IMPORTANT NOTICE

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

IMPORTANT: You must read the following before continuing. If you are not the intended recipient of this message, please do not distribute or copy the information contained in this e-mail, but instead, delete and destroy all copies of this e-mail including all attachments. The following applies to the offering circular dated July 12, 2013 (the "offering circular") following this page, and you are therefore advised to read this carefully before reading, accessing or making any other use of the offering circular. In accessing the offering circular, you agree to be bound by the following terms and conditions, including any modifications to them any time you receive any information from us as a result of such access.

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

THE FOLLOWING OFFERING CIRCULAR MAY NOT BE FORWARDED OR DISTRIBUTED TO ANY OTHER PERSON AND MAY NOT BE REPRODUCED IN ANY MANNER WHATSOEVER. ANY FORWARDING, DISTRIBUTION OR REPRODUCTION OF THIS DOCUMENT IN WHOLE OR IN PART IS UNAUTHORIZED. FAILURE TO COMPLY WITH THIS DIRECTIVE MAY RESULT IN A VIOLATION OF THE SECURITIES ACT OR THE APPLICABLE LAWS OF OTHER JURISDICTIONS. ANY INVESTMENT DECISION SHOULD BE MADE ON THE BASIS OF THE FINAL TERMS AND CONDITIONS OF THE RELEVANT SECURITIES SET FORTH IN THE ATTACHED OFFERING CIRCULAR. 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 either (I) Qualified Institutional Buyers ("QIBs") (within the meaning of Rule 144A under the Securities Act) or (II) non-U.S. persons (within the meaning of Regulation S under the Securities Act). By accepting the e-mail and accessing the following offering circular, you shall be deemed to have represented to us that (1) you and any customers you represent are either (a) QIBs or (b) non-U.S. persons and that the electronic mail address that you gave us and to which this e-mail has been delivered is not located in the United States, its territories or possessions and (2) you consent to the delivery of such offering circular by electronic transmission.

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

The materials relating to the offering do not constitute, and may not be used in connection with, an offer or solicitation in any place where offers or solicitations are not permitted by law. If a jurisdiction requires that the offering be made by a licensed broker or dealer and the initial purchasers or any affiliate of the initial purchasers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by the initial purchasers or such affiliate on behalf of 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 Goldman Sachs International, Barclays Bank PLC, BNP Paribas, Citigroup Global Markets Limited, Crédit Agricole Corporate and Investment Bank, Credit Suisse Securities (Europe) Limited, Deutsche Bank AG, Singapore Branch, The Hongkong and Shanghai Banking Corporation Limited, J.P. Morgan Securities plc, The Korea Development Bank, Merrill Lynch International, Mizuho Securities Asia Limited, Morgan Stanley & Co. International plc, The Royal Bank of Scotland plc and UBS AG, Hong Kong Branch (collectively, the "Dealers") nor any person who controls any of them nor any director, officer, employee nor agent of any of them or affiliate of any such person accepts any liability or responsibility whatsoever in respect of any difference between the offering circular distributed to you in electronic format and the hard copy version available to you on request from the Dealers.

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.

OFFERING CIRCULAR



Korea Gas Corporation

(a statutory juridical corporation organized under the laws of the Republic of Korea)

U.S.\$5,000,000,000 Global Medium Term Note Program

This offering circular replaces and supersedes the offering circular dated January 5, 2012 describing the Program (as defined below). Any Notes (as defined below) issued under this 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.\$5,000,000,000 Global Medium Term Note Program (the "**Program**"), Korea Gas Corporation (the "**Company**") or any subsidiary of the Company which accedes to the Program by executing an accession agreement pursuant to the terms of the Agency Agreement (as defined below) (each such subsidiary, a "**Guaranteed Issuer**", and together with the Company, each, an "**Issuer**" in relation to the Notes issued by it), subject to compliance with all relevant laws, regulations and directives, may from time to time issue notes (the "**Notes**") denominated in any currency agreed between the Issuer and the Relevant Dealer (as defined below).

The Notes will be issued on a senior basis and may be issued in bearer or registered form ("Bearer Notes" and "Registered Notes", respectively). Notes issued by the Guaranteed Issuers will be guaranteed by the Company (in such capacity, the "Guarantor") on a senior basis. The maximum aggregate nominal amount of all Notes from time to time outstanding under the Program will not exceed U.S.\$5,000,000,000 (or its equivalent in other currencies calculated as described herein), subject to increase 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 by the Issuer (each a "Dealer" and together the "Dealers"), which appointment may be for a specific issue or on an ongoing basis. 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 subscribe such Notes.

Application has been made to the Singapore Exchange Securities Trading Limited (the "SGX-ST") for the listing and quotation of any Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the SGX-ST. Such permission will be granted when such Notes have been admitted to the Official List of the SGX-ST. The SGX-ST assumes no responsibility for the correctness of any of the statements made or opinions expressed or reports contained herein. Approval in-principle from, and admission of any Notes to the Official List of, and quotation of any Notes on, the SGX-ST 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 (as defined under "Terms and Conditions of the Notes") of Notes will be set out in a pricing supplement "Pricing Supplement") which, with respect to Notes to be listed on the SGX-ST, will be delivered to the SGX-ST on or before the date of issue of the Notes of such Tranche.

The Program provides that Notes may be listed or admitted to trading, as the case may be, on such other or further stock exchanges or markets as may be agreed between the Issuer, the Guarantor and the Relevant Dealer(s). Issuer may also issue unlisted Notes and/or Notes not admitted to trading on any market.

See "Risk Factors" beginning on page 66 for a discussion of certain factors to be considered in connection with an investment in the 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.

The Notes of each Series will be in either bearer form, with or without interest coupons attached, or registered form, without interest coupons attached. Bearer Notes will be issued only outside the United States to non-U.S. persons in reliance on the exemption from registration provided by Regulation S under the Securities Act ("Regulation S") and Registered Notes may be issued both outside the United States to non-U.S. persons in reliance on the exemption from registration provided by Regulation S and within the United States or to U.S. persons in private transactions (i) to "qualified institutional buyers" within the meaning of Rule 144A under the Securities Act ("QIBs") or (ii) to "accredited investors" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) that are institutions ("Institutional Accredited Investors") who agree to purchase the Notes for their own account and not with a view to the distribution thereof. Bearer Notes are subject to U.S. tax law requirements. Subject to certain exceptions, the Notes may not be offered or sold, or in the case of Bearer Notes delivered, in the United States or its possessions or to, or for the benefit of, U.S. persons (as defined in Regulation S under the Securities Act or, in the case of Bearer Notes, the U.S. Internal Revenue Code of 1986, as amended). See "Form of the Notes" for more description of the manner in which Notes will be issued. Notes are subject to certain restrictions on transfer. See "Subscription and Sale and Transfer and Selling Restrictions".

The Issuer and the Guarantor may agree with any Dealer that the Notes may be issued in a form not contemplated under "Terms and Conditions of the Notes" herein, in which event (in the case of Notes intended to be listed on the SGX-ST) a supplementary offering circular, if appropriate, will be made available which will describe the effect of the agreement reached in relation to such Notes.

Arranger

Goldman Sachs International

Dealers

Barclays BofA Merrill Lynch BNP PARIBAS Citigroup Crédit Agricole CIB Credit Suisse Deutsche Bank Goldman Sachs International HSBC J.P. Morgan Korea Development Bank Mizuho Securities Morgan Stanley The Royal Bank of Scotland UBS

The Company (in its capacity as the Issuer or, in the case of Senior Guaranteed Notes, as the Guarantor) and the Guaranteed Issuers, having made all reasonable enquiries, confirm that this offering circular contains or incorporates all information which is material in the context of the issuance and offering of the Notes, that the information contained or incorporated in this offering circular is true and accurate in all material respects and is not misleading in any material respect, that the opinions and intentions expressed in this offering circular are honestly held and have been reached after considering all relevant circumstances and are based on reasonable assumptions, and that there are no other facts, the omission of which would, in the context of the issue and offering of the Notes, make this offering circular as a whole or any information or the expression of any opinions or intentions expressed in this offering circular misleading in any material respect. The Company and the Guaranteed Issuers accept responsibility accordingly. Information provided in this offering circular with respect to Korea, its political status and economy has been derived from information published by the Korean government and other public sources, and the Company and the Guaranteed Issuers accept responsibility only for the accurate extraction of information from such sources.

This offering circular is to be read in conjunction with all documents that are deemed to be incorporated herein by reference (see "Documents Incorporated by Reference" below). This offering circular shall be read and construed on the basis that such documents are incorporated and form part of this offering circular.

This offering circular is based on the information provided by the Company and the Guaranteed Issuers. Accordingly, no representation, warranty or undertaking, express or implied, is made and no responsibility or liability is accepted by the Dealers as to the accuracy or completeness of the information contained or incorporated in this offering circular or any other information provided by the Company or the Guaranteed Issuers in connection with the Program.

No person is or has been authorized by the Company or the Guaranteed Issuers to give any information or to make any representation other than as contained in this offering circular or any other information supplied in connection with the Program or the Notes and, if given or made, such information or representation must not be relied upon as having been authorized by any of the Company, the Guaranteed Issuers or the Dealers.

Neither this offering circular nor any other information supplied in connection with the Program or any Notes (a) is intended to provide the basis of any credit or other evaluation or (b) should be considered as a recommendation by any of the Company, the Guaranteed Issuers or the Dealers that any recipient of this offering circular or any other information supplied in connection with the Program or any Notes should 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 the Company and the Guaranteed Issuers. 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 any of the Company, the Guaranteed Issuers or the Dealers to any person to subscribe for or to purchase any Notes. The contents of this offering circular should not be construed as providing legal, business, accounting or tax advice. An investor should bear the economic risk of an investment in the 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 the Company and the Guaranteed Issuers 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 advise any investor in the Notes of any information coming to their attention. Investors should review, inter alia, the most recently published documents incorporated by reference into this offering circular when deciding whether or not to purchase any Notes.

i

This offering circular does not constitute an offer to sell or the solicitation of an offer to buy any Notes in any jurisdiction to any person to whom it is unlawful to make the offer or solicitation in such jurisdiction. The distribution of this offering circular and the offer or sale of the Notes may be restricted by law in certain jurisdictions. The Company, the Guaranteed Issuers and the Dealers do not 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 the Company, the Guaranteed Issuers or the Dealers that 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 or any Notes may come must inform themselves about, and observe, any such restrictions on the distribution of this offering circular and the offering and sale of the Notes. In particular, there are restrictions on the distribution of this offering circular and the offer or sale of Notes in the United States of America, the European Economic Area (the "EEA"), the United Kingdom, Italy, Japan, Singapore, Hong Kong and Korea. See "Subscription and Sale and Transfer and Selling Restrictions."

In making an investment decision, investors must rely on their own examination of the applicable Issuer and the Guarantor (if applicable) and the terms of the Notes being offered, including the merits and risks involved. The Notes have not been approved or disapproved by the United States Securities and Exchange Commission or any other securities commission or other regulatory authority in the United States, nor have 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.

This offering circular has been prepared on the basis that, except to the extent sub-paragraph (ii) below may apply, any offer of Notes in any Member State of the EEA which has implemented the Prospectus Directive (each, a "Relevant Member State") will be made pursuant to an exemption under the Prospectus Directive, as implemented in that Relevant Member State, from the requirement to publish a prospectus for offers of Notes. Accordingly, any person making or intending to make an offer in that Relevant Member State of Notes which are the subject of an offering contemplated in this offering circular as completed by final terms in relation to the offer of those Notes may only do so (i) in circumstances in which no obligation arises for the Company, the Guaranteed Issuers 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, or (ii) if a prospectus for such offer has been approved by the competent authority in that Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State and (in either case) published, all in accordance with the Prospectus Directive, provided that any such prospectus has subsequently been completed by final terms which specify that offers may be made other than pursuant to Article 3(2) of the Prospectus Directive in that Relevant Member State and such offer is made in the period beginning and ending on the dates specified for such purpose in such prospectus or final terms, as applicable, and the Company or the Guaranteed Issuer, as applicable, has consented in writing to its use for the purpose of such offer. Except to the extent sub-paragraph (ii) above may apply, none of the Company, the Guaranteed Issuers nor any Dealer have authorized, nor do they authorize, the making of any offer of Notes in circumstances in which an obligation arises for the Company, the Guaranteed Issuers or any Dealer to publish or supplement a prospectus for such offer.

For the purposes of this provision, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent

implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

This offering circular is only being distributed to and is only directed at (i) persons who are outside the United Kingdom or (ii) 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 (all such persons together being referred to as "relevant persons"). The Notes will only be available to, and any invitation, offer or agreement to subscribe, purchase or otherwise acquire such Notes will be engaged in only with, relevant persons. Any person who is not a relevant person should not act or rely on this offering circular or any of its contents.

None of the Dealers, the Company or the Guaranteed Issuers makes any representation to any investor regarding the legality of its investment in the Notes under any applicable laws. The contents of this offering circular should not be construed as providing legal, business, accounting or tax advice. Any investor should be able to bear the economic risk of an investment in the Notes for an indefinite period of time.

U.S. INFORMATION

This offering circular is being submitted on a confidential basis in the United States to a limited number of QIBs or Institutional Accredited Investors (each as defined under "Form of the Notes") for informational use solely in connection with the consideration of the purchase of the Notes being offered hereby. Its use for any other purpose in the United States is not authorized. It may not be copied or reproduced in whole or in part nor may it be distributed or any of its contents disclosed to anyone other than the prospective investors to whom it is originally submitted.

The Registered Notes may be offered or sold within the United States only to QIBs or to Institutional Accredited Investors, in either case in transactions exempt from registration under the Securities Act. Each U.S. purchaser of the Registered Notes is hereby notified that the offer and sale of any Registered Notes to it may be being made in reliance upon the exemption from the registration requirements of the Securities Act provided by Rule 144A under the Securities Act ("Rule 144A").

Purchasers of the Definitive IAI Registered Notes will be required to execute and deliver an IAI Investment Letter (each as defined under "Terms and Conditions of the Notes"). Each purchaser or holder of the Definitive IAI Registered Notes, the Notes represented by a Rule 144A Global Note (as defined below) or any Notes issued in registered form in exchange or substitution therefor (together "Legended Notes") will be deemed, by its acceptance or purchase of any such Legended Notes, to have made certain representations and agreements intended to restrict the resale or other transfer of such Notes as set out in "Subscription and Sale and Transfer and Selling Restrictions." Unless otherwise stated, terms used in this paragraph have the meanings given to them in "Form of the Notes."

Bearer Notes are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to U.S. persons, except in certain transactions permitted by U.S. Treasury regulations. Terms used in this paragraph have the meanings given to them by the U.S. Internal Revenue Code of 1986, as amended, and the U.S. Treasury regulations promulgated thereunder.

NOTICE TO NEW HAMPSHIRE RESIDENTS

NEITHER THE FACT THAT A REGISTRATION STATEMENT OR AN APPLICATION FOR A LICENSE HAS BEEN FILED UNDER RSA 421-B WITH THE STATE OF NEW HAMPSHIRE NOR THE FACT THAT A SECURITY IS EFFECTIVELY REGISTERED OR A PERSON IS LICENSED IN THE STATE OF NEW HAMPSHIRE CONSTITUTES A FINDING BY THE SECRETARY OF STATE OF NEW HAMPSHIRE THAT ANY DOCUMENT FILED UNDER RSA 421-B IS TRUE, COMPLETE AND NOT MISLEADING. NEITHER ANY SUCH FACT NOR THE FACT THAT AN EXEMPTION OR EXCEPTION IS AVAILABLE FOR A SECURITY OR A TRANSACTION MEANS THAT THE SECRETARY OF STATE OF NEW HAMPSHIRE HAS PASSED IN ANY WAY UPON THE MERITS OR QUALIFICATIONS OF, OR RECOMMENDED OR GIVEN APPROVAL TO, ANY PERSON, SECURITY OR TRANSACTION. IT IS UNLAWFUL TO MAKE, OR CAUSE TO BE MADE, TO ANY PROSPECTIVE PURCHASER, CUSTOMER OR CLIENT ANY REPRESENTATION INCONSISTENT WITH THE PROVISIONS OF THIS PARAGRAPH.

CERTAIN DEFINED TERMS AND CONVENTIONS

Industry data used in this offering circular were obtained from statistics published by the Korea Energy Economics Institute and industry studies released by the Ministry of Trade, Industry and Energy. Such information has been accurately reproduced herein and, as far as the Company and the Guaranteed Issuers are aware and are able to ascertain from information published by such third parties, no facts have been omitted that would render the reproduced information inaccurate or misleading. Such industry studies, while believed to be reliable, have not been independently verified, and none of the Company, the Guaranteed Issuers or the Dealers makes any representation as to the accuracy or completeness of this information.

All references to "Korea" and the "Republic" contained in this offering circular shall mean The Republic of Korea. All references to the "government" shall mean the government of Korea. All references to the "Company" or the "Guarantor" shall mean Korea Gas Corporation, a statutory juridical entity established under the Korea Gas Corporation Act of 1982, as amended (the "KOGAS Act"), and its consolidated subsidiaries, unless the context otherwise requires. All references to "Guaranteed Issuers" herein shall mean the subsidiaries of Korea Gas Corporation that have acceded to the Program by executing an accession agreement pursuant to the terms of the Agency Agreement, and all references to "Issuers" herein shall mean Korea Gas Corporation and the Guaranteed Issuers. All references to "KEPCO" herein are references to Korea Electric Power Corporation. All references to "U.S." shall mean the United States of America. All references to "city gas companies" herein are references to companies that distribute gas to end-users in Korea.

In this offering circular, all references to "Won" or "₩" are to the lawful currency of Korea, all references to "U.S. dollars", "dollar", "US\$" or "U.S.\$" are to the lawful currency of the United States of America, all references to "Euro", "euro" or "€" are to the lawful currency of the European Economic and Monetary Union, all references to "Japanese yen", "yen" or "¥" are to the lawful currency of Japan, all references to "Canadian dollar" are to the lawful currency of Canada, all references to "Mexican Peso" are to the lawful currency of Mexico, all references to "CHF" are to the lawful currency of Switzerland and all references to "£" are to the lawful currency of the United Kingdom.

All financial information, descriptions and other information in this offering circular regarding the Company's activities, financial condition and results of operations are, unless otherwise indicated or required by context, presented on a consolidated basis.

Any discrepancies in any table between totals and the sums of the amounts listed are due to rounding.

SERVICE OF PROCESS AND ENFORCEMENT OF CIVIL LIABILITIES

The Company is a corporation with limited liability organized under the laws of Korea. All of the Company's directors and officers and certain other persons named in this offering circular reside in Korea, and a significant portion of the assets of the directors and officers and certain other persons named in this offering circular and a significant portion of the Company's assets are located in Korea. As a result, it may not be possible for you to effect service of process within the United States upon such persons or to enforce against them or against the Company in U.S. courts judgments predicated upon the civil liability provisions of the federal securities laws of the United States. There is doubt as to the enforceability in Korea, either in original actions or in actions for enforcement of judgments of U.S. courts, of civil liabilities predicated on the U.S. federal securities laws.

AVAILABLE INFORMATION

To permit compliance with Rule 144A under the Securities Act in connection with sales of the Notes, each of the Issuers and the Guarantor (if applicable) will be required to furnish, upon request, to a Holder (as defined in "Terms and Conditions of the Notes") of a Note and a prospective investor designated by such Holder, the information required to be delivered under Rule 144A(d)(4) under the Securities Act unless at the time of the request the Issuer is a reporting company under Section 13 or Section 15(d) of the United States Securities Exchange Act of 1934, as amended (the "Exchange Act"), or is exempt from the registration requirements of Section 12(g) of the Exchange Act (and therefore is required to publish on its website, in English, certain information pursuant to Rule 12g3-2(b) under the Exchange Act).

PRESENTATION OF FINANCIAL INFORMATION

Prior to 2011, the Company maintained its financial books and records and prepared its financial statements in accordance with generally accepted accounting principles of Korea ("Korean GAAP"). Commencing on January 1, 2011, the Company maintains its financial books and records and prepares its financial statements in accordance with Korean International Financial Reporting Standards ("Korean IFRS"), which also differs in certain important respects from generally accepted accounting principles in other countries, including U.S. GAAP.

The audited consolidated financial statements of the Company as of and for the years ended December 31, 2010, 2011 and 2012 (the "consolidated annual financial statements") and the unaudited consolidated financial statements of the Company as of March 31, 2013 and for the three months ended March 31, 2012 and 2013 (the "unaudited interim consolidated financial statements") are included elsewhere in the offering circular. Unless otherwise stated, the financial data contained in this offering circular as of and for the years ended December 31, 2010, 2011 and 2012 have been derived from the Company's consolidated annual financial statements included herein which have been prepared in accordance with Korean IFRS, and the financial data contained in this offering circular as of March 31, 2013 and for the three months ended March 31, 2012 and 2013 have been derived from the Company's unaudited interim consolidated financial statements included herein which have been prepared in accordance with Korean IFRS No. 1034 Interim Financial Reporting.

DOCUMENTS INCORPORATED BY REFERENCE	1
GENERAL DESCRIPTION OF THE PROGRAM	2
SUMMARY OF THE PROGRAM	3
FORM OF THE NOTES	10
TERMS AND CONDITIONS OF THE NOTES	26
USE OF PROCEEDS	64
EXCHANGE RATES	65
RISK FACTORS	66
CAPITALIZATION OF THE COMPANY	81
SELECTED FINANCIAL AND OPERATING DATA	82
THE COMPANY	84
Business	84
Management's Discussion and Analysis of Financial Condition and Results of Operations	108
Management	135
Principal Shareholders	137
Related Party Transactions	138
GUARANTEED ISSUERS	140
REGULATION OF THE KOREAN GAS INDUSTRY	141
TAXATION	147
CERTAIN ERISA CONSIDERATIONS	157
INDEPENDENT ACCOUNTANTS	158
SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS	159
BOOK-ENTRY CLEARANCE SYSTEMS	168
INDEX TO FINANCIAL STATEMENTS	F-1

This offering circular includes risk factors, the Company's audited and unaudited consolidated financial statements and disclosure concerning the Company's business and financial condition and results of operations, as well as other matters. You should carefully review the entire offering circular before making an investment decision.

You should rely only on the information contained in this offering circular or to which the Issuers have referred you. Neither the Company nor the Guaranteed Issuers have authorized anyone to provide you with information that is different. This offering circular may only be used where it is legal to sell the Notes. You should not assume that the information in this offering circular is accurate as of any date other than the date at the front of this offering circular. This offering circular is confidential. You are authorized to use this offering circular solely for the purpose of considering the purchase of the Notes described in this offering circular. You may not reproduce or distribute this offering circular in whole or in part, and you may not disclose any of the contents of this offering circular or use any information herein for any purpose other than considering a purchase of the Notes. You agree to the foregoing by accepting delivery of this offering circular.

IN CONNECTION WITH THE ISSUE AND DISTRIBUTION OF ANY TRANCHE OF NOTES, THE DEALER(S) (IF ANY) NAMED AS THE STABILIZING MANAGER(S) (OR PERSONS ACTING ON BEHALF OF ANY STABILIZING MANAGER(S)) IN THE APPLICABLE PRICING SUPPLEMENT MAY, SUBJECT TO ALL APPLICABLE LAWS AND REGULATIONS, OVER-ALLOT THE NOTES OR EFFECT TRANSACTIONS WITH A VIEW TO SUPPORTING THE MARKET PRICE OF THE NOTES OF A SERIES (AS DEFINED BELOW) OF WHICH SUCH TRANCHE FORMS A PART AT A LEVEL HIGHER THAN THAT WHICH MIGHT OTHERWISE PREVAIL FOR A LIMITED PERIOD AFTER THE

ISSUE DATE. HOWEVER, THERE IS NO ASSURANCE THAT THE STABILIZING MANAGER(S) (OR PERSONS ACTING ON BEHALF OF A STABILIZING MANAGER) WILL UNDERTAKE STABILIZING ACTION. SUCH STABILIZATION, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME AND, IF BEGUN, MUST BE BROUGHT TO AN END AFTER A LIMITED PERIOD. ANY STABILIZING ACTION OR OVER-ALLOTMENT MUST BE CONDUCTED BY THE RELEVANT STABILIZING MANAGER(S) (OR PERSON(S) ACTING ON BEHALF OF ANY STABILIZING MANAGER(S)) IN ACCORDANCE WITH ALL APPLICABLE LAWS AND RULES.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents published or issued from time to time after the date hereof shall be deemed to be incorporated into, and to form part of, this offering circular:

- (a) the most recently published audited consolidated annual financial statements and the most recently published unaudited interim consolidated financial statements (if any) of the Company from time to time;
- (b) the most recently published audited consolidated annual financial statements (if any) and the most recently published unaudited interim consolidated financial statements (if any) of the Guaranteed Issuers from time to time; and
- (c) all supplements or amendments to this offering circular circulated by the Issuers from time to time,

save that any statement contained herein or in a document which is deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purpose of this offering circular to the extent that a statement contained in any such subsequent document which is deemed to be incorporated by reference herein modifies or supersedes such earlier statement (whether expressly, by implication or otherwise). Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this offering circular.

The Company and the Guaranteed Issuers will provide, without charge, to each person to whom a copy of this offering circular has been delivered, upon the request of such person, a copy of any or all of the documents deemed to be incorporated herein by reference unless such documents have been modified or superseded as specified above. Requests for such documents should be directed to the Issuers at their offices set out at the end of this offering circular. In addition, such documents will be available from the principal office of The Bank of New York Mellon, London Branch (the "Principal Paying Agent") for any Notes listed on the SGX-ST.

The Company and the Guaranteed Issuers will, in connection with the listing of the Notes on the SGX-ST, so long as any Note remains outstanding and listed on such exchange and the rules of such exchange so require, in the event of any material change in the condition of the Company or any of the Guaranteed Issuers that is not reflected in this offering circular, prepare a supplement to this offering circular or publish a new offering circular for use in connection with any subsequent issue of the Notes to be listed on the SGX-ST. A supplement to this offering circular will also be prepared and submitted to the SGX-ST each time a New Issuer accedes to the Program.

If the terms of the Program are modified or amended in a manner that would make this offering circular, as so modified or amended, inaccurate or misleading, a new offering circular will be prepared.

GENERAL DESCRIPTION OF THE PROGRAM

Under the Program, the Issuer, with the approval of the Guarantor (if applicable), may from time to time issue Notes denominated in any currency, subject to as set out herein. A summary of the terms and conditions of the Program and the Notes appears below. The applicable terms of any Notes will be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer prior to the issue of the Notes and will be set out in the Terms and Conditions of the Notes endorsed on, attached to, or incorporated by reference into, the Notes, as modified and supplemented by the applicable Pricing Supplement attached to, or endorsed on, such Notes, as more fully described under "Form of the Notes".

This offering circular and any supplement will only be valid for Notes issued under the Program during the period of 12 months from the date of this offering circular in an aggregate principal amount which, when added to the aggregate principal amount then outstanding of all Notes previously or simultaneously issued under the Program, does not exceed U.S.\$5,000,000,000 or its equivalent in other currencies. For the purpose of calculating the U.S. dollar equivalent of the aggregate principal amount of Notes issued under the Program from time to time:

- (a) the U.S. dollar equivalent of Notes denominated in another Specified Currency (as specified in the applicable Pricing Supplement in relation to the relevant Notes, described under "Form of the Notes") shall be determined, at the discretion of the Issuer and the Guarantor (if applicable), either as of the date on which agreement is reached for the issue of Notes or on the preceding day on which commercial banks and foreign exchange markets are open for business in London, in each case on the basis of the spot rate for the sale of the U.S. dollar against the purchase of such Specified Currency in the London foreign exchange market quoted by any leading international bank selected by the Issuer and the Guarantor (if applicable) on the relevant day of calculation;
- (b) the U.S. dollar equivalent of Dual Currency Notes, Index Linked Notes and Partly Paid Notes (each as specified in the applicable Pricing Supplement in relation to the relevant Notes, described under "Form of the Notes") shall be calculated in the manner specified above by reference to the original principal amount on issue of such Notes (in the case of Partly Paid Notes regardless of the subscription price paid); and
- (c) the U.S. dollar equivalent of Zero Coupon Notes (as specified in the applicable Pricing Supplement in relation to the relevant Notes, described under "Form of the Notes") and other Notes issued at a discount or a premium shall be calculated in the manner specified above by reference to the net proceeds received by the Issuer for the relevant issue.

SUMMARY OF 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" shall have the same meanings in this summary.

Initial Issuer Korea Gas Corporation (the "Company")

Accession of New Issuers Any Subsidiary of the Company nominated by the Company may agree to be bound by all the terms of the Program, and

thereby become a "New Issuer" by executing an accession agreement pursuant to the terms of the Agency Agreement.

In this offering circular, any reference to the "Issuer" shall mean the Initial Issuer and the New Issuers in respect of the Notes issued by it in accordance with the terms of the Program.

Guaranteed Issuers The New Issuers

Guarantor Korea Gas Corporation, with respect to Notes issued by the

Guaranteed Issuers.

Guarantee The Guarantor will unconditionally and irrevocably guarantee

(the "Guarantee") to each holder of Notes issued by a Guaranteed Issuer the due payment of all amounts owing from

time to time under such Notes.

Description Global Medium Term Note Program

Arranger Goldman Sachs International

Dealers Barclays Bank PLC, BNP Paribas, Citigroup Global Markets

Limited, Crédit Agricole Corporate and Investment Bank, Credit Suisse Securities (Europe) Limited, Deutsche Bank AG, Singapore Branch, Goldman Sachs International, The Hongkong and Shanghai Banking Corporation Limited, J.P. Morgan Securities plc, The Korea Development Bank, Merrill Lynch International, Mizuho Securities Asia Limited, Morgan Stanley & Co. International plc, The Royal Bank of Scotland plc, UBS AG, Hong Kong Branch and any additional Dealer appointed from time to time in accordance with the Program

Agreement.

In this offering circular, any reference to the "Relevant Dealer" shall mean any of the Dealers in respect of the Notes as to whose issue such Dealer has entered into an agreement with the Issuer and (in the case of a Guaranteed Issuer) the

Guarantor in accordance with the terms of the Program.

Certain Restrictions Each issue of Notes denominated in a currency in respect of

which particular laws, guidelines, regulations, restrictions or reporting requirements apply will only be issued in circumstances which comply with such laws, guidelines, regulations, restrictions or reporting requirements from time to time (see "Subscription and Sale and Transfer and Selling Restrictions") including the following restrictions applicable at

the date of this offering circular.

Notes having a maturity of less than one year:

Notes having a maturity of less than one year from the date of issue will, if the proceeds of the issue are accepted in the United Kingdom, constitute deposits for the purposes of the prohibition on accepting deposits contained in Section 19 of the Financial Services and Markets Act 2000 unless they are issued to a limited class of professional investors and have a denomination and redemption value of at least £100,000 or its equivalent, see "Subscription and Sale and Transfer and Selling Restrictions."

Principal Paying Agent and Transfer

Agent The Bank of New York Mellon, London Branch

Paying Agent and Transfer Agent . . . The Bank of New York Mellon

Registrar The Bank of New York Mellon

Euro Registrar The Bank of New York Mellon (Luxembourg) S.A.

Program Size Up to U.S.\$5,000,000,000 (or its equivalent in other currencies

calculated as described under "General Description of the Program") in aggregate principal amount of Notes outstanding at any time. The Company may increase the amount of the Program in accordance with the terms of the Program

Agreement.

Distribution Subject to applicable selling restrictions, Notes may be

distributed by way of private or public placement and in each

case on a syndicated or non-syndicated basis.

Currencies Subject to any applicable legal or regulatory restrictions, any

currency agreed between the Issuer, the Guarantor (if

applicable) and the Relevant Dealer.

Notes may be redenominated in euro.

Maturities Such maturities as may be agreed between the Issuer, the

Guarantor (if applicable) and the Relevant Dealer, subject to

such minimum or maximum maturities as may be allowed or required from time to time by the relevant central bank (or equivalent body) or any laws or regulations applicable to the Issuer or the Guarantor or the relevant Specified Currency. Issue Price Notes may be issued on a fully-paid or a partly-paid basis and at an issue price which is at par or at a discount to, or premium over, par, to the extent permitted by applicable law. Form of Notes The Notes will be issued in bearer or registered form as described in "Form of the Notes." Registered Notes will not be exchangeable for Bearer Notes and vice versa. Fixed Rate Notes Fixed interest will be payable on such date or dates as may be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer and on redemption and will be calculated on the basis of such Day Count Fraction as may be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer. Floating Rate Notes Floating Rate Notes will bear interest at a rate determined: (i) on the same basis as the floating rate under a notional interest rate swap transaction in the relevant Specified Currency governed by an agreement incorporating the 2006 ISDA Definitions (as published by the International Swaps and Derivatives Association, Inc., and as amended and updated as at the Issue Date of the first Tranche of the Notes of the relevant Series); or (ii) on the basis of a reference rate appearing on the agreed screen page of a commercial quotation service; or (iii) on an alternative basis as may be agreed by and among the Issuer, the Guarantor (if applicable) and the Relevant Dealer.

> The margin (if any) relating to such floating rate will be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer for each Series of Floating Rate Notes.

> Payments of principal in respect of Index Linked Redemption Notes or of interest in respect of Index Linked Interest Notes will be calculated by reference to such index and/or formula or to changes in the prices of securities or commodities or to such other factors as the Issuer, the Guarantor (if applicable) and the Relevant Dealer may agree, to the extent permitted by applicable law.

Floating Rate Notes and Index Linked Interest Notes

Other provisions in relation to

Floating Rate Notes and Index Linked Interest Notes may also have a maximum interest rate, a minimum interest rate or both.

5

Interest on Floating Rate Notes and Index Linked Interest Notes in respect of each Interest Period, as agreed prior to issue by the Issuer, the Guarantor (if applicable) and the Relevant Dealer, will be payable on such Interest Payment Dates, and will be calculated on the basis of such Day Count Fraction, as may be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer.

Dual Currency Notes

Payments (whether in respect of principal or interest and whether at maturity or otherwise) in respect of Dual Currency Notes will be made in such currencies, and based on such rates of exchange, as the Issuer, the Guarantor (if applicable) and the Relevant Dealer may agree, to the extent permitted by applicable law.

Zero Coupon Notes Zero Coupon Notes will be offered and sold at a discount to their nominal amount, or offered and sold at their nominal amount and be redeemed at a premium, and will not bear interest.

The applicable Pricing Supplement will indicate either that the relevant Notes cannot be redeemed prior to their stated maturity (other than in specified installments, if applicable, or for taxation reasons or following an occurrence of a Change of Control (as defined herein) or following an Event of Default), or that such Notes will be redeemable at the option of the Issuer, and/or the Noteholders upon giving notice to the Noteholders or the Issuer and the Guarantor, as the case may be, on a date or dates specified prior to such stated maturity and at a price or prices and on such other terms as may be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer.

The applicable Pricing Supplement may provide that Notes may be redeemable in two or more installments of such amounts and on such dates as are indicated in the applicable Pricing Supplement.

Notes having a maturity of less than one year may be subject to restrictions on their denomination and distribution, see "—Certain Restrictions" above.

Change of Control Redemption The Notes will be redeemable at the option of the Noteholders, in all or in part, upon the occurrence of a Change of Control at 100% of their principal amount, together with accrued and unpaid interest, if any, to but excluding the Change of Control Put Date (as defined herein).

> See "Terms and Conditions of the Notes-Redemption and Purchase—Change of Control Redemption."

Notes will be issued in such denominations as may be agreed between the Issuer, the Guarantor and the Relevant Dealer except that the minimum denomination of each Note will be such as may be allowed or required from time to time by the central bank (or equivalent body) or any laws or regulations applicable to the relevant Specified Currency, see "-Certain Restrictions" above.

Unless otherwise stated in the applicable Pricing Supplement, the minimum denomination of each Definitive IAI Registered Note will be U.S.\$500,000 or its approximate equivalent in other Specified Currencies.

Notes having a maturity of less than one year may be subject to restrictions on their denomination and distribution (see "-Certain Restrictions" above). The minimum denomination of each Note admitted to trading on a regulated market within the EEA or offered to the public in a Member State of the EEA in circumstances which require the publication of a prospectus under the Prospectus Directive will be €100,000 (or, if the Notes are denominated in a currency other than euro, the equivalent amount in such currency).

Taxation

All payments of principal and interest in respect of the Notes, Receipts and Coupons or under the Guarantee (if applicable) will be made without deduction for or on account of withholding taxes imposed by the Tax Jurisdiction (as defined in Condition 10). In the event that any such deduction is made, the Issuer (and failing whom, the Guarantor) will, except in certain limited circumstances provided in Condition 10, be required to pay additional amounts to cover the amounts so deducted. See "Terms and Conditions of the Notes—Taxation."

In making an investment decision, each prospective investor is strongly recommended to consult its own professional advisors in respect of the tax implications of holding the Notes. See "Terms and Conditions of the Notes—Taxation."

Negative Pledge

The terms of the Notes will contain a negative pledge provision as further described in Condition 4 (Certain Covenants).

Events of Default Events of default for the Notes are set out in Condition 12 (Events of Default).

Cross-acceleration

The terms of the Notes will contain a cross-acceleration provision as further described in Condition 12 (Events of Default).

Status Senior Notes:

Notes issued by the Company are referred to as Senior Notes. The Senior Notes will constitute direct, unconditional, unsubordinated and (subject to the provisions of Condition 4 (Certain Covenants)) unsecured general obligations of the Company and will rank pari passu, without any preference among themselves and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of the Company, from time to time outstanding.

Senior Guaranteed Notes:

Notes issued by a Guaranteed Issuer are referred to as Senior Guaranteed Notes. The Senior Guaranteed Notes will constitute direct, unconditional, unsubordinated and (subject to the provisions of Condition 4 (*Certain Covenants*)) unsecured general obligations of the Company and will rank pari passu, without any preference among themselves and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of the Guaranteed Issuer, from time to time outstanding.

Guarantee:

The Guarantee will constitute a direct, unconditional, unsubordinated and (subject to the provisions of Condition 4 (*Certain Covenants*)) unsecured general obligations of the Guarantor and will rank pari passu, without any preference among themselves and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of the Guarantor, from time to time outstanding.

Listing

Application has been made to the SGX-ST for the listing and quotation of any Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the SGX-ST. The Notes may also be listed on such other or further stock exchange(s) as may be agreed between the Issuer, the Guarantor (if applicable) and the Relevant Dealer in relation to each Series. For so long as any Notes are listed on the SGX-ST and the rules of the SGX-ST so require, such Notes will be traded on the SGX-ST in a minimum board lot size of U.S.\$200,000 (or its equivalent in other 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 Program Agreement and the Agency Agreement will be governed by, and construed in accordance with, New York law. There are restrictions on the offer, sale and transfer of the Notes in the United States, the EEA, the United Kingdom, Italy, Hong Kong, Singapore, Japan and Korea and such other restrictions as may be required in connection with the offering and sale of a particular Tranche of Notes, see "Subscription and Sale and Transfer and Selling Restrictions."

FORM OF THE NOTES

The Notes of each Series will be in either bearer form, with or without interest coupons attached ("Bearer Notes"), or registered form, without interest coupons attached ("Registered Notes"). Bearer Notes will be issued outside the United States in reliance on Regulation S under the Securities Act ("Regulation S") and Registered Notes will be issued both outside the United States in reliance on the exemption from registration provided by Regulation S and within the United States in reliance on Rule 144A or another available exemption from the registration requirements of the Securities Act.

Bearer Notes

Each Tranche of Bearer Notes will be initially issued in the form of either a temporary bearer global note (a "Temporary Bearer Global Note") or a permanent bearer global note (a "Permanent Bearer Global Note") as indicated in the applicable Pricing Supplement, which, in either case, will be delivered on or prior to the original issue date of the Tranche to a common depositary (the "Common Depositary") for Euroclear Bank S.A./N.V. ("Euroclear") and Clearstream Banking, société anonyme ("Clearstream"). While any Bearer Note is represented by a Temporary Bearer Global Note, payments of principal, interest (if any) and any other amount payable in respect of the Notes due prior to the Exchange Date (as defined below) will be made against presentation of the Temporary Bearer Global Note only to the extent that certification (in a form to be provided) to the effect that the beneficial owners of interests in such Bearer Note are not U.S. persons or persons who have purchased for resale to any U.S. person, as required by U.S. Treasury regulations, has been received by Euroclear and/or Clearstream and Euroclear and/or Clearstream, as applicable, has given a like certification (based on the certifications it has received) to the Principal Paying Agent.

On and after the date (the "Exchange Date") which is 40 days after a Temporary Bearer Global Note is issued, interests in such Temporary Bearer Global Note will be exchangeable (free of charge) upon a request as described therein either for (i) interests in a Permanent Bearer Global Note of the same Series or (ii) for definitive Bearer Notes of the same Series with, where applicable, receipts, interest coupons and talons attached (as indicated in the applicable Pricing Supplement and subject, in the case of definitive Bearer Notes, to such notice period as is specified in the applicable Pricing Supplement), in each case against certification of beneficial ownership as described above unless such certification has already been given. Definitive Bearer Notes will only be delivered outside the United States. The holder of a Temporary Bearer Global Note will not be entitled to collect any payment of interest, principal or other amount due on or after the Exchange Date unless, upon due certification, exchange of the Temporary Bearer Global Note for an interest in a Permanent Bearer Global Note or for definitive Bearer Notes is improperly withheld or refused.

Payments of principal, interest (if any) or any other amounts on a Permanent Bearer Global Note will be made through Euroclear and/or Clearstream against presentation or surrender (as the case may be) of the Permanent Bearer Global Note without any requirement for certification.

The applicable Pricing Supplement will specify that a Permanent Bearer Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Bearer Notes with, where applicable, receipts, interest coupons and talons attached upon either (i) not less than 60 days' written notice from Euroclear and/or Clearstream (acting on the instructions of any holder of an interest in such Permanent Bearer Global Note) to the Principal Paying Agent as described therein or (ii) only upon the occurrence of an Exchange Event. For these purposes, "Exchange Event" means that (i) an Event of Default (as defined in Condition 12 (*Events of Default*)) has occurred and is continuing, (ii) the Issuer and the Guarantor have been notified that both Euroclear and Clearstream have been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and no successor

clearing system is available or (iii) the Issuer or the Guarantor has or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Permanent Bearer Global Note in definitive form. For so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that the Permanent Bearer Global Note is exchanged for definitive Bearer Notes, and unless the Issuer obtains an exemption from the SGX-ST, the Issuer and the Guarantor will appoint and maintain a Paying Agent in Singapore where the Notes may be presented or surrendered for payment or redemption and make an announcement of such exchange through the SGX-ST, and such announcement will include all material information with respect to the delivery of the definitive Bearer Notes, including details of the Paying Agent in Singapore. In the event of the occurrence of an Exchange Event, Euroclear and/or Clearstream (acting on the instructions of any holder of an interest in such Permanent Bearer Global Note) may give notice to the Principal Paying Agent requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iii) above, the Issuer or the Guarantor may also give notice to the Principal Paying Agent requesting exchange. Any such exchange shall occur not later than 45 days after the date of receipt of the first relevant notice by the Principal Paying Agent.

The following legend will appear on all Bearer Notes which have an original maturity of more than 365 days and on all talons, receipts and interest coupons relating to such Notes:

"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."

The sections referred to provide that United States holders, with certain exceptions, will not be entitled to deduct any loss on Bearer Notes, receipts or interest coupons and will not be entitled to capital gains treatment of any gain on any sale, disposition, redemption or payment of principal in respect of such Notes, receipts or interest coupons.

Notes which are represented by a Bearer Global Note will only be transferable in accordance with the rules and procedures for the time being of Euroclear or Clearstream, as the case may be.

Registered Notes

The Registered Notes of each Tranche offered and sold in reliance on Regulation S, which will be sold to non-U.S. persons outside the United States, will initially be represented by a global note in registered form (a "Regulation S Global Note"). Prior to expiry of the distribution compliance period (as defined in Regulation S) applicable to each Tranche of Notes, beneficial interests in a Regulation S Global Note may not be offered or sold to, or for the account or benefit of, a U.S. person except as otherwise provided in Condition 2 (*Transfers of Registered Notes*) and may not be held otherwise than through Euroclear or Clearstream and such Regulation S Global Note will bear a legend regarding such restrictions on transfer.

The Registered Notes of each Tranche may only be offered and sold in the United States or to U.S. persons in private transactions (i) to "qualified institutional buyers" within the meaning of Rule 144A under the Securities Act ("QIBs") or (ii) to "accredited investors" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) that are institutions ("Institutional Accredited Investors") who agree to purchase the Notes for their own account and not with a view to the distribution thereof. The Registered Notes of each Tranche sold to QIBs will be represented by a global note in registered form (a "Rule 144A Global Note" and, together with a Regulation S Global Note, the "Registered Global Notes").

Registered Global Notes will either (i) be deposited with a custodian for, and registered in the name of a nominee of, DTC for the accounts of its participants, including Euroclear and Clearstream or (ii) be deposited with a common depositary for, and registered in the name of a common nominee of, Euroclear and Clearstream, as specified in the applicable Pricing Supplement. Persons holding beneficial interests in Registered Global Notes will be entitled or required, as the case may be, under the circumstances described below, to receive physical delivery of definitive Notes in fully registered form.

The Registered Notes of each Tranche sold to Institutional Accredited Investors will be in definitive form, registered in the name of the holder thereof ("Definitive IAI Registered Notes"). Unless otherwise set forth in the applicable Pricing Supplement, Definitive IAI Registered Notes will be issued only in minimum denominations of U.S.\$500,000 and integral multiples of U.S.\$1,000 in excess thereof (or the approximate equivalents in the applicable Specified Currency). Definitive IAI Registered Notes will be subject to the restrictions on transfer set forth therein and will bear the restrictive legend described under "Subscription and Sale and Transfer and Selling Restrictions." Institutional Accredited Investors that hold Definitive IAI Registered Notes may elect to hold such Notes through DTC, but transferees acquiring the Notes in transactions exempt from Securities Act registration pursuant to Regulation S or Rule 144 under the Securities Act (if available) may do so upon satisfaction of the requirements applicable to such transfer as described under "Subscription and Sale and Transfer and Selling Restrictions." The Rule 144A Global Note and the Definitive IAI Registered Notes will be subject to certain restrictions on transfer set forth therein and will bear a legend regarding such restrictions.

Payments of principal, interest and any other amount in respect of the Registered Global Notes will, in the absence of provision to the contrary, be made to the person shown on the Register (as defined in Condition 8.4 (*Payments—Payments in respect of Registered Notes*)) as the registered holder of the Registered Global Notes. None of the Issuer, the Guarantor, any Paying Agent or the Registrar will have any responsibility or liability for any aspect of the records relating to or payments or deliveries made on account of beneficial ownership interests in the Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Payments of principal, interest or any other amount in respect of the Registered Notes in definitive form will, in the absence of provision to the contrary, be made to the persons shown on the Register on the relevant Record Date (as defined in Condition 8.4 (*Payments—Payments in respect of Registered Notes*)) immediately preceding the due date for payment in the manner provided in that Condition.

Interests in a Registered Global Note will be exchangeable (free of charge), in whole but not in part, for definitive Registered Notes without receipts, interest coupons or talons attached only upon the occurrence of an Exchange Event. For these purposes, "Exchange Event" means that (i) an Event of Default has occurred and is continuing, (ii) in the case of Notes registered in the name of a nominee for DTC, either DTC has notified the Issuer and the Guarantor that it is unwilling or unable to continue to act as depository for the Notes and no alternative clearing system is available or DTC has ceased to constitute a clearing agency registered under the Exchange Act, (iii) in the case of Notes registered in the name of a nominee for a common depositary for Euroclear and Clearstream, the Issuer and the Guarantor have been notified that both Euroclear and Clearstream have been closed for business for a continuous period of 14 days (other than by reason of holiday, statutory or otherwise) or have announced an intention permanently to cease business or have in fact done so and, in any such case, no successor clearing system is available or (iv) the Issuer or the Guarantor have or will become subject to adverse tax consequences which would not be suffered were the Notes represented by the Registered Global Note in definitive form. For so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that the Registered Global Note is exchanged for definitive Registered Notes, and unless the Issuer and the Guarantor obtain an exemption from the SGX-ST, the Issuer and the Guarantor will appoint and maintain a Paying Agent in Singapore where the Notes may

be presented or surrendered for payment or redemption and make an announcement of such exchange through the SGX-ST, and such announcement will include all material information with respect to the delivery of the definitive Registered Notes, including details of the Paying Agent in Singapore. In the event of the occurrence of an Exchange Event, DTC, Euroclear and/or Clearstream (acting on the instructions of any holder of an interest in such Registered Global Note) may give notice to the Registrar requesting exchange and, in the event of the occurrence of an Exchange Event as described in (iv) above, the Issuer and the Guarantor may also give notice to the Registrar requesting exchange. Any such exchange shall occur not later than 10 days after the date of receipt of the first relevant notice by the Registrar.

Transfer of Interests

Interests in a Registered Global Note may, subject to compliance with all applicable restrictions, be transferred to a person who wishes to hold such interest in another Registered Global Note or in the form of a Definitive IAI Registered Note. Definitive IAI Registered Notes may, subject to compliance with all applicable restrictions, be transferred to a person who wishes to hold such Notes in the form of an interest in a Registered Global Note. No beneficial owner of an interest in a Registered Global Note will be able to transfer such interest, except in accordance with the applicable procedures of DTC, Euroclear and Clearstream, in each case to the extent applicable. Registered Notes are also subject to the restrictions on transfer set forth therein and will bear a legend regarding such restrictions, see "Subscription and Sale and Transfer and Selling Restrictions."

General

Pursuant to the Agency Agreement (as defined under "Terms and Conditions of the Notes"), the Principal Paying Agent or the Registrar, as the case may be, shall arrange that, where a further Tranche of Notes is issued which is intended to form a single Series with an existing Tranche of Notes, the Notes of such further Tranche shall be assigned a common code and ISIN and, where applicable, a CUSIP and CINS number which are different from the common code, ISIN, CUSIP and CINS assigned to Notes of any other Tranche of the same Series until at least the expiry of the distribution compliance period applicable to the Notes of such Tranche and, for Notes subject to the certification requirements under U.S. Treasury regulations, until at least the Temporary Global Note is exchanged for the Permanent Global Note.

For so long as any of the Notes is represented by a Global Note held on behalf of Euroclear and/or Clearstream, each person (other than Euroclear or Clearstream) who is for the time being shown in the records of Euroclear or of Clearstream as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear or Clearstream as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes except in the case of manifest error) shall be treated by the Issuer and the Guarantor (if applicable) and their respective agents as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on such nominal amount of such Notes, for which purpose the bearer of the relevant Bearer Global Note or the registered holder of the relevant Registered Global Note shall be treated by the Issuer and the Guarantor (if applicable) and their respective agents as the holder of such nominal amount of such Notes in accordance with and subject to the terms of the relevant Global Note and the expressions "Noteholder" and "holder of Notes" and related expressions shall be construed accordingly.

So long as DTC or its nominee is the registered owner or holder of a Registered Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Registered Global Note for all purposes under the Agency Agreement and such Notes except to the extent that in accordance with DTC's published rules and procedures any ownership rights may be exercised by its participants or beneficial owners through participants.

Any reference herein to Euroclear and/or Clearstream and/or DTC shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system specified in the applicable Pricing Supplement.

A Note may be accelerated by the holder thereof in certain circumstances described in Condition 12 (*Events of Default*). In such circumstances, where any Note is still represented by a Global Note and the Global Note (or any part thereof) has become due and repayable in accordance with the Terms and Conditions of such Notes and payment in full of the amount due has not been made in accordance with the provisions of the Global Note then holders of interests in such Global Note credited to their accounts with DTC may require DTC to deliver Definitive Notes in registered form in exchange for their interest in such Global Note in accordance with DTC's standard operating procedures.

For so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that the global Note is exchanged for definitive Notes, and unless the Issuer obtains an exemption from the SGX-ST, the Issuer and the Guarantor will appoint and maintain a Paying Agent in Singapore where the Notes may be presented or surrendered for payment or redemption and make an announcement of such exchange through the SGX-ST, 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.

Form of Applicable Pricing Supplement

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

[Date]

[KOREA GAS CORPORATION/[NEW ISSUER]]

Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]
under the U.S.\$5,000,000,000
Global Medium Term Note Program of
Korea Gas Corporation

[as guaranteed by Korea Gas Corporation]

This document constitutes the Pricing Supplement relating to the issue of Notes described herein. Terms used herein shall be deemed to be defined as such for the purposes of the conditions (the "Conditions") set forth in the offering circular dated [•], 2013 (the "offering circular"). This Pricing Supplement contains the final terms of the Notes and 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.

Terms used herein shall be deemed to be defined as such for the purposes of the conditions (the "Conditions") set forth in the offering circular dated [original date]. This Pricing Supplement contains the final terms of the Notes and is supplemental to must be read in conjunction with the offering circular dated [current date] (the "offering circular"), except in respect of the Conditions which are extracted from the offering circular dated [original date] and are attached hereto.]

[Include whichever of the following apply or specify as "Not Applicable" (N/A). Note that the numbering should remain as set out below, even if "Not Applicable" is indicated for individual paragraphs or subparagraphs. Italics denote directions for completing the Pricing Supplement.]

[If the Notes have a maturity of less than one year from the date of their issue, the minimum denomination [must/may need to] be £100,000 or its equivalent in any other currency.]

1.	(i)	Issuer:	Korea Gas Corporation/[NEW ISSUER]
	[(ii)	Guarantor:	Korea Gas Corporation (delete for direct issues by Korea Gas Corporation)]
2.	(a)	Series Number:	[●]
	(b)	Tranche Number:	[•] (If fungible with an existing Series, details of such Series, including the date on which the Notes become fungible)
	(c)	Re-opening:	[Yes/No] [Specify terms of initial or eventual fungibility]
3.	Spe	ecified Currency or Currencies:	[●]
4.	Agg	gregate Nominal Amount:	
	(a)	Series:	[●]
	(b)	Tranche:	[•] (If fungible with an existing Series, details of such Series, including the date on which the Notes become fungible)
5.	(a)	Issue Price of Tranche:	[•]% of the Aggregate Principal Amount [plus accrued interest from [insert date] (in the case of fungible issues only, if applicable)]
	(b)	Net Proceeds: (required only for listed issues)	[•]
	(c)	Use of Proceeds: (as described in the offering circular/describe)	[•]
6.	(a)	Specified Denominations:	[●]
			(N.B. In the case of Registered Notes, this means the minimum integral amount in which transfers can be made. For Registered Global Notes, consider including language substantially to the following effect (however, appropriate amendments should be made for different currencies) "€100,000 and integral multiples of €1,000 in excess

thereof")

(N.B. For Bearer Notes with a Specified Denomination and higher integral multiples above the minimum denomination, consider including language substantially to the following effect. However, appropriate amendments should be made or different currencies.)

("[U.S.\$200,000] and integral multiples of [U.S.\$1,000] in excess thereof, up to and including [U.S.\$399,000] and, for so long as the Notes are represented by a Global Note (as defined below) and Euroclear and Clearstream so permit, the Notes shall be tradable only in the minimum authorized denomination of [U.S.\$200,000] and higher integral multiples of [U.S.\$1,000], notwithstanding that no definitive notes will be issued with a denomination above [U.S.\$399,000].")

(N.B. It should be noted that such Specified Denomination will not be permitted in relation to any issue of Notes which are to be represented on issue by a Temporary Global Note exchangeable for Definitive Notes.)

(b) Calculation Amount:

[•] (If only one Specified Denomination, insert the Specified Denomination. If there is more than one Specified Denomination, insert the highest common factor. N.B. There must be a common factor in the case of two or more Specified Denominations.)

7. (a) Issue Date:

- [ullet]
- (b) Interest Commencement Date:

[specify/Issue Date/Not Applicable] (N.B. An Interest Commencement Date will not be relevant for certain Notes, for example Zero Coupon Notes.)

8. Maturity Date:

[Fixed rate—specify date/Floating rate—Interest Payment Date falling in or nearest to [specify month and year]]

9. Interest Basis:

[[•]% Fixed Rate]

[[LIBOR/EURIBOR/ Other reference rate] +/- [●]% Floating

Rate]

[Zero Coupon]

[Index Linked Interest]
[Dual Currency Interest]

[specify other]

(further particulars specified below)

10. Redemption/Payment Basis:

[Redemption at par] [Index Linked Redemption] [Dual Currency Redemption]

[Partly Paid]
[Installment]
[specify other]

11. Change of Interest Basis or Redemption/Payment Basis:

[Specify details of any provision for change of Notes into another Interest Basis or Redemption/Payment Basis]

12. Put/Call Options:

[Investor Put] [Issuer Call]

[(further particulars specified below)]

13. Listing:

[Singapore/specify other/None]

14. (a) Status of the Notes:

[Senior Notes/Senior Guaranteed Notes]

[(b) Status of the Guarantee:]

[Senior] (delete for direct issues by Korea Gas Corporation)

[(c) Date of [the Issuer's Board] approval for the issuance of Notes obtained:] [[●]/None required]

[(d) Date of [the Guarantor's Board] approval for the making of the Guarantee obtained:] [[●]/None required] (delete for direct issues by Korea Gas Corporation)

15. Method of distribution:

[Syndicated/Non-syndicated]

PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16. Fixed Rate Note Provisions:

[Applicable/Not Applicable] (If not applicable, delete the

remaining subparagraphs of this paragraph)

(a) Rate(s) of Interest:

[•]% per annum [payable [annually/semi-annually/quarterly/other (specify)] in arrear] (If payable other than annually,

consider amending Condition 6 (Interest))

(b) Interest Payment Date(s):

[•] in each year up to and including the Maturity Date]
[adjusted in accordance with [specify Business Day
Convention and any applicable Additional Business
Center(s) for the definition of "Business Day"] /not adjusted]

/ [specify other] (N.B. This will need to be amended in the

case of long or short coupons)

(c) Fixed Coupon Amount(s): (applicable to Notes in definitive form)

[•] per Calculation Amount

(d) Broken Amount(s): (applicable to Notes in definitive form)

[●] per Calculation Amount, payable on the Interest Payment Date falling [in/on] [●] [Insert particulars of any initial or final broken interest amounts which do not

correspond with the Fixed Coupon Amount

(e) Day Count Fraction:

[30/360 or Actual/Actual (ICMA) or [specify other]]

(f) 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)]

(g) Other terms relating to the method of calculating interest for Fixed Rate Notes: [None/Give details]

17. Floating Rate Note Provisions:

[Applicable/Not Applicable] (If not applicable, delete the remaining subparagraphs of this paragraph)

(a) Specified Period(s)/Specified Interest Payment Dates:

[•]

(b) Business Day Convention:

[Floating Rate Convention/ Following Business Day Convention/ Modified Following Business Day Convention/ Preceding Business Day Convention/[specify other]]

(c) Additional Business Center(s):

[•] (Insert New York City for U.S. dollar denominated Notes to be held through DTC and for non-US dollar denominated Notes where exchange into U.S. dollars is contemplated for DTC participants holding through Euroclear and Clearstream)

(d) Manner in which the Rate of Interest and Interest Amount is to be determined: [Screen Rate Determination/ISDA Determination/specify other]

(e) Party responsible for calculating the Rate of Interest and Interest Amount (if not the Principal Paying Agent):

- (f) Screen Rate Determination:
 - Reference Rate:
- [•] (Either LIBOR, EURIBOR or other, although additional information is required if other—including fallback provisions in the Agency Agreement)
- Interest Determination Date(s):
- [•] (Second London business day prior to the start of each Interest Period if LIBOR (other than Sterling or euro LIBOR), first day of each Interest Period if Sterling LIBOR and the second day on which the TARGET2 System is open prior to the start of each Interest Period if EURIBOR or Euro LIBOR)
- Relevant Screen Page:
- [•] (In the case of EURIBOR, if not Reuters EURIBOR01 ensure it is a page which shows a composite rate or amend the fallback provisions appropriately)
- (g) ISDA Determination:
 - Floating Rate Option:
- [•] (If not on the same basis as the floating rate under a notional interest rate swap transaction in the relevant Specified Currency governed by an agreement incorporating the 2006 ISDA Definitions, the Issuer shall describe the basis here)

		Designated Maturity:	[●]
		Reset Date:	[●]
	(h)	Margin(s):	[+/-] [●]% per annum
	(i)	Minimum Rate of Interest:	[●]% per annum
	(j)	Maximum Rate of Interest:	[●]% per annum
	(k)	Day Count Fraction:	[Actual/Actual (ISDA)] [Actual/365 (Fixed)] [Actual/365 (Sterling)] [Actual/360] [30/360, 360/360 or Bond Basis] [30E/360 or Eurobond Basis] [30E/360 (ISDA)] [Other] (See Condition 6 (Interest) for alternatives)
	(I)	Fallback provisions, rounding provisions and any other terms relating to the method of calculating interest on Floating Rate Notes, if different from those set out in the Conditions:	[•]
18.	Zer	o Coupon Note Provisions:	[Applicable/Not Applicable] (If not applicable, delete the remaining subparagraphs of this paragraph)
	(a)	Accrual Yield:	[●]% per annum
	(b)	Reference Price:	[●]
	(c)	Any other formula/basis of determining amount payable:	[•]
	(d)	Day Count Fraction in relation to Early Redemption Amounts and late payment:	[Conditions 9.7 (Redemption and Purchase—Early Redemption Amounts) and 9.12 (Redemption and Purchase—Late payment on Zero Coupon Notes) apply/ specify other] (Consider applicable day count fraction if not U.S. dollar denominated)
19.		ex Linked Interest Note visions:	[Applicable/Not Applicable] (If not applicable, delete the remaining subparagraphs of this paragraph)
	(a)	Index/Formula:	[Give or annex details]
	(b)	Calculation Agent:	[give name]

(c) Party responsible for calculating the Rate of Interest (if not the Calculation Agent) and Interest Amount (if not the Principal Paying Agent): [ullet]

(d) Provisions for determining Coupon where calculation by reference to Index and/or Formula is impossible or impracticable:

[Need to include a description of market disruption or settlement disruption events and adjustment provisions]

(e) Specified Period(s)/Specified Interest Payment Dates:

(f) Business Day Convention:

[Floating Rate Convention/ Following Business Day Convention/ Modified Following Business Day Convention/ Preceding Business Day Convention/specify other]

(g) Additional Business Center(s): [●]

(h) Minimum Rate of Interest: [●]% per annum

(i) Maximum Rate of Interest: [●]% per annum

(j) Day Count Fraction: [Actual/Actual (ISDA)]

[Actual/365 (Fixed)] [Actual/365 (Sterling)]

[Actual/360]

[30/360, 360/360 or Bond Basis] [30E/360 or Eurobond Basis]

[30E/360 (ISDA)]

[Other]

(See Condition 6 (Interest) for alternatives)

20. Dual Currency Interest Note Provisions:

[Applicable/Not Applicable] (If not applicable, delete the remaining subparagraphs of this paragraph)

(a) Rate of Exchange/method of calculating Rate of Exchange:

[Give or annex details]

(b) Party, if any, responsible for calculating the principal and/or interest due (if not the Principal Paying Agent): [•]

(c) Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable: [Need to include a description of market disruption or settlement disruption events and adjustment provisions]

(d) Person at whose option Specified Currency(ies) is/are payable: [ullet]

(e) Day Count Fraction: [A

[Actual/Actual (ISDA)] [Actual/365 (Fixed)] [Actual/365 (Sterling)]

[Actual/360]

[30/360, 360/360 or Bond Basis] [30E/360 or Eurobond Basis]

[30E/360 (ISDA)]

[Other]

(See Condition 6 (Interest) for alternatives)

PROVISIONS RELATING TO REDEMPTION

21. Issuer Call: [Applicable/Not Applicable] (If not applicable, delete the

remaining subparagraphs of this paragraph)

(a) Optional Redemption Date(s): [●]

(b) Optional Redemption Amount of each Note and method, if any, of calculation of such amount(s): [[●] per Calculation Amount/specify other]

(c) If redeemable in part:

(i) Minimum Redemption Amount:

[•] per Calculation Amount

(ii) Maximum Redemption Amount:

[] per Calculation Amount

(d) Notice period (if other than as set out in the Conditions):

[•] (N.B. If setting notice periods which are different to those provided in the Conditions, the Issuer and the Guarantor are advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems and custodians, as well as any other notice requirements which may apply, for example, as between the Issuer, the Guarantor and the Principal Paying Agent)

22. Investor Put:

[Applicable/Not Applicable] (If not applicable, delete the

remaining subparagraphs of this paragraph)

(a) Optional Redemption Date(s): [●]

(b) Optional Redemption Amount of each Note and method, if any, of calculation of such amount(s): [[●] per Calculation Amount/specify other]

- (c) Notice period (if other than as set out in the Conditions):
- [•] (N.B. If setting notice periods which are different to those provided in the Conditions, the Issuer and the Guarantor are advised to consider the practicalities of distribution of information through intermediaries, for example, clearing systems and custodians, as well as any other notice requirements which may apply, for example, as between the Issuer, the Guarantor and the Principal Paying Agent)
- 23. Final Redemption Amount:
- [[●] per Calculation Amount/specify other/see Appendix]
- 24. Early Redemption Amount payable on redemption for taxation reasons or on event of default and/or the method of calculating the same (if required or if different from that set out in Condition 9.7 (Redemption and Purchase Early Redemption Amounts)):
- [[●] per Calculation Amount/specify other/see Appendix]

GENERAL PROVISIONS APPLICABLE TO THE NOTES

25. Form of Notes:

[Bearer Notes: Temporary Bearer Global Note exchangeable for a Permanent Bearer Global Note which is exchangeable for Definitive Notes [on 60 days' notice given at any time/only upon an Exchange Event]]

[Bearer Notes: Temporary Bearer Global Note exchangeable for Definitive Notes on and after the Exchange Date]

[Bearer Notes: Permanent Bearer Global Note exchangeable for Definitive Notes [on 60 days' notice given at any time/only upon an Exchange Event/at any time at the request of the Issuer]]

[Registered Notes: Regulation S Global Note (U.S.\$[●] nominal amount) registered in the name of a nominee for [DTC/a common depositary for Euroclear and Clearstream]/ Rule 144A Global Note (U.S.\$[●] principal amount registered in the name of a nominee for [DTC/ a common depositary for Euroclear and Clearstream]/Definitive IAI Registered Notes (*specify principal amounts*]

(Ensure that this is consistent with the wording in the "Form of the Notes" section in the offering circular and the Notes themselves. N.B. The exchange upon notice/at any time options for Bearer Notes should not be expressed to be applicable if the Specified Denomination of the Notes in paragraph 6 includes language substantially to the following effect: "[U.S.\$200,000] and integral multiples of [U.S.\$1,000] in excess thereof, up to and including [U.S.\$399,000]." Furthermore, such Specified Denomination construction is not permitted in relation to any issue of Notes which is to be represented on issue by a Temporary Global Note exchangeable for Definitive Notes.)

("[U.S.\$200,000] and integral multiples of [U.S.\$1,000] in excess thereof, up to and including [U.S.\$399,000] and, for so long as the Notes are represented by a Global Note (as defined below) and Euroclear and Clearstream so permit, the Notes shall be tradable only in the minimum authorized denomination of [U.S.\$200,000] and higher integral multiples of [U.S.\$1,000], notwithstanding that no definitive notes will be issued with a denomination above [U.S.\$399,000].")

26. Additional Financial Center(s) or other special provisions relating to Payment Days:

[Not Applicable/give details] (Note that this paragraph relates to the place of payment and not Interest Period end dates to which sub-paragraphs 17(c) and 19(g) relate)

27. Talons for future Coupons or Receipts to be attached to Definitive Bearer Notes (and dates on which such Talons mature): [Yes/No. If yes, give details]

28. Details relating to Partly Paid Notes: amount of each payment comprising the Issue Price and date on which each payment is to be made and consequences of failure to pay, including any right of the Issuer to forfeit the Notes and interest due on late payment:

[Not Applicable/give details] (N.B. A new form of Temporary Global Note and/or Permanent Global Note may be required for Partly Paid issues)

29. Details relating to Installment Notes:

(a) Installment Amount(s): [Not Applicable/give details]

(b) Installment Date(s): [Not Applicable/give details]

30. Redenomination applicable: Redenomination [not] applicable

[(If Redenomination is applicable, specify the applicable Day Count Fraction and any provisions necessary to deal with floating rate interest calculation (including alternative

reference rates))]

31. Other terms: [Not Applicable/give details]

Distribution

Common Code:

such as CINS)

(insert here any other relevant codes

CUSIP:

32. (a) If syndicated, names of [Not Applicable/give names] Managers: (b) Stabilizing Manager(s) (if any): [Not Applicable/give name] 33. If non-syndicated, name of [Not Applicable/give name] Relevant Dealer: 34. U.S. Selling Restrictions: [TEFRA D/ TEFRA C/ TEFRA not applicable (for Bearer Notes with a maturity of one year or less (including unilateral rollovers and extensions) or Registered Notes)] 35. Additional selling restrictions: [Not Applicable/give details] **Operational Information** 36. Any clearing system(s) other than [Not Applicable/give name(s) and number(s)] Euroclear and Clearstream and the relevant identification number(s): 37. Delivery: Delivery [against/free of] payment 38. Additional Paying Agent(s) (if any): [•] ISIN: [•]

LISTING AND ADMISSION TO TRADING APPLICATION

This Pricing Supplement comprises the pricing supplement required to list the issue of Notes described herein pursuant to the U.S.\$5,000,000,000 Global Medium Term Note Program of the Issuer [and the Guarantor].

[Not Applicable/specify]

The Singapore Exchange Securities Trading Limited (the "SGX-ST") assumes no responsibility for the correctness of any of the statements made or opinions or reports contained in this Pricing Supplement. Admission of the Notes to the Official List of the SGX-ST is not to be taken as an indication of the merits of the Issuer [or the Guarantor], the Program or the Notes.

RESPONSIBILITY

The Issuer accepts responsibility for the information contained in this Pricing Supplement.
Signed on behalf of the Issuer:
By:
Duly authorized

If the applicable Pricing Supplement specifies any modification to the Terms and Conditions of the Notes as described herein, it is envisaged that, to the extent that such modification relates only to Conditions 1 (Form, Denomination and Title), 5 (Redenomination), 6 (Interest), 8 (Payments), 9 (Redemption and Purchase (except Condition 9.2 (Redemption and Purchase—Redemption for tax reasons)), 13 (Replacement of Notes, Receipts, Coupons and Talons), 14 (Agents), 15 (Exchange of Talons), 16 (Notices) (insofar as such Notes are not listed or admitted to trade on any stock exchange) or 18 (Further Issues), they will not necessitate the preparation of a supplement to this offering circular. If the Terms and Conditions of the Notes of any Series are to be modified in any other respect, a supplement to this offering circular will be prepared, if appropriate.

TERMS AND CONDITIONS OF THE NOTES

The following are the Terms and Conditions (the "Conditions") of the Notes (as defined below) which will be incorporated by reference into each Global Note (as defined below) and each definitive Note, in the latter case only if permitted by the rules of the relevant stock exchange or other relevant authority (if any) and agreed by the Issuer and the relevant Dealer at the time of issue but, if not so permitted and agreed, such definitive Note will have endorsed thereon or attached thereto such Conditions. The applicable Pricing Supplement in relation to any Tranche of Notes may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with the following Conditions, replace or modify the following Conditions for the purpose of such Notes. The applicable Pricing Supplement (or the relevant provisions thereof) will be endorsed upon, or attached to, each Global Note and definitive Note. Reference should be made to "Form of the Notes" for a description of the content of the Pricing Supplements which will specify which of such terms are to apply in relation to the relevant Notes.

This Note is one of a Series (as defined below) of Notes issued by Korea Gas Corporation (the "Company") or any additional issuer which is a Subsidiary (as defined below) of the Company and has acceded to the Program by executing an accession agreement pursuant to the terms of the Agency Agreement (as defined below) (each of the Company and such additional issuers, in relation to the Notes issued by it, the "Issuer", and each of such additional issuers, excluding the Company, a "Guaranteed Issuer"). Notes issued by a Guaranteed Issuer will be guaranteed by the Company (in such capacity, the "Guarantor"). References to the Guarantor in the Conditions shall only be relevant in the context of Notes issued by a Guaranteed Issuer.

References herein to the "Notes" shall be references to the Senior Notes or the Senior Guaranteed Notes (each as defined in Condition 3 below), as the case may be, of this Series issued by the Issuer (and in the case of issuance by a Guaranteed Issuer, guaranteed by the Guarantor) and shall mean:

- (a) in relation to any Notes represented by a global Note (a "Global Note"), units of the lowest Specified Denomination in the Specified Currency (as defined below);
- (b) any Global Note;
- (c) any definitive Notes in bearer form ("Bearer Notes"), issued in exchange for a Global Note in bearer form; and
- (d) any definitive Notes in registered form ("Registered Notes") (whether or not issued in exchange for a Global Note in registered form).

The Notes, and in the case of the Bearer Notes, the Receipts (as defined below) and the Coupons (as defined below), are issued pursuant to, and have the benefit of, an agency agreement dated September 30, 2010, as amended on January 5, 2012 (such agency agreement as amended and/or supplemented and/or restated from time to time, the "Agency Agreement"), and made among the Company, The Bank of New York Mellon, London Branch, as principal paying agent, paying agent and transfer agent (each, a "Principal Paying Agent", a "Paying Agent" and a "Transfer Agent", each of which terms including any successor thereto or additional such agent appointed pursuant to the terms of the Agency Agreement, and collectively (and together with the Registrar and the Euro Registrar (each as defined below)), the "Agents"), The Bank of New York Mellon, as Paying Agent, Transfer Agent and registrar (the "Registrar") (which term including any successor thereto) and The Bank of New York Mellon (Luxembourg) S.A., as the Euro registrar (the "Euro Registrar") (which term including any successor thereto).

Interest-bearing definitive Bearer Notes have (unless otherwise indicated in the applicable Pricing Supplement) interest coupons ("Coupons") and, if indicated in the applicable Pricing Supplement, talons for further Coupons ("Talons") attached on issue. Any reference herein to Coupons or coupons shall, unless the context otherwise requires, be deemed to include a reference to Talons or talons. Definitive Bearer Notes repayable in installments have receipts ("Receipts") for the payment of the installments of principal (other than the final installment) attached on issue. Registered Notes and Global Notes do not have Receipts, Coupons or Talons attached on issue.

The Pricing Supplement for this Note (or the relevant provisions thereof) is attached to or endorsed on this Note and supplements these Conditions, and may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Conditions, replace or modify these Conditions for the purposes of this Note. References to the "applicable Pricing Supplement" are to the Pricing Supplement (or the relevant provisions thereof) attached to or endorsed on this Note.

Any reference to "Noteholders" or "holders" in relation to any Notes shall mean (in the case of Bearer Notes) the holders of the Notes and (in the case of Registered Notes) the persons in whose name the Notes are registered and shall, in relation to any Notes represented by a Global Note, be construed as provided below. Any reference herein to "Receiptholders" shall mean the holders of the Receipts, and any reference herein to "Couponholders" shall mean the holders of the Coupons and shall, unless the context otherwise requires, include the holders of the Talons.

As used herein, "**Tranche**" means Notes which are identical in all respects (including as to listing and admission to trading), and "**Series**" means a Tranche of Notes together with any further Tranche or Tranches of Notes which are (a) expressed to be consolidated and form a single series and (b) identical in all respects (including as to listing and admission to trading) except for their respective Issue Dates, Interest Commencement Dates (if applicable) and/or Issue Prices (if applicable).

Copies of the Agency Agreement are available for inspection during normal business hours at the specified office of each of the Agents. Copies of the applicable Pricing Supplement are available for inspection during normal business hours at the specified office of each of the Agents except that, if this Note is an unlisted Note of any Series, the applicable Pricing Supplement will only be available for inspection by a Noteholder holding one or more unlisted Notes of such Series and such Noteholder must produce evidence satisfactory to the relevant Agent as to its holding of such Notes and its identity. The Noteholders, the Receiptholders and the Couponholders are deemed to have notice of, and are entitled to the benefit of, all the provisions of the Agency Agreement and the applicable Pricing Supplement which are applicable to them. The statements in these Conditions include summaries of, and are subject to, the detailed provisions of the Agency Agreement.

Words and expressions defined in the Agency Agreement or used in the applicable Pricing Supplement shall have the same meanings where used in these Conditions unless the context otherwise requires or unless otherwise stated and provided that, in the event of inconsistency between the Agency Agreement and the applicable Pricing Supplement, or between these Conditions and the applicable Pricing Supplement will prevail.

1. FORM, DENOMINATION AND TITLE

The Notes may be issued in bearer form or in registered form as specified in the applicable Pricing Supplement and, in the case of definitive Notes, will be serially numbered, in the Specified Currency and the Specified Denomination(s). Except as provided in Condition 2 (*Transfers of Registered Notes*), Notes of one Specified Denomination may not be exchanged for Notes of another Specified Denomination, and Bearer Notes may not be exchanged for Registered Notes and *vice versa*.

Registered Notes are represented by registered certificates and, except as provided in Condition 2.3, each such certificate shall represent the entire holding of Registered Notes by the same holder.

This Note may be a Fixed Rate Note, a Floating Rate Note, a Zero Coupon Note, an Index Linked Interest Note, a Dual Currency Interest Note or a combination of any of the foregoing, depending upon the Interest Basis shown in the applicable Pricing Supplement.

This Note may be an Index Linked Redemption Note, an Installment Note, a Dual Currency Redemption Note, a Partly Paid Note or a combination of any of the foregoing, depending upon the Redemption/Payment Basis shown in the applicable Pricing Supplement. This Note may also be a Limited Recourse Note, as indicated in the applicable Pricing Supplement.

Definitive Bearer Notes are issued with Coupons attached and (if applicable) Receipts and Talons attached, unless they are Zero Coupon Notes in which case references to Coupons and Couponholders in these Conditions are not applicable.

Subject as set out below, title to Bearer Notes, Receipts and Coupons will pass by delivery and title to the Registered Notes will pass upon registration of transfers in accordance with the provisions of the Agency Agreement. The Issuer, the Guarantor and any Agent will (except as otherwise required by law) deem and treat the bearer of any Bearer Note, Receipt or Coupon and the registered holder of any Registered Note as the absolute owner thereof (whether or not overdue and notwithstanding any notice of ownership or writing thereon or notice of any previous loss or theft thereof) for all purposes but, in the case of any Global Note, without prejudice to the provisions set out in the next succeeding paragraph, and no person shall be liable for so treating the holder.

For so long as any of the Notes is represented by a Global Note held on behalf of Euroclear Bank S.A./N.V. as operator of the Euroclear system ("Euroclear") and/or Clearstream Banking, société anonyme ("Clearstream"), each person (other than Euroclear or Clearstream) who is for the time being shown in the records of Euroclear or Clearstream as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear or Clearstream as to the nominal amount of such Notes standing to the account of any person shall be conclusive and binding for all purposes save in the case of manifest error) shall be treated by the Issuer, the Guarantor and the Agents as the holder of such nominal amount of such Notes for all purposes other than with respect to the payment of principal or interest on such nominal amount of such Notes, for which purpose the bearer of the relevant Bearer Global Note or the registered holder of the relevant Registered Global Note shall be treated by the Issuer, the Guarantor and any Agent as the holder of such nominal amount of such Notes in accordance with and subject to the terms of the relevant Global Note and the expressions "Noteholder" and "holder of Notes" and related expressions shall be construed accordingly. For so long as The Depository Trust Company ("DTC") or its nominee is the registered owner or holder of a Registered Global Note, DTC or such nominee, as the case may be, will be considered the sole owner or holder of the Notes represented by such Registered Global Note for all purposes under the Agency Agreement and the Notes except to the extent that in accordance with DTC's published rules and procedures any ownership rights may be exercised by its participants or beneficial owners through participants.

Notes which are represented by a Global Note will be transferable only in accordance with the rules and procedures for the time being of DTC, Euroclear and Clearstream, as the case may be. References to DTC, Euroclear and/or Clearstream shall, whenever the context so permits, be deemed to include a reference to any additional or alternative clearing system specified in the applicable Pricing Supplement.

For so long as the Notes are listed on the Singapore Exchange Securities Trading Limited (the "SGX-ST") and the rules of the SGX-ST so require, the Issuer and the Guarantor (if applicable) will

appoint and maintain a paying and transfer agent in Singapore in the event that the Global Note is exchanged for definitive Notes. In addition, an announcement of such exchange will be made through the SGX-ST. Such announcement will include all material information with respect to the delivery of the definitive Notes, including details of the paying and transfer agent in Singapore.

2. TRANSFERS OF REGISTERED NOTES

2.1 Transfers of interests in Registered Global Notes

Transfers of beneficial interests in Registered Global Notes will be effected by DTC, Euroclear or Clearstream, as the case may be, and, in turn, by other participants and, if appropriate, indirect participants in such clearing systems acting on behalf of beneficial transferors and transferees of such interests. A beneficial interest in a Registered Global Note will, subject to compliance with all applicable legal and regulatory restrictions, be transferable for Notes in definitive form or for a beneficial interest in another Registered Global Note only in the authorized denominations set out in the applicable Pricing Supplement and only in accordance with the rules and operating procedures for the time being of DTC, Euroclear or Clearstream, as the case may be, and in accordance with the terms and conditions specified in the Agency Agreement. Transfers of a Registered Global Note registered in the name of a nominee for DTC shall be limited to transfers of such Registered Global Note, in whole but not in part, to another nominee of DTC or to a successor of DTC or such successor's nominee.

2.2 Transfers of Registered Notes in definitive form

Subject as provided in Conditions 2.5 (Transfers of Registered Notes-Transfers of interests in Regulation S Global Notes), 2.6 (Transfers of Registered Notes—Transfers of interests in Legended Notes) and 2.7 (Transfers of Registered Notes-Exchanges and transfers of Registered Notes generally), upon the terms and subject to the conditions set forth in the Agency Agreement, a Registered Note in definitive form may be transferred in whole or in part in the authorized denominations set out in the applicable Pricing Supplement. In order to effect any such transfer (i) the holder or holders must (A) surrender the Registered Note for registration of the transfer of the Registered Note, or the relevant part of the Registered Note, at the specified office of the Registrar or any Transfer Agent, with the form of transfer thereon duly executed by the holder or holders thereof or his or their attorney or attorneys duly authorized in writing, and (B) complete and deposit such other certifications as may be required by the Registrar or, as the case may be, the relevant Transfer Agent, and (ii) the Registrar or, as the case may be, the relevant Transfer Agent must, after due and careful enquiry, be satisfied with the documents of title and the identity of the person making the request. Any such transfer will be subject to such reasonable regulations as the Issuer and the Registrar may from time to time prescribe (the initial such regulations being set out in Schedule 8 to the Agency Agreement). Subject as provided above, the Registrar or, as the case may be, the relevant Transfer Agent will, within seven business days (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar or, as the case may be, the relevant Transfer Agent is located) of the request (or such longer period as may be required to comply with any applicable fiscal or other laws or regulations), authenticate and make available for collection at the specified office of the Transfer Agent, or deliver, or procure the authentication and delivery of, at its specified office to the transferee or (at the risk of the transferee) send by uninsured mail, to such address as the transferee may request, a new Registered Note in definitive form of a like aggregate nominal amount to the Registered Note (or the relevant part of the Registered Note) transferred. In the case of the transfer of part only of a Registered Note in definitive form, a new Registered Note in definitive form in respect of the balance of the Registered Note not transferred will be so authenticated and delivered or (at the risk of the transferor) sent to the transferor.

2.3 Registration of transfer upon partial redemption

In the event of a partial redemption of Notes under Condition 9 (*Redemption and Purchase*), the Issuer shall not be required to register the transfer of any Registered Note, or part of a Registered Note, called for partial redemption.

2.4 Costs of registration

Noteholders will not be required to bear the costs and expenses of effecting any registration of transfer as provided above, except for any costs or expenses of delivery other than by regular uninsured mail and except that the Issuer (or the Guarantor, as applicable) may require the payment of a sum sufficient to cover any stamp duty, tax or other governmental charge that may be imposed in relation to the registration.

2.5 Transfers of interests in Regulation S Global Notes

Prior to expiry of the applicable Distribution Compliance Period (as defined below), transfers by the holder of, or of a beneficial interest in, a Regulation S Global Note (as defined below) to a transferee in the United States or who is a U.S. person will only be made:

- (a) upon receipt by the Registrar of a written certification substantially in the form set out in the Agency Agreement, amended as appropriate (a "Transfer Certificate"), copies of which are available from the specified office of the Registrar or any Transfer Agent, from the transferor of the Note or beneficial interest therein to the effect that such transfer is being made:
 - (i) to a person whom the transferor reasonably believes is a QIB (as defined below) in a transaction meeting the requirements of Rule 144A (as defined below); or
 - (ii) to a person who is an Institutional Accredited Investor, in which case the Transfer Certificate must be accompanied by a duly executed investment letter from the relevant transferee substantially in the form set out in Schedule 3 of the Agency Agreement (an "IAI Investment Letter"); or
- (b) otherwise pursuant to the Securities Act (as defined below) or an exemption therefrom, subject to receipt by the Issuer and the Guarantor of such satisfactory evidence as the Issuer and the Guarantor may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States,

and, in each case, in accordance with any applicable securities laws of any state of the United States or any other jurisdiction.

In the case of (i) above, such transferee may take delivery through a Legended Note (as defined below) in global or definitive form, and, in the case of (ii) above, such transferee may take delivery only through a Legended Note in definitive form. After expiry of the applicable Distribution Compliance Period (a) beneficial interests in Regulation S Global Notes registered in the name of a nominee for DTC may be held through DTC directly, by a participant in DTC, or indirectly through a participant in DTC, and (b) such certification requirements will no longer apply to such transfers.

2.6 Transfers of interests in Legended Notes

Transfers of Legended Notes or beneficial interests therein may be made:

- (a) to a transferee who takes delivery of such interest through a Regulation S Global Note, upon receipt by the Registrar of a duly completed Transfer Certificate from the transferor to the effect that such transfer is being made in accordance with Regulation S (as defined below) and that in the case of a Regulation S Global Note registered in the name of a nominee for DTC, if such transfer is being made prior to expiry of the applicable Distribution Compliance Period, the interests in the Notes being transferred will be held immediately thereafter through Euroclear and/or Clearstream; or
- (b) to a transferee who takes delivery of such interest through a Legended Note:
 - (i) where the transferee is a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A, without certification; or
 - (ii) where the transferee is an Institutional Accredited Investor, subject to delivery to the Registrar of a Transfer Certificate from the transferor to the effect that such transfer is being made to an Institutional Accredited Investor, together with a duly executed IAI Investment Letter from the relevant transferee; or
- (c) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer and the Guarantor of such satisfactory evidence as the Issuer and the Guarantor may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with any applicable federal securities laws of the United States or any applicable securities laws of any state of the United States,

and in each case, in accordance with any applicable securities laws of any state of the United States or any other jurisdiction.

Notes transferred by Institutional Accredited Investors to QIBs pursuant to Rule 144A or outside the United States pursuant to Regulation S will be eligible to be held by such QIBs or non-U.S. investors through DTC, Euroclear or Clearstream, as appropriate, and the Registrar will arrange for any Notes which are the subject of such a transfer to be represented by the appropriate Registered Global Note, where applicable.

Upon the transfer, exchange or replacement of Legended Notes, or upon specific request for removal of the Legend, the Registrar shall deliver only Legended Notes or refuse to remove the Legend, as the case may be, unless there is delivered to the Issuer and the Guarantor such satisfactory evidence as may reasonably be required by the Issuer and the Guarantor, which may include an opinion of U.S. counsel, that neither the Legend nor the restrictions on transfer set forth therein are required to ensure compliance with the provisions of the Securities Act.

2.7 Exchanges and transfers of Registered Notes generally

Holders of Registered Notes in definitive form, other than Institutional Accredited Investors, may exchange such Notes for interests in a Registered Global Note of the same type at any time.

2.8 Closed Periods

No Noteholder may require the transfer of a Registered Note to be registered during (i) the period of 15 days ending on the due date for any redemption or payment of principal or interest or payment on such Note and (ii) during the 15 days before any dates on which Notes may be called for redemption by the Issuer at its option pursuant to Condition 9.3, (iii) after any such Note has been called for redemption or (iv) during the period of seven (7) days ending (and including) on any Record Date (as defined below).

2.9 Definitions

In this Condition, the following expressions shall have the following meanings:

"Distribution Compliance Period" means the period that ends 40 days after the completion of the distribution of each Tranche of Notes, as certified by the relevant Dealer (in the case of a non-syndicated issue) or the relevant Lead Manager (in the case of a syndicated issue);

"Institutional Accredited Investor" means "accredited investors" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) that are institutions;

"Legended Note" means Registered Notes in definitive form that are issued to Institutional Accredited Investors and Registered Notes (whether in definitive form or represented by a Registered Global Note) sold in private transactions to QIBs in accordance with the requirements of Rule 144A;

"QIB" means a "qualified institutional buyer" within the meaning of Rule 144A;

"Regulation S" means Regulation S under the Securities Act;

"Regulation S Global Note" means a Registered Global Note representing Notes sold outside the United States in reliance on Regulation S;

"Rule 144A" means Rule 144A under the Securities Act;

"Rule 144A Global Note" means a Registered Global Note representing Notes sold in the United States or to QIBs; and

"Securities Act" means the United States Securities Act of 1933, as amended.

3. STATUS OF THE NOTES; GUARANTEE

3.1 Senior Notes

This Condition 3.1 is applicable to all Notes which are specified in the applicable Pricing Supplement as being Senior Notes issued by the Company ("Senior Notes").

The Senior Notes and any Receipts and Coupons relating thereto are direct, unconditional, unsubordinated and (subject to Condition 4 (*Certain Covenants*)) unsecured general obligations of the Company and shall at all times rank *pari passu*, without any preference among themselves and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of the Company, from time to time outstanding.

3.2 Senior Guaranteed Notes

This Condition 3.2 is applicable to all Notes which are specified in the applicable Pricing Supplement as being Senior Guaranteed Notes issued by a Guaranteed Issuer ("Senior Guaranteed Notes").

The Senior Guaranteed Notes and any Receipts and Coupons relating thereto are direct, senior, unconditional, unsubordinated and (subject to Condition 4 (*Certain Covenants*)) unsecured general obligations of the relevant Guaranteed Issuer and shall at all times rank *pari passu*, without any preference among themselves and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of such Guaranteed Issuer, from time to time outstanding.

The Senior Guaranteed Notes and any Receipts and Coupons relating thereto are guaranteed as to payment of principal and interest by the Guarantor as set forth in Condition 3.3.

In relation to each Series of Senior Guaranteed Notes and any Receipts and Coupons relating thereto, claims in respect of the Guarantee (as defined below) shall at all times rank *pari passu* and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of the Guarantor, from time to time outstanding.

3.3 Guarantee

The Guaranter unconditionally and irrevocably guarantees (the "Guarantee") to each holder of the Senior Guaranteed Notes and any Receipts and Coupons relating thereto the due payment of all amounts owing from time to time under the Senior Guaranteed Notes and the related Receipts and Coupons.

The Guarantee is a guarantee of payment and not a guarantee of collection.

The Guarantee is a direct, senior, unconditional, unsubordinated and (subject to Condition 4 (*Certain Covenants*)) unsecured general obligation of the Guarantor and shall at all times rank *pari passu* and (except for certain obligations required to be preferred by applicable law) equally with all other unsecured and unsubordinated general obligations of the Guarantor, from time to time outstanding.

4. CERTAIN COVENANTS

4.1 Negative Pledge

So long as any of the Notes of this Series remains outstanding, neither the Issuer nor the Guarantor will create or permit to be outstanding any mortgage, charge, lien, pledge or other security interest ("Security") upon the whole or part of its property, assets or revenues, present or future, to secure for the benefit of the holders of any International Investment Securities (as defined below) (i) payment of any sum due in respect of any such securities or (ii) any payment under any guarantee of any such securities or (iii) any payment under any indemnity or other like obligation relating to any such securities, without in any such case at the same time according to the Notes of this Series and the Receipts and Coupons applicable thereto, either the same security as is granted to or is outstanding in respect of such International Investment Securities, guarantee, indemnity or other like obligation or such other security as shall be approved by an Extraordinary Resolution passed at a meeting of the Noteholders of this Series.

The foregoing shall not operate to restrict or prohibit the creation or existence of any Security solely in Receivables (as defined below) 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 wholly-owned Subsidiary (or another Person in which the Issuer or the Guarantor makes an investment and to which the Issuer or the Guarantor transfers Receivables and related assets) of the Issuer or the Guarantor.

As used herein:

"International Investment Securities" means notes, debentures, bonds or investment securities of the Issuer which:

- (A) either are by their terms payable, or confer a right to receive payment, in any currency other than Korean Won or are denominated in Korean Won and more than 50% of the aggregate principal amount thereof is initially distributed outside Korea by or with the authorization of the Issuer and the Guarantor; and
- (B) 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.

"Person" means any individual, corporation, company, firm, tribunal, undertaking, association, organization, partnership, joint venture, trust, limited liability company, unincorporated organization or government or any agency, instrumentality or political subdivision thereof; in each case whether or not being a separate legal entity.

"Receivable" means a right to receive payment arising from a sale or lease of goods (including oil or gas reserves and equipment) or the performance of services by a Person pursuant to an arrangement with another Person pursuant to which such other Person is obligated to pay for such goods or services under terms that permit the purchase of such goods and services on credit.

"Relevant GAAP" means such accounting principles which are generally accepted in the jurisdiction of the Relevant Issuer's or the Guarantor's incorporation, as applicable.

"Subsidiary" means (i) any corporation or other entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are at the time directly or indirectly owned by the Issuer or Guarantor or (ii) any subsidiary subject to consolidation with the Issuer or the Guarantor's financial statements under Relevant GAAP.

4.2 Consolidation, Merger and Sale of Assets

Each of the Issuers and the Guarantor, without the consent of the Noteholders, may consolidate with, or merge into, or sell, transfer, lease or convey its assets as an entirety or substantially as an entirety to any corporation organized under the laws of the respective jurisdiction of its incorporation; provided that (i) any successor corporation expressly assumes the applicable obligations of the Issuer or the Guarantor, as the case may be, under the Notes, the Guarantee (if applicable) and the Agency Agreement, as the case may be, (ii) after giving effect to the transaction, with respect to the Issuer or the Guarantor, as the case may be, or any such successor corporation, no Event of Default (as defined below) and no event which, after notice or lapse of time or both, would become an Event of Default, shall have occurred and be continuing, and (iii) the Issuer or the Guarantor, as the case may be, has delivered to the Principal Paying Agent a certificate executed by a duly authorized officer of the Issuer or the Guarantor, as the case may be, and an opinion of counsel as to matters of law stating that such

consolidation, merger, sale, transfer, lease or conveyance and, if a supplemental agency agreement is required in connection with such transaction, such supplemental agency agreement comply with the Agency Agreement and the Notes and that all conditions precedent herein provided for relating to such transaction have been complied with.

4.3 Provision of Information to Noteholders

Each of the Issuers and the Guarantor covenants that for so long as any of the Notes are "restricted securities" within the meaning of Rule 144 under the Securities Act, it will, at any time when it is not subject to either the periodic reporting requirements of Section 13 or Section 15(d) of the Exchange Act or the requirements of Rule 12g3-2(b) thereunder, provide to any Noteholder or prospective purchaser of Notes designated by such Noteholder, upon the request of such Noteholder or prospective purchaser, the information required to be provided by Rule 144A(d)(4) under the Securities Act.

5. REDENOMINATION

5.1 Redenomination

Where redenomination is specified in the applicable Pricing Supplement as being applicable, the Issuer may, without the consent of the Noteholders, the Receiptholders and the Couponholders, on giving prior notice to the applicable Agent, DTC, Euroclear and Clearstream and at least 30 days' prior notice to the Noteholders in accordance with Condition 16 (*Notices*), elect that, with effect from the Redenomination Date specified in the notice, the Notes shall be redenominated in Euro.

The election will have effect as follows:

- (a) the Notes and the Receipts shall be deemed to be redenominated into Euro with a principal amount for each Note and Receipt equal to the principal amount of that Note or Receipt in the Specified Currency, converted into Euro at the Established Rate, rounded to the nearest Euro 0.01 if the conversion results in an amount involving a fraction of Euro 0.01, provided that, if the Issuer determines, with prior notice to the applicable Agents, that the then market practice in respect of the redenomination into Euro of internationally offered securities is different from the provisions specified above, such provisions shall be deemed to be amended so as to comply with such market practice and the Issuer shall promptly notify the Noteholders, the stock exchange (if any) on which the Notes may be listed and the applicable Agents of such deemed amendments;
- (b) except to the extent that an Exchange Notice (as defined below) has been given in accordance with paragraph (d) below, the amount of interest due in respect of the Notes will be calculated by reference to the aggregate principal amount of Notes presented (or, as the case may be, in respect of which Coupons are presented) for payment by the relevant holder and the amount of such payment shall be rounded down to the nearest Euro 0.01;
- (c) if definitive Notes are required to be issued after the Redenomination Date, they shall be issued at the expense of the Issuer in the denominations of Euro 1,000, Euro 10,000, Euro 100,000 and (but only to the extent of any remaining amounts less than Euro 1,000 or such smaller denominations as stated in prior notice to the applicable Agent) Euro 0.01 and such other denominations as the applicable Agent shall be notified of by the Issuer or the Guarantor and notify the same to the Noteholders;

- (d) if issued prior to the Redenomination Date, all unmatured Coupons denominated in the Specified Currency (whether or not attached to the Notes) will become void with effect from the date on which the Issuer gives notice (the "Exchange Notice") that replacement Eurodenominated Notes, Receipts and Coupons are available for exchange (provided that such securities are so available) and no payments will be made in respect of them. The payment obligations contained in any Notes and Receipts so issued will also become void on that date although those Notes and Receipts will continue to constitute valid exchange obligations of the Issuer. New Euro-denominated Notes, Receipts and Coupons will be issued in exchange for Notes, Receipts and Coupons denominated in the Specified Currency in such manner as the applicable Agent may specify acting on the instruction of the Issuer and as shall be notified to the Noteholders in the Exchange Notice. No Exchange Notice may be given less than 15 days prior to any date for payment of principal or interest on the Notes;
- (e) after the Redenomination Date, all payments in respect of the Notes, the Receipts and the Coupons, other than payments of interest in respect of periods commencing before the Redenomination Date, will be made solely in Euro as though references in the Notes to the Specified Currency were to Euro. Payments will be made in Euro by credit or transfer to a Euro account (or any other account to which Euro may be credited or transferred) specified by the payee or, at the option of the payee, by a Euro check;
- (f) if the Notes are Fixed Rate Notes and interest for any period ending on or after the Redenomination Date is required to be calculated for a period ending other than on an Interest Payment Date (as defined below) (as specified in the applicable Pricing Supplement), it will be calculated by applying the Rate of Interest to each Specified Denomination, multiplying such sum by the applicable Day Count Fraction (as defined below), and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention;
- (g) if the Notes are Floating Rate Notes, the applicable Pricing Supplement will specify any relevant changes to the provisions relating to interest; and
- (h) such other changes shall be made to this Condition as the Issuer may decide, after prior notice to the applicable Agent, and as may be specified in the notice, to conform it to conventions then applicable to instruments denominated in Euro.

5.2 Interpretation

In these Conditions, the following expressions have the following meanings:

"Established Rate" means the rate for the conversion of the Specified Currency (including compliance with rules relating to rounding in accordance with applicable European Community regulations) into Euro established by the Council of the European Union pursuant to Article 123 of the Treaty;

"Euro" or "euro" means the currency introduced at the start of the third stage of European economic and monetary union pursuant to the Treaty;

"Redenomination Date" means (in the case of interest bearing Notes) any date for payment of interest under the Notes or (in the case of Zero Coupon Notes) any date, in each case specified by the Issuer in the notice given to the Noteholders pursuant to Condition 5.1 (*Redenomination*) above and which falls on or after the date on which the country of the Specified Currency first participates in the third stage of European economic and monetary union; and

"**Treaty**" means the Treaty establishing the European Community (signed in Rome on March 25, 1957), as amended from time to time.

6. INTEREST

6.1 Interest on Fixed Rate Notes

Each Fixed Rate Note bears interest on its outstanding nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Interest Commencement Date at the rate(s) per annum (expressed as a percentage) equal to the Rate(s) of Interest. Interest will be payable in arrears on the Interest Payment Date(s) in each year up to (and including) the Maturity Date.

If the Notes are in definitive form, except as provided in the applicable Pricing Supplement, the amount of interest payable on each Interest Payment Date in respect of the Fixed Interest Period ending on (but excluding) such date will amount to the Fixed Coupon Amount. Payments of interest on any Interest Payment Date will, if so specified in the applicable Pricing Supplement, amount to the Broken Amount so specified.

Except in the case of Notes in definitive form where a Fixed Coupon Amount or Broken Amount is specified in the applicable Pricing Supplement, interest shall be calculated in respect of any period by applying the Rate of Interest to:

- (A) in the case of Fixed Rate Notes which are represented by a Global Note, the aggregate outstanding nominal amount of the Fixed Rate Notes represented by such Global Note (or, if they are Partly Paid Notes, the aggregate amount paid up); or
- (B) in the case of Fixed Rate Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention. Where the Specified Denomination of a Fixed Rate Note in definitive form comprises more than one Calculation Amount, the amount of interest payable in respect of such Fixed Rate Note shall be the aggregate of the amounts (determined in the manner provided above) for each Calculation Amount comprising the Specified Denomination without any further rounding.

In these Conditions:

"Day Count Fraction" means, in respect of the calculation of an amount of interest, in accordance with this Condition 6.1:

- (a) if "Actual/Actual (ICMA)" is specified in the applicable Pricing Supplement:
 - (i) in the case of Notes where the number of days in the relevant period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (the "Accrual Period") is equal to or shorter than the Determination Period during which the Accrual Period ends, the number of days in such Accrual Period divided by the product of (1) the number of days in such Determination Period (as defined below) and (2) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; or

- (ii) in the case of Notes where the Accrual Period is longer than the Determination Period during which the Accrual Period ends, the sum of:
 - (A) the number of days in such Accrual Period falling in the Determination Period in which the Accrual Period begins divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year; and
 - (B) the number of days in such Accrual Period falling in the next Determination Period divided by the product of (x) the number of days in such Determination Period and (y) the number of Determination Dates that would occur in one calendar year; and
- (b) if "30/360" is specified in the applicable Pricing Supplement, the number of days in the period from (and including) the most recent Interest Payment Date (or, if none, the Interest Commencement Date) to (but excluding) the relevant payment date (such number of days being calculated on the basis of a year of 360 days with 12 30-day months) divided by 360.

"Determination Period" means each period from (and including) a Determination Date to but excluding the next Determination Date (including, where either the Interest Commencement Date or the final Interest Payment Date is not a Determination Date, the period commencing on the first Determination Date prior to, and ending on the first Determination Date falling after, such date);

"Fixed Interest Period" means the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date; and

"sub-unit" means, with respect to any currency other than Euro, the lowest amount of such currency that is available as legal tender in the country of such currency and, with respect to Euro, one cent.

6.2 Interest on Floating Rate Notes and Index Linked Interest Notes

(a) Interest Payment Dates

Each Floating Rate Note and Index Linked Interest Note bears interest on its outstanding nominal amount (or, if it is a Partly Paid Note, the amount paid up) from (and including) the Interest Commencement Date and such interest will be payable in arrears on either:

- (i) the Specified Interest Payment Date(s) in each year specified in the applicable Pricing Supplement; or
- (ii) if no Specified Interest Payment Date(s) is/are specified in the applicable Pricing Supplement, each date (each such date, together with each Specified Interest Payment Date, an "Interest Payment Date") which falls the number of months or other period specified as the Specified Period in the applicable Pricing Supplement after the preceding Interest Payment Date or, in the case of the first Interest Payment Date, after the Interest Commencement Date.

Such interest will be payable in respect of each Interest Period (which expression shall, in these Conditions, mean the period from (and including) an Interest Payment Date (or the Interest Commencement Date) to (but excluding) the next (or first) Interest Payment Date).

If a Business Day Convention is specified in the applicable Pricing Supplement and (x) if there is no numerically corresponding day on the calendar month in which an Interest Payment Date should occur or (y) if any Interest Payment Date would otherwise fall on a day which is not a Business Day (as defined below), then, if the Business Day Convention specified is:

- (A) in any case where Specified Periods are specified in accordance with Condition 6.2 (Interest—Interest on Floating Rate Notes and Index Linked Interest Notes—(a)(ii)) above, the Floating Rate Convention, such Interest Payment Date (a) in the case of (x) above, shall be the last day that is a Business Day in the relevant month and the provisions of (ii) below shall apply mutatis mutandis or (b) in the case of (y) above, shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event (i) such Interest Payment Date shall be brought forward to the immediately preceding Business Day, and (ii) each subsequent Interest Payment Date shall be the last Business Day in the month which falls the Specified Period after the preceding applicable Interest Payment Date occurred: or
- (B) the Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day; or
- (C) the Modified Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day unless it would thereby fall into the next calendar month, in which event such Interest Payment Date shall be brought forward to the immediately preceding Business Day; or
- (D) the Preceding Business Day Convention, such Interest Payment Date shall be brought forward to the immediately preceding Business Day.

In these Conditions, "Business Day" means a day which is both:

- a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in London, New York and any Additional Business Center specified in the applicable Pricing Supplement; and
- (y) either (i) in relation to any sum payable in a Specified Currency other than Euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial center of the country of the relevant Specified Currency (if other than London, New York and any Additional Business Center and which if the Specified Currency is Australian dollars or New Zealand dollars shall be Melbourne or Wellington, respectively) or (ii) in relation to any sum payable in Euro, a day on which the Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET2) System (the "TARGET2 System") is open.

(b) Rate of Interest

The Rate of Interest payable from time to time in respect of Floating Rate Notes and Index Linked Interest Notes will be determined in the manner specified in the applicable Pricing Supplement.

(i) ISDA Determination for Floating Rate Notes

Where ISDA Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest

Period will be the relevant ISDA Rate (as defined below) plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any). For the purposes of this sub-paragraph (i), "ISDA Rate" for an Interest Period means a rate equal to the Floating Rate that would be determined by the Calculation Agent for that swap transaction under the terms of an agreement incorporating the 2006 ISDA Definitions, as published by the International Swaps and Derivatives Association, Inc. and as amended and updated as at the Issue Date of the first Tranche of the Notes of this Series (the "ISDA Definitions") and under which:

- (1) the Floating Rate Option is as specified in the applicable Pricing Supplement;
- (2) the Designated Maturity is a period specified in the applicable Pricing Supplement; and
- (3) the relevant Reset Date is either (i) if the applicable Floating Rate Option is based on the London inter-bank offered rate ("LIBOR") or on the Euro-zone inter-bank offered rate ("EURIBOR"), the first day of that Interest Period or (ii) in any other case, as specified in the applicable Pricing Supplement.

For the purposes of this sub-paragraph (i), "Floating Rate", "Calculation Agent", "Floating Rate Option", "Designated Maturity" and "Reset Date" have the meanings given to those terms in the ISDA Definitions.

- (ii) Screen Rate Determination for Floating Rate Notes
- (A) Where Screen Rate Determination is specified in the applicable Pricing Supplement as the manner in which the Rate of Interest is to be determined, the Rate of Interest for each Interest Period will, subject as provided below, is either:
 - (1) the offered quotation; or
 - (2) the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the offered quotations,

(expressed as a percentage rate per annum) for the Reference Rate which appears or appear, as the case may be, on the Relevant Screen Page as at 11.00 a.m. (London time, in the case of LIBOR, or Brussels time, in the case of EURIBOR) on the Interest Determination Date in question plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any), all as determined by the Principal Paying Agent. If five or more of such offered quotations are available on the Relevant Screen Page, the highest (or, if there is more than one such lowest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Principal Paying Agent for the purpose of determining the arithmetic mean (rounded as provided above) of such offered quotations.

(B) If the Relevant Screen Page is not available or, if in the case of Condition 6.2(b)(ii)(A)(1) above, no such offered quotation appears or, in the case of Condition 6.2(b)(ii)(A)(2) above, fewer than three such offered quotations appear, in each case as at the time specified in the preceding paragraph the Principal Paying Agent shall request each of the Reference Banks (as defined below) to provide the Principal Paying Agent with its offered quotation (expressed as a percentage rate per annum) for the Reference Rate at approximately 11:00 a.m. (London time, in the case of LIBOR, or Brussels time, in the case of EURIBOR) on the Interest Determination Date in question. If two or more of the Reference Banks provide the Principal Paying Agent with such offered quotations, the Rate of Interest for such Interest Period shall

- be the arithmetic mean (rounded if necessary to the fifth decimal place with 0.000005 being rounded upwards) of such offered quotations plus or minus (as appropriate) the Margin (if any), all as determined by the Principal Paying Agent.
- (C) If on any Interest Determination Date fewer than two Reference Banks provide the Principal Paying Agent with such offered quotations as provided in the preceding paragraph, the Rate of Interest for the relevant Interest Period shall be the rate per annum which the Principal Paying Agent determines as being the arithmetic mean (rounded if necessary to the fifth decimal place, with 0.000005 being rounded upwards) of the rates, as communicated to (and at the request of) the Principal Paying Agent by the Reference Banks or any two or more of them, at which such banks were offered, at approximately 11:00 a.m. (London time, in the case of LIBOR, or Brussels time, in the case of EURIBOR) on the relevant Interest Determination Date, deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate by leading banks in the London inter-bank market (if the Reference Rate is LIBOR) or the Euro-zone inter-bank market (if the Reference Rate is EURIBOR) plus or minus (as appropriate) the Margin (if any) or, if fewer than two of the Reference Banks provide the Principal Paying Agent with such offered rates, the offered rate for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, or the arithmetic mean (rounded as provided above) of the offered rates for deposits in the Specified Currency for a period equal to that which would have been used for the Reference Rate, at which, at approximately 11:00 a.m. (London time, in the case of LIBOR, or Brussels time, in the case of EURIBOR) on the relevant Interest Determination Date, any one or more banks (which bank or banks is or are in the opinion of the Issuer and the Guarantor suitable for such purpose) informs the Principal Paying Agent it is quoting to leading banks in the London inter-bank market (if the Reference Rate is LIBOR) or the Eurozone inter-bank market (if the Reference Rate is EURIBOR) plus or minus (as appropriate) the Margin (if any), provided that, if the Rate of Interest cannot be determined in accordance with the foregoing provisions of this paragraph, the Rate of Interest shall be determined as at the last preceding Interest Determination Date (though substituting, where a different Margin or Maximum or Minimum Rate of Interest is to be applied to the relevant Interest Period from that which applied to the last preceding Interest Period, the Margin or Maximum or Minimum Rate of Interest relating to the relevant Interest Period, in place of the Margin or Maximum or Minimum Rate of Interest relating to that last preceding Interest Period).
- (D) "Reference Banks" means, in the case of Condition 6.2(b)(ii)(A)(1) above, those banks whose offered rates were used to determine such quotation when such quotation last appeared on the Relevant Screen Page and, in the case of Condition 6.2(b)(ii)(A)(2) above, those banks whose offered quotations last appeared on the Relevant Screen Page when no fewer than three such offered quotations appeared.
- (E) If the Reference Rate from time to time in respect of Floating Rate Notes is specified in the applicable Pricing Supplement as being other than LIBOR or EURIBOR, the Rate of Interest in respect of such Notes will be determined as provided in the applicable Pricing Supplement.
- (c) Minimum Rate of Interest and/or Maximum Rate of Interest

If the applicable Pricing Supplement specifies a Minimum Rate of Interest for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (b) above is less than such Minimum Rate of Interest, the Rate of Interest for such Interest Period shall be such Minimum Rate of Interest.

If the applicable Pricing Supplement specifies a Maximum Rate of Interest for any Interest Period, then, in the event that the Rate of Interest in respect of such Interest Period determined in accordance with the provisions of paragraph (b) above is greater than such Maximum Rate of Interest, the Rate of Interest for such Interest Period shall be such Maximum Rate of Interest.

(d) Determination of Rate of Interest and Calculation of Interest Amounts

The Principal Paying Agent, in the case of certain Floating Rate Notes, and the Calculation Agent, in the case of Index Linked Interest Notes, will at or as soon as practicable after each time at which the Rate of Interest is to be determined, determine the Rate of Interest for the relevant Interest Period. Where applicable, the Calculation Agent will notify the Principal Paying Agent of the Rate of Interest for the relevant Interest Period as soon as practicable after calculating the same.

The Principal Paying Agent or the Calculation Agent (where applicable) will calculate the amount of interest (the "Interest Amount") payable on the Floating Rate Notes or Index Linked Interest Notes for the relevant Interest Period by applying the Rate of Interest to:

- (A) in the case of Floating Rate Notes or Index Linked Interest Notes which are represented by a Global Note, the aggregate outstanding nominal amount of the Notes represented by such Global Note (or, if they are Partly Paid Notes, the aggregate amount paid up); or
- (B) in the case of Floating Rate Notes or Index Linked Interest Notes in definitive form, the Calculation Amount;

and, in each case, multiplying such sum by the applicable Day Count Fraction, and rounding the resultant figure to the nearest sub-unit of the relevant Specified Currency, half of any such sub-unit being rounded upwards or otherwise in accordance with applicable market convention. Where the Specified Denomination of a Floating Rate Note or an Index Linked Interest Note in definitive form comprises more than one Calculation Amount, the Interest Amount payable in respect of such Note shall be the aggregate of the amounts (determined in the manner provided above) for each Calculation Amount comprising the Specified Denomination without any further rounding.

"Day Count Fraction" means, in respect of the calculation of an amount of interest in accordance with this Condition 6.2:

- (1) if "Actual/Actual (ISDA)" or "Actual/Actual" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365 (or, if any portion of that Interest Period falls in a leap year, the sum of (A) the actual number of days in that portion of the Interest Period falling in a leap year divided by 366 and (B) the actual number of days in that portion of the Interest Period falling in a non-leap year divided by 365);
- if "Actual/365 (Fixed)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365;
- (3) if "Actual/365 (Sterling)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365, or in the case of an Interest Payment Date falling in a leap year, 366;
- (4) if "Actual/360" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 360;

(5) if "30/360", "360/360" or "Bond Basis" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

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

where:

Y₁ is the year, expressed as a number, in which the first day of the Interest Period falls;

Y₂ is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

 M_1 is the calendar month, expressed as a number, in which the first day of the Interest Period falls:

 M_2 is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

 D_1 is the first calendar day, expressed as a number, of the Interest Period, unless such number is 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 Interest 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 specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360, calculated on a formula basis as follows:

where:

Y₁ is the year, expressed as a number, in which the first day of the Interest Period falls;

Y₂ is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

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

 M_2 is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

 D_1 is the first calendar day, expressed as a number, of the Interest Period, unless such number is 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 Interest Period, unless such number would be 31, in which case D_2 will be 30;

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

Day Count Fraction =
$$[360 \times (Y_2 - Y_1)] + [30 \times (M_2 - M_1)] + (D_2 - D_1)$$

where:

Y₁ is the year, expressed as a number, in which the first day of the Interest Period falls;

Y₂ is the year, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

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

 M_2 is the calendar month, expressed as a number, in which the day immediately following the last day of the Interest Period falls;

 D_1 is the first calendar day, expressed as a number, of the Interest 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 Interest Period, unless (i) that day is the last day of February but not the Maturity Date or (ii) such number would be 31 and D_2 will be 30.

(e) Notification of Rate of Interest and Interest Amounts

The Principal Paying Agent or the Calculation Agent (where applicable) will cause the Rate of Interest and each Interest Amount for each Interest Period and the relevant Interest Payment Date to be notified to the Issuer and any stock exchange on which the relevant Floating Rate Notes or Index Linked Interest Notes are for the time being listed and notice thereof to be published in accordance with Condition 16 (*Notices*) as soon as practicable after their determination but in no event later than the fourth London Business Day (as defined below) thereafter, provided that such notification details are provided by the Issuer to the Agent, or in accordance with Annex D of the Procedures Memorandum. Each Interest Amount and Interest Payment Date so notified may subsequently be amended (or appropriate alternative arrangements made by way of adjustment) without prior notice in the event of an extension or shortening of the Interest Period. Any such amendment will be promptly notified to the Issuer and each stock exchange on which the relevant Floating Rate Notes or Index Linked Interest Notes are for the time being listed and to the Noteholders in accordance with Condition 16 (*Notices*). For the purposes of this paragraph, the expression "London Business Day" means a day (other than a Saturday or a Sunday) on which banks and foreign exchange markets are open for general business in London.

(f) Certificates to be Final

All certificates, communications, opinions, determinations, calculations, quotations and decisions given, expressed, made or obtained for the purposes of the provisions of this Condition 6.2, whether by the Principal Paying Agent or, if applicable, the Calculation Agent, shall (in the absence of willful misconduct, fraud or gross negligence) be binding on the Issuer, the Guarantor (if applicable), the Principal Paying Agent, the Calculation Agent (if applicable), the other Agents and all Noteholders, Receiptholders and Couponholders and (in the absence as aforesaid) no liability to the Issuer, the

Guarantor (if applicable), the Noteholders, the Receiptholders or the Couponholders shall attach to the Principal Paying Agent or the Calculation Agent (if applicable) in connection with the exercise or non-exercise by it of its powers, duties and discretions pursuant to such provisions.

6.3 Zero Coupon Notes

Where a Note the Interest Basis of which is specified to be Zero Coupon is repayable prior to the Maturity Date and is not paid when due, the amount due and payable prior to the Maturity Date shall be the Early Redemption Amount (as defined below) of such Note. As from the Maturity Date, the Rate of Interest for any overdue principal of such Note shall be a rate per annum (expressed as a percentage) equal to the Accrual Yield (as described in paragraph (c) of Condition 9.7).

6.4 Interest on Dual Currency Interest Notes

The rate or amount of interest payable in respect of Dual Currency Interest Notes shall be determined in the manner specified in the applicable Pricing Supplement.

6.5 Interest on Partly Paid Notes

In the case of Partly Paid Notes (other than Partly Paid Notes which are Zero Coupon Notes), interest will accrue as aforesaid on the paid-up nominal amount of such Notes and otherwise as specified in the applicable Pricing Supplement.

6.6 Accrual of Interest

Each Note (or in the case of the redemption of part only of a Note, that part only of such Note) will cease to bear interest (if any) from the date for its redemption unless, upon due presentation thereof, payment of principal is improperly withheld or refused. In such event, interest will continue to accrue until whichever is the earlier of:

- (a) the date on which all amounts due in respect of such Note have been paid; and
- (b) five days after the date on which the full amount of the moneys payable in respect of such Note has been received by the Principal Paying Agent or the Registrar, as the case may be, and notice to that effect has been given to the Noteholders in accordance with Condition 16 (*Notices*).

7. LIMITED RECOURSE

The amounts payable in respect of the Limited Recourse Notes shall be determined in the manner specified in the applicable Pricing Supplement.

8. PAYMENTS

8.1 Method of payment

Subject as provided below:

(a) payments in a Specified Currency other than Euro will be made by credit or transfer to an account in the relevant Specified Currency (which, in the case of a payment in Japanese yen to a non-resident of Japan, shall be a non-resident account) maintained by the payee with, or, at the option of the payee, by a check in such Specified Currency drawn on, a bank in the

- principal financial center of the country of such Specified Currency (which, if the Specified Currency is Australian dollars or New Zealand dollars, shall be Melbourne or Wellington, respectively); and
- (b) payments in Euro will be made by credit or transfer to a Euro account (or any other account to which Euro may be credited or transferred) specified by the payee or, at the option of the payee, by a Euro check.

Payments will be subject in all cases to any fiscal or other laws and regulations applicable thereto in the place of payment, but without prejudice to the provisions of Condition 10 (*Taxation*). References to "**Specified Currency**" will include any successor currency under applicable law.

8.2 Presentation of definitive Bearer Notes, Receipts and Coupons

Payments of principal in respect of definitive Bearer Notes will (subject as provided below) be made in the manner provided in Condition 8.1 (*Payments—Method of payment*) above only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of definitive Bearer Notes, and payments of interest in respect of definitive Bearer Notes will (subject as provided below) be made as aforesaid only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of Coupons, in each case at the specified office of any Paying Agent outside the United States (which expression, as used herein, means the United States of America (including the States and the District of Columbia, its territories, its possessions and other areas subject to its jurisdiction)) and in each case payments will not be made by a transfer of funds to an account maintained by the payee in the United States or mailed to an address in the United States.

Payments of installments of principal (if any) in respect of definitive Bearer Notes, other than the final installment, will (subject as provided below) be made in the manner provided in Condition 8.1 (Payments—Method of payment) above only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the relevant Receipt in accordance with the preceding paragraph. Payment of the final installment will be made in the manner provided in Condition 8.1 (Payments—Method of payment) above only against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the relevant Bearer Note in accordance with the preceding paragraph. Each Receipt must be presented for payment of the relevant installment together with the definitive Bearer Note to which it appertains. Receipts presented without the definitive Bearer Note to which any definitive Bearer Note becomes due and repayable, unmatured Receipts (if any) relating thereto (whether or not attached) shall become void and no payment shall be made in respect thereof.

Fixed Rate Notes in definitive bearer form (other than Dual Currency Notes, Index Linked Notes or Long Maturity Notes (as defined below)) should be presented for payment together with all unmatured Coupons appertaining thereto (which expression shall for this purpose include Coupons falling to be issued on exchange of matured Talons), failing which the amount of any missing unmatured Coupon (or, in the case of payment not being made in full, the same proportion of the amount of such missing unmatured Coupon as the sum so paid bears to the sum due) will be deducted from the sum due for payment. Each amount of principal so deducted will be paid in the manner mentioned above against surrender of the relative missing Coupon at any time before the expiry of 10 years after the Relevant Date (as defined in Condition 10 (*Taxation*)) in respect of such principal (whether or not such Coupon would otherwise have become void under Condition 11 (*Prescription*)) or, if later, five years from the date on which such Coupon would otherwise have become due, but in no event thereafter.

Upon any Fixed Rate Note in definitive bearer form becoming due and repayable prior to its Maturity Date, all unmatured Talons (if any) appertaining thereto will become void and no further Coupons will be issued in respect thereof.

Upon the date on which any Floating Rate Note, Dual Currency Note, Index Linked Note or Long Maturity Note in definitive bearer form becomes due and repayable, unmatured Coupons and Talons (if any) relating thereto (whether or not attached) shall become void and no payment or, as the case may be, exchange for further Coupons shall be made in respect thereof. A "Long Maturity Note" is a Fixed Rate Note (other than a Fixed Rate Note which on issue had a Talon attached) whose nominal amount on issue is less than the aggregate interest payable thereon provided that such Note shall cease to be a Long Maturity Note on the Interest Payment Date on which the aggregate amount of interest remaining to be paid after that date is less than the nominal amount of such Note.

If the due date for redemption of any definitive Bearer Note is not an Interest Payment Date, interest (if any) accrued in respect of such Note from (and including) the preceding Interest Payment Date or, as the case may be, the Interest Commencement Date shall be payable only against surrender of the relevant definitive Bearer Note.

8.3 Payments in respect of Bearer Global Notes

Payments of principal and interest (if any) in respect of any Notes represented by any Global Note in bearer form will (subject as provided below) be made in the manner specified above in relation to definitive Bearer Notes and otherwise in the manner specified in the relevant Global Note against presentation or surrender, as the case may be, of such Global Note at the specified office of any Paying Agent outside the United States. A record of each payment made against presentation or surrender of any Global Note in bearer form, distinguishing between any payment of principal and any payment of interest, will be made on such Global Note by the relevant Paying Agent to which it was presented and such record shall be *prima facie* evidence that the payment in question has been made.

8.4 Payments in respect of Registered Notes

Payments of principal (other than installments of principal prior to the final installment) in respect of each Registered Note (whether or not in global form) will be made against presentation and surrender (or, in the case of part payment of any sum due, endorsement) of the Registered Note at the specified office of the Registrar or any of the Paying Agents. Such payments will be made by transfer to the Designated Account (as defined below) of the holder (or the first named of joint holders) of the Registered Note appearing in the register of holders of the Registered Notes maintained by the Registrar (the "Register"), (i) where the Notes are in global form, at the close of business day (being for this purpose, a day on which Euroclear, Clearstream or DTC, as the case may be, are open for business in respect of Notes cleared through Euroclear, Clearstream or DTC, as the case may be) before the relevant date and (ii) where the Notes are in definitive form, at the close of business on the third business day (being for this purpose a day on which banks are open for business in the city where the specified office of the Registrar is located) before the relevant due date. Notwithstanding the previous sentence, if (a) a holder does not have a Designated Account or (b) the principal amount of the Notes held by a holder is less than U.S.\$250,000 (or its approximate equivalent in any other Specified Currency), payment will instead be made by a check in the Specified Currency drawn on a Designated Bank (as defined below). For these purposes, "Designated Account" means the account (which, in the case of a payment in Japanese yen to a non-resident of Japan, shall be a non-resident account) maintained by a holder with a Designated Bank and identified as such in the Register and "Designated Bank" means (in the case of payment in a Specified Currency other than Euro) a bank in the principal financial center of the country of such Specified Currency (which, if the Specified Currency is Australian dollars or New Zealand dollars, shall be Melbourne or Wellington, respectively) and (in the case of a payment in Euro) any bank which processes payments in Euro.

Payments of interest and payments of installments of principal (other than the final installment) in respect of each Registered Note (whether or not in global form) will be made by a check in the

Specified Currency drawn on a Designated Bank and mailed by uninsured mail on the business day in the city where the specified office of the Registrar is located immediately preceding the relevant due date to the holder (or the first named of joint holders) of the Registered Note appearing in the relevant Register, (i) where the Notes are in global form, at the close of business day (being for this purpose, a day on which Euroclear, Clearstream or DTC, as the case may be, are open for business in respect of Notes cleared through Euroclear, Clearstream or DTC, as the case may be) before the relevant date and (ii) where the Notes are in definitive form, at the close of business on the fifteenth day (whether or not such fifteenth day is a business day) before the relevant due date (the "Record Date") at his address shown in the Register on the Record Date and at his risk. Upon application of the holder to the specified office of the Registrar not less than three business days in the city where the specified office of the Registrar is located before the due date for any payment of interest or an installment of principal (other than the final installment) in respect of a Registered Note, the payment may be made by transfer on the due date in the manner provided in the preceding paragraph. Any such application for transfer shall be deemed to relate to all future payments of interest (other than interest due on redemption) and installments of principal (other than the final installment) in respect of the Registered Notes which become payable to the holder who has made the initial application until such time as the Registrar is notified in writing to the contrary by such holder. Payment of the interest due in respect of each Registered Note on redemption and the final installment of principal will be made in the same manner as payment of the principal amount of such Registered Note.

Holders of Registered Notes will not be entitled to any interest or other payment for any delay in receiving any amount due in respect of any Registered Note as a result of a check posted in accordance with this Condition arriving after the due date for payment or being lost in the post. No commissions or expenses shall be charged to such holders by the Registrar in respect of any payments of principal or interest in respect of the Registered Notes.

All amounts payable to DTC or its nominee as registered holder of a Registered Global Note in respect of Notes denominated in a Specified Currency other than U.S. dollars shall be paid by transfer by the Registrar to an account in the relevant Specified Currency of the Exchange Agent on behalf of DTC or its nominee for conversion into and payment in U.S. dollars in accordance with the provisions of the Agency Agreement.

Neither the Issuer, the Guarantor nor any of the Agents 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 Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

8.5 General provisions applicable to payments

The holder of a Global Note shall be the only person entitled to receive payments in respect of Notes represented by such Global Note and the Issuer (and the Guarantor, if applicable) will be discharged by payment to, or to the order of, the holder of such Global Note in respect of each amount so paid. Each of the persons shown in the records of DTC, Euroclear or Clearstream, as the beneficial holder of a particular nominal amount of Notes represented by such Global Note must look solely to DTC, Euroclear or Clearstream, as the case may be, for his share of each payment so made by the Issuer to, or to the order of, the holder of such Global Note.

Notwithstanding the foregoing provisions of this Condition, if any amount of principal and/or interest in respect of Bearer Notes is payable in U.S. dollars, such U.S. dollar payments of principal and/or interest in respect of such Notes will be made at the specified office of a Paying Agent in the United States if:

- (a) the Issuer and the Guarantor have appointed Paying Agents with specified offices outside the United States with the reasonable expectation that such Paying Agents would be able to make payment in U.S. dollars at such specified offices outside the United States of the full amount of principal and interest on the Bearer Notes in the manner provided above when due;
- (b) payment of the full amount of such principal and interest at all such specified offices outside the United States is illegal or effectively precluded by exchange controls or other similar restrictions on the full payment or receipt of principal and interest in U.S. dollars; and
- (c) such payment is then permitted under United States law without involving, in the opinion of the Issuer and the Guarantor, adverse tax consequences to the Issuer or the Guarantor.

8.6 Payment Day

If the date for payment of any amount in respect of any Note, Receipt or Coupon is not a Payment Day (as defined below), the holder thereof shall not be entitled to payment until the next following Payment Day in the relevant place and shall not be entitled to further interest or other payment in respect of such delay.

For these purposes, "Payment Day" means any day which (subject to Condition 11 (*Prescription*) is:

- (a) a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in:
 - (i) in the case of Notes in definitive form only, the relevant place of presentation;
 - (ii) London; and
 - (iii) any Additional Financial Center specified in the applicable Pricing Supplement;
- (b) either (1) in relation to any sum payable in a Specified Currency other than Euro, a day on which commercial banks and foreign exchange markets settle payments and are open for general business (including dealing in foreign exchange and foreign currency deposits) in the principal financial center of the country of the relevant Specified Currency (which if the Specified Currency is Australian dollars or New Zealand dollars shall be Melbourne or Wellington, respectively) or (2) in relation to any sum payable in Euro, a day on which the TARGET2 System is open; and
- (c) in the case of any payment in respect of a Registered Global Note denominated in a Specified Currency other than U.S. dollars and registered in the name of DTC or its nominee and in respect of which an accountholder of DTC (with an interest in such Registered Global Note) has elected to receive any part of such payment in U.S. dollars, a day on which commercial banks are not authorized or required by law or regulation to be closed in New York City.

8.7 Interpretation of principal and interest

Any reference in these Conditions to principal in respect of the Notes shall be deemed to include, as applicable:

- (a) any additional amounts which may be payable with respect to principal under Condition 10 (*Taxation*);
- (b) the Final Redemption Amount of the Notes;
- (c) the Early Redemption Amount of the Notes;
- (d) the Optional Redemption Amount(s) (if any) of the Notes;
- (e) in relation to Notes redeemable in installments, the Installment Amounts;
- (f) in relation to Zero Coupon Notes, the Amortized Face Amount (as defined in Condition 9.7 (Redemption and Purchase—Early Redemption Amounts)); and
- (g) any premium and any other amounts (other than interest) which may be payable by the Issuer under or in respect of the Notes.

Any reference in the Conditions to interest in respect of the Notes shall be deemed to include, as applicable, any additional amounts which may be payable with respect to interest under Condition 10 (*Taxation*).

9. REDEMPTION AND PURCHASE

9.1 Redemption at maturity

Unless previously redeemed or purchased and cancelled as specified below, each Note (including each Index Linked Redemption Note and Dual Currency Redemption Note) will be redeemed by the Issuer at its Final Redemption Amount specified in, or determined in the manner specified in, the applicable Pricing Supplement in the relevant Specified Currency on the Maturity Date.

9.2 Redemption for tax reasons

The Notes may be redeemed at the option of the Issuer in whole, but not in part, at any time (if this Note is neither a Floating Rate Note, an Index Linked Interest Note or a Dual Currency Interest Note) or on any Interest Payment Date (if this Note is either a Floating Rate Note, an Index Linked Interest Note or a Dual Currency Interest Note), on giving not less than 30 nor more than 60 days' notice to the applicable Agent and, in accordance with Condition 16 (*Notices*), the Noteholders (which notice shall be irrevocable), if:

(a) the Issuer or (if the Guarantor is required to make payments under the Guarantee) the Guarantor has or will become obligated to pay additional amounts as provided or referred to in Condition 10 (*Taxation*) as a result of any change in, or amendment to, the laws or regulations of a Tax Jurisdiction (as defined in Condition 10 (*Taxation*)) or any regulations or rulings promulgated thereunder, or any change in the application or official interpretation of such laws or regulations or rulings, or any change in the application or official interpretation of, or any execution of or amendment to, any treaty or treaties affecting in taxation to which the Tax Jurisdiction is a party, which change or amendment becomes effective on or after the date on which agreement is reached to issue the first Tranche of the Notes of the relevant Series; and

(b) such obligation cannot be avoided by the Issuer or the Guarantor, if applicable, taking reasonable measures available to it,

provided that no such notice of redemption shall be given earlier than 60 days prior to the earliest date on which the Issuer or the Guarantor, if applicable, would be obligated to pay such additional amounts or give effect to such treatment, as the case may be, were a payment in respect of the Notes (or the Guarantee, if applicable), then due.

Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer or the Guarantor, as applicable, shall deliver to the Principal Paying Agent (i) a certificate signed by an authorized officer of the Issuer or the Guarantor, as applicable, stating that the Issuer or the Guarantor, as applicable, is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer or the Guarantor, as applicable, so to redeem have occurred and (ii) an opinion of independent legal advisers of recognized standing to the effect that the Issuer or the Guarantor, as applicable, has or will become obligated to pay such additional amounts as a result of such change or amendment.

Notes redeemed pursuant to this Condition 9.2 will be redeemed at their Early Redemption Amount referred to in Condition 9.7 (*Redemption and Purchase—Early Redemption Amounts*) below together (if appropriate) with interest accrued to (but excluding) the date of redemption.

9.3 Redemption at the option of the Issuer ("Issuer Call")

If Issuer Call is specified in the applicable Pricing Supplement, the Issuer may, having given:

- (a) not less than 15 nor more than 30 days' notice to the Noteholders in accordance with Condition 16 (*Notices*); and
- (b) not less than 15 days before the giving of the notice referred to in (a) above, notice to the Principal Paying Agent and, in the case of a redemption of Registered Notes, the Registrar;

(which notices shall be irrevocable and shall specify the date fixed for redemption), redeem all or some only of the Notes then outstanding on any Optional Redemption Date and at the Optional Redemption Amount(s) specified in, or determined in the manner specified in, the applicable Pricing Supplement together, if appropriate, with interest accrued to (but excluding) the relevant Optional Redemption Date. Any such redemption must be of a nominal amount not less than the Minimum Redemption Amount and not more than the Maximum Redemption Amount, in each case as may be specified in the applicable Pricing Supplement. In the case of a partial redemption of Notes, the Notes to be redeemed ("Redeemed Notes") will be selected individually by lot, in the case of Redeemed Notes represented by definitive Notes, and in accordance with the rules of DTC, Euroclear and/or Clearstream, in the case of Redeemed Notes represented by a Global Note, not more than 30 days prior to the date fixed for redemption (such date of selection being hereinafter called the "Selection Date"). In the case of Redeemed Notes represented by definitive Notes, a list of the serial numbers of such Redeemed Notes will be published in accordance with Condition 16 (Notices) not less than 15 days prior to the date fixed for redemption. The aggregate nominal amount of Redeemed Notes represented by definitive Notes shall bear the same proportion to the aggregate nominal amount of all Redeemed Notes as the aggregate nominal amount of definitive Notes outstanding bears to the aggregate nominal amount of the Notes outstanding, in each case on the Selection Date, provided that, such first mentioned nominal amount shall, if necessary, be rounded downwards to the nearest integral multiple of the Specified Denomination and the aggregate nominal amount of Redeemed Notes represented by a Global Note shall be equal to the balance of the Redeemed Notes. No exchange of the relevant Global Note will be permitted during the period from (and including) the Selection Date to (and

including) the date fixed for redemption pursuant to this Condition 9.3 and notice to that effect shall be given by the Issuer to the Noteholders in accordance with Condition 16 (*Notices*) at least five days prior to the Selection Date.

9.4 Redemption at the option of the Noteholders ("Investor Put")

If Investor Put is specified in the applicable Pricing Supplement, then, if and to the extent specified in the applicable Pricing Supplement, upon the holder of any Note, giving to the Issuer, in accordance with Condition 16 (*Notices*), not less than 15 nor more than 30 days' notice (or such other notice period as is specified in the applicable Pricing Supplement) (which notice shall be irrevocable), the Issuer will, upon the expiry of such notice, redeem subject to, and in accordance with, the terms specified in the applicable Pricing Supplement in whole (but not in part), such Note on the Optional Redemption Date and at the relevant Optional Redemption Amount as specified in, or determined in the manner specified in, the applicable Pricing Supplement, together, if applicable, with interest accrued to (but excluding) the relevant Optional Redemption Date. It may be that before an Investor Put can be exercised, certain conditions and/or circumstances will need to be satisfied. Where relevant, the provisions relating to such conditions and circumstances will be set out in the applicable Pricing Supplement. Registered Notes may be redeemed under this Condition 9.4 in any multiple of their lowest Specified Denomination.

9.5 Change of Control Redemption

Upon the occurrence of a Change of Control (as defined below), each Noteholder will have the option (the "Change of Control Put Option") (unless, prior to the giving of the Change of Control Put Event Notice (as defined below), the Issuer shall have given notice under Condition 9.2 (Redemption and Purchase—Redemption for tax reasons) or 9.3 (Redemption and Purchase—Redemption at the option of the Issuer ("Issuer Call")) in respect of the relevant Notes), exercisable during the Change of Control Put Period (as defined below), to require the Issuer to redeem all or any part of such Noteholder's Notes at a redemption price (the "Change of Control Redemption Price") equal to 100% of the principal amount of such Notes, together with accrued and unpaid interest, if any, to but excluding the Change of Control Put Date (as defined below). The Change of Control Put Option shall operate as set out in Condition 9.4 (Redemption at the option of the Noteholders ("Investor Put")). Accrued and unpaid interest in respect of the then current Interest Period (or portion thereof) shall be determined as if the Change of Control Put Date was an Interest Payment Date. Within 30 days following a Change of Control, the Issuer shall cause the Principal Paying Agent to mail a notice (a "Change of Control Put Event Notice") to the Noteholders in accordance with Condition 16 stating (a) that a Change of Control has occurred and that such holder has the right to require the Issuer to redeem such holder's Notes at the Change of Control Redemption Price, (b) the date (the "Change of Control Put Date") fixed by the Issuer for redemption under this Condition 9.5 (which shall be a Business Day within the fifth day after the expiry of the Change of Control Put Period) and (c) the procedures determined by the Issuer that a Noteholder must follow in order to have its Notes redeemed. In this Condition:

"Change of Control" means the central government and local governments of Korea ceasing to own and control (directly or indirectly or in combination) at least 50.1% of the Company's issued and outstanding voting shares.

"Change of Control Put Period" means the period fixed by the Issuer, which shall end on a Business Day no earlier than 30 days or later than 60 days after a Change of Control Put Event Notice is mailed.

9.6 Put Notices

To exercise the right to require redemption of such Note, pursuant to Condition 9.4 (Redemption and Purchase—Redemption at the option of the Noteholders ("Investor Put")) or 9.5 (Redemption and Purchase—Change of Control Redemption) the Noteholder must deliver, at the specified office of the Principal Paying Agent (in the case of Bearer Notes) or the Registrar (in the case of Registered Notes), at any time during normal business hours of such Principal Paying Agent or, as the case may be, the Registrar falling within the notice period (in the case of Condition 9.4) or the Change of Control Put Period (in the case of Condition 9.5), such Note (except for a Global Note) together with a duly signed and completed notice of exercise in the form (for the time being current) obtainable from any specified office of the relevant Paying Agent or, as the case may be, the Registrar (a "Put Notice") and in which the holder must specify a bank account (or, if payment is required to be made by check, an address) to which payment is to be made under this Condition or evidence satisfactory to the Principal Paying Agent concerned or, as the case may be, the Registrar that the Note will, following delivery of the Put Notice, be held to its order or under its control and, in the case of Registered Notes, the nominal amount thereof to be redeemed and, if less than the full nominal amount of the Registered Notes so surrendered is to be redeemed, an address to which a new Registered Note in respect of the balance of such Registered Notes is to be sent subject to and in accordance with the provisions of Condition 2.2 (Transfers of Registered Notes—Transfers of Registered Notes in definitive form). If this Note is in definitive form, the Put Notice must be accompanied by this Note or evidence satisfactory to the relevant Paying Agent concerned that this Note will, following delivery of the Put Notices, be held to its order or under its control.

Any Put Notice or other notice given in accordance with the standard procedures of Euroclear and Clearstream given by a holder of any Note pursuant to Condition 9.4 (*Redemption and Purchase—Redemption at the option of the Noteholders ("Investor Put"*)) or Condition 9.5 (*Redemption and Purchase—*Change of Control Redemption) shall be irrevocable except where, prior to the due date of redemption, an Event of Default has occurred and is continuing, in which event, such holder, at its option, may elect by notice to the Issuer to withdraw the notice given pursuant to Condition 9.4 (*Redemption and Purchase—Redemption at the option of the Noteholders ("Investor Put"*) or Condition 9.5 (*Redemption and Purchase—Change of Control Redemption*) and instead to declare such Note forthwith due and payable pursuant to Condition 12 (*Events of Default*).

9.7 Early Redemption Amounts

For the purpose of Condition 9.2 (*Redemption and Purchase—Redemption for tax reasons*) above and Condition 12 (*Events of Default*), each Note will be redeemed at its Early Redemption Amount calculated as follows:

- (a) in the case of a Note with a Final Redemption Amount equal to the Issue Price, at the Final Redemption Amount thereof;
- (b) in the case of a Note (other than a Zero Coupon Note but including an Installment Note and a Partly Paid Note) with a Final Redemption Amount which is or may be less or greater than the Issue Price or which is payable in a Specified Currency other than that in which the Note is denominated, at the amount specified in, or determined in the manner specified in, the applicable Pricing Supplement or, if no such amount or manner is so specified in the applicable Pricing Supplement, at its nominal amount; or

(c) in the case of a Zero Coupon Note, at an amount (the "Amortized Face Amount") calculated in accordance with the following formula:

Early Redemption Amount = RP x $(1+AY)^y$

where:

"RP" means the Reference Price:

"AY" means the Accrual Yield expressed as a decimal; and

"y" is a fraction the numerator of which is equal to the number of days (calculated on the basis of a 360-day year consisting of 12 months of 30 days each) from (and including) the Issue Date of the first Tranche of the Notes of the relevant Series to (but excluding) the date fixed for redemption or (as the case may be) the date upon which such Note becomes due and repayable and the denominator of which is 360, or on such other calculation basis as may be specified in the applicable Pricing Supplement.

9.8 Installments

Installment Notes will be redeemed in the Installment Amounts and on the Installment Dates. In the case of early redemption, the Early Redemption Amount will be determined pursuant to Condition 9.7 (*Redemption and Purchase—Early Redemption Amounts*) above.

9.9 Partly Paid Notes

Partly Paid Notes will be redeemed, whether at maturity, early redemption or otherwise, in accordance with the provisions of this Condition and the applicable Pricing Supplement.

9.10 Purchases

The Issuer, the Guarantor and any of their respective Subsidiaries may at any time purchase Notes (provided that, in the case of definitive Bearer Notes, all unmatured Receipts, Coupons and Talons appertaining thereto are purchased therewith) by tender (available to all Noteholders alike) or in the open market at any price. If the Issuer, the Guarantor or any of their respective Subsidiaries shall acquire any Notes, such acquisition shall not operate as or be deemed for any purpose to be a satisfaction of the indebtedness represented by such Notes unless and until such Notes are delivered to the relevant Paying Agent and/or the Registrar for cancellation and are cancelled and retired by such Paying Agent and/or the Registrar. Notes purchased or otherwise acquired or held by or on behalf of the Issuer, the Guarantor or any of their respective Subsidiaries may be held, resold or, at its discretion, surrendered to any Paying Agent and/or the Registrar for cancellation. Notes purchased or otherwise acquired or held by or on behalf of the Issuer, the Guarantor or any of their respective Subsidiaries are not entitled to vote at meetings of Noteholders and shall not be deemed to be outstanding for the purposes of calculating quorums at meetings of Noteholders.

9.11 Cancellation

All Notes which are redeemed will forthwith be cancelled (together with all unmatured Receipts, Coupons and Talons attached thereto or surrendered therewith at the time of redemption). All Notes so cancelled and the Notes purchased and cancelled pursuant to Condition 9.10 (*Redemption and Purchase—Purchases*) above (together with all unmatured Receipts, Coupons and Talons cancelled therewith) shall be forwarded to the Principal Paying Agent (which shall notify the Registrar of such cancelled Notes in the case of Registered Notes) and cannot be reissued or resold.

9.12 Late payment on Zero Coupon Notes

If the amount payable in respect of any Zero Coupon Note upon redemption of such Zero Coupon Note pursuant to Condition 9.1 (*Redemption and Purchase*—Redemption at maturity), 9.2 (*Redemption and Purchase*—Redemption for tax reasons), 9.3 (*Redemption and Purchase*—Redemption at the option of the Issuer ("Issuer Call"), 9.4 (*Redemption and Purchase*—Redemption at the option of the Noteholders ("Investor Put") or 9.5 (*Redemption and Purchase*—Change of Control Redemption above or upon its becoming due and repayable as provided in Condition 12 (*Events of Default*) is improperly withheld or refused, the amount due and repayable in respect of such Zero Coupon Note shall be the amount calculated as provided in paragraph (c) of Condition 9.7 (*Redemption and Purchase*—*Early Redemption Amounts*) above as though the references therein to the date fixed for the redemption or the date upon which such Zero Coupon Note becomes due and payable were replaced by references to the date which is the earlier of:

- (a) the date on which all amounts due in respect of such Zero Coupon Note have been paid; and
- (b) five days after the date on which the full amount of the moneys payable in respect of such Zero Coupon Notes has been received by the Principal Paying Agent or, in the case of Registered Notes, the Registrar and notice to that effect has been given to the Noteholders in accordance with Condition 16 (*Notices*).

9.13 Obligation to redeem

Upon the expiry of any notice as is referred to in 9.2 (Redemption and Purchase—Redemption for tax reasons), 9.3 (Redemption and Purchase—Redemption at the option of the Issuer ("Issuer Call")), 9.4 (Redemption and Purchase—Redemption at the option of the Noteholders ("Investor Put")) or 9.5 (Redemption and Purchase—Change of Control Redemption) above, the Issuer, failing whom, the Guarantor, shall be bound to redeem the Notes to which the notice referred at the relevant redemption price applicable at the date of such redemption together with, if appropriate, interest accrued to (but excluding) the relevant redemption date.

10. TAXATION

All payments of principal and interest in respect of the Notes, Receipts and Coupons or under the Guarantee (if applicable) by or on behalf of the Issuer or the Guarantor (if applicable) will be made without withholding or deduction for or on account of any present or future taxes or duties of whatever nature imposed or levied by or on behalf of the relevant Tax Jurisdiction unless such withholding or deduction is required by law. In such event, the Issuer (or the Guarantor, if applicable) will pay such additional amounts as shall be necessary in order that the net amounts received by the holders of the Notes, Receipts or Coupons after such withholding or deduction shall equal the respective amounts of principal and interest which would otherwise have been receivable in respect of the Notes, Receipts or Coupons, as the case may be, in the absence of such withholding or deduction; except that no such additional amounts shall be payable with respect to any Note, Receipt or Coupon:

- (a) where such withholding or deduction is imposed on a payment to a holder by reason of such holder presenting such Note, Receipt or Coupon for payment (where presentation is required) in the relevant Tax Jurisdiction (provided the Notes can also be presented at an office of a Paying Agent outside such Tax Jurisdiction); or
- (b) to or on behalf of a holder of such Note, Receipt or Coupon who is subject to any present or future taxes or duties of whatever nature imposed or levied by or on behalf of the relevant Tax Jurisdiction in respect of such Note, Receipt or Coupon by reason of such holder being or

- having been connected with the relevant Tax Jurisdiction (or any political subdivision thereof) other than merely by holding such Note, Receipt or Coupon or receiving principal or interest or other payments in respect thereof; or
- (c) where such withholding or deduction is imposed on a payment to a holder who is liable for such taxes or duties in respect of such Note, Receipt or Coupon by reason of such holder of the Note (or fiduciary, settlor, beneficiary, member or shareholder of, or possessor of power over the relevant holder, if the relevant holder is an estate, nominee, trust or corporation) being or having been connected with a Tax Jurisdiction other than merely by holding such Note, Receipt or Coupon; or
- (d) presented for payment (where presentation is required) more than 30 days after the Relevant Date (as defined below) except to the extent that the holder thereof would have been entitled to an additional amount on presenting the same for payment on such thirtieth day assuming that day to have been a Payment Day (as defined in Condition 8.6 (*Payments—Payment Day*)); or
- (e) where such withholding or deduction is imposed on a payment to an individual and is required to be made pursuant to European Council Directive 2003/48/EC or any law implementing or complying with, or introduced in order to conform to, such Directive; or
- (f) presented for payment (where presentation is required) by or on behalf of a holder who would be able to avoid such withholding or deduction by presenting the relevant Note, Receipt or Coupon to another Paying Agent in a Member State of the European Union; or
- (g) where such withholding or deduction is imposed on a payment to a holder who would not be liable or subject to the withholding or deduction by making a declaration of non-residence or other similar claim for exemption to the relevant tax authority if (i) after having been requested in writing by the Issuer (or the Guarantor, if applicable) to make such a declaration or claim, such holder fails to do so and (ii) specific arrangements to undertake the monitoring required to monitor such a declaration or claim have been agreed to and put in place by the Issuer (or the Guarantor, if applicable), Euroclear, Clearstream, the Principal Paying Agent and the Paying Agent; or
- (h) any combination of paragraphs (a), (b), (c), (d), (e), (f) or (g) above.

As used herein:

- (i) "Tax Jurisdiction" means, (i) with respect to the Company and the Guarantor, Korea or any political subdivision or any authority thereof or therein having power to tax or any other jurisdiction or any political subdivision or any authority thereof or therein having power to tax to which the Company or the Guarantor becomes subject in respect of payments made by it of principal and interest on the Notes, Receipts or Coupons or under the Guarantee, as the case may be, through such jurisdiction, and (ii) with respect to any Guaranteed Issuer, such Guaranteed Issuer's jurisdiction of incorporation or any political subdivision or any authority thereof or therein having power to tax or any other jurisdiction or any political subdivision or any authority thereof or therein having power to tax to which such Guaranteed Issuer becomes subject in respect of payments made by it of principal and interest on the Notes, Receipts or Coupons through such jurisdiction; and
- (ii) the "Relevant Date" means the date on which such payment first becomes due, except that, if the full amount of the moneys payable has not been duly received by the relevant Agent or

the relevant Registrar, as the case may be, on or prior to such due date, it means the date on which, the full amount of such moneys having been so received, notice to that effect is duly given to the Noteholders in accordance with Condition 16 (*Notices*).

The obligation to pay additional amounts shall not apply to (a) any estate, inheritance, gift, sales, transfer, personal property or any similar tax, assessment or other governmental charge or (b) any tax, assessment or other governmental charge which is payable otherwise than by deduction or withholding from payments of principal of, or interest or premium on, the Notes, Receipts or Coupons; *provided that*, except as otherwise set forth in these Conditions and in the Agency Agreement, the Issuer or the Guarantor, if applicable, shall pay all stamp and other duties, if any, which may be imposed by Korea, the United States or any respective political subdivision thereof or any taxing authority of or in the foregoing, with respect to the Agency Agreement or as a consequence of the issuance of the first Tranche of the Notes of the relevant Series.

Whenever there is mentioned in any context the payment of principal of, and any premium or interest on, any Note, Receipt or Coupon, such mention shall be deemed to include payment of additional amounts to the extent that, in such context, additional amounts are, were or would be payable in respect thereof.

11. PRESCRIPTION

The Notes (whether in bearer or registered form), Receipts and Coupons or the Guarantee will become void unless presented for payment within a period of five years (in the cases of principal) and two years (in the case of interest) after the Relevant Date (as defined in Condition 10 (*Taxation*)) therefor.

There shall not be included in any Coupon sheet issued on exchange of a Talon any Coupon the claim for payment in respect of which would be void pursuant to this Condition or Condition 8.2 (*Payments—Presentation of definitive Bearer Notes, Receipts and Coupons*) or any Talon which would be void pursuant to Condition 8.2 (*Payments—Presentation of definitive Bearer Notes, Receipts and Coupons*).

12. EVENTS OF DEFAULT

12.1 Events of Default

The occurrence and continuance of any of the following events will constitute an event of default ("Event of Default") under the Notes:

- (i) default in the payment of any installment of interest upon any of the Notes as and when the same shall become due and payable, and continuance of such default for a period of 30 days;
- (ii) default in the payment of all or any part of the principal of, or premium (if any) on, any of the Notes as and when the same shall become due and payable, whether at maturity, upon redemption or otherwise;
- (iii) breach or failure to observe or perform any other of the covenants or agreements on the part of the Issuer or the Guarantor (if applicable) contained in the Notes of the relevant Series or the Guarantee (if applicable) for a period of 60 days after the date on which written notice specifying such default or breach, stating that such notice is a "Notice of Default" under the Notes of the relevant Series or the Guarantee (if applicable) and demanding that the Issuer or the Guarantor (if applicable) remedy the same, shall have been given to the Issuer or the Guarantor (if applicable), with a copy to the Principal Paying Agent, by the holders of at least 10% in aggregate principal amount of the Notes of the relevant Series at the time outstanding;

- (iv) any Debt of the Company in the aggregate outstanding principal amount of US\$10,000,000 or more either (a) becoming due and payable prior to the due date for payment thereof by reason of acceleration thereof following default by the Company or (b) not being repaid at, and remaining unpaid after, maturity as extended by the period of grace, if any, applicable thereto, or any guarantee given by the Company in respect of Debt of any other person not being honored when, and remaining dishonored after becoming, due and called; provided that, in the case of (a) above, if any such default under any such Debt shall be cured or waived, then the default under the Notes by reason thereof shall be deemed to have been cured and waived;
- (v) the entry of a decree or order for relief in respect of the Issuer or the Guarantor by a court or administrative or other governmental agency or body having jurisdiction in the premises in an involuntary case under any applicable bankruptcy, insolvency, reorganization, rehabilitation, compulsory composition or other similar law in effect on the date of issuance of the first Tranche of the Notes or thereafter, or appointing a receiver, liquidator, assignee, custodian, trustee or sequestrator (or similar official) of the Issuer or the Guarantor or for any substantial part of its property or ordering the winding up, dissolution or liquidation of its affairs, or shall otherwise adjudicate or find the Issuer or the Guarantor to be bankrupt or insolvent, and continuance of any such decree or order unstayed and in effect for a period of 60 consecutive days; or
- (vi) the commencement by the Issuer or the Guarantor of a voluntary case under any applicable bankruptcy, insolvency, reorganization, rehabilitation, compulsory composition or other similar law in effect on the date of issuance of the first Tranche of the Notes or thereafter, or consent to the entry of an order for relief in an involuntary case under any such law, or consent to the appointment or taking possession by a receiver, liquidator, assignee, custodian, trustee or sequestrator (or similar official) of the Issuer or the Guarantor or for any substantial part of its property, or cease to carry on the whole or substantially the whole of its business (other than in furtherance of the new legislation by or plan of the government of Korea for restructuring of the gas industry and/or privatization of the Company, as it may be amended, modified or supplemented), or make any general assignment for the benefit of creditors, or enter into any composition with its creditors, or take corporate action in furtherance of any such action.

If an Event of Default with respect to the Notes of a given Series occurs and is continuing, the holders of not less than 25% in aggregate principal amount of the Notes of the relevant Series then outstanding may declare the principal amount (and premium, if any) of, and all accrued but unpaid interest on, all the Notes of the relevant Series to be due and payable immediately, by a notice in writing to the Issuer and the Guarantor (if applicable) at the office of the Principal Paying Agent, and upon such declaration, any such principal amount (and premium, if any) and interest shall become immediately due and payable. Upon such declaration, the Principal Paying Agent shall give notice thereof to the Issuer and the Guarantor (if applicable) and to the Noteholders of the relevant Series, by mail and publication. If, after any such declaration and before any judgment or decree for the payment of the moneys due shall have been obtained or entered, the Issuer or the Guarantor, as applicable, pays or deposits with the Principal Paying Agent all amounts then due with respect to the Notes of the relevant Series (other than amounts due solely because of such declaration) and cures all other Events of Default with respect to the Notes of the relevant Series, such defaults may be waived and such declaration may be annulled and rescinded by the holders of more than 50% in aggregate principal amount of the Notes of the relevant Series then outstanding by written notice thereof to the Issuer and the Guarantor (if applicable) at the office of the Principal Paying Agent.

For the avoidance of doubt, the Agent shall have no responsibility to take any steps to ascertain whether any relevant event under this Condition has occurred.

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

13. REPLACEMENT OF NOTES, RECEIPTS, COUPONS AND TALONS

Should any Note, Receipt, Coupon or Talon be lost, stolen, mutilated, defaced or destroyed, it may be replaced, subject to applicable laws, regulations and stock exchange or other relevant authority regulations, at the specified office of the relevant Paying Agent (in the case of Bearer Notes, Receipts or Coupons) or the Registrar (in the case of Registered Notes) upon payment by the claimant of such costs and expenses as may be incurred in connection therewith and on such terms as to evidence and indemnity as the Issuer and the Agents may reasonably require. Mutilated or defaced Notes, Receipts, Coupons or Talons must be surrendered before replacements will be issued.

14. AGENTS

The names of the initial Agents and their initial specified offices are set out below.

The Issuer and the Guarantor are entitled to vary or terminate the appointment of any Agent and/ or appoint additional or other Agents and/or approve any change in the specified office through which any Agent acts, provided that:

- (a) there will at all times be a Principal Paying Agent and a Registrar;
- (b) so long as the Notes are listed on any stock exchange or admitted to trading by any other relevant authority, there will at all times be a Paying Agent (in the case of Bearer Notes) and a Registrar and a Transfer Agent (in the case of Registered Notes) with a specified office in such place as may be required by the rules and regulations of the relevant stock exchange or any other relevant authority (and in the case of Bearer Notes, outside the United States);
- (c) so long as any of the Registered Global Notes payable in a Specified Currency other than U.S. dollars are held through DTC or its nominee, there will at all times be an Exchange Agent with a specified office in New York, London or Hong Kong;
- (d) the Issuer and the Guarantor undertake that they will ensure that they maintain a Paying Agent in a Member State of the European Union that is not obliged to withhold or deduct tax pursuant to European Council Directive 2003/48/EC or any law implementing or complying with, or introduced in order to conform to, such Directive; and
- (e) for so long as the Notes are listed on the SGX-ST and the rules of the SGX-ST so require, in the event that the Global Note is exchanged for definitive Notes there will at all times be a Paying Agent in Singapore unless the Issuer or the Guarantor, as applicable, obtains an exemption from the SGX-ST.

In addition, the Issuer and the Guarantor shall forthwith appoint a Paying Agent having a specified office in New York City in the circumstances described in Condition 8.5 (*Payments—General provisions applicable to payments*). Any variation, termination, appointment or change shall only take effect (other than in the case of insolvency, when it shall be of immediate effect) after not less than 30 or more than 45 days' prior notice thereof shall have been given to the Noteholders in accordance with Condition 16 (*Notices*).

In acting under the Agency Agreement, the Agents act solely as agents of the Issuer and do not assume any obligation to, or relationship of agency or trust with, any Noteholders, Receiptholders or Couponholders. The Agency Agreement contains provisions permitting any entity into which any Agent is merged or converted or with which it is consolidated or to which it transfers all or substantially all of its assets to become the successor agent.

15. EXCHANGE OF TALONS

On and after the Interest Payment Date on which the final Coupon comprised in any Coupon sheet matures, the Talon (if any) forming part of such Coupon sheet may be surrendered at the specified office of the Principal Paying Agent or any other Paying Agent in exchange for a further Coupon sheet including (if such further Coupon sheet does not include Coupons to (and including) the final date for the payment of interest due in respect of the Note to which it appertains) a further Talon, subject to the provisions of Condition 11 (*Prescription*). Each Talon shall, for the purpose of these Conditions, be deemed to mature on the Interest Payment Date on which the final Coupon comprised in the relative Coupon sheet matures.

16. NOTICES

All notices regarding the Bearer Notes will be deemed to be validly given if published in a leading English language daily newspaper of general circulation in Asia by the Issuer or the Guarantor, if applicable. It is expected that such publication will be made in the *Asian Wall Street Journal*. The Issuer or the Guarantor, as applicable, 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 will be deemed to have been given on the date of the first publication or, where required to be published in more than one newspaper, on the date of the first publication in all required newspapers.

All notices regarding the Registered Notes will be deemed to be validly given if (a) sent by first class mail or (if posted to an address overseas) by airmail to the holders (or the first named of joint holders) at their respective addresses recorded in the Register and will be deemed to have been given on the fourth day after mailing, and (b) in addition, 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.

Until such time as any definitive Notes are issued, there may, so long as any Global Notes representing the Notes are held in their entirety on behalf of DTC, Euroclear and/or Clearstream, be substituted for such publication in such newspaper(s) the delivery of the relevant notice to DTC, Euroclear and/or Clearstream for communication by them to the holders of the Notes and, in addition, for so long as any Notes are listed on a stock exchange or are admitted to trading by another relevant authority and the rules of that stock exchange or any other relevant authority so require, such notice will be published in a manner specified by those rules. Any such notice shall be deemed to have been given to the holders of the Notes one day after the day on which the said notice was given to DTC, Euroclear and/or Clearstream.

Notices to be given by any Noteholder shall be in writing and given by lodging the same, together (in the case of any Note in definitive form) with the relative Note or Notes, with the Principal Paying Agent (in the case of Bearer Notes) or the Registrar (in the case of Registered Notes). So long as any of the Notes are represented by a Global Note, such notice may be given by any holder of a Note to the Agent or the Registrar through DTC, Euroclear and/or Clearstream, as the case may be, in such manner as the Principal Paying Agent, the Registrar and DTC, Euroclear and/or Clearstream, as the case may be, may approve for this purpose.

Receiptholders and Couponholders will be deemed for all purposes to have notice of the contents of any notice given to the Noteholders in accordance with this condition.

17. MEETINGS OF NOTEHOLDERS, MODIFICATION AND WAIVER

17.1 Meetings of Noteholders

The Agency Agreement contains provisions for convening meetings of the Noteholders to consider any matter affecting their interests, including the sanctioning by Extraordinary Resolution of a modification of the Notes, the Receipts, the Coupons or any of the provisions of the Agency Agreement. Such a meeting may be convened by the Issuer, the Guarantor or Noteholders holding not less than 10% in nominal amount of the Notes for the time being remaining outstanding. The guorum at any such meeting for passing an Extraordinary Resolution is one or more persons holding or representing not less than 50% in nominal amount of the Notes for the time being outstanding, or at any adjourned meeting one or more persons being or representing Noteholders whatever the nominal amount of the Notes so held or represented, except that at any meeting the business of which includes the modification of certain provisions of the Notes, Receipts or Coupons (including modifying the due date of maturity of the Notes or any date for payment of principal, premium, redemption amount or interest thereof, reducing or canceling the amount of principal, premium or redemption amount or the rate of interest payable in respect of the Notes, modifying or canceling the Guarantee or altering the currency of payment of the principal amount of the Notes, Receipts or Coupons), the quorum shall be one or more persons holding or representing not less than 75% in nominal amount of the Notes for the time being outstanding, or at any adjourned such meeting one or more persons holding or representing not less than 25%, in nominal amount of the Notes for the time being outstanding. An Extraordinary Resolution passed at any meeting of the Noteholders shall be binding on all the Noteholders, whether or not they are present at the meeting, and on all Receiptholders and Couponholders.

17.2 Modifications and Waivers

The Principal Paying Agent, the Issuer and the Guarantor may agree, without the consent of the Noteholders, Receiptholders or Couponholders, to:

- (a) any modification (except as mentioned above) of the Notes, the Receipts, the Coupons, the Conditions, the Agency Agreement or the Guarantee which is not materially prejudicial to the interests of the Noteholders; or
- (b) any modification of the Notes, the Receipts, the Coupons, the Conditions, the Agency Agreement or the Guarantee which is of a formal, minor or technical nature or is made to correct a manifest error or to comply with mandatory provisions of the law.

Any such modification shall be binding on the Noteholders, the Receiptholders and the Couponholders and any such modification shall be notified to the Noteholders in accordance with Condition 16 (*Notices*) as soon as practicable thereafter.

18. FURTHER ISSUES

The Issuer may from time to time without the consent of the Noteholders, the Receiptholders or the Couponholders, create and issue further notes with the same terms and conditions as the Notes in all respects except for the amount and date of the first payment of interest thereon so that such further issue shall be consolidated and form a single Series with the outstanding Notes; provided that, in the case of Bearer Notes initially represented by interests in a Temporary Bearer Global Note exchangeable for interests in a Permanent Bearer Global Note or definitive Bearer Notes, such consolidation will occur only upon certification of non-U.S. beneficial ownership and exchange of interests in the Temporary Bearer Global Note for interests in the Permanent Bearer Global Note or definitive Bearer Notes; provided further that, further notes must be fungible with the outstanding Notes for United States federal income tax purposes.

19. CURRENCY INDEMNITY

Any amount received or recovered in a currency other than the currency in which payment under the relevant Note, Receipt or Coupon is due (whether as a result of, or of the enforcement of, a judgment or order of a court of any jurisdiction, in the insolvency, winding-up or dissolution of the Issuer or the Guarantor, as applicable, by any Noteholder, Receiptholder or Couponholder in respect of any sum expressed to be due to it from the Issuer or the Guarantor (as applicable) shall only constitute a discharge to the Issuer or the Guarantor, as applicable, to the extent of the amount in the currency of payment under the relevant Note, Receipt or Coupon that the recipient is able to purchase with the amount so received or recovered in that other currency on the date of that receipt or recovery (or, if it is not practicable to make that purchase on that date, on the first date on which it is practicable to do so). If the amount received or recovered is less than the amount expressed to be due to the recipient under any Note, Receipt or Coupon, the Issuer, failing whom the Guarantor, shall indemnify such Noteholder, Receiptholder or Couponholder, as the case may be, against any loss sustained by it as a result. In any event, the Issuer, failing whom the Guarantor, shall indemnify the recipient against the cost of making any such purchase. For the purposes of this Condition, it shall be sufficient for the Noteholder, Receiptholder or Couponholder, as the case may be, to demonstrate that it would have suffered a loss had an actual purchase been made. These indemnities constitute a separate and independent obligation from the Issuer's and the Guarantor's other obligations, shall give rise to a separate and independent cause of action, shall apply irrespective of any indulgence granted by any Noteholder, Receiptholder or Couponholder and shall continue in full force and effect despite any other judgment, order, claim or proof for a liquidated amount in respect of any sum due under any Note, Receipt or Coupon or any other judgment or order.

20. GOVERNING LAW AND SUBMISSION TO JURISDICTION

20.1. Governing law

The Agency Agreement, the Notes, the Guarantee, the Receipts and the Coupons are governed by, and shall be construed in accordance with, the law of the State of New York.

20.2 Submission to jurisdiction

To the fullest extent permitted by applicable law, the Issuer and the Guarantor irrevocably submit to the non-exclusive jurisdiction of any federal or state court in the Borough of Manhattan, The City of New York, United States of America, in any suit, action or proceeding brought by any Noteholder, Receiptholder or Couponholder arising out of or based upon the Notes, the Guarantee, the Receipts/or the Coupons, and irrevocably agrees that all claims in respect of any such suit, action or proceeding may be determined in any such court. The Issuer and the Guarantor irrevocably and to the fullest

extent they are permitted to do so under applicable law waive any objection they may have to the laying of venue in any such court or the defense of an inconvenient forum to the maintenance of any such suit or proceeding to the extent permitted by applicable law. The Issuer and the Guarantor hereby appoint the Law Office of Sungchurl Koh, whose address as of the date hereof is 303 Fifth Avenue, Suite 806, New York, NY 10016, U.S.A. as their authorized agent (the "Authorized Agent", which expression shall include any replacement authorized agent) upon whom process may be served in any such suit or proceeding set forth herein, it being understood that the designation and appointment of the Authorized Agent as such authorized agent shall become effective immediately without any further action on the part of the Issuer or the Guarantor; provided that if for any reason the Authorized Agent named above ceases to act as Authorized Agent hereunder for the Issuer or the Guarantor, the Issuer and the Guarantor will appoint another person acceptable to the Dealers in the Borough of Manhattan, The City of New York and the State of New York, as Authorized Agent. The Issuer and the Guarantor agree to take any and all action as may be necessary, including the filing of any and all documents that may be necessary, to maintain such designation and appointment of the authorized agent in full force and effect. If for any reason the appointment of the Authorized Agent shall cease to be in force, the Issuer and the Guarantor shall forthwith appoint a new agent to be the Authorized Agent and shall deliver to the Dealers and the Arranger a copy of the new Authorized Agent's acceptance for that appointment within 30 days. Service of process upon the Authorized Agent shall be deemed, in every respect, effective service of process upon the Issuer or the Guarantor. The parties hereto each hereby waive any right to trial by jury in any action, proceeding or counterclaim arising out of or relating to the Notes, the Guarantee, the Receipts and/or Coupons.

20.3 Other documents

In the Agency Agreement the Issuer and the Guarantor submitted to the jurisdiction of the courts of the State of New York and appointed an agent for service of process in terms substantially similar to those set out above.

20.4 Waiver of immunity

The Issuer and the Guarantor hereby irrevocably and unconditionally waive and agrees not to raise with respect to the Notes or the Guarantee (including a dispute relating to any non-contractual obligations arising out of or in connection thereunder) any right to claim sovereign or other immunity from jurisdiction or execution and any similar defense, and irrevocably and unconditionally consents to the giving of any relief or the issue of any process, including, without limitation, the making, enforcement or execution against any property whatsoever (irrespective of its use or intended use) of any order or judgment made or given in connection with any legal action or other proceedings.

USE OF PROCEEDS

The net proceeds from each issue of Notes will be applied by the Issuer for its general corporate purposes, including working capital, financing investments in overseas gas exploration, development and production projects, financing capital expenditures and repayment of outstanding borrowings.

EXCHANGE RATES

The table below sets forth, for the periods and dates indicated, information concerning the market average exchange rate, announced by Seoul Money Brokerage Services, Ltd., between Won and U.S. dollars and rounded down to the nearest tenth of one Won. No representation is made that the Won or 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.

Period	At End of Period	Average Rate ⁽¹⁾	High	Low
		(Won per		
2008	1,257.5	1,102.6	1,509.0	934.5
2009	1,167.6	1,276.4	1,573.6	1,152.8
2010	1,138.9	1,156.3	1,261.5	1,104.0
2011	1,153.3	1,108.1	1,199.5	1,049.5
2012	1,071.1	1,126.9	1,181.8	1,071.1
2013 (through July 11)	1,122.1	1,105.9	1,163.5	1,054.5
January	1,089.0	1,065.6	1,093.5	1,054.5
February	1,083.0	1,086.7	1,098.3	1,076.2
March	1,111.1	1,103.2	1,120.0	1,082.2
April	1,101.2	1,121.8	1,145.3	1,100.3
May	1,129.7	1,111.7	1,133.9	1,083.0
June	1,142.0	1,135.7	1,163.5	1,107.6
July (through July 11)	1,122.1	1,141.4	1,153.0	1,122.0

Source: Seoul Money Brokerage Services, Ltd.

⁽¹⁾ The average rate for the period is calculated as the average of the market average exchange rates on each business day during the relevant period.

RISK FACTORS

Investing in the Notes involves risks and uncertainties. Prospective purchasers of the Notes are advised to review carefully all of the information contained elsewhere in this offering circular and should consider, in particular, the following risk factors before purchasing the Notes. The risks described below are not the only ones that may be relevant to the Company or the Notes.

Risks related to the Company and its Natural Gas Import and Wholesale Business

The Company is subject to the control of the government, and its activities are heavily regulated.

As of March 31, 2013, the government directly and indirectly held 51.3% of the Company's issued and outstanding shares, and local governments held an additional 9.6% of the Company's issued and outstanding shares. Accordingly, the government is able to influence the election of the directors on the Company's board and the management of the Company. Although the Company's management runs the day-to-day operations, the government may determine material policies and, without the consent of other shareholders, the outcome of any transaction or other matter submitted to the Company's shareholders for approval, except for those matters requiring a special resolution of the shareholders. The government has historically influenced, and is likely to continue to influence, the Company's strategy and operations. The government also has the ability to influence and control other government-related entities, some of which are the Company's customers.

The Company was established under the KOGAS Act to, among other things, secure Korea's long-term supply of natural gas. The Company is heavily regulated by a variety of laws and regulatory bodies, including the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance. From time to time, the Company is required to take action in furtherance of public policy considerations and the government's broader objectives for the natural gas industry, which are not necessarily in the Company's best commercial interests. For example, public policy considerations relating to the level of the Company's profitability affect the Company's prescribed rate of return. The Ministry of Trade, Industry and Energy, among other things, supervises the Company's forecasting process for natural gas demand, approves the Company's LNG supply contracts, and regulates natural gas sales prices. In addition, the Company must receive the Ministry of Trade, Industry and Energy's consent in certain instances, and in some cases must seek amendments to current laws, to expand its operations into new businesses outside of its core gas operations. The Company cannot make any assurances that future policy decisions by the government will not have an adverse effect on the Company's business, results of operations and financial condition.

From time to time, the government may suspend the Company's ability to increase its sales prices to city gas companies to fully reflect increases in raw material costs, which has had, and may in the future have, a negative impact on the Company's cash flows, financial condition and the ability to comply with certain financial covenants, and also a temporary negative impact on the Company's results of operations.

Historically, the Ministry of Trade, Industry and Energy, after consultation with the Ministry of Strategy and Finance, has permitted the Company to pass through its raw material costs (including LNG costs, transportation expenses, insurance costs and taxes and duties as well as reserves periodically allocated for the collection of the Company's outstanding receivables) through periodic adjustments to the Company's sales prices to its customers, which has enabled the Company to mitigate its commodity price and foreign exchange risks. Prior to the beginning of each calendar year, the Ministry of Trade, Industry and Energy, after consultation with the Ministry of Strategy and Finance and the Company, determines the unit "supply margin," which is based on the Company's target sales

volume, estimated unit supply costs based on such target sales volume (including depreciation, selling, general and administrative expenses and labor costs) and a guaranteed return for the Company for the upcoming year. The Company adds to this unit supply margin the unit raw material costs to arrive at the unit gas sales prices charged to its customers ("Formula Prices"). This enables the Company to recover its supply costs, pass through its raw material costs and realize a guaranteed return. Such Formula Prices are adjusted periodically throughout the year to reflect fluctuations in raw material costs, as permitted by the Supply of Natural Gas Regulation under the City Gas Business Act.

Due in part to substantial fluctuations in the price of LNG and the value of the Won relative to the U.S. dollar in recent years, the Ministry of Trade, Industry and Energy suspended, from March 2008 to February 2013, the periodic bi-monthly adjustments to the sales prices that the Company invoices to city gas companies. Such suspension has resulted in the Company being unable to fully increase its invoice sales prices to city gas companies to reflect the Formula Prices, which in turn has led to a substantial decrease in net cash inflows and a corresponding increase in the Company's borrowings. In order to address the adverse effect on the Company's cash flows and financial condition during the suspension period, the Ministry approved increases in the invoice sales prices to city gas companies of 7.4% in November 2008, 7.9% in June 2009, 4.9% in September 2010, 5.3% in October 2011, 4.9% in June 2012 and 4.4% in February 2013. The Ministry of Trade, Industry and Energy announced in February 2013 that it was discontinuing the suspension of the periodic bi-monthly adjustments and that it would maintain the Formula Prices at a level that would enable the Company to recoup its outstanding guaranteed return within five years. However, no assurance can be given that the Ministry of Trade, Industry and Energy will not change its policy or adopt other measures that may prevent or delay the Company from realizing its guaranteed return fully or at all.

The Company periodically calculates additional amounts that it did not receive from sales but is entitled to receive based on the Formula Prices and records such amounts as "other current nonfinancial assets" (for amounts estimated to be collectible within one year subsequent to the statement of financial position date) and "other non-current non-financial assets" (for amounts estimated to be collectible after one year subsequent to the statement of financial position date). The Company also records as "other non-financial liabilities" amounts that it was overpaid because actual raw material costs were lower than the raw material costs used to calculate the Formula Prices. In 2008, the Company's other current non-financial assets and other non-current non-financial assets increased substantially due to the Company not being able to fully increase its invoice sales prices to city gas companies to the Formula Prices that reflect the increase in raw material costs. From additional amounts that it did not receive from sales but is entitled to receive based on the Formula Prices, the Company recorded other current non-financial assets of Won 1,110 billion and other non-current nonfinancial assets of Won 4,557 billion as of March 31, 2013. See note 8 to the unaudited interim consolidated financial statements included elsewhere in this offering circular. The net total amount of such assets increased in 2011 and 2012 as a result of an increase in the price of LNG but decreased in the first three months of 2013 as a result of the discontinuation of the suspension of the periodic bimonthly adjustments to sales prices. A further increase in the amount of raw material costs allocated for the collection of non-financial assets when calculating the Formula Prices would be necessary for the reduction of such assets to be expedited. The time lag associated with such adjustments has had, and may in the future have, a negative impact on the Company's cash flows, financial condition and the ability to comply with certain financial covenants, and a temporary negative impact on the Company's results of operations. In addition, if the Ministry of Trade, Industry and Energy changes its regulation that allows the Company to pass through its raw material and supply costs by charging the Formula Prices to its customers, the Company's results of operations, cash flows and financial condition could be materially adversely affected.

The government is pursuing liberalization of the Korean natural gas industry, including opening the LNG import and wholesale market to competition.

Since 1998, the government has stated that it is considering various options regarding the liberalization of the natural gas industry to introduce competition and greater transparency. In 1999, the government amended the Petroleum Business Act to allow gas consumers to import LNG for their own use from the year 2001. Since the passage of the amendment, two companies, POSCO and K-Power Co., Ltd., have imported LNG for their own use, and the Company can make no assurance that additional companies will not import LNG for their own use in the future. If a large number of companies were to begin to import LNG in such a way as to bypass the Company's terminals and pipeline facilities, the Company's sales and results of operations could be adversely affected.

In October 2008, the Ministry of Trade, Industry and Energy also announced a road map to permit other companies to enter the LNG import and wholesale market in Korea. The road map contemplates gradual liberalization, initially starting with liberalization of the market for power generating companies followed by the market for industrial usage. Although a bill to amend the City Gas Business Act to allow for such liberalization had been submitted to the National Assembly in September 2009, the National Assembly adjourned without voting on the bill and as a result, the bill has expired. Another bill to amend the City Gas Business Act to allow for such liberalization was submitted to the National Assembly in April 2013. Even if such a plan were to be passed as proposed, the Company believes that such plan would not materially affect its profitability, as a substantial portion of projected demand for natural gas in the next decade is expected to be satisfied under the Company's existing supply contracts and new competitors will only be able to compete for the portion of projected demand that will not be met by the Company under the Company's existing supply contracts. Accordingly, the Company believes that the new entrants would not be able to fully penetrate the market. However, any such liberalization plan may intensify competition in the LNG import and wholesale market in the future, which could have a material adverse effect on the Company's business, results of operation and financial condition. The Company may be put at a disadvantage due to its long-term contracts and pricing structure. New entrants may be able to obtain natural gas at rates lower than those to which the Company has committed to purchase under its long-term contracts and may have more flexibility in pricing.

The government may privatize the Company by further reducing its ownership interest in the Company or spinning off parts of the Company's operations.

In the past, the government contemplated privatization of the Company through a reduction in the government's shareholding or by spinning off the Company's LNG importation and distribution business. To the Company's knowledge, the government currently does not have any plan to privatize the Company. However, there can be no assurance that the government will not consider privatization of the Company in the future. In such an event, the Company cannot be certain how reduced government control would affect its business and results of operations. In particular, the Company cannot provide any assurance that certain government policies, such as the pass-through of costs and guaranteed return on investment, would continue to exist after privatization or a reduction in government control. In addition, certain ship financing agreements relating to ships that are used exclusively by the Company require the central government and the local governments to directly or indirectly own or to control an aggregate of 30% of the Company's total issued and outstanding shares. Should any privatization plan not make specific arrangements for such provisions, the Company's liquidity, financial condition and results of operations could be adversely affected.

In the event that the central government and local governments of Korea cease to own and control (directly or indirectly or in combination) at least 50.1% of the Company's issued and outstanding capital stock (a "change of control event"), it will trigger a change of control redemption provision under the

Notes. See "Terms and Conditions of the Notes—Redemption and Purchase—Change of Control Redemption." Upon the occurrence of a change of control event, each holder of Notes will have the right to require the Company to redeem all or any part of such holder's Notes at a redemption price equal to 100% of their principal amount plus accrued but unpaid interest, if any, to the date of redemption. The failure to redeem any Notes required to be so redeemed would constitute an event of default under the Notes. The Company cannot assure you that it would have sufficient funds available at the time of a change of control event to make any repayment as described above.

The Company obtains substantially all of its natural gas from a small number of overseas suppliers.

The Company obtains substantially all of its LNG from overseas sources, including Qatar, Malaysia, Oman, Indonesia, Yemen, Russia, Egypt, Brunei and Australia. The Company has found that developing relationships with certain key suppliers has enabled the Company to obtain consistent supplies of high quality natural gas at competitive prices. Any interruption in the supply of natural gas from any key suppliers would have a material adverse effect on the Company's business operations. For example, supplies from Indonesia were temporarily suspended in 2001 because of an occupation of its gas fields by Aceh rebels. In order to ensure a stable source of supply, the Company selectively enters into long-term LNG supply contracts typically for 20 years. Any significant interruption in the supply of natural gas from any of its suppliers could cause the Company to purchase gas on the spot market at prices higher than contracted, which in turn would result in an increase in the Company's gas sales prices to its customers. In addition, there is no guarantee that the Company would be able to find suitable alternative sources of long-term supply on a timely basis or at all.

The volatility in the prices of natural gas, crude oil and other competing energy sources could affect demand for natural gas as a fuel source.

The Company's purchase price for LNG is primarily determined by crude oil prices, and the purchase price in Won terms is also affected by the exchange rate between the Won and the U.S. dollar. Driven primarily by a fluctuation in crude oil prices in recent years, the price of natural gas has also fluctuated significantly. Most of the gas currently sold by the Company is sold under long-term contracts and therefore, in the short term, the demand for gas is not materially affected by price volatility. However, long-term demand is dependent upon the relative prices of natural gas and competing alternative energy sources. If there is an increase in the price of crude oil, leading to an increase in the Company's gas sales price, there may be less demand for the Company's gas. For instance, when natural gas prices are unusually high, power generating companies have the capacity to switch from using natural gas to cheaper sources of fuel. To the extent that the market price of alternative energy sources drops to and is sustained at a low level, or the Company's gas sales prices increase as a result of an increase in the price of LNG procured under future contacts, there may be a reduction in demand for the Company's natural gas, which could adversely affect the Company's business, results of operations and financial condition. Also, if there is growing acceptance by the Korean public for greater use of nuclear energy or other alternative energy sources, demand for natural gas and the Company's business, results of operations and financial condition could be adversely affected.

The expansion of the Company's gas processing, storage and transmission network will require additional capital for which the Company may be unable to obtain sufficient financing.

The Company is currently constructing a fourth terminal complex in Samcheok, and it also plans to make capital expenditures to increase its processing and storage capacity and further expand its national pipeline. The Company currently expects to spend approximately Won 4.5 trillion in planned

capital expenditures from 2013 until 2015 relating to the expansion of its receiving terminals, the construction of a fourth terminal complex in Samcheok and construction and maintenance of its pipeline network. The Company may adjust its future capital expenditures on an ongoing basis subject to market demand in Korea for natural gas, the production outlook of the global gas industry and global economic conditions in general. There can be no assurance that debt or equity financing or cash flow from operations will be available or sufficient to meet the Company's capital expenditure requirements or, if debt or equity financing is available, that it will be available on terms acceptable to the Company. Any inability of the Company to access sufficient capital could have a material adverse effect on the Company's growth strategy.

The Company's business is highly seasonal, and this seasonality and weather conditions may lead to increased costs, the failure to fulfill natural gas supply contracts or reduced demand.

Demand for gas in Korea peaks during the winter and falls off considerably in the summer months. Further, extreme weather conditions such as heat waves or winter storms could cause these seasonal fluctuations to be more pronounced. This seasonality may result in increased storage costs in the summer months and deficient supplies of LNG in winter months. Although the Company has historically been able to pass on incurred costs associated with increased storage costs or spot market purchases, there can be no assurance that it can do so in the future. In addition, warm winters and cool summers may reduce demand for natural gas by retail consumers and power generating companies. The Company has implemented various measures to reduce the effects of seasonality on its business, including offering incentives to city gas companies that use natural gas in the summer for cooling operations, but it can make no assurance as to the continued effectiveness of these measures.

The Company's supply and shipping contracts may require the Company to pay for LNG that it did not actually import.

Almost all of the Company's supply contracts contain take-or-pay provisions which require the Company to pay for an agreed amount of LNG annually, irrespective of the amount of LNG actually taken by the Company. In addition, all of the Company's shipping contracts include ship-or-pay clauses that oblige the Company to pay annually the costs payable by the shipping company irrespective of the volume of LNG actually shipped in a given year.

To date, the Company has never been required to make payments under such take-or-pay or ship-or-pay clauses principally because, in most cases, it has been able to purchase and ship sufficient amounts of LNG to avoid triggering these clauses. On rare occasions, due to a decrease in demand, the Company purchased or shipped less than the agreed amounts of LNG, but the amounts were within the range allowed to be deferred under the supply or shipping contracts. However, if the Company's requirements for LNG were to be materially reduced in future years and the Company were not able to negotiate a reduction of the annual off-take or shipment volumes, the Company may incur payment obligations under these clauses. Because at times the Company must negotiate supply volumes with the power generating companies after committing to minimum purchases of LNG from overseas suppliers, the Company may be forced to make payments under its take-or-pay or ship-or-pay clauses if the volume agreed upon with the power generating companies is substantially lower than the Company's committed off-take amounts.

The Company's ability to pass on any take-or-pay or ship-or-pay obligations to city gas companies is limited because city gas companies are typically obliged to pay for only 2% of any amount they contract for but do not actually purchase. The Company believes that it will be able to pass on any such costs related to power generating companies if ever incurred, but can make no assurances that will be the case. Thus, if the Company had to make any payments under its take-or-pay or ship-or-pay obligations, its financial condition and results of operations could be adversely affected.

The Company may have to make substantial payments under its shipping contracts if it discontinues using any ships currently under contract.

Twenty-one LNG ships that the Company currently uses were built specifically for use by the Company. Although the Company is not a party to the financing documents for these ships, it has entered into contracts of affreightment with the shipping companies. Under these contracts, the Company may be required to make payments in respect of the loans used to finance the construction of the ships if the Company were to terminate its use of one or more of the ships and, as a result, were not to make freight or other payments with respect to the use of such ships. Even if the Company were required to make the remaining payments under any ship financing documents, it would not acquire title to the relevant ship. Accordingly, if the Company terminates the use of ships and is required to make the committed payments, the Company's results of operations and financial condition could be materially adversely affected.

The Company relies on the subsidiaries of KEPCO for a substantial portion of its sales, and its results of operations and financial condition are affected by their performance.

The Company relies on the subsidiaries of KEPCO for a substantial portion of the Company's sales. As of March 31, 2013, KEPCO held 24.5% of the Company's issued and outstanding shares. Sales to the subsidiaries of KEPCO accounted for 31.3%, 30.8%, 30.9% and 26.0% of the Company's sales in 2010, 2011, 2012 and the three months ended March 31, 2013, respectively. Consequently, the Company's sales volume is substantially affected by the amount of natural gas the Company sells to the subsidiaries of KEPCO and their overall policy to utilize natural gas as a fuel source for power generation. In addition, upon the liberalization of the natural gas industry, the subsidiaries of KEPCO may satisfy a portion of their natural gas needs through the Company's competitors instead of the Company or by directly importing natural gas from overseas sources, and the subsidiaries of KEPCO may elect to discontinue using the Company's products and services. There can be no assurance that the Company's key relationships with KEPCO or any of its subsidiaries will not terminate. Any such termination may have a material and adverse effect on the Company's business and results of operations.

Depreciation of the Won against the U.S. dollar may have an adverse effect on the Company's results of operations.

Substantially all of the LNG processed by the Company is imported from other countries pursuant to contracts denominated in U.S. dollars, and all of the Company's contracts with its customers for sales of natural gas are denominated in Won. Depreciation of the Won increases the amounts paid in Won for raw material costs, freight costs and interest and principal payment amounts on foreign currency-denominated debt as well as the Won amounts of the Company's foreign currency-denominated liabilities.

With respect to the Company's exposure to foreign currency risks related to raw material costs and freight costs, such risks to the Company are mitigated because the Ministry of Trade, Industry and Energy generally allows the Company to pass through its raw material costs (including freight costs) by periodically adjusting the Company's Formula Prices. The Company is also exposed to the risks inherent in its foreign currency positions relating to its foreign currency-denominated debt, which accounted for approximately 29.3% of the Company's total short-term borrowings and long-term debt (including current portion) as of March 31, 2013. It is the Company's policy to hedge substantially all of its foreign currency-denominated debt through derivative instruments. In addition, the Company's strategy for financing investments in overseas gas exploration, development and production projects is, to the extent possible and subject to market conditions, to raise funding that is denominated under the currency of the local jurisdiction. The Company is also exposed to foreign currency risks on capital

lease expenses relating to 21 of its LNG ships. For additional information, including how such capital lease expenses are hedged, see notes 7 and 28 to the unaudited interim consolidated financial statements. To the extent the Company has unhedged positions or its hedging and other risk management procedures do not work as planned, or the pass-through of cost increases resulting from foreign currency risks is delayed or not fully made, the Company's results of operations and financial condition could be adversely affected.

Importing, processing and transporting of natural gas involve numerous risks that may result in accidents and other operating risks and costs.

The natural gas distributed by the Company is highly flammable and explosive. There is a significant risk of either accidents or leakage causing damage and/or injury. There can be no assurances that accidents will not occur and any significant accidents that arise at the fault of the Company could have a material adverse effect on the Company.

These risks could result in loss of human life, significant damage to property, environmental pollution, impairment of the Company's operations and substantial financial and reputational losses to the Company. For the Company's pipelines located near populated areas, including residential areas, commercial business centers, industrial sites and other public gathering areas, the potential damage resulting from the occurrence of these events is greater. Although the Company maintains insurance against most of these risks and losses, the occurrence of any of these events not fully covered by insurance could have a material adverse effect on the Company's financial position and results of operations.

The Company is subject to environmental regulations, and its operations could expose it to substantial liabilities.

The Company is subject to national and local environmental laws and regulations, including increasing pressure to reduce emission of carbon dioxide relating to its gas processing and transporting activities, and the Company's operations could expose it to risk of substantial liability relating to environmental or health and safety issues, such as those resulting from discharge of pollutants and carbon dioxide into the environment and the handling, storage and disposal of hazardous materials. The Company may be responsible for the investigation and remediation of environmental conditions at currently and formerly operated sites. The Company may also be subject to associated liabilities, including liabilities for natural resource damage, third party property damage or personal injury resulting from lawsuits brought by the government or private litigants. In the course of the Company's operations, hazardous materials may be generated at third party-owned or operated sites, and hazardous materials may be disposed of or treated at third party-owned or operated disposal sites. If those sites become contaminated, the Company could also be held responsible for the cost of investigation and remediation of such sites, for any associated natural resource damage, and for civil or criminal fines or penalties.

Disputes with the Company's labor union may disrupt its business operations.

As of March 31, 2013, approximately 81.9% of the Company's employees were members of a labor union. The Company negotiates a collective bargaining agreement every two years as well as a wage agreement on an annual basis with its labor union. The latest collective bargaining agreement came into effect in September 2010 and expired in September 2012, although the terms of such agreement will remain in effect until a new collective bargaining agreement is negotiated. The Company entered into a new wage agreement with its labor union in December 2012. In the past, the Company has experienced opposition from its labor union for concerns over the government's plans to liberalize and privatize the natural gas wholesale and transport industry and restructure the Company

to improve its operating efficiency and profitability by reducing its employee base. Although the Company has not experienced any significant labor disputes and unrests that have interrupted its business operations in recent years, there can be no assurance that the Company will not experience in the future labor disputes and unrests, including expanded protests and strikes or protracted negotiation of the collective bargaining agreements, which could disrupt its business operations and have an adverse effect on its financial condition and results of operation.

Risks relating to the Company's Exploration, Development and Production Business

The Company participates in overseas gas exploration, development and production projects and LNG terminal operation activities and also invests in gas supply companies abroad; the Company has limited experience in this business and these activities expose the Company to substantially higher risks than its natural gas import and wholesale business, including political and economic risks in such countries.

As part of a consortium or through acquisition of a minority interest, the Company engages in overseas gas exploration, development and production projects in various locations, including Iraq, Canada, Australia, Myanmar, Indonesia, Mozambique, Uzbekistan, Cyprus and East Timor, and participates in operation of LNG terminals in Mexico, Thailand, China, the United Arab Emirates and Singapore. In addition, the Company has made investments in gas supply companies located in Oman, Qatar and Yemen. The Company may also selectively acquire or invest in companies or businesses that may complement its business. As part of its efforts to diversify its operations and prepare for the potential restructuring and liberalization of the natural gas industry in Korea, the Company intends to continue to expand its operations by carefully seeking out promising exploration, development and production opportunities abroad and may acquire energy companies engaged in attractive businesses. To the extent that the Company enters into these arrangements, its success will depend in part on the willingness of the Company's partner companies to dedicate sufficient resources to their partnership with the Company.

The demand and market acceptance for the Company's activities abroad are subject to a substantially higher level of uncertainty than its natural gas import and wholesale business and are substantially dependent upon the market condition of the global natural gas industry. In addition, much of the Company's current exploration, development and production projects involve drilling exploratory wells on properties with no proven natural gas and oil reserves. Although all drilling, whether developmental or exploratory, involves risks, exploratory drilling involves greater risks of dry holes or failure to find commercial quantities of natural gas and oil. The Company has invested approximately US\$3.2 billion in overseas gas exploration, development and production projects in 2012, and it expects to invest approximately US\$2.6 billion in such projects in 2013. The Company expects to continue to aggressively invest in such projects, subject to market conditions. The Company has limited experience in this business, and the Company cannot assure you that its expansion strategy will be profitable, that the Company will be able to meet the financing requirements for such expansion plans, or that the Company can recoup the costs related to such investments. Failure to implement its expansion strategy successfully may have a material adverse effect on the Company's business, results of operations and financial condition.

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

· challenges caused by distance, language, local business customs and cultural differences;

- adverse changes in laws and policies, including those affecting taxes and royalties on energy resources, labor, environmental compliance and investments;
- difficulty in obtaining licenses, permits or other regulatory approvals from local authorities;
- · adverse effects from fluctuations in exchange rates;
- multiple and possibly overlapping and conflicting standards and practices of the regulatory, tax, judicial and administrative bodies of the relevant foreign jurisdiction;
- · political strife, social turmoil or deteriorating economic conditions;
- military hostilities or acts of terrorism; and
- natural disasters including earthquakes or tsunamis and epidemics or outbreaks such as avian flu, swine flu or severe acute respiratory syndrome.

Any failure on the Company's part to recognize or respond to these differences may materially and adversely affect the success of its overseas operations, which in turn could materially and adversely affect the Company's business and results of operations.

The Company may encounter problems with joint overseas gas exploration, development and production projects and large-scale infrastructure projects, which may materially and adversely affect its business.

In recent years, the Company has begun to focus increasingly on overseas gas exploration, development and production projects, as well as participation in large-scale infrastructure projects. The Company typically pursues these gas exploration, development and production projects and infrastructure projects jointly with consortium partners or through acquisition of a minority interest in such projects, and the Company expects to be involved in other joint projects in the future. The Company typically lacks a controlling interest in the joint projects even though the Company sometimes holds the largest interest in the projects among the consortium partners. Therefore, the Company is usually unable to require that its joint ventures sell assets or return invested capital, make additional capital contributions or take any other action without the vote of at least a majority of its consortium partners. If there are disagreements between the Company and its consortium partners regarding the business and operations of the joint projects, the Company cannot assure you that it will be able to resolve them in a manner that will be in the Company's best interests. Certain major decisions, such as selling a stake in the joint project, may require the consent of all other partners. These limitations may adversely affect the Company's ability to obtain the economic and other benefits it seeks from participating in these projects.

In addition, the Company's consortium partners may:

- have economic or business interests or goals that are inconsistent with the Company;
- take actions contrary to the Company's instructions, requests, policies or objectives;
- be unable or unwilling to fulfill their obligations;
- · have financial difficulties; or
- · have disputes with the Company as to their rights, responsibilities and obligations.

Any of these and other factors may have a material adverse effect on the performance of the Company's joint projects and expose the Company to a number of risks, including the risk that the partners may be incapable of providing the required financial support to the partnerships and the risk that the partners may not be able to fulfill their other obligations, resulting in disputes not only between the Company and its partners, but also between the joint ventures and their customers. Such a material adverse effect on the performance of the Company's joint projects may in turn materially and adversely affect the Company's business, results of operations and financial condition.

Risks related to Korea

Unfavorable financial and economic developments in Korea may have an adverse effect on the Company.

Substantially all of the Company's operations, customers and assets are located in Korea. Accordingly, the Company's performance and successful fulfillment of its operational strategies are necessarily dependent on the overall Korean economy and the resulting impact on the demand for energy generally and, in particular, for natural gas. The economic indicators in Korea in recent years have shown mixed signs of growth and uncertainty, and future growth of the economy is subject to many factors beyond the Company's control.

In recent years, adverse conditions and volatility in the worldwide financial markets, fluctuations in oil and commodity prices and the general weakness of the U.S. and global economy have contributed to the uncertainty of global economic prospects in general and have adversely affected, and may continue to adversely affect, the Korean economy. Since the second half of 2008, the value of the Won relative to major foreign currencies in general and the U.S. dollar in particular fluctuated widely. Furthermore, as a result of adverse global and Korean economic conditions, there has been significant volatility in the stock prices of Korean companies in recent years., particularly in light of the financial difficulties affecting many governments worldwide, including Greece, Portugal, Spain and Italy. Future declines in the Korea Composite Stock Price Index (known as the "KOSPI") and large amounts of sales of Korean securities by foreign investors and subsequent repatriation of the proceeds of such sales may continue to adversely affect the value of the Won, the foreign currency reserves held by financial institutions in Korea, and the ability of Korean companies to raise capital. Any future deterioration of the Korean or global economy could adversely affect the Company's business, financial condition and results of operations.

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

- difficulties in the financial sectors in Europe, China and elsewhere and increased sovereign default risks in select countries and the resulting adverse effects on the global financial markets;
- · declines in consumer confidence and a slowdown in consumer spending;
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the U.S. dollar, the euro or the yen exchange rates or revaluation of the Chinese renminbi), interest rates, inflation rates or stock markets;
- increasing levels of household debt;
- continuing adverse conditions in the economies of countries and regions that are important export markets for Korea, such as the United States, Europe, Japan and China, or in emerging market economies in Asia or elsewhere;

- increasing delinquencies and credit defaults by retail and small- and medium-sized enterprise borrowers;
- the continued emergence of the Chinese economy, to the extent its benefits (such as increased exports to China) are outweighed by its costs (such as competition in export markets or for foreign investment and the relocation of the manufacturing base from Korea to China), as well as a slowdown in the growth of China's economy, which is Korea's most important export market;
- · the economic impact of any pending or future free trade agreements;
- · social and labor unrest;
- further decreases in the market prices of Korean real estate;
- a 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 that, together, would lead to an increased Government budget deficit;
- financial problems or lack of progress in the restructuring of Korean conglomerates, 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 conglomerates;
- geo-political uncertainty and risk of further attacks by terrorist groups around the world;
- · the occurrence of severe health epidemics in Korea and other parts of the world;
- deterioration in economic or diplomatic relations between Korea and its trading partners or allies, including deterioration resulting from territorial or trade disputes or disagreements in foreign policy;
- 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 or North Africa and any material disruption in the global supply of oil or increase in the price of oil;
- the occurrence of severe earthquakes, tsunamis and other natural disasters in Korea and other parts of the world, particularly in trading partners; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

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

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of future events. In particular, since the death of Kim Jong-il, in December 2011, there has been

increased uncertainty with respect to the future of North Korea's political leadership and concern regarding its implications for political and economic stability in the region. Although Kim Jong-il's third son, Kim Jong-eun, has assumed power as his father's designated successor, the long-term outcome of such leadership transition remains uncertain.

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

- In late March 2013, North Korea stated that it had entered "a state of war" with Korea, declaring the 1953 armistice invalid, and put its artillery at the highest level of combat readiness to protest the Korea-United States allies' military drills and additional sanctions imposed on North Korea for its missile and nuclear tests;
- North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty in January 2003 and conducted three rounds of nuclear tests between October 2006 and February 2013, which increased tensions in the region and elicited strong objections worldwide. In response, the United Nations Security Council unanimously passed resolutions that condemned North Korea for the nuclear tests and expanded sanctions against North Korea, most recently in March 2013;
- In December 2012, North Korea launched a satellite into orbit using a long-range rocket, despite concerns in the international community that such a launch would be in violation of the agreement with the United States as well as United Nations Security Council resolutions that prohibit North Korea from conducting launches that use ballistic missile technology; and
- 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. For example, in November 2009, the North Korean government redenominated its currency at a ratio of 100 to 1 as part of a currency reform undertaken in an attempt to control inflation and reduce income gaps. In tandem with the currency redenomination, the North Korean government banned the use or possession of foreign currency by its residents and closed down privately run markets, which led to severe inflation and food shortages. Such developments may further aggravate social and political tensions within North Korea.

There can be no assurance that the level of tension on the Korean peninsula will not escalate in the future. Any further 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 the Company's business, financial condition and results of operations and the price of the Notes, including a downgrade in the credit rating of Korea, the Company or the Notes.

There are special risks involved with investing in securities of Korean companies, including the possibility of restrictions being imposed by the government in emergency circumstances as well as accounting and corporate disclosure standards that differ from those in other jurisdictions.

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

Under the Foreign Exchange Transaction Act of Korea and the Presidential Decree and regulations under the Act and Decree (collectively referred to as the "Foreign Exchange Transaction Laws"), if the government deems that certain emergency circumstances, including sudden fluctuations in interest rates or exchange rates, extreme difficulty in stabilizing the balance of payments or substantial disturbance in the Korean financial and capital markets, are likely to occur, it may impose any necessary restriction such as requiring Korean or foreign investors to obtain prior approval from the Minister of Strategy and Finance for the acquisition of Korean securities or for the repatriation of interest, dividends or sales proceeds arising from Korean securities or from disposition of such securities or other transactions involving foreign exchange. 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 Strategy 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 to preparing its financial statements in accordance with the KOGAS Act, the City Gas Business Act and the Accounting Process Standards for Public Enterprises and Semi-Governmental Institutions, the Company prepared and presented its annual financial statements as of and for the years ended December 31, 2010, 2011 and 2012 in accordance with Korean IFRS and expects to prepare its financial statements in accordance with Korean IFRS for future periods, which differ in certain respects from accounting principles applicable to companies in certain other countries, including the United States. In making an investment decision, investors must rely upon their own examination of the Company, the terms of the offering and the financial information contained in this offering circular.

Risks related to the Notes

The Notes are not guaranteed by the Republic of Korea.

The Notes are not the obligations of, or guaranteed by, the Republic of Korea. Although under the KOGAS Act, the government is allowed to guarantee bonds offered by the Company, it is not providing a guarantee in respect of the Notes. In addition, the government is under no obligation to maintain the solvency of the Company. Therefore, investors should not rely on the government to fulfill the Company's obligations under the Notes in the event the Company is unable to do so.

The Notes are unsecured obligations.

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

• the Company enters into bankruptcy, liquidation, rehabilitation or other winding-up proceedings;

- there is a default in payment under the Company's future secured indebtedness or other unsecured indebtedness; or
- there is an acceleration of any of the Company's indebtedness.

If any of these events occurs, the Company's assets may not be sufficient to pay amounts due on any of the Notes.

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 or to, or for the account or benefit of, U.S. persons, except to qualified institutional buyers in reliance on the exemption provided by Rule 144A, to certain persons in offshore transactions in reliance on Regulation S, or pursuant to another exemption from, or in another transaction not subject to, the registration requirements of the Securities Act and in accordance with applicable state securities laws. For a further discussion of the transfer restrictions applicable to the Notes, see "Subscription and Sale and Transfer and Selling Restrictions—Transfer Restrictions."

The Notes may have limited liquidity.

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

- prevailing interest rates;
- the Company's results of operations and financial condition;
- · political and economic developments in and affecting Korea;
- · the market conditions for similar securities; and
- the financial condition and stability of the Korean natural gas industry and the Korean financial sector.

Risks Relating to Forward-Looking Statements

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

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

- · general economic, business and political conditions;
- fluctuations in prices of natural gas, crude oil and other competing energy sources;

- adverse trends in regulatory, legislative and judicial developments;
- the ability of third parties to perform in accordance with contractual terms and specifications;
- fluctuations in exchange rates between the Won and the U.S. dollar;
- the Company's leverage and its ability to meet its debt obligations;
- changes in competitive conditions in the Korean natural gas industry; and
- · conditions in the Korean and the global financial markets.

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

You should not place undue reliance on the forward-looking statements, which speak only as of the date of this offering circular. Except as required by law, the Company is not under any obligation, and expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to the Company or any person acting on the Company's behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

CAPITALIZATION OF THE COMPANY

The following table sets forth the Company's capitalization (defined as the sum of long-term debt and stockholders' equity) as of March 31, 2013 on a consolidated basis under Korean IFRS and as adjusted to give effect to (i) the issuances of Euro 38 million 3.015% notes due 2028, (ii) the issuances of debentures in Korea in the aggregate principal amount of Won 540 billion, (iii) the repayment of long-term borrowings in the aggregate principal amount of Won 28 billion and (iv) the redemption of debentures in the aggregate principal amount of Won 40 billion, in each case during the three months ended June 30, 2013. This table should be read in conjunction with the Company's unaudited interim consolidated financial statements and accompanying notes included elsewhere in this offering circular.

	As of Marc	h 31, 2013
	Outstanding	As Adjusted
	(in billion	s of Won)
Long-term debt:		
Debentures	₩17,887	₩18,443
Long-term borrowings	387	359
Total long-term debt	18,274	18,802
Equity:		
Capital stock	1,056	1,056
Retained earnings	6,159	6,159
Other equity	1,300	1,300
Equity attributable to owners of the Corporation	8,515	8,515
Non-controlling interests	(11)	(11)
Total equity	8,504	8,504
Total capitalization ⁽¹⁾	₩26,778	₩27,306

⁽¹⁾ Sum of long-term debt (excluding current portion) and equity.

Except as set forth herein, there has been no material change in the Company's capitalization (on a consolidated basis under Korean IFRS) since March 31, 2013.

SELECTED FINANCIAL AND OPERATING DATA

The following tables present selected consolidated financial and operating data of the Company. This data should be read in conjunction with the consolidated financial statements of the Company and the notes thereto, "Management's Discussion and Analysis of Financial Condition and Results of Operations" and other historical financial information included elsewhere in, or incorporated by reference into, this offering circular.

Selected Financial Data

The selected financial data as of and for the years ended December 31, 2010, 2011 and 2012 below are derived from the Company's consolidated financial statements included elsewhere in this offering circular, which have been prepared in accordance with Korean IFRS. The selected financial data as of March 31, 2013 and for the three months ended March 31, 2012 and 2013 below are derived from the Company's unaudited interim consolidated financial statements included elsewhere in this offering circular, which have been prepared in accordance with Korean IFRS No. 1034 Interim Financial Reporting.

		the year end December 31	For the three months ended March 31,		
	2010	2011	2012	2012	2013
		(in	billions of W	on)	
Selected Statements of Comprehensive Income Data:					
Revenue	₩23,389 22,083	₩28,430 27,109	₩35,031 33,422	₩11,371 10,568	₩12,222 11,282
Gross profit	1,306	1,321	1,609	803	940
expenses	258	297	343	85	90
Operating income	1,048 2	1,023 2	1,267 5	718 1	850 1
Other expenses	(14)	(15)	(13)	(4)	(7)
Other gain (loss)	(66) 596	7 492	8 500	5 159	(207) 210
Finance costs	(1,314) 115	(1,262) 142	(1,363) 115	(368) 44	(449) 55
Income before income tax	367	389	519	556	452
Income tax expense	(92)	(215)		(144)	(170)
Net income	₩ 275	₩ 175	₩ 362	₩ 411	₩ 282
Net income attributable to: Owners of the corporation Non-controlling interests	277 (2)	181 (7)	367 (5)	412 (1)	283 (1)
Total comprehensive income Total comprehensive income attributable to:	₩ 273	₩ 359	₩ 380	₩ 413	₩ 255
Owners of the corporation	275 (2)	366 (7)	384 (4)	414 (1)	256 (1)
Selected Cash Flow Data: Net cash generated from (used in) operating activities Net cash used in investing activities Net cash generated from financing activities	₩ 984 (1,770)	₩ (471) (3,663) 4,117		₩ (942) (715)	₩ (59) (1,062) 1,045
		•	•	*	•

	As of December 31,				As of March 31,		
	2010		2011 2012		20)13	
0.15.45.10(44.55.45.45.45.45.45.45.45.45.45.45.45.4			(in billions of Won)				
Selected Statements of Financial Position Data:	₩ 21	14 V	N 155	14/	245	₩	174
Cash and cash equivalents	5,24		№ 155 6,455		245 067	VV	7,659
Inventories	2,15		3,360		894		2,535
Other current non-financial assets	1,13		2,000		501		1,553
Other current assets		59	17	,	79		79
Total current assets	8,81	10	11,987	11,	786		12,000
Long-term trade and other accounts receivable	6	66	180		188		200
Property, plant and equipment	16,23	37	17,493	19,	583		20,388
Other non-current non-financial assets	3,41		2,909		645		4,563
Other non-current assets	1,50)3 _	3,446	4,	420		4,525
Total non-current assets	21,22	21 _	24,028	28,	836		29,676
Total assets	₩30,03	31 ₹	₩36,015	₩40,	622	₩	41,676
Total current liabilities (including current portion of							
long-term debt)	₩ 6,37	75 ∀	₩ 8,137	₩10,	183	₩	9,966
Total non-current liabilities	15,92	26	19,834	22,	070		23,206
Total liabilities	22,30)1	27,971	32,	253		33,171
Total equity	7,73	30	8,044	8,	369		8,504
Total liabilities and equity	₩30,03	31 ₩	₩36,015	₩40,	622	₩	41,676
Selected Operating Data							
Colocted Operating Data							
			year ended nber 31,		For t	he three ended March 3	d
	2010	20)11 2	012	20	12	2013
Average daily sales volume (metric tons)	85,485	91,	970 10	0,129	133,	550 1	36,033
			As of Dece				larch 31,
		2010			012	20)13
Send-out capacity (metric tons/hour)		9,91			566		10,556
Pipeline length (kilometers)		2,87	,		558		3,558
Storage capacity (thousands of kiloliters)		7,12	0 8,32	υ 8,	860		8,860

THE COMPANY

Business

The Company is the only company in Korea engaged in the wholesale distribution of natural gas, and the Company believes that it is currently the largest importer of LNG in the world. Since beginning commercial operations in 1986, the Company has significantly expanded its operations, supplying 36.5 million metric tons of natural gas in 2012. According to the Korean Energy Economics Institute, the Company's supply of natural gas of 36.5 million metric tons in 2012 was equivalent to approximately 17.6% of the primary energy consumed in Korea in such year. The Company supplies gas primarily to 30 city gas companies, five power generating companies owned by KEPCO and ten other power generating companies in Korea. The Company imports LNG primarily through long- and medium-term contracts with overseas suppliers. From time to time, the Company also purchases LNG on the spot market to cover short-term fluctuations in demand for natural gas.

The Company's long-term strategic goal is to evolve from a traditional importer and wholesaler of natural gas into an integrated energy company. As part of its efforts to diversify its operations and prepare for the potential restructuring and liberalization of the natural gas industry in Korea as well as in response to the government's policy to promote procurement of natural resources, the Company in recent years has begun to actively participate in exploration, development and production of natural gas outside Korea. As part of a consortium or through acquisition of a minority interest, the Company engages in overseas gas exploration and development in various locations, including Iraq, Canada, Australia, Myanmar, Indonesia, Mozambique, Uzbekistan, Cyprus and East Timor, and participates in LNG terminal operation and maintenance in Mexico, Thailand, China, the United Arab Emirates and Singapore. The Company has also invested in various gas supply companies located in Oman, Qatar and Yemen. The Company believes that such diversification efforts, while entailing higher risks than its traditional import and wholesale business, offer higher potential returns, and the Company intends to continue to expand its operations by carefully seeking out promising exploration, development and production opportunities abroad.

The Company was established by the government on August 18, 1983 to facilitate the implementation of the government's policies relating to the diversification of energy sources through the development of the natural gas industry. The government has sought to reduce Korea's dependence on fossil fuels, such as petroleum and coal, partly to reduce its vulnerability to the international oil market, but also in response to growing international and domestic awareness of environmental issues. Through its direct and indirect holdings, the government controls a majority of the Company's issued share capital. As of March 31, 2013, the government directly and indirectly held 51.3% of the Company's issued and outstanding shares, and local governments held an additional 9.6% of the Company's issued and outstanding shares. Accordingly, the government has historically influenced, and is likely to continue to influence, the Company's strategy and operations. The government also has the ability to influence and control other government-related entities, some of which are the Company's customers, such as the five power generating companies owned by KEPCO. From time to time, the Company is required to take actions in furtherance of public policy considerations and the government's broader objectives for the natural gas industry.

The Company's facilities consist primarily of its gas processing terminals, storage facilities and a nationwide pipeline network. The Company imports, receives and revaporizes LNG at its LNG receiving terminals and then distributes the natural gas to its customers through its nationwide network of pipelines that encompassed 3,558 kilometers as of March 31, 2013. The Company has three receiving terminals located in Pyongtaek, Incheon and Tongyeong, and the Company commenced the construction of its fourth receiving terminal complex in Samcheok in October 2009. As

of March 31, 2013, the Pyongtaek terminal, the Incheon terminal and the Tongyeong terminal had LNG storage capacities of 3.4 million kiloliters, 2.9 million kiloliters and 2.6 million kiloliters, respectively. The Company plans to complete the first phase of the Samcheok terminal complex and start its commercial operation in 2014, and the Samcheok complex is expected to have an LNG storage capacity of 2.6 million kiloliters upon its completion in 2017. The Company intends to expand both its pipeline network and storage capacity to meet forecasted increases in demand for natural gas in Korea. The Company's wholly owned subsidiary, Korea Gas Technology Corp., designs and maintains the Company's storage tanks and pipeline network.

The Company generated revenue of Won 28,430 billion in 2011 and had total assets of Won 36,015 billion and total equity of Won 8,044 billion as of December 31, 2011. The Company generated revenue of Won 35,031 billion in 2012 and had total assets of Won 40,622 billion and total equity of Won 8,369 billion as of December 31, 2012. The Company generated revenue of Won 12,222 billion in the first three months of 2013 and had total assets of Won 41,676 billion and total equity of Won 8,504 billion as of March 31, 2013.

The Korean Gas Industry

Energy Policy

The government has long had an active involvement in the energy sector, necessitated by the limited availability of domestic energy resources. Early energy policy was driven by a desire to maintain rapid economic growth. However, the present government policy is to develop a sustainable energy policy in which economic growth, energy security and environmental goals are balanced.

In the early years of the Republic, priority was placed on the development of energy resources to meet increasing demand generated by Korea's rapid economic growth. The oil crisis experienced in the 1970s exposed Korea's over-dependence on oil as its primary source of fuel. In an effort to achieve a more secure energy supply, the government encouraged diversification into other sources of primary fuel and the development of alternative fuel sources. The formation of the Ministry of Trade, Industry and Energy and resultant linkage between energy and the wider economic and industrial policies place Korea in a similar situation to the majority of developed countries. This allows for the formulation of energy policy in the context of its wider role in economic policy.

To determine necessary supplies of energy, the Ministry of Trade, Industry and Energy prepares various energy plans that guide energy policy, including the importation and production plans of Korea's energy providers. The Basic National Energy Plan (the "Basic Plan") is prepared by the government every five years and contains plans for various types of energy (petroleum, gas, electric power, hard and soft coal, new and recyclable energy sources and general mineral resources). The first Basic Plan was issued in 2008. The Energy Use Rationalization Basic Plan (the "Energy Usage Plan") is formulated and issued by the government every five years to promote rational and efficient use of energy. The latest Energy Usage Plan was issued in 2008. The Long-Term Natural Gas Supply-Demand Plan (the "Long-Term Plan") is updated every two years and lays out the government's expectations of natural gas demand in Korea. The latest Long-Term Plan was issued in April 2013 and forecasted that natural gas demand would initially continue to increase and then gradually decrease through 2027. In the latest Long-Term Plan, demand for natural gas by city gas companies is forecasted to increase at a compounded annual rate of 2.7% per annum from 2012 to 2027, and demand by power generating companies is forecasted to decrease at a compounded annual rate of 5.5% per annum from 2012 to 2027. Total demand for natural gas is forecasted to decrease at a compounded annual growth rate of 0.1% per annum from 2012 to 2027. The Ministry of Trade, Industry and Energy's demand forecasts are typically conservative compared to actual demand and have consistently been revised upwards to reflect rising gas usage. For a further discussion of these

plans, see "Regulation of the Korean Gas Industry." In addition to providing support in the production of the required reports of the government, the Company uses a demand model to continually update and revise gas demand forecasts for its own internal purposes.

In general, the rate of growth in energy demand in Korea has been closely correlated to the rate of growth in the overall economy, reflected in such measures as GDP growth. According to the first Basic Plan, Korea's gross domestic product increased to Won 760.3 trillion in 2006 from Won 487.2 trillion in 1998, representing a compounded annual growth rate of 5.7% per annum. During the same period, total energy consumption in Korea increased to 233.4 million tons in 2006 from 165.9 million tons in 1998, representing a compounded annual growth rate of 4.4% per annum. In addition to the relationship to growth in the overall economy, there are other factors such as environmental regulations, which have a significant positive impact on the growth of natural gas demand as regulations that promote or mandate "clean energy" increase the move to natural gas from alternate fuel sources.

In addition, according to the first Basic Plan, demand for natural gas, new renewable energy and nuclear energy is forecasted to continue to grow, while dependence on oil is expected to fall by 8.0% for the period from 2006 to 2030. In the latest Long-Term Plan, LNG demand is forecasted to decrease from 38.3 million tons in 2012 to 37.7 million tons in 2027.

Liberalization

Since 1998, the government has stated that it is considering various options regarding the liberalization of the natural gas industry to introduce competition and greater transparency. In 1999, the government amended the Petroleum Business Act to allow gas consumers to import LNG for their own use from the year 2001. Since the passage of the amendment, two companies, POSCO and K-Power Co., Ltd., have imported LNG for their own use, and the Company can make no assurance that additional companies will not import LNG for their own use in the future.

In October 2008, the Ministry of Trade, Industry and Energy also announced a road map to permit other companies to enter the LNG import and wholesale market in Korea. The road map contemplates gradual liberalization, initially starting with liberalization of the market for power generating companies followed by the market for industrial usage. Although a bill to amend the City Gas Business Act to allow for such liberalization had been submitted to the National Assembly in September 2009, the National Assembly adjourned without voting on the bill and as a result, the bill has expired. Another bill to amend the City Gas Business Act to allow for such liberalization was submitted to the National Assembly in April 2013. Even if such a plan were to be passed as proposed, the Company believes that such plan would not materially affect its profitability, as a substantial portion of projected demand for natural gas in the next decade is expected to be satisfied under the Company's existing supply contracts and new competitors will only be able to compete for the portion of projected demand that will not be met by the Company under the Company's existing supply contracts. Accordingly, the Company believes that the new entrants would not be able to fully penetrate the market. However, any such liberalization plan may intensify competition in the LNG import and wholesale market in the future.

Privatization

In the past, the government contemplated privatization of the Company through a reduction in the government's shareholding or by spinning off the Company's LNG importation and distribution business. To the Company's knowledge, the government currently does not have any plan to privatize the Company. However, there can be no assurance that the government will not consider privatization of the Company in the future.

Sales

The Company's sales are primarily split between two customer groups: power generating companies and city gas companies. Demand for natural gas from the city gas companies has grown over the past decade as new pipeline connections increased access to natural gas and customers that used other forms of energy switched to natural gas as it became available. The majority of sales to power generating companies are to the five power generating subsidiaries of KEPCO. The Company also sells gas to ten other power generating companies that collectively own seventeen power plants.

In addition, the Company sells compressed natural gas ("CNG") to private transport companies and companies that operate portable gas fueling stations. The Company also earns fees from companies that utilize the Company's pipelines in order to transport LNG, as well as fees by diverting LNG through a private company that uses the low temperatures of LNG for cooling purposes, en route to the Company's revaporizing facilities.

The Company first supplied natural gas to city gas companies in 1987. Since then, sales to city gas companies have surpassed sales to power generating companies and grew to approximately 19,380 thousand metric tons in 2012. The residential gas penetration rate in Korea in 2012 was 75.5% compared to 50.0% in 1998. The growth in volume of natural gas supplied to residential and business heating end-users has slowed in recent years. However, the volume of natural gas supplied to industrial users has increased more rapidly in recent years, and the Company believes that there remains potential to increase natural gas sales to such users where penetration rates are relatively lower.

Since the first sale of natural gas to KEPCO in November 1986, sales of natural gas by the Company to power generating companies have increased to 16,990 thousand metric tons in 2012 and 4,933 thousand metric tons in the first three months of 2013.

For the three months ended

The table below provides details of gas sales volume for the periods indicated.

		For the y	ear end	ded Decem	ber 31,		1 01	March		iiueu
	20	2010		2011 2012		2012 2		012	20	013
	Total sales	Percent of total	Total sales	Percent of total	Total sales	Percent of total	Total sales	Percent of total	Total sales	Percent of total
				(in the	usand	of metric	tons)			
City gas companies: Residential / business										
heating	8,719	27.9%	8,511	25.4%	8,627	23.6%	4,155	34.2%	3,866	31.6%
Industrial	5,486	17.6%	6,290	18.7%	8,065	22.1%	1,918	15.8%	2,188	17.9%
Other	3,149	10.1%	3,289	9.8%	2,688	7.4%	1,137	9.4%	1,203	9.8%
Sub-total	17,354	55.6%	18,090	53.9%	19,380	53.0%	7,210	59.3%	7,257	59.3%
Power generating companies: Subsidiaries of KEPCO Other power generating	10,317	33.1%	10,551	31.4%	11,280	30.9%	3,247	26.7%	3,235	26.4%
companies	3,364	10.8%	4,765	14.2%	5,710	15.6%	1,649	13.6%	1,698	13.9%
Sub-total	13,681	43.9%	15,316	45.6%	16,990	46.5%	4,896	40.3%	4,933	40.3%
Miscellaneous	167	0.5%	164	0.5%	177	0.5%	47	0.4%	53	0.4%
Total sales volume	31,202	100.0%	33,570	100.0%	36,547	100.0%	12,153	100.0%	12,243	100.0%
Other power generating companies	3,364 13,681 167	10.8% 43.9% 0.5%	4,765 15,316 164	14.2% 45.6% 0.5%	5,710 16,990 177	15.6% 46.5% 0.5%	1,649 4,896 47	13.6% 40.3% 0.4%	1,698 4,933 53	13.9% 40.3% 0.4%

City Gas Companies

As of March 31, 2013, the Company supplied natural gas to 30 of the 32 city gas companies in Korea. The remaining city gas companies currently do not use natural gas. The Company generally supplies natural gas to city gas companies under 20-year contracts, which may be extended if the parties agree to an extension five years before expiration of the relevant contract. Under these contracts, in November of each year, the volume of gas to be supplied each month of the following year is determined. If the volume that a city gas company fails to purchase is greater than 10% of the agreed amount, these contracts typically contain penalty provisions that oblige the city gas company to pay 2% of the amount they contract for but do not actually take. The penalty does not apply if extreme weather conditions cause a decrease in demand. Thus, the Company may not be able to fully pass through to the city gas companies any costs it incurs under its own take-or-pay or ship-or-pay obligations discussed below.

The table below shows the city gas penetration rate as of December 31, 2012.

Region/City	Total number of households	Households with natural gas supply	Penetration rate
	(in the	(%)	
Seoul	4,192	3,868	92.3
Gyonggi	4,579	3,717	81.2
Busan	1,381	1,002	72.6
Gyongnam	1,109	648	58.4
Daegu	940	732	77.8
Incheon	1,067	977	91.5
Choongnam	868	393	45.3
Gyongbuk	1,092	534	48.9
Daejon	566	513	90.7
Gwangju	549	500	91.2
Chunbuk	703	408	58.1
Chunnam	534	268	50.2
Choongbuk	625	333	53.4
Ulsan	412	345	83.8
Gangwon	485	233	48.0
Total	19,304	14,486	75.0

Source: City Gas Companies Association.

Although residential heating and electricity generation have been, and will continue to be in the foreseeable future, the major uses of natural gas, natural gas has also become a key energy source in industrial use, including in the manufacturing of food, textile, metal, machinery and chemical products. Sales of natural gas for industrial use represented 22.1% of the Company's total sales and 41.6% of the Company's sales to city gas companies in 2012 and 17.9% of the Company's total sales and 30.2% of the Company's sales to city gas companies in the first three months of 2013. The Company believes that industrial use of natural gas will increase as technologies develop to allow industrial users to utilize natural gas and these users become more aware of the potential uses for natural gas.

The table below provides details of sales by volume to the Company's major city gas customers for the periods indicated.

	For the year ended December 31,			For the three months ended March 31,		
	2010	2011	2012	2012	2013	
		(in thous	tric tons)			
Samchully	2,912	2,984	3,128	1,207	1,158	
Seoul	1,719	1,678	1,729	765	719	
Ko-one	1,426	1,402	1,439	589	584	
Isyesco	1,186	1,147	1,149	496	484	
Gyeongdong	1,460	1,890	2,332	626	772	

Because of the importance of residential and business heating gas consumers to the Company's overall gas demand, sales are heavily skewed toward the winter months. Gas demand from these sectors is predominantly for heating purposes, and demand for gas in the winter months is significantly greater than in the summer months due to Korea's climate in which winters tend to be long and cold. The demand gap, or "Turn-Down Ratio," for city gas companies was approximately 3.1:1 in 2012, meaning that in such year, sales in the month with the highest gas usage were more than three times greater than sales in the month with the lowest gas usage.

During times of peak demand in the winter, the Company's storage facilities generally achieve full capacity levels, whereas during times of low demand in the summer the storage tanks operate at very low utilization rates. To use overall capacity and storage facilities more efficiently year-round, the Company is focusing on reducing seasonality by boosting demand for natural gas in the summer months. Its strategies in this regard include:

- focusing on new customer types with more stable demand patterns, particularly industrial consumers;
- developing a price structure that encourages increased summer demand;
- promoting the use of natural gas-powered air conditioning; and
- · promoting the use of CNG-powered cars and buses.

Power Generating Companies

The Company's sales to power generating companies are split between two customer segments: the five power generating companies owned by KEPCO and the ten other power generating companies in Korea. The power generating companies' generating systems comprise nuclear, thermal, hydro and internal combustion units, which at the end of 2012 had an aggregate installed generating capacity of 79,839 megawatts. Natural gas was used for approximately 26.2% of the power generating companies' gross generating production in 2012. Because of the variety of energy sources available to the power generating companies, it is the government's practice to first allocate supplies of LNG to the city gas companies, which do not have the same flexibility.

Power Generating Subsidiaries of KEPCO

From the Company's inception until April 2001, it supplied natural gas to KEPCO. In April 2001, pursuant to a restructuring plan for the electricity industry in Korea, KEPCO's non-nuclear generating capacity was divided among the following five separate power generating subsidiaries, each with its own management structure, assets and liabilities: Korea South-East Power Co., Ltd., Korea Southern

Power Co., Ltd., Korea Midland Power Co., Ltd., Korea Western Power Co., Ltd. and Korea East-West Power Co., Ltd. The subsidiaries all remain wholly-owned by KEPCO, although the government may gradually reduce KEPCO's shareholding of each subsidiary.

The Company entered into 20-year LNG supply contracts with the five non-nuclear power generating subsidiaries of KEPCO that will expire in December 2026. Under the terms of the contracts, the Company's annual sales quantity is determined annually through negotiations with the power generating companies, subject to the government's approval, and may be adjusted through negotiations between the parties. The Company and each power generating company have agreed that, if the Company and the relevant power generating company cannot agree on the annual purchase quantity, the power generating company will continue to purchase LNG from the Company, with the purchase quantity being determined based on the average of the quantities purchased for the preceding three years. The five non-nuclear power generating subsidiaries of KEPCO are jointly and severally liable for a take-or-pay obligation to the Company to the extent of their annual purchase quantity.

As discussed above in "—The Korean Gas Industry—Energy Policy" and in "Regulation of the Korean Gas Industry," energy policy in Korea is expressed in a series of government energy plans. These plans are periodically revised every two to five years and their main aims include maintaining a balance between energy supply and demand, improving efficiency within the electricity industry and ensuring the production of electricity in an environmentally clean manner. The government also develops Electricity Plans which effectively determine the power generating companies' long-term plans for construction of generating units. In February 2013, the government published in consultation with KEPCO its Sixth Electricity Plan which forecasts energy supply and demand until 2027. The Sixth Electricity Plan forecasts that electricity consumption will record an average annual growth rate of 3.4% from 2013 to 2027 and increase to 771,007 gigawatts in 2027 from 469,049 gigawatts in 2012.

Other Power Generating Companies

In addition to the five power generating subsidiaries of KEPCO, the Company currently supplies natural gas to ten other power generating companies. The following table describes the notional natural gas usage capacities of these companies as of December 31, 2012.

_	Number of power plants	Capacity (in megawatts)
GS Power Co., Ltd	2	900
GS EPS Co., Ltd	2	1,033
Posco Energy Corporation	2	2,949
Incheon Airport Energy Co., Ltd	1	127
Meiya Power Co., Ltd	1	525
Pyungtaek Energy Co., Ltd	1	833
Korea District Heating Co., Ltd	4	1,315
Incheon Total Energy Company	1	205
Suwan Energy Co., Ltd	1	118
Busan-Jungkwan Energy Co., Ltd.	1	100
Total	16	8,105

Wholesale Pricing of Natural Gas

Wholesale gas and gas supply prices are set by the Ministry of Trade, Industry and Energy after consultations with the Ministry of Strategy and Finance. A sales price adjustment mechanism is

implemented pursuant to the Supply of Natural Gas Regulation under the City Gas Business Act and is designed to enable the Company to recover its reasonable costs (including supply costs and raw material costs) plus a guaranteed return. Prior to the beginning of each calendar year, the Ministry of Trade, Industry and Energy, after consultation with the Ministry of Strategy and Finance and the Company, determines the unit "supply margin," which is based on the Company's target sales volume, estimated unit supply costs based on such target sales volume (including depreciation, selling, general and administrative expenses and labor costs) and a guaranteed return for the Company for the upcoming year. The guaranteed return is determined based on the Company's assets used in the distribution of natural gas, the Company's weighted average cost of capital and certain adjustments. The weighted average cost of capital is calculated by applying the Company's estimated borrowing rate as well as the Company's cost of equity calculated using a capital asset pricing model.

The Company adds to the unit supply margin the unit raw material costs (including LNG costs, transportation expenses, insurance costs and taxes and duties as well as reserves periodically allocated for the collection of the Company's outstanding receivables) to arrive at the Formula Price. This enables the Company to recover its supply costs, pass through its raw material costs and realize a guaranteed return. Such Formula Prices are adjusted periodically throughout the year to reflect fluctuations in raw material costs, which enables the Company to mitigate its commodity price and foreign exchange risks. In the case of raw material costs related to the Company's sales to power generating companies, estimates for such costs are determined on a monthly basis and the Company is able to periodically settle any differences between its estimated costs and the actual costs it incurs. In the case of raw material costs related to the Company's sales to city gas companies, such costs are typically adjusted every two months under the City Gas Business Act if the fluctuations in the raw material costs exceed 3%.

The government reserves the right to suspend the periodic adjustments to the sales price the Company invoices to its customers. Due in part to substantial fluctuations in the price of LNG and the value of the Won relative to the U.S. dollar in recent years, the Ministry of Trade, Industry and Energy suspended, from March 2008 to February 2013, the periodic bi-monthly adjustments to the sales prices that the Company invoices to city gas companies. Such suspension has resulted in the Company being unable to fully increase its invoice sales prices to city gas companies to reflect the Formula Prices, which in turn has led to a substantial decrease in net cash inflows and a corresponding increase in the Company's borrowings. In order to address the adverse effect on the Company's cash flows and financial condition during the suspension period, the Ministry approved increases in the invoice sales prices to city gas companies of 7.4% in November 2008, 7.9% in June 2009, 4.9% in September 2010, 5.3% in October 2011, 4.9% in June 2012 and 4.4% in February 2013. The Ministry of Trade, Industry and Energy announced in February 2013 that it was discontinuing the suspension of the periodic bimonthly adjustments and that it would maintain Formula Prices at a level that would enable the Company to recoup its outstanding guaranteed return within five years. However, no assurance can be given that the Ministry of Trade, Industry and Energy will not change its policy or adopt other measures that may prevent or delay the Company from realizing its guaranteed return fully or at all. See "Risk Factors—Risks related to the Company and its Natural Gas Import and Wholesale Business—From time to time, the government may suspend the Company's ability to increase its sales prices to city gas companies to fully reflect increases in raw material costs, which has had, and may in the future have, a negative impact on the Company's cash flows, financial condition and the ability to comply with certain financial covenants, and also a temporary negative impact on the Company's results of operations".

The split of the Company's supply cost burden between city gas companies and power generating companies is determined by using the respective purchase volume forecasts and allocating a part of the overall supply cost based on the pro rata utilization rates for the components of the Company's supply costs. In 1998, the Company began supplying KEPCO at a margin lower than the city gas companies because it is less expensive for the Company to supply KEPCO than the city gas

companies. The unit supply cost for city gas companies is higher because of their greater usage of the pipeline and valve stations and higher seasonal fluctuations in demand that create greater storage capacity requirements. The Company at times charges different supply prices based on seasonality and the ultimate end user.

LNG SUPPLY

The Company currently obtains substantially all of its LNG requirements from overseas sources, including Qatar, Malaysia, Oman, Indonesia, Yemen, Russia, Egypt, Brunei and Australia. The Company imported 35.0 million metric tons of LNG in 2012 and 12.6 million metric tons of LNG in the first three months of 2013.

LNG Sales and Purchase Agreements

Developers and financiers of LNG facilities have historically required long-term sales contracts of 20 to 25 years to be in place before starting the capital-intensive process of LNG facility construction. As a large purchaser of LNG, the Company has established a number of long-term sales and purchase agreements with suppliers that guarantee a minimum level of annual LNG supply. The Company has found that developing relationships with key suppliers has enabled the Company to obtain consistent supplies of high quality natural gas at competitive prices. Since the introduction of LNG in Korea in 1986, natural gas demand has increased at rates often exceeding the LNG supply from long-term contracts. This has occurred in part because the Company's purchase commitments under long-term contracts are constrained by plans issued by the Ministry of Trade, Industry and Energy that have often underestimated growth in demand. Accordingly, the Company from time to time has entered into short- and medium-term purchase contracts or spot market transactions to cover short-term fluctuations in seasonal demand. Historically, the Company has obtained approximately 5% to 10% of its LNG annual supply on the spot market. In 2012, the Company obtained approximately 10.1% of its LNG supply on the spot market. The Company increased its spot market purchases in 2012 in order to meet the increase in demand for natural gas primarily caused by lower temperatures during the winter of 2012 as compared to 2011.

The following table provides certain information about the Company's long- and medium-term LNG purchase agreements outstanding as of March 31, 2013.

Supplier	Contract period	Delivery basis	Contract volume (in thousand metric tons per year)
PERTAMINA (Indonesia)	1994 to 2014	FOB ⁽¹⁾	2,000
	1998 to 2017	FOB	1,000
MLNG (Malaysia)	1995 to 2018	FOB	2,000
	2008 to 2028	DES (2)	1,500 ⁽³⁾
RASGAS (Qatar)	1999 to 2024	FOB	4,920
	2007 to 2026	DES	2,100
	2013 to 2032	DES	2,000
OLNG (Oman)	2000 to 2024	FOB	4,060
BLNG (Brunei)	1997 to 2013	DES	700
	2013 to 2018	DES	1,000
Woodside Energy and others (Australia)	2003 to 2016	DES	500
Donghae Gas Fields (Korea)	2004 to 2018	PNG ⁽⁴⁾	400
YLNG (Yemen)	2008 to 2028	FOB	2,000
SAKHALIN Energy (Russia)	2008 to 2028	FOB	1,500
BG (primarily Egypt)	2008 to 2016	DES	1,320(5)
Shell Eastern Trading Ltd. (primarily Australia)	2013 to 2038	DES	3,640(6)
Total Gas and Power Ltd. (primarily Australia) ⁽⁷⁾	2014 to 2017	DES	1,000
	2018 to 2031	DES	2,000
Santos and others (Australia)	2015 to 2035	FOB	3,000(8)
DSLNG (Indonesia)	2015 to 2027	FOB	700
Sabine Pass Liquefaction LLC (USA)	2017 to 2037	FOB	3,500

- (1) Under "free-on-board" ("FOB") contracts, title to the LNG passes to the Company at the loading docks in the country where the supplier is located, and the Company arranges for transportation to its receiving terminals.
- (2) Under "delivered-ex-ship" ("DES") contracts, the suppliers arrange for the transportation of the LNG to the Company's receiving terminals in Korea and a transportation component is included in the contract price. Title to the LNG passes to the Company at the Company's receiving terminals.
- (3) Excluding 500 thousand metric tons per year that can be purchased at the option of the Company.
- (4) Under "pipeline natural gas" ("PNG") contracts, the supplier transports natural gas in vapor form through a pipeline to the Company's receiving terminal.
- (5) Excluding 240 thousand metric tons per year that can be purchased at the option of the supplier. Purchases are made under a portfolio contract that provides for the supply of LNG primarily from Egypt and other regions as necessary.
- (6) Initially one million metric tons per year from fields in Russia and Nigeria until the satisfaction of certain conditions. Purchases are made under a portfolio contract that provides for the supply of LNG primarily from Australia and other regions as necessary.
- (7) Purchases are made under a portfolio contract that provides for the supply of LNG primarily from Egypt and other regions as necessary.
- (8) Excluding 500 thousand metric tons per year that can be purchased subject to the satisfaction of certain conditions.

In August 2010, the Company also entered into a short-term supply contract with GDF Suez S.A., pursuant to which GDF Suez S.A. agreed to supply the Company, on a delivered-ex-ship basis, an aggregate volume of 2.5 million metric tons of LNG from 2010 to 2013. The Company intends to continue to seek to diversify its supply sources and may enter into additional agreements to satisfy future supply needs.

Almost all of the long- and medium-term supply contracts contain take-or-pay provisions that require the Company to purchase a certain amount of LNG each year of the contract term, whether or not delivery is taken. Conversely, some agreements specify that the suppliers have downward flexibility to defer supplies. The long- and medium-term supply contracts also specify the downward flexibility available to the Company, which is the amount that may be deferred in any one year without payment becoming due. This figure varies between 4% to 10% of the annual volume the Company is required to purchase. The Company normally is required to purchase such deferred amounts during the remaining term of the relevant contract. Furthermore, there is a limit on the total amount of LNG that can be deferred under such contracts, generally up to 100% of the annually contracted volume. Once this level is reached, the Company is required to pay for the LNG even if delivery is not taken. Almost all of the supply agreements provide that any payment made under the take-or-pay provision can be applied as a credit to future LNG purchases that in subsequent years exceed that year's agreed-upon volume. To date, there have been no instances where the Company has been required to pay for undelivered LNG under the take-or-pay provisions. As the Company increases its storage capacity and expands its pipeline network, its ability to store unutilized LNG will increase. As a result, the Company expects that its ability to deal with excess LNG, if any, will improve.

The price of LNG is generally determined by an LNG market pricing formula based primarily on the price of crude oil. The price of LNG purchased by the Company is determined by:

- in the case of LNG purchased from Indonesia (other than from DSLNG), the Indonesian Crude Price ("ICP"), which is linked to the average price of crude oil exported by Indonesia, adjusted on a monthly basis, in arrears;
- in the case of LNG purchased from Qatar, Malaysia, Oman, Yemen, Russia, Brunei and Australia, and LNG purchased from DSLNG and Total, the Japanese Crude Cocktail ("JCC"), which is linked to the price of customs-cleared crude oil imports into Japan; and
- in the case of LNG purchased from BG Group, JCC as well as the Henry Hub gas price, which is linked to the price of natural gas futures contracts traded on the New York Mercantile Exchange.

The long-term contract with MLNG II in Malaysia allows for the renegotiation of the pricing terms if there has been a drastic change in circumstances. In November 2009, the Company agreed to renegotiate the pricing terms with MLNG II, and negotiations are currently ongoing. In addition, the long-term contracts with Sakhalin Energy, MLNG III and YLNG permit the Company or the supplier to request a price review every five years. The Company intends to continue to seek to diversify its supply sources and may enter into additional long- and medium-term agreements to satisfy future supply needs.

With the exception of the purchase price under the supply contract with Donghae Gas Fields, which the Company pays in Won, the purchase prices under the other supply contracts are all payable by the Company in U.S. dollars.

Shipping

The Company currently imports all of its natural gas in the form of LNG in ships designed and used exclusively for transporting LNG. Each ship can transport approximately 56,000 to 67,000 metric tons of LNG at a temperatures ranging from minus 159.8 celsius to minus 163.8 celsius.

The Company arranges LNG shipments on two different bases:

- Under DES contracts, the suppliers arrange for the transportation of the LNG to the Company's receiving terminals in Korea and a transportation component is included in the contract price. For such contracts, title to the LNG passes to the Company at the Company's receiving terminals.
- Under FOB contracts, title to the LNG passes to the Company at the loading docks in the country where the supplier is located, and the Company must arrange for the transportation to its receiving terminals.

For its FOB contracts, the Company utilizes the services of the following domestic Korean shipping companies: Hyundai Merchant Marine Co., Ltd., SK Shipping Co., Ltd., Hanjin Shipping Co., Ltd., Korea Line Corporation and Korea LNG Trading Co., Ltd. Each ship is allocated to a particular LNG purchase contract, although there is some flexibility in changing the allocation.

The Company has entered into a total of 23 shipping contracts with the above five Korean shipping companies for the exclusive use of 23 vessels. 21 of these shipping contracts relate to LNG transporting vessels that were built specifically for use by the Company. Each of these 21 shipping contracts has a term of 20 or 25 years, which term may be adjusted by the Company with the consent of the relevant shipping company. The two other shipping contracts relate to ships chartered by the relevant shipping companies for use by the Company. Thirteen of the financing contracts for these ships require the government to directly or indirectly own 30% of the Company's shares and maintain effective control of the Company.

If the Company were to terminate its use of one or more of these ships, it could be required to make the remaining payments under the relevant shipping company's financing documents. Although the Company is not a party to the financing documents for these ships, it has entered into contracts of affreightment with the shipping companies. The Company believes that it would only terminate its use of such ships pursuant to a plan by the Ministry of Trade, Industry and Energy that calls for large reductions in supply. The Company believes that the government would reimburse the Company for any payments it makes following the termination of a shipping contract. However, the government does not have any legal or contractual obligation to do so. Even if the Company were required to make payments under a ship's financing documents, it would not acquire title to the ship. The financing documents also contain various grace periods and other provisions regarding alternative uses of the ships, which the Company believes would enable it to minimize its exposure in respect of such payments.

Under the shipping contracts relating to the 21 ships built for the Company, the Company and the shipping companies have agreed to an annual shipment volume for the life of the agreements. Each year the Company may adjust the shipment volume for the following year based on any changes to agreements between the Company and its LNG suppliers. In the two other shipping contracts, the Company has guaranteed an aggregate shipment volume. The annual shipment volume may be adjusted according to the Company's shipping requirements as long as the Company adheres to the aggregate shipment volume for the term of the contract.

All of the shipping contracts contain ship-or-pay clauses, which require the Company to pay the costs incurred by the shipping company if the committed volume of shipment, as adjusted as described in the previous paragraph, for a given year is not shipped. Under the shipping contracts relating to the ships built for the Company, the payments under the ship-or-pay clauses are determined based on the shipping companies' capital costs and vessel expenses. The components of the shipping companies' capital costs include the cost of building the vessel, interest expense on financing for the construction

of the vessel and other costs such as management and other fees in connection with such financing. The shipping companies' vessel expenses include labor, repair, maintenance and insurance costs for the ships. Payments under the ship-or-pay clauses are calculated by multiplying the unit shipment costs by the shortfall in shipment volume for the relevant year.

To date, the Company has never been required to make payments under such take-or-pay or ship-or-pay clauses principally because, in most cases, it has been able to purchase and ship sufficient amounts of LNG to avoid triggering these clauses. On rare occasions, due to a decrease in demand, the Company has purchased or shipped less than the agreed amounts of LNG, but the amounts were within the range allowed to be deferred under the supply or shipping contracts. However, if the Company's requirements for LNG were to be materially reduced in future years and the Company were not able to negotiate a reduction of the annual shipment volumes, the Company may incur payment obligations under the ship-or-pay clauses. Under the shipping contracts, any such payments could be applied against costs relating to future shipping requirements in excess of contracted amounts.

Storage and Transmission

As of March 31, 2013, the Company owned and operated a pipeline network of 3,558 kilometers in length. The Company receives, stores and vaporizes LNG in three large terminal complexes in Pyongtaek, Incheon and Tongyeong that combined had a storage capacity of 8.9 million kiloliters of LNG as of March 31, 2013. Pyongtaek and Incheon are located on the western coast of Korea near Seoul, and Tongyeong is located in the southern part of Korea.

LNG is delivered to the Company's receiving terminals in specially designed ships. The LNG is then pumped into storage tanks through unloading arms and pipes. Later it is pumped out to the vaporizers where it is revaporized and then piped in its gaseous state to wholesale customers throughout Korea. The Company's facilities for receiving, storing, vaporizing and distributing natural gas have been constructed to meet international industry design standards and are operated under strict quality and safety controls.

Terminals

Pyongtaek

The Pyongtaek complex, which has been in operation since 1986, is located on a 1,494,215 square meter tract of land at Asan Bay on Korea's western coast in Gyonggi province, 100 kilometers south-west of Seoul. The Pyongtaek complex is equipped with berthing facilities for two tankers to unload LNG and, as of March 31, 2013, it housed 23 storage tanks with a total capacity of 3.4 million kiloliters of LNG. Each tank has a storage capacity of between 100,000 to 200,000 kiloliters, is above ground with a concrete membrane and is designed to withstand earthquakes to the same scale as nuclear power plants in Korea. The Pyongtaek complex's vaporizing facilities are a combination of "open rack" type and "submerged" type with a production capacity of 4,036 metric tons of natural gas per hour as of March 31, 2013. The terminal processed 14.0 million metric tons of natural gas in 2012 and 4.5 million metric tons of natural gas in the first three months of 2013.

The revaporizing facilities at the Pyongtaek complex utilize waste water from the adjacent Korea Western Power Co., Ltd.'s power station. The Company believes this has a significant beneficial effect on the Pyongtaek complex's operating cost structure when compared to the Incheon complex.

Incheon

The Incheon complex, which commenced operations in 1996, is located on a 991,700 square meter site, also on the Republic's western coast in the Incheon municipality. Due to safety concerns in

this heavily populated area, the Incheon complex is situated entirely on an island of reclaimed land, approximately eight kilometers off the coast. The Incheon complex is also equipped with two berths and, as of March 31, 2013, had 20 storage tanks in operation with a total capacity of 2.9 million kiloliters. Ten of the storage tanks are above ground and ten are below ground. The vaporizing facility had a production capacity of 4,400 metric tons of natural gas per hour as of March 31, 2013. The Company plans to increase the storage capacity of the Incheon complex to 3.1 million kiloliters by 2017. The terminal processed 13.2 million metric tons of natural gas in 2012 and 4.8 million metric tons of natural gas in the first three months of 2013.

Tongyeong

The Tongyeong complex is located on a 1,322,320 square meter site and has been operational since October 2002. The Tongyeong complex is equipped with one berth and, as of March 31, 2013, had 17 storage tanks in operation with a total capacity of 2.6 million kiloliters. All of the storage tanks are above ground. The vaporizing facility had a production capacity of 2,130 metric tons of natural gas per hour as of March 31, 2013. The terminal processed 9.0 million metric tons of natural gas in 2012 and 2.9 million metric tons of natural gas in the first three months of 2013.

Samcheok

The Company commenced the construction of its fourth receiving terminal complex in Samcheok, located on the eastern coast of Korea, in October 2009, which is expected to commence commercial operation in 2014. Upon completion of the first phase of construction in 2014, the Samcheok complex will operate four storage tanks with a total capacity of 0.8 million kiloliters of LNG. Once the construction of the complex is completed in 2017, it is expected to have 12 storage tanks with a total storage capacity of 2.6 million kiloliters of LNG.

Pipeline Network

Once LNG is converted into natural gas at the Pyongtaek, Incheon and Tongyeong facilities, the gas is pumped throughout Korea through underground pipelines. The pipes are constructed in Korea to ISO 9001 technical standards and ISO 14001 environmental standards, and are insulated with rubber and then buried 1.2 to 1.5 meters underground after stringent inspections. The Company's distribution facilities also include stations for regulating the pressure of the gas as it is transmitted and other auxiliary facilities such as metering instruments.

As of March 31, 2013, the Company's transmission system had a total of 3,558 kilometers of pipeline in operation. As of March 31, 2013, the pipelines supplied gas to approximately 186 counties and cities throughout Korea. The Company's transmission system includes 288 kilometers of pipeline that encircle the Seoul metropolitan area in order to provide this highly populated area with a stable and secure supply of natural gas. The Company's extensive pipeline also allows the Company to distribute LNG to regional areas of Korea outside of the major metropolitan areas. By the end of 2017, the Company expects to expand its network to comprise approximately 4,715 kilometers of pipeline.

System Control Centers

The Central System Control Center, which is located at the Company's headquarters building in Bundang, continually and automatically checks and controls the production and distribution operations with computerized monitoring equipment. The control center has been designed with the assistance of Dong-Ah Engineering Co., Ltd. (Korea) and OGE Energy Corp. (Japan) and utilizes computer-controlled equipment from Digital Equipment Corporation (USA). The center is designed to prevent accidents and to manage any emergency that may arise. In addition, there are seven regional

control centers in Ansan, Daejon, Gimhae, Gwangju, Gyeongsan, Seoul, and Wonju, which continually monitor the distribution of natural gas within their respective regions. The regional centers are also designed for accident prevention.

The Central System Control Center also monitors the distribution and flow of natural gas in order to obtain consumption and demand figures. The information gathered is used to study and review the Company's performance and customer consumption patterns.

Other Operations

The Company's overall strategic goal is to evolve from a traditional importer and wholesaler of natural gas into an integrated energy company that actively participates in exploration, development and production of natural gas, which entails significantly higher risks as well as higher potential returns compared to its natural gas import and wholesale business. As a means of diversifying its operations to increase its profits and prepare for the restructuring of the natural gas market, the Company has invested in various upstream and downstream projects. Since 1997, the Company has made investments in gas supply companies located in Oman, Qatar and Yemen. In addition, as part of a consortium or through acquisition of a minority interest, the Company engages in overseas gas exploration and development in various locations, including Iraq, Canada, Australia, Myanmar, Indonesia, Mozambique, Uzbekistan, Cyprus and East Timor, and participates in the operation and maintenance of LNG terminals in Mexico, Thailand, China, the United Arab Emirates and Singapore. The Company has invested approximately US\$3.2 billion in overseas gas exploration, development and production projects in 2012, and it expects to invest approximately US\$2.6 billion in such projects in 2013. The Company expects to continue to invest in such projects, subject to market conditions. The Company also plans to invest in other revenue diversification efforts, including LNG trading and development of alternative energy sources. The Company may also selectively acquire or invest in companies or businesses that may complement its business.

The major operations that the Company is currently pursuing are summarized below.

Investments in Gas Supply Companies

Oman. In 1997, the Company organized an investment consortium, Korea LNG Limited, in which the Company held a 24% equity interest as of March 31, 2013, with four other Korean companies. The consortium acquired a 5% interest in Oman LNG LLC, a gas supply company that supplies gas from Saih Rowl in Oman. In 2012, Oman LNG LLC paid US\$23 million in dividends to Korea LNG Limited. As of March 31, 2013, the Company had invested approximately US\$8 million in Oman LNG LLC.

Qatar. In 1999, the Company organized an investment consortium, Korea Ras Laffan LNG Ltd., in which it held a 60% equity interest as of March 31, 2013, with six other Korean companies. The consortium acquired a 5% interest in Ras Laffan Liquefied Natural Gas Company NY Ltd., a gas supply company that supplies gas from Qatar. In 2012, Ras Laffan Liquefied Natural Gas Company NY Ltd. paid US\$88 million in dividends to Korea Ras Laffan LNG Ltd. As of March 31, 2013, the Company had invested approximately US\$29 million in Ras Laffan Liquefied Natural Gas Company NY Ltd.

Yemen. In August 2005, the Company signed an equity participation agreement and acquired a 6% interest in Yemen LNG Company Ltd. ("YLNG"), a gas supply company that supplies natural gas extracted from the Marib region of central Yemen. In September 2006, the Company acquired a 49% interest in Hyundai Yemen LNG Company, a shareholder of YLNG, and indirectly acquired an additional 2.88% interest in YLNG. The establishment of YLNG also involved the construction of a two-train natural gas liquefaction plant with an annual processing capacity of 6.7 million tons and other

pipelines, storage and port facilities. YLNG made its first shipment of LNG in November 2009. As of March 31, 2013, the Company had invested approximately US\$284 million in YLNG.

Overseas Exploration, Development and Production

Production Stage

Iraq. In June 2009, the Company joined a consortium with Eni S.p.A. and Occidental Petroleum Corporation and made a successful bid in the Iraqi government's auction of the Zubair oilfield. The Company held an 18.75% interest in the project as of March 31, 2013. The Zubair oilfield is estimated to hold recoverable reserves of approximately 6.4 billion barrels of crude oil and approximately 17.1 trillion cubic feet of natural gas. The consortium has the right to develop and produce oil and gas in the Zubair oilfield for twenty years, with the right to extend the contract period by an additional five years, subject to certain conditions. The consortium plans to increase the current production level of 356,000 barrels of crude oil per day to 1.2 million barrels of crude oil per day by 2017. The consortium expects to produce an aggregate of 6.4 billion barrels of crude oil during the initial contract period of twenty years. The Company has invested approximately US\$340 million in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$66 million in 2013. The Zubair oilfield is already producing oil, and the Company received a return of US\$71 million from this investment in 2012.

In December 2009, the Company joined a consortium with Gazprom Neft, Petroliam Nasional Berhad, the state-owned oil company of Malaysia, and TPAO, the state-owned oil and gas company of Turkey, and made a successful bid in the Iraqi government's auction of the Badra oilfield. The Company held a 22.5% interest in the project as of March 31, 2013. The Badra oilfield is estimated to hold recoverable reserves of approximately 0.8 billion barrels of crude oil and approximately 2.6 trillion cubic feet of natural gas. The consortium has the right to develop and produce oil and gas in the Badra oilfield for twenty years, with the right to extend the contract period by an additional five years, subject to certain conditions. The consortium is expected to begin its production operations in the second half of 2013. The consortium expects to produce an aggregate of 0.8 billion barrels of crude oil during the initial contract period of twenty years. The Company has invested approximately US\$204 million in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$298 million in 2013.

In October 2010, a 50-50 consortium formed between the Company and JSC KazMunaiGas Exploration Production ("KazMunaiGas") of Kazakhstan made a successful bid in the Iraqi government's auction of the Akkas gasfield. The Company has been designated as the operating company for the Akkas gasfield, which is estimated to hold gas reserves of approximately 3.3 trillion cubic feet. In its bid accepted by the Iraqi government, the consortium proposed a fee of US\$5.5 per barrel of oil equivalent and a plateau production target of 400 million cubic feet per day. In May 2011, the Company acquired an additional 37.5% interest in the Akkas gas field subsequent to KazMunaiGas's withdrawal from the consortium. As a result, the Company currently holds a total of 75% interest in the Akkas gas field. In October 2011, the Company and the Iraqi government entered into a development and production contract for the Akkas gasfield. The Company is expected to begin its production operations in the second half of 2015. The Company expects to produce an aggregate of 2.1 trillion cubic feet of natural gas during the initial contract period, which is to be for twenty years. The Company has invested approximately US\$38 million in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$273 million in 2013.

In October 2010, a consortium that the Company formed with Turkiye Petrolleri Anonim Ortakligi ("TPAO") of Turkey and Kuwait Energy Company made a successful bid in the Iraqi government's auction of the Mansuriyah gasfield. The Company currently holds a 15% interest in the Mansuriyah

gasfield with TPAO holding 37.5% (and acting as the operating company), Kuwait Energy Company holding 22.5% and Iraq's Oil Exploration Company holding 25%. The Mansuriyah gasfield is estimated to hold gas reserves of approximately 2.7 trillion cubic feet. After negotiations, the Iraqi government accepted the consortium's final proposal of a fee of US\$7.0 per barrel of oil equivalent and a plateau production target of 320 million cubic feet per day. The consortium is expected to begin its production operations in the second half of 2015. The consortium expects to produce an aggregate of 1.7 trillion cubic feet of natural gas during the initial contract period, which is to be for twenty years. In June 2011, the consortium and the Iraqi government signed the Mansuriyah gasfield development and production contract. The Company has invested approximately US\$9 million in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$47 million in 2013.

Development Stage

Myanmar. In November 2002, the Company joined a consortium with Daewoo International Corporation, ONGC Videsh Ltd. and the Gas Authority of India Ltd., which made a successful bid in the gas exploration, development and production project in the Myanmar A-1 gas field. In October 2005, the same consortium made a successful bid in the gas exploration, development and production project in the Myanmar A-3 gas field, adjacent to the Myanmar A-1 gas field. In August 2010, Myanmar Oil & Gas Enterprise, the national oil and gas company of Myanmar, acquired a 15% interest in each of the projects, and the Company's interest in each of these projects decreased to 8.5%. The Company estimates that the A-1 and A-3 fields in the aggregate have up to 4.5 trillion cubic feet of proven natural gas reserves. In December 2008, the consortium entered into a sales agreement with China National United Oil Corporation to sell the gas produced from the above-mentioned gas fields beginning in July 2013.

In June 2010, the consortium, together with China National Petroleum Corporation, established South-East Asia Gas Pipeline Company Ltd. ("SEAGP") to construct on-shore pipelines that will transport gas from these gas fields to China. As of March 31, 2013, the Company held a 4.17% interest in SEAGP. The transportation of gas is expected to begin in July 2013. In connection with the Company's various projects in Myanmar, the Company has invested approximately US\$224 million as of March 31, 2013, and it is planning to additionally invest approximately US\$83 million in 2013.

Australia. In January 2011, the Company, Total S.A., Santos Ltd. and Petroliam Nasional Berhad ("Petronas") announced their approval of the Gladstone LNG project (the "GLNG Project") in Australia. The integrated GLNG Project, which is expected to have a total investment cost of approximately US\$16 billion through 2015, consists of the development and production of coal bed methane, an unconventional natural gas, from the Fairview, Arcadia, Roma and Scotia fields located in the Bowen and Surat Basin in Queensland, eastern Australia, the construction of a 420 kilometer gas transmission pipeline from the gas fields to Gladstone, Queensland as well as the construction of a liquefaction plant on Curtis Island, Queensland. The consortium expects to begin production operations in 2015 with an initial annual production capacity of approximately 7.8 million metric tons of LNG per annum. The Company, pursuant to a purchase agreement it entered into in December 2010, acquired a 7.5% interest in the GLNG Project from each of Santos and Petronas, for an aggregate 15% interest in the GLNG Project. In December 2010, the Company also entered into an agreement with the other consortium members to offtake approximately 3.5 million metric tons of LNG per annum from the GLNG Project for a period of 20 years beginning in 2015. The Company has invested approximately US\$2.4 billion in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$645 million in 2013.

In June 2012, the Company announced its purchase of a 10% interest in the Prelude floating LNG project in Australia (the "**Prelude Project**"), which had been wholly-owned by Shell Australia Pty, for US\$350 million. Floating LNG projects produce, liquefy, store and transfer LNG at sea before carriers

ship it directly to markets. The Prelude Project is expected to commence operation in 2016 with initial production capacity of approximately 3.6 million metric tons of LNG per annum, and is expected to be the world's first floating LNG project. The Company has invested approximately US\$519 million (including the initial purchase price amount of US\$210 million for 60% of the 10% interest in the Prelude Project) in the Prelude Project as of March 31, 2013, and it is planning to additionally invest approximately US\$306 million in 2013.

Indonesia. In January 2011, the Company received approval from the Korean government to participate in the Donggi-Senoro LNG project (the "DSLNG Project"). The DSLNG Project consists of the construction of pipelines, condensate handling facilities, a liquefaction facility, LNG storage tanks and harbor works. The DSLNG Project is estimated to have a total investment cost of approximately US\$2.8 billion and the other participants of the project are Mitsubishi Materials Corporation ("Mitsubishi"), PT Medco LNG Indonesia and PT Pertamina Energy Services, the state-owned oil and gas company of Indonesia. The LNG plant is expected to commence production operations in the first quarter of 2015. As part of this project, the Company entered into a supply agreement in January 2011 to offtake approximately 700,000 metric tons of LNG per annum beginning in 2015. In February 2011, the Company and Mitsubishi established a joint venture company, PT Sulawesi LNG Development, which currently holds a 59.9% interest in the DSLNG Project. The Company currently holds a 25% interest in the joint venture and thereby holds an indirect 14.975% interest in the DSLNG Project. The Company has invested approximately US\$251 million in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$93 million in 2013.

In December 2011, the Company acquired a 49% interest in Tomori E&P Limited, which had been wholly-owned by Mitsubishi, for approximately US\$139 million, thereby acquiring a 9.8% interest in the Senoro-Toili gas field located in Central Sulawesi province in Indonesia. By securing such interest, the Company plans to participate in the development and production of natural gas from the Senoro-Toili gas field which is expected to play a major role in supplying gas for the DSLNG Project. The Company has invested approximately US\$148 million in the project as of March 31, 2013, and it is planning to additionally invest approximately US\$41 million in 2013.

Uzbekistan. In March 2006, the Company and UzbekNefteGaz, Uzbekistan's state-owned oil and gas company, agreed to a joint study and exploration of the Usunkui field and to cooperate in the joint development of the Surgil field located in Uzbekistan. In May 2008, the Company, as a member of a consortium with other Korean companies, signed a joint study agreement with UzbekNefteGaz to conduct geological and economic risk assessment and exploration of the Usunkui field. The Korean consortium has acquired a 50% interest in the Uzunkui exploration project, and the Company held a 50% interest in the Korean consortium as of March 31, 2013. The consortium completed a two-dimensional seismic survey of the Uzunkui field in 2011 and is currently interpreting the seismic data retrieved from the survey. In order to develop the Surgil gas field, UzbekNefteGaz and the Korean consortium established a joint venture company, Kor-Uz Gas Chemical, in which the Company holds a 22.5% interest. The Company will make its final investment decision regarding the development of the Surgil field after conducting a feasibility study and formulating a plan to meet its working capital requirements. In connection with the Company's various projects in Uzbekistan, the Company had invested approximately US\$228 million as of March 31, 2013, and it is planning to additionally invest approximately US\$91 million in 2013.

Exploration Stage

East Timor. In May 2007, the Company formed a consortium with Eni S.p.A. and Petroleos e Gas de Portugal SGPS, S.A. to explore five offshore blocks in East Timor owned by Eni S.p.A. The Company held a 10% interest in the consortium as of March 31, 2013. In 2007 and 2008, the consortium conducted two-dimensional and three-dimensional seismic surveys of the block. In

September 2010, the consortium returned the rights to one of the offshore blocks to the government of East Timor after seismic surveys revealed low potential gas volume in that block. The consortium completed drilling an exploratory well in December 2010 and is will make its financial investment decision regarding future exploration activities after further consideration. As of March 31, 2013, the Company had invested approximately US\$32 million in the project, and it is planning to additionally invest approximately US\$11 million in 2013.

Mozambique. In July 2007, the Company formed a consortium with Eni S.p.A. and Petroleos e Gas de Portugal SGPS, S.A. to explore the Area 4 offshore block in Mozambique owned by Eni S.p.A. The Company held a 10% interest in the consortium and Mozambique's state-owned oil and gas company, Empresa Nacional de Hidrocarbonetos de Mozambique, also held a 10% interest in the project as of March 31, 2013. In 2008, the consortium conducted two-dimensional and three-dimensional seismic surveys of the block. In September 2011, the consortium began drilling its first exploration well on the block, and in October 2011, the consortium identified a natural gas pay while drilling the well. As of March 31, 2013, the Company had invested approximately US\$109 million in the project, and it is planning to additionally invest approximately US\$82 million in 2013.

Indonesia. In July 2007, the Company formed a consortium with Eni S.p.A. to explore the Krueng Mane offshore block in Indonesia owned by Eni S.p.A. The Company held a 15% interest in the consortium as of March 31, 2013. The consortium conducted interpretation of seismic data of the block in 2008, and completed the drilling of two exploration wells in February 2009. In June 2009, the consortium submitted to the Indonesian government a development plan of the JAU gas field located in the Krueng Mane offshore block. In January 2012, the Indonesian government approved the development plan and the consortium is currently conducting an additional feasibility study. As of March 31, 2013, the Company had invested approximately US\$42 million in the project, and it is planning to additionally invest approximately US\$3 million in 2013.

Canada. In February 2010, KOGAS Canada Ltd., a wholly owned subsidiary of the Company, entered into an agreement with EnCana Corporation, pursuant to which the Company agreed to acquire 50% of EnCana Corporation's interest in Kiwigana gas field located in the northeast British Columbia's Horn River and Jackpine and Noel gas fields located in West Cutbank. In addition, in July 2011, the Company entered into an agreement with EnCana Corporation, pursuant to which the Company agreed to acquire 50% of EnCana Corporation's interest in the Kiwigana expansion gas fields located in the northeast British Columbia's Horn River region, further expanding the Company's interest in the gas fields located in Canada. The Company plans to participate in the development and production of unconventional natural gas in this region, including shale gas and tight gas, and expects to secure approximately 52 million tons of natural gas during the production period of approximately 45 years. As of March 31, 2013, the Company had invested approximately Canadian dollar 826 million in the project, and it plans to additionally invest approximately Canadian dollar million in 2013.

In June 2011, the Company purchased a 10% interest in Cordova Gas Resources Ltd. from Mitsubishi Corporation for approximately US\$8 million, thereby acquiring a 5% interest in the Cordova Embayment shale gas project in Canada. By securing such interest, the Company plans to participate in the development and production of shale gas in the Cordova region. As of March 31, 2013, the Company had invested approximately Canadian dollar 24 million in the project. The Company currently does not plan to make additional investments in the project.

In February 2011, the Company decided to participate in the development of the Umiak gas reserve located in the northern region of Canada and purchased a 20% interest in the Umiak gas reserve from MGM Energy of Canada for approximately US\$30 million. By participating in the development of the Umiak gas reserve, the Company expects to expand its operations, and also gain

knowledge in developing and operating gas fields, in the arctic region. As of March 31, 2013, the Company had invested approximately Canadian dollar 20 million in the project. The Company currently does not plan to make additional investments in the project.

Cyprus. In January 2013, the Company formed a consortium with Eni S.p.A. to explore Blocks 2, 3 and 9 in the Levant basin off the shore of Cyprus. The Company currently holds a 20% interest in the consortium. The consortium plans to commence geophysical surveys in the third quarter of 2013 and the drilling of exploration wells in 2014. As of March 31, 2013, the Company had invested approximately Euro 30 million in the project, and it is planning to additionally invest approximately Euro 40 million in 2013.

Operation of LNG Terminals

In March 2008, the Company joined a consortium to construct and operate an LNG receiving terminal in Manzanillo, Mexico. A special purpose company, in which the Company held a 25% interest as of March 31, 2013, was established by the consortium to manage and operate the facilities for 20 years. The LNG receiving terminal commenced commercial operations in June 2012. As of March 31, 2013, the Company had invested US\$49 million in the LNG terminal project. The Company currently does not plan to make additional equity investments in the project.

In February 2010, the Company entered into an agreement with Samsung C&T Co., Ltd. to provide consulting services relating to the operation of an LNG terminal in Singapore. The Company entered into an agreement with China Huanqiu Construction & Engineering Corporation ("HCEC") in May 2010 and PetroChina LNG Jiangsu Co., Ltd. in August 2010, to provide consulting services relating to the operation of the Jiangsu LNG terminal in China, and entered into an agreement with HCEC in March 2011 to provide consulting services relating to the operation of the Dalian LNG terminal in China. Under such agreements, the Company provides consulting services relating to the operation of the terminal and training of terminal personnel.

Other Projects

In September 2008, the Company entered into a memorandum of understanding with Gazprom, Russia's state-controlled oil and gas company, pursuant to which the Company and Gazprom have agreed to undertake joint research on construction of a gas pipeline that connects Korea and Russia. In June 2009, Gazprom and the Company signed an agreement to conduct various studies relating to the project, including economic, technical and transportation feasibility studies. In September 2011, Gazprom and the Company signed a roadmap outlining the top priority actions needed for implementing the project. The roadmap contemplates commencing construction of a gas pipeline through North Korea from 2013 and supplying South Korea with gas from 2017. In November 2011, Korea's president, Lee Myung Bak, and Russia's president, Dmitry Medvedev, met and reaffirmed their commitment to this project. The Company will make its investment decisions based on the feasibility of implementing the actions outlined in the roadmap. If Gazprom and the Company are able to proceed with this project, the Company may purchase up to 7.5 million tons of natural gas each year from Gazprom beginning in 2017.

In January 2008, the Company and the government of the Sultanate of Oman established a joint venture company, KOMAN ENERGY FZCO, to build and operate an LNG terminal and to participate in LNG swap and trade transactions. The Company held a 50% interest in the joint venture company as of March 31, 2013. The Company believes that this project will aid in stabilizing the supply of natural gas in Korea by securing a stable source of natural gas in the spot market and will enable the Company to reduce capital expenditure by constructing LNG storage facilities overseas at a cheaper cost. As of March 31, 2013, the Company had invested approximately US\$1 million in the project.

Safety

Safety standards and regulations in the LNG industry are issued, and compliance of such standards and regulations is monitored, by the Ministry of Trade, Industry and Energy and the Gas Technology Standards Committee, a government body under the control of the Ministry of Trade, Industry and Energy. Liability for gas-related accidents involving either the Company or the city gas

companies is generally governed by the Korean Civil Code, the Labor Standards Act and the Industrial Accident Compensation Insurance Act. There are no specific provisions for civil liability relating to gas-related accidents in any relevant legislation for either the Company or the city gas companies.

The Company has undertaken various measures including replacing pipeline valves with newer and safer models, improving computer systems, increasing safety and maintenance training for employees and improving the Company's patrolling equipment (used to detect leaks and other defects in pipes). The Company believes that its safety standards surpass or are at least comparable to domestic and international safety standards relating to the gas industry. The Company has acquired OHSAS 18001, ISO 9001 and ISO 14001 certifications for its safety and health management. The government also periodically conducts spot-checks of the Company's facilities to ensure that they are in compliance with environmental regulations. These spot-checks have never identified any major violations or resulted in monetary fines or other penalties. There has not been a serious accident at any of the Company's workplaces since 1995.

Employees

As of March 31, 2013, the Company had 3,252 employees. The following table describes a breakdown of employees by function as of the dates indicated.

	As of December 31,			As of	
Function	2010	2011	2012	March 31, 2013	
Planning	51	66	152	168	
Administration	358	313	194	208	
Marketing	85	124	141	150	
Exploration & production	-	121	102	117	
Production	972	1,014	834	886	
Operations	1,115	1,090	1,340	1,432	
Research & development	122	122	127	142	
Others	93	40	136	149	
Total	2,796	2,890	3,026	3,252	

In addition, the Company's wholly-owned subsidiary, Korea Gas Technology Corp., had 1,173 employees as of March 31, 2013.

Labor Relations

As of March 31, 2013, 2,662 of the Company's employees, or 81.9% of its total employees, were members of a labor union. The Company negotiates a collective bargaining agreement every two years as well as a wage agreement on an annual basis with its labor union. The latest collective bargaining agreement came into effect in September 2010 and expired in September 2012, although the terms of such agreement will remain in effect until a new collective bargaining agreement has been negotiated. The Company entered into a new wage agreement with its labor union in December 2012. In the past, the Company has experienced opposition from its labor union for concerns over the government's plans to liberalize and privatize the natural gas wholesale and transport industry and restructure the Company to improve its operating efficiency and profitability by reducing its employee base. In recent years, the Company has not experienced any significant labor disputes and unrests that have interrupted its business operations. Although the Company believes that it has hired and trained appropriate personnel to continue 24-hour operations in the event of a strike, there can be no assurance that this is the case.

Remuneration

The Company, like most Korean companies, grants its employees annual increases in basic wages and pays periodic bonuses. Increases in the average wage (excluding retirement and severance benefits and other employee benefits) amounted to approximately 5.5% in 2011. In December 2012, the Company entered into a new wage agreement with its labor union pursuant to which an increase of 3.9% in the average wage (excluding retirement and severance benefits and other employee benefits) was granted to the Company's employees.

The Company also provides loans to certain of its employees in order to allow them to purchase the Company's shares. As of March 31, 2013, the Company had provided such loans in the aggregate amount of Won 9 billion to its employees.

Employees and directors with more than one year of service are entitled to receive a lump-sum payment upon termination of their service with the Company, based on their length of service and rate of pay at the time of termination.

Property

The Company's headquarters and principal offices are located close to Seoul, at 171 Dolmaro, Bundang-gu, Seongnam-si, Gyunggi-do 463-754, Korea. The Company has title over eight branch offices at Gyungin, Gyungnam, Choongchung, Honam, Gyungbuk, Gangwon, Seohae and Seoul.

The Company has title over the land used for the Incheon, Pyongtaek and Tongyeong receiving terminals, as well as the land in Samcheok where it is constructing its fourth receiving terminal complex.

To construct the pipeline network, pipelines are laid underneath government-owned land whenever possible. The Company generally pays annual fees for the use of such land. In other cases, the Company either pays landowners for "right of use" permission, pursuant to which a single up-front right of use fee is paid to landowners and in exchange for which the landowners are required to restrict the future uses of such land, or else purchases the land outright.

Insurance

The Company maintains property, general commercial liability, bodily injury, fire, construction and cargo insurance policies with respect to the Pyongtaek, Incheon and Tongyeong complexes, its distribution stations, and its LNG and other raw materials. As of December 31, 2012, inventories, machinery, equipment and tools were insured against fire damage up to Won 16,989 billion. In addition, as of December 31, 2012, the Company maintained an assembly insurance policy, liability insurance policies and cargo insurance policies with consequential loss coverage of Won 4,914 billion, Won 96 billion and Won 13,017 billion, respectively. The Company is not delinquent on any of its insurance payments. The Company believes that its insurance coverage is comparable to that of other companies engaged in similar businesses.

Research and Development and Intellectual Property

In May 1990, the Company opened its Research and Development Center in Ansan in Gyonggi province. The center has a branch in Incheon to conduct further research and development activities. As of December 31, 2012, the Center employed 77 researchers (including 32 with Ph.Ds) and 22 other employees. The Company incurred research and development costs of Won 44 billion in 2012.

Although the KOGAS Act calls for the Company to invest at least 1% of its gas sales in research development, the Company found it necessary to invest only 0.13% of its gas sales in 2012. The Company's objective with regard to research and development is to develop internal technologies that (i) serve as a growth engine for the Company through increased operating efficiencies and increasing demand for natural gas, (ii) ensure the safety of its facilities, and (iii) provide the Company with a competitive advantage in its overseas gas exploration, development and production projects.

Current core projects focus on development of the following areas:

- core technologies such as LNG storage tanks and LNG cargo containers used in vessels;
- · safety control systems for ensuring safe operation of the Company's infrastructure; and
- natural gas exploration, development and production technologies and technologies for enhancing productivity of gas fields.

The Company has entered into cooperation agreements with other natural gas energy companies in order to pursue joint research and development activities. In addition, the Company is a member of various international organizations related to the natural gas industry, such as the International Gas Union, Institute of Gas Technology, the Society of International Gas Tanker and Terminal Operators Ltd., the International Group of LNG Importers, the Institute of Energy & Economics and the International Energy Agency.

The Company's general policy is to seek intellectual property protection for those inventions and improvements likely to be incorporated into its products or to give it a competitive advantage compared to other fuel sources. The Company relies on a variety of patents, utility model rights, copyrights, trade secrets, trademarks and proprietary information to maintain and enhance its competitive position. The Company's principal brand names are registered trademarks in Korea.

The Company held 410 patents and 31 utility model rights as of December 31, 2012. The Company does not believe that any individual property right or related group of intellectual property rights is of such importance that its expiration or termination would materially affect the business of the Company.

Subsidiaries

The following table sets forth certain information relating to the Company's consolidated subsidiaries as of December 31, 2012:

		As of or for the year ended December 31, 2012			
Subsidiaries	Primary business	Percentage ownership	Total assets	Total sales	Net income (loss)
			,	nillions of Wo	,
Korea Gas Technology Corp	Construction and services	100%	124,279	188,992	8,528
KOGAS Mozambique, Lda	Construction and services	100%	22,136	0	(261)
KOGAMEX Investment Manzanillo B.V.(1)	Investment and services	100%	23,472	0	888
Gyeonggi CES Co., Ltd	Group energy enterprise	56%	63,953	14,340	(10,597)
KOGAS Iraq B.V	Oil and gas production	100%	664,436	415,762	51,794
KOGAS Canada Ltd	Gas field development and production	100%	919,481	0	(6,548)
KOGAS Canada LNG Ltd	Gas field development and production	100%	50,386	0	(5,885)
KOGAS Australia Pty. Ltd. (2)	Investment and LNG business development	100%	2,500,125	26,113	(24,449)
KOGAS Prelude Pty. Ltd	Exploration and development	100%	702,824	0	(2,625)
KG Timor Leste Ltd	Exploration and development	100%	33,752	0	(4,208)
KG Krueng Mane Ltd	Exploration and development	100%	45,274	0	(5,134)
KG Mozambique Ltd	Exploration and development	100%	99,362	0	(2,418)
KOGAS Akkas B.V	Oil and gas production	100%	40,664	0	4
KOGAS Mansuriyah B.V	Oil and gas production	100%	7,819	0	(47)
KOGAS Badra B.V	Oil and gas production	100%	171,991	0	(85)
KOGAS Vostok LLC	Participation in gas related business in Russia	100%	1,149	164	(482)
KOMEX-GAS, S. de R.L. de					
C.V	Management of employees in Mexico	100%	3,656	7,961	2,247

⁽¹⁾ KOGAMEX Investment Manzanillo B.V. owns a 51% equity interest in Manzanillo Gas Tech, S. de R.L., which is also a consolidated subsidiary of the Company. Financial information of KOGAMEX Investment Manzanillo B.V. is provided on a consolidated basis.

Legal Matters

The Company is the defendant in various court proceedings involving claims for civil damages arising in the ordinary course of its business. While the Company is unable to predict the ultimate disposition of these claims, it is the Company's view that there are no legal or arbitration proceedings involving the Company or any of its affiliates, the outcome of which may have a material adverse effect on the results of operations or financial position of the Company.

⁽²⁾ KOGAS Australia Pty. Ltd. owns a 100% equity interest in each of KGLNG E&P Pty. Ltd., KGLNG Liquefaction Pty. Ltd. and KGLNG E&P II Pty. Ltd., which are all consolidated subsidiaries of the Company. Financial information of KOGAS Australia Pty. Ltd. is provided on a consolidated basis.

Management's Discussion and Analysis of Financial Condition and Results of Operations

All financial information included below is given on a consolidated basis under Korean IFRS, unless otherwise specified. The following discussion and analysis should be read in conjunction with the Company's financial statements, together with the accompanying notes, included elsewhere in this offering circular. The unaudited consolidated interim financial information for the three months ended March 31, 2013 presented in this offering circular may not be indicative of the Company's full year results for 2013.

Overview

The Company is the only company in Korea engaged in the wholesale distribution of natural gas, and the Company believes that it is currently the largest importer of LNG in the world. The Company supplied 36.5 million metric tons of natural gas in 2012 and 12.2 million metric tons in the first three months of 2013. According to the Korea Energy Economics Institute, the Company's supply of natural gas of 36.5 million metric tons in 2012 was equivalent to approximately 17.6% of the primary energy consumed in Korea in such year. The Company's facilities consist primarily of its gas processing terminals, storage facilities and nation-wide pipeline network. The Company imports, receives and revaporizes LNG at its three LNG receiving terminals, and then distributes the natural gas to its customers through its network of pipelines which encompassed 3,558 kilometers as of March 31, 2013. The Company intends to expand both its pipeline network and storage capacity to meet forecasted increases in demand for natural gas in Korea. The Company's long-term strategic goal is to evolve from a traditional importer and wholesaler of natural gas into an integrated energy company, and the Company in recent years has invested in gas exploration, development and production projects overseas.

As of March 31, 2013, the government directly and indirectly held 51.3% of the Company's issued and outstanding shares, and local governments held an additional 9.5% of the Company's issued and outstanding shares. The government has historically influenced, and is likely to continue to influence, the Company's strategy and operations. The Company is heavily regulated by a variety of laws and regulatory bodies, including the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance. The government also has the ability to influence and control other government-related entities, some of which are the Company's customers, such as the five generation subsidiaries of KEPCO. From time to time, the Company is required to take actions in furtherance of public policy considerations and the government's broader objectives for the natural gas industry which are not necessarily in the Company's best commercial interests. For example, public policy considerations relating to the level of the Company's profitability affect the Company's prescribed rate of return.

Sales Price Adjustment Mechanism and Guaranteed Return

The government, among other things, supervises the Company's forecasting process for natural gas demand, approves the Company's LNG supply contracts, and influences the Company's operating income and cash flow by regulating the Company's natural gas sales prices. Prior to the beginning of each calendar year, the Ministry of Trade, Industry and Energy, after consultation with the Ministry of Strategy and Finance and the Company, determines the unit "supply margin," which is based on the Company's target sales volume, estimated unit supply costs based on such target sales volume (including depreciation, selling, general and administrative expenses and labor costs) and a guaranteed return for the Company for the upcoming year. The guaranteed return amount is determined based on the Company's assets used in the distribution of natural gas, the Company's weighted average cost of capital and certain adjustments. The weighted average cost of capital is calculated by applying the Company's estimated borrowing rate as well as the Company's cost of equity calculated using a capital asset pricing model.

The Company adds to the unit supply margin the unit raw material costs (including LNG costs, transportation expenses, insurance costs and taxes and duties as well as reserves periodically allocated for the collection of the Company's outstanding receivables) to arrive at the Formula Price. This enables the Company to recover its supply costs, pass through its raw material costs and realize a guaranteed return. Such Formula Prices are adjusted periodically throughout the year to reflect fluctuations in raw material costs, which enables the Company to mitigate its commodity price and foreign exchange risks. In the case of raw material costs related to the Company's sales to power generating companies, estimates for such costs are determined on a monthly basis and the Company is able to periodically settle any differences between its estimated costs and the actual costs it incurs. In the case of raw material costs related to the Company's sales to city gas companies, such costs are typically adjusted every two months under the City Gas Business Act if the fluctuations in the raw material costs exceed 3%.

Such sales price adjustment mechanism is implemented pursuant to the Supply of Natural Gas Regulation under the City Gas Business Act and is designed to enable the Company to recover its reasonable costs (including supply costs and raw material costs) plus a guaranteed return. Accordingly, unlike most companies, gross margin and operating margin calculations, which rates decrease in times of increasing raw material costs, are not useful parameters that the Company uses to measure its operating performance.

Suspension in Adjustments to Gas Sales Prices Invoiced to City Gas Companies due to Government Policy

The government reserves the right to suspend the periodic adjustments to the sales price the Company invoices to its customers. Due in part to substantial fluctuations in the price of LNG and the value of the Won relative to the U.S. dollar in recent years, the Ministry of Trade, Industry and Energy suspended from March 2008 to February 2013, the periodic bi-monthly adjustments to the sales prices that the Company invoices to city gas companies. Such suspension has resulted in the Company being unable to fully increase its invoice sales prices to city gas companies to reflect the Formula Prices, which in turn has led to a substantial decrease in net cash inflows and a corresponding increase in the Company's borrowings. In order to address the adverse effect on the Company's cash flows and financial condition during the suspension period, the Ministry approved increases in the invoice sales prices to city gas companies of 7.4% in November 2008, 7.9% in June 2009, 4.9% in September 2010, 5.3% in October 2011, 4.9% in June 2012 and 4.4% in February 2013. The Ministry of Trade, Industry and Energy announced in February 2013 that it was discontinuing the suspension of the periodic bi-monthly adjustments and that it would maintain the Formula Prices at a level that would enable the Company to recoup its outstanding guaranteed return within five years. However, no assurance can be given that the Ministry of Trade, Industry and Energy will not change its policy or adopt other measures that may prevent or delay the Company from realizing its guaranteed return fully or at all.

The Company periodically calculates additional amounts that it did not receive from sales but is entitled to receive based on the Formula Prices and records such amounts as "other current non-financial assets" (for amounts estimated to be collectible within one year subsequent to the statement of financial position date) and "other non-current non-financial assets" (for amounts estimated to be collectible after one year subsequent to the statement of financial position date). The Company also records as "other non-financial liabilities" amounts that it was overpaid because actual raw material costs were lower than the raw material costs used to calculate the Formula Prices. Other current non-financial assets and other non-current non-financial assets increase if the Company is not able to fully increase its invoice sales prices to city gas companies to the Formula Prices that reflect increases in raw material costs. From additional amounts that it did not receive from sales but is entitled to receive based on the Formula Prices, the Company recorded other current non-financial assets of Won 1,110 billion and other non-current non-financial assets of Won 4,557 billion as of March 31, 2013. See note 8 to the unaudited interim consolidated financial statements included elsewhere in this offering

circular. The net total amount of such assets increased in 2011 and 2012 as a result of an increase in the price of LNG but decreased in the first three months of 2013 as a result of the discontinuation of the suspension of the periodic bi-monthly adjustments to sales prices. A further increase in the amount of raw material costs allocated for the collection of non-financial assets when calculating the Formula Prices would be necessary for the reduction of such assets to be expedited. The time lag associated with such adjustments has had, any may in the future have, a negative impact on the Company's cash flows, financial condition and the ability to comply with certain financial covenants, and a temporary negative impact on the Company's results of operations.

Reconciliation of the Company's Estimated and Actual Raw Material and Supply Costs

For fiscal years 2010, 2011 and 2012, the income effects associated with the variance between estimated raw material and supply costs and actual raw material and supply costs from the fourth quarter of the prior year to the third quarter of the current year were recognized in the current year, subject to certain additional governmental approvals, and collected or repaid during the following year through the sales price adjustment mechanism described above. While certain adjustments were made throughout the year, a significant portion of the effects associated with the variance between estimated raw material and supply costs and actual raw material and supply costs were typically recognized in the fourth quarter of each fiscal year. The Company's financial information for the fourth quarters of 2010, 2011 and 2012 is as follows:

	For the three m	onths ended I	December 31,		
	2010	2011	2012		
	(in billions of Won)				
Revenue	₩6,503	₩8,754	₩10,096		
Operating income	236	362	327		
Net income	45	95	78		

In part due to such adjustments made in the fourth quarter, the results of operations of each of the first three quarters of any fiscal year are not indicative of the Company's results of operations for the entire fiscal year.

Other Factors Affecting the Company's Results of Operations

In addition to the adjustments to natural gas sales prices described above, the Company's business, results of operations and financial condition have been affected, and may continue to be affected, by the following factors:

- · the performance of the Korean economy;
- · fluctuations in prices of natural gas, crude oil and other competing energy sources;
- the Company's capital expenditure plans;
- the Company's investments in overseas gas exploration, development and production projects as well as other revenue diversification efforts;
- plans to liberalize the Korean gas import and wholesale industry; and
- adoption of Korean IFRS starting in 2011.

Dependence on the Performance of the Korean Economy

The Company's performance and successful implementation of its operational strategies are dependent on the health of the overall Korean economy and the resulting impact on the demand for energy generally and, in particular, for natural gas. The economic crisis in 1997 resulted in a decline in real gross domestic product of 6.7% in 1998 and a decrease in the Company's natural gas sales volume to KEPCO by 22.1% and by 6.5% overall. Although GDP has increased during the past decade, the rate of growth has slowed in recent years. The Korean market and the Korean economy are influenced by economic and market conditions in other countries, including the United States, countries in Europe and emerging market countries in Asia. See "Risk Factors—Risks related to Korea—Unfavorable financial and economic developments in Korea may have an adverse effect on the Company."

Fluctuations in Prices of Natural Gas, Crude Oil and Other Competing Energy Sources

The Company's purchase price for LNG is primarily determined by crude oil prices, and the purchase price in Won terms is also affected by the exchange rate between the Won and the U.S. dollar. As a result of significant fluctuations in crude oil prices in recent years, the price of natural gas has also fluctuated significantly. Most of the gas currently sold by the Company is sold under long-term contracts and therefore, in the short term, the demand for gas is not materially affected by price volatility. However, long-term demand is dependent upon the relative prices of natural gas and competing alternative energy sources. If there is an increase in the price of crude oil, leading to an increase in the Company's gas sales price, there may be less demand for the Company's gas. For instance, when natural gas prices are unusually high, power generating companies have the capacity to switch from using natural gas to cheaper sources of fuel, such as fuel oil. To the extent that the market price of alternative energy sources drops to, and is sustained at, a low level, or the Company's gas sales price increases as a result of an increase in the price of LNG procured under future contacts, there may be a reduction in demand for the Company's natural gas, which could adversely affect the Company's business, results of operations and financial condition. Also, if there is growing acceptance by the Korean public for greater use of nuclear energy or other alternative energy sources, demand for natural gas and the Company's business, results of operations and financial condition may be adversely affected.

The Company's Capital Expenditure Plans

The Company plans to make additional capital expenditures to increase processing and storage capacity and further expand its pipeline network, and it anticipates that capital expenditures will represent a significant use of funds in the near future. The Company currently expects to spend approximately Won 1,525 billion in 2013, Won 1,290 billion in 2014 and Won 1,043 billion in 2015 in planned capital expenditures relating to the construction and maintenance of its pipeline network and expansion of its receiving terminals, which include expenditures for the construction of the Company's fourth receiving terminal complex in Samcheok. The Company plans to complete the first phase of the Samcheok terminal complex and start its commercial operation in 2014, and the Samcheok complex is expected to have an LNG storage capacity of 2.6 million kiloliters upon its completion in 2017. The Company may adjust its future capital expenditures on an ongoing basis subject to market demand in Korea for natural gas, the production outlook of the global gas industry and global economic conditions in general.

The Company's Investments in Overseas Gas Exploration, Development and Production Projects as well as Other Revenue Diversification Efforts

The Company's long-term strategic goal is to evolve from a traditional importer and wholesaler of natural gas into an integrated energy company that actively participates in exploration, development and production of natural gas, which entails significantly higher risks as well as higher potential returns

compared to its natural gas import and wholesale business. As part of a consortium or through acquisition of a minority interest, the Company engages in overseas gas exploration, development and production projects in various locations, including Iraq, Canada, Australia, Myanmar, Indonesia, Mozambique, Uzbekistan, Cyprus and East Timor. As part of its efforts to diversify its operations and prepare for the potential restructuring and liberalization of the natural gas industry in Korea, the Company intends to continue to expand its operations by carefully seeking out promising exploration, development and production opportunities abroad and may acquire energy companies engaged in attractive businesses. The Company invested approximately US\$3.2 billion in overseas gas exploration, development and production projects in 2012, and it expects to invest approximately US\$2.6 billion in such projects in 2013. The Company expects to continue to invest in such projects, subject to market conditions. The Company also plans to invest in other revenue diversification efforts, including overseas LNG terminal operation and maintenance, LNG trading and the development of alternative energy sources.

Plans to Liberalize the Korean Gas Import and Wholesale Industry

In October 2008, the Ministry of Trade, Industry and Energy announced a road map to permit other companies to enter the LNG import and wholesale market in Korea. The road map contemplates gradual liberalization, initially starting with liberalization of the wholesale market targeting power generating companies followed by the wholesale market for industrial usage. Although a bill to amend the City Gas Business Act to allow for such liberalization had been submitted to the National Assembly in September 2009, the National Assembly adjourned without voting on the bill and as a result, the bill has expired. Another bill to amend the City Gas Business Act to allow for such liberalization was submitted to the National Assembly in April 2013. Even if such a plan were to be passed as proposed, the Company believes that such plan would not materially affect its profitability, as a substantial portion of projected demand for natural gas in the next decade is expected to be satisfied under the Company's existing supply contracts and new competitors will only be able to compete for the portion of projected demand that will not be met by the Company under the Company's existing supply contracts. Accordingly, the Company believes that the new entrants would not be able to fully penetrate the market. However, any such liberalization plan may intensify competition in the LNG import and wholesale market in the future.

Critical Accounting Policies

The preparation of the Company's financial statements requires the Company's management to select and apply significant accounting policies and to make estimates and judgments that affect the Company's reported financial condition and results of operations. See note 2 to the unaudited interim consolidated financial statements included elsewhere in this offering circular for a summary of the Company's significant accounting policies that are critical to the portrayal of the Company's financial condition.

Recent Accounting Changes and Pronouncements

The Company changed its accounting policy in 2012 to present operating income after deducting cost of sales and selling and administrative expenses from revenue, in accordance with an amendment of Korean IFRS. As a result of the change in the accounting policy, other income and expenses and other gains and losses, which include reversal of other provisions, reversal of allowance for bad debt, gains from contribution to construction (non-operating), gains from subsidies and reimbursement, rental revenues, other bad debts expense, donations, gain or loss on disposal of property, plant and equipment, losses on disposal of intangible assets and impairment loss on property, plant and equipment, which were classified as operating income under the previously applicable accounting policy, were excluded from operating income. The Company applied the changed accounting policy retroactively and corresponding amounts for the years ended December 31, 2010 and 2011 have been

restated to reflect such reclassification. Consequently, operating income for the years ended December 31, 2010 and 2011 are higher by Won 77 billion and Won 5 billion, respectively, and operating income for the year ended December 31, 2012 is lower by Won 75 million, as compared to the corresponding amounts under the previous accounting policy. However, there is no impact on net income or earnings per share for the years ended December 31, 2010, 2011 and 2012.

The Company also changed its accounting policy in 2012 to reclassify the additional amounts that it did not receive from sales but is entitled to receive based on the Formula Prices from "non-trade accounts receivable" to "other current non-financial assets" (for amounts estimated to be collectible within one year subsequent to the statement of financial position date) and from "long-term non-trade accounts receivable" to "other non-current non-financial assets" (for amounts estimated to be collectible after one year subsequent to the statement of financial position date), in accordance with responses received from queries to the Korea Accounting Standards Board. In connection with the change in the accounting policy, income arising from the pass-through of raw material costs, which was classified as revenue under the previously applicable accounting policy, were reclassified as a deduction from cost of sales. The Company applied the changed accounting policy retroactively and corresponding amounts for the years ended December 31, 2010 and 2011 have been restated to reflect such reclassification. Consequently, revenue for the year ended December 31, 2010 is higher by Won 648 billion and revenue for the year ended December 31, 2011 is lower by Won 69 billion, as compared to the corresponding amounts under the previous accounting policy. However, there is no impact on net income or earnings per share for the years ended December 31, 2010 and 2011.

Results of Operations

First Three Months of 2013 Compared to First Three Months of 2012

The following table presents selected income statement data and changes therein for the first three months of 2013 and 2012.

		ee months larch 31,	Chan	ges
	2013	2012	Amount	%
		(in billions of	Won)	
Revenue	₩12,222	₩11,371	₩ 851	7.5
Cost of sales	11,283	10,568	715	6.8
Gross profit	940	803	137	17.0
Selling, general and administrative expenses	90	85	5	5.7
Operating income	850	718	132	18.3
Other income	1	1	(0)	(27.3)
Other expenses	(7)	(4)	(3)	72.7
Other gain (loss)	(207)	5	(212)	N/A ⁽¹⁾
Finance income	210	159	51	32.2
Finance costs	(449)	(368)	(81)	22.1
Gains from associates and joint-ventures	55	44	11	24.7
Income before income tax	452	555	(103)	(18.6)
Income tax expense	(170)	(144)	(26)	18.0
Net income	₩ 282	₩ 411	₩(129)	(31.5)
Other comprehensive income (loss), net of tax	(27)	2	(29)	N/A ⁽¹⁾
Total comprehensive income	₩ 255	₩ 413	₩ (158)	(38.4)

⁽¹⁾ N/A = Not applicable.

Revenue

The following table presents a breakdown of the Company's revenue by category of customers and changes therein for the first three months of 2013 and 2012.

		ree months larch 31,	Changes	
	2013	2012	Amount	%
	(in billions of Won)			
City gas companies:				
Residential / business heating	₩ 3,851	₩ 3,863	₩ 12	(0.3)
Industrial	2,132	1,726	406	23.5
Other	1,198	1,047	151	14.4
Sub-total	7,181	6,636	545	8.2
Power generating companies:				
Subsidiaries of KEPCO	3,181	3,039	142	4.7
Other power generating companies	1,671	1,544	127	8.2
Sub-total	4,852	4,583	269	5.9
Miscellaneous revenue	189	152	37	24.3
Total revenue	₩12,222	₩11,371	₩851	7.5

The Company's total revenue in the first three months of 2013 increased by 7.5% to Won 12,222 billion from Won 11,371 billion in the first three months of 2012. The increase in total revenue was primarily attributable to a 6.5% increase in the average Formula Price of natural gas charged to city gas companies and power generating companies as well as a 0.7% increase in the volume of gas sold. The average Formula Price of natural gas charged to city gas companies and power generating companies increased to Won 987 thousand per metric ton in the first three months of 2013 from Won 927 thousand per metric ton in the first three months of 2012. The increase in the average Formula Price of natural gas charged to city gas companies and power generating companies was primarily due to an increase in the average Won price of raw materials resulting from an increase in the average unit LNG prices in U.S. dollar terms which was partially offset by an appreciation of the average value of the Won against the U.S. dollar in the first three months of 2013 compared to the first three months of 2012. Sales volume increased to 12,243 thousand metric tons in the first three months of 2013 due to the reasons described below.

Sales to city gas companies. Sales to city gas companies in the first three months of 2013 increased by 8.2% to Won 7,181 billion from Won 6,636 billion in the first three months of 2012. The increase in sales was due to an increase in the average Formula Price of natural gas sold to city gas companies, which increased by 7.6% to Won 990 thousand per metric ton in the first three months of 2013 from Won 920 thousand per metric ton in the first three months of 2012, as well as an increase in the total volume of natural gas sold to city gas companies. The total volume of natural gas sold to city gas companies increased by 0.7% in the first three months of 2013 to 7,257 thousand metric tons from 7,210 thousand metric tons in the first three months of 2012 as the sales volume to industrial endusers increased by 14.1%, which was partially offset by a decrease of 7.0% in the sales volume to residential and business heating end-users. The Company's sales volume to industrial end-users increased in the first three months of 2013 primarily due to an increase in demand reflecting the decision by certain industrial end-users to increase their reliance on natural gas due to its cheaper cost compared to crude oil in the first three months of 2013 as well as the marketing efforts of the Company and the city gas companies to create new demand for industrial use. The Company's sales volume to residential and business heating end-users decreased in the first three months of 2013 primarily due to a decrease in demand reflecting higher temperatures during January 2013 compared to January 2012.

Sales to power generating companies. Sales to power generating companies increased by 5.9% in the first three months of 2013 to Won 4,852 billion from Won 4,583 billion in the first three months of 2012. The increase in sales was due to a 5.1% increase in the average Formula Price of natural gas sold to power generating companies to Won 984 thousand per metric ton in the first three months of 2013 from Won 936 thousand per metric ton in the first three months of 2012 as well as an increase in the total volume of natural gas sold to power generating companies. The total volume of natural gas sold to power generating companies increased by 0.8% to 4,933 thousand metric tons in the first three months of 2013 from 4,896 thousand metric tons in the first three months of 2012, reflecting a 3.0% increase in the sales volume to other power generating companies, which more than offset a 0.4% decrease in the sales volume to the subsidiaries of KEPCO. The Company's sales volume to power generating companies increased in the first three months of 2013 compared to the first three months of 2012 primarily due to the decision by certain power generating companies, through the course of 2012, to increase reliance on natural gas as a fuel source of power generation resulting from an increase in the unit cost of power generation using crude oil. Certain power generating companies also increased their reliance on natural gas as a fuel source in the first three months of 2013 because power plants that use other fuel sources were already operating at full capacity.

Cost of Sales

In the first three months of 2013, the Company's cost of sales increased by 6.8% to Won 11,283 billion from Won 10,568 billion in the first three months of 2012 primarily due to an increase in the volume of raw materials purchased, which was partially offset by a decrease in the average price of crude oil to U.S.\$ 107.9 per barrel in the first three months of 2013 from U.S.\$ 116.2 per barrel in the first three months of 2012 that resulted in lower prices for the Company's spot market purchases and the appreciation of the average value of the Won against the U.S. dollar in the first three months of 2013 compared to the first three months of 2012. The price of LNG is generally determined by an LNG market pricing formula based primarily on the price of crude oil and the cost to the Company is also affected by the exchange rate of the Won against the U.S. dollar. The average rate of the Won against the U.S. dollar, as announced by Seoul Money Brokerage Services, Ltd., was Won 1,084.1 to U.S.\$ 1.00 in the first three months of 2013 compared to Won 1,131.5 to U.S.\$ 1.00 in the first three months of 2012.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased by 5.7% to Won 90 billion in the first three months of 2013 from Won 85 billion in the first three months of 2012 primarily due to increases in salaries, other expenses and research and development expense, which were partially offset by decreases in taxes and dues and amortization. Salaries included as selling, general and administrative expenses increased by 22.0% to Won 18 billion in the first three months of 2013 from Won 15 billion in the first three months of 2012 primarily due to an increase in wages and the number of the Company's employees. Other expenses increased by 53.0% to Won 8 billion in the first three months of 2013 from Won 5 billion in the first three months of 2012 primarily due to an increase in expenses related to overseas investments as well as a general increase in sales. Research and development expense increased by 31.1% to Won 9 billion in the first three months of 2013 from Won 7 billion in the first three months of 2012 primarily due to an increase in research and development project activities in the first three months of 2013 compared to the first three months of 2012. The Company's taxes and dues decreased by 10.1% to Won 31 billion in the first three months of 2013 from Won 34 billion in the first three months of 2012 primarily due to a decrease in safety management dues. Amortization decreased by 59.3% to Won 2 billion in the first three months of 2013 from Won 5 billion in the first three months of 2012 primarily due to a decrease in intangible drilling and development costs resulting from the Company's decreased drilling activities through its investments in overseas gas exploration, development and production projects in the first three months of 2013.

Operating Income

As a result of the foregoing, the Company's operating income increased by 18.3% to Won 850 billion in the first three months of 2013 from Won 718 billion in the first three months of 2012. The Company's operating margin increased to 7.0% in the first three months of 2013 from 6.3% in the first three months of 2012.

Other Income and Expenses

The Company's net other expenses increased by 112.0% to Won 6 billion in the first three months of 2013 from Won 3 billion in the first three months of 2012 primarily due to a 67.2% increase in donations to Won 7 billion in the first three months of 2013 from Won 4 billion in the first three months of 2012, which was primarily attributable to an increase in donations to universities and energy related organizations.

Other Gain (Loss)

The Company recorded net other loss of Won 207 billion in the first three months of 2013 compared to net other gain of Won 5 billion in the first three months of 2012 primarily due to the recognition of impairment losses on intangible assets of Won 210 billion in the first three months of 2013 compared to no such impairment losses in the first three months of 2012. In the first three months of 2013, the Company recognized impairment losses on intangible assets of Won 210 billion in connection with its development activities in the West Cutbank and Umiak regions of Canada reflecting a decrease in average gas prices in the region due to technological advances which have led to increased production and a localized over-supply of natural gas.

Finance Income and Costs

The following table presents a breakdown of the Company's finance income and costs and changes therein for the first three months of 2013 and 2012.

	For the three months ended March 31,		Cha	nges
	2013	2012	Amount	%
		(in billions	of Won)	
Interest income	₩ 6	₩ 3	₩ 3	84.6
Interest expense	(205)	(219)	14	(6.4)
Dividend income	0	0	(0)	(80.0)
Loss on valuation of derivative instruments, net	(80)	(12)	(68)	540.6
Gain (loss) on transactions of derivative instruments, net	29	(21)	50	N/A ⁽¹⁾
Foreign currency translation gain, net	61	3	58	1,863.6
Foreign currency transaction (loss) gain, net	(50)	37	(87)	N/A ⁽¹⁾
Total finance costs, net	₩(239)	₩(209)	₩(30)	14.4

(1) N/A = Not applicable.

Net finance costs increased by 14.4% to Won 239 billion in the first three months of 2013 from Won 209 billion in the first three months of 2012 primarily due to a net loss on foreign currency transactions in the first three months of 2013 compared to a net gain in the first three months of 2012 and an increase in net loss on valuation of derivative instruments, which were partially offset by an increase in net foreign currency translation gain and a net gain on transactions of derivative instruments in the first three months of 2013 compared to a net loss in the first three months of 2012. Such factors were principally attributable to the following:

• The Company recorded a net loss on foreign currency transactions of Won 50 billion in the first three months of 2013 compared to a net gain of Won 37 billion in the first three months of

2012 primarily as a result of a depreciation of the Won against the U.S. dollar in the first three months of 2013 compared to an appreciation of the Won against the U.S. dollar in the first three months of 2012. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won depreciated against the U.S. dollar to Won 1,111.1 to U.S.\$ 1.00 as of March 31, 2013 from Won 1,071.1 to U.S.\$ 1.00 as of December 31, 2012, while the Won appreciated against the U.S. dollar to Won 1,137.8 to U.S.\$ 1.00 as of March 31, 2012 from Won 1,153.3 to U.S.\$ 1.00 as of December 31, 2011.

- Net loss on valuation of derivative instruments increased by 540.6% to Won 80 billion in the first three months of 2013 from Won 12 billion in the first three months of 2012 primarily due to the exchange rate movements of the Won against the U.S. dollar for such periods as described above. The Company uses derivative instruments to hedge its foreign currency exposure and generally records net gain on valuation of derivative instruments when the Won depreciates against the U.S. dollar. The Company recorded a net loss on valuation of derivative instruments in the first three months of 2013 despite the depreciation of the Won against the U.S. dollar primarily due to the expiration and replacement of most of the Company's foreign currency forward contract portfolio in the first three months of 2013, which resulted in multiple valuation dates for the Company's foreign currency forward contracts throughout the first three months of 2013 at various exchange rates including periods when the value of the Won against the U.S. dollar was less than that as of March 31, 2013.
- Net foreign currency translation gain increased over eighteen-fold to Won 61 billion in the first three months of 2013 from Won 3 billion in the first three months of 2012 primarily as a result of a depreciation of the Won against the U.S. dollar in the first three months of 2013 compared to an appreciation of the Won against the U.S. dollar in the first three months of 2012.
- The Company recorded a net gain on transactions of derivative instruments of Won 29 billion
 in the first three months of 2013 compared to a net loss of Won 21 billion in the first three
 months of 2012 primarily due to the exchange rate movements of the Won against the dollar
 and the yen for such periods as described above. The Company generally records net gain on
 transactions of derivative instruments when the Won depreciates against the U.S. dollar.

Gains from Associates and Joint Ventures

Gains from associates and joint ventures increased by 24.7% to Won 55 billion in the first three months of 2013 from Won 44 billion in the first three months of 2012 primarily due to an increase in the Company's share of profit from Korea Ras Laffan LNG Ltd. The Company's share of profit from Korea Ras Laffan LNG Ltd. increased by 32.3% to Won 47 billion in the first three months of 2013 from Won 35 billion in the first three months of 2012.

Income Tax Expense

Income tax expense increased by 18.0% to Won 170 billion in the first three months of 2013 from Won 144 billion in the first three months of 2012 notwithstanding an 18.6% decrease in income before income taxes to Won 452 billion in the first three months of 2013 from Won 556 billion in the first three months of 2012, primarily because an amount equal to the impairment losses on intangible assets in Canada was excluded and not recognized as a deferred income tax asset in the first three months of 2013. The Company's effective tax rates were 37.7% in the first three months of 2013 and 26.0% in the first three months of 2012.

Net Income

As a result of the foregoing, the Company's net income decreased by 31.5% to Won 282 billion in the first three months of 2013 from Won 411 billion in the first three months of 2012. Net margin, which represents the ratio of net income to total revenue, decreased to 2.3% in the first three months of 2013 from 3.6% in the first three months of 2012.

Other Comprehensive Income

The Company recorded other comprehensive loss, net of tax, of Won 27 billion in the first three months of 2013 compared to other comprehensive income, net of tax, of Won 2 billion in the first three months of 2012 primarily due its recording net losses on hedge of net investment in a foreign operation in the first three months of 2013 compared to net gains on hedge of a net investment in a foreign operation in the first three months of 2012 and a negative amount of effective portion of changes in fair value of cash flow hedges in the first three months of 2013 compared to a positive amount in the first three months of 2012. These losses were partially offset by the Company's recording of positive foreign operations currency translation differences in the first three months of 2013 compared to negative foreign operations currency translation differences in the first three months of 2012 and share of other comprehensive gains of associates and joint-ventures in the first three months of 2013 compared to share of other comprehensive losses in the first three months of 2012.

Total Comprehensive Income

As a result of the foregoing, the Company's total comprehensive income decreased by 38.4% to Won 255 billion in the first three months of 2013 from Won 413 billion in the first three months of 2012.

2012 Compared to 2011

The following table presents selected income statement data and changes therein for 2012 and 2011.

	For the ye Decem		Changes	
	2012	2011	Amount	%
		(in billions o	f Won)	
Revenue	₩35,031	₩28,430	₩6,601	23.2
Cost of sales	33,422	27,109	6,313	23.3
Gross profit	1,609	1,321	288	21.9
Selling, general and administrative expenses	343	297	46	15.2
Operating income	1,267	1,023	244	23.8
Other income	5	2	3	110.4
Other expenses	(13)	(15)	1	(10.2)
Other gains (losses)	8	7	1	11.8
Finance income	500	492	8	1.7
Finance costs	(1,363)	(1,262)	(101)	8.0
Gains from associates and joint-ventures	115	142	(27)	(19.1)
Income before income tax	519	389	130	33.2
Income tax expense	(156)	(215)	59	(27.1)
Net income	₩ 362	₩ 175	₩ 187	107.2
Other comprehensive income (loss), net of tax	18	184	(166)	(90.1)
Total comprehensive income	₩ 380	₩ 359	₩ 21	6.0

Revenue

The following table presents a breakdown of the Company's revenue by category of customers and changes therein for 2012 and 2011.

	For the year ended December 31,		Chan	ges
	2012	2011	Amount	%
		(in billions	of Won)	
City gas companies:				
Residential / business heating	₩ 8,124	₩ 7,419	₩ 705	9.5
Industrial	6,533	5,217	1,316	25.2
Other	3,335	2,850	485	17.0
Sub-total	17,992	15,486	2,506	16.2
Power generating companies:				
Subsidiaries of KEPCO	10,837	8,750	2,087	23.9
Other power generating companies	5,474	3,983	1,491	37.4
Sub-total	16,311	12,733	3,578	28.1
Miscellaneous revenue	728	211	517	245.0
Total revenue	₩35,031	₩28,430	₩6,601	23.2

The Company's total revenue in 2012 increased by 23.2% to Won 35,031 billion from Won 28,430 billion in 2011. The increase in total revenue was primarily attributable to a 11.1% increase in the average Formula Price of natural gas charged to city gas companies and power generating companies as well as a 8.9% increase in the volume of gas sold. The average Formula Price of natural gas charged to city gas companies and power generating companies increased to Won 943 thousand per metric ton in 2012 from Won 849 thousand per metric ton in 2011. The increase in the average Formula Price of natural gas charged to city gas companies and power generating companies was primarily due to an increase in the average unit LNG prices in U.S. dollar terms, the impact of which was enhanced by an increase in the average Won price of raw materials resulting from a depreciation of the average value of the Won against the U.S. dollar in 2012 compared to 2011. Sales volume increased to 36,547 thousand metric tons in 2012 from 33,570 thousand metric tons in 2011 due to the reasons described below.

Sales to city gas companies. Sales to city gas companies in 2012 increased by 16.2% to Won 17,992 billion from Won 15,486 billion in 2011. The increase in sales was due to an increase in the average Formula Price of natural gas sold to city gas companies, which increased by 9.4% to Won 928 thousand per metric ton in 2012 from Won 848 thousand per metric ton in 2011, as well as an increase in the total volume of natural gas sold to city gas companies. The total volume of natural gas sold to city gas companies increased by 7.1% in 2012 to 19,380 thousand metric tons from 18,090 thousand metric tons in 2011 as the sales volume to industrial end-users increased by 28.2% and the sales volume to residential and business heating end-users increased by 1.4%. The Company's sales volume to industrial end-users increased in 2012 primarily due to an increase in demand reflecting the decision by certain industrial end-users to increase their reliance on natural gas due to its cheaper cost compared to crude oil in 2012 as well as the marketing efforts of the Company and the city gas companies to create new demand for industrial use. The Company's sales volume to residential and business heating end-users increased in 2012 primarily due to an increase in demand reflecting lower temperatures during February, November and December 2012 compared to February, November and December 2011, which was partially offset by a decrease in demand reflecting significantly higher temperatures during January 2012 compared to January 2011.

Sales to power generating companies. Sales to power generating companies increased by 28.1% in 2012 to Won 16,311 billion from Won 12,733 billion in 2011. The increase in sales was due to a 15.5% increase in the average Formula Price of natural gas sold to power generating companies to Won 960 thousand per metric ton in 2012 from Won 831 thousand per metric ton in 2011 as well as an increase in the total volume of natural gas sold to power generating companies. The total volume of natural gas sold to power generating companies increased by 10.9% to 16,990 thousand metric tons in 2012 from 15,316 thousand metric tons in 2011, reflecting a 6.9% increase in the sales volume to the subsidiaries of KEPCO in addition to a 19.8% increase in the sales volume to other power generating companies. The Company's sales volume to power generating companies increased primarily due to the decision by certain power generating companies to increase reliance on natural gas as a fuel source of power generation resulting from an increase in the unit cost of power generation using crude oil in 2012 compared to 2011. Certain power generating companies also increased their reliance on natural gas as a fuel source in 2012 because power plants that use other fuel sources were already operating at full capacity.

Cost of Sales

In 2012, the Company's cost of sales increased by 23.3% to Won 33,422 billion from Won 27,109 billion in 2011 primarily due to an increase in the volume of raw materials purchased as well as an increase in the average price of crude oil to U.S.\$ 108.9 per barrel in 2012 from U.S.\$ 106.1 per barrel in 2011 that resulted in higher prices for the Company's spot market purchases, the impact of which was enhanced by a depreciation of the average value of the Won against the U.S. dollar in 2012 compared to 2011. The price of LNG is generally determined by an LNG market pricing formula based primarily on the price of crude oil. The average rate of the Won against the U.S. dollar, as announced by Seoul Money Brokerage Services, Ltd., was Won 1,126.9 to U.S.\$ 1.00 in 2012 compared to Won 1,108.1 to U.S.\$ 1.00 in 2011.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased by 15.2% to Won 343 billion in 2012 from Won 297 billion in 2011 primarily due to increases in depreciation, other expenses, taxes and dues and salaries. Depreciation increased by 93.2% to Won 21 billion in 2012 from Won 11 billion in 2011 primarily due to an increase in the number of the Company's LNG tanks which resulted in a higher base for depreciation. Other expenses increased by 46.9% to Won 28 billion in 2012 from Won 19 billion in 2011 primarily due to an increase in expenses related to overseas investments as well as a general increase in sales. The Company's taxes and dues increased by 8.3% to Won 96 billion in 2012 from Won 89 billion in 2011 primarily due to an increase in safety management dues resulting from an increase in the sales volume of natural gas. Salaries included as selling, general and administrative expenses increased by 10.6% to Won 63 billion in 2012 from Won 57 billion in 2011 primarily due to an increase in wages, incentive payments to employees and the number of the Company's employees.

Operating Income

As a result of the foregoing, the Company's operating income increased by 23.8% to Won 1,267 billion in 2012 from Won 1,023 billion in 2011. The Company's operating margin remained stable at 3.6% in 2012 and 2011.

Other Income and Expenses

The Company's net other expenses decreased by 35.0% to Won 8 billion in 2012 from Won 12 billion in 2011 primarily due to a decrease in donations related to the Foundation for Overseas

Resources Development, an increase in gains from subsidies and reimbursement related to reimbursements for delayed performance of contracts and an increase in rental income.

Other Gain (Loss)

The Company's net other gain increased by 11.8% to Won 8 billion in 2012 from Won 7 billion in 2011 primarily due to decreases in losses on impairment of property, plant and equipment and net losses on disposal of property, plant and equipment. These decreases were offset in part by a decrease in net miscellaneous gains.

Finance Income and Costs

The following table presents a breakdown of the Company's finance income and costs and changes therein for 2012 and 2011.

	For the year ended December 31,		Chan	ges
	2012	2011	Amount	%
		(in billions	of Won)	
Interest income	₩ 16	₩ 23	₩ (7)	(28.6)
Interest expense	(857)	(724)	(134)	18.4
Dividend income	0	0	(0)	(25.0)
Loss on impairment of available for sale securities	(11)	0	(11)	N/A ⁽¹⁾
Gain (loss) on valuation of derivative instruments, net	(8)	(43)	36	(82.6)
Gain (loss) on transactions of derivative instruments, net	(116)	(20)	(96)	483.3
Foreign currency translation gain (loss), net	22	(9)	30	N/A ⁽¹⁾
Foreign currency transaction gain (loss), net	91	2	89_4	4,561.6
Total finance income (costs), net	₩ (863)	<u>₩(771</u>)	₩ (92)	12.0

(1) N/A = Not applicable.

Net finance costs increased by 12.0% to Won 863 billion in 2012 from Won 771 billion in 2011 primarily due to increases in interest expense and net loss on transactions of derivative instruments, which were partially offset by an increase in net gain on foreign currency transactions. Such factors were principally attributable to the following:

- Interest expense increased by 18.4% to Won 857 billion in 2012 from Won 724 billion in 2011 primarily due to an increase in the average balance of the Company's outstanding debentures and borrowings.
- Net loss on transactions of derivative instruments increased by 483.3% to Won 116 billion in 2012 from Won 20 billion in 2011 primarily as a result of an appreciation of the Won against the U.S. dollar in 2012 compared to a depreciation of the Won against the U.S. dollar in 2011. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won appreciated against the U.S. dollar to Won 1,071.1 to U.S.\$ 1.00 as of December 31, 2012 from Won 1,153.3 to U.S.\$ 1.00 as of December 31, 2011, but depreciated against the U.S. dollar to Won 1,153.3 to U.S.\$ 1.00 as of December 31, 2011 from Won 1,138.9 to U.S.\$ 1.00 as of December 31, 2010. The Company uses derivative instruments to hedge its foreign currency exposure and generally records net loss on transactions of derivative instruments when the Won appreciates against the dollar.
- Net gain on foreign currency transactions increased over forty-five-fold to Won 91 billion in 2012 from Won 2 billion in 2011 primarily as a result of the exchange rate movements of the

Won against the dollar for such periods as described above. The impact of such increase in net gain on foreign currency transactions was more than offset by an increase in net loss on transactions of derivative instruments in 2012 compared to 2011 as described above.

Gains from Associates and Joint Ventures

Gains from associates and joint ventures decreased by 19.1% to Won 115 billion in 2012 from Won 142 billion in 2011 primarily due to a decrease in the Company's share of profit from Korea Ras Laffan LNG Ltd. The Company's share of profit from Korea Ras Laffan LNG Ltd. decreased by 23.2% to Won 95 billion in 2012 from Won 124 billion in 2011.

Income Tax Expense

Income tax expense decreased by 27.1% to Won 156 billion in 2012 from Won 215 billion in 2011 notwithstanding a 33.2% increase in income before incomes taxes to Won 519 billion in 2012 from Won 389 billion in 2011, primarily because an increase in the statutory tax rate effective from 2012, from 22.0% to 24.2% for taxable income exceeding Won 20 billion, had resulted in a one-time increase in deferred income tax in 2011 of Won 110 billion that was not repeated in 2012. The Company's tax expense at the statutory tax rate of 24.2% increased to Won 125 billion in 2012 from Won 99 billion in 2011, primarily due to a 33.2% increase in income before income tax in 2012 compared to 2011. The Company's effective tax rates were 30.2% in 2012 and 55.1% in 2011. The Company's comparatively higher effective tax rate in 2011 compared to 2012 was primarily due to the effect of the increase in deferred income tax described above.

Net Income

As a result of the foregoing, the Company's net income increased by 107.2% to Won 362 billion in 2012 from Won 175 billion in 2011. Net margin, which represents the ratio of net income to total revenue, increased to 1.0% in 2012 from 0.6% in 2011.

Other Comprehensive Income

The Company's other comprehensive income, net of tax decreased by 90.1% to Won 18 billion in 2012 from Won 184 billion in 2011 primarily due to the Company's recording share of other comprehensive loss items of associates and joint-ventures, net of tax in 2012 compared to share of other comprehensive income, net of tax in 2011 and the Company's recording loss on foreign operation currency translation differences, net of tax in 2012 compared to gain on foreign operation currency translation differences, net of tax in 2011. These losses were offset in part by the Company's recording of net gain on hedge of net investment in a foreign operation, net of tax in 2012 compared to net loss on hedge of net investment in a foreign operation, net of tax in 2011 and the Company's recording gain on effective portion of changes in fair value of cash flow hedges, net of tax in 2011.

Total Comprehensive Income

As a result of the foregoing, the Company's total comprehensive income increased by 6.0% to Won 380 billion in 2012 from Won 359 billion in 2011.

2011 Compared to 2010

The following table presents selected income statement data and changes therein for 2011 and 2010.

		ear ended ber 31,	Changes	
	2011	2010	Amount	%
		(in billions o	f Won)	
Revenue	₩28,430	₩23,389	₩5,041	21.6
Cost of sales	27,109	22,083	5,026	22.8
Gross profit	1,321	1,306	15	1.2
Selling, general and administrative expenses	297	258	40	15.3
Operating income	1,023	1,048	(25)	(2.3)
Other income	2	2	0	9.2
Other expenses	(15)	(14)	(1)	7.4
Other gain (loss)	7	(66)	73	N/A
Finance income	492	596	(105)	(17.5)
Finance costs	(1,262)	(1,314)	52	(4.0)
Gains from associates and joint-ventures	142	115	27	23.8
Income before income tax	389	367	23	6.2
Income tax expense	(215)	(92)	(123)	134.4
Net income	₩ 175	₩ 275	₩ (100)	(36.5)
Other comprehensive income (loss), net of tax	184	(2)	186	N/A
Total comprehensive income	₩ 359	₩ 273	₩ 86	31.6

Revenue

The following table presents a breakdown of the Company's revenue by category of customers and changes therein for 2011 and 2010.

	For the year ended December 31,		Chang	jes
	2011	2010	Amount	%
	(in billions of Won)			
City gas companies:				
Residential / business heating	₩ 7,419	₩ 6,541	₩ 878	13.4
Industrial	5,217	3,951	1,266	32.0
Other	2,850	2,374	476	20.1
Sub-total	15,486	12,866	2,620	20.4
Power generating companies:				
Subsidiaries of KEPCO	8,750	7,328	1,422	19.4
Other power generating companies	3,983	2,384	1,599	67.1
Sub-total	12,733	9,712	3,021	31.1
Miscellaneous revenue	211	811	(600)	(73.9)
Total revenue	₩28,430	₩23,389	₩5,041	21.6

The Company's total revenue in 2011 increased by 21.6% to Won 28,430 billion from Won 23,389 billion in 2010. The increase in total revenue was primarily attributable to a 16.6% increase in the average Formula Price of natural gas charged to city gas companies and power generating companies as well as a 7.6% increase in the volume of gas sold. The average Formula Price of natural gas charged to city gas companies and power generating companies increased to Won 849 thousand per metric ton in 2011 from Won 728 thousand per metric ton in 2010. The increase in the average Formula Price of natural gas charged to city gas companies and power generating companies was primarily due to an increase in the average unit LNG prices in U.S. dollar terms, the impact of which was partially offset by a decrease in the average Won price of raw materials resulting from an appreciation of the average value of the Won against the U.S. dollar in 2011 compared to 2010. Sales volume increased to 33,570 thousand metric tons in 2011 from 31,202 thousand metric tons in 2010 due to the reasons described below.

Sales to city gas companies. Sales to city gas companies in 2011 increased by 20.4% to Won 15,486 billion from Won 12,866 billion in 2010. The increase in sales was due to an increase in the average Formula Price of natural gas sold to city gas companies, which increased by 15.5% to Won 848 thousand per metric ton in 2011 from Won 734 thousand per metric ton in 2010, as well as an increase in the total volume of natural gas sold to city gas companies. The total volume of natural gas sold to city gas companies increased by 4.2% in 2011 to 18,090 thousand metric tons from 17,354 thousand metric tons in 2010 as the sales volume to industrial end-users increased by 14.7%, which was partially offset by a decrease of 2.4% in the sales volume to residential and business heating end-users. The Company's sales volume to industrial end-users increased in 2011 primarily due to an increase in demand reflecting the decision by certain industrial end-users to increase their reliance on natural gas due to its cheaper cost compared to crude oil in 2011 as well as the marketing efforts of the Company and the city gas companies to create new demand for industrial use. The Company's sales volume to residential and business heating end-users decreased in 2011 primarily due to a decrease in demand reflecting significantly higher temperatures during November 2011 compared to November 2010, which was partially offset by an increase in demand reflecting significantly lower temperatures during January 2011 compared to January 2010.

Sales to power generating companies. Sales to power generating companies increased by 31.1% in 2011 to Won 12,733 billion from Won 9,712 billion in 2010. The increase in sales was due to a 17.1% increase in the average Formula Price of natural gas sold to power generating companies to Won 831 thousand per metric ton in 2011 from Won 710 thousand per metric ton in 2010 as well as an increase in the total volume of natural gas sold to power generating companies. The total volume of natural gas sold to power generating companies increased by 11.9% to 15,316 thousand metric tons in 2011 from 13,681 thousand metric tons in 2010, reflecting a 2.3% increase in the sales volume to the subsidiaries of KEPCO in addition to a 41.6% increase in the sales volume to other power generating companies. The Company's sales volume to power generating companies increased primarily due to the decision by certain power generating companies to increase reliance on natural gas as a fuel source of power generation resulting from an increase in the unit cost of power generation using crude oil in 2011 compared to 2010. Certain power generating companies also increased their reliance on natural gas as a fuel source in 2011 because power plants that use other fuel sources were already operating at full capacity.

Cost of Sales

In 2011, the Company's cost of sales increased by 22.8% to Won 27,109 billion from Won 22,083 billion in 2010 primarily due to an increase in the volume of raw materials purchased as well as an increase in the average price of crude oil to U.S.\$ 106.1 per barrel in 2011 from U.S.\$ 78.1 per barrel in 2010 that resulted in higher prices for the Company's spot market purchases, the impact of which was partially offset by an appreciation of the average value of the Won against the U.S. dollar in 2011

compared to 2010. The price of LNG is generally determined by an LNG market pricing formula based primarily on the price of crude oil. The average rate of the Won against the U.S. dollar, as announced by Seoul Money Brokerage Services, Ltd., was Won 1,108.1 to U.S.\$ 1.00 in 2011 compared to Won 1,156.3 to U.S.\$ 1.00 in 2010.

Selling, General and Administrative Expenses

Selling, general and administrative expenses increased by 15.3% to Won 297 billion in 2011 from Won 258 billion in 2010 primarily due to increases in salaries, research and development expense, amortization and taxes and dues. Salaries included as selling, general and administrative expenses increased by 30.3% to Won 57 billion in 2011 from Won 44 billion in 2010 primarily due to an increase in incentive payments to employees. Research and development expense increased by 20.6% to Won 45 billion in 2011 from Won 38 billion in 2010 primarily due to an increase in payments for outside services provided in connection with the Company's research and development activities principally related to dimethyl ether and gas hydrate applications and improvements to the Company's LNG tanks and pipelines. Amortization increased by 90.0% to Won 11 billion in 2011 from Won 6 billion in 2010 primarily due to an increase in investments in mineral rights resulting from the Company's acquisition of mineral rights through its investments in overseas gas exploration, development and production projects in 2011. The Company's taxes and dues increased by 4.7% to Won 89 billion in 2011 from Won 85 billion in 2010 primarily due to an increase in safety management dues resulting from an increase in the sales volume of natural gas.

Operating Income

As a result of the foregoing, the Company's operating income decreased by 2.3% to Won 1,023 billion in 2011 from Won 1,048 billion in 2010. The Company's operating margin decreased to 3.6% in 2011 from 4.5% in 2010.

Other Income and Expenses

The Company's net other expenses increased by 7.0% to Won 12 billion in 2011 from Won 11 billion in 2010 primarily due to an increase in donations related to the Foundation for Overseas Resources Development and a decrease in gains from subsidies and reimbursement related to reimbursements for delayed performance of contracts, offset in part by an increase in reversal of allowance for doubtful accounts.

Other Gain (Loss)

The Company recorded net other gain of Won 7 billion in 2011 compared to net other loss of Won 66 billion in 2010 primarily due to no impairment losses on intangible assets being recognized in 2011 compared to such losses of Won 65 billion in 2010. In 2010, the Company recognized impairment losses on intangible assets of Won 65 billion in connection with its exploration activities in the JPDA 06-102 block in East Timor after surveys and exploration drillings failed to produce promising results.

Finance Income and Costs

The following table presents a breakdown of the Company's finance income and costs and changes therein for 2011 and 2010.

	For the year ended December 31,		Chan	ges
	2011	2010	Amount	%
		(in billions o	of Won)	
Interest income	₩ 23	₩ 15	₩ 8	49.4
Interest expense	(724)	(635)	(89)	14.0
Dividend income	0	0	0	166.7
Gain (loss) on valuation of derivative instruments, net	(43)	10	(53)	N/A ⁽¹⁾
Gain (loss) on transactions of derivative instruments, net	(20)	(56)	36	(64.3)
Foreign currency translation gain (loss), net	(9)	(7)	(1)	18.6
Foreign currency transaction gain (loss), net	2	(45)	47	N/A ⁽¹⁾
Total finance income (costs), net	₩ (771)	₩ (718)	₩ (53)	7.3

⁽¹⁾ N/A = Not applicable.

Net finance costs increased by 7.3% to Won 771 billion in 2011 from Won 718 billion in 2010 primarily due to an increase in interest expense and a net loss on valuation of derivative instruments in 2011 compared to a net gain in 2010, which were partially offset by a net gain on foreign currency transactions in 2011 compared to a net loss in 2010 as well as a decrease in net loss on transactions of derivative instruments. Such factors were principally attributable to the following:

- Interest expense increased by 14.0% to Won 724 billion in 2011 from Won 635 billion in 2010 primarily due to an increase in the average balance of the Company's outstanding debentures and borrowings.
- The Company recorded a net gain on foreign currency transactions of Won 2 billion in 2011 compared to a net loss of Won 45 billion in 2010 primarily as a result of a depreciation of the Won against the U.S. dollar in 2011 compared to an appreciation of the Won against the U.S. dollar in 2010 as well as a further depreciation of the Won against the yen in 2011 compared to 2010. In terms of the market average exchange rates announced by Seoul Money Brokerage Services, Ltd., the Won depreciated against the U.S. dollar to Won 1,153.3 to U.S.\$ 1.00 as of December 31, 2011 from Won 1,138.9 to U.S.\$ 1.00 as of December 31, 2010, but appreciated against the U.S. dollar to Won 1,138.9 to U.S.\$ 1.00 as of December 31, 2010 from Won 1,167.6 to U.S.\$ 1.00 as of December 31, 2009. In addition, the Won depreciated against the yen to Won 1,485.2 to ¥100.0 as of December 31, 2011 from Won 1,397.1 to ¥100.0 as of December 31, 2010, a further depreciation from Won 1,262.8 to ¥100.0 as of December 31, 2009. The impact of such net gain on foreign currency transactions was more than offset by a net loss of Won 43 billion on valuation of derivative instruments in 2011 compared to a net gain of Won 10 billion in 2010. The Company uses derivative instruments to hedge its foreign currency exposure and generally records net gain on valuation of derivative instruments when the Won depreciates against the dollar and the yen. The Company recorded a net loss on valuation of derivative instruments in 2011 despite the depreciation of the Won against the dollar and the yen primarily due to the expiration and replacement of most of the Company's foreign currency swap contract portfolio in 2011, which resulted in multiple valuation dates for the Company's foreign currency swap contracts throughout 2011 at various exchange rates including periods when the value of Won against the U.S. dollar was less than that as of December 31, 2011.

• Net loss on transactions of derivative instruments decreased by 64.3% to Won 20 billion in 2011 from Won 56 billion in 2010 primarily due to the exchange rate movements of the Won against the dollar and the yen for such periods as described above. The Company generally records a net gain on transactions of derivative instruments when the Won depreciates against the dollar and the yen. The Company recorded a net loss on transactions of derivative instruments in 2011 despite the depreciation of the Won against the dollar and the yen primarily due to the comparative difference in exchange rates in effect on the dates of such transactions, which were not reflective of the general depreciation of the Won against the dollar and the yen in 2011.

Gains from Associates and Joint Ventures

Gains from associates and joint ventures increased by 23.8% to Won 142 billion in 2011 from Won 115 billion in 2010 primarily due to an increase in the Company's share of profit from Korea Ras Laffan LNG Ltd. The Company's share of profit from Korea Ras Laffan LNG Ltd. increased by 28.3% to Won 124 billion in 2011 from Won 96 billion in 2010.

Income Tax Expense

Income tax expense increased by 134.4% to Won 215 billion in 2011 from Won 92 billion in 2010 primarily due to an increase in the statutory tax rate effective from 2012, from 22.0% to 24.2% for taxable income exceeding Won 20 billion, that resulted in an increase in deferred income tax. The Company's tax expense at the statutory tax rate of 24.2% increased to Won 99 billion in 2011 from Won 82 billion in 2010, primarily due to a 6.2% increase in income before income tax in 2011 compared to 2010. The Company's effective tax rates were 55.1% in 2011 and 25.0% in 2010. The increase in the Company's effective tax rate was primarily due to the effect of the increase in deferred income tax liabilities described above.

Net Income

As a result of the foregoing, the Company's net income decreased by 36.5% to Won 175 billion in 2011 from Won 275 billion in 2010. Net margin, which represents the ratio of net income to total revenue, decreased to 0.6% in 2011 from 1.2% in 2010.

Other Comprehensive Income

The Company recorded other comprehensive income, net of tax of Won 184 billion in 2011 compared to other comprehensive loss, net of tax of Won 2 billion in 2010 primarily due to the Company's recording share of other comprehensive income items of associates and joint-ventures, net of tax in 2011 compared to share of other comprehensive loss, net of tax in 2010. The Company's share of other comprehensive income items of associates and joint ventures in 2011 was mainly from Korea Ras Laffan LNG Ltd.

Total Comprehensive Income

As a result of the foregoing, the Company's total comprehensive income increased by 31.6% to Won 359 billion in 2011 from Won 273 billion in 2010.

Liquidity and Capital Resources

Cash Flows

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

	For the three months ended March 31,		For [
	2013 2012		2012 2011		2010	
Net cash generated from (used in) operating						
activities	₩ (59)	₩ (942)	₩ 403	₩ (471)	₩ 984	
Net cash used in investing activities	1,062	715	4,715	3,663	1,770	
Net cash generated from financing activities	1,045	1,808	4,477	4,117	776	
Net increase (decrease) in cash and cash						
equivalents	(75)	152	165	(18)	(10)	
Cash and cash equivalents at the beginning of the	` ,			, ,	, ,	
period	245	155	155	211	217	
Cash and cash equivalents at the end of the						
period	174	291	245	155	211	

The Company recorded net cash used in operating activities of Won 59 billion in the first three months of 2013, net cash generated from operating activities of Won 403 billion in 2012, net cash used in operating activities of Won 471 billion in 2011 and net cash generated from operating activities of Won 984 billion in 2010.

- The Company's net cash used in operating activities decreased to Won 59 billion in the first three months of 2013 from Won 942 billion in the first three months of 2012. The Company's volume of gas sold increased by 0.7% in the first three months of 2013 compared to the first three months of 2012. The Ministry of Trade, Industry and Energy announced in February 2013 that it was discontinuing the suspension of the periodic bi-monthly adjustments to the sales prices that the Company invoices to city gas companies and approved an increase in the invoice sales prices to city gas companies of 4.9% in June 2012 and 4.4% in February 2013. Such factors contributing to the increase in gross cash inflow in the first three months of 2013 compared to the first three months of 2012 were partially offset by a significant increase in cash used in the purchase of inventories in the first three months of 2013. Inventories increased by 33.8% to Won 2,535 billion as of March 31, 2013 from Won 1,894 billion as of December 31, 2012. Inventory levels increased in the first three months of 2013 primarily as a result of ordinary course variance in the timing of purchases.
- The Company recorded net cash generated from operating activities of Won 403 billion in 2012 compared to net cash used in operating activities of Won 471 billion in 2011. The Company's volume of gas sold increased by 8.9% in 2012 compared to 2011 and the Ministry of Trade, Industry and Energy, while continuing to suspend the periodic bi-monthly adjustments to the sales prices that the Company invoices to city gas companies, approved an increase in the invoice sales prices to city gas companies of 5.3% in October 2011 and 5.2% in June 2012. Such factors contributing to the increase in gross cash inflow in 2012 compared to 2011 were enhanced by a significant decrease in cash used in the purchase of inventories in 2012. Inventories decreased by 43.6% to Won 1,894 billion as of December 31, 2012 from Won 3,360 billion as of December 31, 2011. Inventory levels decreased in the second half of 2012 primarily as a result of ordinary course variance in the timing of purchases.

The Company recorded net cash used in operating activities of Won 471 billion in 2011 compared to net cash generated from operating activities of Won 984 billion in 2010. The Company's volume of gas sold increased by 7.6% in 2011 compared to 2010 and the Ministry of Trade, Industry and Energy, while continuing to suspend the periodic bi-monthly adjustments to the sales prices that the Company invoices to city gas companies, approved an increase in the invoice sales prices to city gas companies of 4.9% in September 2010 and 5.3% in October 2011. However, such factors contributing to the increase in gross cash inflow in 2011 compared to 2010 were more than offset by a significant increase in cash used in the purchase of inventories in 2011 as well as an increase in the price of raw materials which further widened the gap between the average invoice sales prices to city gas companies and the average Formula Price of gas charged to city gas companies. Inventories increased by 55.8% to Won 3,360 billion as of December 31, 2011 from Won 2,157 billion as of December 31, 2010. Inventory levels increased in the second half of 2011 primarily as a result of an increase in the Company's purchase of raw materials in the spot market in anticipation of higher average spot market purchase prices for natural gas in the fourth quarter of 2011 and the first quarter of 2012 as well as lower than anticipated sales of natural gas in the third quarter of 2011. Spot market purchase prices for natural gas generally showed an increasing trend in 2011 due to the uncertain political situations in the Middle East as well as the March 2011 earthquake in Japan, which caused several countries to reassess their nuclear energy programs and seek alternative energy sources, including natural gas. The average Formula Price of gas charged to city gas companies increased by 15.5% primarily due to an increase in the average unit LNG prices in U.S. dollar terms in 2011 compared to 2010.

The Company's net cash used in investing activities was Won 1,062 billion in the first three months of 2013, Won 4,715 billion in 2012, Won 3,663 billion in 2011 and Won 1,770 billion in 2010.

- The Company's net cash used in investing activities of Won 1,062 billion in the first three
 months of 2013 consisted primarily of Won 875 billion used in acquisition of property, plant
 and equipment and Won 149 billion used in acquisition of intangible assets relating mainly to
 mineral rights.
- The Company's net cash used in investing activities of Won 715 billion in the first three
 months of 2012 consisted primarily of Won 506 billion used in acquisition of property, plant
 and equipment and Won 132 billion used in acquisition of intangible assets relating mainly to
 exploration and evaluation assets.
- The Company's net cash used in investing activities of Won 4,715 billion in 2012 consisted primarily of Won 3,211 billion used in acquisition of property, plant and equipment and Won 1,102 billion used in acquisition of intangible assets relating mainly to mineral rights.
- The Company's net cash used in investing activities of Won 3,663 billion in 2011 consisted primarily of Won 2,097 billion used in acquisition of property, plant and equipment and Won 1,289 billion used in acquisition of intangible assets relating mainly to mineral rights.
- The Company's net cash used in investing activities of Won 1,770 billion in 2010 consisted primarily of Won 1,619 billion used in acquisition of property, plant and equipment.

The Company's net cash generated from financing activities was Won 1,045 billion in the first three months of 2013, Won 4,477 billion in 2012, Won 4,117 billion in 2011 and Won 776 billion in 2010.

- The Company's net cash generated from financing activities of Won 1,045 billion in the first three months of 2013 consisted primarily of proceeds from borrowings and issuance of debentures of Won 9,394 billion, offset in part by repayment of borrowings and debentures of Won 8,290 billion. The Company's borrowings increased in the first three months of 2013 primarily to fund its overseas exploration, development and production activities and due to a seasonal increase in working capital requirements.
- The Company's net cash generated from financing activities of Won 1,808 billion in the first three months of 2012 consisted primarily of proceeds from borrowings and issuance of debentures of Won 12,340 billion, offset in part by repayment of borrowings and debentures of Won 10,477 billion. The Company's borrowings increased in the first three months of 2012 primarily to fund its overseas exploration, development and production activities and to address the funding needs caused by the widening of the gap between the average invoice sales prices to city gas companies and the average Formula Price of gas charged to city gas companies in the first three months of 2012, as well as due to a seasonal increase in working capital requirements.
- The Company's net cash generated from financing activities of Won 4,477 billion in 2012 consisted primarily of net proceeds from issuance of debentures and borrowings of Won 4,764 billion, offset in part by payment of finance lease liabilities of Won 232 billion and dividend payments of Won 55 billion. The Company's borrowings increased in 2012 primarily to fund its overseas exploration, development and production activities as well as to address the funding needs caused by the widening of the gap between the average invoice sales prices to city gas companies and the average Formula Price of gas charged to city gas companies in 2012.
- The Company's net cash generated from financing activities of Won 4,117 billion in 2011 consisted primarily of net proceeds from issuance of debentures and borrowings of Won 4,372 billion, offset in part by repayment of finance lease liabilities of Won 210 billion and dividend payments of Won 45 billion. The Company's borrowings increased in 2011 primarily to fund its overseas exploration, development and production activities as well as to address the funding needs caused by the widening of the gap between the average invoice sales prices to city gas companies and the average Formula Price of gas charged to city gas companies in 2011.
- The Company's net cash generated from financing activities of Won 776 billion in 2010 consisted primarily of net proceeds from issuance of debentures of Won 3,922 billion, offset in part by net repayment of short-term borrowings of Won 611 billion, net repayment of long-term borrowings of Won 2,273 billion, repayment of current portion of finance lease liabilities of Won 206 billion and dividend payments of Won 56 billion.

Capital Requirements

Historically, the Company's capital requirements have consisted primarily of financing its operating activities, including purchase of LNG, as well as capital expenditures relating to the construction and maintenance of receiving terminals and nation-wide pipeline network, repayments of outstanding debt and payments of dividends.

The Company anticipates that capital expenditures and repayments of outstanding debt will represent the most significant uses of funds for the next several years. From time to time, the Company may also require capital for investments in overseas gas exploration, development and production projects or acquisitions of interests in energy related companies, as well as other revenue diversification efforts. The following table sets out the Company's planned capital expenditures from 2013 until 2015 relating to the expansion of its receiving terminals, the construction of a fourth terminal complex in Samcheok and construction and maintenance of its pipeline network.

			Year ended December 31,							
Year	2013		2014		2015		Total			
	(in billions of W			Von)						
Receiving terminals:										
Incheon	₩	228	₩	80	₩	55	₩	363		
Pyongtaek		75		135		120		330		
Tongyeong		145		93		82		320		
Samcheok		862		432		433	1	,727		
Pipelines		215		550		353	1	,118		
Total capital expenditures	₩1	,525	₩1	,290	₩1	,043	₩3	3,858		

The Company expects that investment in its receiving terminals, including construction of a fourth terminal complex in Samcheok, will continue to account for the majority of its capital expenditures, amounting to approximately Won 1,727 billion for the years 2013 to 2015. The Company also expects to invest approximately Won 1,118 billion during the same period to extend the length of the Company's pipelines primarily to meet the forecasted increase in demand for natural gas in Korea. The Company may adjust its capital expenditure plans on an on-going basis subject to market demand for its products, the production outlook of the global natural gas industry and global economic conditions in general. The Company may delay or not implement some of its current capital expenditure plans based on its assessment of such market conditions.

The Company also expects to make investments in overseas gas exploration, development and production projects or acquisitions of interests in energy related companies, as well as other revenue diversification efforts. The Company invested approximately U.S.\$2.9 billion in overseas gas exploration, development and production projects in 2012, and it expects to invest approximately U.S.\$3.1 billion in such projects in 2013. The Company expects to continue to aggressively invest in such projects, subject to market conditions. The Company plans to fund a portion of its investments in natural resources exploration, development and production projects with policy loans provided by the Ministry of Trade, Industry and Energy to encourage participation in such projects. In the event the exploration project does not result in successful production of natural resources, the Company may apply to have such loans forgiven.

Payments of contractual obligations and commitments will also require considerable resources. In the ordinary course of its business, the Company routinely enters into commercial commitments for various aspects of its operations, as well as provides, from time to time, payment guarantees primarily in connection with the Company's investments in LNG supply companies and project financing relating to overseas gas exploration, development and production projects. As of March 31, 2013, the Company provided payment guarantees of U.S.\$130 million, Canadian dollar 27 million, Australian dollar 23 million and Won 2 billion to Korea Exchange Bank and others. See note 29 to the unaudited interim consolidated financial statements included elsewhere in this offering circular.

Starting in 2011, in compliance with Korean IFRS, the Company began recognizing capital lease on 21 of its LNG transporting vessels. The following table sets forth the amount of long-term debt and capital lease obligations as of March 31, 2013.

Payments Due by Period							
Total	Less than 1 Year	1 to 3 Years	3 to 4 Years	After 4 Years			
	(in billions of Won)						
₩20,458	₩2,205	₩4,620	₩2,132	₩11,501			
2,667	263	531	286	1,587			
₩23,125	<u>₩</u> 2,468	₩5,151	₩2,418	₩13,088			
	₩20,458 2,667	Total Less than 1 Year ₩20,458 ₩2,205 2,667 263	Total Less than 1 Year 1 to 3 Years (in billions of W 10 the properties) ₩20,458 ₩2,205 ₩4,620 2,667 263 531	Total Less than 1 Year 1 to 3 Years 3 to 4 Years (in billions of Won) ₩20,458 ₩2,205 ₩4,620 ₩2,132 2,667 263 531 286			

- (1) Stated at principal amount before discounts.
- (2) Stated at book value translated into Won amount at the market average exchange rate of Won 1,112.1 to U.S.\$ 1.00 on March 29, 2013 as announced by the Seoul Money Brokerage Services, Ltd.

In addition, the Company has substantial purchase obligations under long-term contracts to purchase LNG. These contracts generally have terms of 20 years and provide for periodic price adjustments. The Company also has entered into long-term transportation contracts for the exclusive use of 21 LNG delivery ships.

Capital Resources and Liquidity

The Company operates in an industry with significant financing requirements and has historically financed its operations primarily through short-term and long-term borrowings from Korean banks and Korea National Oil Corporation, issuances of debentures and cash generated from operations. The Company expects that these sources will continue to be its principal sources of cash in the future.

Total long-term borrowings (excluding current portion) and debentures (excluding current portion) were Won 18,274 billion as of March 31, 2013, Won 17,419 billion as of December 31, 2012, Won 15,220 billion as of December 31, 2011 and Won 11,489 billion as of December 31, 2010, and total short-term borrowings and current portion of long-term borrowings and debentures were Won 7,324 billion as of March 31, 2013, Won 6,907 billion as of December 31, 2012, Won 4,838 billion as of December 31, 2011 and Won 4,127 billion as of December 31, 2010.

The Company periodically increases its short-term borrowings and adjusts its long-term debt financing levels depending on changes in its capital requirements. The Company has increased its outstanding debt substantially in recent years in order to address additional funding needs resulting from a suspension in the periodic adjustments to invoice sales prices to city gas companies starting in March 2008, and to a lesser extent, to fund its overseas exploration, development and production activities.

The Company had working capital (current assets minus current liabilities) of Won 2,034 billion as of March 31, 2013, Won 1,603 billion as of December 31, 2012, Won 3,850 billion as of December 31, 2011 and Won 2,436 billion as of December 31, 2010.

The Company intends to meet its working capital and other capital requirements principally from debt financings and cash generated from operations. The Company's strategy for financing investments in overseas gas exploration, development and production projects is, to the extent possible and subject to market conditions, to raise funding that is denominated under the currency of the local jurisdiction. The Company's ability to rely on some of these alternatives could be affected by

factors such as the liquidity of the Korean and global financial markets, prevailing interest rates, the Company's credit rating and the government's policies regarding Won currency and foreign currency borrowings.

The Company's total equity increased to Won 8,504 billion as of March 31, 2013 from Won 8,369 billion as of December 31, 2012 primarily as a result of an increase of Won 163 billion in retained earnings through net income. The Company's total equity increased to Won 8,369 billion as of December 31, 2012 from Won 8,044 billion as of December 31, 2011 primarily as a result of an increase of Won 306 billion in retained earnings through net income. The Company's total equity increased to Won 8,044 billion as of December 31, 2011 from Won 7,730 billion as of December 31, 2010 primarily as a result of an increase of Won 216 billion in the Company's share of other comprehensive income of associates and joint-ventures accounted for using the equity method (net of tax), attributable primarily to an increase of Won 271 billion in accumulated other comprehensive income at Korea Ras Laffan LNG Ltd. in 2011, and an increase of Won 123 billion in retained earnings through net income.

Market Risks

Market risk generally represents the risk that losses may occur in the values of financial instruments as a result of movements in interest rates and foreign exchange rates as well as risks related to raw material prices.

The Company is exposed to various market risks in its ordinary course business transactions.

Interest Rate Risk

The Company's debt consists of fixed and variable rate debt obligations with original maturities typically ranging from one to 30 years. An increase in interest rates would adversely affect the Company's ability to service its existing debt and incur new debt for its operations and its ability to make payments on loans that it has guaranteed.

The Company's interest rate risk is mitigated through application by the Ministry of Trade, Industry and Energy of the Company's estimated borrowing rate when calculating the Company's Formula Prices, which is subject to approval from the government. From time to time, the Company also uses interest rate currency swaps to reduce the impact of interest rate and exchange rate volatility on the Company's debentures issued overseas. See note 28 to the unaudited interim consolidated financial statements included elsewhere in this offering circular.

Foreign Currency Risk

Anticipated foreign currency payments, which represent a substantial sum and are mostly denominated in U.S. dollars, relate primarily to imported raw material costs, transportation costs and interest and principal payments on the Company's foreign currency-denominated debt. With respect to the Company's exposure to foreign currency risks related to raw material costs and freight costs, such risks to the Company are mitigated because the Ministry of Trade, Industry and Energy generally allows the Company to pass through its raw material costs (including transportation costs) by periodically adjusting the Company's Formula Prices. As for the Company's exposure to foreign currency risks related to foreign currency-denominated debt, the Company utilizes forward foreign currency contracts as well as interest rate currency swap contracts mentioned above. See note 28 to the unaudited interim consolidated financial statements included elsewhere in this offering circular.

Commodity Price Risk

The Company's operations are affected by price fluctuations of LNG. However, the Company's exposure to LNG price risk is mitigated because the Trade, Industry and Energy generally allows the Company to pass through its raw material costs by periodically adjusting the Company's Formula Prices. The Company does not use any derivative instruments to manage its commodity price risks. The Company purchases a substantial portion of its LNG from overseas sources, including Qatar, Malaysia, Oman, Indonesia, Yemen, Russia, Egypt, Brunei and Australia.

In order to ensure a stable source of supply, the Company selectively enters into long-term supply contracts typically for 20 years, and such contracts generally provide for periodic price adjustments. The Company's long-term supply contracts for LNG are summarized in "The Company—Business—LNG Supply—LNG Sales and Purchase Agreements."

Inflation

Inflation in Korea was 3.0% in 2010, 4.0% in 2011, 2.2% in 2012 and 3.3% in the first three months of 2013. The effects of inflation in Korea on the Company's financial condition and results of operations are reflected primarily in salary and selling, general and administration expenses. Inflation in Korea has not had a significant impact on the Company's results of operations to date. It is possible that inflation in the future may have an adverse effect on the Company's financial condition or results of operations. See "Risk Factors—Risks related to Korea—Unfavorable financial and economic developments in Korea may have an adverse effect on the Company."

Management

The Company's Articles of Incorporation provide that the board of directors shall be made up of no more than seven standing directors (including the President, who also serves as the Chief Executive Officer of the Company) and eight non-standing directors. All non-standing directors are independent. The directors have terms of two years (with the exception of the President, whose term is for three years). The activities within the discretion of the board of directors are subject to applicable Korean laws including the Korean Commercial Code as well as the Company's Articles of Incorporation and the Board of Directors' Regulations and include calling a general meeting of shareholders, approving financial statements and issuing bonds or debentures.

Until October 1997, the Company was a government-owned entity and the Chairman of the Board and the President were appointed by the President of the Republic upon the recommendation of the Ministry of Trade, Industry and Energy. The other directors were appointed by the Ministry of Trade, Industry and Energy upon the recommendation of the Chairman of the Board. In October 1997, the Company became a government-invested entity and, as a result of the change in status, the Chairman and the other directors are now selected by a general meeting of shareholders. Representation on the board of directors is not at present proportional to share ownership.

Under the Company's Articles of Incorporation, the President, who serves as the Company's chief executive, is nominated by the Executive Recommending Committee that consists of several non-standing directors (constituting a majority of the committee members) and several private citizens recommended by the board of directors. The Executive Recommending Committee recommends a pool of candidates, which is then deliberated by the Committee for Management of Public Institutions pursuant to the Act on Management of Public Institutions. After being appointed by the shareholders at a general meeting of shareholders and upon recommendation by the Minister of Trade, Industry and Energy, the President is appointed by the President of Korea. The President is deemed to have the capacity of a representative director where the Korean Commercial Code applies and thus administers most of the day-to-day business that is not specifically designated as a responsibility of the board of directors. The President must enter into a management contract (in a form approved by the shareholders) with the Ministry of Trade, Industry and Energy pursuant to which the President must meet a certain minimum level of performance each year. Under the current management contract with the President, if the President fails to meet such performance level, then the board of directors may submit a resolution to discharge the President to the shareholders.

Other than the President, the standing directors who are not members of the Audit Committee are appointed by the President after being selected by the shareholders at a general meeting of shareholders. The standing directors who are members of the Audit Committee are appointed by the President of Korea, upon recommendation by the Minister of Strategy and Finance after selection by the shareholders at a general meeting of shareholders from a pool of candidates nominated after deliberation by the Committee for Management of Public Institutions and recommendation by the Executive Recommending Committee. The standing directors assist the President and act on his behalf when the President is unable to act. The non-standing directors are appointed by the Minister of Strategy and Finance, after being selected by the shareholders at a general meeting of shareholders from a pool of candidates recommended by the Executive Recommending Committee. The board of directors may establish sub-committees to delegate some of its management functions pursuant to the Articles of Incorporation of the Company, and the board of directors has established three committees, which consist of the Audit Committee, the Planning and Strategy Committee and the Overseas Operations Committee.

The Audit Committee is comprised of three committee members, two of whom must be non-standing directors and at least one member must be an accounting or financial professional, as determined in accordance with the relevant provisions of the Enforcement Decree of the Korean Commercial Code. The

Audit Committee is responsible for auditing the accounting records and practices and business activities of the Company, examining proposals and documents to be submitted to the shareholders and, pursuant to determining whether any matters violate the Articles of Incorporation of the Company or any applicable laws and regulations, submitting its opinion to the shareholders.

The directors' address is 171 Dolmaro, Bundang-gu, Seongnam-si, Gyungi-do, 463-754, Korea. Summary biographical information regarding the Company's directors is set out below.

Standing Directors

Sung-Ho Lee, age 58, was appointed as a standing director on August 17, 2012. Mr. Lee is currently serving as a standing member of the Audit Committee. Mr. Lee previously served as president of Korea National Defense University.

Suk-Sun Lee, age 56, was appointed as a standing director on March 29, 2011. Mr. Lee is currently serving as a senior executive vice president of the Company. Mr. Lee previously served as the head of the LNG terminal division of the Company.

Key-Man Kim, age 58, was appointed as a standing director on September 23, 2011. Mr. Kim is currently serving as the head of the support division of the Company. Mr. Kim previously served as the head of the management strategy team of the Company.

Young-Woo Min, age 58, was appointed as a standing director on April 4, 2012. Mr. Min is currently serving as acting President and Chief Executive Officer of the Company until the appointment of the next President and Chief Executive Officer. Mr. Min previously served as the chairman of the Korea Chemical Fibers Association.

Non-Standing Directors

Song-Ki Kim, age 70, was appointed as a non-standing director on March 31, 2011. Mr. Kim is currently serving as a non-standing member of the Audit Committee. Mr. Kim is also currently an honorary professor at Seoul National University's College of Business Administration.

Myung-Hwan Kim, age 67, was appointed as a non-standing director on March 31, 2011. Mr. Kim is currently a visiting professor at the School of Law and Public Administration at Baekseok University. Mr. Kim previously served as a commander in the marine corp. of the Republic of Korea.

Sin-Won Lee, age 67, was appointed as a non-standing director on March 31, 2011. Mr. Lee is currently the chairman of the Jeollanam-do provincial headquarters of the Federation of Korean Trade Unions. Mr. Lee previously served as a member of the Jeollanam-do provincial assembly.

Jong-Gyu Namgoong, age 65, was appointed as a non-standing director on March 31, 2011. Mr. Namgoong previously served as an auditor of the Korean Fusion Industry & Technology Association.

Joo-Ho Choi, age 48, was appointed as a non-standing director on March 31, 2011. Mr. Choi is currently serving as chair of the Audit Committee. Mr. Choi previously served as a council member of the Seoul metropolitan government's Eunpyeong-gu council.

Bu-Kyun Jeong, age 58, was appointed as a non-standing director on April 2, 2012. Mr. Jeong is currently a representative of the World Futures Forum. Mr. Jeong previously served as the president of the Korea Center for International Finance.

Kyung-Noh Han, age 52, was appointed as a non-standing director on April 2, 2012. Mr. Han previously served as the representative director of Hanareum Chain Co., Ltd. and a statutory auditor of the Company.

Principal Shareholders

The following table describes the Company's shareholders as of March 31, 2013 (the latest date such information is available).

Name	Amount of Paid in Capital	Number of Shares	Percentage	
	(millions of Won)			
The Republic of Korea	₩103,791	20,758,110	26.9%	
KEPCO ⁽¹⁾	94,500	18,900,000	24.5%	
Local governments	36,633	7,326,600	9.5%	
Employees	10,094	2,018,807(2)	2.6%	
Foreign investors	33,417	6,683,385	8.6%	
Others	84,609	16,921,848	21.9%	
Treasury stock	23,379	4,675,760	6.0%	
Total	₩386,423	77,284,510	100.0%	

⁽¹⁾ The government directly and indirectly holds 51.1% of equity interest in KEPCO.

Under the KOGAS Act, the government is allowed, but has no obligation, to guarantee bonds issued by the Company. The Company has never received any guarantees from the government. The government is not required under Korean law or by contract or its shareholding position to maintain the solvency of the Company.

The Company is dedicated to a policy of maintaining a high dividend payout ratio and a high dividend yield ratio. The Company paid dividends of 18.0% in 2010, 26.5% in 2011 and 23.6% in 2012, with dividend yields of 1.3% in 2010, 1.8% in 2011 and 2.3% in 2012.

The Korean Commercial Code requires the Company to appropriate as a legal reserve an amount equal to at least 10% of the cash dividends for each accounting period until the reserve equals 50% of the capital stock The legal reserve and the reserve for financial structure improvement are not available for cash dividends; however, these reserves may be credited to paid-in capital or accumulated deficit by resolution of the Company's shareholders.

⁽²⁾ Including 16,395 shares directly and indirectly held by directors and executives.

Related Party Transactions

All annual financial information included below is given on a consolidated basis under Korean IFRS, unless otherwise specified.

The Company engages in a variety of transactions with related parties.

The Company sold LNG to the power generating companies owned by KEPCO, which owns 24.5% of the Company's outstanding shares, amounting to Won 8,035 billion in 2010, Won 9,378 billion in 2011, Won 11,511 billion in 2012 and Won 3,374 billion in the first three months of 2013 on a billing basis which includes special consumption tax.

The table below provides a breakdown of the Company's sales to the five power generating subsidiaries of KEPCO for the periods indicated:

	For the year ended December 31,			For the three months ended March 31,	
	2010(1)	2011(1)	2012(1)	2013(1)	
		(in billions of Won)			
Korea Southern Power Co., Ltd	₩2,497	₩2,972	₩3,697	₩1,122	
Korea Midland Power Co., Ltd	1,951	2,068	2,507	779	
Korea Western Power Co., Ltd	1,782	2,341	2,838	750	
Korea East-West Power Co., Ltd	1,241	1,436	1,701	472	
Korea South-East Power Co., Ltd	564	561	768	251	

⁽¹⁾ Special consumption tax amounts are included.

The Company enters into various agreements with its wholly-owned subsidiary, Korea Gas Technology Corp., which provides system maintenance for the Company's gas-related facilities and designs and supervises the construction of natural gas production and supply facilities. The Company paid Korea Gas Technology Corp. service fees of Won 127 billion in 2010, Won 139 billion in 2011 and Won 138 billion in 2012. The Company enters into other transactions with Korea Gas Technology Corp., including the provision of administrative service and lease of office space.

The Company also receives dividend income from its subsidiary and affiliates. The Company received dividend income of Won 94 billion in 2010, Won 129 billion in 2011 and Won 97 billion in 2012 from its subsidiary, Korea Ras Laffan LNG Ltd. The Company also received dividend income of Won 19 billion in 2010, Won 22 billion in 2011 and Won 26 billion in 2012 from its affiliate, Korea LNG Ltd.

From time to time, the Company also provides long-term loans to its subsidiaries and affiliates. The following table sets forth the amount of long-term loans outstanding with respect to loans made to subsidiaries and affiliates as of the dates indicated.

	As of December 31,			As of March 31,	
	2010	2011	2012	2013	
		(in bill	າ)		
KOGAMEX Investment Manzanillo B.V	₩64	₩ 69	₩ 68	₩	72
Hyundai Yemen LNG Company	61	61	104		108
KG Krueng Mane Ltd	48	49	45		47
KG-Timor Leste Ltd	34	36	34		35
KOGAS Australia Pty Ltd	15	897	1,832	1,	929
KG Mozambique Ltd	11	27	99		121
Kogas Vostok LLC	0	0	1		1
South-East Asia Gas Pipeline Company Limited	0	0	28		34
KOGAS Prelude Pty. Ltd	0	0	3		4
KOGAS Mozambique, Lda	0	0	22		23

The Company also received interest income of Won 1 billion in 2010, Won 1 billion in 2011 and Won 2 billion in 2012 from Hyundai Yemen LNG Company, Won 4 billion in 2010, Won 4 billion in 2011 and Won 4 billion in 2012 from KOGAMEX Investment Manzanillo B.V., Won 0.3 billion in 2010, Won 29 billion in 2011 and Won 93 billion in 2012 from KOGAS Australia Pty. Ltd. and Won 1 billion in 2012 from South-East Asia Gas Pipeline Company Limited. In addition, the Company paid interest expenses of Won 11 billion in 2010, Won 10 billion in 2011 and Won 12 billion in 2012 to Korea LNG Trading Co., Ltd.

GUARANTEED ISSUERS

A subsidiary of the Company may become a Guaranteed Issuer by executing an accession agreement pursuant to the terms of the Agency Agreement. By executing the accession agreement, such subsidiary agrees to be bound by all the terms of the Program.

REGULATION OF THE KOREAN GAS INDUSTRY

The Company was established as a juridical entity under the KOGAS Act, and it is subject to the rules and regulations of that Act and the Act on the Improvement of Managerial Structure and Privatization of Public Enterprises ("Privatization Act"). The Company is also subject to all general rules and regulations applicable to corporations under the Korean Commercial Code ("KCC"), unless otherwise provided for in the KOGAS Act and the Privatization Act.

Under the KOGAS Act, the Company is licensed by the Ministry of Trade, Industry and Energy as a "wholesale gas supplier." Under the City Gas Business Act, a wholesale gas supplier has the right to supply natural gas on a wholesale basis to the city gas companies and bulk purchasing customers. At present, the Company is the only entity that is licensed as such, and the Company retains effective monopoly rights to supply gas on a wholesale basis to all city gas companies and all substantial power generating companies throughout Korea.

In Korea, primary legislation is supported by a presidential decree or ordinance, which in turn is supported by regulations. This section examines the legislation concerning the regulation of the gas industry in Korea. It does not consider any other facets of regulation such as company law and taxation.

Current Framework

The main regulatory bodies of the gas industry in Korea are the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance. At present, the Ministry of Trade, Industry and Energy is responsible for the primary regulation of the Company while local governments are responsible for the primary regulation of the city gas companies. In addition, the Ministry of Strategy and Finance is involved in planning amendments to the broad principles of the regulatory environment insofar as this impacts the government's dual goals of market liberalization and revenue maximization from the privatization program.

KOGAS Act, 1982 (wholly amended in 1986; last amended in 2013)

Under the KOGAS Act, the Company is established as a statutory juridical entity for the purpose of "preparing a basis for long-term supply of natural gas, promoting the convenience and benefit of national life and contributing to the promotion of public welfare." To achieve these objectives, the Act allows the Company to undertake the following activities:

- manufacture and supply natural gas and refine and sell by-products;
- · construct and operate natural gas receiving terminals and supply networks;
- · develop, export and import natural gas;
- · develop, export and import LPG;
- research and develop gas-related technologies relevant to the above activities;
- · engage in incidental activities relevant to the above activities;
- engage in other activities entrusted by the nation or local autonomous bodies; and
- engage in the business of developing and exploring oil resources (other than natural gas and LPG) and other related business subject to the approval of the Ministry of Trade, Industry and Energy when it is deemed necessary taking into consideration international oil market conditions.

Under Article 16 of the KOGAS Act, the Ministry of Trade, Industry and Energy is granted the power to direct and supervise the Company's activities relating to its business plan to supply natural gas throughout the country, its investment plan for safety control, matters relating to the use of the Company's gas pipeline network by other parties and matters relating to participation in overseas natural gas development activities and long-term import of natural gas.

The Company is required to obtain approval from the Ministry of Trade, Industry and Energy of its business plan under Article 16-2 of the KOGAS Act. This approval by the Ministry of Trade, Industry and Energy is deemed as approval of the related activities falling under various laws concerning land use and resource planning regarding public facilities. Public notice of such approval is also deemed as a public notice of approval of such related activities.

City Gas Business Act (wholly amended in 1983; last amended in 2013)

The purpose of the City Gas Business Act is to develop the city gas business while protecting consumer interest by devising rational and sound strategies and ensuring public safety by prescribing matters on the installation, maintenance and safety management of gas services and facilities that use gas as a fuel source. It classifies city gas business into three types: wholesale gas supply business, city gas supply business and city gas charge business. Under Article 3 of the City Gas Business Act, the Ministry of Trade, Industry and Energy is responsible for the licensing of wholesale gas suppliers while local or municipal governments are responsible for licensing city gas companies. The Company is at present the only entity in Korea with a wholesale license.

All wholesale natural gas prices are regulated under the City Gas Business Act. In setting prices, the Company prepares a proposal using traditionally accepted formula that is based on the Company's costs. The proposal is submitted to the Ministry of Trade, Industry and Energy followed by discussions with the Ministry of Strategy and Finance. Although not required by the Act, the Ministry of Trade, Industry and Energy's practice is to allow the Ministry of Strategy and Finance to review the pricing proposal to determine its acceptability to the public and with a view to managing its impact on inflation. The Company's wholesale pricing mechanism is further described in "Business—Sales—Wholesale Pricing of Natural Gas."

General license conditions for wholesale gas suppliers are set out in Article 5 of the City Gas Business Act Enforcement Rule. For a gas wholesaler, such conditions are as follows:

- the geographic supply area granted to a licensee cannot overlap with the geographic supply area of another licensee;
- the business plan provides for the licensee to maintain at least a 30% equity capital ratio for the first operating year and at least a 20% equity capital ratio thereafter; and
- the business plan provides for the stable procurement of raw materials and construction of main distribution pipelines.

Under Article 2 of the City Gas Business Act, the Company, as a holder of a wholesale license, is permitted to supply gas to city gas companies and bulk purchasing customers, as designated by the Ministry of Trade, Industry and Energy. The regulations define bulk purchasing customers as:

users who buy through pipelines at least 100,000 cubic meters of natural gas per month and
are located outside the geographic supply areas covered by the city gas companies or are
refused supply of natural gas for a justifiable reason by the city gas companies under the City
Gas Business Act even though such users are located in the geographic supply areas
covered by city gas companies;

- users of natural gas for the purpose of power generation with installed generation capacity of 100 megawatts or more;
- users who are equipped with storage facilities for LNG; or
- users who are refused the supply of LNG for fueling of sea vessels under the Ship Safety Act for a justifiable reason by the city gas companies under the City Gas Business Act.

The City Gas Business Act also sets the technical standards for each gas distribution facility and determines the safety obligations of the city gas companies.

Long-term Supply-Demand Plan

Under Article 18-2 of the City Gas Business Act, the Ministry of Trade, Industry and Energy is required every year to establish a gas supply-demand plan (the "Gas Plan") for the next five years and every two years to establish a Long-Term Plan for the next ten or more years.

The Gas Plan must include:

- · a supply-demand plan for city gas (including by region);
- · a plan for expanding gas service facilities and facility investments;
- a plan for importing city gas and a plan for gas storage in preparation for emergencies;
- current status of the city gas business and a plan for fostering the city gas business (including fundraising plans);
- · a plan for promoting the supply of city gas; and
- a plan to manage the demand of city gas.

The Long-Term Plan must include:

- long-term prospects for the supply and demand of natural gas;
- · an equipment supply plan; and
- · a plan for investing in natural gas.

Powers Granted to the Ministry of Trade, Industry and Energy

The City Gas Business Act endows the Ministry of Trade, Industry and Energy with extensive regulatory powers over the Company. Under Article 40 of the City Gas Business Act, the Ministry of Trade, Industry and Energy has the power to order the Company to make various "adjustments" deemed necessary for balanced demand and supply. An order of adjustment may apply to the following items:

- gas service facilities construction plans;
- · gas service (supply) plan;
- service areas, if the service area extends to two or more municipalities or provinces;
- · service conditions including gas prices;

- · calorific value, pressure and flammability of gas;
- joint usage of gas supply and delivery facilities;
- timing and quantities of LNG imports and exports; and
- sale of surplus gas to gas wholesalers made by persons who import gas for their own use.

Under Article 41 of the City Gas Business Act, the Company may be required to report to the Ministry of Trade, Industry and Energy on implementation of the adjustment order.

Energy Usage Rationalization Act (wholly amended in 2007; last amended in 2013)

The Energy Usage Rationalization Act (the "Energy Act") was established to "contribute to the sound growth of the national economy, the national welfare and the international efforts to minimize global warming by securing a stable supply and demand of energy, facilitating the rationalized and efficient usage of energy and reducing environmental deterioration caused by energy consumption." Article 3 of the Energy Act assigns to the government the ultimate responsibility for ensuring stable and efficient energy usage and reducing the emission of greenhouse gases while the participation and cooperation of energy users and suppliers is called for in the formulation of energy policy.

Under Article 4 of the Energy Act, the Ministry of Trade, Industry and Energy is required to prepare the Energy Usage Plan, the contents of which are to include plans relating to:

- conversion to an energy-conserving economic structure;
- increasing efficiency in energy use;
- · development of technology to promote rational and efficient energy use;
- education and public awareness campaigns to promote rational and efficient energy use;
- · interfuel substitution;
- safe handling of heat bearing or heat using materials;
- providing a system for forecasting prices in order to promote rational and efficient energy use;
- · measures to reduce greenhouse gas emissions through efficient energy use; and
- any other matters determined by the Ministry of Trade, Industry and Energy as necessary to promote efficient use of energy.

Similarly, under Article 6 of the Energy Act, plans for rational and efficient energy use are produced by municipal governments to implement relevant policies at the local and regional levels.

Under Article 9 of the Energy Act, the Company is required to submit an annual investment plan to the Ministry of Trade, Industry and Energy outlining demand, management initiatives, and covering issues including improving efficiency in production, conversion, transportation, storage and use of energy, decreasing energy consumption and reducing the emission of greenhouse gases. Upon review, the Ministry of Trade, Industry and Energy may request the Company to revise or supplement such plan.

Energy Use Rationalization Basic Plan

Pursuant to the requirements of the Energy Act, an Energy Usage Plan is required to be formulated and issued every five years. In order for the plan to be issued, the relevant central administrative agencies must be consulted and the plan also has to pass a review conducted by the National Committee for Promoting Energy Conservation.

The most recent Energy Usage Plan was issued in 2008 and included plans relating to the following:

- · development of technology to improve energy efficiency;
- sector-specific reforms in managing energy demand (including industry, transportation, building and public sectors);
- promoting, and converting to, energy efficient market (including introduction of energy efficiency objectives and elimination of tungsten light bulbs);
- · establishment of low-carbon and highly-efficient infrastructure; and
- improving national energy efficiency by 11.3% by 2012 compared to 2007.

The most recent Energy Usage Plan establishes policies for improving energy efficiency by managing energy demand in order to achieve a balance between supply and demand. It also establishes policies in response to climate change issues by, among other things, reducing greenhouse gasses and reducing the import of energy.

Framework Act on Low Carbon, Green Growth (effective on January 13, 2010; last amended in 2013)

The purpose of the Framework Act on Low Carbon, Green Growth (the "Green Act") is to promote the development of the national economy by laying down the foundation necessary for low carbon dioxide emission and by utilizing environmentally friendly technology and industries as new engines for economic growth. Article 41 of the Green Act requires the Basic Plan, which is described below, to include the following:

- trends and forecasts of domestic and overseas energy supply and demand;
- · measures to secure and manage stable energy supply;
- target of energy consumption;
- compositions of energy sources;
- saving energy and improving the efficiency of energy usage;
- supply and use of environmentally friendly energy, including new and renewable energy;
- measures to promote safe energy management;
- plans for the development and diffusion of energy related technology;
- · measures to promote the training and cultivation of energy professionals and experts; and
- measures to promote (i) international cooperation in implementing energy policies, (ii) the development and use of natural energy resources and (iii) public welfare through energy policies.

Basic National Energy Plan

A Basic Plan is to be formulated and issued every five years by obtaining the consent of central administrative agencies and by passing the review of the National Energy Commission under the Green Act. Each Basic Plan shall contain a long-term strategy to implement the plan over a period of 20 year. Included within the scope of the Basic Plan are guidelines to be followed by various other plans relating to the energy including the Long-Term Plan and the Energy Usage Plan.

The Basic Plan issued in 2008 includes the following:

- improving energy efficiency and reducing energy consumption;
- increasing the supply of clean energy and reducing the use of fossil fuels;
- · boosting the green energy industry; and
- ensuring that citizens have access to affordable energy.

The Basic Plan issued in August 2008 puts emphasis on a long-term strategy to achieve "low-carbon and green growth" goals for a post-petroleum era, which will replace previous policies which were focused on promoting stable energy supply by reducing energy demand and increasing energy efficiency.

Environmental Legislation

Air Environment Preservation Act (wholly amended in 2007; last amended in 2013)

The purpose of the Air Environment Preservation Act (the "Air Act") is to protect public health and prevent environmental damage arising from air pollution.

Articles 41 and 42 of the Air Act provide for the Ministry of Environment to determine standards for the sulphur content of fuel and that the Ministry of Environment can determine the supply area and range of facilities to use the respective fuels and may in some circumstances prohibit or restrict the production, sale or use of certain fuels. According to Article 43 of the Enforcement Decree issued in connection with Article 42 of the Air Act, in the areas that fail, or are likely to fail, to meet minimum air quality standards, only clean energy such as LNG may be used.

TAXATION

Certain U.S. Federal Income Tax Considerations

TO ENSURE COMPLIANCE WITH U.S. TREASURY DEPARTMENT CIRCULAR 230, HOLDERS ARE HEREBY NOTIFIED THAT: (A) ANY DISCUSSION OF UNITED STATES FEDERAL TAX ISSUES IN THIS OFFERING CIRCULAR IS NOT INTENDED OR WRITTEN TO BE RELIED UPON, AND CANNOT BE RELIED UPON, BY HOLDERS FOR THE PURPOSE OF AVOIDING PENALTIES THAT MAY BE IMPOSED ON HOLDERS UNDER THE INTERNAL REVENUE CODE; (B) SUCH DISCUSSION IS INCLUDED HEREIN BY THE ISSUERS IN CONNECTION WITH THE PROMOTION OR MARKETING (WITHIN THE MEANING OF CIRCULAR 230) BY THE ISSUERS OF THE TRANSACTIONS OR MATTERS ADDRESSED HEREIN; AND (C) HOLDERS SHOULD SEEK ADVICE BASED ON THEIR PARTICULAR CIRCUMSTANCES FROM AN INDEPENDENT TAX ADVISOR.

The following is a summary of certain U.S. federal income tax considerations that may be relevant to a holder of a Note that is a citizen or resident of the United States or a domestic corporation or that otherwise is subject to U.S. federal income taxation on a net income basis in respect of the Note (a "United States holder"). This summary is based on laws, regulations, rulings and decisions now in effect, all of which are subject to change. This summary deals only with United States holders that will purchase the Notes in their initial issuance for their issue price and will hold Notes as capital assets, and does not address tax considerations applicable to investors that may be subject to special tax rules, such as banks, tax-exempt entities, insurance companies, dealers in securities or currencies, traders in securities electing to mark to market, persons that will hold Notes as a position in a "straddle" or conversion transaction, or as part of a "synthetic security" or other integrated financial transaction or persons that have a "functional currency" other than the U.S. dollar. Any special U.S. federal income tax considerations relevant to a particular issue of Notes, including any Floating Rate Notes, Index Linked Notes, Dual Currency Notes, or Zero Coupon Notes will be provided in the applicable Pricing Supplement.

Investors should consult their own tax advisors in determining the tax consequences to them of holding Notes, including the application to their particular situation of the U.S. federal income tax considerations discussed below, as well as the application of state, local, foreign or other tax laws.

Payments of Interest

Payments of "qualified stated interest" (as defined below under "-Original Issue Discount") on a Note will be taxable to a United States holder as ordinary interest income at the time that such payments are accrued or are received (in accordance with the United States holder's method of tax accounting). If such payments of interest are made with respect to a Note denominated in a foreign currency (a "Foreign Currency Note"), the amount of interest income realized by a United States holder that uses the cash method of tax accounting will be the U.S. dollar value of the relevant foreign currency payment based on the exchange rate in effect on the date of receipt regardless of whether the payment in fact is converted into U.S. dollars. A United States holder that uses the accrual method of accounting for tax purposes will accrue interest income on the Note in the relevant foreign currency and translate the amount accrued into U.S. dollars based on the average exchange rate in effect during the interest accrual period (or portion thereof within the United States holder's taxable year), or, at the accrual basis United States holder's election, at the spot rate of exchange on the last day of the accrual period (or the last day of the taxable year within such accrual period if the accrual period spans more than one taxable year), or at the spot rate of exchange on the date of receipt, if such date is within five business days of the last day of the accrual period. A United States holder that makes such election must apply it consistently to all debt instruments from year to year and cannot change the

election without the consent of the Internal Revenue Service (the "IRS"). A United States holder that uses the accrual method of accounting for tax purposes will recognize foreign currency gain or loss, as the case may be, on the receipt of an interest payment made with respect to a Foreign Currency Note if the exchange rate in effect on the date the payment is received differs from the rate applicable to a previous accrual of that interest income. This foreign currency gain or loss will be treated as ordinary income or loss but generally will not be treated as an adjustment to interest income received on the Note.

Additional Amounts

Although interest payments to a United States holder are generally currently exempt from Korean taxation unless such United States holder has a permanent establishment in Korea, (see"-Korean Taxation—Tax on Interest on the Senior Notes" below) if the Korean law providing for the exemption is repealed or otherwise limited with respect to the Notes held by such United States holder, then in addition to interest on the Notes, such United States holder would be required to include in income any Additional Amounts received and any tax withheld from interest payments, notwithstanding that such tax withheld is not in fact received by such United States holder. A United States holder may be entitled to deduct or credit such tax, subject to applicable limitations and conditions under U.S. federal income tax laws. However, the election to deduct foreign taxes applies to all of the United States holder's foreign taxes for a particular taxable year. Interest income on a Note, including any Additional Amounts and any taxes withheld in respect thereof, generally will constitute foreign source income and generally will be considered "passive category income" in computing the foreign tax credit allowable to United States holder under U.S. federal income tax laws. A United States holder will generally be denied a foreign tax credit for foreign taxes imposed with respect to the Notes where it does not meet a minimum holding period requirement during which it is not protected from risk of loss. The rules governing the foreign tax credit are complex. Investors are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

Purchase, Sale and Retirement of Notes

A United States holder's tax basis in a Note generally will equal the cost of such Note to such holder, increased by any amounts includible in income by the holder as original issue discount and market discount and reduced by any amortized premium (each as described below) and any payments other than payments of qualified stated interest made on such Note. In the case of a Foreign Currency Note, the cost of such Note to a United States holder will be the U.S. dollar value of the foreign currency purchase price on the date of purchase. In the case of a Foreign Currency Note that is traded on an established securities market, a cash basis United States holder (and, if it so elects, an accrual basis United States holder) will determine the U.S. dollar value of the cost of such Note by translating the amount paid at the spot rate of exchange on the settlement date of the purchase. The amount of any subsequent adjustments to a United States holder's tax basis in a Note in respect of original issue discount and premium denominated in a foreign currency will be determined in the manner described under "—Original Issue Discount" and "—Premium" below. The conversion of U.S. dollars to the relevant foreign currency and the immediate use of the foreign currency to purchase a Foreign Currency Note generally will not result in taxable gain or loss for a United States holder.

Upon the sale, exchange or retirement of a Note, a United States holder generally will recognize gain or loss equal to the difference between the amount realized on the sale, exchange or retirement (less any accrued qualified stated interest, which will be taxable as such) and the United States holder's tax basis in such Note. If a United States holder receives a currency other than the U.S. dollar in respect of the sale, exchange or retirement of a Note, the amount realized will be the U.S. dollar value of the foreign currency received calculated at the exchange rate in effect on the date the instrument is disposed of or retired. In the case of a Foreign Currency Note that is traded on an

established securities market, a cash basis United States holder, and if it so elects, an accrual basis United States holder will determine the U.S. dollar value of the amount realized by translating such amount at the spot rate on the settlement date of the sale. The election available to accrual basis United States holders in respect of the purchase and sale of Foreign Currency Notes traded on an established securities market, discussed above, must be applied consistently to all debt instruments from year to year and cannot be changed without the consent of the IRS.

Except as described below with respect to Short-Term Notes (as defined below) and foreign currency gain or loss, gain or loss recognized by a United States holder generally will be long-term capital gain or loss if the United States holder has held the Note for more than one year at the time of disposition. Long-term capital gains recognized by an individual holder generally are subject to tax at a lower rate than short-term capital gains or ordinary income.

Gain or loss recognized by a United States holder on the sale, exchange or retirement of a Foreign Currency Note generally will be treated as ordinary income or loss to the extent that the gain or loss is attributable to changes in exchange rates during the period in which the holder held such Note. This foreign currency gain or loss will not be treated as an adjustment to interest income received on the Notes.

Original Issue Discount

If an Issuer issues Notes at a discount from their stated redemption price at maturity, and the discount is equal to or more than the product of one-fourth of one percent (0.25%) of the stated redemption price at maturity of the Notes multiplied by the number of full years to their maturity, the Notes will be "Original Issue Discount Notes." The difference between the issue price and the stated redemption price at maturity of the Notes will be the "original issue discount." The "issue price" of the Notes will be the first price at which a substantial amount of the notes are sold to the public (i.e., excluding sales of Notes to underwriters, placement agents, wholesalers, or similar persons). The "stated redemption price at maturity" will include all payments under the Notes other than payments of "qualified stated interest" (as determined below).

United States holders of Original Issue Discount Notes generally will be subject to the special tax accounting rules for obligations issued with original issue discount ("OID") provided by the Internal Revenue Code of 1986, as amended, and certain regulations promulgated thereunder (the "OID Regulations"). United States holders of such Notes should be aware that, as described in greater detail below, they generally must include OID in ordinary gross income for U.S. federal income tax purposes as it accrues, in advance of the receipt of cash attributable to that income.

In general, each United States holder of an Original Issue Discount Note, whether such holder uses the cash or the accrual method of tax accounting, will be required to include in ordinary gross income the sum of the "daily portions" of OID on the Note for all days during the taxable year that the United States holder owns the Note. The daily portions of OID on an Original Issue Discount Note are determined by allocating to each day in any accrual period a ratable portion of the OID allocable to that accrual period. Accrual periods may be of any length and may vary in length over the term of an Original Issue Discount Note, provided that no accrual period is longer than one year and each scheduled payment of principal or interest occurs on either the final day or the first day of an accrual period. In the case of an initial holder, the amount of OID on an Original Issue Discount Note allocable to each accrual period is determined by (a) multiplying the "adjusted issue price" (as defined below) of the Original Issue Discount Note at the beginning of the accrual period by the yield to maturity of such Original Issue Discount Note (appropriately adjusted to reflect the length of the accrual period) and (b) subtracting from that product the amount (if any) of qualified stated interest (as defined below) allocable to that accrual period. The yield to maturity of a Note is the discount rate that causes the

present value of all payments on the Note as of its original issue date to equal the issue price of such Note. The "adjusted issue price" of an Original Issue Discount Note at the beginning of any accrual period will generally be the sum of its issue price (generally including accrued interest, if any) and the amount of OID allocable to all prior accrual periods, reduced by the amount of all payments other than payments of qualified stated interest (if any) made with respect to such Note in all prior accrual periods. The term "qualified stated interest" generally means stated interest that is unconditionally payable in cash or property (other than debt instruments of the issuer) at least annually during the entire term of an Original Issue Discount Note at a single fixed rate of interest or, subject to certain conditions, based on one or more interest indices. In the case of an Original Issue Discount Note that is a Floating Rate Note, both the "yield to maturity" and "qualified stated interest" will generally be determined for these purposes as though the Original Issue Discount Note will bear interest in all periods at a fixed rate generally equal to the rate that would be applicable to the interest payments on the Note on its date of issue or, in the case of certain Floating Rate Notes, the rate that reflects the yield that is reasonably expected for the Note. (Additional rules may apply if interest on a Floating Rate Note is based on more than one interest index.) As a result of this "constant yield" method of including OID in income, the amounts includible in income by a United States holder in respect of an Original Issue Discount Note denominated in U.S. dollars generally are lesser in the early years and greater in the later years than the amounts that would be includible on a straight-line basis.

A United States holder generally may make an irrevocable election to include in its income its entire return on a Note (i.e., the excess of all remaining payments to be received on the Note, including payments of qualified stated interest, over the amount paid by such United States holder for such Note) under the constant-yield method described above. For Notes purchased at a premium, the United States holder making such election will also be deemed to have made the election (discussed below in "—Premium") to amortize premium currently on a constant-yield basis.

In the case of an Original Issue Discount Note that is also a Foreign Currency Note, a United States holder should determine the U.S. dollar amount includible in income as OID for each accrual period by (a) calculating the amount of OID allocable to each accrual period in the foreign currency using the constant-yield method described above, and (b) translating the amount of the foreign currency so derived at the average exchange rate in effect during that accrual period (or portion thereof within a United States holder's taxable year) or, at the United States holder's election (as described above under "-Payments of Interest"), at the spot rate of exchange on the last day of the accrual period (or the last day of the taxable year within such accrual period if the accrual period spans more than one taxable year), or at the spot rate of exchange on the date of receipt, if such date is within five business days of the last day of the accrual period. Because exchange rates may fluctuate, a United States holder of an Original Issue Discount Note that is also a Foreign Currency Note may recognize a different amount of OID income in each accrual period than would the holder of an otherwise similar Original Issue Discount Note denominated in U.S. dollars. All payments on an Original Issue Discount Note (other than payments of qualified stated interest) will generally be viewed first as payments of previously-accrued OID (to the extent thereof), with payments attributed first to the earliest-accrued OID, and then as payments of principal. Upon the receipt of an amount attributable to OID (whether in connection with a payment of an amount that is not qualified stated interest or the sale or retirement of the Original Issue Discount Note), a United States holder will recognize ordinary income or loss measured by the difference between the amount received (translated into U.S. dollars at the exchange rate in effect on the date of receipt or on the date of disposition of the Original Issue Discount Note, as the case may be) and the amount accrued (using the exchange rate applicable to such previous accrual).

Floating Rate Notes generally will be treated as "variable rate debt instruments" under the OID Regulations. Accordingly, the stated interest on a Floating Rate Note generally will be treated as "qualified stated interest" and such a Note will not have OID solely as a result of the fact that it provides

for interest at a variable rate. If a Floating Rate Note does not qualify as a "variable rate debt instrument," such Note will be subject to special rules (the "Contingent Payment Regulations") that govern the tax treatment of debt obligations that provide for contingent payments ("Contingent Debt Obligations"). A detailed description of the tax considerations relevant to United States holders of any such Notes will be provided in the applicable Pricing Supplement.

Certain of the Notes may be subject to special redemption, repayment or interest rate reset features, as indicated in the applicable Pricing Supplement. Notes containing such features, in particular Original Issue Discount Notes, may be subject to special rules that differ from the general rules discussed above. Purchasers of Notes with such features should carefully examine the applicable Pricing Supplement and should consult their own tax advisors with respect to such Notes since the tax consequences with respect to such features, and especially with respect to OID, will depend, in part, on the particular terms of the purchased Notes.

Premium

A United States holder of a Note that has an issue price (as determined under "-Original Issue Discount" above) greater than its stated redemption price at maturity (as determined above under "-Original Issue Discount" above) generally will be considered to have purchased the Note at a premium, and may elect to amortize such premium (as an offset to interest income), using a constant-yield method, over the remaining term of the Note. Such election, once made, generally applies to all bonds held or subsequently acquired by the United States holder on or after the first day of the first taxable year to which the election applies and may not be revoked without the consent of the IRS. A United States holder that elects to amortize such premium must reduce its tax basis in a Note by the amount of the premium amortized during its holding period. In the case of premium in respect of a Foreign Currency Note, a United States holder should calculate the amortization of such premium in the foreign currency. Amortization deductions attributable to a period reduce interest payments in respect of that period and therefore are translated into U.S. dollars at the exchange rate used by the United States holder for such interest payments. Exchange gain or loss will be realized with respect to amortized bond premium on such a Note based on the difference between the exchange rate on the date or dates such premium is recovered through interest payments on the Note and the exchange rate on the date on which the United States holder acquired the Note. With respect to a United States holder that does not elect to amortize bond premium, the amount of bond premium will be included in the United States holder's tax basis when the Note matures or is disposed of by the United States holder. Therefore, a United States holder that does not elect to amortize such premium and that holds the Note to maturity generally will be required to treat the premium as capital loss when the Note matures.

Short-Term Notes

The rules set forth above will also generally apply to Notes having maturities of not more than one year ("Short-Term Notes"), but with certain modifications.

The OID Regulations treat *none* of the interest on a Short-Term Note as qualified stated interest. Thus, all Short-Term Notes will be Original Issue Discount Notes. OID will be treated as accruing on a Short-Term Note ratably, or at the election of a United States holder, under a constant yield method.

A United States holder of a Short-Term Note that uses the cash method of tax accounting and is not a bank, securities dealer, regulated investment company or common trust fund, and does not identify the Short-Term Note as part of a hedging transaction, will generally not be required to include OID in income on a current basis. Such a United States holder may not be allowed to deduct all of the interest paid or accrued on any indebtedness incurred or maintained to purchase or carry such Note until the maturity of the Note or its earlier disposition in a taxable transaction. In addition, such a United States holder will be required to treat any gain realized on a sale, exchange or retirement of the Note

as ordinary income to the extent such gain does not exceed the OID accrued with respect to the Note during the period the United States holder held the Note. Notwithstanding the foregoing, a cash-basis United States holder of a Short-Term Note may elect to accrue original issue discount into income on a current basis (in which case the limitation on the deductibility of interest described above will not apply). A United States holder using the accrual method of tax accounting and certain cash-basis United States holders (including banks, securities dealers, regulated investment companies and common trust funds) generally will be required to include original issue discount on a Short-Term Note in income on a current basis.

Index Linked Notes and Other Notes Providing for Contingent Payments

The Contingent Payment Regulations, which govern the tax treatment of Contingent Debt Obligations, generally require accrual of interest income on a constant-yield basis in respect of such obligations at a yield determined at the time of their issuance, and may require adjustments to such accruals when any contingent payments are made. A detailed description of the tax considerations relevant to United States holders of any contingent debt obligations will be provided in the applicable Pricing Supplement.

Estate and Gift Taxation

As discussed in "—Korean Taxation—Inheritance Tax and Gift Tax," Korea imposes an inheritance tax on property located or deemed to be located in Korea (including the Notes) that passes on death, even if the decedent is a Non-Resident. Similarly a Korean gift tax will be imposed on transfers of the Notes by gift. Subject to certain conditions and limitations, the amount of any inheritance tax paid to Korea may be eligible for credit against the amount of U.S. federal estate tax imposed on the estate of a United States holder. The Korean gift tax generally will not be treated as a creditable foreign tax for U.S. tax purposes. Prospective purchasers should consult their personal tax advisors regarding the consequences of the imposition of the Korean inheritance or gift tax.

Information Reporting and Backup Withholding

The Paying Agent will be required to file information returns with the IRS with respect to payments made to certain United States holders of Notes. In addition, certain United States holders may be subject to backup withholding tax in respect of such payments if they do not provide their taxpayer identification numbers to the Paying Agent. Persons holding Notes who are not United States holders may be required to comply with applicable certification procedures to establish that they are not United States holders in order to avoid the application of such information reporting requirements and backup withholding tax.

Information with Respect to Foreign Financial Assets

Individual United States holders that own "specified foreign financial assets" with an aggregate value in excess of U.S.\$ 50,000 are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. "Specified foreign financial assets" include any financial accounts held at a non-United States financial institution, as well as securities issued by a non-United States issuer (which would include the Notes) that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. Regulations have been proposed that would extend this reporting requirement to certain entities that are treated as formed or availed of to hold direct or indirect interests in specified foreign financial assets based on certain objective criteria. United States holders who fail to report the required information could be subject to substantial penalties. Prospective investors should consult their own tax advisors concerning the application of these rules to their investment in Notes, including the application of the rules to their particular circumstances.

Korean Taxation

Republic of Korea

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

The taxation of non-resident individuals and non-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 on the Senior Notes

Interest on the Senior Notes paid to Non-Residents (except for their permanent establishments in Korea), being foreign currency denominated bonds issued by the Company and/or its Korean subsidiaries outside of Korea, is exempt from income tax and corporation tax (whether payable by withholding or otherwise) pursuant to the Special Tax Treatment Control Law (the "STTCL").

If the tax exemption under the STTCL referred to above were to cease to be in effect, the rate of income tax or corporation tax applicable to interest on the Senior Notes paid by the Company and its Korean subsidiary, 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 the Issuer. As the duty to withhold the tax is on the payer or the Issuer, Korean law does not automatically entitle the person who has suffered the withholding of Korean tax to recover from the government any part of the Korean tax withheld even if he subsequently produces evidence that he was entitled to have his tax withheld at a lower rate or be exempted, although in certain circumstances it may be possible to claim withheld tax from the payer or the Issuer. A Non-Resident that was subject to withholding of Korean tax on interest is entitled to claim refund of over-withheld tax directly from the Korean tax authorities effective from refund claims made on or after January 1, 2009.

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.

In order to obtain a reduction or exemption of withholding tax under an applicable tax treaty upon any income to which Korean withholding tax applies, a Non-Resident should submit either an application for tax exemption or an application for treaty-reduced tax rates to either the payer or the entity obligated to withhold such tax prior to the date upon which such income is to be paid to the Non-Resident.

Tax on Capital Gains

Korean tax laws currently exclude from Korean taxation gains made by a Non-Resident without a permanent establishment in Korea from the sale of the Notes to other Non-Residents (other than to their permanent establishments in Korea). In addition, capital gains earned by Non-Residents with or without permanent establishments in Korea from the transfer taking place outside Korea of the Notes

issued by the Company and/or its Korean subsidiaries are currently exempt from taxation by virtue of STTCL, provided that the issuance of the Notes issued by the Company and/or its Korean subsidiaries 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 tax treaty reducing or eliminating tax on capital gains, the applicable rate of tax would be the lower of 11% (including local income tax) of the gross realization proceeds or (subject to the production of satisfactory evidence of the acquisition cost and certain direct transaction costs of the relevant Note issued by the Company and/or its Korean subsidiaries) 22% (including local income tax) of the realized gain (i.e., the excess of the gross realization proceeds over the acquisition cost and certain direct transaction costs) made. If such evidence shows that no gain (or a loss) was made on the sale, no Korean tax is payable. There is no provision under relevant Korean law to allow offsetting of gains and losses or otherwise aggregating transactions for the purpose of computing the net gain attributable to sales of the Notes issued by Korean companies. The purchaser or any other designated withholding agent of the Notes issued by the Company and/or its Korean subsidiaries 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% of the gross realization proceeds. Any amounts withheld by the purchaser or such 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 such 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 resided in Korea for at least one year immediately prior to his death and (b) all property located in Korea that 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%. 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 issued by the Company and/or its Korean subsidiaries by inheritance or gift. Prospective purchasers should consult their personal tax advisors regarding the consequences of the imposition of the Korean inheritance or gift tax.

Stamp Duty and Securities Transaction Tax

No stamp, issue or registration duties will be payable in Korea by the Holders in connection with the issue of the Notes except for a nominal amount of stamp duty on certain documents executed in Korea which will be paid by the Issuer. 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, Australia, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, The Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, the United Kingdom and the United States of America, under which the rate of withholding tax on interest is reduced, generally to between 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 the Issuer a certificate as to his residence. In the absence of sufficient proof, the payer or the Issuer must withhold taxes in accordance with the above discussion.

Further, in order for a Non-Resident to obtain the benefit of a tax exemption on certain Korean source income (e.g., interest and capital gains) under an applicable tax treaty, Korean tax law requires such Non-Resident (or its agents) to submit to the payer of such Korean source income an application for tax exemption under a tax treaty along with a certificate of tax residency of such Non-Resident issued by a competent authority of the non-resident's country of tax residence, subject to certain exceptions. The payer of such Korean source income, in turn, is required to submit such application to the relevant district tax office by the ninth day of the month following the date of the first payment of such income. However, this requirement does not apply to exemptions under Korean tax law.

In addition, under amendments to the Corporate Income Tax Act promulgated on December 31, 2011, in order to have the reduced tax treaty withholding tax rate applied to Korean source income (e.g. interest) from July 1, 2012, an offshore beneficial owner of the income must first submit an application for such treatment to the relevant tax withholding obligor, subject to certain exceptions.

Withholding and Gross Up

As mentioned above, interest paid on the Senior Notes is exempt from any withholding or deduction on account of income tax or corporation tax pursuant to STTCL. However, in the event that the payer or the Issuer is 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—Taxation") the Issuer has agreed to pay (subject to the customary exceptions as set out in "Terms and Conditions of the Notes—Taxation") 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.

Payment of the Guarantee

It is not entirely clear whether the interest paid by a Korean parent company as a guarantor of the bonds issued by its foreign subsidiary is subject to Korean withholding tax under Korean tax law. The National Tax Service ("NTS") had interpreted in its ruling on May 20, 2010 that such interest should be subject to Korean withholding tax. However, the Ministry of Strategy and Finance issued a new tax ruling on May 20, 2011 that the interest paid by a Korean parent company as a guarantor of the borrowings of its foreign subsidiary from foreign financial institutions does not constitute Korean source income, and therefore would not be subject to Korean withholding tax. Although a ruling issued by the Ministry of Strategy and Finance can supersede a ruling issued by the NTS, it remains unclear whether the interest paid by the Guarantor to a Non-Resident under the Guarantee would be subject to Korean withholding tax (which, if applicable would be at the rate of 22% (including the local income tax) or

such lower rate as is applicable under the tax treaty between Korea and the country in which the Non-Resident resides). In the event that any withholding or deduction is imposed on such interest paid under the Guarantee by law or by any Korean tax authority, the Issuer has agreed that such payment shall be increased by such amount as may be necessary to ensure that the Non-Resident receives a net amount, free and clear of all Korean taxes, equal to the full amount which such Non-Resident would have received had such payment not been subject to such taxes, subject to certain exceptions.

European Union Savings Directive

Under Council Directive 2003/48/EC on the taxation of savings income (the "Savings Directive"), each Member State of the European Union (the "EU") is required to provide to the tax authorities of another Member State details of payments of interest or other similar income paid by a person within its jurisdiction to, or secured by such a person for, an individual beneficial owner resident in, or certain limited types of entity established in, that other Member State. However, for a transitional period, Austria and Luxembourg will (unless during such period they elect otherwise) instead operate a withholding system in relation to such payments. Under such a withholding system, the beneficial owner of the interest payment must be allowed to elect that certain provision of information procedures should be applied instead of withholding. The current rate of withholding is 35%. The transitional period is to terminate at the end of the first full fiscal year following agreement by certain non-EU countries to exchange of information procedures relating to interest and other similar income.

A number of non-EU countries, and certain dependent or associated territories of certain Member States, have adopted or agreed to adopt similar measures (either provision of information or transitional withholding) in relation to payments made by a person within their respective jurisdictions to, or secured by such a person for, an individual beneficial owner resident in, or certain limited types of entity established in, a Member State. In addition, the Member States have entered into provision of information or transitional withholding arrangements with certain of those countries and territories in relation to payments made by a person in a Member State to, or secured by such a person for, an individual beneficial owner resident in, or certain limited types of entity established in, one of those countries or territories.

A proposal for amendments to the Savings Directive has been published, including a number of suggested changes which, if implemented, would broaden the scope of the rules described above. Investors who are in any doubt as to their position should consult their professional advisers.

If a payment under a Note were to be made by a person in a Member State or another country or territory which has opted for a withholding system and an amount of, or in respect of, tax were to be withheld from that payment pursuant to the Savings Directive or any law implementing or complying with, or introduced in order to conform to the Savings Directive, neither the Issuer nor any Paying Agent nor any other person would be obliged to pay additional amounts under the terms of such Note as a result of the imposition of such withholding tax. The Issuer is, however, required to maintain a Paying Agent in a Member State that will not be obliged to withhold or deduct tax pursuant to the Savings Directive or any such law.

CERTAIN ERISA CONSIDERATIONS

Due to the fiduciary duties imposed and transactions prohibited by Title I of the U.S. Employee Retirement Income Security Act of 1974, as amended ("ERISA"), and Section 4975 of U.S. Internal Revenue Code of 1986, as amended (the "Code"), each retirement, pension, individual retirement account or other employee benefit plan subject thereto, including entities whose underlying assets are considered to include "plan assets" of any such plan, account or arrangement (each, a "Plan"), considering an investment in the Notes should consult with its counsel regarding the legal consequences of such an investment.

Section 406 of ERISA and Section 4975 of the Code prohibit certain transactions involving the assets of a Plan and persons who are "parties in interest," within the meaning of ERISA, or "disqualified persons," within the meaning of Section 4975 of the Code, with respect to the Plan. Thus, a fiduciary considering a purchase of the Notes should also consider whether such an investment might constitute or give rise to a prohibited transaction under ERISA or the Code. For example, if the Issuer, a Guarantor or any of their respective affiliates were considered to be a "party in interest" within the meaning of ERISA, or a "disqualified person" within the meaning of the Code, the acquisition or holding of the Notes by or on behalf of the Plan could result in a prohibited transaction unless an exemption is available. A party in interest or disqualified person who engaged in a non-exempt prohibited transaction may be subject to excise taxes and other penalties and liabilities under ERISA and/or the Code. In addition, the fiduciary of the Plan that engaged in such a non-exempt prohibited transaction may be subject to penalties and liabilities under ERISA and/or the Code.

Certain exemptions from the prohibited transaction provisions of ERISA and the Code could be applicable, depending on the plan fiduciary who makes the decision on behalf of the Plan to purchase the Notes and the terms of the Notes. Among these exemptions are Section 408(b)(17) of ERISA and Section 4975(d)(20) of the Code, relating to transactions with certain service providers, Prohibited Transaction Class Exemption 90-1, relating to investments by insurance company pooled separate accounts, Prohibited Transaction Class Exemption 91-38, relating to investments by bank collective investment funds, Prohibited Transaction Class Exemption 84-14, relating to investments made by a "qualified professional asset manager," Prohibited Transaction Class Exemption 95-60 relating to investments by insurance company general accounts and Prohibited Transaction Class Exemption 96-23, relating to investments made by in-house asset managers, although there can be no assurance that all of the conditions of any such exemptions will be satisfied.

Employee benefit plans which are governmental plans (as defined in Section 3(32) of ERISA), certain church plans (as defined in Section 3(33) of ERISA) and non-U.S. plans may not be subject to the prohibited transaction provisions of Section 406 of ERISA or Section 4975 of the Code, but may be subject to other laws or regulations that are similar to such provisions of ERISA or the Code (collectively, "Similar Laws").

Because of the foregoing, each purchaser and subsequent transferee of Notes or any interest therein will be deemed to have represented and warranted that either (i) no portion of the assets used by such purchaser or subsequent transferee to acquire or hold the Notes or any interest therein constitutes assets of any Plan or an employee benefit plan subject to provisions under any Similar Laws or (ii) the acquisition and holding of the Notes or any interest therein will not constitute a non-exempt prohibited transaction under Section 406 of ERISA or Section 4975 of the Code or a similar violation under any applicable Similar Law.

The foregoing discussion is general in nature and is not intended to be all-inclusive. Due to the complexity of these rules and the penalties that may be imposed upon persons involved in non-exempt prohibited transactions, it is particularly important that fiduciaries, or other persons considering purchasing any Notes on behalf of, or with the assets of, any Plan, consult with their counsel regarding the matters described herein.

INDEPENDENT ACCOUNTANTS

The unaudited interim consolidated financial statements of the Company as of March 31, 2013 and for the three months ended March 31, 2013 and 2012, included elsewhere in this offering circular, have been reviewed by Samil PricewaterhouseCoopers, independent accountants, as started in their report appearing herein.

The consolidated annual financial statements of the Company as of and for the year ended December 31, 2012, included elsewhere in this offering circular, have been audited by Samil PricewaterhouseCoopers, independent accountants, who did not audit the financial statements of certain consolidated subsidiaries, whose financial statements represent 12% of the consolidated total assets as of December 31, 2012 and 2% of the consolidated total sales for the year ended December 31, 2012, as stated in their report appearing herein.

The consolidated annual financial statements of the Company as of and for the years ended December 31, 2011 and 2010, included elsewhere in this offering circular, have been audited by KPMG Samjong Accounting Corp., independent auditors, as stated in their report appearing herein. Their report contains explanatory paragraphs that state: 1) as described in note 2.1, effective from January 1, 2012, the Company early adopted the amendment of K-IFRS 1001, Presentation of Financial Statements, which requires other comprehensive income items to be presented into two groups on the basis of whether they are potentially reclassifiable to profit or loss subsequently (reclassification adjustments), 2) as described in note 50, the Company adjusted the settled income arising from raw material cost pass-through adjustment system ("cost adjustment system") by deducting from cost of sales during the year instead of recognizing sales revenue, and reclassified the accumulated uncollected settled income from financial asset to other non-financial asset, and 3) the accompanying consolidated financial statements of the Company for the years ended December 31, 2011 and 2010 have been restated based on the items described above for the purpose of this Offering Circular.

SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS

The Dealers have, in a program agreement dated September 30, 2010, as further amended, supplemented and/or restated from time to time, (the "Program Agreement"), agreed with the Issuer and the Guarantor a basis upon which they or any of them may from time to time agree to purchase Notes or, in the case of Definitive IAI Registered Notes, procure purchasers of Notes. Any such agreement will extend to those matters stated under "Form of the Notes" and "Terms and Conditions of the Notes" above. In the Program Agreement, the Company and Guaranteed Issuers have 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

Certain of the Dealers and their affiliates may from time to time perform various investment banking, commercial banking or advisory services for the Issuer, the Guarantor and their respective affiliates, for which they have received and may in the future receive customary compensation. The Dealers or their affiliates may own securities issued by the Issuer or the Guarantor. The Dealers or their affiliates may purchase the Notes and be allocated Notes for asset management and/or proprietary purposes but not with a view to distribution.

The Dealers or their respective affiliates may purchase Notes for its or their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to Notes and/or other securities of the Issuer, the Guarantor or their respective subsidiaries or associates at the same time as the offer and sale of Notes or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately from any existing sale or resale of Notes to which this Offering Circular relates (notwithstanding that such selected counterparties may also be purchasers of Notes).

Transfer Restrictions

As a result of the following restrictions, purchasers of Notes in the United States are advised to consult legal counsel prior to making any purchase, offer, sale, resale or other transfer of such Notes.

Each purchaser of Registered Notes (other than a person purchasing an interest in a Registered Global Note with a view to holding it in the form of an interest in the same Global Note) will be deemed to have acknowledged, represented and agreed as follows (terms used in this paragraph that are defined in Rule 144A or in Regulation S are used herein as defined therein):

- (i) that either: (a) it is a QIB, purchasing (or holding) the Notes for its own account or for the account of one or more QIBs and it is aware that any sale to it is being made in reliance on Rule 144A or (b) it is an Institutional Accredited Investor, that, prior to its purchase of the Notes has delivered to the Registrar an IAI Investment Letter in the form as set forth below or (c) it is outside the United States and is not a U.S. person;
- (ii) that the Notes have not been and will not be registered under the Securities Act or any other applicable U.S. state securities laws and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except as set forth below;
- (iii) that, unless it holds an interest in a Regulation S Global Note and either is a person located outside the United States or is not a U.S. person, if in the future it decides to resell, pledge or otherwise transfer the Notes or any beneficial interests in the Notes, it will do so, prior to the date which is one year after the later of the last Issue Date for the Series and the last date on which the Issuer or an affiliate of the Issuer was the owner of such Notes, only (a) to the Issuer or any affiliate thereof, (b) inside the United States to a person whom the seller reasonably believes is a QIB purchasing for its own account or for the account of a QIB in a transaction meeting the requirements of Rule 144A, (c) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act, (d) pursuant to the exemption from registration provided by Rule 144 under the Securities Act, in each case in accordance with all applicable U.S. state securities laws;
- (iv) it will, and will require each subsequent holder to, notify any purchaser of the Notes from it of the resale restrictions referred to in paragraph (iii) above, if then applicable;
- (v) that Notes initially offered in the United States to QIBs will be represented by one or more Rule 144A Global Notes, that Notes offered to Institutional Accredited Investors will be in the form of Definitive IAI Registered Notes and that Notes offered outside the United States in reliance on Regulation S will be represented by one or more Regulation S Global Notes;
- (vi) that the Notes, other than the Regulation S Global Notes, will bear a legend to the following effect unless otherwise agreed to by the Company and Guaranteed Issuers:

"THE NOTES [AND THE RELATED GUARANTEE] ([COLLECTIVELY,] THE "SECURITIES") HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY OTHER APPLICABLE U.S. STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT AS SET FORTH IN THE FOLLOWING SENTENCE. BY ITS ACQUISITION HEREOF, THE HOLDER (A) REPRESENTS THAT (1) IT IS A "QUALIFIED INSTITUTIONAL BUYER" (AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT) PURCHASING THE SECURITIES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF ONE OR MORE QUALIFIED INSTITUTIONAL BUYERS OR (2) IT IS AN INSTITUTIONAL "ACCREDITED INVESTOR" (AS DEFINED IN RULE 501(A)(1), (2), (3) OR (7) UNDER THE SECURITIES ACT) (AN "INSTITUTIONAL ACCREDITED INVESTOR"); (B) AGREES THAT IT WILL NOT RESELL OR OTHERWISE TRANSFER THE SECURITIES EXCEPT IN ACCORDANCE WITH THE AGENCY AGREEMENT AND, PRIOR TO THE DATE WHICH IS

ONE YEAR AFTER THE LATER OF THE LAST ISSUE DATE FOR THE SERIES AND THE LAST DATE ON WHICH THE ISSUER OR AN AFFILIATE OF THE ISSUER WAS THE OWNER OF SUCH SECURITIES OTHER THAN (1) TO THE ISSUER OR ANY AFFILIATE THEREOF, (2) INSIDE THE UNITED STATES TO A PERSON WHOM THE SELLER REASONABLY BELIEVES IS A QUALIFIED INSTITUTIONAL BUYER WITHIN THE MEANING OF RULE 144A UNDER THE SECURITIES ACT PURCHASING FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER IN A TRANSACTION MEETING THE REQUIREMENTS OF RULE 144A, (3) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 903 OR RULE 904 UNDER THE SECURITIES ACT, (4) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (5) PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT, IN EACH CASE IN ACCORDANCE WITH ALL APPLICABLE SECURITIES LAWS OF THE STATES OF THE UNITED STATES AND ANY OTHER JURISDICTION; AND (C) IT AGREES THAT IT WILL DELIVER TO EACH PERSON TO WHOM THESE SECURITIES IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND.

THESE SECURITIES AND RELATED DOCUMENTATION (INCLUDING, WITHOUT LIMITATION, THE AGENCY AGREEMENT REFERRED TO HEREIN) MAY BE AMENDED OR SUPPLEMENTED FROM TIME TO TIME, WITHOUT THE CONSENT OF, BUT UPON NOTICE TO, THE HOLDERS OF SUCH SECURITIES SENT TO THEIR REGISTERED ADDRESSES, TO MODIFY THE RESTRICTIONS ON AND PROCEDURES FOR RESALES AND OTHER TRANSFERS OF THESE SECURITIES TO REFLECT ANY CHANGE IN APPLICABLE LAW OR REGULATION (OR THE INTERPRETATION THEREOF) OR IN PRACTICES RELATING TO RESALES OR OTHER TRANSFERS OF RESTRICTED SECURITIES GENERALLY. THE HOLDER OF THESE SECURITIES SHALL BE DEEMED, BY THEIR ACCEPTANCE OR PURCHASE HEREOF, TO HAVE AGREED TO ANY SUCH AMENDMENT OR SUPPLEMENT (EACH OF WHICH SHALL BE CONCLUSIVE AND BINDING ON THE HOLDER HEREOF AND ALL FUTURE HOLDERS OF THESE SECURITIES AND ANY SECURITIES ISSUED IN EXCHANGE OR SUBSTITUTION THEREFOR, WHETHER OR NOT ANY NOTATION THEREOF IS MADE HEREON).";

(vii) if it is outside the United States and is not a U.S. person, that if it should resell or otherwise transfer the Notes prior to the expiration of the distribution compliance period (defined as 40 days after the later of the commencement of the offering and the closing date with respect to the original issuance of the Notes), it will do so only (a)(i) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act or (ii) to a QIB in compliance with Rule 144A and (b) in accordance with all applicable U.S. state securities laws; and it acknowledges that the Regulation S Global Notes will bear a legend to the following effect unless otherwise agreed to by the Issuer:

"THE NOTES [AND THE RELATED GUARANTEE] ([COLLECTIVELY,] THE "SECURITIES") HAVE NOT BEEN AND WILL NOT BE REGISTERED UNDER THE U.S. SECURITIES ACT OF 1933, AS AMENDED, OR ANY OTHER APPLICABLE U.S. STATE SECURITIES LAWS AND, ACCORDINGLY, MAY NOT BE OFFERED OR SOLD WITHIN THE UNITED STATES OR TO, OR FOR THE ACCOUNT OR BENEFIT OF, U.S. PERSONS EXCEPT IN ACCORDANCE WITH THE AGENCY AGREEMENT AND PURSUANT TO AN EXEMPTION FROM REGISTRATION UNDER THE SECURITIES ACT OR PURSUANT TO AN EFFECTIVE REGISTRATION STATEMENT UNDER THE SECURITIES ACT. THIS LEGEND SHALL CEASE TO APPLY UPON THE EXPIRY OF THE PERIOD OF 40 DAYS AFTER THE COMPLETION OF THE DISTRIBUTION OF ALL THE NOTES OF THE TRANCHE OF WHICH THIS NOTE FORMS A PART"; and

(viii) that the Company, the Guaranteed Issuers and others will rely upon the truth and accuracy of the foregoing acknowledgements, representations and agreements and agrees that if any of such acknowledgements, representations or agreements made by it are no longer accurate, it shall promptly notify the Issuer and the Guarantor; and if it is acquiring any Notes as a fiduciary or agent for one or more accounts it represents that it has sole investment discretion with respect to each such account and that it has full power to make the foregoing acknowledgements, representations and agreements on behalf of each such account.

Persons wishing to transfer an interest from one Registered Global Note to another or from global to definitive form or vice versa will be required to deliver to certain transfer certificate in the form attached to the Agency Agreement.

Institutional Accredited Investors who purchase Registered Notes in definitive form offered and sold in the United States in reliance upon the exemption from registration provided by Regulation D of the Securities Act are required to execute and deliver to the Registrar an IAI Investment Letter. Upon execution and delivery of an IAI Investment Letter by an Institutional Accredited Investor, Notes will be issued in definitive registered form; see "Form of the Notes".

The IAI Investment Letter will state, among other things, the following:

- (i) that the Institutional Accredited Investor has received a copy of this offering circular and such other information as it deems necessary in order to make its investment decision;
- (ii) that the Institutional Accredited Investor understands that any subsequent transfer of the Notes is subject to certain restrictions and conditions set forth in this offering circular and the Notes (including those set out above) and that it agrees to be bound by, and not to resell, pledge or otherwise transfer the Notes except in compliance with, such restrictions and conditions and the Securities Act;
- (iii) that, in the normal course of its business, the Institutional Accredited Investor invests in or purchases securities similar to the Notes;
- (iv) that the Institutional Accredited Investor is an Institutional Accredited Investor within the meaning of Rule 501(a)(1), (2), (3) or (7) of Regulation D under the Securities Act that is an institution and has such knowledge and experience in financial and business matters as to be capable of evaluating the merits and risks of its investment in the Notes, and it and any accounts for which it is acting are each able to bear the economic risk of its or any such accounts' investment for an indefinite period of time;
- (v) that the Institutional Accredited Investor is acquiring the Notes purchased by it for its own account or for one or more accounts (each of which is an Institutional Accredited Investor) as to each of which it exercises sole investment discretion and not with a view to any distribution of the Notes, subject, nevertheless, to the understanding that the disposition of its property shall at all times be and remain within its control; and
- (vi) that, in the event that the Institutional Accredited Investor purchases Notes, it will acquire Notes having a minimum purchase price of at least U.S.\$500,000 (or the approximate equivalent in another Specified Currency).

No sale of Legended Notes in the United States to any one purchaser will be for less than U.S.\$200,000 (or its foreign currency equivalent) principal amount or, in the case of sales to Institutional Accredited Investors, U.S.\$500,000 (or its foreign currency equivalent) principal amount and no Legended Note will be issued in connection with such a sale in a smaller principal amount. If

the purchaser is a non-bank fiduciary acting on behalf of others, each person for whom it is acting must purchase at least U.S.\$200,000 (or its foreign currency equivalent) or, in the case of sales to Institutional Accredited Investors, U.S.\$500,000 (or its foreign currency equivalent) principal amount of Registered Notes.

Selling Restrictions

United States of America

The Notes have not been and will not be registered under the Securities Act and may not be offered or sold within the United States or to, or for the account or benefit of, U.S. persons except (i) to QIBs in reliance on Rule 144A, (ii) to Institutional Accredited Investors, that, prior to their purchase of the Notes have furnished an IAI Investment Letter and (iii) in accordance with Regulation S under the Securities Act.

The Bearer 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 a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meaning given to them by the U.S. Internal Revenue Code of 1986 and regulations thereunder.

In connection with any Notes which are offered or sold outside the United States in reliance on an exemption from the registration requirements of the Securities Act provided under Regulation S ("Regulation S Notes") each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent and agree, that it will not offer, sell or deliver such Regulation S Notes (i) as part of their distribution at any time or (ii) otherwise until 40 days after the completion of the distribution, as determined and certified by the Relevant Dealer or, in the case of an issue of Notes on a syndicated basis, the relevant lead manager, of all Notes of the Tranche of which such Regulation S Notes are a part, within the United States or to, or for the account or benefit of, U.S. persons. Each Dealer has further agreed, and each further Dealer appointed under the Program will be required to agree, that it will send to each dealer to which it sells any Regulation S Notes during the distribution compliance period a confirmation or other notice setting forth the restrictions on offers and sales of the Regulation S Notes within the United States or to, or for the account or benefit of, U.S. persons.

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 (whether or not participating in the offering) may violate the registration requirements of the Securities Act if such offer or sale is made otherwise than in accordance with an applicable exemption from registration under the Securities Act.

Dealers may arrange for the resale of Notes to QIBs pursuant to Rule 144A and each such purchaser of Notes is hereby notified that the Dealers may be relying on the exemption from the registration requirements of the Securities Act provided by Rule 144A. The minimum aggregate principal amount of Notes which may be purchased by a QIB pursuant to Rule 144A is U.S.\$200,000 (or the approximate equivalent thereof in any other currency).

Each issuance of Index Linked Notes or Dual Currency Notes shall be subject to such additional U.S. selling restrictions as the Issuer, the Guarantor 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.

Public Offer Selling Restriction under the Prospectus Directive

In relation to each Member State of the EEA which has implemented the Prospectus Directive (each, a "Relevant Member State"), each Dealer has represented and agreed, and each further Dealer

appointed under the Program will be required to represent and agree, that with effect from and including the date on which the Prospectus Directive is implemented in that Relevant Member State (the "Relevant Implementation Date"), it has not made and will not make an offer of Notes which are the subject of the offering contemplated by this offering circular to the public in that Relevant Member State, except that it may, with effect from and including the Relevant Implementation Date, make an offer of such Notes to the public in that Relevant Member State:

- (a) if the Pricing Supplement in relation to the Notes specify that an offer of those Notes may be made other than pursuant to Article 3(2) of the Prospectus Directive in that Relevant 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 Relevant Member State or, where appropriate, approved in another Relevant Member State and notified to the competent authority in that Relevant Member State, provided that any such prospectus has subsequently been completed by the Pricing Supplement contemplating such Non-exempt Offer, in accordance with the Prospectus Directive, in the period beginning and ending on the dates specified in such prospectus or Pricing Supplement, as applicable and the Issuer has consented in writing to its use for the purpose of that Non-exempt offer;
- (b) at any time to any legal entity which is a qualified investor as defined in the Prospectus Directive;
- (c) at any time to fewer than 100 or, if the Relevant Member State has implemented the relevant provision of the 2010 PD Amending Directive, 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive) as permitted under the Prospectus Directive, subject to obtaining the prior consent of the Relevant Dealer or Dealers nominated by the Issuer for any such offer; or
- (d) at any time in any other circumstances falling within Article 3(2) of the Prospectus Directive,

provided that no such offer of Notes referred to in (b) to (d) above shall require the Issuer, the Guarantor 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.

For the purposes of this provision, the expression an "offer of Notes to the public" in relation to any Notes in any Relevant 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, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (and amendments thereto, including the 2010 PD Amending Directive, to the extent implemented in the Relevant Member State), and includes any relevant implementing measure in the Relevant Member State and the expression "2010 PD Amending Directive" means Directive 2010/73/EU.

United Kingdom

Each Dealer has represented and agreed, and each further Dealer appointed under the Program will be required to represent 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 UK Financial Services and Markets Act 2000 (the "FSMA") by the Issuer;

- (b) it has only communicated or caused to be communicated and will only communicate or cause to be communicated an invitation or inducement to engage in investment activity (within the meaning of Section 21 of the FSMA) received by it in connection with the issue or sale of any Notes in circumstances in which Section 21(1) of the FSMA does not apply to the Issuer or the Guarantor; and
- (c) it has complied and will comply with all applicable provisions of the FSMA with respect to anything done by it in relation to any Notes in, from or otherwise involving the United Kingdom.

Japan

The Notes have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Law No. 25 of 1948, as amended) (the "FIEA"). 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 or sold and will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (as defined under Item 5, Paragraph 1, Article 6 of the Foreign Exchange and Foreign Trade Control Law (Law No. 228 of 1949, as amended)) or to others for reoffering or resale, directly or indirectly, in Japan or to, or for the benefit of, a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the FIEA and other applicable laws, regulations and ministerial guidelines of Japan.

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 the 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), or any person pursuant to Section 275(1A), and in accordance with the conditions specified in Section 275, of the SFA 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 (as defined in Section 239(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the Notes, as the case may be, pursuant to an offer made under Section 275 of the SFA except:

- (1) to an institutional investor or to a relevant person (defined in Section 275(2) of the SFA) or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;
- (2) where no consideration is or will be given for the transfer;
- (3) where the transfer is by operation of law;
- (4) as specified in Section 276(7) of the SFA; or
- (5) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore.

Hong Kong

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

- (a) it has not offered or sold, and will not offer or sell, in Hong Kong Special Administrative Region of the People's Republic of China ("Hong Kong"), by means of any document, any Notes (except for Notes which are a "structured product" as defined in the Securities and Futures Ordinance (Cap. 571) of Hong Kong) other than (i) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made under that Ordinance, or (ii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies Ordinance (Cap. 32) of Hong Kong or which do not constitute an offer to the public within the meaning of that Ordinance; and
- (b) it has not issued, or had in its possession for the purposes of issue, and will not issue or have in its possession for the purposes of issue, whether in Hong Kong or elsewhere, any advertisement, invitation or document relating to the Notes, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance of Hong Kong and any rules made under that Ordinance.

The Dealers may offer and sell Notes through certain of their affiliates. One or more of the Dealers may use affiliates or other appropriately licensed entities for sales of the Notes in jurisdictions in which such Dealers are not otherwise permitted.

Korea

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

(a) it has not offered, sold or delivered and will not offer, sell or deliver, directly or indirectly, any Notes in Korea, or to, or for the account or benefit of, any resident of Korea (as defined in the Foreign Exchange Transaction Law), except as otherwise permitted by applicable Korean laws and regulations; and

(b) any securities dealer to whom each Dealer and each further dealer may sell the Notes will agree that it will not offer any Notes, directly or indirectly, in Korea, or to any resident of Korea, except as permitted by applicable Korean laws and regulations, or to any other dealer who does not so represent and agree.

General

Each Dealer has agreed and each further Dealer appointed under the Program will be required to agree that it will (to the best of its knowledge and belief) comply with all applicable securities laws and regulations in force in any jurisdiction in which it purchases, offers, sells or delivers Notes or possesses or distributes this offering circular and will obtain any consent, approval or permission required by it for the purchase, offer, sale or delivery by it of Notes under the laws and regulations in force in any jurisdiction to which it is subject or in which it makes such purchases, offers, sales or deliveries and neither the Issuer, the Guarantor nor any other Dealer shall have any responsibility therefor.

Neither the Company, the Guaranteed Issuers nor any of the Dealers represents that Notes may at any time lawfully be sold in compliance with any applicable registration or other requirements in any jurisdiction, or pursuant to any exemption available thereunder, or assumes any responsibility for facilitating such sale.

With regard to each Tranche, the Relevant Dealer will be required to comply with such other additional restrictions as the Issuer, the Guarantor and the Relevant Dealer shall agree and as shall be set out in the applicable Pricing Supplement.

BOOK-ENTRY CLEARANCE SYSTEMS

The information set out below is subject to any change in or reinterpretation of the rules, regulations and procedures of DTC, Euroclear or Clearstream (each a "Clearing System" and together, the "Clearing Systems") currently in effect. The information in this section concerning the Clearing Systems has been obtained from sources that the Issuer and the Guarantor believe to be reliable, but none of the Company, the Guaranteed Issuers nor any Dealer takes any responsibility for the accuracy thereof. Investors wishing to use the facilities of any of the Clearing Systems are advised to confirm the continued applicability of the rules, regulations and procedures of the relevant Clearing System. None of the Company, the Guaranteed Issuers, the Arranger, any Dealer nor 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 relevant Pricing Supplement will specify the Clearing System(s) applicable for each Series.

Book-entry Systems

DTC

DTC has advised the Company and the Guaranteed Issuers that it is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve System, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to Section 17A of the Exchange Act. DTC holds securities that its participants ("Participants") deposit with DTC. DTC also facilitates the post-trade settlement among Direct Participants of sales and other securities transactions in deposited securities through electronic computerized book-entry transfers and pledges between Direct Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Access to the DTC System is also available to others such as securities brokers and dealers, banks, trust companies and clearing corporations that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants").

Under the rules, regulations and procedures creating and affecting DTC and its operations (the "Rules"), DTC makes book-entry transfers of Registered Notes among Direct Participants on whose behalf it acts with respect to Notes accepted into DTC's book-entry settlement system ("DTC Notes") as described below and receives and transmits distributions of principal and interest on DTC Notes. The Rules are on file with the U.S. Securities and Exchange Commission. Direct Participants and Indirect Participants with which beneficial owners of DTC Notes ("Owners") have accounts with respect to the DTC Notes similarly are required to make book-entry transfers and receive and transmit such payments on behalf of their respective Owners. Accordingly, although Owners who hold DTC Notes through Direct Participants or Indirect Participants will not possess Registered Notes, the Rules, by virtue of the requirements described above, provide a mechanism by which Direct Participants will receive payments and will be able to transfer their interest in respect of the DTC Notes.

Purchases of DTC Notes under the DTC system must be made by or through Direct Participants, which will receive a credit for the DTC Notes on DTC's records. The ownership interest of each actual purchaser of each DTC Note ("Beneficial Owner") is in turn to be recorded on the Direct and Indirect

Participant's records. Beneficial Owners will not receive written confirmation from DTC of their purchase, but Beneficial Owners are expected to receive written confirmations providing details of the transaction, as well as periodic statements of their holdings, from the Direct or Indirect Participant through which the Beneficial Owner entered into the transaction. Transfers of ownership interests in the DTC Notes are to be accomplished by entries made on the books of Participants acting on behalf of Beneficial Owners. Beneficial Owners will not receive certificates representing their ownership interests in DTC Notes, except in the event that use of the book-entry system for the DTC Notes is discontinued.

To facilitate subsequent transfers, all DTC Notes deposited by Direct Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co, or such other name as may be requested by an authorized representative of DTC. The deposit of DTC Notes with DTC and their registration in the name of Cede & Co. or such other DTC nominee do not effect any change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the DTC Notes; DTC's records reflect only the identity of the Direct Participants to whose accounts such DTC Notes are credited, which may or may not be the Beneficial Owners. The Participants will remain responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to Direct Participants, by Direct Participants to Indirect Participants, and by Direct Participants and Indirect Participants to Beneficial Owners will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time.

Redemption notices shall be sent to DTC. If less than all of the DTC Notes within an issue are being redeemed, DTC's practice is to determine by lot the amount of the interest of each Direct Participant in such issue to be redeemed.

Neither DTC nor Cede & Co. (nor any other DTC nominee) will consent or vote with respect to DTC Notes unless authorized by a Direct Participant in accordance with DTC's MMI Procedures. Under its usual procedures, DTC mails an Omnibus Proxy to the Issuer and the Guarantor as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the DTC Notes are credited on the record date (identified in a listing attached to the Omnibus Proxy).

Principal and interest payments on the DTC Notes will be made to Cede & Co., or such other nominee as may be requested by an authorized representative of DTC. DTC's practice is to credit Direct Participants' accounts upon DTC's receipt of funds and corresponding detail information from the Issuer, the Guarantor or the Principal Paying Agent on the due date for payment in accordance with their respective holdings shown on DTC's records. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers in bearer form or registered in "street name", and will be the responsibility of such Participant and not of DTC, the Issuer or the Guarantor, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to Cede & Co. (or such other nominee as may be requested by an authorized representative of DTC) is the responsibility of the Issuer (and failing whom, the Guarantor), disbursement of such payments to Direct Participants is the responsibility of DTC, and disbursement of such payments to the Beneficial Owners is the responsibility of Direct and Indirect Participants.

Under certain circumstances, including if there is an Event of Default under the Notes, DTC will exchange the DTC Notes for definitive Registered Notes, which it will distribute to its Participants in accordance with their proportionate entitlements and which, if representing interests in a Rule 144A Global Note, will be legended as set forth under "Subscription and Sale and Transfer and Selling Restrictions."

Since DTC may only act on behalf of Direct Participants, who in turn act on behalf of Indirect Participants, any Owner desiring to pledge DTC Notes to persons or entities that do not participate in DTC, or otherwise take actions with respect to such DTC Notes, will be required to withdraw its Registered Notes from DTC as described below.

Euroclear and Clearstream

Euroclear and Clearstream each holds securities for its customers and facilitates the clearance and settlement of securities transactions by electronic book-entry transfer between their respective account holders. Euroclear and Clearstream provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream have established an electronic bridge between their two systems across which their respective participants may settle trades with each other.

Euroclear and Clearstream customers are world-wide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream is available to other institutions that clear through or maintain a custodial relationship with an account holder of either system.

Book-entry Ownership of and Payments in respect of DTC Notes

The Issuer and the Guarantor may apply to DTC in order to have any Tranche of Notes represented by a Registered Global Note accepted in its book-entry settlement system. Upon the issue of any such Registered Global Note, DTC or its custodian will credit, on its internal book-entry system, the respective nominal amounts of the individual beneficial interests represented by such Registered Global Note to the accounts of persons who have accounts with DTC. Such accounts initially will be designated by or on behalf of the Relevant Dealer. Ownership of beneficial interests in such a Registered Global Note will be limited to Direct Participants or Indirect Participants, including, in the case of any Regulation S Global Note, the respective depositaries of Euroclear and Clearstream. Ownership of beneficial interests in a Registered Global Note accepted by DTC will be shown on, and the transfer of such ownership will be effected only through, records maintained by DTC or its nominee (with respect to the interests of Direct Participants) and the records of Direct Participants (with respect to interests of Indirect Participants).

Payments in U.S. dollars of principal and interest in respect of a Registered Global Note accepted by DTC will be made to the order of DTC or its nominee as the registered holder of such Note. In the case of any payment in a currency other than U.S. dollars, payment will be made to the Exchange Agent on behalf of DTC or its nominee and the Exchange Agent will (in accordance with instructions received by it) remit all or a portion of such payment for credit directly to the beneficial holders of interests in the Registered Global Note in the currency in which such payment was made and/or cause all or a portion of such payment to be converted into U.S. dollars and credited to the applicable Participants' account.

The Issuer and the Guarantor expect DTC to credit accounts of Direct Participants on the applicable payment date in accordance with their respective holdings as shown in the records of DTC unless DTC has reason to believe that it will not receive payment on such payment date. The Issuer and the Guarantor also expect that payments by Participants to beneficial owners of Notes will be governed by standing instructions and customary practices, as is the case with securities held for the accounts of customers, and will be the responsibility of such Participant and not the responsibility of DTC, the Principal Paying Agent, the Registrar, the Issuer or the Guarantor. Payment of principal, premium, if any, and interest, if any, on Notes to DTC is the responsibility of the Issuer (and failing whom, the Guarantor).

Transfers of Notes Represented by Registered Global Notes

Transfers of any interests in Notes represented by a Registered Global Note within DTC, Euroclear and Clearstream will be effected in accordance with the customary rules and operating procedures of the relevant clearing system. The laws in some States within the United States require that certain persons take physical delivery of securities in definitive form. Consequently, the ability to transfer Notes represented by a Registered Global Note to such persons may depend upon the ability to exchange such Notes for Notes in definitive form. Similarly, because DTC can only act on behalf of Direct Participants in the DTC system who in turn act on behalf of Indirect Participants, the ability of a person having an interest in Notes represented by a Registered Global Note accepted by DTC to pledge such Notes to persons or entities that do not participate in the DTC system or otherwise to take action in respect of such Notes may depend upon the ability to exchange such Notes for Notes in definitive form. The ability of any holder of Notes represented by a Registered Global Note accepted by DTC to resell, pledge or otherwise transfer such Notes may be impaired if the proposed transferee of such Notes is not eligible to hold such Notes through a direct or indirect participant in the DTC system.

Subject to compliance with the transfer restrictions applicable to the Registered Notes described under "Subscription and Sale and Transfer and Selling Restrictions", cross-market transfers between DTC, on the one hand, and directly or indirectly through Clearstream or Euroclear accountholders, on the other, will be effected by the relevant clearing system in accordance with its rules and through action taken by the Registrar, the Principal Paying Agent and any custodian ("Custodian") with whom the relevant Registered Global Notes have been deposited.

On or after the Issue Date for any Series, transfers of Notes of such Series between accountholders in Clearstream and Euroclear and transfers of Notes of such Series between participants in DTC will generally have a settlement date three business days after the trade date (T+3). The customary arrangements for delivery versus payment will apply to such transfers.

Cross-market transfers between accountholders in Clearstream or Euroclear and DTC participants will need to have an agreed settlement date between the parties to such transfer. Because there is no direct link between DTC, on the one hand, and Clearstream and Euroclear, on the other, transfers of interests in the relevant Registered Global Notes will be effected through the Registrar, the Principal Paying Agent and the Custodian receiving instructions (and, where appropriate, certification) from the transferor and arranging for delivery of the interests being transferred to the credit of the designated account for the transferee. In the case of cross-market transfers, settlement between Euroclear or Clearstream accountholders and DTC participants cannot be made on a delivery versus payment basis. The securities will be delivered on a free delivery basis and arrangements for payment must be made separately.

DTC, Clearstream and Euroclear have each published rules and operating procedures designed to facilitate transfers of beneficial interests in Registered Global Notes among participants and accountholders of DTC, Clearstream and Euroclear. However, they are under no obligation to perform or continue to perform such procedures, and such procedures may be discontinued or changed at any time. None of the Issuer, the Guarantor, the Agents or any Dealer will be responsible for any performance by DTC, Clearstream or Euroclear or their respective direct or indirect participants or accountholders of their respective obligations under the rules and procedures governing their operations and none of them will have any liability for any aspect of the records relating to or payments made on account of beneficial interests in the Notes represented by Registered Global Notes or for maintaining, supervising or reviewing any records relating to such beneficial interests.

INDEX TO FINANCIAL STATEMENTS

AUDITED CONSOLIDATED ANNUAL FINANCIAL STATEMENTS	PAGE
Report of Independent Auditors of Samil PricewaterhouseCoopers Report of Independent Auditors of KPMG Samjong Accounting Corp. Consolidated Statements of Financial Position as of December 31, 2012, 2011 and 2010 Consolidated Statements of Comprehensive Income for the Years Ended December 31, 2012, 2011 and 2010 Consolidated Statements of Changes in Equity for the Years Ended December 31, 2012, 2011 and 2010	F-2 F-4 F-6 F-8
Consolidated Statements of Cash Flows for the Years Ended December 31, 2012, 2011 and 2010	F-13 F-15
UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS	
Report on Review of Interim Financial Statements	F-141 F-143
Unaudited Consolidated Statements of Comprehensive Income for the Three-Month Periods Ended March 31, 2013 and 2012 Unaudited Consolidated Statements of Changes in Equity for the Three-Month Periods Ended	F-145
March 31, 2013 and 2012	F-146 F-148
Notes to the Unaudited Interim Consolidated Financial Statements	F-150

Report of Independent Auditors

To the Shareholders and Board of Directors of Korea Gas Corporation

We have audited the accompanying consolidated statement of financial position of Korea Gas Corporation and its subsidiaries (the "Group") as of December 31, 2012, and the related consolidated statements of comprehensive income, changes in equity and cash flows for the year then ended, expressed in Korean won. These financial statements are the responsibility of the Group's management. Our responsibility is to express an opinion on these financial statements based on our audit. We did not audit the financial statements of Korea Gas Technology Corp. and certain other consolidated subsidiaries, whose financial statements represent 12% of the Group's consolidated total assets as of December 31, 2012, and 2% of the Group's consolidated total sales for the year then ended. These statements were audited by other auditors whose reports have been furnished us and our opinion, insofar as it relates to the amounts included for Korea Gas Technology Corp. and certain other consolidated subsidiaries, is based solely on the reports of the other auditors.

We conducted our audit in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall consolidated financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, based on our audit and the reports of other auditors, the consolidated financial statements, referred to above, present fairly, in all material respects, the financial position of Korea Gas Corporation and its subsidiaries as of December 31, 2012, and their financial performance and cash flows for the year then ended, in accordance with International Financial Reporting Standards as adopted by the Republic of Korea ("Korean IFRS").

We have neither audited nor reviewed the consolidated financial statements of the Group as of and for the years ended December 31, 2011 and 2010, including the adjustments explained in Note 50. Accordingly, we do not express any assurance on the consolidated financial statements for the years ended December 31, 2011 and 2010.

Without qualifying opinion, we draw your attention to the following matters. As discussed in Note 50, the Group adjusted the settled income arising from raw material cost pass-through adjustment system ("cost adjustment system") by deducting from cost of sales during the year instead of recognizing sales revenue as done in the prior year, and reclassified the accumulated settled income from financial asset to other non-financial asset, according to responses from the Korea Accounting Standards Board (KASB).

In accordance with the cost adjustment system implemented in 1998, the settled income is calculated based on the differences between the material cost charge collected as natural gas fees and actual cost incurred. The settled income incurred during the current year is reflected in the price of the subsequent year upon approval of the Korean Government. Thus, the Group had recorded the settled income as accounts receivable or accounts payable until the settled income is collected. However, due to the government policy of price stabilization, the Korean Government had suspended the cost adjustment system from 2008, and accordingly, uncollected settled income of the Group has accumulated up to \text{\$\psi\$}5.8 trillion as of December 31, 2012.

To alleviate these matters, the Ministry of Knowledge Economy has affirmed that it will take necessary measures to have the Group collect total cumulative settled income as of December 31, 2012, by the year 2017. Further, the Government resumed the cost adjustment system from February 22, 2013, and allowed to increase the natural gas price. The Group recognized the settled income as other non-financial assets since it determined that the settled income satisfies the criteria of assets under the financial reporting framework of IFRS issued by the International Accounting Standards Board (IASB) as a result of government measures above.

The current method of accounting, however, may be amended in the subsequent period if the IASB establishes a new standard on rate regulation activity such as cost adjustment system.

Auditing standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to audit such financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report is for use by those who are informed about Korean auditing standards and their application in practice.

/s/ Samil PricewaterhouseCoopers Seoul, Korea March 19, 2013

This report is effective as of March 19, 2013, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that there is a possibility that the above audit report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Independent Auditors' Report

The Board of Directors and Shareholders KOREA GAS CORPORATION:

We have audited the accompanying consolidated statements of financial position of Korea Gas Corporation and its subsidiaries (the "Corporation") as of December 31, 2011 and 2010, and the related consolidated statements of comprehensive income, changes in equity and cash flows for the years then ended. Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Korean International Financial Reporting Standards. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the Republic of Korea. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Corporation as of December 31, 2011 and 2010 and its financial performance and its cash flows for the years then ended, in accordance with Korean International Financial Reporting Standards ("K-IFRS").

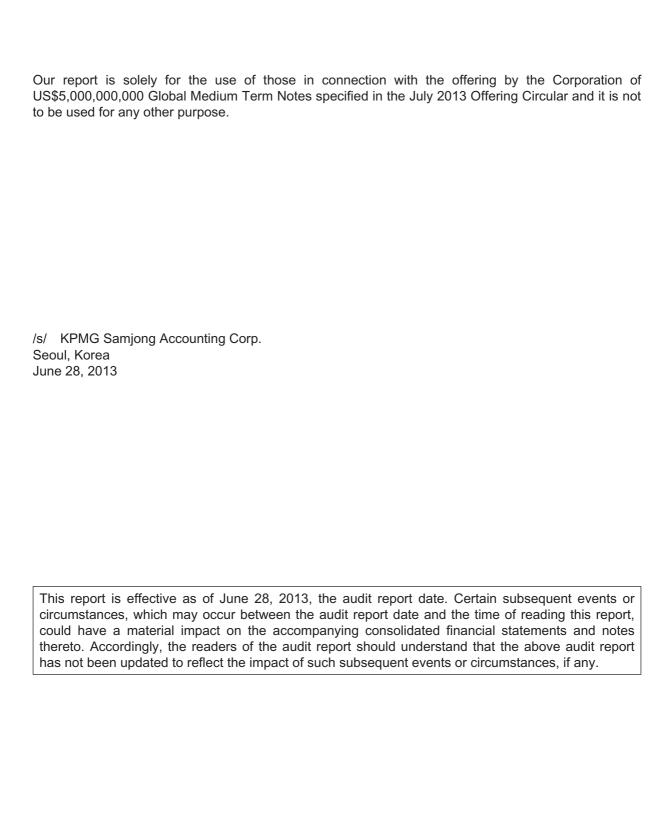
Without qualifying our opinion, we draw attention to the following:

The procedures and practices utilized in the Republic of Korea to audit such consolidated financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report and the accompanying consolidated financial statements are for use by those knowledgeable about Korean auditing standards and their application in practice.

As described in note 2.1, effective from January 1, 2012, the Corporation early adopted the amendment of K-IFRS 1001, *Presentation of Financial Statements*, which requires other comprehensive income items to be presented into two groups on the basis of whether they are potentially reclassifiable to profit or loss subsequently (reclassification adjustments).

As described in note 50, the Corporation adjusted the settled income arising from raw material cost pass-through adjustment system ("cost adjustment system") by deducting from cost of sales during the year instead of recognizing sales revenue, and reclassified the accumulated uncollected settled income from financial asset to other non-financial asset.

The accompanying consolidated financial statements of the Corporation for the years ended December 31, 2011 and 2010 have been restated based on items described above for the purpose of the Corporation's Offering Circular in connection with its update of US\$5,000,000,000 Global Medium Term Note Program in July 2013.



Korea Gas Corporation and Subsidiaries Consolidated Statements of Financial Position December 31, 2012 and 2011, and December 31, 2010

	Notes		December 31, 2012 (in mi	December 31, 2011 Restated lions of won)	December 31, 2010 Restated
Assets					
Current assets					
Cash and cash equivalents	6	₩	245,466	154,575	210,867
Financial assets at fair value through profit			,	,	_,,,,,,,,
or loss	7,8		15,327	1,337	11,394
Held-to-maturity financial assets	11		139	311	447
Other financial assets	12		62,021	13,540	6,549
Current derivative financial assets	8		-	-	40,487
Trade and other accounts receivable	9		8,066,955	6,455,025	5,248,926
Inventories	13		1,894,016	3,360,288	2,156,535
Prepaid income taxes			967	1,779	1,317
Other non-financial assets	14		1,500,765	2,000,490	1,133,947
			11,785,656	11,987,345	8,810,469
Non-current assets					
Financial assets at fair value through profit					
or loss	7,8		42,081	-	25,341
Available-for-sale financial assets	10		24,401	26,712	28,907
Held-to-maturity financial assets	11		1,430	1,301	1,326
Other financial assets	12		345,763	319,635	306,354
Derivative financial assets	8		1,349	20,768	-
Long-term trade and other accounts					
receivable	9		188,316	179,951	66,189
Property, plant and equipment	17,26		19,582,966	17,492,995	16,237,120
Intangible assets other than goodwill	19,26		2,406,601	1,748,751	424,117
Investments in joint ventures	16		48,945	34,683	39,578
Investments in associates	16		1,530,547	1,281,699	674,023
Deferred tax assets	39		18,859	12,953	2,811
Other non-financial assets	14	_	4,644,805	2,908,549	3,414,941
		_	28,836,063	24,027,997	21,220,707
Total assets		₩	40,621,719	36,015,342	30,031,176

Korea Gas Corporation and Subsidiaries Consolidated Statements of Financial Position, Continued December 31, 2012 and 2011, and December 31, 2010

Current liabilities Current liabilities at fair value through profit or loss 8,20 W 4,382 9,728 7,085 Trade and other accounts payable 21 3,175,214 3,023,590 2,018,370 Short-term borrowings 22 4,626,514 3,360,304 1,946,072 Current portion of long-term borrowings 22 110,184 117,548 1946,072 Current portion of debentures 22 2,170,153 1,360,000 1,986,083 Current portion of other brownigh lities 8 22,188 - 32,964 Current portion of other non-financial liabilities 8 60,991 257,874 184,935 Current portion of other non-financial liabilities 8 60,991 257,874 184,935 Non-current liabilities 8 95,380 34,830 - Non-current financial liabilities at fair value through profit or loss 8 29 95,380 34,830 - Long-term borrowings 21 2,494,278 2,853,522 3,001,307 Long-term borrowings		Notes		December 31, 2012	December 31, 2011 Restated	December 31, 2010 Restated
Current liabilities Financial liabilities at fair value through profit or loss 8,20 ₩ 4,382 9,728 7,085 Trade and other accounts payable 21 3,175,214 3,023,590 2,018,370 Short-term borrowings 22 4,626,514 3,360,304 1,946,072 Current portion of long-term borrowings 22 110,184 117,548 194,603 Current portion of debentures 22 2,170,153 1,360,000 1,986,083 Derivative financial liabilities 8 22,168 - 32,964 Current tax liabilities 8 22,168 - 32,964 Current portion of other non-financial liabilities 8 60,991 257,874 184,935 Current portion of other non-financial liabilities 8 60,991 257,874 184,935 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term trade and other accounts payable 21				(in mil	lions of won)	
Financial liabilities at fair value through profit or loss 8,20 W 4,382 9,728 9,728 7,085 Trade and other accounts payable 21 3,175,214 3,023,590 2,018,370 Short-term borrowings 22 4,626,514 3,360,304 1,946,072 Current portion of loebentures 22 2,170,153 1,360,000 1,986,083 Current portion of debentures 22 2,170,153 1,360,000 1,986,083 Derivative financial liabilities 8 22,168 - 32,964 Current tax liabilities 8 60,991 257,874 184,935 Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities 8 8,20 95,380 34,830 - 4,404 Non-current liabilities 8,20 95,380 34,830 - 4,404 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - 4,587 Long-term borrowings 22 499,291 509,177 615,879 Debentures 21 2,494,278 2,853,522 3,001,307 Non-current de						
profit or loss 8,20 ₩ 4,382 9,728 (3,370) 7,085 Trade and other accounts payable 21 (3,175,214) 3,023,590 2,018,370 Short-term borrowings 22 (4,626,614) 3,030,304 1,946,072 Current portion of long-term borrowings 22 (2,170,153) 1,360,000 1,986,083 Derivative financial liabilities 8 (22,168) - 32,964 Current tax liabilities 8 (20,168) 8,120 4,404 Current portion of other non-financial liabilities 8 (60,991) 257,874 184,935 Iabilities 8 (60,991) 257,874 184,935 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 (2,494,278) 2,853,522 3,001,307 Long-term borrowings 22 (409,291) 509,177 615,879 Debentures 22 (17,009,901) 14,710,850 10,873,276 Non-current derivative financial liabilities 8 (32,275) 10,933 12,806 Employee benefit liabilities 28 (26,775) 10,933						
Trade and other accounts payable 21 3,175,214 3,023,590 2,018,370 Short-term borrowings 22 4,626,514 3,360,304 1,946,072 Current portion of long-term borrowings 22 110,184 117,548 194,603 Current portion of debentures 22 2,170,153 1,360,000 1,986,083 Derivative financial liabilities 8 22,168 - 32,964 Current tax liabilities 8 22,188 - 32,964 Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities 8 8 60,991 257,874 184,935 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670						
Short-term borrowings	•		₩			
Current portion of long-term borrowings 22 110,184 117,548 194,603 Current portion of debentures 22 2,170,153 1,360,000 1,986,083 Derivative financial liabilities 8 22,168 - 32,964 Current tax liabilities 13,544 8,120 4,404 Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities 8,20 95,380 34,830 - Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 29	· ·					
Current portion of debentures 22 2,170,153 1,360,000 1,986,083 Derivative financial liabilities 8 22,168 - 32,964 Current tax liabilities 13,544 8,120 4,404 Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities 10,183,150 8,137,164 6,374,516 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082	-					
Derivative financial liabilities 8 22,168 - 32,964 Current tax liabilities 13,544 8,120 4,404 Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities 10,183,150 8,137,164 6,374,516 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147						
Current tax liabilities 13,544 8,120 4,404 Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 Equity 22,069,603 19,834,277 15,926,482 Total liabilities 29					1,360,000	
Current portion of other non-financial liabilities 28 60,991 257,874 184,935 Non-current liabilities 10,183,150 8,137,164 6,374,516 Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 Equity 32,252,753 27,971,441 22,300,998 Equity 29 1,056,063 1,056,063 1,056		ŏ			9 120	
Itabilities				13,344	0,120	4,404
Non-current liabilities Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 Total liabilities 32,252,753 27,971,441 22,300,998 Equity 32 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32	•	28		60,991	257,874	184,935
Non-current financial liabilities at fair value through profit or loss 8,20 95,380 34,830 -				10,183,150	8,137,164	6,374,516
through profit or loss 8,20 95,380 34,830 - Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to	Non-current liabilities					
Long-term trade and other accounts payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 <tr< td=""><td>Non-current financial liabilities at fair value</td><td></td><td></td><td></td><td></td><td></td></tr<>	Non-current financial liabilities at fair value					
payable 21 2,494,278 2,853,522 3,001,307 Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) </td <td>through profit or loss</td> <td>8,20</td> <td></td> <td>95,380</td> <td>34,830</td> <td>-</td>	through profit or loss	8,20		95,380	34,830	-
Long-term borrowings 22 409,291 509,177 615,879 Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966	Long-term trade and other accounts					
Debentures 22 17,009,901 14,710,850 10,873,276 Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 29 1,056,063 1,056,063 1,056,063 Requity 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Non-current derivative financial liabilities 8 93,242 7,911 8,670 Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 32,252,753 27,971,441 22,300,998 Equity Capital stock 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Other non-financial liabilities 28 26,775 10,933 12,806 Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Equity Capital stock 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Employee benefit liabilities 24 24,867 39,029 45,978 Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 32,252,753 27,971,441 22,300,998 Equity Capital stock 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Deferred tax liabilities 39 1,777,082 1,532,878 1,248,547 Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 32,252,753 27,971,441 22,300,998 Equity 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Provisions 25 138,787 135,147 120,019 22,069,603 19,834,277 15,926,482 Total liabilities 32,252,753 27,971,441 22,300,998 Equity 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178	·					
Equity 29 1,056,063 1,056,06						
Total liabilities 32,252,753 27,971,441 22,300,998 Equity 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178	Provisions	25	_	138,787	135,147	120,019
Equity Capital stock 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178			_	22,069,603	19,834,277	15,926,482
Capital stock 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation Non-controlling interests 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178	Total liabilities		_	32,252,753	27,971,441	22,300,998
Capital stock 29 1,056,063 1,056,063 1,056,063 Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation Non-controlling interests 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178	Equity					
Retained earnings 30,31 5,995,870 5,690,241 5,567,107 Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation Non-controlling interests 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178		20		1 056 063	1 056 063	1 056 063
Other equity 32 1,326,400 1,303,107 1,105,519 Equity attributable to owners of the Corporation Non-controlling interests 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Equity attributable to owners of the Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178						
Corporation 8,378,333 8,049,411 7,728,689 Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178		02	-	1,020,100		
Non-controlling interests (9,367) (5,510) 1,489 Total equity 8,368,966 8,043,901 7,730,178	• •			0.070.000	0.040.444	7 700 600
Total equity 8,368,966 8,043,901 7,730,178	•					
			-			
Total liabilities and equity ₩ 40,621,719 36,015,342 30,031,176	Total equity		-	8,368,966	8,043,901	7,730,178
	Total liabilities and equity		₩	40,621,719	36,015,342	30,031,176

The accompanying notes are an integral part of these consolidated financial statements.

Korea Gas Corporation and Subsidiaries Consolidated Statements of Comprehensive Income Years Ended December 31, 2012, 2011 and 2010

	Notes		2012	2011 Restated	2010 Restated
			(in mill	ions of won)	
Revenue	33	₩	35,031,319	28,429,772	23,388,696
Cost of sales	41	_	33,421,893	27,109,154	22,083,098
Gross profit		_	1,609,426	1,320,618	1,305,598
Selling, general and administrative expenses	34,41	_	342,774	297,443	257,930
Operating income	40		1,266,652	1,023,175	1,047,668
Other income Other expenses Other gains (losses) Finance income Finance cost Gains from associates and joint ventures	35 35 36 37,43 38,43 16	_	5,216 13,029 7,888 499,905 1,362,962 114,857	2,479 14,507 7,055 491,557 1,262,378 141,982	2,270 13,509 (66,363) 596,182 1,314,406 114,669
Income before income tax			518,527	389,363	366,511
Income tax expense	39	_	156,481	214,657	91,575
Net income		_	362,046	174,706	274,936
Other comprehensive income (loss), net of income tax Items that will not be reclassified subsequently to profit or loss Defined benefit plan actuarial losses Items that will be reclassified subsequently to profit or loss			(5,863)	(13,332)	(10,774)
Change in fair value of available-for-sale financial assets Effective portion of changes in fair value of cash			9,590	(5,004)	(5,505)
flow hedges			148,671	(36,453)	61,383
Net gains(losses) on hedge of net investment in a foreign operation Share of other comprehensive gains(losses)			235,793	(21,960)	11,890
items of associates and joint ventures Foreign operation currency translation			(99,154)	216,395	(60,205)
differences		_	(270,834)	44,388	932
		_	18,203	184,034	(2,279)
Total comprehensive income		₩	380,249	358,740	272,657

Korea Gas Corporation and Subsidiaries Consolidated Statements of Comprehensive Income, Continued Years Ended December 31, 2012, 2011 and 2010

	Notes	2012	2011 Restated	2010 Restated
		(in mi	llions of won)	
Net income attributable to:				
Owners of the Corporation	₩	366,675	181,483	276,831
Non-controlling interests		(4,629)	(6,777)	(1,895)
		362,046	174,706	274,936
Total comprehensive income attributable to:	•			
Owners of the Corporation		384,105	365,739	274,833
Non-controlling interests		(3,856)	(6,999)	(2,176)
		380,249	358,740	272,657
Earnings per share in Korean won	42 ₩	5,050	2,499	3,813

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

Korea Gas Corporation and Subsidiaries Consolidated Statements of Changes in Equity Years Ended December 31, 2012, 2011 and 2010

	Capital stock	Retained earnings	Other components of equity	Owners of the Corporation ns of won)	Non-controlling interests	Total equity
Balance at January 1,			•	,		
2010 (Restated)	₩ 1,056,063	5,356,959	1,096,742	7,509,764	3,665	7,513,429
Comprehensive income Net income Other comprehensive income	-	276,831	-	276,831	(1,895)	274,936
Items that will not be reclassified subsequently to profi or loss	t					
Defined benefit plan actuarial losses Items that will be reclassified	-	(10,774)	-	(10,774)	-	(10,774)
subsequently to profi or loss Change in fair value of available-for-sale	t					
financial assets Effective portion of	-	-	(5,505)	(5,505)	-	(5,505)
changes in fair value of cash flow hedges Net gains on hedge of ne	-	-	61,664	61,664	(281)	61,383
investment in foreign operation Share of other	-	-	11,890	11,890	-	11,890
comprehensive losses of associates and joint ventures	-	-	(60,205)	(60,205)	-	(60,205)
Foreign operation currency translation differences	_	_	933	933	-	933
Transaction with owners of the Corporation, recorded directly in equity						
Dividends paid		(55,909)		(55,909)		(55,909)
Balance at December 31, 2010	₩_1,056,063	5,567,107	1,105,519	7,728,689	1,489	7,730,178

Korea Gas Corporation and Subsidiaries Consolidated Statements of Changes in Equity, Continued Years Ended December 31, 2012, 2011 and 2010

		Capital stock	Retained earnings	Other components of equity	Owners of the Corporation ions of won)	Non-controlling interests	Total equity
Balance at January 1, 2011 (Restated)	₩	1,056,063	5,567,107	1,105,519	7,728,689	1,489	7,730,178
Comprehensive income Net income Other comprehensive income Items that will		-	181,483	-	181,483	(6,777)	174,706
not be reclassified subsequently to profi or loss Defined benefit plan actuarial losses Items that will be reclassified subsequently to profi or loss		-	(13,332)	-	(13,332)	-	(13,332)
Change in fair value of available-for-sale financial assets Effective portion of		-	-	(5,004)	(5,004)	-	(5,004)
changes in fair value of cash flow hedges Net losses on hedge of		-	-	(36,231)	(36,231)	(222)	(36,453)
net investment in foreign operation Share of other comprehensive gains o	f	-	-	(21,960)	(21,960)	-	(21,960)
associates and joint ventures Foreign operation currency translation	•	-	-	216,395	216,395	-	216,395
differences Transaction with owners of the Corporation, recorded directly in		-	-	44,388	44,388	-	44,388
equity Dividends paid			(45,017)		(45,017)		(45,017)
Balance at December 31, 2011	₩	1,056,063	5,690,241	1,303,107	8,049,411	(5,510)	8,043,901

Korea Gas Corporation and Subsidiaries Consolidated Statements of Changes in Equity, Continued Years Ended December 31, 2012, 2011 and 2010

	Capital stock	Retained earnings	Other components of equity	Owners of the Corporation	Non-controlling interests	Total equity
			(In mill	lions of won)		
Balance at January 1, 2012	₩ 1,056,063	5,690,241	1,303,107	8,049,411	(5,510)	8,043,901
Comprehensive income Net income Other comprehensive income Items that will not be reclassified subsequently to profit or loss	-	366,675	-	366,675	(4,629)	362,046
Defined benefit plan actuarial gains(losses) Items that will be reclassified subsequently to profit or loss	-	(5,863)	-	(5,863)	-	(5,863)
Change in fair value of available-for-sale financial assets Effective portion of changes in	-	-	9,590	9,590	-	9,590
fair value of cash flow hedges Net gains on hedge of net	-	-	147,898	147,898	773	148,671
investment in foreign operation Share of other comprehensive	-	-	235,793	235,793	-	235,793
loss of associates and joint ventures Foreign operation currency	-	-	(99,154)	(99,154)	-	(99,154)
translation differences Transaction with owners of the Corporation, recorded	-	-	(270,834)	(270,834)	-	(270,834)
directly in equity Dividends paid Changes in scope of consolidation	-	(55,183)	-	(55,183)	(1) -	(55,184)
Balance at December 31, 2012	₩_1,056,063	5,995,870	1,326,400	8,378,333	(9,367)	8,368,966

The accompanying notes are an integral part of these consolidated financial statements.

Korea Gas Corporation and Subsidiaries Consolidated Statements of Cash Flows Years Ended December 31, 2012, 2011 and 2010

	_	2012	2011 Restated	2010 Restated
			(in millions of won)	
Cash flows from operating activities				
Net income	₩	362,046	174,706	274,936
Adjustments for:				
Income tax expense		156,481	214,657	91,575
Interest expense		857,312	723,804	635,133
Depreciation and amortization expense		1,056,422	845,492	805,417
Losses(gains) on foreign currency translation, net Losses(gains) on valuation of derivative instruments	,	(21,606)	8,560	6,754
net		7,525	43,222	(9,793)
Losses on disposal of non-current assets		1,058	6,221	15,851
Other, net		(65,604)	(126,370)	(38,031)
Changes in operating assets and liabilities				
Inventories		1,468,071	(1,203,916)	(515,220)
Trade accounts receivable		(1,567,049)	(1,090,636)	(597,402)
Other receivables		(1,304,010)	(371,353)	806,896
Trade accounts payable		227,690	1,147,873	(45,961)
Other payables	_	(3,535)	(168,728)	196,931
Cash generated from operating activities		1,174,801	203,532	1,627,086
Dividends received		121,663	149,444	112,553
Interest paid		(903,458)	(835,027)	(767,700)
Interest received		13,807	` 18,165 [°]	` 16,933
Income taxes paid	_	(3,434)	(7,560)	(4,565)
Net cash generated from(used in) operating activities	S .	403,379	(471,446)	984,307
Cash flows from investing activities				
Acquisition of equity instrument or debt instrument o	f			
other entities		(391,456)	(298,942)	(10,552)
Acquisition of associates and joint ventures		(17,161)	, ,	-
Proceeds from sale of property, plant and equipmen	t	23,312	2,621	2,924
Acquisition of property, plant and equipment		(3,210,574)	(2,096,886)	(1,619,155)
Proceeds from sale of intangible assets		1,589	1,787	1,845
Acquisition of intangible assets		(1,102,103)	(1,289,246)	(184,781)
Proceeds from sale of available-for-sale financial				
assets		5	420	3,400
Acquisition of available-for-sale financial assets		-	(1,072)	(198)
Proceeds from sale of held-to-maturity financial		0.4.4		0.40
assets		311	(005)	218
Acquisition of held-to-maturity financial assets		(268)	(285)	(656)
Receipt of government grants		39,244	37,617	35,306
Cash advances and loans made to other parties		(42,187) 50,665	(25,286) 13,786	(58,973) 7,123
Cash receipts from repayment of loans Others, net		(66,243)	7,971	53,227
Outgro, fiet	-	(00,243)		

Korea Gas Corporation and Subsidiaries Consolidated Statements of Cash Flows, Continued Years Ended December 31, 2012, 2011 and 2010

		2012	2011 Restated	2010 Restated
	_	(in	nillions of Korean w	ron)
Net cash used in investing activities	₩	(4,714,866)	(3,663,446)	(1,770,272)
Cash flows from financing activities				
Proceeds from borrowings		38,294,035	17,600,398	11,720,892
Repayments of borrowings		(37,114,423)	(16,371,426)	(14,603,906)
Proceeds from issuance of debentures		4,894,341	5,129,136	3,921,636
Repayments of debentures		(1,310,000)	(1,986,083)	-
Payments of finance lease liabilities		(231,950)	(210,118)	(206,400)
Dividends paid	-	(55,184)	(45,312)	(56,148)
Net cash generated from financing activities		4,476,819	4,116,595	776,074
Net increase(decrease) in cash and cash				
equivalents		165,332	(18,297)	(9,891)
Cash and cash equivalents at beginning of year		154,575	210,867	216,507
Exchange loss on cash and cash equivalents	-	(74,441)	(37,995)	4,251
Cash and cash equivalents at end of year	₩	245,466	154,575	210,867

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

Korea Gas Corporation and Subsidiaries Notes to the Consolidated Statements December 31, 2012, 2011 and 2010

1. General Information

Korea Gas Corporation ("KOGAS" or the "Corporation") was incorporated as a government-invested entity on August 18, 1983, under the Korea Gas Corporation Act to engage in the development, production and distribution of liquefied natural gas (LNG). Under Article 5 and Article 3 of the supplementary provisions of the 'Legislation for public institution operation', it was designated as "market-type public enterprise" on April 2, 2007.

The Corporation's stock was listed on the Korea Stock Exchange on December 15, 1999.

Capital stock of the Corporation as of December 31, 2012, is ₩386,423 million and the ownership of the Corporation's common stock issued as of December 31, 2012, is as follows:

Shareholder	Number of shares	Percentage of ownership
Government of the Republic of Korea	20,758,110	26.9%
Korea Electric Power Corporation	18,900,000	24.5%
Others	32,950,640	42.5%
	72,608,750	93.9%
Treasury stock	4,675,760	6.1%
	77,284,510	100.0%

In October 2008, the Ministry of Knowledge Economy also announced a road map to permit other companies to enter the LNG import and wholesale market in Korea starting in 2010. The road map contemplates gradual liberalization, initially starting with liberalization of the market for power generating companies followed by the market for industrial usage. In September 2009, amendment on City Gas Business Act was submitted to the National Assembly. However, it was automatically revoked because of 18th parliament dissolution in May 2012. Accordingly, no adjustments have been made in the accompanying consolidated financial statements in relation to such changes.

2. Basis of Preparation and Significant Accounting Policies

2.1 Basis of Presentation

The Corporation maintains its accounting records in Korean won and prepares statutory financial statements in the Korean language (Hangul) in accordance with the International Financial Reporting Standards as adopted by the Republic of Korea ("Korean IFRS"). The accompanying consolidated financial statements have been condensed, restructured and translated into English from the Korean language financial statements. The Corporation and its subsidiaries (collectively referred to as "the Group") have adopted Korean IFRS expected to be effective for annual periods beginning on or after January 1, 2011, except for the requirements set below. The date of transition to Korea IFRS is on January 1, 2010 in accordance with Korean IFRS 1001, First-time Adoption of International Financial Reporting Standards.

2.1 Basis of Presentation, Continued

- (a) New standards, amendments and interpretations issued and effective for the financial year beginning January 1, 2012 or 2013 but early adopted by the Group are as follows:
 - Amendment of Korean IFRS 1001, Presentation of Financial Statements

The Group changed its accounting policy to present the operating income after deducting cost of sales, and selling and administrative expenses from revenue, in accordance with the amendment of Korean IFRS 1001, *Presentation of Financial Statements*. The Group has retrospectively applied a new accounting policy and restated the comparative statements of comprehensive income to reflect the retrospective adjustments.

(b) The effect of new accounting policy is as follows:

(i) December 31, 2012

		Before adjustment	Adjustment(*)	After adjustment
			(In millions of won)	
Operating income Net income Earnings per share (in Korean won)	₩	1,266,728 362,046 5,050	(75) - -	1,266,653 362,046 5,050
(ii) December 31, 2011 (Restated)				
	_	Before adjustment	Adjustment(*) (In millions of won)	After adjustment
Operating income Net income Earnings per share (in won)	₩	1,018,203 174,706 2,499	4,972 - -	1,023,175 174,706 2,499
(iii) December 31, 2010 (Restated)				
		Before adjustment	Adjustment(*)	After adjustment
			(In millions of won)	
Operating income Net income Earnings per share (in won)		970,066 274,936 3,813	77,602 - -	1,047,668 274,936 3,813

2.1 Basis of Presentation, Continued

(*) Details of changes in other income, other expenses and other gains (losses) due to amendment of accounting standards are summarized as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In millions of won)		
Other income				
Reversal of other provisions	₩	86	-	-
Reversal of allowance for bad debt Gains from contribution to construction (non-		-	942	-
operating)		808	96	94
Gains from subsidies and reimbursement		2,007	560	1,364
Rental revenues	_	2,315	881	812
	_	5,216	2,479	2,270
Other expenses				
Other bad debts expense		120	-	
Donations		12,100	14,496	13,214
Indemnities paid		788	-	256
Others	_	21	11	39
	_	13,029	14,507	13,509
Other gains (losses)				
Gains on disposal of property, plant and				
equipment	₩	2,848	737	1,498
Other gains Losses on disposal of property, plant and		48,721	38,953	22,936
equipment		(3,906)	(6,832)	(17,325)
Losses on disposal of intangible assets		-	(126)	(25)
Impairment loss on property, plant and				
equipment		(11)	(9,527)	-
Impairment loss on intangible assets Other losses				(65,268)
105565		_	_	(03,200)
	_	(39,764)	(16,149)	(8,179)
	₩	7,888	7,056	(66,363)

In addition, the amendment, which requires other comprehensive income items to be presented into two groups on the basis of whether they are potentially reclassifiable to profit or loss subsequently, was early adopted. As explained in Note 50, the amendment, which does not require that an entity applies an accounting policy retroactively and discloses the effect of retroactive restatement in the statement of financial position at the beginning of the preceding period in the notes, was early adopted.

2.1 Basis of Presentation, Continued

- (c) New standards, amendments and interpretations issued but not effective for the financial year beginning January 1, 2012, and not early adopted by the Group are as follows:
 - Amendments to Korean IFRS 1019, Employee Benefits

According to the amendments to Korean IFRS 1019, *Employee Benefits*, use of a 'corridor' approach is no longer permitted, and therefore all actuarial gains and losses incurred are immediately recognized in other comprehensive income. All past service costs incurred from changes in pension plan are immediately recognized, and expected returns on interest costs and plan assets that used to be separately calculated are now changed to calculating net interest expense(income) by applying discount rate used in measuring defined benefit obligation in net defined benefit liabilities(assets). This amendment will be effective for the Group as of January 1, 2013, and the Group expects that it would not have a material impact on its consolidated financial statements.

- Enactment of Korean IFRS 1110, Consolidated Financial Statements

Korean IFRS 1110, Consolidated Financial Statements identify the concept of control as the determining factor in whether an entity should be included in the consolidated financial statements of the Parent Company. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The standard provides additional guidance to assist in the determination of control where this is difficult to assess. This enactment will be effective for annual periods beginning on or after January 1, 2013, and the Group is reviewing the impact of this standard.

- Enactment of Korean IFRS 1111, Joint Arrangements

Korean IFRS 1111, *Joint Arrangements*, aims to reflect the substance of joint arrangements by focusing on the contractual rights and obligations that each party to the arrangement has rather than its legal form. Joint arrangements are classified as either joint operations or joint ventures. A joint operation is when joint operators have rights to the assets and obligations for the liabilities, and account for the assets, liabilities, revenues and expenses, while parties to the joint venture have rights to the net assets of the arrangement and account for their interest in the joint venture using the equity method. This enactment will be effective for annual periods beginning on or after January 1, 2013, and the Group is reviewing the impact of this standard.

- Enactment of Korean IFRS 1112, Disclosures of Interests in Other Entities

Korean IFRS 1112, *Disclosures of Interests in Other Entities*, provides the disclosure requirements for all forms of interests in other entities, including a subsidiary, a joint arrangement, an associate, a consolidated structured entity and an unconsolidated

2.1 Basis of Presentation, Continued

structured entity. This enactment will be effective for annual periods beginning on or after January 1, 2013, and the Group is reviewing the impact of this standard.

Enactment of Korean IFRS 1113, Fair value measurement

Korean IFRS 1113, Fair value measurement, aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across Korean IFRSs. Korean IFRS 1113 does not extend the use of fair value accounting but provides guidance on how it should be applied where its use is already required or permitted by other standards within Korean IFRSs. This amendment will be effective for the Group as of January 1, 2013, and the Group expects that it would not have a material impact on its consolidated financial statements.

The significant accounting policies applied by the Group in preparation of its consolidated financial statements are included below. The accounting policies set out below have been applied consistently to all periods presented in these consolidated financial statements.

The consolidated financial statements have been prepared on the historical cost basis except for certain non-current asset, financial instruments. Historical cost is generally based on the fair value of the consideration given in exchange for assets.

2.2 Consolidation

The consolidated financial statements incorporate the financial statements of the Corporation and other entities (including special purpose companies) controlled by the Corporation (or its subsidiaries). Control is achieved where the Corporation has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities.

Income and expenses of subsidiaries acquired or disposed of during the year are included in the consolidated statement of comprehensive income from the date of acquisition and up to the effective date of disposal, as appropriate. The book value of non-controlling interests is recognized at initial recognition value, which reflects proportional changes in capital. Total comprehensive income of subsidiaries is attributed to the owners of the Corporation and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies in line with those used by the Group.

All intra-group transactions, balances, income and expenses are eliminated in full on consolidation.

Korea Gas Corporation and Subsidiaries Notes to the Consolidated Statements December 31, 2012, 2011 and 2010

2. Basis of Preparation and Significant Accounting Policies, Continued

2.2 Consolidation, Continued

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amounts by which the non-controlling interests are adjusted and the fair values of the consideration paid or received is recognized directly in equity and attributed to owners of the Group.

When the Group loses the control of a subsidiary, the profit or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amounts of the assets (including goodwill) and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gains or losses has been recognized in accumulated other comprehensive income in equity, the amounts previously recognized in accumulated other comprehensive income are accounted for as if the Group had directly disposed of the relevant assets (that is, reclassified to profit or loss or transferred directly to retained earnings). The fair value of any investment retained in the subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under Korean IFRS 1039 Financial Instruments: Recognition and Measurement or, when applicable, the cost on initial recognition of an investment in an associate or a jointly controlled entity.

2.3 Investments in associates

An associate is an entity in which the Group has significant influence, but not control, over the entity's financial and operating policies. Significant influence is presumed to exist when the Group holds between 20 and 50 percent of the voting power of another entity.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting, except when the investment is classified as held for sale, in which case it is accounted for in accordance with Korean IFRS 1105, Non-current Assets Held for Sale and Discontinued Operations. Under the equity method, an investment in an associate is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Group's share of the profit or loss and other comprehensive income of the associate. When the Group's share of losses of an associate exceeds the Group's interest in that associate (which includes any long-term interests that, in substance, form part of the Group's net investment in the associate), the Group discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the

2.3 Investments in associates, Continued

investment. Any excess of the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition is recognized immediately in profit or loss.

The requirements of Korean IFRS 1039 Financial Instruments: Recognition and Measurement are applied to determine whether it is necessary to recognize any impairment loss with respect to the Group's investment in an associate. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with Korean IFRS 1036 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount, any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with Korean IFRS 1036 to the extent that the recoverable amount of the investment subsequently increases.

When the Group transacts with its associate, profits and losses resulting from the transactions with the associate are recognized in the Group's consolidated financial statements only to the extent of interests in the associate that are not related to the Group.

2.4 Investments in joint ventures

A joint venture is a contractual arrangement whereby the Group and other parties undertake an economic activity that is subject to a joint control (i.e. when the strategic financial and operating policy decisions relating to the activities of the joint venture require the unanimous consent of the parties sharing control).

When the Group undertakes its activities under joint venture arrangements directly, the Group's share of jointly controlled assets and any liabilities incurred jointly with other entities are recognized in the financial statements of the relevant entity and classified according to their nature. Liabilities and expenses incurred directly in respect of interests in jointly controlled assets are accounted for on an accrual basis. Income from the sale or use of the Group's share of the output of jointly controlled assets, and its share of joint venture expenses, are recognized when it is probable that the economic benefits associated with the transactions will flow to/from the Group and their amount can be measured reliably.

Joint venture arrangements that involve the establishment of a separate entity in which each venturer has an interest are referred to as jointly controlled entities.

The Group accounts its interests in jointly controlled entities using an equity method, except in which case the investment is classified as held for sale in accordance with Korean IFRS 1105, Non-current Assets Held for Sale and Discontinued Operations.

The Group's share of the assets, liabilities, income and expenses of jointly controlled entities is combined with the equivalent items in the consolidated financial statements on a line-by-line basis.

2.4 Investments in joint ventures, Continued

When the Group transacts with its jointly controlled entity, profits and losses resulting from the transactions with the jointly controlled entity are recognized in the Group's consolidated financial statements only to the extent of interests in the jointly controlled entity that are not related to the Group.

2.5 Revenue recognition

Revenue is measured at the fair value of the consideration received or receivable, net of estimated customer returns, rebates and other similar allowances. The Group recognizes revenue when the amount of revenue can be reliably measured; when it is probable that future economic benefits will flow to the entity; and when specific criteria have been met for each of the Group's activities, as described below.

(i) Goods sold

Revenue is recognized when persuasive evidence exists, usually in the form of an executed sales agreement, that the significant risks and rewards of ownership have been transferred to the buyer, recovery of the consideration is probable, the associated costs and possible return of goods can be estimated reliably, there is no continuing management involvement with the goods, and the amount of revenue can be measured reliably.

(ii) Services

Revenue from services rendered is recognized in profit or loss in proportion to the stage of completion of the transaction at the reporting date. The stage of completion is assessed by reference to surveys of work performed.

2.6 Construction contracts

Where the outcome of a construction contract can be estimated reliably, revenue and costs are recognized by reference to the stage of completion of the contract activity at the end of the reporting period, measured based on the proportion of contract costs incurred for work performed to date relative to the estimated total contract costs, except where this would not be representative of the stage of completion. Variations in contract work, claims and incentive payments are included to the extent that the amount can be measured reliably and its receipt is considered probable.

Where the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized to the extent of contract costs incurred that it is probable will be recoverable. Contract costs are recognized as expenses in the period in which they are incurred.

When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

Korea Gas Corporation and Subsidiaries Notes to the Consolidated Statements December 31, 2012, 2011 and 2010

2. Basis of Preparation and Significant Accounting Policies, Continued

2.6 Construction contracts, Continued

The Group reports the amount of which costs incurred plus recognized profits (less recognized losses) exceeds progress billings as the 'amount due from customers for contract work' and the amount of which progress billings exceed costs incurred plus recognized profits (less recognized losses) as the 'amount due to customers for contract work' Amounts received by the contractor before the related work is performed are recorded as advances in consolidated statement of financial position. Amounts invoiced to the contractor for work performed, but not yet received are recorded as trade and other accounts receivable in consolidate statement of financial position.

2.7 Lease

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

Assets held under finance leases are initially recognized as assets of the Group at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lesser is included in the statement of financial position as a finance lease obligation.

Lease payments are apportioned between finance expenses and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognized immediately in profit or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Group's general policy on borrowing costs (Note 2.9). Contingent rents are recognized as expenses in the periods in which they are incurred.

2.8 Foreign currency

The individual financial statements of each entity are presented in the currency of the primary economic environment in which the entity operates (its functional currency). For the purpose of the consolidated financial statements, the results and financial position of each entity are expressed in 'Korean won', which is the functional currency of the Group and the presentation currency for the consolidated financial statements.

In preparing the financial statements of the individual entities, transactions in currencies other than the entity's functional currency (foreign currencies) are recognized at the rates of exchange prevailing at the dates of the transactions. At the end of each reporting period, monetary items denominated in foreign currencies are retranslated at the rates prevailing at that date. Non-monetary items carried at fair value that are denominated in foreign currencies are retranslated at the rates prevailing at the date when the fair value was determined. Non-monetary items that are measured in terms of historical cost in a foreign currency are not retranslated.

2.8 Foreign currency, Continued

Exchange differences are recognized in profit or loss in the period in which they arise except for:

- exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;
- exchange differences on transactions entered into in order to hedge certain foreign currency risks (see Note 2 (20) below related to hedge accounting); and
- exchange differences on monetary items receivable from or payable to a foreign
 operation for which settlement is neither planned nor likely to occur (therefore forming
 part of the net investment in the foreign operation), which are recognized initially in other
 comprehensive income and reclassified from equity to profit or loss on disposal or partial
 disposal of the net investment.

For the purpose of presenting consolidated financial statements, the assets and liabilities of the Group's foreign operations are expressed in 'Korean won' using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity (attributed to non-controlling interests as appropriate).

On the disposal of a foreign operation (i.e. a disposal of the Group's entire interest in a foreign operation, or a disposal involving loss of control over a subsidiary that includes a foreign operation, loss of joint control over a jointly controlled entity that includes a foreign operation, or loss of significant influence over an associate that includes a foreign operation), all of the accumulated exchange differences in respect of that operation attributable to the Group are reclassified to profit or loss. Any exchange differences that have previously been attributed to non-controlling interests are derecognized, but they are not reclassified to profit or loss.

In the case of a partial disposal (i.e. no loss of control) of a subsidiary that includes a foreign operation, the proportionate share of accumulated exchange differences are re-attributed to non-controlling interests in equity and are not recognized in profit or loss. For all other partial disposals (i.e. of associates or jointly controlled entities not involving a change of accounting basis), the proportionate share of the accumulated exchange differences is reclassified to profit or loss.

Goodwill and fair value adjustments arising on the acquisition of a foreign operation are treated as assets and liabilities of the foreign operation and translated at the closing rate. Foreign currency gains or loss are recognized in other comprehensive income.

2.9 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.

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.

Other borrowing costs are recognized in expense as incurred.

2.10 Governments 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 related to assets shall be presented in the statement of financial position by deducting the grant in arriving at the carrying amount of asset. The grant is recognized in profit or loss over the life of a related asset by reducing depreciation expense.

If the Group received grants related to income, government grants which are intended to compensate the Group for expenses incurred are recognized as other income in profit or loss over the periods in which the Group recognizes the related costs as expenses. The government grants which are intended to give immediate financial support to the Group with no future related costs are recognized as government grant income in profit or loss at the time such grants can be rightfully claimed by the Group.

2.11 Retirement benefit costs

In respect of defined benefit plans, defined benefit obligation is calculated using the Projected Unit Credit Method by qualified actuary firm at the end of reporting period. The present value of defined benefit obligation is calculated by discounting the expected future cash flows using market yields on high quality corporate bond, which has similar date of payment and maturity to the defined benefit obligation.

However, if there is no active market in such bonds, the market yields on government bonds at the end of reporting period shall be used. Actuarial gains or losses, resulting from changes in actuarial assumption and differences between estimated amounts and actual amounts are recognized as other comprehensive income and loss as incurred. Actuarial gains and losses recognized as other comprehensive income and loss are recognized directly in retained earnings, and they shall not be recognized in profit or loss in a subsequent period.

2.11 Retirement benefit costs, Continued

To the extent that the benefits are already vested, the Group shall recognize past service costs immediately, unless past service costs are recognized as an expense on a straight-line basis over the average period until the benefits become vested.

Post-employment benefit obligation is presented at the present value of the obligation after adjusting unrecognized past service cost and deducting the fair value of plan assets in consolidated statements of financial position. When the fair value of plan assets exceed the present value of the defined benefit obligation, the Group recognizes an assets, to the extent of the total of cumulative unrecognized past service cost and the present value of any economic benefits available in the form of refunds from the plan or reduction in the future contribution to the plan.

2.12 Income taxes

Income tax consists of current tax and deferred tax.

(i) Current tax

The tax currently payable is based on taxable profit for the year. Taxable profit differs from profit as reported in the consolidated statements of comprehensive income because of items of income or expense that are taxable or deductible in other years and items that are never taxable or deductible. The Group's liability for current tax is calculated using tax rates that have been enacted or substantively enacted by the end of the reporting period.

(ii) Deferred tax

Deferred tax is recognized on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and the corresponding tax bases used in the computation of taxable profit. Deferred tax liabilities are generally recognized for all taxable temporary differences. Deferred tax assets are generally recognized for all deductible temporary differences to the extent that it is probable that taxable profits will be available against which those deductible temporary differences can be utilized. Such deferred tax assets and liabilities are not recognized if the temporary difference arises from goodwill or from the initial recognition (other than in a business combination) of other assets and liabilities in a transaction that affects neither the taxable profit nor the accounting profit.

Deferred tax liabilities are recognized for taxable temporary differences associated with investments in subsidiaries and associates, and interests in joint ventures, except where the Group is able to control the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. Deferred tax assets arising from deductible temporary differences associated with such

2.12 Income taxes, Continued

(ii) Deferred tax, Continued

investments and interests are only recognized to the extent that it is probable that there will be sufficient taxable profits against which to utilize the benefits of the temporary differences and they are expected to reverse in the foreseeable future.

The carrying amount of deferred tax assets is reviewed at the end of each reporting period and reduced to the extent that it is no longer probable that sufficient taxable profits will be available to allow all or part of the asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the period in which the liability is settled or the asset realized, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities.

Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis.

(iii) Current and deferred tax for the year

Current and deferred tax are recognized in profit or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

2.13 Property, plant and equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits

2.13 Property, plant and equipment, Continued

associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Except for land, the costs of property, plant and equipment less estimated residual value are depreciated on a straight-line basis over estimated useful lives that appropriately reflect the pattern in which the asset's future economic benefits are expected to be consumed. A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life.

	Useful lives (years)
Buildings	15,30,40
Structures	15,30
Machinery	12,20,30
Vehicles	4~5
Office equipment	4~5
Tools and Instruments	4~6
Finance lease assets	25

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.

The carrying amount of an item of property, plant and equipment shall be derecognized on disposal or when no future economic benefits are expected from its use or disposal.

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.

2.14 Intangible assets

(i) Intangible assets acquired separately

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

2.14 Intangible assets, Continued

(i) Intangible assets acquired separately, Continued

Expenditures on geological and geophysical exploration are recognized as cost as incurred. Costs directly associated with an exploration well are capitalized as intangible exploration and evaluation assets. If natural resources are not found, the intangible exploration and evaluation assets are written off.

If hydrocarbons are found, further appraisal activities, which may include the drilling of further well, are carried out. As a result of appraisal, commercial development is expected to be certain, the intangible exploration and evaluation assets is transferred to a mineral right.

Intangible exploration and evaluation assets are subject to technical, commercial and management review at least once a year to evaluate possibilities for entering to development stage. When this is no longer the case, the costs are written off. When proved reserves of oil and natural gas are determined and development is sanctioned, the relevant intangible exploration and evaluation assets are depreciated by the unit of production method.

Expenditure on the construction, installation or completion of infrastructure facilities such as platforms, pipelines and the drilling of development wells is capitalized within property, plant and equipment and depreciation is computed by the unit of production method.

(ii) Internally-generated intangible assets—Research and Development expenditure

Research and 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.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria described above. When the development expenditure does not meet the criteria described above, an internally-generated intangible asset cannot be recognized and the expenditure is recognized in profit or loss in the period in which it is incurred.

Internally-generated intangible assets are carried at acquisition cost less accumulated depreciation and accumulated impairment losses.

2.14 Intangible assets, Continued

(iii) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, and are recognized in profit or loss when the asset is derecognized.

2.15 Impairment of tangible and intangible assets

At the end of each reporting period, the Group reviews the carrying amounts of its tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets 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.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted. If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in profit or loss.

Where an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in profit or loss.

2.16 Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is determined by the specific identification method for materials in transit, by the moving average method for supplies and by the gross average method for all other inventories. The cost of inventories comprises all costs of purchase, costs of conversion and other costs incurred in bringing the inventories to their present location and condition. Net realizable value is the estimated selling price in the ordinary course of business less the estimated costs of completion and the estimated costs necessary to make the sale.

When inventories are sold, the carrying amount of those inventories are recognized as cost of goods sold in the period in which the related revenue is recognized and 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, is recognized as a reduction in the amount of inventories recognized as a cost of goods sold in the period in which the reversal occurs.

2.17 Provisions

Provisions are recognized when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

The amount recognized as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation Where the effect of the time value of money is material, the amount of a provision shall be the present value of the expenditures expected to be required to settle the obligation. The discount rate shall be a pre-tax rate that reflects the current market assessment of the time value of money and the risk specific to the liability. Increase in provision of the time value of money shall be recognized on financial costs.

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognized as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

At the end of each reporting period, the remaining provision balance is reviewed and assessed to determine if the current best estimate is being recognized. If the existence of an obligation to transfer economic benefit is no longer probable, the related provision is reversed during the period.

2.18 Financial assets

All financial assets are recognized and derecognized on trade date where the purchase or sale of a financial asset is under a contract whose terms require delivery of the financial asset within the timeframe established by the market concerned, and are initially measured at fair value, plus transaction costs, except for those financial assets classified as at fair value through profit or loss, which are initially measured at fair value.

Financial assets are classified into the following specified categories; 'financial assets at fair value through profit or loss', 'held-to-maturity financial assets', 'available-for-sale financial assets', and 'loans and receivables'. The classification depends on the nature and purpose of the financial assets and is determined at the time of initial recognition.

(i) Effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition. Income is recognized on an effective interest basis for debt instruments other than those financial assets classified as financial assets at fair value through profit or loss.

(ii) Financial assets at fair value through profit or loss

A financial asset is classified as at fair value through profit or loss if it is held for trading or is designated as such upon initial recognition. Upon initial recognition, transaction costs are recognized in profit or loss when incurred. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss.

A financial asset is classified as held for trading if:

- It has been acquired principally for the purpose of selling it in the near term; or
- On initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profittaking; or
- It is a derivative, including an embedded derivative that is not designated and effective as a hedging instrument.

2.18 Financial assets, Continued

(ii) Financial assets at fair value through profit or loss, Continued

A financial asset other than a financial asset held for trading may be designated as at fair value through profit or loss upon initial recognition if:

- Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- The financial asset forms part of a group of financial assets or financial liabilities, or both, which is managed and whose performance is evaluated on a fair value basis, in accordance with the Group's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or
- It forms part of a contract containing one or more embedded derivatives, and Korean IFRS 1039 Financial Instruments: Recognition and Measurement permits the entire combined contract (asset or liability) to be designated as at financial assets at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gains or losses recognized in profit or loss incorporates any dividend or interest income earned on the financial asset.

(iii) Held-to-maturity financial assets

Financial assets with fixed or determinable payments and fixed maturity dates that the Group has the positive intent and ability to hold to maturity are classified as held-to-maturity financial assets. Held-to-maturity financial assets are measured at amortized cost using the effective interest method less any impairment, with revenue recognized on an effective yield basis.

(iv) Available-for-sale financial assets

Financial assets that are not classified as at held-to-maturity, held-for-trading, designated as financial assets at fair value through profit or loss, or loans and receivables are classified as available-for-sale financial assets. They are initially recognized at fair value plus directly related transaction costs. Those investments traded in an active market are subsequently measured at fair value. Unquoted equity investments which are not traded in an active market, and whose fair value cannot be measured reliably are carried at cost less impairment, if any.

Gains and losses arising from changes in fair value are recognized in other comprehensive income, with the exception of impairment losses, interest calculated

2.18 Financial assets, Continued

(iv) Available-for-sale financial assets, Continued

using the effective interest method, and foreign exchange gains and losses on monetary assets, which are recognized in profit or loss. Where the investment is disposed of or is determined to be impaired, the cumulative gains or losses previously accumulated in the investments revaluation reserve is reclassified to profit or loss. Dividends on available-for-sale financial assets equity instruments are recognized in profit or loss when the Group's right to receive the dividends is established.

The fair value of available-for-sale financial assets monetary assets denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. The foreign exchange gains and losses that are recognized in profit or loss are determined based on the amortized cost of the monetary asset. Other foreign exchange gains and losses are recognized in other comprehensive income.

(v) Loans and receivables

Trade receivables, loans, and other receivables that have fixed or determinable payments that are not traded in an active market are classified as 'loans and receivables'. Loans and receivables are measured at amortized cost using the effective interest method, less any impairment. Interest income is recognized by applying the effective interest rate, except for short-term receivables whose period interest income is immaterial.

(vi) Impairment of financial assets

Financial assets, other than those at financial assets at fair value through profit or loss, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected. For listed and unlisted equity investments classified as available-for-sale financial assets, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment.

For all other financial assets, including redeemable notes classified as available-forsale financial assets and finance lease receivables, objective evidence of impairment could include:

- significant financial difficulty of the issuer or counterparty; or
- default or delinquency in interest or principal payments; or

2.18 Financial assets, Continued

- (vi) Impairment of financial assets, Continued
 - · probable that the borrower will enter bankruptcy or financial re-organization; or
 - when there no longer exist an active market due to economic turmoil.

For financial assets carried at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

In case of financial assets carried at costs, the amount of the impairment loss is measured as the difference between the carrying amount of the financial asset and the present value of estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment losses shall not be reversed.

When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in profit or loss.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to profit or loss in the period.

With the exception of available-for-sale financial assets of equity instruments, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through profit or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

In respect of available-for-sale financial assets for equity securities, impairment losses previously recognized in profit or loss are not reversed through profit or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income. In respect of available-for-sale financial assets for debt instrument, if in a subsequent period, the increase in fair value is related objectively to an event occurring after the impairment was recognized, the impairment loss is recognized in profit or loss.

2.18 Financial assets, Continued

(vii) Derecognition of financial assets

The Group derecognizes a financial asset only when the contractual rights to the cash flows from the asset expire, or when it transfers the financial asset and substantially all the risks and rewards of ownership of the asset to another entity. If the Group neither transfers nor retains substantially all the risks and rewards of ownership and continues to control the transferred asset, the Group recognizes its retained interest in the asset and an associated liability for amounts it may have to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognize the financial asset and also recognizes a collateralized borrowing for the proceeds received.

On derecognition of a financial asset in its entirety, the difference between the carrying amount and the sum of the consideration received and any cumulative gains or losses that had been recognized in other comprehensive income shall be recognized in profit or loss.

If an entity's continuing involvement is in only a part of a financial asset (e.g. when an entity retains an option to repurchase part of a transferred asset, or retains a residual interest that does not result in the retention of substantially all the risks and rewards of ownership and the entity retains control), the entity allocates the previous carrying amount of the financial asset between the part it continues to recognize under continuing involvement, and the part it no longer recognizes on the basis of the relative fair values of those parts on the date of the transfer. For the part that is derecognized, the difference between the carrying amount and the sum of the consideration received and any cumulative gains or losses that had been recognized in other comprehensive income shall be recognized in other comprehensive income shall be allocated based on the relative fair values of those parts on the date of the transfer.

2.19 Financial liabilities and equity instruments issued by the Group

(i) Classification as debt or equity

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

(ii) Equity instruments

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Group are recognized at the proceeds received, net of direct issue costs. If the Group reacquires its own equity instruments, the amount of those instruments are presented as contra equity account. No gains or losses is recognized in profit or loss on the purchase, sale, issue or cancellation of its own equity instruments.

2.19 Financial liabilities and equity instruments issued by the Group, Continued

(iii) Financial liabilities

Financial liabilities are classified as either financial liabilities at fair value through profit or loss or other financial liabilities.

(iv) Financial liabilities at fair value through profit or loss

Financial liabilities are classified as at fair value through profit or loss when the financial liability is either held for trading or it is designated as fair value through profit or loss.

A financial liability is classified as held for trading if:

- it has been acquired principally for the purpose of repurchasing it in the near term;
 or
- on initial recognition it is part of a portfolio of identified financial instruments that the Group manages together and has a recent actual pattern of short-term profittaking; or
- it is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may be designated as at fair value through profit or loss upon initial recognition if:

- such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or
- the financial liability forms part of a group of financial assets or financial liabilities
 or both, which is managed and its performance is evaluated on a fair value basis,
 in accordance with the Group's documented risk management or investment
 strategy, and information about the grouping is provided internally on that basis; or
- it forms part of a contract containing one or more embedded derivatives, and Korean IFRS 1039 Financial Instruments: Recognition and Measurement permits the entire combined contract (asset or liability) to be designated as at fair value through profit or loss.

Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on remeasurement recognized in profit or loss. The net gains or losses recognized in profit or loss incorporates any interest paid on the financial liability and is included in the 'finance income and finance costs' line item in the statement of comprehensive income.

2.19 Financial liabilities and equity instruments issued by the Group, Continued

(v) Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis.

The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

(vi) Financial guarantee liability

Financial guarantee liabilities are initially measured at fair value. If the financial guarantee liabilities are not classified into financial assets at fair value through profit or loss, subsequent measurement shall be the higher of followings.

- (a) the amount determined in accordance with K-IFRS 1037, *Provisions Contingent Liabilities and Contingent Assets*; and
- (b) the amount initially recognized less, when appropriate, cumulative amortization recognized in accordance with K-IFRS 1018, *Revenue*

(vii) Derecognition of financial liabilities

The Group derecognizes financial liabilities when the Group's obligations are discharged, cancelled or they expire. The difference between the carrying amount of a financial liability extinguished and the consideration paid, including any non-cash assets transferred or liabilities assumed, shall be recognized in profit or loss.

2.20 Derivative financial instruments

The Group enters into a variety of derivative financial instruments arrangements to manage its exposure to interest rate and foreign exchange rate risk, including foreign exchange forward contracts, interest rate swaps and cross currency swaps.

Derivatives are initially recognized at fair value at the date the derivative contract is entered into and are subsequently remeasured to their fair value at the end of each reporting period. The resulting gains or losses is recognized in profit or loss immediately unless the derivative is designated and effective as a hedging instrument, in such case the timing of the recognition in profit or loss depends on the nature of the hedge relationship.

2.20 Derivative financial instruments, Continued

A derivative with a positive fair value is recognized as a financial asset; a derivative with a negative fair value is recognized as a financial liability. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

(i) Hedge accounting

The Group designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges, cash flow hedges, or hedges of net investments in foreign operations. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedging relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Group documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

(ii) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in profit or loss immediately, together with any changes in the fair value of the hedged asset or liability that are attributable to the hedged risk. The change in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk are recognized in the same line of the statement of comprehensive income relating to the hedged item.

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized to profit or loss from that date.

(iii) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income. The gains or losses relating to the ineffective portion is recognized immediately in profit or loss, and is included in the 'finance income and costs' line item.

2.20 Derivative financial instruments, Continued

(iii) Cash flow hedges, Continued

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to profit or loss in the periods when the hedged item is recognized in profit or loss, in the same line of the statement of comprehensive income as the recognized hedged item. However, when the forecasted transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

Hedge accounting is discontinued when the Group revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or it no longer qualifies for hedge accounting. Any gains or losses accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in profit or loss.

When a forecasted transaction is no longer expected to occur, the gains or losses accumulated in equity is recognized immediately in profit or loss.

(iv) Hedges of net investments in foreign operations

Hedges of net investments in foreign operations are accounted for similarly to cash flow hedges. Any gains or losses on the hedging instrument relating to the effective portion of the hedge are recognized in foreign currency translation reserve in other comprehensive income. The gains or losses relating to the ineffective portion is recognized immediately in profit or loss, and is included in the 'finance income and costs'.

Gains and losses on the hedging instrument relating to the effective portion of the hedge accumulated in the foreign currency translation reserve are reclassified to profit or loss in the same way as exchange differences relating to the foreign operation.

3. Critical Accounting Estimates and Judgments

The Group makes estimates and assumptions concerning the future. Estimations and assumptions are continuously evaluated with consideration to factors such as events reasonably predictable in the foreseeable future within the present circumstance according to historical experience. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

3.1 Income taxes

The Group is operating in various countries and the income generated from these operations is subject to income taxes based on tax laws and interpretations of tax authorities in numerous jurisdictions. There are many transactions and calculations for which the ultimate tax determination is uncertain. The Group recorded, based on its best estimate, current taxes and deferred taxes that the Group will be liable in the future for the operating results as of the financial year end. However, the final tax outcome in the future may be different from the amounts that were initially recorded. Such differences will impact the current and deferred income taxes in the period in which such determination is made.

3.2 Fair value of financial instruments

The fair value of financial instruments that are not traded in an active market is determined by using valuation techniques. The Group uses its judgment to select a variety of methods and make assumptions that are mainly based on market conditions existing at the end of each reporting period.

3.3 Provisions

As described in Note 25, the Group recognizes provisions for restoration as of the reporting date. The amounts are estimated based on historical data.

3.4 Defined benefit liability

The present value of the defined benefit obligation depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The assumptions used in determining the net cost (income) for pensions include the discount rate. Any changes in these assumptions will impact the carrying amount of the defined benefit liability. The Group determines the appropriate discount rate at the end of each year. This is the interest rate that is used to determine the present value of estimated future cash outflows expected to be required to settle the defined benefit liability. In determining the appropriate discount rate, the Group considers the interest rates of high-quality corporate bonds that are denominated in the currency in which the pension benefits will be paid, and that have terms to maturity approximating to the terms of the related pension liability. Other key assumptions for defined benefit liability are based in part on current market conditions. Additional information is disclosed in Note 24.

4. Operating segments

(a) Details of reportable segments are summarized as follows:

Operating segments	Activity
Natural gas wholesale	Import, production and wholesale of LNG, Compressed Natural Gas, Natural Gas
Others	Supply of power and heat, equipment conservation, terminal management, labor force management, exploration, and development and production of gas and oil

- (b) Details of segment results for the years ended December 31, 2012, 2011 and 2010 are as follows:
 - (i) December 31, 2012

		Total revenue	Inter-segment revenue (*)	External revenue	Operating income (*)	Depreciation and amortization (*)
				(In millions of wo	on)	
Natural gas wholesale	₩	34,516,666	-	34,516,666	1,196,603	783,455
Others	_	653,331	(138,678)	514,653	59,284	273,326
	₩	35,169,997	(138,678)	35,031,319	1,255,887	1,056,781

(ii) December 31, 2011 (Restated)

		Total revenue	Inter-segment revenue (*)	External revenue	Operating income (*)	Depreciation and amortization (*)
				(In millions of wo	on)	
Natural gas wholesale	₩	28,190,880	-	28,190,880	1,004,984	760,779
Others	_	377,774	(138,882)	238,892	12,524	84,870
	₩	28,568,654	(138,882)	28,429,772	1,017,508	845,649

(iii) December 31, 2010 (Restated)

		Total revenue	Inter-segment revenue (*)	External revenue	Operating income (*)	Depreciation and amortization (*)
				(In millions of w	on)	
Natural gas wholesale Others	₩	23,259,612 256.104	- (127,020)	23,259,612 129.084	988,757 58.965	795,293 10,203
Others	_	200,104	(127,020)	120,004		10,200
	₩	23,515,716	(127,020)	23,388,696	1,047,722	805,496

(*) Reportable segment operating income and depreciation and amortization represent amounts before elimination of intra-group transactions.

4. Operating segments, Continued

- (c) Details of assets and liabilities about operating segments as of December 31, 2012, 2011 and 2010 are as follows:
 - (i) December 31, 2012

	Assets (*)	Investment in associates and joint ventures (**)	Acquisition of non-current assets (***)	Liabilities (*)
		(In millions	of won)	
Natural gas wholesale	₩ 39,356,467	1,538,600	1,720,084	31,390,455
Others	5,474,762	40,892	2,326,518	2,785,501
	₩_44,831,229	1,579,492	4,046,602	34,175,956

(ii) December 31, 2011 (Restated)

	Assets (*)	Investment in associates and joint ventures (**)	Acquisition of non-current assets (***)	Liabilities (*)
		(In millions	of won)	
Natural gas wholesale	₩ 34,239,173	1,289,752	1,209,298	26,865,570
Others	3,392,761	26,630	2,177,832	2,014,906
	₩_37,631,934	1,316,382	3,387,130	28,880,476

(iii) December 31, 2010 (Restated)

	Assets (*)	Investment in associates and joint ventures (**)	Acquisition of non-current assets (***)	Liabilities (*)
		(In millions	of won)	
Natural gas wholesale	₩ 29,180,554	675,310	1,491,484	21,922,310
Others	938,926	38,291	314,803	451,727
	₩_30,119,480	713,601	1,806,287	22,374,037

- (*) Reportable segment assets and liabilities represent amounts before the elimination of intra-group transactions and after the allocation of common assets and liabilities. The elimination of intra-group transactions related to assets/ liabilities primarily consists of intra-group loans/borrowings and intra-group trade accounts receivables/payables.
- (**) Investment in associates and joint ventures represent amounts after the assessment of invested shares included in reportable segment assets.
- (***) Aggregate amount of tangible and intangible assets acquired during period before elimination of intra-group transactions.

4. Operating segments, Continued

(d) Details of external revenue for the years ended December 31, 2012, 2011 and 2010, and details of non-current assets by geographic locations as of December 31, 2012, 2011 and 2010 are as follows:

		External revenu	е	Non-current assets (*)			
	2012	2011 (Restated)	2010 (Restated)	2012	2011 (Restated)	2010 (Restated)	
			(In millior	ns of won)			
Korea	₩ 34,581,319	28,227,829	23,291,658	17,564,374	16,683,913	16,188,144	
Mexico	7,961	9,967	5,555	179	166	241	
Australia	26,113	15,532	-	2,993,395	1,631,124	102	
Canada	-	1,899	238	855,962	620,118	141,326	
Iraq	415,762	174,380	91,041	406,524	188,843	234,245	
Russia	164	165	204	71	100	71	
Indonesia	-	-	-	45,274	48,748	47,929	
Mozambique	-	-	-	99,382	27,301	11,448	
Timor				33,752	35,974	33,341	
1	₩ 35,031,319	28,429,772	23,388,696	21,998,913	19,236,287	16,656,847	

^(*) Aggregate amount of tangible and intangible assets before elimination of intra-group transactions.

5. Restricted financial instruments

Restricted financial instruments as of December 31, 2012, 2011 and 2010 are as follows:

	Description	2012	2011 (Restated)	2010 (Restated)
	(In million	ns of won)		
Cash and cash equivalents	₩	-	-	65,538
Short-term financial instruments	Deposit for compensation	55,000		113,687
	₩	55,000		179,225

As of December 31, 2012, the Group provided 16 blank promissory notes to the Korea National Oil Corporation as collaterals for the Group's borrowings.

6. Cash and Cash Equivalents

Cash and cash equivalents include cash and ordinary deposits. Cash and cash equivalents in the consolidated statements of cash flows is the same with cash and cash equivalents in the consolidated statements of financial position.

		2012	2011 (Restated)	2010 (Restated)
		(ln ı	millions of Korean won)	
Cash	₩	203,154	136,224	156,534
Cash equivalents		42,312	18,351	54,333
	₩	245,466	154,575	210,867

7. Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss as of December 31, 2012, 2011 and 2010 are as follows:

		2012		(Restated)	2010 (Restated)	
	Current	Non-current	Current	Non-current	Current	Non-current
			(In milli	ons of won)		
Derivative for trading	₩ 15,327	42,081	1,337	-	11,394	25,341

8. Derivative instruments

(a) Details of derivative instruments as of December 31, 2012, 2011 and 2010 are as follows:

		2012		2011 (Restated)		2010 estated)
	Curre	nt Non-current	Current	Non-current	Current	Non-current
			(In mill	ions of won)		
Derivative instrument assets:						
Foreign currency forwards	₩	5 -	1,337	-	12,956	-
Foreign currency swap	15,3°	13 43,429	-	20,768	38,925	25,341
Interest rate swap		9 -	-	-	-	-
	₩ 15,32	43,429	1,337	20,768	51,881	25,341
Derivatives instrument liabilities:						
Foreign currency forwards	₩ (6,63	38) (12,305)	(9,728)	(4,410)	(7,094)	(6,857)
Foreign currency swap	(19,9)	10) (157,743)	-	(34,018)	(32,922)	(1,318)
Interest rate swap		- (18,574)	-	(4,313)	-	(495)
Firm commitment					(32)	
	₩ (26,54	(188,622)	(9,728)	(42,741)	(40,048)	(8,670)

8. Derivative instruments, Continued

(b) Details of foreign currency swap contracts as of December 31, 2012, are as follows:

(In millions of won and Japanese yen, and in thousands of US dollars, Euro, Confoederatio Helvetica Franc, Hong Kong Dollars, Singapore Dollars, Chinese Yuan, Canadian Dollars and Australian Dollars)

	Financial		Amount o	f contract	Interest r		
Purpose	institutions	Period	Sell	Buy	Sell	Buy	Exchange rate
Trading	UBS	2011.07 ~ 2016.07	USD 189,982	JPY 15,000	3.60%	1.38%	USD 1 = JPY 78.96
	Goldman Sachs RBS Barclays UBS UBS	2011.07 ~ 2016.07 2011.10 ~ 2016.10 2011.10 ~ 2016.10 2011.10 ~ 2016.10 2011.10 ~ 2019.10	USD 114,025 USD 57,013	JPY 15,000 CHF 100,000 CHF 100,000 CHF 50,000 CHF 100,000	3.62% 3.14% 3.14% 3.14% 4.28%	1.38% 2.01% 2.01% 2.01% 2.89%	USD 1 = JPY 78.96 USD 1 = CHF 0.8770 USD 1 = CHF 0.8770 USD 1 = CHF 0.8770 USD 1 = CHF 0.8770
	Societe General	2012.04 ~ 2013.04	CAD 40,863	47,116	2.59%	3.57%	CAD 1 = KRW 1,153.0
	UBS RBS HSBC	2012.06 ~ 2017.06 2012.06 ~ 2017.06 2012.06 ~ 2017.06	CAD 39,113 USD 38,665 USD 64,443	44,490 44,781 74,650	3.74% 2.72% 2.73%	3.64% 3.66% 3.66%	CAD 1 = KRW 1,137.5 USD 1 = KRW 1,158.2 USD 1 = KRW 1,158.4
	HSBC	2012.06 ~ 2013.06	USD 49,900	58,383	3M Libor + 1.02%	3.30%	USD 1 = KRW 1,170.0
	BNP	2012.06 ~ 2014.06	CAD 102,210	115,641	3M CDOR + 0.715%	2.33%	CAD 1 = KRW 1,131.4
	UBS	2012.06 ~ 2014.06	CAD 51,105	57,820	3M CDOR + 0.74%	2.33%	CAD 1 = KRW 1,131.4
	KEB	2012.06 ~ 2014.06	CAD 51,105	USD 50,000		3M Libor + 0.65%	USD 1 = CAD 1.021
	Goldman Sachs	2012.06 ~ 2014.06	USD 25,131	29,080	3M Libor + 1.20%	2.75%	USD 1 = KRW 1,157.1
	ВОА	2012.06 ~ 2013.06	USD 23,684	27,479	3M Libor + 0.90%	2.93%	USD 1 = KRW 1,160.3
	BOA	2012.07 ~ 2013.06	USD 7,820	9,048	3M Libor + 0.90%	2.89%	USD 1 = KRW 1,157.0
	UBS	2012.06 ~ 2013.06	CAD 25,860	29,240	3M CDOR + 1.03%	3.44%	CAD 1 = KRW 1,130.7
	Barclays UBS	2012.06 ~ 2017.06 2012.06 ~ 2013.07	,	29,134 43,140	2.58% 2.27%	3.32% 3.44%	USD 1 = KRW 1,159.9 CAD 1 = KRW 1,126.0
	BOA	2012.09 ~ 2017.09	CAD 37,417	42,854	3M CDOR + 1.67%	3M CD + flat	CAD 1 = KRW 1,145.3
	ANZ DBS HSBC	2012.09 ~ 2015.09 2012.09 ~ 2015.09 2012.09 ~ 2015.09	USD 104,225	116,711 116,711 116,711	1.64% 1.63% 1.64%	3.10% 3.10% 3.10%	USD 1 = KRW 1,119.8 USD 1 = KRW 1,119.8 USD 1 = KRW 1,119.8

8. Derivative instruments, Continued

(b) Details of foreign currency swap contracts as of December 31, 2012, are as follows, Continued

(In millions of Korean won and Japanese yen, and in thousands of US dollars, Euro, Confoederatio Helvetica Franc, Hong Kong Dollars, Singapore Dollars, Chinese Yuan and Canadian Dollars, Australian Dollars)

	Financial		Amount of contract		Interest rate of contract		
Purpose	institutions	Period	Sell	Buy	Sell	Buy	Exchange rate
Cash flow hedge	UBS	2011.04 ~ 2015.10	355,608	CHF 300,000	4.03%	2.26%	USD 1 = KRW 1,185.4
	Credit Agricole	2011.02 ~ 2013.02	55,965	USD 50,000	3.90%	3M Libor + 1.10%	USD 1 = KRW 1,119.3
	MIZUHO	2011.02 ~ 2013.02	55,850	USD 50,000	3.90%	3M Libor + 1.10%	USD 1 = KRW 1,117.0
	DBS	2011.03 ~ 2015.03	56,525	USD 50,000	4.21%	3M Libor + 1.05%	USD 1 = KRW 1,130.5
	SMBC	2011.03 ~ 2015.03	56,525	USD 50,000	4.21%	3M Libor + 1.05%	USD 1 = KRW 1,130.5
	Societe General UBS RBS	2012.04 ~ 2013.04 2012.06 ~ 2017.06 2012.06 ~ 2017.06	47,116 44,490 44,781	USD 41,395 JPY 3,000 HKD 300,000	3.57% 3.64% 3.66%	1.53% 1.28% 2.50%	USD 1 = KRW 1,138.2 JPY 1 = KRW 14.8 HKD 1 = KRW 149.3
	HSBC	2012.06 ~ 2017.06	74,650	HKD 500,000	3.66%	2.60%	HKD 1 = KRW 149.3
	HSBC	2012.06 ~ 2013.06	58,383	EUR 40,000	3.30%	3M Euribor + 0.40%	EUR 1 = KRW 1459.6
	BNP	2012.06 ~ 2014.06	115,641	USD 100,000	2.33%	3M Libor + 0.65%	USD 1 =KRW 1,156.4
	UBS	2012.06 ~ 2014.06	57,820	USD 50,000	2.33%	3M Libor + 0.65%	USD 1 =KRW 1,156.4
	Goldman Sachs BOA	2012.06 ~ 2014.06 2012.06 ~ 2013.06	29,080 27,479	HKD 195,000 SGD 30,000	2.75% 2.93%	1.65% 1.10%	HKD 1 = KRW 149.1 SGD 1 = KRW 916.0
	BOA	2012.07 ~ 2013.06	9,048	SGD 10,000	2.89%	1.10%	SGD 1 = KRW 904.8
	UBS	2012.06 ~ 2013.06	29,240	EUR 20,000	3.44%	3M Euribor + 0.45%	EUR 1 =KRW 1,462.0
	Barclays	2012.06 ~ 2017.06	29,134	CNY 160,000	3.32%	3.25%	CNY 1 =KRW 182.1
	UBS	2012.06 ~ 2013.07	43,140	JPY 3,000	3.44%	0.95%	JPY 1 = KRW 14.4
	Credit Agricole	2012.07 ~ 2017.07	114,810	USD 100,000	3.15%	2.25%	USD 1 = KRW 1,148.1
	Barclays	2012.07 ~ 2017.07	114,810	USD 100,000	3.16%	2.25%	USD 1 = KRW 1,148.1
	BOA	2012.09 ~ 2017.09	42,854	,	3M CD +flat	3M JPY Libor + 0.76%	JPY1 = KRW 14.3
	ANZ DBS HSBC	2012.09 ~ 2015.09 2012.09 ~ 2015.09 2012.09 ~ 2015.09	116,711 116,711 116,711	AUD 100,000 AUD 100,000 AUD 100,000	3.10% 3.10% 3.10%	4.50% 4.50% 4.50%	AUD 1 = KRW 1,167.1 AUD 1 = KRW 1,167.1 AUD 1 = KRW 1,167.1

8. Derivative instruments, Continued

(c) Details of the interest rate swap contracts as of December 31, 2012, are as follows:

	Financial				Inte	rest rate of contract	
Purpose	institutions	Period	od Amount		Sell	Buy	
	-			(In millions of won and in thousands of US dollars)			
Trading	JPM	2011.09 ~ 2016.09	USD	200,000	2.32%	6M Libor + 1.00%	
Ü	DBS	2011.11 ~ 2015.11	USD	400,000	2.55%	3M Libor + 1.45%	
	DB	2012.06 ~ 2013.06	USD	30,000	1.55%	3M Libor + 1.02%	
	KEB	2012.06 ~ 2016.06	USD	50,000	1.96%	3M Libor + 1.20%	
	SOGE	2012.06 ~ 2016.06	USD	50,000	1.96%	3M Libor + 1.20%	
	JPM	2012.06 ~ 2017.06	USD	50,000	2.30%	3M Libor + 1.27%	
	CAL	2012.06 ~ 2017.06	USD	50,000	2.30%	3M Libor + 1.27%	
Cash flow hedge	Morgan Stanley	2010.09 ~ 2020.09	KRW	20,000	4.69%	Min{10.0%, Max[2.0%,(28Xindex)]}	

(d) Details of foreign currency forwards contract as of December 31, 2012, are as follows:

8. Derivative instruments, Continued

(d) Details of foreign currency forwards contract as of December 31, 2012, are as follows, Continued

		Contract		Amount			Exchange
Purpose	Financial institutions	Date	Expiration	Sell		Buy	rate
						ns of won a ds of US do	
	CSFB	2012.12.27	2013.01.10	160,988	USD	150,000	1,073.3
	Kookmin Bank	2012.12.27	2013.01.11	53,655	USD	50,000	1,073.1
	SC	2012.12.27	2013.01.11	53,657	USD	50,000	1,073.1
	Woori Bank	2012.12.27	2013.01.11	53,664	USD	50,000	1,073.3
	Mizuho Korea Development Bank	2012.12.28 2012.12.27	2013.01.14 2013.01.14	53,600 53.678	USD	50,000 50.000	1,072.0 1.073.6
	UBS	2012.12.28	2013.01.14	85,766	USD	80,000	1,073.0
	Morgan Stanley	2012.12.28	2013.01.15	85,766	USD	80,000	1,072.1
	Shinhan Bank	2012.12.28	2013.01.15	85,755	USD	80,000	1,071.9
Cash flow	JP Morgan	2012.12.26	2013.02.26	57,219	USD	53,083	1,077.9
hedge	ING	2012.12.26	2013.02.26	50,064	USD	46,445	1,077.9
	Credit Agricole	2012.12.24	2013.02.26	54,978	USD	50,969	1,078.7
	JP Morgan	2012.12.26	2013.02.26	55,508	USD	51,496	1,077.9
	SCOTIA	2012.12.26	2013.02.26	54,922	USD	50,951	1,078.0
	RBS	2012.12.24	2013.02.26	53,163	USD	49,282	1,078.8
	BTMU	2012.12.24	2013.02.26	75,007	USD	69,535	1,078.7
	JP Morgan	2012.12.26	2013.02.26	38,453	USD	35,674	1,077.9
	BOA	2012.12.26	2013.03.26	77,657	USD	71,931	1,079.6
	BOA	2012.12.24	2013.03.26	63,029	USD	58,341	1,080.4
	BOA	2012.12.24	2013.03.26	53,414	USD	49,441	1,080.4
	DB	2012.12.26	2013.03.26	79,078	USD	73,251	1,079.6
	SMBC	2012.12.27	2013.03.26	54,785	USD	50,803	1,078.4
	DBS	2012.12.26	2013.03.26	50,931	USD	47,182	1,079.5
	DB	2012.12.26	2013.03.26	14,571	USD	13,497	1,079.6
	SMBC	2012.12.27	2013.03.26	44,392	USD	41,164	1,078.4
	DBS	2012.12.26	2013.03.26	55,716	USD	51,616	1,079.5
	JP Morgan	2009.07.27	2014.07.15	121,976	USD	100,000	1,219.8

8. Derivative instruments, Continued

(e) Gains or losses on valuation of derivatives for the years ended December 31, 2012, 2011 and 2010 are as follows:

		Gains (losses) on valuation of derivatives			Gains (losses) on transaction of derivatives			Other comprehensive income (*)		
		2012	2011 (Restated)	2010 (Restated)	2012	2011 (Restated)	2010 (Restated)	2012	2011 (Restated)	2010 (Restated)
					(In n	nillions of wo	n)			
Foreign currency forwards	₩	(4,377)	(8,392)	958	(92,251)	(37,832)	22,227	557	(285)	(1,697)
Foreign currency swap Interest rate		10,372	(32,250)	9,234	(17,090)	17,920	(78,082)	(3,442)	(229)	589
swap		(13,520)	(2,603)	(29)	(6,807)	-	-	1,037	(1,746)	(1,139)
Total	₩	(7,525)	(43,245)	10,163	(116,148)	(19,912)	(55,855)	(1,848)	(2,260)	(2,247)

(*) Income taxes are included

As of December 31, 2012, losses on valuation of derivatives amounting to \$5,284 million (2011: \$3,539 million and 2010: \$1,251) in accumulated other comprehensive income are presented net of income tax.

(f) Hedging on non-financial items

The Group currently uses LNG ships that were built specifically for the Group's use for stable LNG supply through a long-term financial lease contract in US dollars with the lessor. As the lease expense is recovered through the sales price as a component of shipping expense, the lease expense and raw material cost, which is also denominated in US dollars, form part of the selling price and have same exposure to foreign currency change.

In order for the Group to hedge the risk of foreign exchange rate change on foreign revenue from the natural gas for the use of power, only foreign currency revenue with the same maturity date as the lease liability has been distinguished from long-term supply contract to be designated as the hedged item, and the payment of lease liability has been designated as hedging instrument of non-financial items to apply the hedge accounting.

Purpose	Period	Hedged item	Hedging instrument	Currency swap exchange rate
Cash flow hedge	Lease contract period (2010 ~ 2028)	Foreign currency risk in LNG forecast sales	Payment in financial lease liabilities in foreign currency	Currency exchange rate of lease payment

8. Derivative instruments, Continued

(f) Hedging on non-financial items, Continued

Gains and losses related to the hedging on non-financial items are as follows:

(i) December 31, 2012

		Finance income and cost	Other comprehensive income		
Purpose	_	Foreign currency translation gains	Cash flow hedges		
		(In milli	ons of won)		
Cash flow hedge	₩	(197,418)	197,418		
Income tax effect	_	_	(47,775)		
	₩	(197,418)	149,643		

(ii) December 31, 2011 (Restated)

		Finance income and cost	Other comprehensive income
Purpose		Foreign currency translation losses	Cash flow hedges
		(In milli	ons of won)
Cash flow hedge Income tax effect	₩	43,361	(43,361) 8,709
	₩	43,361	(34,652)

(iii) December 31, 2010 (Restated)

		Finance income and cost	Other comprehensive income	
Purpose		Foreign currency translation losses	Cash flow hedges	
		(In milli	ons of won)	
Cash flow hedge	₩	(81,125)	81,125	
Income tax effect		<u> </u>	(17,847)	
	₩	(81,125)	63,278	

(g) Hedges of net investments in a foreign operation

In order for the Group to hedge the risk of exchange rate fluctuation caused by the foreign currency translation, hedge accounting has been applied to the net investment of overseas business regarding the difference in foreign exchange which arose between the functional currency of overseas business and of the Parent Company.

8. Derivative instruments, Continued

(g) Hedges of net investments in a foreign operation, Continued

The amounts recognized on the comprehensive income statements for the years ended December 31, 2012, 2011 and 2010 are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In m	illions of Korea	n won)
After tax net gains (losses) on hedge of net				
investment in a foreign operation	₩	235,793	(21,960)	11,890

9. Trade and other accounts receivable

(a) Trade and other accounts receivables as of December 31, 2012, 2011 and 2010 are as follows:

(i) December 31, 2012

-	Face amount	Allowance for doubtful receivables (In millions of won	Present value discount	Book value
Current:				
Trade accounts receivable ₩	7,823,631	(234)	(48)	7,823,349
Other accounts receivable	243,606	-	-	243,606
	8,067,237	(234)	(48)	8,066,955
Non-current:				
Trade accounts receivable	4,919	(44)	(370)	4,505
Other accounts receivable	183,810	<u>-</u>		183,810
	188,729	(44)	(370)	188,315
₩	8,255,966	(278)	(418)	8,255,270

9. Trade and other accounts receivable, Continued

(a) Trade and other accounts receivables as of December 31, 2012, 2011 and 2010 are as follows, Continued

(ii) December 31, 2011 (Restated)

	Face amount	Allowance for doubtful receivables	Present value discount	Book value
_		(In millions of	won)	
Current:				
Trade accounts receivable ₩	6,259,842	(41)	(50)	6,259,751
Other accounts receivable	195,274			195,274
	6,455,116	(41)	(50)	6,455,025
Non-current:				
Trade accounts receivable	5,801	(49)	(467)	5,285
Other accounts receivable	174,666			174,666
-	180,467	(49)	(467)	179,951
₩ ₌	6,635,583	(90)	(517)	6,634,976

(iii) December 31, 2010 (Restated)

	Face amount	Allowance for doubtful receivables	Present value discount	Book value
_		(In millions of	won)	
Current:				
Trade accounts receivable ₩	5,164,705	(2,117)	(57)	5,162,531
Other accounts receivable	86,395			86,395
	5,251,100	(2,117)	(57)	5,248,926
Non-current:				
Trade accounts receivable	6,660	(54)	(583)	6,023
Other accounts receivable	60,166			60,166
-	66,826	(54)	(583)	66,189
₩_	5,317,926	(2,171)	(640)	5,315,115

9. Trade and other accounts receivable, Continued

(b) Other accounts receivable as of December 31, 2012, 2011 and 2010 are as follows:

(i) December 31, 2012

		Face amount	Allowance for doubtful receivables	Present value discount	Book value
	_		(In millions of wo	on)	
Current:					
Non-trade receivables	₩	221,341	-	-	221,341
Accrued income		12,148	-	-	12,148
Deposits	_	10,117			10,117
		243,606	-	-	243,606
Non-current:					
Non-trade receivables		126,070	-	_	126,070
Deposits		51,280	-	_	51,280
Others	_	6,460			6,460
	_	183,810	<u>-</u>		183,810
	₩	427,416	<u>-</u>	<u>-</u>	427,416
	_				

(ii) December 31, 2011 (Restated)

		Face amount	Allowance for doubtful receivables	Present value discount	Book value
	_		(In millions of wo	on)	
Current:					
Non-trade receivables	₩	184,009	-	-	184,009
Accrued income		10,983	-	-	10,983
Deposits	_	282			282
	_	195,274	<u>-</u>	<u>-</u>	195,274
Non-current:					
Non-trade receivables		127,218	-	-	127,218
Deposits		47,448	-	-	47,448
Others	_				
	_	174,666	<u>-</u>		174,666
	₩_	369,940			369,940
	_				

9. Trade and other accounts receivable, Continued

- (b) Other accounts receivable as of December 31, 2012, 2011 and 2010 are as follows, Continued
 - (iii) December 31, 2010 (Restated)

	_	Face amount	Allowance for doubtful receivables	Present value discount	Book value
			(In millions of w	on)	
Current:					
Non-trade receivables	₩	78,041	-	-	78,041
Accrued income		8,354	-	-	8,354
Deposits	_				
		86,395	-	-	86,395
Non-current:					
Non-trade receivables		-	-	-	-
Deposits	_	60,166	<u>-</u>		60,166
	_	60,166		<u> </u>	60,166
	₩_	146,561			146,561

(c) Credit risk and allowance for doubtful account

(i) The aging analysis of trade accounts receivable as of December 31, 2012, 2011 and 2010 is as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(II	n millions of wo	n)
Receivables that are neither past due nor impaired Receivables that are past due but not impaired	₩	7,828,162	6,265,400	5,168,557
60~90 days		103	50	380
90~120 days		49	59	1,404
Receivables verified after impairment test				
More than 120 days	_	236	134	1,024
	_	7,828,550	6,265,643	5,171,365
Less : Allowance for doubtful receivables		(278)	(90)	(2,171)
Less : Present value discount	_	(418)	(517)	(640)
	₩_	7,827,854	6,265,036	5,168,554

9. Trade and other accounts receivable, Continued

- (c) Credit risk and allowance for doubtful account, Continued
 - (ii) The aging analysis of other accounts receivable as of December 31, 2012, 2011 and 2010, is as follows:

		2012	2011 (Restated)	2010 (Restated)
		(In millions of won)		
Receivables that are neither past due nor impaired Receivables that are past due but not impaired	42	27,414	369,938	146,559
60~90 days		2	1	1
90~120 days			1	1
	42	27,416	369,940	146,561
Less : Allowance for doubtful receivables Less : Present value discount		-	-	-
Less . Present value discount				
₩	42	27,416	369,940	146,561

(iii) Movement on allowance for doubtful receivables for the years ended December 31, 2012, 2011 and 2010 are as follows:

		20	2011 2012 (Restated)			2010 (Restated)	
	_	Trade Other accounts receivable receivable		Trade accounts receivable	Other accounts receivable	Trade accounts receivable	Other accounts receivable
	_			(In million	s of won)		
Beginning balance Provision for receivables	₩	(90)	-	(2,171)	-	(1,352)	-
impairment		(241)	-	-	-	(1,191)	-
Write-off		53	-	1,157	-	213	-
Unused effect		-	-	942	-	-	-
Others	_			(18)		159	
Ending balance	₩	(278)		(90)		(2,171)	

10. Available-for-sale financial assets

Details of available-for-sale financial assets as of December 31, 2012, 2011 and 2010 are as follows:

		2012			2011 estated)		2010 estated)
	_	Current	Non-current	Current	Non-current	Current	Non-current
				(In milli	ions of won)		
Equity instruments:							
Marketable	₩	-	3,422	-	5,164	-	8,006
Unmarketable (*)	_		20,979		21,548		20,901
	₩		24,401		26,712		28,907

^(*) Unmarketable equity instruments are recorded at cost, since their respective fair values are not available or reliably determinable.

11. Held-to-maturity financial assets

Details of held-to-maturity financial assets as of December 31, 2012, 2011 and 2010 are as follows:

			2012		2011 estated)	2010 (Restated)	
		Current	Non-current	Current	Non-current	Current	Non-current
				(In milli	ions of won)		
Government bonds	₩	139	1,430	311	1,301	447	1,326

12. Other financial assets

Details of other financial assets as of December 31, 2012, 2011 and 2010 are as follows:

		2012		2011 estated)	2010 (Restated)	
	Current	Non-current	Current	Non-current	Current	Non-current
			(In milli	ons of won)		
Loans ₩	439	374,856	4,061	348,271	483	334,915
(Present value discount)	-	(1)	-	(4)	-	(11)
(Allowance for doubtful						
receivables)	-	(29,092)	-	(28,632)	-	(28,550)
Short-term financial						
instruments	61,582	-	9,467	-	6,066	-
Other financial assets			12			
₩	62,021	345,763	13,540	319,635	6,549	306,354

13. Inventories

Details of inventories as of December 31, 2012, 2011 and 2010 are as follows:

(i) December 31, 2012

		Acquisition cost	Government grants	Provision for loss on inventory valuation	Book value
		_	(In million	ns of won)	
Raw materials	₩	1,350,941	-	-	1,350,941
Finished goods		54,501	-	-	54,501
Supplies		34,704	-	-	34,704
Goods in transit	_	453,870			453,870
	₩_=	1,894,016			1,894,016

(ii) December 31, 2011 (Restated)

	Acquisition cost	Government grants	Provision for loss on inventory valuation	Book value
		(In million	ns of won)	
Raw materials	2,631,873	-	_	2,631,873
Finished goods	46,110	-	-	46,110
Supplies	31,836	-	-	31,836
Goods in transit	650,469			650,469
	3,360,288			3,360,288

(iii) December 31, 2010 (Restated)

	Acquisition cost	Government grants	Provision for loss on inventory valuation	Book value
		(In million		
Raw materials	1,537,629	-	-	1,537,629
Finished goods	30,157	-	-	30,157
Supplies	31,556	-	-	31,556
Goods in transit	528,821	-	-	528,821
Other inventories	28,372			28,372
	2,156,535			2,156,535

14. Other non-financial assets

Details of other non-financial assets as of December 31, 2012, 2011 and 2010 are as follows:

		2012			011 stated)	2010 (Restated)		
	•	Current	Non-current	Current	Non-current	Current	Non-current	
	•			(In millio	ns of won)			
Advance payments	₩	193,807	5,851	123,245	47,678	8,985	-	
Prepaid expenses		27,240	37	27,289	42	16,806	46	
Others		1,279,718	4,638,917	1,849,956	2,860,829	1,108,156	3,414,895	
	₩	1,500,765	4,644,805	2,000,490	2,908,549	1,133,947	3,414,941	

In accordance with the standard for natural gas supply price and the guidelines for raw material cost pass-through adjustment system for city gas and power generation, difference between actual cost incurred and current year's revenues, the settled income, is reflected in following year's rate upon the approval of the government.

The Group recognizes settled income by adjusting cost of sales, and relevant assets and liabilities as other non-financial assets and non-financial liabilities respectively.

Details of other non-financial assets and liabilities arising from settled income of natural gas as December 31, 2012, 2011 and 2010 are as follows:

		20	12		11 tated)	2010 (Restated)		
		Material cost	Supply cost	Material cost	Supply cost	Material cost	Supply cost	
				(In million	ns of won)			
Current: Other non- financial								
assets Other non- financial	₩	1,134,740	20,809	1,638,134	-	809,045	139,709	
liabilities Non-current: Other non- financial		-	-	-	(198,250)	(53,233)	(79,999)	
assets Other non- financial liabilities		4,638,885	- -	2,860,109	-	3,414,875	- -	
	₩	5,773,625	20,809	4,498,243	(198,250)	4,170,687	59,710	

15. Investments in subsidiaries

(a) Details of investments in subsidiaries as of December 31, 2012, 2011 and 2010 are as follows:

			Percentage of ownership				
Subsidiary	Business	Location	2012	2011 (Restated)	2010 (Restated)		
				ions of won, ntage of own			
Korea Gas Technology							
Corp.	Construction & Service	Korea	100.00%	100.00%	100.00%		
KOGAMEX Investment							
Manzanillo B.V.	Service	Netherlands	100.00%	100.00%	100.00%		
KOMEX-GAS, S. de R.L.	LNG terminal						
de C.V.	construction	Mexico	99.97%	99.97%	99.97%		
KOGAS Vostok LLC	LNG terminal						
	inspection	Russia	100.00%	100.00%	100.00%		
KOGAS Iraq B.V.	Resource development	Netherlands	100.00%	100.00%	100.00%		
KOGAS Badra B.V.	Resource development	Netherlands	100.00%	100.00%	100.00%		
KOGAS Akkas B.V.	Resource development	Netherlands	100.00%	100.00%	100.00%		
KOGAS Mansuriyah B.V.	Resource development	Netherlands	100.00%	100.00%	100.00%		
KOGAS Canada Ltd.	Resource development	Canada	100.00%	100.00%	100.00%		
KOGAS Canada LNG Ltd.	Resource development	Canada	100.00%	100.00%	_		
KOGAS Australia Pty. Ltd.	Resource development	Australia	100.00%	100.00%	100.00%		
KOGAS Prelude Pty. Ltd.	Resource development	Australia	100.00%	100.00%	-		
KG Timor Leste Ltd.	Resource development	Marshall Islands	100.00%	100.00%	100.00%		
KG Krueng Mane Ltd.	Resource development	Marshall Islands	100.00%	100.00%	100.00%		
KG Mozambique Ltd.	Resource development	Marshall Islands	100.00%	100.00%	100.00%		
KGLNG E&P Pty Ltd.	Resource development	Australia	100.00%	100.00%	-		
KGLNG E&P II Pty Ltd.	Resource development	Australia	100.00%	100.00%	-		
KGLNG Liquefation Pty	LNG plant						
Ltd.	management	Australia	100.00%	100.00%	-		
Manzanillo Gas Tech, S.	LNG terminal						
de R.L. de C.V. (*)	management	Mexico	51.00%	51.00%	51.00%		
Kyung-Ki CES Corp.	Energy	Korea	56.31%	56.31%	56.31%		
KOGAS Mozambique, Lda	Construction & Service	Mozambique	99.99%	-	-		

^(*) The subsidiary is excluded from the scope of consolidation, as the effect of its inclusion is not significant.

15. Investments in subsidiaries, Continued

(b) Financial information of investments in subsidiaries as of December 31, 2012, 2011 and 2010 is as follows:

(i) December 31, 2012

		Assets	Liabilities	Equities	Revenue	Net Income	Comprehensive Income
	_			(In millio	ns of won)		
Korea Gas Technology							
Corp.	₩	124,279	43,746	80,533	188,992	8,528	7,700
KOGAMEX Investment							
Manzanillo B.V.		23,472	68,256	(44,784)	-	888	6,378
KOMEX-GAS, S. de R.L.							
de C.V.		3,656	1,150	2,506	7,961	2,247	2,411
KOGAS Vostok LLC		1,149	607	542	164	(482)	(487)
KOGAS Iraq B.V.		664,436	242,977	421,459	415,762	51,794	21,960
KOGAS Badra B.V.		171,991	7,566	164,425	-	(85)	(9,816)
KOGAS Akkas B.V.		40,664	4,857	35,807	-	4	(2,099)
KOGAS Mansuriyah B.V.		7,819	634	7,185	-	(47)	(313)
KOGAS Canada Ltd.		919,481	38,013	881,468	-	(6,548)	(49,168)
KOGAS Canada LNG Ltd.		50,386	406	49,980	-	(5,885)	(8,428)
KOGAS Australia Pty.							
Ltd.		2,500,125	1,889,646	610,479	26,113	(24,449)	(63,838)
KOGAS Prelude Pty. Ltd.		702,824	190,515	512,309	-	(2,625)	(38,707)
KG Timor Leste Ltd.		33,752	38,067	(4,315)	-	(4,208)	(3,782)
KG Krueng Mane Ltd.		45,274	50,006	(4,732)	-	(5,134)	(4,568)
KG Mozambique Ltd.		99,362	101,655	(2,293)	-	(2,418)	(2,226)
Kyung-Ki CES Corp.		63,953	85,397	(21,444)	14,340	(10,597)	(8,828)
KOGAS Mozambique,							
Lda.		22,136	22,002	134	-	(261)	(277)

15. Investments in subsidiaries, Continued

(b) Financial information of investments in subsidiaries as of December 31, 2012, 2011 and 2010 is as follows, Continued

(ii) December 31, 2011 (Restated)

	A	Assets	Liabilities	Equities	Revenue	Net Income	Comprehensive Income
Korea Gas Technology Corp. KOGAMEX Investment	₩	115,603	42,770	72,833	160,537	6,622	7,877
Manzanillo B.V.		18,000	69,162	(51,162)	-	(4,402)	(25,241)
KOMEX-GAS, S. de R.L. de C.V.		5,445	985	4,460	9,967	2,544	2,065
KOGAS Vostok LLC		1,281	252	1,029	165	(799)	(832)
KOGAS Iraq B.V.	4	499,886	199,985	299,901	174,380	13,788	19,206
KOGAS Badra B.V.		89,155	2,495	86,660	-	(85)	1,728
KOGAS Akkas B.V.		10,939	1,221	9,718	-	3	(81)
KOGAS Mansuriyah B.V.		809	14	795	-	(61)	(37)
KOGAS Canada Ltd.	(643,154	19,207	623,947	1,899	(8,061)	(10,042)
KOGAS Canada LNG Ltd.		49,569	-	49,569	-	(1,510)	(1,112)
KOGAS Australia Pty. Ltd.	1,7	799,341	1,478,336	321,005	15,532	(24,113)	(15,957)
KOGAS Prelude Pty. Ltd.		-	-	-	-	-	-
KG Timor Leste Ltd.		35,974	39,775	(3,801)	-	(873)	(945)
KG Krueng Mane Ltd.		48,748	52,699	(3,951)	-	(1,189)	(1,271)
KG Mozambique Ltd.		27,301	28,478	(1,177)	-	(363)	(387)
Kyung-Ki CES Corp.		66,739	79,355	(12,616)	15,295	(15,514)	(16,023)

(iii) December 31, 2010 (Restated)

		Assets	Liabilities	Equities	Revenue	Net Income	Comprehensive Income
Korea Gas Technology Corp. KOGAMEX Investment	₩	104,671	37,205	67,466	146,686	7,973	7,973
Manzanillo B.V. KOMEX-GAS, S. de R.L. de		38,381	64,302	(25,921)	-	(4,074)	(19,261)
C.V.		3,862	1,201	2,661	5,555	1,278	1,323
KOGAS Vostok LLC		970	231	739	204	(512)	(554)
KOGAS Iraq B.V.		355,363	152,472	202,891	91,040	25,576	26,279
KOGAS Badra B.V.		48,426	37	48,389	-	(58)	(27)
KOGAS Akkas B.V.		27	-	27	-	-	-
KOGAS Mansuriyah B.V.		27	-	27	-	-	-
KOGAS Canada Ltd.		203,872	6,137	197,735	238	(1,982)	1,767
KOGAS Australia Pty. Ltd.		11,603	15,502	(3,899)	-	(936)	(6,358)
KG Timor Leste Ltd.		33,341	36,197	(2,856)	-	(741)	(676)
KG Krueng Mane Ltd.		47,929	50,609	(2,680)	-	(1,290)	(1,236)
KG Mozambique Ltd.		11,448	12,237	(789)	-	(271)	(254)
Kyung-Ki CES Corp.		79,005	75,599	3,406	12,380	(4,338)	(4,982)

16. Investments in associates and joint ventures

- (a) Details of investments in associates and joint ventures as of December 31, 2012, 2011 and 2010 are as follows:
 - (i) December 31, 2012

	Business	Location	Percentage of ownership	Acquisition cost	Book value
	(In millio	ons of won, exce	pt percentage of ov	vnership)	
Associates: Korea Ras Laffan LNG					
Ltd. (*2) Korea LNG Ltd. Hyundai Yemen LNG	Resource development Resource development	Bermuda Bermuda	60.00% 24.00%	₩ 19,532 3,298	728,840 130,987
Company (*3) Korea LNG Trading Co.,	Resource development	Bermuda	49.00%	8,306	8,306
Ltd. (*1) Kor-Uz Gas Chemical	Shipping industry	Korea	28.00%	601	601
Investment Ltd. South-East Asia Gas Pipeline Company	Resource development	Uzbekistan	45.00%	255,706	244,291
Limited (*4) Sulawesi LNG	Pipe construction LNG terminal construction	Hong Kong United	4.17%	25,160	24,139
Development Limited TOMORI E&P Limited	& management Resource development	Kingdom United	25.00%	248,577	234,806
AMEC Partners Korea	Engineering and	Kingdom	49.00%	173,734	158,019
LTD. (*1)(*4)	technique service	Korea	15.00%	558	558
				735,472	1,530,547
Joint ventures: KOMAN ENERGY					
FZCO (*1) Kor-Uz Gas cylinder	LNG Trading Cylinder business	UAE	50.00%	1,286	1,286
Investment Ltd. (*1) Kor-Uz Gas C&G	investment Charge business	Korea	37.26%	4,226	4,226
Investment Ltd. (*1) TERMINAL KMS de	investment	Korea	38.00%	2,541	2,541
GNL, S. De R.L. De C.V.	LNG terminal construction & management	Mexico	25.00%	56,281	23,381
JV SACOTEC (*1) GLNG Operations Pty.	Service	Russia	50.00%	-	-
Ltd. (*1) GLNG Property	LNG Plant management	Australia	15.00%	17	17
Pty. Ltd. (*1) CORDOVA GAS	Property Lease	Australia	15.00%	26	26
RESOURCES LTD.	Resource development	Canada	10.00%	16,873	17,468
				81,250	48,945
			4	₩ <u>816,722</u>	1,579,492

^(*1) The entity is not accounted for using the equity method, as the difference between book value and identifiable net asset is not significant.

^(*2) The entity is classified as an associate or joint venture, as it needs the unanimous approval in its decisions.

16. Investments in associates and joint ventures, Continued

- (a) Details of investments in associates and joint ventures as of December 31, 2012, 2011 and 2010 are as follows, Continued
 - (i) December 31, 2012, Continued
- (*3) Value of the goodwill for Hyundai Yemen LNG Company is \(\psi 8,306\) million of December 31, 2012.
- (*4) The entity is classified as an associate or joint venture, as the Group can designate one director in its board of directors, although the percentage of ownership is 20% below.
 - (ii) December 31, 2011 (Restated)

	Business	Location	Percentage of ownership		Acquisition cost	Book value
			t percentage of	f ow		
Associates	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	.,		.,	
Korea Ras Laffan LNG Ltd.(*2)	Resource development	Bermuda	60.00%	₩	19,532	776,889
Korea LNG Ltd.	Resource development	Bermuda	24.00%		3,298	141,066
Hyundai Yemen LNG	Resource development	Bermuda			,	•
Company			49.00%		47,288	47,288
Korea LNG Trading Co., Ltd.(*1)	Shipping industry	Korea	28.00%		601	601
Kor-Uz Gas Chemical	Resource development	Uzbekistan				
Investment Ltd.(*1)			45.00%		4,757	4,757
South-East Asia Gas Pipeline	Pipe construction	Hong Kong				
Company Limited(*3)			4.17%		21,951	22,676
Sulawest LNG Development	LNG terminal construction &	United				
Limited	management	Kingdom	25.00%		123,237	126,646
TOMORI E&P Limited(*1)	Gas field development and	United				
	operation	Kingdom	49.00%	_	161,776	161,776
					382,440	1,281,699
Joint ventures				_		
KOMAN ENERGY FZCO(*1)	LNG Trading	UAE	50.00%		1,286	1,286
Kor-Uz Gas cylinder	Cylinder business	Korea				
Investment Ltd.(*1)	investment		37.26%		4,226	4,226
Kor-Uz Gas C&G Investment	Charge business investment	Korea				
Ltd.(*1)			38.00%		2,541	2,541
TERMINAL KMS de GNL, S.	LNG terminal construction &	Mexico				
De R.L. De C.V.	management		25.00%		56,281	17,909
JV SACOTEC(*1)	Service	Russia	50.00%		-	-
GLNG Operations Pty.	LNG plant management	Australia	4= 000/			
Ltd.(*1)	Deel manager lanes	A	15.00%		17	17
GLNG Property Pty. Ltd.(*1) CORDOVA GAS	Real property lease	Australia Canada	15.00%		-	-
RESOURCES LTD.	Resource development	Canada	10.00%		9,225	8,704
				-	73,576	34,683
				₩	456,016	1,316,382
				=		

^(*1) The entity is not accounted for using the equity method, as the difference between book value and identifiable net asset is not significant.

16. Investments in associates and joint ventures, Continued

- (a) Details of investments in associates and joint ventures as of December 31, 2012, 2011 and 2010 are as follows, Continued
 - (ii) December 31, 2011 (Restated), Continued
- (*2) The entity is classified as an associate or joint venture, as it needs the unanimous approval in its decisions.
- (*3) The entity is classified as an associate or joint venture, as the Group can designate one director in its board of directors, although the percentage of ownership is below 20%.

(iii) December 31, 2010 (Restated)

			Percentage of	Acquisition	Book
Company	Business	Location	ownership	cost	value
	(In mil	lions of won, e	except percentag	e of ownership)	
Associates:					
Korea Ras Laffan LNG Ltd. (*2)	Resource development	Bermuda	60.00%	₩ 19,532	510,967
Korea LNG Ltd.	Resource	Bermuda			
IIdei Wesser INO Oesser	development	Dl -	24.00%	3,298	102,387
Hyundai Yemen LNG Company	Resource development	Bermuda	49.00%	47,288	47,288
Korea LNG Trading Co., Ltd. (*1)	Shipping industry	Korea	28.00%	601	601
Kor-Uz Gas Chemical Investment Ltd. (*1)	Resource development	Malaysia	35.00%	3,612	3,612
South-East Asia Gas Pipeline Company Limited (*3)	Pipe construction	Hong-Kong	4.17%	9,168	9,168
Sub total				83,499	674,023
Joint ventures:				<u> </u>	
KOMAN ENERGY FZCO (*1) TERMINAL KMS de GNL, S. De R.L. De C.V.	LNG Trading LNG terminal construction &	Indonesia Mexico	50.00%	1,286	1,286
20 0	management		25.00%	55,578	38,292
Sub total	-			56,864	39,578
Total			1	₩140,363	713,601

- (*1) The entity is not accounted for using the equity method, as the difference between book value and identifiable net asset is not significant.
- (*2) The entity is classified as an associate or joint venture, as it needs the unanimous approval in its decisions.
- (*3) The entity is classified as an associate or joint venture, as the Group can designate one director in its board of directors, although the percentage of ownership is below 20%.

16. Investments in associates and joint ventures, Continued

- (b) Valuations of equity method investments for the years ended December 31, 2012, 2011 and 2010 are as follows:
 - (i) December 31, 2012

		Beginning Balance	Acquisition	Dividends received	Equity method gain or loss	Accumulated other comprehensive income (loss)	Others	Ending Balance
Associates: Korea Ras Laffan LNG				(00 - 1-)		(40,400)		
Ltd. Korea LNG Ltd. Hyundai Yemen LNG	₩	776,889 141,066	-	(96,547) (25,842)	94,988 25,909	(46,490) (10,146)	-	728,840 130,987
Company(*) Korea LNG Trading Co.,		47,288	-	-	(508)	48	(38,522)	8,306
Ltd. Kor-Uz Gas Chemical		601	-	-	-	-	-	601
Investment Ltd. South-East Asia Gas Pipeline Company		4,757	250,949	-	520	(11,935)	-	244,291
Limited Sulawest LNG		22,676	3,208	-	25	(1,770)	-	24,139
Development Limited TOMORI E&P Limited		126,646 161,776	125,340 11,958	-	(2,462) (2,185)	(14,718) (13,530)	-	234,806 158,019
AMEC Partners Korea LTD.		558						558
		1,282,257	391,455	(122,389)	116,287	(98,541)	(38,522)	1,530,547
Joint ventures: KOMAN ENERGY FZCO Kor-Uz Gas cylinder		1,286	-	-	-	-	-	1,286
Investment Ltd. Kor-Uz Gas C&G		4,226	-	-	-	-	-	4,226
Investment Ltd. TERMINAL KMS de GNL, S. De R.L. De		2,541	-	-	-	-	-	2,541
C.V. JV SACOTEC		17,909 -	-	-	5,114 -	1,215	(856)	23,382
GLNG Operations Pty Ltd.		17	-	-	-	(1)	-	16
GLNG Property Pty Ltd. CORDOVA GAS		-	26	-	-	-	-	26
RESOURCES LTD		8,704	17,135		(6,544)	(1,827)		17,468
		34,683	17,161		(1,430)	(613)	(856)	48,945
	₩	1,316,940	408,616	(122,389)	114,857	(99,154)	(39,378)	1,579,492

^(*) The Group ceased to recognize changes in investments of its associates because the book value, other than goodwill of investment in associates, fell below zero when applying losses of equity securities. The Group has established allowance for doubtful accounts of \(\pm\)460 million on long-term receivables to cover the loss under equity method.

16. Investments in associates and joint ventures, Continued

(b) Valuations of equity method investments for the years ended December 31, 2012, 2011 and 2010 are as follows, Continued

Accumulated

(ii) December 31, 2011 (Restated)

		Beginning Balance	Acquisition	Dividends received	Equity method gain or loss	other comprehensive income (loss)	Others	Ending Balance
				(In	millions of w	on)		
Associates: Korea Ras Laffan LNG Ltd. Korea LNG Ltd.	₩	510,968 102,387	- -	(129,143) (22,143)	123,719 22,268	271,345 38,554	-	776,889 141,066
Hyundai Yemen LNG Company (*1) Korea LNG Trading Co.,		47,288	-	-	(76)	(6)	82	47,288
Ltd.		601	-	-	-	-	-	601
Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company		3,612	1,145	-	-	-	-	4,757
Limited Sulawest LNG		9,168	12,784	-	(24)	748	-	22,676
Development Limited TOMORI E&P Limited		-	123,237 161,776	-	(2,876)	6,285	-	126,646 161,776
		674,024	298,942	(151,286)	143,011	316,926	82	1,281,699
Joint ventures: KOMAN ENERGY FZCO Kor-Uz Gas cylinder		1,286	-	-	-	-	-	1,286
Investment Ltd.		-	4,226	-	-	-	-	4,226
Kor-Uz Gas C&G Investment Ltd. TERMINAL KMS de GNL, S. De R.L. De C.V. JV SACOTEC GLNG Operations Pty Ltd. GLNG Property Pty Ltd.		-	2,541	-	-	-	-	2,541
		38,291 -	-	-	(513)	(20,541)	672 -	17,909 -
		-	17	-	-	-	-	17
(*2) CORDOVA GAS		-	-	-	-	-	-	-
RESOURCES LTD			9,147		(516)		73	8,704
		39,577	15,931		(1,029)	(20,541)	745	34,683
	₩	713,601	314,873	(151,286)	141,982	296,385	827	1,316,382

^(*1) The Group ceased to recognize changes in investments of its associates because the book value, other than goodwill of investment in associates, fell below zero as applying losses on equity securities. The Group has established allowance for doubtful accounts of \text{\psi}82 million on long-term receivables to cover the loss under equity method.

^(*2) Impairment loss of ₩166 thousand was recognized on GLNG Property Pty Ltd., which was acquired in prior year.

16. Investments in associates and joint ventures, Continued

- (b) Valuations of equity method investments for the years ended December 31, 2012, 2011 and 2010 are as follows, Continued
 - (iii) December 31, 2010 (Restated)

		Beginning Balance	Acquisition	Dividends received	Equity method gain or loss	Accumulated other comprehensive income (loss)	Others	Ending Balance
				(In m	illions of won)			
Associates: Korea Ras Laffan LNG								
Ltd.	₩	554,846	-	(93,611)	96,411	(46,679)	-	510,967
Korea LNG Ltd. Hyundai Yemen LNG		108,137	-	(18,561)	18,523	(5,712)	-	102,387
Company (*1) Korea LNG Trading Co.,		47,288	-	-	(79)	5	74	47,288
Ltd. Kor-Uz Gas Chemical		601	-	-	-	-	-	601
Investment Ltd. South-East Asia Gas Pipeline Company		2,228	1,384	-	-	-	-	3,612
Limited			9,168					9,168
		713,100	10,552	(112,172)	114,855	(52,386)	74	674,023
Joint ventures: KOMAN ENERGY FZCO TERMINAL KMS de GNL, S. De R.L. De		1,286	-	-	-	-	-	1,286
C.V.		55,245			(186)	(15,384)	(1,383)	38,292
		56,531		-	(186)	(15,384)	(1,383)	39,578
	₩	769,631	10,552	(112,172)	114,669	(67,770)	(1,309)	713,601

^(*1) The Group ceased to recognize changes in investments of its associates because the book value, other than goodwill of investment in associates, fell below zero as applying losses on equity securities. The Group has established allowance for doubtful accounts of \text{\psi}74 million on long-term receivables to cover the loss under equity method.

16. Investments in associates and joint ventures, Continued

- (c) Financial information of associates and joint ventures as of and for the years ended December 31, 2012, 2011 and 2010, is as follows:
 - (i) December 31, 2012

	_	Assets	Liabilities	Sales	Net income (loss)
			(In millions	of won)	
Associates:					
Korea Ras Laffan LNG Ltd.	₩	1,237,968	23,235	160,803	158,314
Korea LNG Ltd.		545,841	64	109,992	108,021
Hyundai Yemen LNG Company		237,370	238,976	-	(1,037)
Korea LNG Trading Co., Ltd.		818,255	814,461	12,989	545
Kor-Uz Gas Chemical Investment Ltd.		542,870	-	-	(74)
South-East Asia Gas Pipeline					
Company Limited		1,341,510	763,116	-	589
Sulawest LNG Development Limited		939,536	314	-	(9,508)
TOMORI E&P Limited		318,060	5,832	14,273	(4,459)
AMEC Partners Korea LTD		1,119	375	1,045	181
Joint ventures:					
KOMAN ENERGY FZCO		1,974	16	46,151	(594)
Kor-Uz Gas cylinder Investment Ltd.		10,296	232	-	(526)
Kor-Uz Gas C&G Investment Ltd.		5,385	12	_	(460)
TERMINAL KMS de GNL, S. De R.L.					,
De C.V.		1,018,886	925,360	73,613	20,456
JV SACOTEC		214	76	487	63
GLNG Operations Pty Ltd.		128,213	6,618	_	2,912
CORDOVA GAS RESOURCES LTD.		603,792	516,937	15,896	(65,440)

16. Investments in associates and joint ventures, Continued

- (c) Financial information of associates and joint ventures as of and for the years ended December 31, 2012, 2011 and 2010, is as follows, Continued
 - (ii) December 31, 2011 (Restated)

		Assets	Liabilities	Sales	Net income (loss)
			(In million	ns of won)	
Associates:					
Korea Ras Laffan LNG Ltd.	₩	1,310,968	16,152	208,639	206,198
Korea LNG Ltd.		598,267	10,492	94,785	92,785
Hyundai Yemen LNG Company		267,902	268,569	-	(154)
Korea LNG Trading Co., Ltd.		917,099	913,568	11,480	695
Kor-Uz Gas Chemical Investment Ltd.		11,534	-	-	-
South-East Asia Gas Pipeline					
Company Limited		596,472	53,140	-	(579)
Sulawest LNG Development Limited		506,838	256	-	(11,506)
TOMORI E&P Limited		321,438	5,301	7,926	(917)
Joint ventures:					
KOMAN ENERGY FZCO		68,253	65,537	170,051	11
Kor-Uz Gas cylinder Investment Ltd.		10,604	13	-	(752)
Kor-Uz Gas C&G Investment Ltd.		5,833	-	-	(709)
TERMINAL KMS de GNL, S. De R.L.					
De C.V.		1,018,835	947,199	-	(2,053)
JV SACOTEC		-	-	-	_
GLNG Operations Pty Ltd.		67,481	67,365	-	-
CORDOVA GAS RESOURCES LTD.		502,742	394,925	17	(23)

(iii) December 31, 2010 (Restated)

		Assets	Liabilities	Sales	Net income (loss)
			s of won)		
Associates:					
Korea Ras Laffan LNG Ltd.	₩	866,744	15,130	162,943	160,685
Korea LNG Ltd.		426,692	80	79,030	77,180
Hyundai Yemen LNG Company		262,613	263,113	-	(162)
Korea LNG Trading Co., Ltd.		927,598	924,834	122,803	633
Kor-Uz Gas Chemical Investment Ltd.		8,885	-	-	-
South-East Asia Gas Pipeline					
Company Limited		269,188	2,115	-	-
Joint ventures:					
KOMAN ENERGY FZCO		3,597	893	195,428	437
TERMINAL KMS de GNL, S. De R.L.					
De C.V.		927,101	772,002	-	(713)
JV SACOTEC		-	-	-	-

17. Property, plant and equipment

(a) Details of property, plant and equipment as of December 31, 2012, 2011 and 2010 are as follows:

(i) December 31, 2012

	Acquisition cost			Accumulated impairment loss	Book value
-		(In	millions of won)		
₩	2,325,143	-	-	-	2,325,143
	638,292	(654)	(224,481)	-	413,157
	4,328,990	(904)	(763,024)	-	3,565,062
	8,007,264	(21,236)	(2,201,703)	(9,509)	5,774,816
	29,639	-	(21,838)	-	7,801
	87,604	(148)	(72,504)	-	14,952
	42,162	(226)	(30,963)	-	10,973
	31,344	-	-	-	31,344
	3,637,401	(97,883)	-	-	3,539,518
	5,528,659	-	(2,594,651)	-	2,934,008
_	1,276,527		(310,335)		966,192
₩	25,933,025	(121,051)	(6,219,499)	(9,509)	19,582,966
		Cost 2,325,143 638,292 4,328,990 8,007,264 29,639 87,604 42,162 31,344 3,637,401 5,528,659	cost grants (In ₩ 2,325,143 - 638,292 (654) 4,328,990 (904) 8,007,264 (21,236) 29,639 - 87,604 (148) 42,162 (226) 31,344 - 3,637,401 (97,883) 5,528,659 - 1,276,527 -	cost grants depreciation millions of won) ₩ 2,325,143 - - 638,292 (654) (224,481) 4,328,990 (904) (763,024) 8,007,264 (21,236) (2,201,703) 29,639 - (21,838) 87,604 (148) (72,504) 42,162 (226) (30,963) 31,344 - - 3,637,401 (97,883) - 5,528,659 - (2,594,651) 1,276,527 - (310,335)	Acquisition cost Governments grants Accumulated depreciation impairment loss ₩ 2,325,143 - - - - 638,292 (654) (224,481) - 4,328,990 (904) (763,024) - 8,007,264 (21,236) (2,201,703) (9,509) 29,639 - (21,838) - 87,604 (148) (72,504) - 42,162 (226) (30,963) - 31,344 - - - 3,637,401 (97,883) - - 5,528,659 - (2,594,651) - 1,276,527 - (310,335) -

(ii) December 31, 2011 (Restated)

	Acquisition cost		•		Accumulated impairment loss	Book value
			(In	millions of won)		
Land	₩	2,149,996	-	_	-	2,149,996
Buildings		587,426	(503)	(202,672)	-	384,251
Structure		3,972,320	(835)	(592,231)	-	3,379,254
Machinery		7,089,113	(17,750)	(1,852,760)	(9,508)	5,209,095
Vehicles		34,332	-	(27,884)	-	6,448
Office equipment		85,977	(98)	(71,732)	-	14,147
Tools and instruments		38,747	(20)	(28,678)	-	10,049
Tangible exploration and	l					
evaluation assets		6,811	-	-	-	6,811
Timber		24,860	-	-	-	24,860
Construction in progress		2,789,003	(64,079)	-	-	2,724,924
Finance lease assets		5,528,659	-	(2,373,505)	-	3,155,154
Others	_	500,812		(72,806)		428,006
	₩	22,808,056	(83,285)	(5,222,268)	(9,508)	17,492,995

17. Property, plant and equipment, Continued

- (a) Details of property, plant and equipment as of December 31, 2012, 2011 and 2010 are as follows, Continued
 - (iii) December 31, 2010 (Restated)

		Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment loss	Book value
			(In	millions of won)		
Land	₩	2,082,260	-	_	-	2,082,260
Buildings		557,685	(110)	(181,986)	-	375,589
Structure		3,395,685	(553)	(434,521)	-	2,960,611
Machinery		6,294,304	(4,469)	(1,514,299)	-	4,775,536
Vehicles		32,903	(4)	(27,477)	-	5,422
Office equipment		86,448	(101)	(69,741)	-	16,606
Tools and instruments		36,655	(67)	(29,186)	-	7,402
Timber		21,881	-	-	-	21,881
Construction in progress		2,416,735	(41,560)	-	-	2,375,175
Finance lease assets		5,528,659	-	(2,152,172)	-	3,376,487
Others	-	240,151				240,151
	₩	20,693,366	(46,864)	(4,409,382)		16,237,120

- (b) Changes in property, plant and equipment for the years ended December 31, 2012, 2011 and 2010, are as follows:
 - (i) December 31, 2012

		Beginning		. .	5	Impairment	0.11	Ending
	_	Balance	Acquisition		Depreciation	loss	Other	Balance
				(In	millions of wo	n)		
Land	₩	2,149,996	602	(13,475)	-	-	188,020	2,325,143
Buildings		384,251	2,512	(791)	(22,256)	-	49,441	413,157
Structure		3,379,254	89	(517)	(170,763)	-	356,999	3,565,062
Machinery		5,209,095	14,685	(7,443)	(357,948)	-	916,427	5,774,816
Vehicles		6,448	3,329	(252)	(2,776)	(11)	1,063	7,801
Office equipment		14,147	6,524	(66)	(6,023)	-	370	14,952
Tools and								
instruments		10,049	4,428	(2)	(3,670)	-	168	10,973
Tangible exploration	1							
and evaluation							(0.044)	
assets		6,811	-	-	-	-	(6,811)	-
Timber		24,860	-	-	-	-	6,484	31,344
Construction in								
progress		2,724,924	2,415,360	-	-	-	(1,600,766)	3,539,518
Finance lease								
assets		3,155,154	-	-	(221,146)	-	-	2,934,008
Others		428,006	775,430	(1,824)	(256,265)		20,845	966,192
	₩	17,492,995	3,222,959	(24,370)	(1,040,847)	(11)	(67,760)	19,582,966

17. Property, plant and equipment, Continued

(b) Changes in property, plant and equipment for the years ended December 31, 2012, 2011 and 2010, are as follows, Continued

(ii) December 31, 2011 (Restated)

	Begin Bala		Acquisition	Disposal	Depreciation	Impairment loss	Other	Ending Balance
				(In	millions of wo	n)		
Land Buildings Structure Machinery Vehicles Office equipment	2,960 4,775	5,589	13,822 2,272 394 56,289 3,020 4,904	(877) (870) (26) (4,934)	(21,276) (157,274) (347,421) (2,335) (7,374)	- - (9,509) - (19)	54,791 28,536 575,549 739,134 341 37	2,149,996 384,251 3,379,254 5,209,095 6,448 14,147
Office equipment Tools and instruments Tangible exploration and evaluation		7,402	5,462	(7)	(2,971)	-	158	10,049
assets Timber Construction in		- 1,881	6,544	-	-	-	267 2,979	6,811 24,860
progress Finance lease	,	5,175	1,647,746	-	(004.455)	-	(1,297,997)	2,724,924
assets Others	,	6,487 0,151	356,434	(16)	(221,155) (69,132)		(178) (99,431)	3,155,154 428,006
	₩ 16,237	7,120	2,096,887	(6,732)	(828,938)	(9,528)	4,186	17,492,995

(iii) December 31, 2010 (Restated)

	Beginning Balance	Acquisition	Disposal	Depreciation	Impairment loss	Other	Ending Balance
			(In	millions of wo	n)		
Land	₩ 2,060,679	14,285	(693)	-	-	7,989	2,082,260
Buildings	356,888	9,194	(1,569)	(21,126)	-	32,202	375,589
Structure	2,729,614	1,551	(688)	(142,316)	-	372,450	2,960,611
Machinery	4,461,947	5,954	(12,798)	(389,662)	-	710,095	4,775,536
Vehicles	5,762	2,201	-	(2,554)	-	13	5,422
Office equipment	14,264	6,844	(11)	(9,112)	-	4,621	16,606
Tools and							
instruments	7,196	2,994	(3)	(2,959)	-	174	7,402
Timber	20,609	-	-	-	-	1,272	21,881
Construction in							
progress	1,972,976	1,446,238	(2,128)	-	-	(1,041,911)	2,375,175
Finance lease							
assets	3,597,446	-	-	(220,959)	-	-	3,376,487
Others		129,894		(2,029)		112,286	240,151
	₩ 15,227,381	1,619,155	(17,890)	(790,717)		199,191	16,237,120

As of December 31, 2012, 2011 and 2010 certain land, buildings and machinery amounting to \$46,700 million are pledged as collaterals for borrowings.

18. Construction and service contracts

(a) Changes in outstanding construction and service contracts for the year ended December 31, 2012, are as follows:

		Beginning balance	Increase (Decrease)(*)	Sales recognized	Ending balance
	_		(In millions of Ko	rean won)	
Construction contracts:					
Domestic construction contracts	₩	1,202	4,922	2,721	3,403
Overseas construction contracts		-	175	175	-
		1,202	5,097	2,896	3,403
Service contracts:	_				
Domestic service contracts		6,663	6,601	5,109	8,155
Overseas service contracts		47,406	7,234	42,504	12,136
		54,069	13,835	47,613	20,291
	₩	55,271	18,932	50,509	23,694

- (*) During 2012, the amount of contract increased due to the new contracts is \$19,060 million and decreased due to the change in size of existing construction contracts is \$128 million.
- (b) Accumulated revenues and costs of construction in progress as of December 31, 2012, 2011 and 2010 are as follows:
 - (i) December 31, 2012

		Accumulated revenue	Accumulated cost	Accumulated income
	_	(In	millions of won)	
Construction contracts:				
Domestic construction contracts	₩	1,458	1,317	141
Overseas construction contracts		175	176	(1)
		1,633	1,493	140
Service contracts:	_			
Domestic service contracts		8,795	6,792	2,003
Overseas service contracts		52,057	49,978	2,079
		60,852	56,770	4,082
	₩_	62,485	58,263	4,222

18. Construction and service contracts, Continued

- (b) Accumulated revenues and costs of construction in progress as of December 31, 2012, 2011 and 2010 are as follows, Continued
 - (ii) December 31, 2011 (Restated)

		Accumulated revenue	Accumulated cost	Accumulated income
	_		(In millions of won)	
Construction contracts: Domestic construction contracts	₩_	9,490	8,501	989
Service contracts:				
Domestic service contracts		37,227	29,620	7,607
Overseas service contracts		16,975	14,508	2,467
	_	54,202	44,128	10,074
	₩_	63,692	52,629	11,063
December 31, 2010 (Restated)				
		Accumulated revenue	Accumulated cost	Accumulated income

(iii)

		Accumulated revenue	Accumulated cost	Accumulated income
	_		(In millions of won)	
Construction contracts:				
Domestic construction contracts	₩	12,419	10,951	1,468
Service contracts:				
Domestic service contracts		27,931	22,173	5,757
Overseas service contracts	_	23,447	16,569	6,879
	_	51,378	38,742	12,636
	₩_	63,797	49,693	14,104

18. Construction and service contracts, Continued

(c) Trade accounts receivable and advances received arising from construction and service contracts as of December 31, 2012, 2011 and 2010 are as follows:

		20	012	_	011 tated)		10 tated)
		Unbilled amount (*1)	Overbilled amount (*2)	Unbilled amount (*1)	Overbilled amount (*2)	Unbilled amount (*1)	Overbilled amount (*2)
				(In million	s of won)		
Construction contracts: Domestic construction	₩						
contracts Service contracts: Domestic service		239	9	268	6	429	990
contracts Overseas service		431	1,936	181	2,594	400	946
contracts		509	3,557	333	4,243	309	3,972
		940	5,493	514	6,837	709	4,918
	₩	1,179	5,502	782	6,843	1,138	5,908

^(*1) Unbilled amount is recognized as accounts receivable in the statement of financial position.

^(*2) Overbilled amount is recognized as deferred revenue in the statement of financial position.

19. Intangible assets other than goodwill

(a) Details of intangible assets, other than goodwill, as of December 31, 2012, 2011 and 2010 are as follows:

(i) December 31, 2012

	Acquisition cost	Governments grants	Accumulated amortization	Accumulated impairment loss	Book value
		(I	n millions of wor	n)	
Intangible exploration and evaluation					
assets	₩ 883,118	-	-	-	883,118
Computer software	43,551	(199)	(23,359)	-	19,993
Patents	1,016	-	(625)	-	391
Development costs	35,414	-	(35,414)	-	-
Right to donated					
assets	134,218	-	(80,211)	-	54,007
Land use rights	2,583	-	(1,602)	-	981
Mineral rights	1,392,239	-	-	-	1,392,239
Others	60,668	-	(4,796)		55,872
	₩ 2,552,807	(199)	(146,007)		2,406,601

(ii) December 31, 2011 (Restated)

Computer software 33,257 - (16,185) - 17 Patents 868 - (574) - Development costs 35,414 - (35,413) - Right to donated assets 134,037 - (70,670) - 63		Acquisition cost	Governments grants	Accumulated amortization	Accumulated impairment loss	Book value
and evaluation assets ₩ 191,150 (65,102) 126 Computer software 33,257 - (16,185) - 17 Patents 868 - (574) - Development costs 35,414 - (35,413) - Right to donated assets 134,037 - (70,670) - 63	_			In millions of wo	n)	
Computer software 33,257 - (16,185) - 17 Patents 868 - (574) - Development costs 35,414 - (35,413) - Right to donated assets 134,037 - (70,670) - 63	•					
Patents 868 - (574) - Development costs 35,414 - (35,413) - Right to donated assets 134,037 - (70,670) - 63	ıssets ₩	191,150	-	-	(65,102)	126,048
Development costs 35,414 - (35,413) - Right to donated assets 134,037 - (70,670) - 63	mputer software	33,257	-	(16,185)	-	17,072
Right to donated assets 134,037 - (70,670) - 63	ents	868	-	(574)	-	294
assets 134,037 - (70,670) - 63	velopment costs	35,414	-	(35,413)	-	1
	ht to donated					
Land use rights 2.230 (1.446)	issets	134,037	-	(70,670)	-	63,367
	nd use rights	2,239	-	(1,446)	-	793
Mineral rights 1,525,994 - (4,509) - 1,521	neral rights	1,525,994	-	(4,509)	-	1,521,485
Others 23,865 - (4,174) - 19	ners	23,865		(4,174)		19,691
₩ <u>1,946,824</u> <u>-</u> <u>(132,971)</u> <u>(65,102)</u> <u>1,748</u>	₩ ₌	1,946,824	·	(132,971)	(65,102)	1,748,751

19. Intangible assets other than goodwill, Continued

(iii) December 31, 2010 (Restated)

		Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment loss	Book value
				In millions of wo	n)	
Intangible exploration and evaluation						
assets	₩	166,411	-	-	(64,288)	102,123
Computer software		27,349	-	(10,208)	-	17,141
Patents		628	-	(514)	_	114
Development costs		35,414	-	(35,307)	_	107
Right to donated						
assets		131,225	-	(63,616)	_	67,609
Land use rights		1,983	-	(1,384)	_	599
Mineral rights		231,246	-	(68)	_	231,178
Others	-	8,925		(3,679)		5,246
	₩	603,181		(114,776)	(64,288)	424,117

(b) Changes in intangible assets, other than goodwill, for the years ended December 31, 2012 and 2011, are as follows:

(i) December 31, 2012

		Beginning Balance	Acquisition	Disposal	Amortization	Impairment loss	Other	Ending Balance
				(In millions of we	on)		
Intangible exploration and evaluation	l							
assets	₩	126,048	315,813	-	-	-	441,257	883,118
Computer		47.070	0.045		(7,000)		7.070	40.000
software		17,072	2,315	-	(7,066)	-	7,672	19,993
Patents		294	-	-	(50)	-	147	391
Development								
costs		1	12,908	-	(1)	-	(12,908)	_
Right to donated							, ,	
assets		63,367	-	(1,589)	(7,771)	-	-	54,007
Land use rights		793	70	-	(92)	-	210	981
Mineral rights		1,521,485	465,417	-	-	-	(594,663)	1,392,239
Others		19,691	26,186	-	(595)	-	10,590	55,872
	₩	1,748,751	822,709	(1,589)	(15,575)		(147,695)	2,406,601

19. Intangible assets other than goodwill, Continued

(b) Changes in intangible assets, other than goodwill, for the years ended December 31, 2012 and 2011, are as follows, Continued

(ii) December 31, 2011 (Restated)

	Beginning Balance	Acquisition	Disposal	Amortization	Impairment loss	Other	Ending Balance
			(lı	n millions of wo	n)		
Intangible exploration and evaluation							
assets ₩	102,123	21,927	-	-	-	1,998	126,048
Computer software	17,141	2,633	-	(5,978)	-	3,276	17,072
Patents	114	-	-	(42)	-	222	294
Development							
costs	107	-	-	(106)	-	-	1
Right to donated							
assets	67,609	2,993	(1,759)	(5,476)	-	-	63,367
Land use rights	599	259	(3)	(62)	-	-	793
Mineral rights	231,178	1,247,188	(17)	(4,405)	-	47,541	1,521,485
Others	5,246	14,246	(134)	(484)	-	817	19,691
₩	424,117	1,289,246	(1,913)	(16,553)		53,854	1,748,751

(iii) December 31, 2010 (Restated)

		Beginning Balance	Acquisition	Disposal	Amortization	Impairment loss	Other	Ending Balance
	-			(ln ı	millions of won)			
Intangible exploration and						()	(2 = 12)	
evaluation assets	₩	140,707	29,427	-	-	(65,268)	(2,743)	102,123
Computer software		19,668	1,697	-	(5,304)	-	1,080	17,141
Patents		140	-	-	(26)	-	-	114
Development costs Right to donated		3,649	-	-	(3,542)	-	-	107
assets		74,679	-	(1,841)	(5,229)	-	-	67,609
Land use rights		635	26	(3)	(59)	-	-	599
Mineral rights		67,509	153,016	-	(68)	-	10,721	231,178
Others	-	5,127	615		(472)		(24)	5,246
	₩	312,114	184,781	(1,844)	(14,700)	(65,268)	9,034	424,117

19. Intangible assets other than goodwill, Continued

(c) Details of individually significant intangible assets as of December 31, 2012, 2011 and 2010 are as follows:

(i) December 31, 2012

	Details	_	Amount	Remaining amortization period
		(In	millions of won	
Intangible exploration and evaluation assets	Acquisition in exploration	₩	883,118	Phase in exploration and development
Right to contributed assets	Harbor facility usage right		54,007	6.95 years
Mineral rights	Mining Rights		1,392,239	Phase in development approval

(ii) December 31, 2011 (Restated)

	Details		Amount	Remaining amortization period
		(In	millions of won	
Intangible exploration and evaluation assets	Acquisition in exploration	₩	126,048	Phase in exploration and development
Right to contributed assets	Harbor facility usage right		63,367	11.57 years
Mineral rights	Mining Rights		1,521,485	Phase in development approval

(iii) December 31, 2010 (Restated)

	Details	(ln i	Amount millions of won)	Remaining amortization period
Intangible exploration and evaluation assets	Acquisition in exploration	₩	102,123	Phase in exploration and development
Right to contributed assets	Harbor facility usage right		67,609	12.93 years
Mineral rights	Mining Rights		231,178	Phase in development approval

20. Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss as of December 31, 2012, 2011 and 2010 are as follows:

			2012		2011 estated)		2010 estated)
		Current	Non-current	Current	Non-current	Current	Non-current
				(In million	s of won)		
Derivative trading	₩	4,382	95,380	9,728	34,830	7,085	-

21. Trade and other accounts payables

Trade and other accounts payables as of December 31, 2012, 2011 and 2010 are as follows:

	2	2012		011 stated)	2010 (Restated)	
	Current	Non-current	Current	Non-current	Current	Non-current
			(In millions	s of won)		
Trade accounts payable	₩ 2,189,738	-	1,966,839	-	1,305,298	-
Non-trade payables	533,754	74,345	657,684	1,221	353,827	-
Accrued expenses	210,152	-	163,354	-	140,394	-
Lease deposits received	2	-	842	-	863	-
Finance lease liabilities	241,156	2,381,929	234,871	2,817,665	217,988	3,001,307
Others	412	38,004		34,636		
Total	₩_3,175,214	2,494,278	3,023,590	2,853,522	2,018,370	3,001,307

22. Borrowings and debentures

(a) Borrowings and debentures as of December 31, 2012, 2011 and 2010 are summarized as follows:

	2012	2011 (Restated)	2010 (Restated)
_	(In	millions of won)	
₩	4,626,514	3,360,304	1,946,072
	110,184	117,548	194,603
	2,170,172	1,360,000	1,986,083
	(19)		
_	6,906,851	4,837,852	4,126,758
	409,291	509,177	615,879
	17,067,364	14,740,551	10,889,028
_	(57,463)	(29,701)	(15,752)
	17,419,192	15,220,027	11,489,155
₩	24,326,043	20,057,879	15,615,913
	-	(In ₩ 4,626,514 110,184 2,170,172 (19) 6,906,851 409,291 17,067,364 (57,463) 17,419,192	2012 (Restated) (In millions of won) ₩ 4,626,514 3,360,304 110,184 117,548 2,170,172 1,360,000 (19) - 6,906,851 4,837,852 409,291 509,177 17,067,364 14,740,551 (57,463) (29,701) 17,419,192 15,220,027

22. Borrowings and debentures, Continued

(b) Short-term borrowings as of December 31, 2012, 2011 and 2010 are summarized as follows:

Lender	Interest rate	2012	2011 (Restated)	2010 (Restated)
		(In millions o	f won)	
Local currency borrowings:				
HYUNDAI SECURITIES				
CO.,LTD		₩ -	-	150,000
SAMSUNG SECURITIES				
CO.,LTD	2.93% ~ 2.94%	130,000	920,000	250,000
SHINHAN BANK	2.93% ~ 2.94%	420,000	500,000	400,000
KTB Investment & Securities Co.,				
Ltd.	2.93% ~ 2.94%	600,000	260,000	265,000
SK SECURITIES CO.,LTD	2.93% ~ 2.94%	620,000	270,000	10,000
KOREA EXCHANGE BANK	2.93% ~ 2.94%	420,000	50,000	50,000
Woori Bank	2.93% ~ 2.94%	1,080,000	690,000	430,000
MERITZ SECURITIES CO.,LTD	2.93% ~ 2.94%	180,000	210,000	-
Kookmin Bank	18.00%	8,628	4,994	2,183
	18.00%	4,625		
Sub-total		3,463,253	2,904,994	1,557,183
Foreign currency borrowings: BNP Paribas Bank Seoul Branch Australia and New Zealand Bank		-	-	54,672
Seoul Branch		_	_	69,152
DBS Seoul Branch	0.65%	105,653	112,381	68,498
BANK OF NOVA SCOTIA Seoul		,	•	•
Branch	0.75% ~ 0.81%	76,270	36,490	82,519
The Bank of Tokyo Mitsubishi				
UFJ Seoul Branch	0.85% ~ 1.97%	179,199	164,363	-
Bank of America Seoul Branch	0.65% ~ 1.70%	209,328	43,895	-
Deutsche Bank AG Seoul Branch	0.65%	92,767	-	43,653
Credit Agricole	0.85%	54,512	-	70,395
ING	0.90%	49,672	-	-
JPMorgan	0.60%	150,072	-	-
RBS	0.64%	52,727	-	-
SMBC	0.76%	98,323	-	-
Mizuho Bank Seoul Branch	1.80%	94,738	98,181	
Sub-total		1,163,261	455,310	388,889
Total		₩ 4,626,514	3,360,304	1,946,072

22. Borrowings and debentures, Continued

(c) Long-term borrowings as of December 31, 2012, 2011 and 2010, are summarized as follows:

			2012			011 tated)	2010 (Restated)	
Lender	Interest rate	Maturity	Foreign currency (USD)	Local currency (KRW)	Foreign currency (USD)	Local currency (KRW)	Foreign currency (USD)	Local currency (KRW)
			(In million	s of won, th	nousands o	f USD)		
Local currency borrowings:								
Korea National Oil Corporation	3-year government bond	2014.03 ~						
Citibank	floating rate 5-year government bond	2019.09	-	364,265	-	469,735	-	584,205
	floating rate	2018.09	_	10,868	-	13,946	_	15,793
Hana Bank	-	-	-	-	-	-	-	5,577
Kookmin Bank(*)	18.00%	2023.06.02	-	17,000	-	17,000	-	17,000
	18.00%	2021.06.15	-	4,853	-	4,853	-	4,853
			-	-	-	9,000	-	9,000
Foreign currency borrowings: Bank of Communications, Seoul branch			_	-	_	-	60,000	68,334
Korea National Oil Corporation	3-year government bond rate-						,	,
	2.25%	2017.12	114,358	122,489	97,278	112,191	92,826	105,720
Less : current portion			(4,109)	(110,184)		(117,548)	(60,000)	(194,603)
		:	110,249	409,291	97,278	509,177	92,826	615,879

^(*) As of December 31, 2012, 2011 and 2010, borrowings are collateralized with the Group's land, buildings and machinery amounting to \$ 46,700 million.

22. Borrowings and debentures, Continued

(d) Debentures as of December 31, 2012, 2011 and 2010 are summarized as follows:

			201	2012		11 ated)	201 (Resta	
List	Interest rate	Period	Foreign currency	Local currency (KRW)	Foreign currency	Local currency (KRW)	Foreign currency	Local currency (KRW)
		(In millio	ns of won, JP	Y, thousand	s of USD, CHF	, CAD)		
162th Private	_	_	_	_	_	_	_	_
BOND(JPY)	-	-	-	_	_	-	-	_
Global 1th	-	-	-	-	-	-	-	-
194th US Dollar	-	-	-	-	-	-		
196th US Dollar	-	-	-	-	-	-	USD 100,000	113,890
200th US Dollar 204th US Dollar	-	-	-	-	-	-	USD 50,000 USD 90,000	56,945 102,501
212th US Dollar	_	-	-	_	_	_	USD 50,000	56,945
KRW linkage	-	-	-	_	_	-	-	100,000
234th Japanese								,
yen	-	-	-	-	-	-	JPY 3,000	41,912
DBS Private	4 0C0/ F 040/	- 2012 02 2014 11	-	1 200 000	-	2 040 000	USD 100,000	113,890
146th~193th 195th~235th	4.86%~5.94% 5.42%~7.07%	2012.02~2014.11 2012.09~2015.06	-	1,300,000 1,630,000	-	2,040,000 2,020,000	-	2,860,000 2,600,000
236th~257th	4.82%~5.97%	2012.03~2013.00	-	2,130,000	_	2,310,000	-	2,310,000
310th ~ 316th	3.80%~4.09%	2018.09~2022.09	-	900,000	_	-	-	-
317th ~ 324th	3.07%~3.23%	2018.04~2027.07	-	1,050,000	-	-	-	-
Global 2th	6.00%	2014.07	USD 500,000	535,550	USD 500,000	576,650	USD 500,000	569,450
258th~285th	4.08%~5.51%	2015.07~2121.05	1100 450 000	2,730,000	-	2,730,000	-	2,730,000
262th US Dollar 267th US Dollar	3M LIBOR + 1.35% 3M LIBOR + 1.10%	2013.02 2014.05	USD 150,000 USD 100,000	160,665 107,110		172,995	USD 150,000 USD 100,000	170,835 113,890
Switzerland franc	2.25%	2015.10	CHF 300,000	351,930		367,761		365,403
Global 3th	4.25%	2020.11	USD 500,000	535,550			USD 500,000	569,450
286th~309th	3.87%~4.93%	2015.04~2022.11	-	3,055,000	-	3,055,000	-	-
287th	3M LIBOR + 1.10%	2013.02	USD 100,000	107,110		115,330	-	-
289th	3M LIBOR + 1.15%	2015.03	USD 100,000	107,110		115,330	-	-
Maple bond	4.58%	2016.05	CAD 300,000	322,815		338,922	-	-
6th Samurai Shogun	1.38% 6M LIBOR + 1.00%	2016.07 2016.09	JPY 30,000 USD 200,000	374,250 214,220	JPY 30,000 USD 200,000	445,548 230,660		
Switzerland franc	0111 212 011 1 1.00 70	2010.00	000 200,000	211,220	000 200,000	200,000		
2th	2.00%	2016.10	CHF 250,000	293,275	CHF 250,000	306,468	-	-
Switzerland franc								
3th	2.88%	2019.10	CHF 100,000	117,310		122,587	-	-
Syndicate bond Global 4th	3M LIBOR + 1.45% 6.25%	2015.11 2042.01	USD 400,000 USD 750.000	428,440 803.325	USD 400,000	461,320	-	-
MTN 1st	1.53%	2013.04	USD 40,000	42.844	_	_	-	_
MTN 2nd	1.28%	2017.06	JPY 3,000	37,425	_	-	-	_
MTN 3rd	2.50%	2017.06	HKD 300,000	41,455	-	-	-	-
MTN 4th	2.60%	2017.06	HKD 500,000	69,090	-	-	-	-
MTN 5th	3M EURIBOR + 0.40%	2013.06	EUR 40,000	56,650	-	-	-	-
MTN 6th Shogun 2nd	1.55% 3M LIBOR + 0.65%	2013.06 2014.06	USD 30,000 USD 200,000	32,133 214.220	-	_	_	-
Shogun 3rd	3M LIBOR + 0.03%	2014.00	USD 100,000	107,110	_	_	-	-
Shogun 4th	3M LIBOR + 1.27%	2017.06	USD 100,000	107,110	_	-	-	_
MTN 7th	1.65%	2014.06	HKD 195,000	26,945	-	-	-	-
MTN 8th	1.10%	2013.06	SGD 30,000	26,264	-	-	-	-
MTN 8th(2)	1.10%	2013.07	SGD 10,000	8,755	-	-	-	-
MTN 9th MTN 10th	3M EURIBOR + 0.45% 3.25%	2013.06 2017.06	EUR 20,000 CNY160,000	28,325 27,501	-	-	-	-
MTN 10th	0.95%	2017.00	JPY 3,000	37,425	-	-	-	-
Global 5th	2.25%	2017.07	USD 700,000	749,779	_	-	-	_
MTN 12th	3M JPY Libor+0.76%		JPY 3,000	37,425	-	-	-	-
AUD BOND	4.50%	2015.09	AUD 300,000	333,429	-	-	-	-
				19,237,536		16,100,551		12,875,111
Less : Discount on	debentures			(57,482))	(29,701))	(15,752)
Less : Current port	ion			(2,170,172)		(1,360,000)		(1,986,083)
Less : Current port	ion of discount on debent	tures		19				
				17,009,901		14,710,850		10,873,276

23. Finance lease liabilities

As of December 31, 2012, the Group has lease contracts with shipping agents for the vessels used for LNG transportation. Since substantial risks on long-term use of LNG transportation vessels were transferred to the Group, the leases are accounted for as finance leases. The lower amount of the present value of minimum lease payment or the fair value of lease asset was recognized as a finance lease asset and finance lease liability.

(a) Finance lease liabilities as of December 31, 2012, 2011 and 2010 are summarized as follows:

	2	2012		011 stated)	2010 (Restated)	
	Minimum lease payment	Present value of minimum lease payment	Minimum lease payment	Present value of minimum lease payment	Minimum lease payment	Present value of minimum lease payment
			(In millio	ns of won)		
1year or less	₩ 298,293	241,156	290,954	234,871	289,066	217,988
1 ~ 5 years More than	1,212,120	1,051,957	1,254,727	1,060,296	1,233,608	985,586
5 years	1,468,168	1,329,972	1,929,153	1,757,369	2,259,619	2,015,721
	₩_2,978,581	2,623,085	3,474,834	3,052,536	3,782,293	3,219,295

(b) Financial leases liabilities liquidity classification as of December 31, 2012, 2011 and 2010 are as follows:

	_	2012	2011 (Restated) (In millions of won)	2010 (Restated)
Current liabilities Non-current liabilities	₩	241,156 2,381,929	234,871 2,817,665	217,988 3,001,307
Total	₩_	2,623,085	3,052,536	3,219,295

24. Severance payments liabilities

The Group operates a defined benefit plan. According to defined benefit plan, employees will receive average salaries in the past three months multiplied rate of payment considering year of service on their retirement. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method.

(a) The principal actuarial assumptions as of December 31, 2012, 2011 and 2010, are as follows:

	2012	2011 (Restated)	2010 (Restated)
Discount rate	4.94%	6.00%	7.00%
Expected return on plan assets	4.94%	4.35%	5.86%
Future salary increases	7.31%	7.31%	7.31%

24. Severance payments liabilities, Continued

(b) The amounts recognized in profit or loss for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
			(In millions of won)	
Current service cost	₩	28,782	23,768	20,317
Interest expense		7,038	9,693	7,997
Expected return on plan assets		(3,914)	(5,565)	(4,306)
Settlement gains	_		(8,041)	
Total	₩_	31,906	19,855	24,008

(c) Defined benefit liability recognized on the statements of financial position as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
			(In millions of won)	
Present value of funded defined benefit liability Fair value of plan assets	₩_	158,041 (133,187)	125,439 (86,418)	142,797 (96,865)
		24,854	39,021	45,932
Present value of defined benefit obligation—funds not accumulated	_	13	8	46
Liability on the statement of financial position	₩	24,867	39,029	45,978

(d) Changes in the carrying amount of defined benefit obligations for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_		(In millions of won)
Beginning balance	₩	125,447	142,843	107,424
Current service cost		28,782	23,768	20,317
Interest expense		7,038	9,693	7,997
Actuarial gains (losses)		7,572	15,918	13,257
Foreign exchange difference		(9)	-	-
Reduction of liability due to termination		-	(58,678)	-
Benefits paid	_	(10,776)	(8,097)	(6,152)
Ending balance	₩_	158,054	125,447	142,843

24. Severance payments liabilities, Continued

(e) The movement in the fair value of plan assets for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
			(In millions of won)
Beginning balance	₩	86,418	96,865	77,625
Expected return on plan assets		3,914	5,565	4,306
Actuarial gains(losses)		(132)	(1,975)	(556)
Employer contribution		43,200	17,114	17,330
Contributions by plan participants		5,109	2,446	3,209
Benefits paid		(5,322)	(5,476)	(5,049)
Distributed assets related with termination	_		(28,121)	<u> </u>
Ending balance	₩_	133,187	86,418	96,865

Accumulated actuarial losses, net of tax, recorded in other comprehensive income accounts to \$29,970 million, \$24,107 million and \$10,774 million as of December 31, 2012, 2011 and 2010, respectively.

(f) Plan assets as of December 31, 2012, 2011 and 2010, consist of:

		201	2012		1 ted)	2010 (Restated)		
	,	Expected return rate on plan assets	Fair value	Expected return rate on plan assets	Fair value	Expected return rate on plan assets	Fair value	
		(In mill	ions of won,	except expecte	d return rate	on plan assets)		
Deposits Retirement	₩	4.94%	124,042	4.47%	16,560	-	-	
insurance		4.94%	2,884	4.29%	1,916	5.86%	81,534	
Others Weighted-average expected return		4.25%	6,261	3.25%	67,942	3.73%	15,331	
rate		4.94%		4.35%		5.52%		
Total	₩		133,187		86,418	:	96,865	

25. Provisions

(a) Details of provisions as of December 31, 2012, 2011 and 2010, are as follows:

			2012			2011 (Restated))		2010 (Restated))
		Current	Non- current	Total	Current	Non- current	Total	Current	Non- current	Total
					(In m	illions of w	on)			
Provision for restoration Others	₩	-	136,587 2,200	136,587 2,200	-	134,933 214	134,933 214	-	119,792 227	119,792 227
Total	₩	_	138,787	138,787		135,147	135,147		120,019	120,019

- (b) Changes in provisions for the years ended December 31, 2012, 2011 and 2010, are as follows:
 - (i) December 31, 2012

	_	Beginning balance	Increase	Utilization	Reversal	Others	Ending balance
				(In millions	of won)		
Provision for restoration	₩	134,933	11,786	-	_	(10,132)	136,587
Others	_	214	2,301	(91)	(86)	(138)	2,200
Total	₩_	135,147	14,087	(91)	(86)	(10,270)	138,787

(ii) December 31, 2011 (Restated)

	_	Beginning balance	Increase	Utilization	Others	Ending balance
			(ln mi	llions of won)		
Provision for restoration Others	₩	119,791 228	15,142 	(14)	<u>-</u>	134,933 214
Total	₩_	120,019	15,142	(14)		135,147

(iii) December 31, 2010 (Restated)

		Beginning balance	Increase	Utilization	Others	Ending balance
			(In mi	llions of won)		
Provision for restoration Others	₩	190	119,792 66	(29)		119,791 228
Total	₩_	190	119,858	(29)		120,019

26. Government grants

Government grants relating to property, plant and equipment are presented as the deduction of related assets

(a) Changes in government grants for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
		(lı	n millions of won)	
Government grants income recognized during the year Off-set of government grants related to assets Offset of government grants related to deferred	₩	- 1,279	- 924	539
revenue	_	4,989	5,706	2,590
Total	₩_	6,268	6,630	3,129

(b) Details of government grants related to assets as of December 31, 2012, are as follows:

	_	Beginning balance	Increase	Decrease	Ending balance
			(In millions	or won)	
Building	₩	503	175	(24)	654
Structure		835	106	(37)	904
Machinery		17,751	4,382	(897)	21,236
Office equipment		98	95	(44)	149
Tools and instruments		20	278	(72)	226
Construction in progress		64,079	37,535	(3,731)	97,883
Software	_	_	403	(204)	199
Total	₩_	83,286	42,974	(5,009)	121,251

(c) Details of government grants presented as deferred revenue as of December 31, 2012, are as follows:

	_	Beginning balance	Increase	Offset	Ending balance
			(In millions	of won)	
Government grants related to deferred					
revenue	₩	6,430	4,577	(4,989)	6,018

27. Customer's contribution to construction costs

(a) Changes in gains from contribution to construction as of December 31, 2012, 2011 and 2010, are as follows:

	-	2012	2011 (Restated)	2010 (Restated)
		(1	n millions of v	von)
Contribution to construction related to revenues occurred during the year Offset of deferred income related to contribution to	₩	-	-	-
construction	-	807	96	95
Total	₩	807	96	95

(b) Changes in deferred revenue related to contribution from customer as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)	
	_	(ln ı	millions of won)		
Beginning balance Increase Offset	₩	2,821 12,716 (807)	2,917 - (96)	2,734 278 (95)	
Ending balance	₩_	14,730	2,821	2,917	

28. Other non-financial liabilities

Other non-financial liabilities as of December 31, 2012, 2011 and 2010, are summarized as follows:

		2012		_	2011 stated)	2010 (Restated)		
	_	Current	Non-current	Current	Non-current	Current	Non-current	
	_			(In million	s of won)			
Advanced receipts	₩	3,022	-	82	-	586	-	
Unearned revenues		19,241	-	19,331	-	18,567	-	
Withholdings		13,444	-	15,978	-	12,655	-	
Deferred revenue		703	20,045	-	9,250	-	10,934	
Others	_	24,581	6,730	222,483	1,683	153,127	1,872	
Total	₩	60,991	26,775	257,874	10,933	184,935	12,806	

29. Equity

- (a) As of December 31, 2012, 2011 and 2010, the number of authorized shares, number of issued shares and par value per share are 200,000,000, 77,284,510 and ₩5,000, respectively.
- (b) Changes in the number of ordinary shares for years ended December 31, 2012, 2011 and 2010, are as follow:

	2012	2011 (Restated)	2010 (Restated)
Beginning balance	77,284,510	77,284,510	77,284,510
Ending balance	77,284,510	77,284,510	77,284,510

(c) Details of share premium as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In n	nillions of won)	
Share premium	₩	669,640	669,640	669,640

30. Retained earnings and Dividends

(a) Retained earnings as of December 31, 2012, 2011 and 2010, consist of:

		2012	2011 (Restated)	2010 (Restated)
	_	(In		
Legal reserve(*)	₩	193,211	193,211	193,211
Other reserves		5,427,757	2,464,319	2,303,068
Unappropriated retained earnings	_	374,902	3,032,711	3,070,828
Total	₩	5,995,870	5,690,241	5,567,107

(*) The Korean Commercial Code requires the Corporation to appropriate as legal reserve in an amount equal to at least 10% of cash dividends for each accounting period until the reserve equals 50% of the capital. The legal reserve may be used to reduce a deficit or may be transferred to common stock in connection with a free issuance of shares.

30. Retained earnings and Dividends, Continued

(b) Other reserves as of December 31, 2012, 2011 and 2010, are as follows:

	_	2012 (In	2011 (Restated) millions of won)	2010 (Restated)
Business expansion Reserve for dividend equalization Business rationalization Investment in social overhead capital Research and human resources development Accident compensation Improvement of financial structure	₩	4,733,442 219,282 792 - 386,423 87,818	1,750,418 219,282 792 9,586 10,000 386,423 87,818	1,558,438 219,282 792 26,981 23,333 386,423 87,819
Total	₩_	5,427,757	2,464,319	2,303,068

(c) Changes in inappropriate retained earnings for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In	millions of won)	
Beginning balance	₩	5,690,241	5,567,107	5,356,959
Net income		366,675	181,483	276,831
Dividends		(55,183)	(45,017)	(55,909)
Actuarial gains or losses	_	(5,863)	(13,332)	(10,774)
Ending balance	₩	5,995,870	5,690,241	5,567,107

- (d) Details of dividends for the years ended December 31, 2012, 2011 and 2010, are as follows:
 - (i) December 31, 2012

	Shares of outstanding	Treasury stocks	Shares eligible for dividends	_	Dividends for share	Total dividends
Common stock	77,284,510	4,675,760	72,608,750	₩	760	55,182,650,000

(ii) December 31, 2011 (Restated)

	Shares of outstanding	Treasury stocks	Shares eligible for dividends		Dividends for share	Total dividends
Common stock	77,284,510	4,675,760	72,608,750	₩	620	45,017,425,000

30. Retained earnings and Dividends, Continued

- (d) Details of dividends for the years ended December 31, 2012, 2011 and 2010, are as follows, Continued
 - (iii) December 31, 2010 (Restated)

	Shares of outstanding	Treasury stocks	Shares eligible for dividends			Total dividends
Common stock	77,284,510	4,675,760	72,608,750	₩	770	55,908,737,500

(e) Changes in actuarial gains (losses) as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
		(In	millions of won)	1
Beginning balance	₩	(24,108)	(10,774)	-
Losses		(7,705)	(17,893)	(13,813)
Tax effect	_	1,841	4,559	3,039
Ending balance	₩_	(29,972)	(24,108)	(10,774)

31. Appropriation of Retained Earnings

The appropriation of retained earnings of Corporation for the years ended December 31, 2012, 2011 and 2010, follows:

Date of Appropriation for 2012: March 29, 2013 Date of Appropriation for 2011: March 29, 2012 Date of Appropriation for 2010: March 29, 2011

		2012	2011 (Restated)	2010 (Restated)
	-		(In millions of we	on)
Unappropriated retained earnings				
Balance at beginning of year	₩	2,500	2,824,800	2,790,067
Net income		505,724	208,399	250,381
Actuarial gains(losses)	_	(5,035)	(12,078)	(9,379)
Balance at end of year before appropriation	_	503,189	3,021,121	3,031,069
Transfers from voluntary reserves				
Reserve for investment in social capital overhead		-	9,586	17,395
Reserve for research and human resources development		-	10,000	13,333
Unappropriated retained earnings available for				
appropriation	_	503,189	3,040,707	3,061,797
Appropriations of retained earnings				
Cash dividends		119,078	55,183	45,017
Reserve for business expansion	_	382,111	2,983,024	191,980
Unappropriated retained earnings	₩	2,000	2,500	2,824,800

32. Elements of Other Equity

(a) Details of elements of other equity as of December 31, 2012, 2011 and 2010 are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In millions of won)
Other capital surplus	₩	21,353	21,353	21,353
Accumulated other comprehensive income		713,593	690,300	492,712
Treasury stock		(102,423)	(102,423)	(102,423)
Other equity	_	693,877	693,877	693,877
Total	₩	1,326,400	1,303,107	1,105,519

(b) Changes in other capital surplus for the years ended December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2011 (Restated) (In millions of won)	2010 (Restated)
Gains on sale of treasury stock:				
Beginning balance Ending balance	₩	21,353 21,353	21,353 21,353	21,353 21,353

- (c) Changes in accumulated other comprehensive income for the years ended December 31, 2012, 2011 and 2010, are as follows:
 - (i) December 31, 2012

		Fair value of available-for- sale financial assets	Cash flow hedges	Net investments in a foreign operation	Other comprehensive income of associates and joint-ventures accounted for using equity method	Foreign operation currency translation differences
				(In millions	of won)	
Beginning balance Change in fair value of available-for-sale financial	₩	(1,111)	25,086	(10,070)	655,965	28,908
assets Effective portion of changes in fair value of cash flow		13,700	-	-	-	-
hedges Net gain(loss) on hedge of net investment in a foreign		-	194,798	-	-	-
operation Share of other comprehensive income of associates and joint-ventures accounted for		-	-	311,072	-	-
using equity method Foreign operation currency		-	-	-	(135,725)	-
translation differences		- (4.4.40)	- (40.000)	(75.070)		(270,834)
Tax effect		(4,110)	(46,900)	(75,279)	36,571	
Ending balance	₩	1	172,984	225,723	556,811	(241,926)

32. Elements of Other Equity, Continued

- (c) Changes in accumulated other comprehensive income for the years ended December 31, 2012, 2011 and 2010, are as follows, Continued
 - (ii) December 31, 2011 (Restated)

		Fair value of available-for- sale financial assets	Cash flow hedges	Net investments in a foreign operation	Other comprehensive income of associates and joint-ventures accounted for using equity method	Foreign operation currency translation differences
				(In millions	of won)	
Beginning balance Change in fair value of available-for-sale financial	₩	(, , , , ,	61,317	11,890	439,571	(15,481)
assets Effective portion of changes in fair value of cash flow		(7,148)	-	-	-	-
hedges Net losses on hedge of net investment in a foreign		-	(45,399)	-	-	-
operation Share of other comprehensive gains of associates and		-	-	(28,154)	-	-
joint-ventures Foreign operation currency		-	-	-	296,385	-
translation differences		-	-	-	-	44,389
Tax effect		2,144	9,168	6,194	(79,991)	
Ending balance	₩	(9,589)	25,086	(10,070)	655,965	28,908

32. Elements of Other Equity, Continued

- (c) Changes in accumulated other comprehensive income for the years ended December 31, 2012, 2011 and 2010, are as follows, Continued
 - (iii) December 31, 2010 (Restated)

		Fair value of available-for- sale financial assets	Cash flow hedges	Net investments in a foreign operation	Other comprehensive income of associates and joint-ventures accounted for using equity method	Foreign operation currency translation differences
				(In millions	of won)	
Beginning balance Change in fair value of available-for-sale	₩		(347)	-	499,775	(16,413)
financial assets Effective portion of changes in fair value of cash flow hedges		(7,864)	79,159	-	-	-
Net gains on hedge of net investment in a foreign operation		-	-	15,244	-	_
Share of other comprehensive gains of associates and joint-						
ventures Foreign operation currency		-	-	-	(67,770)	-
translation differences Tax effect		2,359	- (17,495)	(3,354)	- 7,566	932
Ending balance	₩	· · · · · · · · · · · · · · · · · · ·	61,317	11,890	439,571	(15,481)

(d) Changes in treasury stock for the years ended December 31, 2012, 2011 and 2010, are as follows:

	2012		2011 (Restate	ed)	(Restated)				
	Shares	Book value	Shares	Book value	Shares		Book value		
		(In millions of won except share data)							
Beginning balance Ending balance	4,675,760 ₩ 4,675,760	102,423 102,423	4,675,760 ₩ 4,675,760	102,423 102,423	4,675,760 4,675,760		102,423 102,423		

32. Elements of Other Equity, Continued

(e) Changes in revaluation surplus for the years ended December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2011 (Restated)	2010 (Restated)
			(In millions of wo	n)
Beginning balance	₩	693,877	693,877	693,877
Ending balance		693,877	693,877	693,877

33. Revenue

(a) Details of revenue for the years ended December 31, 2012, 2011 and 2010, are as follows:

	201	2	201 (Resta	-	2010 (Restated)		
	Domestic	Overseas	Domestic	Overseas	Domestic	Overseas	
			(In millions	of won)			
Revenue from sale of goods: Revenue—Finished							
goods Revenue—	34,498,966	23,394	28,164,585	16,455	23,235,737	238	
Services	47,582	423,722	11,635	189,951	6,372	101,647	
Construction	2,896	-	4,575	6	8,400	46	
Government grants	4,989	-	5,706	-	2,590	-	
Other revenue	27,050	2,720	35,883	976	33,666		
Total	34,581,483	449,836	28,222,384	207,388	23,286,765	101,931	

(b) The Group's operations are highly cyclical as revenue is higher during the winter season due to the heating demand of city gas.

34. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the years ended December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2011 (Restated) (In millions of wo	2010 (Restated) on)
Salaries	₩	63,352	57,300	43,972
Severance benefits	**	6,195	3,003	3,922
Other employee benefits		10,577	8,094	6,694
Insurance		2,762	2,236	1,529
Depreciation		21,211	10,979	10,774
Amortization		7,178	10,556	5,556
Bad debts expense		241	-	1,034
Commission		24,329	22,953	20,955
Advertising		6,395	6,240	5,738
Training		6,713	6,077	5,391
Vehicles maintenance expenses		584	459	385
Periodicals and printing expenses		707	708	738
Business promotion expenses		808	847	772
Rent		4,144	3,693	2,194
Communication		1,323	1,299	1,190
Taxes and dues		96,141	88,813	84,802
Supplies		877	657	583
Water, lighting and heating		780	706	635
Repairs and maintenance expenses		1,288	730	819
Research and development expense		48,170	45,469	37,692
Travel and transportation		4,487	3,246	2,563
Clothing expenses		440	124	132
Association fee		412	397	374
Sales promotion costs		5,638	3,704	4,254
Sales commission		8	4	-
Promotional expenses		137	178	224
Other expenses	_	27,877	18,971	15,008
Total	₩_	342,774	297,443	257,930

35. Other Income and Expenses

(a) Details of other income for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_		(In millions of w	on)
Reversal of other provisions	₩	86	-	-
Reversal of allowance for doubtful accounts		-	942	-
Gains from contribution to construction		808	96	1,364
Gains from subsidies and reimbursement		2,007	560	95
Rental income		2,315	881	811
Total	₩_	5,216	2,479	2,270

(b) Details of other operating expense for the years ended December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2011 (Restated)	2010 (Restated)
		(In	millions of won)	
Other bad debts expense	₩	120	-	-
Donations		12,100	14,496	13,214
Losses from contribution to construction		788	-	256
Others	_	21	11	39
Total	₩_	13,029	14,507	13,509

36. Other Gains and Losses

Details of other gains (losses) for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In r	millions of won)	
Gains on disposal of property, plant and equipment	₩	2,848	737	1,499
Gains on disposal of intangible assets		-	-	-
Miscellaneous gains		48,721	38,953	22,936
Losses on disposal of property, plant and equipment		(3,906)	(6,832)	(17,325)
Losses on disposal of intangible assets		-	(126)	(25)
Losses on impairment of property, plant and equipment		(11)	(9,527)	(65,268)
Miscellaneous losses	_	(39,764)	(16,150)	(8,180)
Total	₩	7,888	7,055	(66,363)

37. Finance Income

(a) Details of finance income for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In r	millions of won)
Interest income	₩	16,229	22,743	15,223
Dividend income		6	8	3
Gains on valuation of derivative instruments		66,611	1,337	38,976
Gains on transaction of derivative instruments		105,650	156,472	256,509
Foreign currency translation gains		80,591	51,935	28,844
Foreign currency transaction gains		230,818	259,062	256,627
Total	₩	499,905	491,557	596,182

(b) Details of content of interest income which included in finance income for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In	millions of won)
Cash and cash equivalents	₩	7,538	10,148	6,728
Held-to-maturity financial assets		67	74	133
Loans and receivables		4,518	9,504	3,479
Short-term financial instruments		2,387	1,415	983
Derivative financial assets		-	-	2,991
Other financial assets		1,611	1,474	767
Trade and other accounts receivables	_	108	128	142
Total	₩_	16,229	22,743	15,223

38. Finance Costs

(a) Details of finance costs for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In		
Interest expense	₩	857,312	723,804	635,133
Losses on impairment of available for sale securities		10,815	-	-
Losses on valuation of derivative instruments		74,135	44,582	28,813
Losses on transaction of derivative instruments		221,798	176,385	312,364
Foreign currency translation losses		58,985	60,495	36,062
Foreign currency transaction losses	_	139,917	257,112	302,034
Total	₩	1,362,962	1,262,378	1,314,406

38. Finance Costs, Continued

(b) Details of content of interest expense which included in finance income for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In n	nillions of won)	
Trade and other accounts payables	₩	1,986	5	2
Short-term borrowings		114,934	45,880	28,958
Long-term borrowings		18,838	49,176	39,344
Debentures		818,074	691,268	635,558
Derivative financial liabilities		17,245	29,498	8,650
Other financial liabilities		64,777	63,309	55,471
Capitalization of interests	_	(178,542)	(155,332)	(132,850)
Total	₩_	857,312	723,804	635,133

Borrowing cost were capitalized at the weighted average rate of 3.13% (2011: 4.69%, 2010: 4.96%).

39. Income Tax Expense

(a) Income tax expenses for the years ended December 31, 2012, 2011 and 2010, consist of:

		2012	2011 (Restated)	2010 (Restated)
Current income tax expense:				
Current income tax payable	₩	6,252	9,772	6,214
Adjustment on prior year tax returns		(192)	(77)	28
Tax expense directly recorded in equity		-	354	394
Deferred income tax expense:				
The effect of change of temporary differences Utilization of previously unrecognized tax loss carryforwards, tax credit and temporary difference		139,435	112,644	84,661
from prior years		10,986	801	278
The effect of change of tax rates or tax law	_	<u> </u>	91,163	
Income tax expenses	₩_	156,481	214,657	91,575

39. Income Tax Expense, Continued

(b) Details of the relationship between accounting profits and income tax expense for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(In m	illions of won)	
Income before income taxes	₩	518,527	389,364	366,511
Income tax expense based on statutory tax rate	₩	125,484	98,674	82,245
Adjustment:				
Effect of progressive tax rate		(488)	76	40
Effect of tax-free income		(5)	3,889	12,821
Effect of non-deductible expense		1,277	2,934	3,695
Effect of tax credit and tax reduction		(51)	(217)	(406)
Utilization of previously unrecognized tax loss carryforwards, tax credit and temporary				
difference from prior years		11,474	(803)	(1,048)
Oversea subsidiaries and associated operations		18,982	-	-
Effect of change in deferred income tax caused by				
the change in tax rate	_		110,182	(5,800)
		156,673	214,735	91,547
Adjustment for prior years' income taxes	_	(192)	(78)	28
Income tax expense	₩_	156,481	214,657	91,575
Effective tax rate	=	30.2%	55.1%	25.0%

(c) Deferred taxes that were directly (charged) credited to equity for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
		(In	millions of won)	
Change in fair value of available-for-sale financial assets	₩	(4,110)	2,145	2,359
Losses (gains) on valuation of cash flow hedges derivative instruments		(46,900)	9,168	(17,495)
Net investment in foreign operations		(75,279)	6,194	(3,354)
Actuarial gains on defined benefit plans		1,841	4,559	3,039
Investments in associates		36,571	(79,991)	7,565
	₩	(87,877)	(57,925)	(7,886)

39. Income Tax Expense, Continued

- (d) Details of changes in gross deferred tax assets (liabilities) for the years ended December 31, 2012, 2011 and 2010, are as follows:
 - (i) December 31, 2012

	Beginning balance	Amount recorded in profit or loss	Amount recorded in other comprehensive income	Ending balance			
		(In million	(In millions of won)				
Price adjustment on raw materials	₩ (1,067,816) (324,977)	-	(1,392,793)			
Gains on valuation of derivatives	(1,168) (15,795)	-	(16,963)			
Losses on valuation of derivatives	11,719	15,587	-	27,306			
Accrual for retirement and							
severance benefits	23,466	4,037	-	27,503			
Deposit for severance benefit							
insurance	(17,533) (2,988)	-	(20,521)			
Foreign currency translation							
losses	49,327	38,435	-	87,762			
Foreign currency translation gains	(82,562	(84,839)	-	(167,401)			
Derivative liabilities	1,287	-	2,259	3,546			
Derivative assets	(475	-	(1,384)	(1,859)			
Allowance for doubtful long-term							
loans	15,744	(15,744)	-	-			
Government grants	23,536	11,076	-	34,612			
Land (advanced depreciation							
provision)	(24,858	-	-	(24,858)			
Customers contribution to							
construction costs	476	(/	-	409			
Temporary depreciation allowance	(19,510	(8,958)	-	(28,468)			
Accumulated depreciation in							
excess of tax limit	136,374	, , ,	-	85,089			
Finance lease assets	(537,276	,	-	(494,162)			
Finance lease liabilities	516,229	, , ,	(47,775)	418,393			
Revaluation	(953,217) 67,674	-	(885,543)			
Others	(276,752	(9,779)	(40,977)	(327,508)			
	(2,203,009	(384,570)	(87,877)	(2,675,456)			
Tax loss carryforwards	683,085	, , ,	-	917,233			
Total	₩ (1,519,924	(150,422)	(87,877)	(1,758,223)			

39. Income Tax Expense, Continued

- (d) Details of changes in gross deferred tax assets (liabilities) for the years ended December 31, 2012, 2011 and 2010, are as follows, Continued
 - (ii) December 31, 2011 (Restated)

	67,816) (1,168)
	,
	1 168)
Gains on valuation of derivatives (27,399) 26,231 -	(1,100)
Losses on valuation of derivatives 20,485 (8,766) -	1,719
Accrual for retirement and	
severance benefits 18,999 4,467 - 2	23,466
Deposit for severance benefit	
	7,533)
	9,327
	32,562)
Derivative liabilities 1,471 - (184)	1,287
Derivative assets (1,118) - 643	(475)
Allowance for doubtful long-term	
· · · · · · · · · · · · · · · · · · ·	5,744
	23,536
Land (advanced depreciation	
	24,858)
Customers contribution to	
construction costs 448 28 -	476
	9,510)
Accumulated depreciation in	
· · · · · · · · · · · · · · · · · · ·	86,374
	37,276)
	6,229
	3,217)
Others (126,412) (83,248) (67,093) (27	' 6,753)
(1,880,299) $(264,786)$ $(57,925)$ $(2,20)$	(010,3
	3,085
Total ₩ (1,245,736) (216,264) (57,925) (1,51	9,925)

39. Income Tax Expense, Continued

- (d) Details of changes in gross deferred tax assets (liabilities) for the years ended December 31, 2012, 2011 and 2010, are as follows, Continued
 - (iii) December 31, 2010 (Restated)

			Amount recorded	Amount recorded in other	
		Beginning balance	in profit or loss	comprehensive income	Ending balance
	_		(In mill	lions of won)	
Price adjustment on raw materials	₩	(1,110,258)	189,949	-	(920,309)
Gains on valuation of derivatives		(118,279)	90,880	-	(27,399)
Losses on valuation of derivatives		57,007	(36,522)	-	20,485
Accrual for retirement and severance					
benefits		13,795	5,204	-	18,999
Deposit for severance benefit					
insurance		(14,013)	(3,924)	-	(17,937)
Foreign currency translation losses		125,118	(80,138)	-	44,980
Foreign currency translation gains		(87,243)	14,311	-	(72,932)
Derivative liabilities		-	-	1,471	1,471
Derivative assets		-	-	(1,118)	(1,118)
Allowance for doubtful long-term			4.4.0.4.0		44040
loans		-	14,313	-	14,313
Government grants		3,820	9,572	-	13,392
Land (advanced depreciation		(00.500)			(00 500)
provision)		(22,598)	-	-	(22,598)
Customers contribution to construction costs		378	70		448
				-	
Temporary depreciation allowance		(499)	(9,135)	-	(9,634)
Accumulated depreciation in excess of tax limit		34,693	28,106		62,799
Financial lease assets		(566,823)	39,195	<u>-</u>	(527,628)
Financial lease liabilities		558,506	(39,576)	(17,848)	501,082
Revaluation		(284,379)	(547,922)	(17,040)	(832,301)
Others		(590,271)	454,249	9,610	(126,412)
Othors	-				<u>`</u>
Taulana ann famunda		(2,001,046)	128,632	(7,885)	(1,880,299)
Tax loss carryforwards	_	848,283	(213,720)		634,563
Total	₩	(1,152,763)	(85,088)	(7,885)	(1,245,736)

39. Income Tax Expense, Continued

(e) Details of deferred tax assets (liabilities) on the statements of financial position as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011	2010	
	_	(In millions of won)			
Deferred tax assets Deferred tax liabilities	₩	18,859 (1,777,082)	12,953 (1,532,878)	2,811 (1,248,547)	
Total	₩_	(1,758,223)	(1,519,925)	(1,245,736)	

(f) Taxable temporary difference and tax credit which are not recognized as deferred tax asset as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_	(1	1)	
Temporary deductible difference	₩	17,507	9,945	9,945
Tax losses		17,763	25,424	10,291
Tax credits	_	12,613	9,807	6,387
Total	₩_	47,883	45,176	26,623

Expiration dates for tax credits which are not recognized as deferred tax asset for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012		2011 (Restated)		2010 (Restated)		
	_	Tax loss carry- forwards	Tax credit	Tax loss carry- forwards	Tax credit	Tax loss carry- forwards	Tax credit	
	_	(In millions of won)						
Within 1 year	₩	297	1,249	308	-	233	-	
1 ~ 2 years		246	2,747	246	1,249	308	1,249	
2 ~ 3 years		5,019	2,391	-	2,747	246	2,747	
After 3 years	_	12,201	6,226	24,870	5,811	9,504	2,391	
Total	₩	17,763	12,613	25,424	9,807	10,291	6,387	

(g) The aggregate amount of temporary differences associated with investments in subsidiaries for which deferred tax liability is not recognized as of December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
			(In millions of wo	n)
Domestic subsidiary companies	₩	41,720	49,266	47,348
Overseas subsidiary companies	-			5,999
Total	₩_	41,720	49,266	53,347

40. Profit from continuing operations

Operating profit is calculated as gross profit, net of selling and administrative expenses.

41. Nature of expenses

- (a) Details of nature of expenses for the years ended December 31, 2012,2011 and 2010 are as follows:
 - (i) December 31, 2012

		Changes in inventories	Selling, general and administrative expenses	Cost of sales	Total
			(In millions of Ko	rean won)	
Changes in inventories:					
Finished goods	₩	8,391	-	-	8,391
Raw materials used		-	-	31,900,262	31,900,262
Salaries		-	63,352	162,005	225,357
Severance benefits		-	6,195	15,779	21,974
Other employee benefits		-	10,577	21,967	32,544
Insurance		-	2,762	5,676	8,438
Depreciation		-	21,211	1,000,922	1,022,133
Amortization		-	7,178	8,112	15,290
Bad debts expense		-	241	_	241
Commission		-	24,329	155,172	179,501
Advertising		-	6,395	414	6,809
Training		-	6,713	306	7,019
Vehicles maintenance expenses		-	584	1,370	1,954
Periodicals and printing expenses		-	707	263	970
Business promotion expenses		-	808	350	1,158
Rent		-	4,144	11,299	15,443
Communication		-	1,323	3,038	4,361
Freight expenses		-	-	-	-
Taxes and dues		-	96,141	22,312	118,453
Supplies		-	877	978	1,855
Water, lighting and heating		-	780	156,077	156,857
Repairs and maintenance expenses		-	1,288	131,786	133,074
Research and development expense		-	48,170	10	48,180
Travel and transportation		-	4,487	2,708	7,195
Clothing expenses		-	440	551	991
Association fee		-	412	343	755
Sales promotion costs		-	5,638	-	5,638
Sales commission		-	8	-	8
Promotional expenses		-	137	-	137
Other expenses(*)			27,877	(188,198)	(160,321)
Total	₩	8,391	342,774	33,413,502	33,764,667

^(*) Other expenses primarily includes adjustments of supply costs for the settled income arising from raw material cost pass-through adjustment system ("cost adjustment system") by deducting from cost of sales during the year instead of recognizing sales revenue amounted to ₩ (219,059) million.

41. Nature of expenses, Continued

- (a) Details of nature of expenses for the years ended December 31, 2012,2011 and 2010 are as follows, Continued
 - (ii) December 31, 2011 (Restated)

		Changes in inventories	Selling, general and administrative expenses	Cost of sales	Total
	_		(In millions	of won)	
Changes in inventories:					
Finished goods	₩	15,953	-	-	15,953
Raw materials used		_	-	25,353,462	25,353,462
Salaries		-	57,300	201,945	259,245
Severance benefits		-	3,003	15,433	18,436
Other employee benefits		-	8,094	29,865	37,959
Insurance		-	2,236	5,726	7,962
Depreciation		-	10,979	813,171	824,150
Amortization		-	10,556	5,724	16,280
Commission		-	22,953	40,232	63,185
Advertising		-	6,240	585	6,825
Training		-	6,077	2,041	8,118
Vehicles maintenance					
expenses		-	459	3,929	4,388
Periodicals and printing					
expenses		-	708	345	1,053
Business promotion expenses		-	847	371	1,218
Rent		-	3,693	16,540	20,233
Communication		-	1,299	3,369	4,668
Freight expenses		-	-	7	7
Taxes and dues		-	88,813	18,904	107,717
Supplies		-	657	1,200	1,857
Water, lighting and heating		-	706	128,210	128,916
Repairs and maintenance					
expenses		-	730	158,776	159,506
Research and development					
expense		-	45,469	70	45,539
Travel and transportation		-	3,246	3,415	6,661
Clothing expenses		-	124	493	617
Association fee		-	397	242	639
Sales promotion costs		-	3,704	-	3,704
Sales commission		-	4	-	4
Promotional expenses		-	178	<u>-</u>	178
Other expenses(*)	_	_	18,971	289,146	308,117
Total	₩	15,953	297,443	27,093,201	27,406,597

(*) Other expenses primarily includes adjustments of supply costs for the settled income arising from raw material cost pass-through adjustment system ("cost adjustment system") by deducting from cost of sales during the year instead of recognizing sales revenue amounted to ₩ 257,960 million.

41. Nature of expenses, Continued

- (a) Details of nature of expenses for the years ended December 31, 2012,2011 and 2010 are as follows, Continued
 - (iii) December 31, 2010 (Restated)

		Changes in inventories	Selling, general and administrative expenses	Cost of sales	Total
	_	inventories	(In millions of		
			(III IIIIII OII O	i won,	
Changes in inventories:	147	(0.7)			(0.7)
Finished goods	₩	(37)	-	20,619,688	(37)
Raw materials used Salaries		-	43,972		20,619,688
Severance benefits		-	3,922	182,609 16,826	226,581 20,748
Other employee benefits		_	6,694	29,425	36,119
Insurance		_	1,529	5,788	7,317
Depreciation		_	10,774	775,624	786,398
Amortization		_	5,556	5,534	11,090
Bad debt expenses		_	1,034		1,034
Professional service fees		_	20,955	39,681	60,636
Advertising		_	5,738	440	6,178
Training		_	5,391	1,899	7,290
Vehicles maintenance			, , , , ,	,	,
expenses		-	385	3,522	3,907
Periodicals and printing				,	•
expenses		-	738	343	1,081
Business promotion					
expenses		-	772	479	1,251
Rent		-	2,194	14,374	16,568
Communication		-	1,190	3,390	4,580
Freight expenses		-	-	14	
Taxes and dues		-	84,802	15,574	100,376
Supplies		-	583	1,277	1,860
Water, lighting and heating		-	635	102,926	103,561
Repairs and maintenance			0.40	00.700	07.540
expenses		-	819	86,729	87,548
Research and			27.602	70	27 774
development expense		-	37,692	79	37,771
Travel and transportation		-	2,563	3,179	5,742
Clothing expenses Association fee		-	132 374	972 243	1,104 617
Sales promotion costs		-	4,254	243	4,254
Promotional expenses		-	4,234 224	-	224
Other expenses(*)		<u>-</u>	15,008	172,520	187,528
outer expenses()	_	<u>-</u>	10,000	172,020	
Total	₩	(37)	257,930	22,083,135	22,341,028

(*) Other expenses primarily includes adjustments of supply costs for the settled income arising from raw material cost pass-through adjustment system ("cost adjustment system") by deducting from cost of sales during the year instead of recognizing sales revenue amounted to \(\forall \) 144,595 million.

42. Earnings per share

Basic earnings per share for the years ended December 31, 2012, 2011 and 2010, is as follows:

		2012	2011 (Restated)	2010 (Restated)			
		(In millions of won, except share data and earnings per share)					
Net income attributable to owners of Corporation Weighted-average number of common shares	₩	366,675	181,483	276,831			
outstanding	-	72,608,750	72,608,750	72,608,750			
Earnings per share in Korean won	₩	5,050	2,499	3,813			

Net income and weighted average number of ordinary shares in issue for the years ended December 31, 2012, 2011 and 2010, are as follows:

		2012	2011 (Restated)	2010 (Restated)
	_		of won, except sh arnings per share	
Net income Weighted average number of ordinary shares in	₩	366,675	181,484	276,831
issue		72,608,750	72,608,750	72,608,750

43. Categories of financial instruments

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows:
 - (i) December 31, 2012
 - ① Current financial assets

		Financial assets at fair value through profit or loss	Loans and receivables	Held-to- maturity financial assets	Total
			(In millions of w	on)	
Current financial assets Financial assets at fair value through					
profit or loss	₩	15,327	-	-	15,327
Held-to-maturity financial assets		-	-	139	139
Loans and receivables		-	439	-	439
Short-term financial instruments	_		61,582		61,582
	_	15,327	62,021	139	77,487
Trade and other accounts receivable	_		8,066,955		8,066,955
Total	₩_	15,327	8,128,976	139	8,144,442

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows, Continued
 - (i) December 31, 2012, Continued
 - ② Non-current financial assets

		Financial assets at fair value through profit or loss	Loans and receivables	Available- for-sale financial assets	Held-to- maturity financial assets	Hedging derivative instruments	Total
				(In millions of	f won)		
Non-current financial assets Financial assets at fair value through profit or							
loss	₩	42,081	-	-	-	-	42,081
Available-for-sale financial assets Held-to-maturity financial		-	-	24,401	-	-	24,401
assets		-	-	-	1,430	-	1,430
Loans and receivables Derivative financial		-	345,763	-	-	-	345,763
assets		-	-	-	-	1,349	1,349
		42,081	345,763	24,401	1,430	1,349	415,024
Trade and other accounts receivable	3	-	188,316				188,316
Total	₩	42,081	534,079	24,401	1,430	1,349	603,340

3 Current financial liabilities

		Financial liabilities at fair value through profit or loss	Financial liability measured at amortized cost	Hedging derivative instruments	Total
			(In millions of	won)	
Current financial liabilities Financial liabilities at fair value					
through profit or loss	₩	4,382	- -	-	4,382
Long-term borrowings		-	110,184	-	110,184
Debentures Derivative financial liabilities		-	2,170,153	22 167	2,170,153
Derivative illianciai liabilities	_			22,167	22,167
		4,382	2,280,337	22,167	2,306,886
Trade and other accounts receivable	,	_	3,175,214	_	3,175,214
Short-term borrowings	_		4,626,514		4,626,514
Total	₩	4,382	10,082,065	22,167	10,108,614

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows, Continued
 - (i) December 31, 2012, Continued
 - 4 Non-current financial liabilities

	_	Financial liabilities at fair value through profit or loss	Financial liability measured at amortized cost	Hedging derivative instruments	Total
			(In millions of	won)	
Non-current financial liabilities					
Financial liabilities at fair value through profit or loss	₩	95,380	-	_	95,380
Long-term borrowings		-	409,291	-	409,291
Debentures		-	17,009,901	-	17,009,901
Derivative financial liabilities	_			93,242	93,242
		95,380	17,419,192	93,242	17,607,814
Trade and other accounts receivable	_		2,494,278		2,494,278
Total	₩_	95,380	19,913,470	93,242	20,102,092

- (ii) December 31, 2011 (Restated)
 - ① Current financial assets

		Financial assets at fair value through profit or loss	Loans and receivables	Held-to- maturity financial assets	Total
			(In millions of	won)	
Current financial assets Financial assets at fair value through profit					
or loss	₩	1,337	-	-	1,337
Held-to-maturity financial assets		-	-	311	311
Loans and receivables		-	4,061	-	4,061
Short-term financial instruments		-	9,467	-	9,467
Others	_		12		12
	_	1,337	13,540	311	15,188
Trade and other accounts receivable	_		6,455,025		6,455,025
Total	₩	1,337	6,468,565	311	6,470,213

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows, Continued
 - (ii) December 31, 2011 (Restated), Continued
 - 2 Non-current financial assets

		Loans and receivables	Available- for-sale financial assets	Held-to- maturity financial assets	Hedging derivative instruments	Total
			(In	millions of w	on)	
Non-current financial assets Available-for-sale financial						
assets	₩	-	26,712	-	-	26,712
Held-to-maturity financial assets		_	-	1,301	-	1,301
Loans and receivables		319,636	-	-	-	319,636
Derivative financial assets		_			20,768	20,768
	_	319,636	26,712	1,301	20,768	368,417
Trade and other accounts receivable	_	179,951				179,951
Total	₩	499,587	26,712	1,301	20,768	548,368

3 Current financial liabilities

		Financial liabilities at fair value through profit or loss	Financial liability measured at amortized cost	Total
	_	(In	millions of won)	
Current financial liabilities Financial liabilities at fair value through				
profit or loss Long-term borrowings	₩	9,728	-	9,728
		-	117,548	117,548
Debentures				
	_	<u>-</u>	1,360,000	1,360,000
	_	9,728	1,477,548	1,487,276
Trade and other accounts payable		-	3,023,590	3,023,590
Short-term borrowings	_		3,360,304	3,360,304
Total	₩	9,728	7,861,442	7,871,170

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows, Continued
 - (ii) December 31, 2011 (Restated), Continued
 - Non-current financial liabilities

	_	Financial liabilities at fair value through profit or loss	Financial liability measured at amortized cost	Hedging derivative instruments	Total
			(In millions of won)		
Non-current financial liabilities Financial liabilities at fair value					
through profit or loss	₩	34,830	-	-	34,830
Long-term borrowings		-	509,177	-	509,177
Debentures		-	14,710,850	-	14,710,850
Derivative financial liabilities		-		7,911	7,911
		34,830	15,220,027	7,911	15,262,768
Trade and other accounts		_			
payable	_		2,853,522		2,853,522
Total	₩_	34,830	18,073,549	7,911	18,116,290

(iii) December 31, 2010 (Restated)

① Current financial assets

		Financial assets at fair value through profit or loss	Loans and receivables	Held-to- maturity financial assets	Derivative financial assets	Total
		_	(In r	millions of wo	n)	
Current financial assets: Financial assets at fair value						
through profit or loss	₩	11,394	-	-	-	11,394
Derivative financial assets		-	-	-	40,487	40,487
Held-to-maturity financial assets		-	_	447	-	447
Loans and receivables Short-term financial		-	483	-	-	483
instruments	_	_	6,066			6,066
Sub Total		11,394	6,549	447	40,487	58,877
Trade and other accounts receivables	_	_	5,248,926			5,248,926
Total	₩	11,394	5,255,475	447	40,487	5,307,803

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows, Continued
 - (iii) December 31, 2010 (Restated), Continued

2 Non-current financial assets

	Financial assets at fair value through profit or loss		Loans and receivables	Available-for- sale financial assets	Held-to- maturity financial assets	Total
			(In	millions of won)		
Non-current financial assets:						
Financial assets at fair value through profit or						
loss	₩	25,341	-	-	-	25,341
Available-for-sale financial assets		-	-	28,907	-	28,907
Held-to-maturity financial assets		-	-	-	1,326	1,326
Loans and receivables	_		306,354			306,354
Sub Total	_	25,341	306,354	28,907	1,326	361,928
Trade and other accounts receivables	_		66,189			66,189
Total	₩	25,341	372,543	28,907	1,326	428,117

3 Current financial liabilities

		Trading Securities	Financial liability measured at amortized cost	Derivative financial liabilities	Total
	_		(In millions	of won)	
Current financial liabilities:					
Long-term borrowings	₩	-	194,603	-	194,603
Debentures		-	1,986,083	-	1,986,083
Derivative financial liabilities	_			32,964	32,964
Sub Total		_	2,180,686	32,964	2,213,650
Financial liabilities at fair value through profit or loss Trade and other accounts payables Short-term borrowings		7,085 - -	2,018,370 1,946,072	- - -	7,085 2,018,370 1,946,072
Total	₩	7,085	6,145,128	32,964	6,185,177

43. Categories of financial instruments, Continued

- (a) Details of categories of financial instruments as of December 31, 2012, 2011 and 2010, are as follows, Continued
 - (iv) December 31, 2010 (Restated)
 - ① Non-current financial liabilities

		Financial liability measured at amortized cost	Derivative financial liabilities	Total
Non-current financial liabilities:				
Long-term borrowings	₩	615,879	-	615,879
Debentures		10,873,276	-	10,873,276
Derivative financial liabilities	_		8,670	8,670
Sub Total	_	11,489,155	8,670	11,497,825
Trade and other accounts payables	_	3,001,307		3,001,307
Total	₩_	14,490,462	8,670	14,499,132

(b) Details of financial income and expense for the years ended December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2010 (Restated)	
		(In	millions of won)
Financial assets at fair value through profit or loss				
Gains (losses) on foreign currency translation	₩	-	1	-
Gains (losses) on evaluation of derivatives		66,611	1,337	38,851
Gains (losses) on trading of derivatives		105,650	156,434	256,391
Loans and receivables				
Interest income		8,624	12,521	5,371
Gains(losses) on foreign currency transaction		150	1,020	29
Gains(losses) on foreign currency translation		(16,088)	9,427	(390)
Available-for-sale financial assets				
Dividends		6	8	3
Impairment loss on available-for-sale financial				
assets		10,815	-	
Held-to-maturity financial assets				
Interest income		67	74	133
Financial liabilities at fair value through profit or loss				
Gains (losses) on evaluation of derivatives		(74,135)	(44,559)	(28,690)
Gains (losses) on trading of derivatives		(220,115)	(176,384)	(312,335)
Financial liabilities measured at amortized cost				
Interest expense		(1,018,608)	(849,638)	(759,333)
Gains(losses) on foreign currency transactions		100,148	(8,232)	9,202
Gains(losses) on foreign currency translation		73,265	(16,754)	(2,229)
Comprehensive income recognized during the year		508,491	(71,890)	96,368
Hedging derivative instruments				
Gains (losses) on evaluation of derivatives		-	(23)	2
Gains (losses) on trading of derivatives		(1,684)	`38 [°]	89
Interest income		-	-	2,991
Interest expense		(17,246)	(29,498)	(8,650)
Comprehensive income recognized during the year		(1,848)	(2,260)	(2,247)
Others				
Capitalization of interest	_	178,542	155,332	132,850
	₩	(297,355)	(863,046)	(571,594)
	=			

44. Risk management

The Group has exposure to the following risks from its use of financial instruments:

- · credit risk
- liquidity risk
- market risk
- operational risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

(a) Risk management framework

The Management Committee has overall responsibility for the establishment and oversight of the Group's risk management framework. The Committee has established the Risk Management Committee, which is responsible for developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analysis the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities.

The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group.

(b) Equity risk management

While the equity management of the Group maintains the ability to continue as an ongoing entity, it also minimizes the issuance costs of equity in order to maximize the returns on owner's equity. Moreover, the management of the Group periodically inspects the structure of equity, and makes a continuous effort to improve the debt ratios through various actions such as short- and long-term borrowings, disposals of asset, and capital increase by issuing new shares

44. Risk management, Continued

(b) Equity risk management, Continued

Details of accounts which are managed for capital management purposes as of December 31, 2012, 2011 and 2010, are summarized as follows:

		2012	2011 (Restated)	2010 (Restated)
		(In millions of wo	on, except net liabi	lities ratio)
Liabilities				
Short-term borrowings	₩	4,626,514	3,360,304	1,946,072
Current portion of long-term debts		110,184	117,548	194,603
Current portion of debentures		2,170,153	1,360,000	1,986,083
Current portion of finance lease liabilities		241,156	234,871	217,988
Long-term borrowings, net of current				
portion		409,291	509,177	615,879
Debentures, net of current portion		17,009,901	14,710,850	10,873,276
Finance lease liabilities	_	2,381,929	2,817,665	3,001,307
Total Liabilities	_	26,949,128	23,110,415	18,835,208
Assets				
Cash and cash equivalents		245,466	154,575	210,867
Short-term financial instruments	_	61,582	9,467	6,066
Total assets	_	307,048	164,042	216,933
Net liabilities		26,642,080	22,946,373	18,618,275
Total equity	₩_	8,368,965	8,043,901	7,730,178
Net liabilities ratio	=	318.3%	285.3%	240.9%

(c) Financial risk management

(i) Credit Risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables and investments. The main components of this allowance are a specific loss component that relates to individually significant exposures. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets. The book value of financial assets means maximum exposure in respect of credit and counterparty risk.

44. Risk management, Continued

(c) Financial risk management, Continued

(i) Credit Risk, Continued

The maximum exposure by credit risk as of December 31, 2012, 2011 and 2010, are summarized as follows:

		2012	2011 (Restated)	2010 (Restated)
		(In	millions of won)	
Held-to-maturity financial assets Financial assets at fair value through profit or	₩	1,569	1,612	1,773
loss		57,408	1,337	36,735
Short-term financial instruments		61,582	9,467	6,066
Loans and receivables(*)		346,202	323,697	306,837
Cash and cash-equivalents		242,746	149,731	204,449
Other current financial assets		_	12	-
Trade and other accounts receivables		8,255,271	11,133,219	9,678,744
Derivative financial assets	_	1,349	20,768	40,487
Total	₩_	8,966,127	11,639,843	10,275,091

(*) The Group has received blank promissory notes from customers and made deposit transfer agreements to decrease the credit risk of trade accounts receivable.

(ii) Interest rate risk

The Group borrows funds at fixed and variable interest rate. Also, the Group's management monitors the level of interest rates and maintains the balance of borrowings at variable rates and fixed rates.

Variable interest rate borrowings as of December 31, 2012, 2011 and 2010, are summarized as follows:

		2012	2011 (Restated)	2010 (Restated)
		(In r	nillions of won)	
Long-term borrowings	₩	397,139	507,376	697,308
Debentures		698,493	288,325	284,725
Finance lease liabilities	_	2,623,085	3,052,536	3,219,295
	₩	3,718,717	3,848,237	4,201,328

44. Risk management, Continued

- (c) Financial risk management, Continued
 - (ii) Interest rate risk, Continued

Sensitivity analysis of income before taxes from changes of interest rate for the years ended December 31, 2012, 2011 and 2010, is as follows:

	20	12)11 tated)	2010 (Restated)			
	1% Increase	1% Decrease	1% Increase	1% Decrease	1% Increase	1% Decrease		
_		(In mi	llions of wo	on)				
м.	(27 197)	27 107	(20 402)	20 /02	(42.012)	42 O12		

Income before income taxes

₩ (37,187) 37,187 (38,482) 38,482 (42,013) 42,013

(iii) Currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Corporation entities, primarily the US Dollars (USD), but also Canadian Dollars (CAD) and Australian Dollars (AUD). The Group uses forward exchange contracts to hedge its currency risk.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

44. Risk management, Continued

(c) Financial risk management, Continued

(iii) Currency risk, Continued

The book values of foreign currency assets and liabilities as of December 31, 2012, 2011 and 2010, are summarized as follows:

① December 31, 2012

	USD	EUR	AUD	CAD	JPY	CHF	GBP	MYR
			(li	n millions of w	on)			
Assets								
Cash and cash								
equivalents	39,666	322	27,634	7,218	-	-	-	16
Trade and other								
accounts receivable	430,785	6,334	5,924	4,900	_	_	_	_
Loans and	400,700	0,004	0,024	4,000				
receivables	290,015	-	9,805	-	-	-	-	-
Non-trade								
receivables	18,311	-	463	1,428	-	-	-	-
Available-for- sale financial								
assets	82	_	3,340	_	_	_	_	_
Current portion	02		0,010					
of other non-								
financial								
assets	60					<u>-</u> .		
Total assets	778,919	6,656	47,166	13,546				16
Liabilities								
Trade and other								
accounts	0.007.070	45.000	70.004	25.045			200	
payable Borrowings	2,087,372 1,069,033	15,863	76,231 15,595	35,915 216,716	-	-	308	-
Debentures	4,252,267	84,976	333,429	322,815	486,525	762,515	_	_
Finance lease	-,,	- 1,-1	,	,	,	,,,,,,		
liabilities	2,623,085	-	-	-	-	-	-	-
Other financial	_							
liabilities	2				<u>-</u>	<u>-</u> .		
Total liabilities	10,031,759	100,839	425,255	575,446	486,525	762,515	308	
Net exposure	(9,252,840)	(94,183)	(378,089)	(561,900)	(486,525)	(762,515)	(308)	16

- (c) Financial risk management, Continued
 - (iii) Currency risk, Continued
 - ① December 31, 2012, Continued

	THB	CNY	MXN	RUB	HKD	SGD	AED	MZN
				(In m	nillions of won)			
Assets								
Cash and cash equivalents	2	19	38	-	-	-	103	842
Trade and other accounts								
receivable	-	-	-	11	-	-	-	-
Loans and receivables	-	-	17	150	-	-	-	-
Non-trade receivables	-	-	-	-	-	-	-	-
Available-for-sale financial								
assets	-	-	-	102	-	-	-	-
Current portion of other non-								
financial assets						<u>-</u> _		
Total assets	2	19	55	263			103	842
Liabilities								
Trade and other accounts								
payable	-	-	360	-	-	-	-	-
Borrowings	-	-	-	-	-	-	-	-
Debentures	-	27,501	-	-	137,489	35,019	-	-
Finance lease liabilities	-	-	-	-	-	-	-	-
Other financial liabilities					<u> </u>			
Total liabilities		27,501	360		137,489	35,019		
Net exposure	2	(27,482)	(305)	263	(137,489)	(35,019)	103	842

- (c) Financial risk management, Continued
 - (iii) Currency risk, Continued
 - ② December 31, 2011 (Restated)

	USD	EUR	AUD	CAD	JPY	CHF	MYR	ТНВ	CNY	RUB
				(In i	millions of w	on)				
Assets Cash and cash equivalents Trade and other accounts	16,975	829	13,700	-	-	-	51	24	40	-
receivable	238	-	1,577	-	-	-	-	-	-	-
Loans and receivables Non-trade	1,298,288	206	16,320	-	-	-	-	-	-	244
receivables Available-for- sale financial	27,346	-	-	-	-	-	-	-	-	-
assets Current portion of other non- financial assets	- 12	-	5,145	-	-	-	-	-	-	-
Total assets	1,342,859	1,035	36,742				<u>-</u> 51	24	40	244
Liabilities Trade and other accounts	1,558,644	756	41,784		1					
payable Borrowings	224,572	206	16,320	342,929	-	-	-	-	-	_
Debentures Finance lease liabilities	2,364,265	-	-	338,922	445,548	796,816	-	-	-	-
	3,052,536				 -					<u>-</u>
Total liabilities	7,200,017	962	58,104	681,851	445,549	796,816				
Net exposure	(5,857,158)	73	(21,362)	(681,851)	(445,549)	(796,816)	51	24	40	244

- (c) Financial risk management, Continued
 - (iii) Currency risk, Continued
 - 3 December 31, 2010 (Restated)

	USD	EUR	AUD	CAD	JPY	CHF	MYR	ТНВ	CNY	MXN
-				(I	n millions	of won)				
Assets: Cash and cash-										
equivalents Trade and other accounts	46,088	81	-	-	-	-	83	64	-	-
receivables Loans and	1,364	37	-	-	-	-	-	-	-	-
receivables Non-trade	417,838	146	14,562	-	-	-	-	-	-	-
receivables Current portion of other non- financial assets	2,240	-	-	-	-	-	-	-	-	-
Total assets	467,567	264	14,562				83	64		_
Liabilities: Trade and other accounts										
payables	999,042	1,491	-	-	-	-	-	-	-	132
Borrowings Debentures Financial lease	480,424 1,867,796	146 -	-	82,519 -	41,912	365,403	-	-	-	-
liabilities	3,219,295	-	-	-	-	-	-	-	-	-
Total liabilities	6,566,557	1,637	_	82,519	41,912	365,403		<u>-</u>	<u>-</u>	132
Net exposure	(6,098,990)	(1,373)	14,562	(82,519)	(41,912)	(365,403)	83	64	<u>-</u>	(132)

44. Risk management, Continued

(c) Financial risk management, Continued

(iii) Currency risk, Continued

Foreign currency exchange rate as of December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2011 (Restated) (In won)	2010 (Restated)
USD	₩	1,071.10	1,153.30	1,138.90
EUR		1,416.26	1,494.10	1,513.60
AUD		1,111.43	1,169.27	1,157.92
CAD		1,076.05	1,129.74	1,138.67
JPY		12.48	14.85	13.97
CHF		1,173.10	1,225.87	1,218.01
GBP		1,730.95	1,777.24	1757.72
MYR		349.80	362.96	369.35
THB		34.97	36.32	37.78
CNY		171.88	182.51	172.50
MXN		82.51	82.38	91.95
RUB		35.29	35.92	37.28
HKD		138.18	148.38	146.35
SGD		875.48	886.44	884.00
AED		291.61	313.99	310.07
MZN		36.35	43.40	35.23

Sensitivity analysis of income before taxes from changes of foreign exchange rate for the year ended December 31, 2012, is as follows:

	10% Increase	e 10% Decrease
	(In million	ns of won)
Income before income taxes	₩ (217,999	217,999

(iv) Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions.

- (c) Financial risk management, Continued
 - (iv) Liquidity risk, Continued
 - ① Aggregate maturities of the Group's financial liabilities as of December 31, 2012, are summarized as follows:

		Book value	Cash flows in contract	1 year or less	1 ~ 5 years	More than 5 years
			(In	millions of won)		
Non-derivative financial liabilities						
Debentures	₩	19,180,054	24,048,031	2,950,057	11,481,622	9,616,352
Borrowings		5,145,988	5,207,411	4,773,077	307,153	127,181
Finance lease liabilities		2,623,085	2,978,580	298,293	1,212,119	1,468,168
Trade and other accounts payable(*) Other guarantees	S	3,046,407 2,047	3,050,110 180,470	2,934,987 180,470	115,123	
Total	₩	29,997,581	35,464,602	11,136,884	13,116,017	11,211,701
Derivative financial liabilities Derivative financial liabilities	-	215,171	282,093	60.195	212.659	9,239
		• ,	=3=,000	30,.00	,	0,200

- (*) These trade and other accounts payable excludes financial lease liabilities.
 - ② Aggregate maturities of the Group's financial liabilities as of December 31, 2011, are summarized as follows: (Restated)

		Book value	Cash flows in contract	1 year or less	1 ~ 5 years	More than 5 years
	_		(In	millions of won)		
Non-derivative financial liabilities						
Debentures	₩	16,070,850	20,145,143	606,891	9,842,326	9,695,926
Borrowings		3,987,029	5,491,144	1,463,152	3,816,135	211,857
Finance lease liabilities Trade and other accounts		3,052,536	3,474,834	290,954	1,254,727	1,929,153
payable(*)		2,824,577	2,824,577	2,788,720	35,857	-
Other guarantees	-		579,989	579,989		
Total	₩	25,934,992	32,515,687	5,729,706	14,949,045	11,836,936
Derivative financial liabilities Derivative financial liabilities	₩	52.469	52,469	9.728	40.972	1,769
Derivative infaricial liabilities	VV	52,403	32,403	3,720	70,312	1,700

^(*) These trade and other accounts payable excludes finance lease liabilities.

- (c) Financial risk management, Continued
 - (iv) Liquidity risk, Continued
 - 3 Aggregate maturities of the Group's financial liabilities as of December 31, 2010, are summarized as follows: (Restated)

		Book value	Cash flows in contract	1 year or less	1 ~ 5 years	More 5 years
	_		(In m	illions of won)		
Non derivative financial						
liabilities:						
Debentures	₩	12,875,111	15,749,147	2,625,027	8,251,536	4,872,584
Borrowings		2,756,554	2,784,264	2,155,353	439,591	189,320
Financial lease liabilities		3,219,295	4,246,411	306,264	1,304,432	2,635,715
Trade and other accounts						
payable(*)		1,800,382	1,800,382	1,800,382	-	-
Other guarantees	_		472,202	472,202		
Total	₩	20,651,342	25,052,406	7,359,228	9,995,559	7,697,619
Derivative financial liabilities:	=					
Derivative financial liabilities	₩	48,718	48,718	40,048	7,352	1,318

^(*) These trade and other accounts payable excludes finance lease liabilities.

- (d) Fair value of financial assets and liabilities
 - (i) Financial assets and liabilities as of December 31, 2012, 2011 and 2010, are summarized as follows:

		20)12)11 tated)	2010 (Restated)		
	-	Book value	Fair value	Book value	Fair value	Book value	Fair value	
	-			(In million	ns of won)			
Assets carried at fair value Available-for-sale financial								
assets Financial assets at fair	₩	24,401	24,401	26,712	26,712	28,907	28,907	
value through profit Foreign currency forwards		57,407	57,407	1,337	1,337	36,735	36,735	
and swap	-	1,349	1,349	20,768	20,768	40,487	40,487	
Total	₩	83,157	83,157	48,817	48,817	106,129	106,129	
Assets carried at amortized		_						
cost								
Trade and other accounts receivable Held-to-maturity financial		8,255,270	8,255,270	6,634,976	6,634,976	5,315,115	5,315,115	
assets		1,569	1,569	1,612	1,612	1,773	1,773	
Loans and receivables		346,203	346,203	323,697	323,697	306,837	306,837	
Short-term financial assets		61,582	61,582	9,467	9,467	6,066	6,066	
Cash and cash-equivalents	-	245,466	245,466	154,575	154,575	210,867	210,867	
Total	₩	8,910,090	8,910,090	7,124,327	7,124,327	5,840,658	5,840,658	
Liabilities carried at fair value Financial liabilities at fair value through profit or								
loss	₩	99,762	99,762	44,558	44,558	7,085	7,085	
Interest rate swap	•••	2,464	2,464	3,501	3,501	495	495	
Foreign currency forwards		14,562	14,562	4,410	4,410	41,106	41,106	
Foreign currency swap		98,383	98,383			32	32	
Total	₩	215,171	215,171	52,469	52,469	48,718	48,718	
Liabilities carried at amortized								
Debentures	₩	19,180,054	20,505,892	16,070,850	16,743,583	12,859,359	12,859,426	
Finance lease liabilities		2,623,085	2,623,085	3,052,536	3,052,536	3,219,295	3,219,295	
Borrowings		5,145,989	5,145,989	3,987,029	3,987,029	2,756,554	2,756,554	
Trade and other accounts payable.(*)	-	3,046,407	3,046,407	2,824,577	2,824,577	1,800,382	1,800,382	
Total	₩	29,995,535	31,321,373	25,934,992	26,607,725	20,635,590	20,635,657	

^(*) These trade and other accounts payable exclude financial lease liabilities.

44. Risk management, Continued

- (d) Fair value of financial assets and liabilities, Continued
 - (ii) Detail of discount ratio as of December 31, 2012, 2011 and 2010, are as follows:

	2012	2011 (Restated)	2010 (Restated)
Derivative financial instruments	0.00% ~ 3.27%	2.32% ~ 4.28%	2.89% ~ 6.51%
Borrowings	0.60% ~ 3.00%	3.22% ~ 3.75%	1.00% ~ 4.25%
Financial lease	1.12% ~ 3.52%	0.84% ~ 4.05%	0.48% ~ 4.58%
Debentures	0.56% ~ 4.05%	1.26% ~ 4.09%	1.38% ~ 7.07%

(iii) The level of fair value hierarchy is as follows:

Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities

Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)

Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

The fair value measurements classified by fair value hierarchy as of December 31, 2012, 2011 and 2010, are as follows:

① December 31, 2012

		Level 1	Level 2	Level 3	Total
		(In millions of won			
Available-for-sale financial assets	₩	3,422	-	-	3,422
Financial assets at fair value through profit or loss		-	57,408	-	57,408
Derivative instruments assets / Foreign currency swap		-	1,349	-	1,349
Financial liabilities at fair value through profit or loss		-	99,762	-	99,762
Derivative instruments liabilities / Foreign currency swap		-	98,383	-	98,383
Derivative instruments liabilities / Interest rate swap		-	2,464	-	2,464
Derivative instruments liabilities / Foreign currency forwards		-	14,562	-	14,562

② December 31, 2011(Restated)

		Level 1	Level 2	Level 3	Total
	_	(In millions of won)			
Available-for-sale financial assets	₩	5,164	-	-	5,164
Financial assets at fair value through profit or loss		-	1,337	-	1,337
Derivative instruments assets / Foreign currency swap		-	20,768	-	20,768
Financial liabilities at fair value through profit or loss		-	44,558	-	44,558
Derivative instruments liabilities / Interest rate swap		-	3,501	-	3,501
Derivative instruments liabilities / Foreign currency forwards		-	4,410	-	4,410

44. Risk management, Continued

- (d) Fair value of financial assets and liabilities, Continued
 - (iii) The level of fair value hierarchy is as follows, Continued
 - 3 December 31, 2010 (Restated)

		Level 1	Level 2	Level 3	Total
	_	(In millions of won)			
Available-for-sale financial assets	₩	8,006	-	-	8,006
Financial assets at fair value through profit or loss		-	36,735	-	36,735
Derivative instruments assets / Foreign currency swap		-	40,487	-	40,487
Financial liabilities at fair value through profit or loss		-	7,085	-	7,085
Derivative instruments liabilities / Foreign currency swap		-	32	-	32
Derivative instruments liabilities / Interest rate swap		-	495	-	495
Derivative instruments liabilities / Foreign currency forwards		-	41,106	-	41,106

The following table presents available-for-sale financial assets that are valued at historical cost as of December 31, 2012, 2011 and 2010:

Category		2012	2011 (Restated)	2010 (Restated)
		(In millions of w	von)
Available-for-sale financial assets 1	₩	20,979	20,990	20,901

1 The available-for-sale financial assets are unlisted equities. Because the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed and therefore, these instruments are measured at cost.

45. Related Party Transactions

(a) Detail list of related parties as of December 31, 2012, is as follows:

Relationship	Related parties					
Subsidiaries	Korea Gas Technology Corp. KOGAMEX Investment Manzanillo B.V. KOMEX-GAS, S. de R.L. de C.V. KG Timor Leste Ltd. KG Mozambique Ltd. KG Krueng Mane Ltd. KOGAS Vostok LLC KOGAS Canada Ltd. KOGAS Canada Ltd. KOGAS Badra B.V. KOGAS Badra B.V. KOGAS Mansuriyah B.V. KOGAS Akkas B.V. KOGAS Australia Pty. Ltd. KOGAS Australia Pty. Ltd. KGLNG E&P Pty Ltd. KGLNG E&P II Pty Ltd. KGLNG Liquefaction Pty Ltd. Kyung-Ki CES Corp. Kogas Prelude Pty. Ltd. Manzanillo Gas Tech, S. de R.L. de C.V. KOGAS Mozambique Lda.					
Associates	Korea LNG Trading Co., Ltd. Hyundai Yemen LNG Company Korea LNG Ltd. Korea Ras Laffan LNG Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawesi LNG Development TOMORI E&P LIMITED AMEC Partners Korea Ltd.					
Joint ventures	Kor-Uz Gas cylinder Investment Ltd. Kor-Uz Gas C&G Investment Ltd. CORDOVA GAS RESOURCES Ltd. GLNG Operations Pty Ltd GLNG Property Pty Ltd JV SACOTECH Koman Energy FZCO Terminal KMS de GNL, S. De R.L. De C.V.					
Others(*)	Korea Southern Power Co., Ltd. Korea Midland Power co., Ltd. Korea Western Power Co., Ltd Korea East-West Power Co., Ltd. Korea South-East Power Co., Ltd					

(*) Significant subsidiaries of Korea Electric Power Corporation, which exercises significant influence on the Corporation.

All inter-company transactions are eliminated as part of the consolidation process and are not disclosed in the notes to the consolidated financial statements.

45. Related Party Transactions, Continued

(b) Significant transactions which occurred in the normal course of business with related parties for the years ended December 31, 2012, 2011 and 2010, are summarized as follows:

			Sales	Sales and other income			es and othe	r expense
Related party	Transaction		2012	2011 (Restated)	2010 (Restated)	2012	2011 (Restated)	2010 (Restated)
					(In millions o	of won)		
Korea Ras								
Laffan LNG								
Ltd.	Dividends	₩	96,548	129,143	,	-	-	-
Korea LNG Ltd.	Dividends		25,842	22,143	18,561	-	-	-
Hyundai Yemen								
LNG Company	Interest income		2,411	1,199	990	-	-	-
South-East Asia Gas Pipeline								
Company	Interest income		1 100					
Limited	Interest income		1,180	-		-	-	-
Korea LNG	Missellanseus							
Trading Co.,	Miscellaneous		4.540					
Ltd.	gains		1,546	-		100 010	107 700	440.077
	Costs of sales		-	-				112,377
Terminal KMS	Interest expense		-	-		11,729	9,600	11,420
de GNL, S. de								
R.L. de C.V	Revenue		-	4,625	5,385	-	-	-
Korea Southern								
Power Co.,								
Ltd.(*)	Revenue		3,697,034	2,972,220	2,496,825	-	-	-
Korea Midland								
Power Co.,								
Ltd. (*)	Revenue		2,506,615	2,068,283	1,951,463	-	-	-
Korea Western								
Power Co.,								
Ltd(*)	Revenue		2,838,391	2,341,360	1,782,120	-	-	-
Korea East-West								
Power Co.,								
Ltd. (*)	Revenue		1,701,479	1,436,011	1,241,028	-	-	-
Korea South-								
East Power								
Co., Ltd. (*)	Revenue		767,796	560,518	563,653	-	-	-

^(*) Special consumption tax amounts are included.

45. Related Party Transactions, Continued

(c) Account balances with related parties as of December 31, 2012, 2011 and 2010, are summarized as follows:

			Receivables				Payables			
Related party	Account		2012	2011 (Restated)	2010 (Restated)	2012	2011 (Restated)	2010 (Restated)		
					(In million	s of won)				
Korea Ras Laffan	Non-trade accounts									
LNG Ltd.	receivable	₩	4,483	1,257	-	-	-	-		
Korea LNG Ltd.	Non-trade accounts									
	receivable		-	2,491	1,631	-	-	-		
Hyundai Yemen										
LNG Company	Accrued income		7,516	5,217	4,018	-	-	-		
Korea LNG Trading	Finance lease									
Co., Ltd.	liabilities		-	-	-	778,309	870,715	890,112		
	Current portion of									
	finance lease									
	liabilities		-	-	-	30,347	30,651	28,393		
	Non-trade accounts					4 005	5.040	700		
	payable		-	-	-	1,005	5,946	739		
	Accrued expense		-	4 440	-	4,182	2,781	3,360		
Tamain al I/MO da	Prepaid expense		-	1,410	268	-	-	-		
Terminal KMS de	Trada asserta									
GNL, S. de R.L. de C.V.	Trade accounts receivable			225	1 210					
Korea Southern	Trade accounts		-	225	1,318	-	-	-		
Power Co., Ltd.	receivable		474 000	380,451	220 064					
Korea Midland	Trade accounts		471,023	300,431	328,064	-	-	-		
Power Co., Ltd.	receivable		31/ 230	260,784	255 565					
Korea Western	Trade accounts		314,233	200,704	200,000	_	_	_		
Power Co., Ltd.	receivable		316 300	304,640	261 /62	_		_		
Korea East-West	Trade accounts		310,303	304,040	201,402					
Power Co., Ltd.	receivable		199,661	184 447	161,871	_	_	_		
Korea South-East	Trade accounts		100,001	107,771	101,071					
Power Co., Ltd.	receivable		108,327	94,556	78,569	_	_	_		
. 5 55., Etd.	. 500110010		. 50,527	0.,000	. 5,550					

45. Related Party Transactions, Continued

(d) Loans to related parties as of December 31, 2012, 2011 and 2010, are summarized as follows:

			2012	2011 (Restated)	2010 (Restated)
			(1	n millions of v	/on)
Key management		₩	-	-	77
Associate	South-East Asia Pipeline				
	Company Limited		28,474	-	-
	Hyundai Yemen LNG				
	Company		103,850	61,488	60,660
Others	Officers	_		46	
Total		₩	132,324	61,534	60,737

(e) As of December 31, 2012, the Group has provided payment guarantees amounting to USD 125 million, CAD 27 million, AUD 23 million and KRW 3,141 million for the long-term debts of Terminal KMS de GNL, S. de R.L. de C.V. and others to KEB, HSBC and others.

Except for guarantees described above, the Group has provided guarantees for the shareholder of Donggi-Senoro LNG Company and Donggi-Senoro LNG Company on funding obligation as a shareholder of Sulawesi LNG Development. Also the Group has provided guarantees on the financing obligation under agreement on the joint operation with KGLNG investors, guarantees on KGLNG Liquefaction according GLNG liquefaction plant (Train 1, Train 2) EPC contract, and guarantees on all obligations under the contract on sales of equity and the joint operation of KOGAS Prelude.

(f) Key management compensation for the years ended December 31, 2012, 2011 and 2010, consists of:

	_	2012 (In	2011 (Restated) millions of wo	2010 (Restated)
Short-term employee benefits Retirement benefits Other long-term employees benefits	₩	2,286 228 388	1,775 200	1,692 179
Total	₩	2,902	1,975	1,871

46. Disposal of Subsidiary

The Group disposed of KG(Timor Sea 06-102) Ltd. during the year.

Fair value of disposal price is as follows:

		2012 (In th	2011 (Restated)
	_	(In th	ousands of won)
Cash and cash equivalents received as consideration	₩	1	-

When the Group loses the control of the subsidiary, the amounts of assets and liabilities of the subsidiary are as follows:

		2012	2011 (Restated)
	_		ousands of won)
Current assets Cash and cash equivalents	₩	1	-
Total amount of disposed assets		1	-

47. Supplemental Information for Cash Flow Statements

(1) Non-monetary transactions

The significant non-monetary transactions for the years ended December 31, 2012, 2011 and 2010, are as follows:

	_	2012	2011 (Restated) nillions of won)	2010 (Restated)
		(illillonis or won,	
Transfer of construction-in-progress to property, plant				
and equipment	₩	1,559,512	1,427,981	1,132,494
Reclassification of current portion of long-term				
borrowings		109,504	108,548	186,373
Reclassification of current portion of debentures		1,951,877	1,360,000	1,986,083
Reclassification of current portion of finance lease				
liabilities		222,727	227,003	219,155

(2) Other, net

Other, net in adjustments for cash flows from operating activities includes primarily share of net profit of equity method investee amounted to \forall 114,857 million, \forall 141,982 million and \forall 114,669 million for the years ended December 31, 2012, 2011 and 2010, respectively.

48. Commitments and contingencies

The Group is involved in various lawsuits and claims for alleged damages totaling \$4,263 million and \$5,130 million as of December 31, 2012 and 2011, respectively, which arose in the ordinary course of business. Management is of the opinion that the foregoing lawsuits and claims will not have a materially adverse effect on the Group's financial position, operating results or cash flows.

As of December 31, 2012, 2011 and 2010, the Group has provided guarantees on the payment of debts amounting to USD 13 million, USD 393 and USD 387 million, respectively.

Details of commitments held by the Group as of December 31, 2012, are as follows:

	Financial institutions	Limit	Amount				
	(In millions of won, thousands of US dollars and in thousands of Canadian dollars and thousands of Euros)						
Bank overdraft	Kookmin Bank and other	115,000	4,625				
Commitments to letter of credit	Korea Exchange Bank	USD 52,500	EUR 4,565				
	Woori bank	USD 53,144	USD 53,144				
Limit on foreign currency borrowings	Credit Agricole and other	USD 1,620,000	USD 672,396				
			CAD 201,400				
	SCOTIA	CAD 122,000	USD 71,207				
Foreign currency commitment	Korea Exchange Bank	27	27				
	Korea Exchange Bank and other	USD 107,759	USD 64,391				
	JBIC	CAD 27,000	CAD 27,000				
Commitment to collateral	Korea Exchange Bank	2,400	2,400				
Credit limit	Korea Exchange Bank	400,000	-				

Commitment to raw materials purchase

The Group has made contracts with RASGAS and other companies on LNG introduction of 26,800 thousand ton annually.

49. Event After the Reporting Period

The issuance of the December 31, 2012 consolidated financial statements of the Group was approved by the Board of Directors on March 7, 2013.

50. Accounting policies, changes in accounting estimates and errors Change in accounting treatment for settled income from natural gas sales

The Group has changed the accounting treatment for the settled income from natural gas sales according to responses from the KASB.

Settled income from natural gas sales

In accordance with the standard for natural gas supply price and the guidelines for raw material cost pass-through adjustment system (hereafter "cost adjustment system") for city gas and power generation, difference between actual costs incurred and current year's revenues (hereafter "settled income"), the settled income is reflected in following year's rate upon the approval of the government. While the system for settlement of costs for raw material for power generation and supplies has been operating without suspension, uncollected settled income of \forall 5.8 trillion has been accumulated as of December 31, 2012, due to the suspension of price increase relating to the cost adjustment system for city gas since the year of 2008 as part of the government policy of price stabilization.

The Ministry of Knowledge Economy issued its letters on February 15, 2013 and March 6, 2013, in which it affirms that it will take necessary measures to have the Group collect the uncollected settled income for city gas by 2017 and for power generation by 2014, respectively. It also confirmed that the settled income of supply costs is going to be collected during 2013 in accordance with the standard for natural gas supply price. In addition, it announced the price increase of natural gas rate and the resumption of the operation of cost adjustment system from February 22, 2013, which had been suspended.

Progress on existing discussions on accounting treatment

A. Board discussion on Rate-regulated Activities

The IASB issued an exposure draft (ED) on Rate-regulated Activities in 2009 to discuss the accounting treatment for assets and liabilities arising from rate-regulated industries such as settled income from the natural gas price. Since then, no further progress has been made. Pursuant to the ED issued in 2009, the Group would be allowed to capitalize the settled income from sales of the natural gas and recognize these as regulatory assets or liabilities. IASB, however, will reassess these matters from a fundamentally different viewpoint. The KASB has made queries to IFRS Interpretations Committee (IFRS IC) regarding such matters, on which the chair of the IFRS IC has decided not to answer as no decision has been reached by the IASB.

B. Response from the KASB

The Group has made queries to the KASB on accounting matters arising from cost adjustment system. In its responses made on January 21 and March 4, 2013, the KASB addressed that the current year's loss from cost adjustment system and cumulative uncollected settled income should not be recorded as sales and financial assets in the current year and also does not meet the criteria of intangible assets. However, if such effect of the loss from raw material cost satisfies both criteria under the paragraphs 4.4 and 4.44 in the financial reporting framework issued by the IASB, the Group may recognize it as assets.

50. Accounting policies, changes in accounting estimates and errors Change in accounting treatment for settled income from natural gas sales, Continued

Progress on existing discussions on accounting treatment, Continued

C. Change in Accounting Treatment of Settled Income

On the basis of a determination that settled income from natural gas sales meets all the requirements of the financial reporting framework paragraph 4.4 and 4.44, the Group has recorded settled income from natural gas sales as assets (other non-financial assets). The method of recognizing settled income in statement of income was changed from adjusting the sales to adjusting cost of sales. Also, the classification of relating assets and liabilities were changed from receivables and payables to other non-financial assets and other non-financial liabilities.

The Group has retrospectively applied the changes in accounting treatment for settled income, thus the comparative financial statements have been restated.

Details of recalculation in the statement of financial position due to the above changes as of December 31, 2011 and 2010, and January 1, 2010, are as follows:

			er 31, 2011 stated)	December 31, 2010 (Restated)			y 1, 2010 tated)
		Before adjustment	After adjustment	Before adjustment	After adjustment	Before adjustment	After adjustment
				(In million	ns of won)		-
Assets Non-trade							
receivables Long-term non-trade	₩	1,822,143	184,009	1,026,795	78,042	1,851,397	81,784
receivables Other current non-		2,987,327	127,218	3,414,875	-	3,106,428	-
financial assets Other non-current non-financial		211,821	1,849,955	159,403	1,108,156	137,990	1,907,603
assets	_	720	2,860,829	20	3,414,895		3,106,428
	₩	5,022,011	5,022,011	4,601,093	4,601,093	5,095,815	5,095,815
Liabilities Non-trade payables Other current non-	₩	855,934	657,684	487,059	353,827	182,543	182,543
financial liabilities	_	24,233	222,483	23,042	156,274	74,955	74,955
	₩	880,167	880,167	510,101	510,101	257,498	257,498

50. Accounting policies, changes in accounting estimates and errors Change in accounting treatment for settled income from natural gas sales, Continued

Progress on existing discussions on accounting treatment, Continued

C. Change in Accounting Treatment of Settled Income, Continued

Details of recalculation in the statement of comprehensive income due to the above changes in 2011 and 2010 are as follows:

			011 stated)		10 ated)
		Before adjustment	After adjustment	Before adjustment	After adjustment
	_				
Revenue (sales)	₩	28,499,369	28,429,772	22,743,050	23,388,696
Cost of sales		27,178,751	27,109,154	21,437,452	22,083,098
Gross profit		1,320,618	1,320,618	1,305,598	1,305,598
Operating income		1,023,175	1,023,175	1,047,668	1,047,668
Net income		174,706	174,706	274,936	274,936

As described above, the accounting method for assets and liabilities arising from rate-regulated industries are not explained in detail in the current Korean IFRS. The current accounting treatment could be changed if IASB established a new accounting standard for Rate-regulated Activities or other authoritative institutions, such as KASB, issued a definitive interpretation.

If settled income from natural gas sales had not been recognized as assets or liabilities, the Group's net income and total equity as of December 31, 2012, would have decreased by \forall 1.1 trillion and \forall 4.4 trillion, respectively.

Report on Review of Interim Financial Statements

To the Shareholders and Board of Directors of Korea Gas Corporation

Reviewed Financial Statements

We have reviewed the accompanying interim consolidated financial statements of Korea Gas Corporation (the "Corporation") and its subsidiaries (collectively the Group). These financial statements consist of consolidated statement of financial position of the Corporation and its subsidiaries as of March 31, 2013, and the related consolidated statements of comprehensive income, changes in equity and cash flows for the three-month periods ended March 31, 2013 and 2012, and a summary of significant accounting policies and other explanatory notes, expressed in Korean won.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these interim consolidated financial statements in accordance with the International Financial Reporting Standards as adopted by the Republic of Korea ("Korean IFRS")1034, *Interim Financial Reporting*, and for such internal control as management determines is necessary to enable the preparation of interim consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditor's Responsibility

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

We conducted our reviews in accordance with the quarterly and semi-annual review standards established by the Securities and Futures Commission of the Republic of Korea. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with auditing standards generally accepted in the Republic of Korea and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

Conclusion

Based on our reviews, nothing has come to our attention that causes us to believe the accompanying interim consolidated financial statements do not present fairly, in all material respects, in accordance with the Korean IFRS 1034, *Interim Financial Reporting*.

Emphasis of matter

As discussed in Note 31 to the interim consolidated financial statements, in 2012, the Group changed the accounting treatment for the settled income arising from raw material cost pass-through adjustment system by deducting from cost of sales instead of recognizing sales revenue, and reclassified the accumulated settled income from financial assets to other non-financial assets, according to the responses from the Korea Accounting Standards Board (KASB). The comparative statement of comprehensive income for the three-month period ended March 31, 2012, has been restated by reflecting adjustments resulting from the retrospective application.

We have audited the consolidated statement of financial position of Korea Gas Corporation as of December 31, 2012, and the related statements of comprehensive income, changes in equity and cash flows for the year then ended, in accordance with auditing standards generally accepted in the Republic of Korea. We expressed an unqualified opinion on those statements in our audit report dated March 19, 2013. These financial statements are not included in this review report. The consolidated statement of financial position as of December 31, 2012, presented herein for comparative purposes, is consistent, in all material respects, with the above audited statement of financial position as of December 31, 2012.

Review standards and their application in practice vary among countries. The procedures and practices used in the Republic of Korea to review such financial statements may differ from those generally accepted and applied in other countries. Accordingly, this report is for use by those who are informed about Korean review standards and their application in practice.

/s/ Samil PricewaterhouseCoopers Seoul, Korea May 13, 2013

This report is effective as of May 13, 2013, the review report date. Certain subsequent events or circumstances, which may occur between the review report date and the time of reading this report, could have a material impact on the accompanying interim consolidated financial statements and notes thereto. Accordingly, the readers of the review report should understand that there is a possibility that the above review report may have to be revised to reflect the impact of such subsequent events or circumstances, if any.

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Financial Position March 31, 2013 and December 31, 2012

	Notes		March 31, 2013		December 31, 2012
			(in millions o	f Kor	ean won)
Assets					
Current assets					
Cash and cash equivalents	28	₩	174,384	₩	245,466
Financial assets at fair value through profit or loss	7		11,577		15,327
Held-to-maturity financial assets			168		139
Other financial assets	5		65,426		62,021
Current derivative financial assets	7		98		_
Trade and other accounts receivable	27,28		7,659,158		8,066,955
Inventories			2,535,047		1,894,016
Prepaid income taxes			1,173		967
Other non-financial assets	8		1,553,177		1,500,765
			12,000,208		11,785,656
Non-current assets					
Financial assets at fair value through profit or loss	7		24,400		42,081
Available-for-sale financial assets			23,241		24,401
Held-to-maturity financial assets			1,465		1,430
Other financial assets			360,969		345,763
Derivative financial assets	7		_		1,349
Long-term trade and other accounts receivable	27		200,165		188,316
Property, plant and equipment	11		20,387,577		19,582,966
Intangible assets other than goodwill	13		2,414,137		2,406,601
Investments in joint ventures	10		52,284		48,945
Investments in associates	10		1,624,213		1,530,547
Deferred tax assets			23,912		18,859
Other non-financial assets	8		4,563,156		4,644,805
		_	29,675,519	_	28,836,063
Total assets		₩	41,675,727	₩_	40,621,719

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Financial Position, Continued March 31, 2013 and December 31, 2012

	Notes		March 31, 2013		December 31, 2012
_		_	(in millions	orean won)	
Liabilities					
Current liabilities					
Financial liabilities at fair value through profit or loss	7,27,28	₩	1,267	₩	4,382
Trade and other accounts payable	27,28		2,525,345		3,175,214
Short-term borrowings	14,27,28		5,118,118		4,626,514
Current portion of long-term borrowings	14		111,376		110,184
Current portion of debentures	14		2,094,615		2,170,153
Derivative financial liabilities	7		13,824		22,168
Current tax liabilities			17,069		13,544
Current portion of other non-financial liabilities			84,028		60,991
Current portion of provisions	17		111		-
			9,965,753		10,183,150
Non-current liabilities		_		_	
Non-current financial liabilities at fair value through					
profit or loss	7,27,28		152,122		95,380
Long-term trade and other accounts payable	27,28		2,522,961		2,494,278
Long-term borrowings	14		387,170		409,291
Debentures	14		17,886,523		17,009,901
Non-current derivative financial liabilities	7		84,883		93,242
Other non-financial liabilities			24,071		26,775
Severance benefit liabilities	16		33,966		24,867
Deferred tax liabilities			1,894,166		1,777,082
Provisions	17	_	219,646	_	138,787
		_	23,205,508	_	22,069,603
Total liabilities			33,171,261		32,252,753
Equity		_		_	
Capital stock	18		1,056,063		1,056,063
Retained earnings	19		6,159,234		5,995,870
Other equity			1,299,797		1,326,400
Equity attributable to owners of the Corporation			8,515,094		8,378,333
Non-controlling interests			(10,628)		(9,367)
Total equity		_	8,504,466	_	8,368,966
Total liabilities and equity		₩	41,675,727	₩	40,621,719

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

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Comprehensive Income Three-Month periods ended March 31, 2013 and 2012

, , , , , , , , , , , , , , , , , , , ,	Notes		2013		2012
		_			orean won, per share)
Revenue	20	₩	12,222,382	₩	11,370,958
Cost of sales	26		11,282,530		10,567,635
Gross profit Selling, general and administrative expenses	21	_	939,852 90,143	_	803,323 85,246
Operating income Other income Other expenses Other gains(losses) Finance income Finance cost Gains from associates and joint ventures	22 22 23 24 24	_	849,709 838 7,052 (207,339) 210,199 449,239 55,097	_	718,077 1,152 4,083 5,216 159,023 367,959 44,180
Income before income tax			452,213		555,606
Income tax expense	25	_	170,314	_	144,316
Net income		_	281,899	_	411,290
Other comprehensive income (loss), net of income tax Items that will not be reclassified subsequently to profit or loss Defined benefit plan actuarial gains(losses) Items that will be reclassified subsequently to profit or loss Change in fair value of available-for-sale financial assets Effective portion of changes in fair value of cash flow hedges Net gains(losses) on hedge of net investment in a foreign operation Share of other comprehensive gains(losses) of associates and joint ventures Foreign operation currency translation differences	16	_	(718) (1,294) (97,507) (139,820) 55,591 156,427 (27,321)	_	1,391 27,754 12,137 (20,751) (19,374) 1,757
Total comprehensive income		₩_	254,578	₩	413,047
Net income attributable to: Owners of the Corporation Non-controlling interests Total comprehensive income attributable to:		- -	283,160 (1,261) 281,899	-	412,171 (881) 411,290
Owners of the Corporation Non-controlling interests		_	255,839 (1,261)	_	413,818 (771)
		₩_	254,578	₩_	413,047
Earnings per share in Korean won		₩_	3,882	₩_	5,677

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

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Changes in Equity Three-Month periods ended March 31, 2013 and 2012

	Capital stock	Retained earnings		Other components of equity (In millions	Owners of the Corporation of Korean won)	Non-controlling interests	Total equity
Balance at January 1,							
2012	₩ 1,056,063 ₩	5,690,241	₩	1,303,106 ₩	V 8,049,410 ₩	(5,510) ₩	8,043,900
Comprehensive income							
Net income	-	412,171		-	412,171	(881)	411,290
Other comprehensive							
income							
Items that will not be							
reclassified							
subsequently to							
profit or loss Defined benefit plan							
actuarial gains		600			600		600
Items that will be	-	000		-	000	-	000
reclassified							
subsequently to							
profit or loss							
Change in fair value of							
available-for-sale							
financial assets	-	-		1,391	1,391	-	1,391
Effective portion of							·
changes in fair value							
of cash flow hedges	-	-		27,645	27,645	109	27,754
Net gains on hedge of							
net investment in							
foreign operation	-	-		12,137	12,137	-	12,137
Share of other							
comprehensive							
losses of associates							
and joint ventures	-	-		(20,751)	(20,751)	-	(20,751)
Foreign operation							
currency translation				(40.074)	(40.074)		(40.074)
differences Transaction with owners	-	-		(19,374)	(19,374)	-	(19,374)
of the Corporation,							
recorded directly in							
equity							
Dividends paid	-	(55,183))	-	(55,183)	-	(55,183)
Balance at March 31, 2012	₩ 1,056,063 ₩	6,047,829	₩	1,304,154 V	₩ 8,408,046	(6,282) ₩	8,401,764

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Changes in Equity, Continued Three-Month periods ended March 31, 2013 and 2012

	Capital stock	Retained earnings		Other components of equity	Owners of the Corporation		Non-controlling interests	Total equity
				(In millions o	f Korean won)			
Balance at January 1,								
2013	₩ 1,056,063 ₩	5,995,870	₩	1,326,400 ₩	8,378,333	₩	(9,367)₩	8,368,966
Comprehensive income								
Net income	-	283,160		-	283,160		(1,261)	281,899
Other comprehensive								
income								
Items that will not be								
reclassified								
subsequently to profit or loss								
Defined benefit plan								
actuarial losses	_	(718)		_	(718)		_	(718)
		(1.0)			(1.0)			(110)
Items that will be								
reclassified								
subsequently to profit or loss								
Change in fair value of								
available-for-sale								
financial assets	_	_		(1,294)	(1,294)		_	(1,294)
Effective portion of				(1,201)	(1,201)			(1,201)
changes in fair value of								
cash flow hedges	-	-		(97,507)	(97,507)		-	(97,507)
Net losses on hedge of								
net investment in								
foreign operation	-	-		(139,820)	(139,820)		-	(139,820)
Share of other								
comprehensive gains								
of associates and joint				FF F04	55 504			FF F04
ventures	-	-		55,591	55,591		-	55,591
Foreign operation currency translation								
differences	_	_		156,427	156,427		_	156,427
Transaction with owners				100,427	100,421			100,427
of the Corporation,								
recorded directly in								
equity								
Dividends paid	-	(119,078)		-	(119,078)		-	(119,078)
Balance at March 31, 2013	₩ 1,056,063 ₩	6,159,234	₩	1,299,797 ₩	8,515,094	₩	(10,628)₩	8,504,466

The accompanying notes are an integral part of these consolidated financial statements.

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Cash Flows Three-Month periods ended March 31, 2013 and 2012

	2013	2012
	(in millions of	Korean won)
Cash flows from operating activities		
Net income ₩	∀ 281,899	₩ 411,290
Adjustments for:		
Income tax expense	170,314	144,316
Interest expense	204,895	218,798
Depreciation and amortization expense	269,455	236,561
Gains on foreign currency translation, net	(60,755)	(3,095)
Impairment loss recognized in profit or loss	210,498	-
Losses on valuation of derivative instruments, net	79,434	12,400
Losses(gains) on disposal of non-current assets	188	(456)
Other, net	(48,168)	(27,630)
Changes in operating assets and liabilities		
Inventories	(640,740)	441,136
Trade accounts receivable	261,868	(1,092,841)
Other receivables	186,886	(493,647)
Trade accounts payable	(590,051)	, ,
Other payables	(191,960)	(461,391)
Cash generated from(used in) operating activities	133,763	(772,502)
Dividends received	46,964	38,124
Interest paid	(243,632)	(209,291)
Interest received	4,551	2,179
Income taxes paid	(607)	(319)
Net cash generated used in operating activities	(58,961)	(941,809)
Cash flows from investing activities		
Acquisition of equity instrument or debt instrument of other entities	(28,799)	(32,030)
Proceeds from sale of property, plant and equipment	141	15,180
Acquisition of property, plant and equipment	(874,890)	(505,934)
Proceeds from sale of intangible assets	1,327	530
Acquisition of intangible assets	(149,179)	(132,294)
Proceeds from sale of held-to-maturity financial assets	1	271
Acquisition of held-to-maturity financial assets	(65)	(295)
Receipt of government grants	61	-
Cash advances and loans made to other parties	(9,857)	(2,727)
Cash receipts from repayment of loans	6,655	7,653
Others, net	(6,938)	(65,265)
Net cash used in investing activities	(1,061,543)	(714,911)

Korea Gas Corporation and Subsidiaries Interim Consolidated Statements of Cash Flows, Continued Three-Month periods ended March 31, 2013 and 2012

	2013	2012
	(in millions	of Korean won)
Cash flows from financing activities		
Proceeds from borrowings	8,233,815	10,541,018
Repayments of borrowings	(7,772,162)	(9,548,498)
Proceeds from issuance of debentures	1,160,410	1,798,614
Repayments of debentures	(517,775)	(928,325)
Payments of finance lease liabilities	(58,920)	(54,323)
Net cash generated from financing activities	1,045,368	1,808,486
Net increase(decrease) in cash and cash equivalents	(75,136)	151,766
Cash and cash equivalents at the beginning of period	245,466	154,403
Exchange gain(loss) on cash and cash equivalents	2,070	(7,201)
Foreign operation currency translation differences	1,984	(8,215)
Cash and cash equivalents at the end of period	¥ <u>174,384</u>	₩ 290,753

The accompanying notes are an integral part of these consolidated financial statements.

1. General Information

Korea Gas Corporation ("KOGAS" or the "Corporation") was incorporated as a government-invested entity on August 18, 1983, under the Korea Gas Corporation Act to engage in the development, production and distribution of liquefied natural gas (LNG). Under Article 5 and Article 3 of the supplementary provisions of the 'Legislation for public institution operation', it was designated as "market-type public enterprise" on April 2, 2007.

The Corporation's stock was listed on the Korea Stock Exchange on December 15, 1999. Capital stock of the Corporation as of March 31, 2013, is \text{\psi}386,423 million and the ownership of the Corporation's common stock issued as of March 31, 2013, is as follows:

Shareholder	Number of shares	Percentage of ownership
Government of the Republic of Korea	20,758,110	26.9%
Korea Electric Power Corporation	18,900,000	24.5%
Others	32,950,640	42.5%
	72,608,750	93.9%
Treasury stock	4,675,760	6.1%
	77,284,510	100.0%

2. Basis of Preparation and Significant Accounting Policies

2.1 Basis of Presentation

The interim consolidated financial statements for the three-month periods ended March 31, 2013 and 2012, have been prepared in accordance with Korean IFRS 1034, 'Interim Financial Reporting'. These financial statements are interim consolidated financial statements of Korea Gas Corporation and its subsidiaries (collectively referred to as 'the Group') and have been prepared in accordance with the Korean IFRS standards and interpretations issued and effective or issued and early adopted as of March 31, 2013.

New and amended standards for the annual period beginning on January 1, 2013, adopted by the Group are as follows:

- Amendments to Korean IFRS 1019, Employee Benefits

According to the amendments to Korean IFRS 1019, *Employee Benefits*, use of a 'corridor' approach is no longer permitted, and therefore all actuarial gains and losses incurred are immediately recognized in other comprehensive income. All past service costs incurred from changes in pension plan are immediately recognized, and expected returns on interest costs and plan assets that used to be separately calculated are now changed to calculating net interest expense(income) by applying discount rate used in measuring defined benefit obligation in net defined benefit liabilities(assets).

In addition, according to Korean IFRS 1019, termination benefits are paid when an employee's employment is terminated by the Group's decision before the normal retirement

2. Basis of Preparation and Significant Accounting Policies, Continued

2.1 Basis of Presentation, Continued

date, or when an employee accepts voluntary redundancy in exchange for certain benefits. The Group recognizes a liability and expense for termination benefits at the earlier of the following dates: (a) when the entity can no longer withdraw the offer of those benefits and (b) when the entity recognizes costs for a restructuring that is within the scope of Korean IFRS 1037 and involves the payment of termination benefits. In the case of voluntary redundancy, the measurement of termination benefits is based on the number of employees expected to accept the offer. Where the benefits fall due more than 12 months after the reporting period, they are discounted to its present value. This amendment does not have a material impact on its financial statements.

- Enactment of Korean IFRS 1110, Consolidated Financial Statements

Korean IFRS 1110 supersedes Korean IFRS 1027, Consolidated and Separate Financial Statements, and SIC-2012, Consolidation-Special Purpose Entities.

Korean IFRS 1110, Consolidated Financial Statements identify the concept of control as the determining factor in whether an entity should be included in the consolidated financial statements of the Corporation. An investor controls an investee when it is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee. The standard provides additional guidance to assist in the determination of control where this is difficult to assess.

In accordance with transition of Korean IFRS 1110, when there are changes as of January 1, 2013, the date of initial application, the financial statements for the comparative periods are restated in conformity with the conclusion of Korean IFRS 1110 unless it is impracticable to do so. When there are no changes of consolidation scope, the previous accounting treatments are not adjusted.

- Enactment of Korean IFRS 1111, Joint Arrangements

Korean IFRS 1111, *Joint Arrangements*, aims to reflect the substance of joint arrangements by focusing on the contractual rights and obligations that each party to the arrangement has rather than its legal form. Joint arrangements are classified as either joint operations or joint ventures. A joint operation is when joint operators have rights to the assets and obligations for the liabilities, and account for the assets, liabilities, revenues and expenses, while parties to the joint venture have rights to the net assets of the arrangement and account for their interest in the joint venture using the equity method. The Group reviewed that there is no change in scope of consolidation as a result of the adoption of Korean IFRS 1111.

Enactment of Korean IFRS 1112, Disclosures of Interests in Other Entities

Korean IFRS 1112, Disclosures of Interests in Other Entities, provides the disclosure requirements for all forms of interests in other entities, including a subsidiary, a joint

2. Basis of Preparation and Significant Accounting Policies, Continued

2.1 Basis of Presentation, Continued

arrangement, an associate, a consolidated structured entity and an unconsolidated structured entity. The effect of disclosures in accordance with the application of this standard is not reflected in these interim financial statements.

- Enactment of Korean IFRS 1113, Fair value measurement

Korean IFRS 1113, Fair value measurement, aims to improve consistency and reduce complexity by providing a precise definition of fair value and a single source of fair value measurement and disclosure requirements for use across Korean IFRSs. Korean IFRS 1113 does not extend the use of fair value accounting but provides guidance on how it should be applied where its use is already required or permitted by other standards within Korean IFRSs. This enactment prospectively applied for annual periods beginning on or after January 1, 2013, and the enactment does not have a material impact on its consolidated financial statements.

2.2 Significant Accounting Policies

The principal accounting policies applied in the preparation of these interim consolidated financial statements have been consistently applied to all the periods presented, unless otherwise stated or described in Note 2.1.

- Income tax

Interim period income tax expense is calculated by applying estimated average annual effective tax rate to the interim period's pre-tax income.

3. Critical Accounting Estimates and Judgments

The preparation of the financial statements requires management to make estimates and assumptions that affect amounts reported therein. Estimations and assumptions are continuously evaluated with consideration to factors such as events reasonably predictable in the foreseeable future within the present circumstance according to historical experience. The resulting accounting estimates will, by definition, seldom equal the related actual results.

These estimations and assumptions have been consistently applied to all the periods presented, except for the method to determine income tax.

4. Characteristics of Business

The Group's operations are highly cyclical as the revenue is generally high in winter season due to the heating demand of gas in the cities.

5. Operating Segments

Details of reportable segments are summarized as follows:

Operating segments	Activity								
Natural gas wholesale	Import, production and wholesale of LNG, Compressed Natural Gas, Natural Gas								
Others	Supply of power and heat, equipment conservation, terminal management, labor force management, exploration, and development and production of gas and oil								

Details of segment results for the three-month periods ended March 31, 2013 and 2012, are as follows:

					2013				
		Total revenue		Inter-segment revenue	External revenue		Operating income 1		Depreciation and amortization 1
			-	(In mill	ions of Korean	wo	n)		
Natural gas wholesale	₩	12,086,485 ₩	₩	- ₩	<i>†</i> 12,086,485	₩	810,288	₩	202,730
Others		169,269	_	33,371	135,898		39,825	_	66,822
	₩	12,255,754	₩	33,371 ₩	12,222,383	₩	850,113	₩	269,552
					2012				
	•	Total revenue		Inter-segment revenue	External revenue		Operating income 1		Depreciation and amortization 1
				(In mill	ions of Korean	wo	n)		
Natural gas wholesale	₩	11,268,483 \	₩	- ₩	<i>†</i> 11,268,483	₩	718,750	₩	189,969
Others		134,349	_	31,873	102,476		698		46,682
	₩	11,402,832	₩	31,873 ₩	± 11,370,959	₩	719,448	₩	236,651

¹ Reportable segment operating income and depreciation and amortization represent amounts before elimination of intra-group transactions.

5. Operating Segments, Continued

Details of assets and liabilities about operating segments as of March 31, 2013 and December 31, 2012, are as follows:

		March 31, 2013								
	Assets 1		Investment in associates and joint ventures 2		Acquisition of non-current assets 3		Liabilities 1			
			(In millions of	Kor	ean won)					
Natural gas wholesale	₩ 40,062,552	₩	1,632,267	₩	529,135	₩	32,158,649			
Others	6,038,329	_	44,230		521,718		3,075,307			
	₩_46,100,881	₩_	1,676,497	₩	1,050,853	₩	35,233,956			
			Decemb	er 3	1, 2012					
	Assets 1		Investment in associates and joint ventures 2		Acquisition of non-current assets 3		Liabilities 1			
			(In millions of	Kor	ean won)	_				
Natural gas wholesale	₩ 39,356,467	₩	1,538,600	₩	1,720,084	₩	31,390,455			
Natural gas wholesale Others	₩ 39,356,467 5,474,762	₩	1,538,600 40,892	₩	1,720,084 2,326,518	₩	31,390,455 2,785,501			

- 1 Reportable segment assets and liabilities represent amounts before the elimination of intragroup transactions and after the allocation of common assets and liabilities.
- 2 Investment in associates and joint ventures represent amounts after the assessment of invested shares included in reportable segment assets.
- 3 Aggregate amount of tangible and intangible assets acquired during period before elimination of intra-group transactions.

5. Operating Segments, Continued

Details of external revenue for the three-month periods ended March 31, 2013 and 2012, and details of non-current assets by geographic locations as of March 31, 2013 and December 31, 2012, are as follows:

	Exte	revenue		Non-cur	t assets 1		
	2013 2012			March 31, 2013		December 31, 2012	
		_	(In millions o	f Ko	rean won)	_	
Korea W	12,096,877	₩	11,283,751	₩	17,874,454	₩	17,564,374
Mexico	1,159		1,863		190		179
Australia	5,059		8,582		3,506,224		2,993,395
Canada	10,438		998		714,696		855,962
Iraq	108,850		75,708		513,477		406,524
Russia	-		57		64		71
Indonesia	-		-		46,118		45,274
Mozambique	-		-		120,808		99,382
Timor		_		-	35,044	_	33,752
₩	12,222,383	₩	11,370,959	₩	22,811,075	₩	21,998,913

¹ Aggregate amount of tangible and intangible assets before elimination of intra-group transactions.

6. Restricted Financial Instruments

Restricted financial instruments as of March 31, 2013 and December 31, 2012, are as follows:

	Description	March 31, Description 2013							
	(In millions of	Korea	n won)						
Short-term financial instruments	Deposit for compensation	₩	55,000 ₩	55,000					

As of March 31, 2013, the Group provided 16 blank promissory notes to the Korea National Oil Corporation as collaterals for the Group's borrowings.

7. Derivative Instruments

Details of derivative instruments as of March 31, 2013 and December 31, 2012, are as follows:

		March 31, 2013				Dece	mbe	ber 31, 2012	
		Current		Non-current	_	Current		Non-current	
	_			(In millions of	Koı	rean won)	_		
Derivative instrument assets									
Foreign currency forwards	₩	1,083	₩	-	₩	5	₩	-	
Foreign currency swap		10,574		24,400		15,313		43,429	
Interest rate swap	_	18	_	_	_	9	_	_	
	₩	11,675	₩	24,400	₩	15,327	₩	43,429	
Derivatives instrument liabilities									
Foreign currency forwards	₩	(1,267)	₩	(7,894)	₩	(6,638)	₩	(12,305)	
Foreign currency swap		(13,824)		(210,314)		(19,910)		(157,743)	
Interest rate swap	_	-	_	(18,797)	_	-	_	(18,574)	
	₩	(15,091)	₩	(237,005)	₩	(26,548)	₩	(188,622)	

Details of foreign currency swap contracts as of March 31, 2013, are as follows:

(In millions of Korean won and Japanese yen, and in thousands of US dollars, Euro, Confoederatio Helvetica Franc, Hong Kong Dollars, Singapore Dollars, Chinese Yuan, Canadian Dollars and Australian Dollars)

	Financial		Amount of contract			Interest r			
Purpose	institutions Period		Sell			Buy	Sell	Buy	Exchange rate
Trading	UBS	2011.07 ~ 2016.07	USD	189,982	JPY	15,000	3.60%	1.38%	USD 1 = JPY 78.96
	Goldman Sachs	2011.07 ~ 2016.07	USD	189,982	JPY	15,000	3.62%	1.38%	USD 1 = JPY 78.96
	RBS	2011.10 ~ 2016.10	USD	114,025	CHF	100,000	3.14%	2.01%	USD 1 = CHF 0.8770
	Barclays	2011.10 ~ 2016.10	USD	114,025	5 CHE 100 000 3 14% 2 01% USD 1				
	UBS	2011.10 ~ 2016.10	USD	57,013	CHF	50,000	3.14%	2.01%	USD 1 = CHF 0.8770
	UBS	2011.10 ~ 2019.10	USD	114,025	CHF	100,000	4.28%	2.89% USD 1 = CHF 0.8770	
	Societe General	2012.04 ~ 2013.04	CAD	40,863		47,116	2.59%	3.57%	CAD 1 = KRW 1,153.0
	UBS	2012.06 ~ 2017.06	CAD	39,113		44,490	3.74%	3.64%	CAD 1 = KRW 1,137.5
	RBS 2012.06 ~ 2017.06 USD 38,665 4	44,781	2.72%	3.66%	USD 1 = KRW 1.158.2				
	HSBC	2012.06 ~ 2017.06	USD	64,443		74,650	2.73%	3.66%	USD 1 = KRW 1,158.4
	HSBC	2012.06 ~ 2013.06	USD	49,900		58,383	3M Libor + 1.02%	3.30%	USD 1 = KRW 1,170.0
	BNP	2012.06 ~ 2014.06	CAD	102,210		115,641	3M CDOR + 0.72%	2.33%	CAD 1 = KRW 1,131.4

7. Derivative Instruments, Continued

(In millions of Korean won and Japanese yen, and in thousands of US dollars, Euro, Confoederatio Helvetica Franc, Hong Kong Dollars, Singapore Dollars, Chinese Yuan, Canadian Dollars and Australian Dollars)

	Financial		Amount of contract					t rate of tract	
Purpose	Financial institutions	Period		Sell		Buy	Sell	Buy	Exchange rate
Trading	UBS	2012.06 ~ 2014.06	CAD	51,105		57,820	3M CDOR + 0.74%	2.33%	CAD 1 = KRW 1,131.4
	KEB	2012.06 ~ 2014.06	CAD	51,105	USD	50,000	3M CDOR + 0.74%	3M Libor + 0.65%	USD 1 = CAD 1.021
	Goldman Sachs	2012.06 ~ 2014.06	USD	25,131		29,080	3M Libor + 1.20%	2.75%	USD 1 = KRW 1,157.1
	BOA	2012.06 ~ 2013.06	USD	23,684		27,479	3M Libor + 0.90%	2.93%	USD 1 = KRW 1,160.3
	BOA	2012.07~ 2013.06	USD	7,820		9,048	3M Libor + 0.90%	2.89%	USD 1 = KRW 1,157.0
	UBS	2012.06 ~ 2013.06	CAD	25,860		29,240	3M CDOR + 1.03%	3.44%	CAD 1 = KRW 1,130.7
	Barclays	2012.06 ~ 2017.06	USD	25,117		29,134	2.58%	3.32%	USD 1 = KRW 1,159.9
	UBS	2012.06 ~ 2013.07	CAD	38,311		43,140	2.27%	3.44%	CAD 1 = KRW 1,126.0
	BOA	2012.09 ~ 2017.09	CAD	37,417		42,854	3M CDOR + 1.67%	3M CD + flat	CAD 1 = KRW 1,145.3
	ANZ	2012.09 ~ 2015.09	USD	104,225		116,711	1.64%	3.10%	USD 1 = KRW 1,119.8
	DBS	2012.09 ~ 2015.09	USD	104,225		116,711	1.63%	3.10%	USD 1 = KRW 1,119.8
	HSBC	2012.09 ~ 2015.09	USD	104,225		116,711	1.64%	3.10%	USD 1 = KRW 1,119.8
	BNP	2013.02 ~ 2020.02	USD	108,613		118,801	2.54%	3.11%	USD 1 = KRW 1,093.8
	CSFB	2013.02 ~ 2020.02	USD	108,613		118,801	2.55%	3.11%	USD 1 = KRW 1,093.8
	RBS	2013.02 ~ 2020.02	USD	108,613		118,801	2.54%	3.11%	USD 1 = KRW 1,093.8
Cash flow hedge	UBS	2011.04 ~ 2015.10		355,608	CHF	300,000	4.03%	2.26%	USD 1 = KRW 1,185.4
	DBS	2011.03 ~ 2015.03		56,525	USD	50,000	4.21%	3M Libor + 1.05%	USD 1 = KRW 1,130.5
	SMBC	2011.03 ~ 2015.03		56,525	USD	50,000	4.21%	3M Libor + 1.05%	USD 1 = KRW 1,130.5
	Societe General	2012.04 ~ 2013.04		47,116	USD	41,395	3.57%	1.53%	USD 1 = KRW 1,138.2
	UBS	2012.06 ~ 2017.06		44,490	JPY	3,000	3.64%	1.28%	JPY 1 = KRW 14.8
	RBS	2012.06 ~ 2017.06		44,781	HKD	300,000	3.66%	2.50%	HKD 1 = KRW 149.3
	HSBC	2012.06 ~ 2017.06		74,650	HKD	500,000	3.66%	2.60%	HKD 1 = KRW 149.3
	HSBC	2012.06 ~ 2013.06		58,383	EUR	40,000	3.30%	3M Euribor + 0.40%	EUR 1 = KRW 1,459.6
	BNP	2012.06 ~ 2014.06		115,641	USD	100,000	2.33%	3M Libor + 0.65%	USD 1 =KRW 1,156.4
	UBS	2012.06 ~ 2014.06		57,820	USD	50,000	2.33%	3M Libor + 0.65%	USD 1 =KRW 1,156.4

7. Derivative Instruments, Continued

(In millions of Korean won and Japanese yen, and in thousands of US dollars, Euro, Confoederatio Helvetica Franc, Hong Kong Dollars, Singapore Dollars, Chinese Yuan, Canadian Dollars and Australian Dollars)

	Financial		Amour	nt of co	ntract		est rate of ontract	
Purpose	institutions	Period	Sell		Buy	Sell	Buy	Exchange rate
Cash flow hedge	Goldman Sachs	2012.06 ~ 2014.06	29,080	HKD	195,000	2.75%	1.65%	HKD 1 = KRW 149.1
	ВОА	2012.06 ~ 2013.06	27,479	SGD	30,000	2.93%	1.10%	SGD 1 = KRW 916.0
	ВОА	2012.07 ~ 2013.06	9,048	SGD	10,000	2.89%	1.10%	SGD 1 = KRW 904.8
	UBS	2012.06 ~ 2013.06	29,240	EUR	20,000	3.44%	3M Euribor + 0.45%	EUR 1 =KRW 1,462.0
	Barclays	2012.06 ~ 2017.06	29,134	CNY	160,000	3.32%	3.25%	CNY 1 =KRW 182.1
	UBS	2012.06 ~ 2013.07	43,140	JPY	3,000	3.44%	0.95%	JPY 1 = KRW 14.4
	Credit Agricole	2012.07 ~ 2017.07	114,810	USD	100,000	3.15%	2.25%	USD 1 = KRW 1,148.1
	Barclays	2012.07 ~ 2017.07	114,810	USD	100,000	3.16%	2.25%	USD 1 = KRW 1,148.1
	ВОА	2012.09 ~ 2017.09	42,854	JPY	3,000	3M CD +flat	3M JPY Libor + 0.76%	JPY1 = KRW 14.3
	ANZ	2012.09 ~ 2015.09	116,711	AUD	100,000	3.10%	4.50%	AUD 1 = KRW 1,167.1
	DBS	2012.09 ~ 2015.09	116,711	AUD	100,000	3.10%	4.50%	AUD 1 = KRW 1,167.1
	HSBC	2012.09 ~ 2015.09	116,711	AUD	100,000	3.10%	4.50%	AUD 1 = KRW 1,167.1
	BNP	2013.02 ~ 2020.02	118,801	CHF	100,000	3.11%	1.13%	CHF 1 = KRW 1,188.0
	CSFB	2013.02 ~ 2020.02	118,801	CHF	100,000	3.11%	1.13%	CHF 1 = KRW 1,188.0
	RBS	2013.02 ~ 2020.02	118,801	CHF	100,000	3.11%	1.13%	CHF 1 = KRW 1,188.0

7. Derivative Instruments, Continued

Details of the interest rate swap contracts as of March 31, 2013, are as follows:

Financial				ı	nterest rate of contract		
Purpose	institutions	Period	Amount	Sell	Buy		
			(In millions of Korean won and in thousands of US dollars)				
Trading	JPM	2011.09 ~ 2016.09	USD 200,00	0 2.32%	6M Libor + 1.00%		
-	DBS	2011.11 ~ 2015.11	USD 400,00	0 2.55%	3M Libor + 1.45%		
	DB	2012.06 ~ 2013.06	USD 30,00	0 1.55%	3M Libor + 1.02%		
	KEB	2012.06 ~ 2016.06	USD 50,00	0 1.96%	3M Libor + 1.20%		
	SOGE	2012.06 ~ 2016.06	USD 50,00	0 1.96%	3M Libor + 1.20%		
	JPM	2012.06 ~ 2017.06	USD 50,00	0 2.30%	3M Libor + 1.27%		
	CAL	2012.06 ~ 2017.06	USD 50,00	0 2.30%	3M Libor + 1.27%		
	MIZUHO	2013.02 ~ 2018.02	USD 200,00	0 2.10%	3M Libor + 0.90%		
	KDB	2013.02 ~ 2018.02	USD 150,00	0 2.04%	3M Libor + 0.90%		
Cash flow hedge	Morgan				Min{10.0%,		
-	Stanley	2010.09 ~ 2020.09	₩ 20,00	0 4.69%	Max[2.0%,(28 X index)]}		

Details of foreign currency forwards contract as of March 31, 2013, are as follows:

	Financial	Contract		Am	ount	Exchange
Purpose	institutions	Date	Expiration	Sell	Buy	rate
					ions of Korean wousands of US do	
Trading	KEB Credit Agricole BOA HANA Bank Barclays CITI Woori Bank MUFG CSFB	2013-03-18 2013-03-18 2013-03-25 2013-03-22 2013-03-25 2013-03-26	2013-04-01 2013-04-02 2013-04-02 2013-04-02 2013-04-03 2013-04-03	44,244 55,779 66,965 59,013 65,935 33,404 55,506 66,568 19,900	USD 50,000 USD 60,000 USD 53,000 USD 59,000 USD 30,000 USD 50,000	1,106.1 1,115.6 1,116.1 1,113.5 1,117.6 1,113.5 1,110.1 1,109.5 1,105.5
Cash flow hedge	SCOTIA UBS DBS Mizuho KEB CSFB CSFB KEB Barclays JP Morgan BNP KDB KEB DBS DBS JP Morgan	2013-03-28 2013-03-28 2013-03-28 2013-03-28 2013-03-29 2013-03-29 2013-03-29 2013-03-29 2013-03-28 2013-03-28 2013-03-28		33,326 87,748 33,276 43,295 166,836 111,301 111,308 33,375 20,025 100,157 55,658 55,639 EUR 30,000 61,301 61,427 121,976	USD 90,000 USD 50,000 USD 50,000	1,110.9 1,110.7 1,109.2 1,110.1 1,112.2 1,113.0 1,113.1 1,112.5 1,112.5 1,112.9 1,113.2 1,112.8 1,424.1 1,117.7 1,117.7

7. Derivative Instruments, Continued

Gains or losses on valuation of derivatives for the three-month periods ended March 31, 2013 and 2012, are as follows:

		Gains (losses) on valuation of derivatives		Gains (Losses) on transaction of derivatives			Other comprehensive income		
		2013	2012		2013	2012	2013	2012	
				(In	millions	of Korean won)			
Foreign currency forwards Foreign currency swap	₩	(281) ₩ (79,171)	7,933 (17,669)		(2,042)	₩ (14,187) ₩ (4,950)	(232)	(3,874)	
Interest rate swap		18	(2,664)		(1,742)	(1,610)	(25,634)	(571)	
Total	₩	<u>(79,434)</u> ₩	(12,400)	₩	28,753	₩ <u>(20,747)</u> ₩	(25,690)	₩_(3,065)	

As of March 31, 2013, losses on valuation of derivatives amounting to \forall 24,757 million (2012: \forall 5,284 million) in accumulated other comprehensive income are presented net of income tax.

Hedging on non-financial items

The Group currently uses LNG ships that were built specifically for the Group's use for stable LNG supply through a long-term financial lease contract in US dollars with the lessor. As the lease expense is recovered through the sales price as a component of shipping expense, the lease expense and raw material cost, which is also denominated in US dollars, form part of the selling price and have same exposure to foreign currency change.

In order for the Group to hedge the risk of foreign exchange rate change on foreign revenue from the natural gas for the use of power, only foreign currency revenue with the same maturity date as the lease liability has been distinguished from long-term supply contract to be designated as the hedged item, and the payment of lease liability has been designated as hedging instrument of non-financial items to apply the hedge accounting.

Purpose	Period	Hedged item	Hedging instrument	Currency swap exchange rate
Cash flow hedge	Lease contract period (2010~2028)	Foreign currency risk in LNG forecast sales	Payment in financial lease liabilities in foreign currency	Currency exchange rate of lease payment

7. Derivative Instruments, Continued

Gains and losses related to the hedging on non-financial items are as follows:

			March 31, 2013				
		_	Finance income and cos	t	Other comprehensive income		
	Purpose	_	Foreign currency translation gains		Cash flow hedges		
			(In millions	of Ko	rean won)		
Cash flow hedge		₩	102,948	8 ₩	(102,948)		
Income tax effect		_			24,913		
		₩	102,948	8 ₩	(78,035)		
			March	2012			
			Finance income and cost		Other comprehensive income		
	Purpose	_	Foreign currency translation losses		Cash flow hedges		
			(In millions of	Korea	n won)		
Cash flow hedge		₩	(39,350	₩	39,350		
Income tax effect		_			(9,522)		
		₩	(39,350	₩	29,828		

Hedges of net investments in a foreign operation

In order for the Group to hedge the risk of exchange rate fluctuation caused by the foreign currency translation, hedge accounting has been applied to the net investment of overseas business regarding the difference in foreign exchange which arose between the functional currency of overseas business and of the Corporation.

The amounts recognized on the comprehensive income statements for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013		2012
		(In millions o	of Kor	ean won)
After tax net gains (losses) on hedge of net investment in a foreign				
operation	₩	(139,820)	₩	12,137

8. Settled Income of Natural Gas

In accordance with the standard for natural gas supply price and the guidelines for raw material cost pass-through adjustment system for city gas and power generation, difference between actual cost incurred and current year's revenues, the settled income, is reflected in following year's rate upon the approval of the government.

8. Settled Income of Natural Gas, Continued

The Group recognizes settled income by adjusting cost of sales, and relevant assets and liabilities as other non-financial assets and non-financial liabilities respectively.

Details of other non-financial assets arising from settled income of natural gas as of March 31, 2013 and December 31, 2012, are as follows:

		March 31, 2013							
	_	Mate	erial c	ost		Sı	cost		
	_	City gas		Power generating	_	City gas		Power generating	
				(In millions	of Ko	rean won)			
Current assets Non-current assets	₩	903,937 4,557,012	₩	185,032 -	₩	11,117	₩	9,692	
Total	₩	5,460,949	₩	185,032	₩	11,117	₩	9,692	
	_	December 3				31, 2012			
	_	Mate	erial c	ost	_	Sı	cost		
		City gas		Power generating		City gas		Power generating	
	_			(In millions	of Ko	rean won)	_		
Current assets	₩	896,761	₩	237,979	₩	11,117	₩	9,692	
Non-current assets	_	4,638,885	_		_		_		
Total	₩	5,535,646	₩_	237,979	₩	11,117	₩	9,692	

9. Investments in Subsidiaries

Details of investments in subsidiaries as of March 31, 2013 and December 31, 2012, are as follows:

			Percentage of ownership		
Subsidiary	Business	Location	March 31, 2013	December 31, 2012	
			won, exce	ons of Korean ept percentage vnership)	
Korea Gas Technology Corp. KOGAMEX Investment	Construction & Service	Korea	100.00%	100.00%	
Manzanillo B.V.	Service	Netherlands	100.00%	100.00%	
KOMEX-GAS, S. de R.L. de C.V.	LNG terminal construction	Mexico	99.97%	99.97%	
KOGAS Vostok LLC	LNG terminal inspection	Russia	100.00%	100.00%	
KOGAS Iraq B.V.	Resource development	Netherlands	100.00%	100.00%	
KOGAS Badra B.V.	Resource development	Netherlands	100.00%	100.00%	
KOGAS Akkas B.V.	Resource development	Netherlands	100.00%	100.00%	
KOGAS Mansuriyah B.V.	Resource development	Netherlands	100.00%	100.00%	
KOGAS Canada Ltd.	Resource development	Canada	100.00%	100.00%	
KOGAS Canada LNG Ltd.	Resource development	Canada	100.00%	100.00%	
KOGAS Australia Pty. Ltd.	Resource development	Australia	100.00%	100.00%	
KOGAS Prelude Pty. Ltd.	Resource development	Australia	100.00%	100.00%	
KG Timor Leste Ltd.		Marshall			
KG Krueng Mane Ltd.	Resource development	Islands Marshall	100.00%	100.00%	
KG Mozambique Ltd.	Resource development	Islands Marshall	100.00%	100.00%	
·	Resource development	Islands	100.00%	100.00%	
KGLNG E&P Pty. Ltd.	Resource development	Australia	100.00%	100.00%	
KGLNG E&P II Pty. Ltd.	Resource development	Australia	100.00%	100.00%	
KGLNG Liquefaction Pty. Ltd. Manzanillo Gas Tech, S. de R.L.	LNG plant management	Australia	100.00%	100.00%	
de C.V. 1	LNG terminal management	Mexico	51.00%	51.00%	
Kyung-Ki CES Corp.	Energy	Korea	56.31%	56.31%	
KOGAS Mozambique, Lda	Construction & Service	Mozambique	99.99%	99.99%	

¹ The subsidiary is excluded from the scope of consolidation, as the effect of its inclusion is not significant.

9. Investments in Subsidiaries, Continued

Financial information of subsidiaries as of March 31, 2013 and December 31, 2012, and for the three-month periods ended March 31, 2013 and 2012, is as follows:

	March 31, 2013						
	Assets	Liabilities	Equities	Revenue	Net Income(loss)		
		(In mi	llions of Korea	n won)	· · · ·		
Korea Gas Technology Corp. KOGAMEX Investment Manzanillo	118,522	37,770	80,752	39,332	2,675		
B.V.	25,811	71,946	(46, 135)	-	(154)		
KOMEX-GAS, S. de R.L. de C.V.	3,764	923	2,841	1,159	104		
KOGAS Vostok LLC	1,090	632	458	39	(91)		
KOGAS Iraq B.V.	732,021	239,010	493,011	108,850	28,073		
KOGAS Badra B.V.	234,310	7,317	226,993	-	(23)		
KOGAS Akkas B.V.	46,389	3,650	42,739	-	-		
KOGAS Mansuriyah B.V.	10,402	659	9,743	-	(8)		
KOGAS Canada Ltd.	774,740	84,986	689,754	10,438	(206,832)		
KOGAS Canada LNG Ltd.	53,593	4,611	48,982	-	(1,820)		
KOGAS Australia Pty. Ltd.	2,965,524	2,084,047	881,477	5,059	(4,056)		
KOGAS Prelude Pty. Ltd.	784,096	214,282	569,814	-	(1,866)		
KG Timor Leste Ltd.	35,044	39,697	(4,653)	-	(169)		
KG Krueng Mane Ltd.	47,007	52,147	(5,140)	-	(221)		
KG Mozambique Ltd.	120,761	123,636	(2,875)	-	(482)		
Kyung-Ki CES Corp.	62,753	87,082	(24,329)	4,392	(2,885)		
KOGAS Mozambique, Lda.	22,503	22,912	(409)	-	-		
		De	ecember 31, 20	012			
	Assets	Liabilities	Equities	Revenue	Net Income(loss)		
		(In mi	llions of Korea	n won)			
Korea Gas Technology Corp. KOGAMEX Investment Manzanillo	124,279	43,746	80,533	41,177	2,753		
TO OF WILL THE HIT OOK HOLD WALLEATING							

	Assets	Liabilities	Equities	Revenue	Net Income(loss)
		(In mil	lions of Korea	n won)	
Korea Gas Technology Corp. KOGAMEX Investment Manzanillo	124,279	43,746	80,533	41,177	2,753
B.V.	23,472	68,256	(44,784)	-	(1,169)
KOMEX-GAS, S. de R.L. de C.V.	3,656	1,150	2,506	1,863	157
KOGAS Vostok LLC	1,149	607	542	57	(108)
KOGAS Iraq B.V.	664,436	242,977	421,459	75,708	3,018
KOGAS Badra B.V.	171,991	7,566	164,425	-	(3)
KOGAS Akkas B.V.	40,664	4,857	35,807	-	1
KOGAS Mansuriyah B.V.	7,819	634	7,185	-	(7)
KOGAS Canada Ltd.	919,481	38,013	881,468	998	(5,582)
KOGAS Canada LNG Ltd.	50,386	406	49,980	-	(1,020)
KOGAS Australia Pty. Ltd.	2,500,125	1,889,646	610,479	8,582	129
KOGAS Prelude Pty. Ltd.	702,824	190,515	512,309	-	(158)
KG Timor Leste Ltd.	33,752	38,067	(4,315)	-	-
KG Krueng Mane Ltd.	45,274	50,006	(4,732)	-	-
KG Mozambique Ltd.	99,362	101,655	(2,293)	-	-
Kyung-Ki CES Corp.	63,953	85,397	(21,444)	5,964	(2,016)
KOGAS Mozambique, Lda.	22,136	22,002	134	-	· -

10. Investments in Associates and Joint Ventures

Details of investments in associates and joint ventures as of March 31, 2013 and December 31, 2012, are as follows:

			March 31, 2013					
	Business	Location	Percentage of ownership	Acquisition cost	Book value			
	(In millions of Korear	n won, excep	t percentage	of ownership)				
Associates								
Korea Ras Laffan LNG Ltd. 2	Resource development	Bermuda	60.00% ₩	V 19,532 ₩	766,067			
Korea LNG Ltd.	Resource development	Bermuda	24.00%	3,298	132,550			
Hyundai Yemen LNG Company 3	Resource development	Bermuda	49.00%	8,306	8,306			
Korea LNG Trading Co., Ltd. 1	Shipping industry	Korea	28.00%	601	601			
Kor-Uz Gas Chemical Investment	Resource development	Uzbekistan						
Ltd.			45.00%	255,706	252,423			
South-East Asia Gas Pipeline	Pipe construction	Hong Kong						
Company Limited 4			4.17%	25,160	25,063			
Sulawesi LNG Development	LNG terminal construction &	United						
Limited	management	Kingdom	25.00%	277,376	273,528			
TOMORI E&P Limited	Resource development	United						
		Kingdom	49.00%	173,734	165,117			
AMEC Partners Korea LTD. 1,4	Engineering and technique service	Korea	15.00%	558	558			
				764,271	1,624,213			
Joint ventures								
KOMAN ENERGY FZCO 1	LNG Trading	UAE	50.00%	1,286	1,286			
Kor-Uz Gas cylinder Investment	Cylinder business investment	Korea			•			
Ltd. 1	•		37.26%	4,226	4,226			
Kor-Uz Gas C&G Investment Ltd. 1	Charge business investment	Korea	38.00%	2,541	2,541			
TERMINAL KMS de GNL, S. De	LNG terminal construction &	Mexico			•			
R.L. De C.V.	management		25.00%	56,281	25,718			
JV SACOTEC 1	Service	Russia	50.00%	_	_			
GLNG Operations Pty. Ltd. 1	LNG Plant management	Australia	15.00%	17	17			
GLNG Property Pty. Ltd. 1	Property Lease	Australia	15.00%	26	27			
CORDOVA GAS RESOURCES	Resource development	Canada						
LTD.			10.00%	26,098	18,469			
				90,475	52,284			
Total			\	V 854,746 ₩	1,676,497			

¹ The entity is not accounted for using the equity method, as the difference between book value and identifiable net asset is not significant.

² The entity is classified as an associate or joint venture, as it needs the unanimous approval in its decisions.

³ Value of the goodwill for Hyundai Yemen LNG Company is ₩8,306 million of March 31, 2013.

⁴ The entity is classified as an associate, as the Group can designate one director in its board of directors, although the percentage of ownership is below 20%.

10. Investments in Associates and Joint Ventures, Continued

			Dece		
	Business	Location	Percentage of ownership	Acquisition cost	Book value
	(In millions of Kor	ean won, excep	ot percentage of	ownership)	
Associates					
Korea Ras Laffan LNG Ltd. 2	Resource development	Bermuda	60.00% ₩	19,532 ₩	728,840
Korea LNG Ltd.	Resource development	Bermuda	24.00%	3,298	130,987
Hyundai Yemen LNG Company 3	Resource development	Bermuda	49.00%	8,306	8,306
Korea LNG Trading Co., Ltd. 1	Shipping industry	Korea	28.00%	601	601
Kor-Uz Gas Chemical Investment	Resource development				
Ltd. 1		Uzbekistan	45.00%	255,706	244,291
South-East Asia Gas Pipeline	Pipe construction				
Company Limited 4		Hong Kong	4.17%	25,160	24,139
Sulawest LNG Development	LNG terminal construction &	United			
Limited	management	Kingdom	25.00%	248,577	234,806
TOMORI E&P Limited	Gas field development and	United			
	operation	Kingdom	49.00%	173,734	158,019
AMEC Partners Korea LTD. 1,4	Engineering and technology				
	service	Korea	15.00%	558	558
			-	735,472	1,530,547
			-	700,172	1,000,011
Joint ventures					
KOMAN ENERGY FZCO 1	LNG Trading	UAE	50.00%	1,286	1,286
Kor-Uz Gas cylinder Investment	Cylinder business investment				
Ltd. 1		Korea	37.26%	4,226	4,226
Kor-Uz Gas C&G Investment Ltd. 1		Korea	38.00%	2,541	2,541
TERMINAL KMS de GNL, S. De	LNG terminal construction &				
R.L. De C.V.	management	Mexico	25.00%	56,281	23,381
JV SACOTEC 1	Service	Russia	50.00%	-	-
GLNG Operations Pty. Ltd. 1	LNG plant management	Australia	15.00%	17	17
GLNG Property Pty. Ltd. 1	Real property lease	Australia	15.00%	26	26
CORDOVA GAS RESOURCES	Resource development				
LTD.		Canada	10.00%	16,873	17,468
			_	81,250	48,945
Total			₩	816,722 ₩	1,579,492

¹ The entity is not accounted for using the equity method, as the difference between book value and identifiable net asset is not significant.

² The entity is classified as an associate or joint venture, as it needs the unanimous approval in its decisions.

³ Value of the goodwill for Hyundai Yemen LNG Company is ₩8,306 million of March 31, 2013.

⁴ The entity is classified as an associate or joint venture, as the Group can designate one director in its board of directors, although the percentage of ownership is below 20%.

10. Investments in Associates and Joint Ventures, Continued

Valuations of equity method investments for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

				March 31, 2013			
	Beginning Balance	Acquisition	Dividends received	Equity method gains or losses	Accumulated other comprehensive income (loss)	Others	Ending Balance
			(In mi	Ilions of Korean w	von)		
Associates Korea Ras Laffan							
LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG	₩ 728,840 130,987	₩ - \ \	f (37,656) ₩ (6,528)	/ 46,816 \ 6,451	1,640	- W	766,067 132,550
Company 1 Korea LNG Trading	8,306	-	-	(3)	(30)	33	8,306
Co., Ltd. Kor-Uz Gas Chemical	601	-	-	-	-	-	601
Investment Ltd. South-East Asia Gas Pipeline Company	244,291	-	-	(1,235)	9,367	-	252,423
Limited Sulawesi LNG Development	24,139	-	-	-	924	-	25,063
Limited	234,806	28,799	-	206	9,717	-	273,528
TOMORI E&P Limited	158,019	-	-	1,274	5,824	-	165,117
AMEC Partners Korea LTD	558	-	-	-	-	-	558
	1,530,547	28,799	(44,184)	53,509	55,509	33	1,624,213
Joint ventures KOMAN ENERGY	4.000						4 000
FZCO Kor-Uz Gas cylinder	1,286	-	-	-	-	-	1,286
Investment Ltd. Kor-Uz Gas C&G	4,226	-	-	-	-	-	4,226
Investment Ltd. TERMINAL KMS de GNL, S. De R.L.	2,541	-	-	-	-	-	2,541
De C.V.	23,382	-	-	897	(231)	1,670	25,718
JV SACOTEC GLNG Operations	-	-	-	-	-	-	-
Pty Ltd. GLNG Property Pty	16	-	-	-	1	-	17
Ltd. CORDOVA GAS RESOURCES	26	-	-	-	1	-	27
LTD.	17,468	-	-	691	310	-	18,469
	48,945			1,588	81	1,670	52,284
Total	₩ 1,579,492	₩28,799	/ (44,184)₩	55,097 ₩	55,590 ₩	1,703 ₩	1,676,497

¹ The Group ceased to recognize changes in investments of its associates because the book value, other than goodwill of investment in associates, fell below zero when applying losses of equity securities. The Group has established allowance for doubtful accounts of ₩ 33 million on long-term receivables to cover the loss under equity method.

10. Investments in Associates and Joint Ventures, Continued

December 31, 2012

			L	December 31, 2012	<u>′</u>		
	Beginning Balance	Acquisition	Dividends received	Equity method gains or losses	Accumulated other comprehensive income (loss)	Others	Ending Balance
			(In m	illions of Korean	won)		
Associates							
Korea Ras Laffan							
	₩ 776,889 ¥	/ - ₩	(96,547) ₩	<i>t</i> 94,988 ₩	(46,490) ₩	∀ - ₩	728,840
Korea LNG Ltd.	141,066	-	(25,842)	25,909	(10,146)	-	130,987
Hyundai Yemen							
LNG Company 1	47,288	-	-	(508)	48	(38,522)	8,306
Korea LNG Trading Co., Ltd.	601	_	_	_			601
Kor-Uz Gas	001	_	_	_	_	_	001
Chemical							
Investment Ltd.	4,757	250,949	-	520	(11,935)	-	244,291
South-East Asia							
Gas Pipeline	22.676	2 200		25	(4.770)		24 120
Company Limited Sulawesi LNG	22,676	3,208	-	25	(1,770)	-	24,139
Development							
Limited	126,646	125,340	-	(2,462)	(14,718)	-	234,806
TOMORI E&P							
Limited	161,776	11,958	-	(2,185)	(13,530)	-	158,019
AMEC Partners Korea LTD	558						558
Rolea LID							
	1,282,257	391,455	(122,389)	116,287	(98,541)	(38,522)	1,530,547
Joint ventures							
KOMAN ENERGY							
FZCO	1,286	-	-	-	-	-	1,286
Kor-Uz Gas							
cylinder	4.000						4 000
Investment Ltd. Kor-Uz Gas C&G	4,226	-	-	-	-	-	4,226
Investment Ltd.	2,541	_	_	_	_	_	2,541
TERMINAL KMS de	2,041						2,041
GNL, S. De R.L.							
De C.V.	17,909	-	-	5,114	1,215	(856)	23,382
JV SACOTEC	-	-	-	-	-	-	-
GLNG Operations Pty Ltd.	17	_	_	_	(1)	_	16
GLNG Property Pty	17	_	_	_	(1)	_	10
Ltd.	-	26	-	-	-	-	26
CORDOVA GAS							
RESOURCES	0.70:	47.105		(0.54.0)	(4.00=)		47 400
LTD.	8,704	17,135		(6,544)	(1,827)		17,468
	34,683	17,161		(1,430)	(613)	(856)	48,945
Total	₩ 1,316,940	√ 408,616 W	(122,389)	114,857 ₩	(99,154) ₩	√ (39,378) √	1,579,492

¹ The Group ceased to recognize changes in investments of its associates because the book value, other than goodwill of investment in associates, fell below zero as applying losses on equity securities. The Group has established allowance for doubtful accounts of \(\forall \) 460 million on long-term receivables to cover the loss under equity method.

10. Investments in Associates and Joint Ventures, Continued

Financial information of associates and joint ventures as of March 31, 2013 and December 31, 2012, and for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, follows:

	March 31, 2013						
	Assets	Liabilities	Sales	Net income (loss)			
	(I	n millions of	Korean won)				
Associates							
Korea Ras Laffan LNG Ltd.	₩ 1,293,364 ₩	t 16,586 t	№ 78,591 ₩	78,027			
Korea LNG Ltd.	559,454	7,163	27,536	26,930			
Hyundai Yemen LNG Company	246,755	248,428	.	(6)			
Korea LNG Trading Co., Ltd.	856,096	852,289	2,702	143			
Kor-Uz Gas Chemical Investment Ltd.	560,939	-	-	(43)			
South-East Asia Gas Pipeline Company Limited	1,519,583	919,049	-	-			
Sulawest LNG Development Limited	1,094,524	411	-	824			
TOMORI E&P Limited	334,461	7,748	-	(838)			
AMEC Partners Korea LTD	1,233	420	367	69			
Joint ventures KOMAN ENERGY FZCO	1,794	_	_	(880)			
Kor-Uz Gas cylinder Investment Ltd.	9,426	231	_	(118)			
Kor-Uz Gas C&G Investment Ltd.	6,506	1,188	_	(55)			
TERMINAL KMS de GNL, S. De R.L. De C.V.	1,050,471	947,601	30,741	3,588			
JV SACOTEC	-	-	-	-			
GLNG Operations Pty Ltd.	129	8	-	(1)			
CORDOVA GAS RESOURCES LTD.	645,239	500,621	7,447	6,911			
		Decembe	r 31, 2012				
	Assets	Decembe Liabilities		Net income (loss)			
		Liabilities		(loss)			
Associates		Liabilities	Sales	(loss)			
Associates Korea Ras Laffan LNG Ltd.		Liabilities n millions of	Sales Korean won) ∀ 160,803 ₩	(loss) 158,314			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd.	(1	Liabilities n millions of	Sales Korean won)	(loss)			
Korea Ras Laffan LNG Ltd.	₩ 1,237,968 ₩	Liabilities n millions of d 23,235 ₹ 64 238,976	Sales Korean won) ₩ 160,803 ₩ 109,992	(loss) 158,314			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd.	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255	Liabilities n millions of d 23,235 ₩ 64	Sales Korean won) ∀ 160,803 ₩	158,314 108,021			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd.	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870	Liabilities n millions of # 23,235 ₹ 64 238,976 814,461	Sales Korean won) ₩ 160,803 ₩ 109,992	158,314 108,021 (1,037) 545 (76)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510	Liabilities n millions of # 23,235 ₹ 64 238,976 814,461 - 763,116	Sales Korean won) ₩ 160,803 ₩ 109,992	158,314 108,021 (1,037) 545 (76) 589			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536	Liabilities n millions of 23,235 ₹ 64 238,976 814,461 - 763,116 314	Sales Korean won) V 160,803 ₩ 109,992 - 12,989	158,314 108,021 (1,037) 545 (76) 589 (9,508)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832	Sales Korean won) ▼ 160,803 ₩ 109,992 - 12,989 14,273	158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536	Liabilities n millions of 23,235 ₹ 64 238,976 814,461 - 763,116 314	Sales Korean won) V 160,803 ₩ 109,992 - 12,989	158,314 108,021 (1,037) 545 (76) 589 (9,508)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832 375	Sales Korean won) ▼ 160,803 ₩ 109,992 - 12,989 14,273 1,045	158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures KOMAN ENERGY FZCO	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119 1,974	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832 375	Sales Korean won) ▼ 160,803 ₩ 109,992 - 12,989 14,273	(loss) 158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181 (594)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures KOMAN ENERGY FZCO Kor-Uz Gas cylinder Investment Ltd.	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119 1,974 10,296	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832 375 16 232	Sales Korean won) ▼ 160,803 ₩ 109,992 - 12,989 14,273 1,045	(loss) 158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181 (594) (526)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures KOMAN ENERGY FZCO Kor-Uz Gas cylinder Investment Ltd. Kor-Uz Gas C&G Investment Ltd.	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119 1,974 10,296 5,385	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832 375 16 232 12	Sales Korean won) ▼ 160,803 ₩ 109,992 - 12,989 14,273 1,045 46,151	(loss) 158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181 (594) (526) (460)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures KOMAN ENERGY FZCO Kor-Uz Gas cylinder Investment Ltd. Kor-Uz Gas C&G Investment Ltd. TERMINAL KMS de GNL, S. De R.L. De C.V.	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119 1,974 10,296 5,385 1,018,886	Liabilities n millions of # 23,235 ₹ 64 238,976 814,461 - 763,116 314 5,832 375 16 232 12 925,360	Sales Korean won) V 160,803 ₩ 109,992 - 12,989 14,273 1,045 46,151 - 73,613	(loss) 158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181 (594) (526) (460) 20,456			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures KOMAN ENERGY FZCO Kor-Uz Gas cylinder Investment Ltd. Kor-Uz Gas C&G Investment Ltd. TERMINAL KMS de GNL, S. De R.L. De C.V. JV SACOTEC	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119 1,974 10,296 5,385	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832 375 16 232 12	Sales Korean won) ▼ 160,803 ₩ 109,992 - 12,989 14,273 1,045 46,151	(loss) 158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181 (594) (526) (460)			
Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawest LNG Development Limited TOMORI E&P Limited AMEC Partners Korea LTD Joint ventures KOMAN ENERGY FZCO Kor-Uz Gas cylinder Investment Ltd. Kor-Uz Gas C&G Investment Ltd. TERMINAL KMS de GNL, S. De R.L. De C.V.	(I ₩ 1,237,968 ₩ 545,841 237,370 818,255 542,870 1,341,510 939,536 318,060 1,119 1,974 10,296 5,385 1,018,886 214	Liabilities n millions of # 23,235 \(\) 64 238,976 814,461 - 763,116 314 5,832 375 16 232 12 925,360 76	Sales Korean won) V 160,803 ₩ 109,992 - 12,989 14,273 1,045 46,151 - 73,613	(loss) 158,314 108,021 (1,037) 545 (76) 589 (9,508) (4,459) 181 (594) (526) (460) 20,456 63			

11. Property, Plant and Equipment

Changes in property, plant and equipment for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

		March 31, 2013										
	Beginning balance	Acquisition	Disposal	Depreciation	Impairment loss	Other	Ending balance					
			(In m	illions of Korea	n won)							
Land	₩ 2,325,143 ₩	+ -₩	(16) \	+ -∀	∀ - ₩	6,997 ₩	2,332,124					
Buildings	413,157	1	(265)	(5,889)	-	6,692	413,696					
Structure	3,565,062	-	(19)	(44,579)	-	15,010	3,535,474					
Machinery	5,774,816	7,671	-	(95,015)	-	190,486	5,877,958					
Vehicles	7,801	62	(17)	(817)	-	682	7,711					
Office equipment	14,952	1,108	(12)	(1,606)	-	127	14,569					
Tools and instruments	10,973	40	-	(1,001)	-	(7)	10,005					
Tangible exploration												
and evaluation assets	-	-	-	-	-	-	-					
Timber	31,344	-	-	-	-	770	32,114					
Construction in												
progress	3,539,518	610,657	-	-	-	(116,365)	4,033,810					
Finance lease assets	2,934,008	-	-	(55,287)	-	-	2,878,721					
Others	966,192	293,256		(61,995)		53,942	1,251,395					
Total	₩ 19,582,966 ₩	/ 912,795 ₩	(329)	/ (266,189) ₩	∀ ₩_	158,334 ₩	20,387,577					

		December 31, 2012										
	Beginning balance	J Acquisition	Disposal	Depreciation	Impairment loss	Other	Ending balance					
			(In m	Illions of Korea	n won)							
Land	₩ 2,149,996	602 ₩	(13,475) ₩	<i>t</i> - ₩	∀ - ₩	188,020 ₩	2,325,143					
Buildings	384,25	1 2,512	(791)	(22,256)	-	49,441	413,157					
Structure	3,379,254	1 89	(517)	(170,763)	-	356,999	3,565,062					
Machinery	5,209,09	5 14,685	(7,443)	(357,948)	-	916,427	5,774,816					
Vehicles	6,448	3,329	(252)	(2,776)	(11)	1,063	7,801					
Office equipment	14,147	7 6,524	(66)	(6,023)	-	370	14,952					
Tools and instruments	10,049	9 4,428	(2)	(3,670)	-	168	10,973					
Tangible exploration												
and evaluation assets	6,81	1 -	-	-	-	(6,811)	-					
Timber	24,860) -	-	-	-	6,484	31,344					
Construction in												
progress	2,724,924	4 2,415,360	-	-	-	(1,600,766)	3,539,518					
Finance lease assets	3,155,154	1 -	-	(221,146)	-	-	2,934,008					
Others	428,006	775,430	(1,824)	(256,265)		20,845	966,192					
Total	₩_17,492,995	5 ₩ 3,222,959 ₩	(24,370)	f(1,040,847) ₩	∀ (11) W	(67,760) ₩	19,582,966					

As of March 31, 2013, certain land, buildings and machinery amounting to \$ 59,891 million are pledged as collaterals for borrowings.

12. Construction and Service Contracts

Changes in outstanding construction and service contracts for the three-month periods ended March 31, 2013, are as follows:

		Beginning balance	Increase (Decrease) 1	Sales recognized	Ending balance
	_		(In millions of Ko	rean won)	
Domestic construction contracts	₩	3,403 ₩	(2,882)₩	197 ₩	324
Domestic service contracts		8,155	1,811	2,326	7,640
Overseas service contracts	_	12,136	81	3,556	8,661
Total	₩_	23,694 ₩	(990)₩	6,079 W	16,625

Accumulated revenues and costs of construction in progress as of March 31, 2013 and December 31, 2012, are as follows:

	March 31, 2013					
_	Accumulated revenue		Accumulated cost		Accumulated income	
_	(In mi	Ilions of Korea	ı wo	n)	
Construction contracts						
Domestic construction contracts Overseas construction contracts	704 -	₩	595 -	₩_	109	
_	704		595		109	
Service contracts						
Domestic service contracts	6,568		5,378		1,190	
Overseas service contracts	54,604	_	51,241	_	3,363	
_	61,172	_	56,619	_	4,553	
Total ₩ ₌	61,876	₩_	57,214	₩	4,662	
		D	ecember 31, 20	12		
_	Accumulated revenue		Accumulated cost		Accumulated income	
_	(In mi	Ilions of Korea	n wo	n)	
Construction contracts						
Domestic construction contracts ₩	1,458		1,317	₩	141	
Overseas construction contracts	175		176	_	(1)	
_	1,633	_	1,493	_	140	
Service contracts						
Domestic service contracts	8,795		6,792		2,003	
Overseas service contracts	52,057	_	49,978	_	2,079	
_	60,852	_	56,770	_	4,082	
Total \to \text{\tinit}\\ \text{\texit}\xi}\\ \text{\text{\text{\text{\text{\text{\text{\text{\text{\tinit}\xi}\\ \text{\texi}\text{\texitile}}\text{\text{\text{\text{\texi}\text{\text{\text{\text{\texi}\text{\text{\texi}\text{\texitilex{\texitil{\text{\texitilex{\texit{\texi{\texi{\texi{\texi{\texi}\texi{\tiint{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\texi{\tex	62,485	₩_	58,263	₩	4,222	

12. Construction and Service Contracts, Continued

Trade accounts receivable and advances received arising from construction and service contracts as of March 31, 2013 and December 31, 2012, are as follows:

	_	March 31, 2013				December 31, 2		
		Unbilled amount 1		Overbilled amount 2		Unbilled amount 1		Overbilled amount 2
	_			(In millions	of K	(orean won)	_	
Construction contracts								
Domestic construction contracts	₩	647	₩	5	₩	239	₩	9
	_	_	_		_		_	
		647		5		239		9
Service contracts		_	_		_		_	
Domestic service contracts		434		1,471		431		1,936
Overseas service contracts		493		1,573		509		3,557
	_	927	_	3,044	-	940	_	5,493
Total	₩_	1,574	₩	3,049	₩	1,179	₩	5,502

- 1 Unbilled amount is recognized as accounts receivable in the statement of financial position.
- 2 Overbilled amount is recognized as deferred revenue in the statement of financial position.

13. Intangible Assets Other Than Goodwill

Changes in intangible assets, other than goodwill, for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

		March 31, 2013										
		Beginning balance	Acquisition		Disposal	Aı	nortization	ln	npairment loss	Other		Ending balance
					(In mil	llion	s of Korean v	von))			
Intangible exploration and												
evaluation assets	₩	883,118 ₩	106,336 ₩	₩	(867)	₩	- +	₩	(210,498) ₩	₹ 20,259	₩	798,348
Computer software		19,993	397		-		(2,179)		-	19		18,230
Patents		391	-		-		(13)		-	(53)		325
Development costs Right to donated		-	-		-		-		-	-		-
assets		54,007	-		(459)		(890)		-	-		52,658
Land use rights		981	-		-		(21)		-	-		960
Mineral rights		1,392,239	36,463		-		-		-	46,764		1,475,466
Others		55,872	10,247	_		_	(163)	_		2,194		68,150
	₩	2,406,601 W	153,443 ₩	₩	(1,326)	₩	(3,266)	₩	(210,498)	₩ 69,183	₩	2,414,137

13. Intangible Assets Other Than Goodwill, Continued

	December 31, 2012										
	Beginning balance	Acquisition	Disposal	Amortization	Impairment loss	Other	Ending balance				
			(In mil	lions of Korean	won)						
Intangible exploration and											
evaluation assets W	126,048 ₩	315,813 ₩	∀ - ∀	V -	₩ - ₩	441,257 ₩	883,118				
Computer software	17,072	2,315	-	(7,066)	-	7,672	19,993				
Patents	294	-	-	(50)	-	147	391				
Development costs	1	12,908	-	(1)	_	(12,908)	-				
Right to donated											
assets	63,367	-	(1,589)	(7,771)	_	-	54,007				
Land use rights	793	70	-	(92)	-	210	981				
Mineral rights	1,521,485	465,417	-	-	-	(594,663)	1,392,239				
Others	19,691	26,186		(595)		10,590	55,872				
₩	1,748,751 ₩	822,709 ₩	¥ <u>(1,589)</u> ¥	∀(15,575)	₩₩	(147,695) W	2,406,601				

Impairment loss amounting to $\upsigma 210,498$ million was recognized in relation to intangible exploration and evaluation assets of KOGAS Canada Ltd. and its recoverable amount was calculated as the asset's value in use discounted at 7.5 % of the pre-tax discount rate. Impairment loss is included in other gains (losses) in the statement of comprehensive income.

Details of individually significant intangible assets as of March 31, 2013 and December 31, 2012, are as follows:

		N	March 31, 2013	
	Details		Amount	Remaining amortization period
	(In	milli	ions of Korean	won)
Intangible exploration and evaluation assets	Acquisition in exploration phase	₩	798,348	Phase in exploration and development
Right to contributed assets	Harbor facility usage right		52,658	7.20 years
Mineral rights	Mining Rights		1,475,466	Phase in development approval
		De	cember 31, 201	2
	Details		Amount	Remaining amortization period
	(In	milli	ions of Korean	won)
Intangible exploration and evaluation assets	Acquisition in exploration phase	₩	883,118	Phase in exploration and development
Right to contributed assets	Harbor facility usage right		54,007	6.95 years
Mineral rights	Mining Rights		1,392,239	Phase in development

14. Borrowings and Debentures

Borrowings and debentures as of March 31, 2013 and December 31, 2012, are summarized as follows:

	March 31, 2013			December 31, 2012
	_	(In million	s of	Korean won)
Current				
Short-term borrowings	₩	5,118,118	₩	4,626,514
Current portion of long-term borrowings		111,377		110,184
Current portion of debentures		2,094,615		2,170,172
Less: Discount on debentures		-		(19)
		7,324,110	_	6,906,851
Non-current				
Long-term borrowings, net of current portion		387,169		409,291
Debentures, net of current portion		17,947,629		17,067,364
Less: Discount on debentures		(61,106)	_	(57,463)
	_	18,273,692	_	17,419,192
Total	₩	25,597,802	₩_	24,326,043

14. Borrowings and Debentures, Continued

Short-term borrowings as of March 31, 2013 and December 31, 2012, are summarized as follows:

Lender	Interest rate		March 31, 2013	December 31, 2012		
	(Ir	milli	ons of Korean v	won)		
Local currency borrowings						
KTB Investment & Securities Co., Ltd.	2.74% ~ 2.81%	₩	680,000	₩	600,000	
NH Investment & Securities Co., Ltd.	2.74%		70,000		-	
SK Securities Co.,Ltd.	2.74% ~ 2.81%		630,000		620,000	
Kyobo Securities Co., Ltd.	2.74% ~ 2.76%		485,000		-	
Meritz Securities Co.,Ltd.	2.74% ~ 2.81%		690,000		180,000	
Samsung Securities Co.,Ltd.	2.74% ~ 2.81%		710,000		130,000	
Shinhan Bank	2.74% ~ 2.81%		630,000		420,000	
HMC Investment & Securities Co., Ltd.	2.74% ~ 2.81%		540,000		_	
Woori Bank	2.74% ~ 2.81%		210,000		1,080,000	
Hyundai Securities Co., Ltd.	2.74% ~ 2.76%		80,000		_	
Korea Exchange Bank	-		-		420,000	
Kookmin Bank	18.00%		13,253		13,253	
		_	4,738,253	_	3,463,253	
Foreign currency borrowings		_		_		
DBS Seoul Branch	0.56%		121,935		105,653	
Bank of Nova Scotia	CAD LIBOR +		,		, , , , , , ,	
	0.50%		37,512		76,270	
The Bank of Tokyo Mitsubishi UFJ	2.01%		106,620		179,199	
Bank of America	1.70%		17,440		209,328	
Deutsche Bank	_		, -		92,767	
Credit Agricole	_		-		54,512	
ING	_		-		49,672	
JPMorgan	_		-		150,072	
RBS	_		-		52,727	
SMBC	-		-		98,323	
Mizuho Bank	2.00%		96,358		94,738	
		_	379,865	_	1,163,261	
Total		₩_	5,118,118	₩	4,626,514	

14. Borrowings and Debentures, Continued

Long-term borrowings as of March 31, 2013 and December 31, 2012, are summarized as follows:

			Marci	h 31, 2013	December 31, 2012			
Lender	Interest rate	Maturity	Foreign currency (USD)	Local currency (KRW)	Foreign currency (USD)	Local currency (KRW)		
		(In millions	of Korean won, t	housands of U	S dollars)			
Local currency borrowings								
Korea National Oil	3-year							
Corporation	government	2014.03 ~						
Olaib and	bond floating rate	2019.09	USD -	₩ 338,648	USD -	₩ 364,265		
Citibank	5-year	2016.09 ~						
	government bond floating rate	2018.09	_	10,868	_	10,868		
Kookmin Bank 1	18.00%	2023.06.02	_	17,000	_	17,000		
rtoottiiii Bariit 1	18.00%	2021.06.15	-	4,853	_	4,853		
Foreign currency borrowings Korea National Oil Corporation	3-year government			ŕ		,		
· · · · · · · · · · · · · · · · · ·	bond rate -2.25%	6 2017.12	114,358	127,177	114,358	122,489		
			114,358	498,546	114,358	519,475		
Less : current portion			(4,109)	(111,377)	(4,109)	(110,184)		
Total			USD 110,249	₩ 387,169	USD 110,249	₩_409,291		

¹ As of March 31, 2013, borrowings are collateralized with the Group's land, buildings and machinery amounting to \$ 59,891 million.

14. Borrowings and Debentures, Continued

Debentures as of March 31, 2013 and December 31, 2012, are summarized as follows:

			March 31, 2013			December 31, 2012			
List	Interest rate	Period		oreign rrency	Local currency (KRW)	Foreig	n currency	Local currency (KRW)	
			(In I	millions of ollars, Eur	Korean won and o, Confoederatio , Singapore Dolla	Japanes Helvetic	se yen, and a Franc, Ho	in thousands of ong Kong Dollars,	
146th~193rd 195th~222nd 236th~257th 258th~285th 286th~309th 310th ~ 316th 317th ~ 324th 325th ~ 327th	4.86% ~ 5.94% 5.42% ~ 7.07% 5.05% ~ 5.97% 4.08% ~ 5.51% 3.87% ~ 4.93% 3.80% ~ 4.09% 3.07% ~ 3.23% 3.24% ~ 3.25%	2013.09 ~ 2014.11 2013.07 ~ 2015.06 2013.08 ~ 2019.11 2015.07 ~ 2021.05 2015.04 ~ 2022.11 2018.09 ~ 2022.09 2018.04 ~ 2027.07 2023.08 ~ 2028.08	1100		1,200,000 1,630,000 1,980,000 2,730,000 3,055,000 900,000 430,000	LIOD		1,300,000 1,630,000 2,130,000 2,730,000 3,055,000 900,000 1,050,000	
Global 2nd 262nd US Dollar	6.00% 3M LIBOR + 1.35%	2014.07 2013.02	USD	500,000	556,050	USD	500,000	535,550	
267th US Dollar	3M LIBOR + 1.10%		USD	100,000		USD	150,000	160,665	
Switzerland franc Global 3rd 287th US Dollar	2.25% 4.25% 3M LIBOR +	2014.05 2015.10 2020.11	CHF	300,000 500,000	111,210 351,300 556,050	CHF USD	100,000 300,000 500,000	107,110 351,930 535,550	
289th US Dollar	1.10% 3M LIBOR +	2013.02		-	-	USD	100,000	107,110	
Maple bond 6th Samurai Shogun	1.05% 4.58% 1.38% 6M LIBOR +	2015.03 2016.05 2016.07	USD CAD JPY	100,000 300,000 30,000	111,210 328,329 354,039	USD CAD JPY	100,000 300,000 30,000	107,110 322,815 374,250	
Switzerland franc 2nd Switzerland franc 3rd Switzerland franc 4th FRN 1st Syndicate bond	1.00% 2.00% 2.88% 1.13% 1.18% 3M LIBOR +	2016.09 2016.10 2019.10 2020.02 2018.02	USD CHF CHF CHF USD	200,000 250,000 100,000 300,000 200,000	222,420 292,750 117,100 351,300 222,420	USD CHF CHF	200,000 250,000 100,000	214,220 293,275 117,310 -	
Global 4th MTN 1st MTN 2nd MTN 3rd MTN 4th	1.45% 6.25% 1.53% 1.28% 2.50% 2.60%	2015.11 2042.01 2013.04 2017.06 2017.06 2017.06	USD USD USD JPY HKD HKD	400,000 750,000 40,000 3,000 300,000 500,000	444,840 834,075 44,484 35,404 42,979 71,630	USD USD USD JPY HKD HKD	400,000 750,000 40,000 3,000 300,000 500,000	428,440 803,325 42,844 37,425 41,455 69,090	
MTN 5th MTN 6th Shogun 2nd	3M EURIBOR + 0.40% 1.55% 3M LIBOR +	2013.06 2013.06	EUR USD	40,000 30,000	57,008 33,363	EUR USD	40,000 30,000	56,650 32,133	
Shogun 3rd	0.65% 3M LIBOR +	2014.06	USD	200,000	222,420	USD	200,000	214,220	
Shogun 4th	1.20% 3M LIBOR +	2016.06	USD	100,000	111,210	USD	100,000	107,110	
Shogun 5th	1.27% 3M LIBOR +	2017.06	USD	100,000	111,210	USD	100,000	107,110	
MTN 7th MTN 8th MTN 8th(2) MTN 9th	90Bp 1.65% 1.10% 1.10% 3M EURIBOR +	2018.02 2014.06 2013.06 2013.07	USD HKD SGD SGD	150,000 195,000 30,000 10,000	166,815 27,936 26,888 8,963	HKD SGD SGD	195,000 30,000 10,000	26,945 26,264 8,755	
MTN 10th MTN 11th Global 5th MTN 12th	0.45% 3.25% 0.95% 2.25% 3M JPY	2013.06 2017.06 2013.07 2017.07	EUR CNY JPY USD	20,000 160,000 3,000 700,000	28,504 28,632 35,404 778,470	EUR CNY JPY USD	20,000 160,000 3,000 700,000	28,325 27,501 37,425 749,770	
AUD BOND	Libor+0.76% 4.50%	2017.09 2015.09	JPY AUD	3,000 300,000	35,404 347,427 20.042,244	JPY AUD	3,000 300,000	37,425 333,429 19,237,536	
Less : Discount on debentu Less : Current portion					20,042,244 (61,106) (2,094,615)			(57,482) (2,170,172)	
Less : Current portion of dis debentures	scount on				-			19	
				•	17,886,523	-	-	17,009,901	
				:	,,-	:	=	,,.	

15. Finance Lease Liabilities

As of March 31, 2013, the Group has lease contracts with shipping agents for the vessels used for LNG transportation. Since substantial risks on long-term use of LNG transportation vessels were transferred to the Group, the leases are accounted for as finance leases. The lower amount of the present value of minimum lease payment or the fair value of lease asset was recognized as a finance lease asset and finance lease liability.

Finance lease liabilities as of March 31, 2013 and December 31, 2012, are summarized as follows:

		Ma	31, 2013		December 31, 2012				
	-	Minimum lease payment		Present value of minimum lease payment	Minimum lease payment			Present value of minimum lease payment	
	-			(In millions	of k	(orean won)	-		
1 year or less	₩	315,855	₩	263,488	₩	298,293	₩	241,156	
1 ~ 5 years		1,254,736		1,117,486		1,212,120		1,051,957	
More than 5 years	-	1,406,206	_	1,286,282	-	1,468,168	_	1,329,972	
Total	₩	2,976,797	₩	2,667,256	₩	2,978,581	₩	2,623,085	

16. Severance Benefit Liabilities

The Group operates a defined benefit plan. According to defined benefit plan, employees will receive average salaries in the past three months multiplied rate of payment considering year of service on their retirement. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method.

The amounts recognized in profit or loss for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013		2012	
	_	(In millions	of K	Korean won)	
Current service cost Interest expense Expected return on plan assets	₩	7,854 1,952 (1,634)	₩	6,988 1,840 (975)	
Total	₩	8,172	₩	7,853	

16. Severance Benefit Liabilities, Continued

Changes in the carrying amount of defined benefit obligations for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

	Ma	rch 31, 2013	December 31, 2012				
	(In millions of Korean won)						
Beginning balance	₩	158,054	₩	125,447			
Current service cost		7,854		28,782			
Interest expense		1,952		7,038			
Actuarial gains(losses)		875		7,572			
Foreign exchange difference		7		(9)			
Benefits paid		(971)		(10,776)			
Ending balance	₩	167,771	₩	158,054			

The movements in the fair value of plan assets for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

	M	arch 31, 2013	December 31, 2012				
	(In millions of Korean won)						
Beginning balance	₩	133,187	₩	86,418			
Expected return on plan assets		1,634		3,914			
Actuarial gains(losses)		(45)		(132)			
Employer contribution		-		43,200			
Contributions by plan participants		-		5,109			
Benefits paid		(970)		(5,322)			
Ending balance	₩	133,806	₩	133,187			

17. Provisions

Details of provisions as of March 31, 2013 and December 31, 2012, are as follows:

			March 31, 20	13	December 31, 2012				
	С	urrent	Non-current	Total	Current	Non-current	Total		
				(In millions	of Korean wo	n)			
Provision for restoration Others	₩	- ₩ 111	217,413 2,233	₩ 217,413 2,344		¥ 136,587 ₩ 2,200	136,587		
Total	₩	111 ₩	219,646	₩ 219,757	₩	¥ <u>138,787</u> ₩	138,787		

17. Provisions, Continued

Changes in provisions for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

			March 31, 2013									
		Beginning balance	J —	Increas		Utilization (In millions	_	Reversa orean won)		Others		Ending balance
Financial guarante liability Provision for restoration	ee ₩	£ 2,047		V 110		<i>†</i>	- \	•	- \	V 40 7,058	₩	2,197 217,413
Others		153			<u>-</u>	(6	3)		_		_	147
Total	₩	138,787	′ _ ∀	73,87	8 <u>₩</u>	t (6	<u>8)</u> \tag{8}	₩	- \	₩ 7,098	₩	219,757
						Decembe	er 31	l, 2012				
		Beginning balance		Increase		Utilization Reversal			Others		Ending balance	
					(I	n millions o	f Ko	rean won)			_	
Financial guarantee liability Provision for	₩	-	₩	2,210	₩	(26)	₩	-	₩	(138)	₩	2,046
restoration Others		134,933 214		11,786 91		- (65)		(86)		(10,132)		136,587 154
Total	₩	135,147	₩	14,087	₩	(91)	₩	(86)	₩	(10,270)	₩	138,787

18. Equity

As of March 31, 2013 and December 31, 2012, the number of authorized shares, number of issued shares and par value per share are 200,000,000, 77,284,510 and \$ 5,000, respectively.

Changes in the number of ordinary shares for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follow:

	March 31, 2013	December 31, 2012
Beginning balance	72,608,750	72,608,750
Ending balance	72,608,750	72,608,750

Details of share premium as of March 31, 2013 and December 31, 2012, are as follows:

	_	March 31, 2013		December 31, 2012
	_	(In millions of Korean won)		
Share premium	₩	669,640	₩	669,640

19. Retained Earnings

Retained earnings as of March 31, 2013 and December 31, 2012, consist of:

		March 31, 2013		December 31, 2012
	_	(In millio	Korean won)	
Legal reserve 1	₩	193,211	₩	193,211
Other reserves		5,809,868		5,427,757
Unappropriated retained earnings	_	156,155	_	374,902
Total	₩_	6,159,234	₩	5,995,870

1 The Korean Commercial Code requires the Corporation to appropriate as legal reserve in an amount equal to at least 10% of cash dividends for each accounting period until the reserve equals 50% of the capital. The legal reserve may be used to reduce a deficit or may be transferred to common stock in connection with a free issuance of shares.

Other reserves as of March 31, 2013 and December 31, 2012, are as follows:

		March 31, 2013		December 31, 2012	
	_	(In millions of Korean won)			
Business expansion	₩	5,115,553	₩	4,733,442	
Reserve for dividend equalization		219,282		219,282	
Business rationalization		792		792	
Accident compensation		386,423		386,423	
Improvement of financial structure	_	87,818	-	87,818	
Total	₩_	5,809,868	₩	5,427,757	

Changes in retained earnings for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, are as follows:

		March 31, 2013		December 31, 2012	
		(In millions of Korean won)			
Beginning balance	₩	5,995,870	₩	5,690,241	
Net income		283,160		366,675	
Dividends		(119,078)		(55,183)	
Actuarial gains (losses)	_	(718)	_	(5,863)	
Ending balance	₩_	6,159,234	₩	5,995,870	

20. Revenue

Details of revenue for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013		2012	
		(In millions of Korean won)			
Revenue from sale of goods and services	₩	12,218,534	₩	11,361,185	
Revenue—Finished goods		12,103,235		11,276,062	
Revenue—Services		115,299		85,123	
Construction		710		1,809	
Government grants		634		604	
Other revenue	_	2,504	_	7,360	
Total	₩_	12,222,382	₩_	11,370,958	

The Group's operations are highly cyclical as revenue is higher during the winter season due to the heating demand of gas in the cities.

21. Selling, General and Administrative Expenses

Details of selling, general and administrative expenses for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013		2012
		(In millions	of K	(orean won)
Salaries	₩	18,299	₩	14,998
Severance benefits		1,647		1,532
Other employee benefits		1,180		1,518
Insurance		1,302		705
Depreciation		4,452		3,887
Amortization		2,044		5,026
Bad debts expense		-		52
Commission		6,343		4,869
Advertising		778		739
Training		1,045		1,235
Vehicles maintenance expenses		138		166
Periodicals and printing expenses		161		157
Business promotion expenses		245		184
Rent		1,572		1,162
Communication		357		324
Taxes and dues		30,805		34,259
Supplies		182		272
Water, lighting and heating		380		238
Repairs and maintenance expenses		277		126
Research and development expense		8,827		6,735
Travel and transportation		850		998
Clothing expenses		586		140
Association fee		270		203
Sales promotion costs		138		300
Sales commission		3		2
Promotional expenses		-		19
Other expenses	_	8,262	_	5,400
Total	₩	90,143	₩	85,246

22. Other Income and Expenses

Details of other income for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013	2012
	<u>(I</u>	n millions of K	orean won)
Gains from subsidies and reimbursement	₩	190 ₩	357
Gains from contribution to construction		189	24
Rental income		459	771
Total	₩	838 ₩_	1,152

Details of other expense for the three-month periods ended March 31, 2013 and 2012, are as follows:

	2013		2012
	(In millio	ns of K	(orean won)
Losses from contribution to construction	₩ 22	4 ₩	-
Donations	6,82	6	4,082
Others		2 .	1
Total	₩7,05	2 ₩	4,083

23. Other Gains and Losses

Details of other gains (losses) for the three-month periods ended March 31, 2013 and 2012, are as follows:

	2013		2012
	_	(In millions of K	orean won)
Gains on disposal of property, plant and equipment	₩	62 ₩	566
Miscellaneous gains		10,474	7,031
Losses on disposal of property, plant and equipment		(264)	(109)
Losses on impairment of intangible assets		(210,498)	-
Miscellaneous losses	_	(7,113)	(2,272)
Total	₩	(207,339) ₩	5,216

24. Financial Income and costs

Details of finance income for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013	2012	
		(In millions of Korean		
Interest income	₩	5,871	₩ 3,181	
Dividend income		1	5	
Gains on valuation of derivative instruments		5,931	22,315	
Gains on transactions of derivative instruments		83,054	26,608	
Foreign currency translation gains		64,967	37,475	
Foreign currency transaction gains	_	50,375	69,439	
T (.)	14/	040 400		
Total	₩	210,199	₩ 159,023	

Details of finance costs for the three-month periods ended March 31, 2013 and 2012, are as follows:

		2013	2012
	((In millions of K	orean won)
Interest expense	₩	204,894 ₩	218,798
Losses on valuation of derivative instruments		85,366	34,715
Losses on transactions of derivative instruments		54,301	47,355
Foreign currency translation losses		4,212	34,381
Foreign currency transaction losses	_	100,466	32,710
Total	₩_	449,239 ₩	367,959

25. Income Tax Expense

Interim period income tax expense is calculated by applying estimated average annual effective tax rate to the interim period's pre-tax income. Deferred tax expected to reverse after December 31, 2013, has been measured the effective rate 37.7% that will apply for the future periods.

26. Nature of Expenses

Details of nature of expenses for the three-month periods ended March 31, 2013 and 2012, are as follows:

	2013							
	_	Changes in inventories		Selling, general and administrative expenses		Cost of sales		Total
	-		-	(In millions of	Koı	rean won)	_	
Changes in inventories:								
Finished goods	₩	(4,986)	₩	_	₩	_	₩	(4,986)
Raw materials used	••	(1,000)	••	_	••	10,822,603	••	10,822,603
Salaries		_		18,299		39,519		57,818
Severance benefits		_		1,647		3,822		5,469
Other employee benefits		-		1,180		3,759		4,939
Insurance		-		1,302		1,466		2,768
Depreciation		-		4,452		259,436		263,888
Amortization		-		2,044		1,116		3,160
Commission		-		6,343		30,000		36,343
Advertising		-		778		67		845
Training		-		1,045		41		1,086
Vehicles maintenance								
expenses		-		138		226		364
Periodicals and printing								
expenses		-		161		54		215
Business promotion								
expenses		-		245		83		328
Rent		-		1,572		4,713		6,285
Communication		-		357		841		1,198
Taxes and dues		-		30,805		5,152		35,957
Supplies		-		182		209		391
Water, lighting and heating		-		380		92,523		92,903
Repairs and maintenance								
expenses		-		277		10,170		10,447
Research and								
development expense		-		8,827				8,827
Travel and transportation		-		850		732		1,582
Clothing expenses		-		586		36		622
Association fee		-		270		332		602
Sales promotion costs		-		138		-		138
Sales commission		-		3		-		3
Other expenses	_		_	8,262	_	10,616	_	18,878
Total	₩	(4,986)	₩	90,143	₩_	11,287,516	₩_	11,372,673

26. Nature of Expenses, Continued

	2012					
	-	Changes in inventories		Selling, general and administrative expenses	Cost of sales	Total
	-			(In millions of	f Korean won)	
Changes in inventories:						
Finished goods	₩	(3,231)	₩	-	₩ -	₩ (3,231)
Raw materials used		-		-	10,135,640	10,135,640
Salaries		-		14,998	27,540	42,538
Severance benefits		-		1,532	5,505	7,037
Other employee benefits		-		1,518	3,186	4,704
Insurance		-		705	1,463	2,168
Depreciation		-		3,887	223,348	227,235
Amortization		-		5,026	40	5,066
Bad debts expense				52	-	52
Commission		-		4,869	28,754	33,623
Advertising		-		739	71	810
Training		-		1,235	256	1,491
Vehicles maintenance						
expenses		-		166	1,068	1,234
Periodicals and printing						
expenses		-		157	66	223
Business promotion						
expenses		-		184	82	266
Rent		-		1,162	4,088	5,250
Communication		-		324	888	1,212
Taxes and dues		-		34,259	4,652	38,911
Supplies		-		272	318	590
Water, lighting and heating		-		238	81,677	81,915
Repairs and maintenance						
expenses		-		126	41,059	41,185
Research and development						
expense		-		6,735	2	6,737
Travel and transportation		-		998	883	1,881
Clothing expenses		-		140	49	189
Association fee		-		203	-	203
Sales promotion costs		-		300	-	300
Sales commission		-		2	-	2
Promotional expenses		-		19	-	19
Other expenses	-	-		5,400	10,231	15,631
Total	₩	(3,231)	₩	85,246	₩_10,570,866	₩_10,652,881

27. Categories of Financial Instruments

Details of categories of financial instruments as of March 31, 2013 and December 31, 2012, are as follows:

				Ма	rch 31, 2013		
		Financial assets at fair value through profit or loss	Loans and receivables		Held-to- maturity financial assets i	Hedging derivative nstruments	Total
			(In mi	llio	ns of Korean w	on)	
Current financial assets Financial assets at fair value through profit or loss Held-to-maturity financial	₩	11,577 ₩	-	₩	- ₩	- ₩	11,577
assets		-	-		168	-	168
Loans and receivables Short-term financial		-	390		-	-	390
instruments Derivative financial assets		-	65,036		-	- 98	65,036 98
Derivative illiancial assets			65,426	-		98	77,269
		11,577	05,420	-	100		77,209
Trade and other accounts receivable			7,659,158			<u> </u>	7,659,158
Total	₩	11,577 ₩	7,724,584	₩	168 ₩ __	98 ₩	7,736,427
				Ма	rch 31, 2013		
		Financial assets at fair value through profit or loss	Loans and receivables		Available- for-sale financial assets	Held-to- maturity financial assets	Total
			(In mi	llio	ns of Korean w	on)	
Non-current financial assets Financial assets at fair value							
through profit or loss Available-for-sale financial	₩	24,400 ₩	-	₩	- ₩	- ₩	24,400
assets Held-to-maturity financial		-	-		23,241	-	23,241
assets		-	-		-	1,465	1,465
Loans and receivables			360,968	-	- -	<u> </u>	360,968
		24,400	360,968	-	23,241	1,465	410,074
Trade and other accounts receivable		_	200,165		_	-	200,165
				-			

27. Categories of Financial Instruments, Continued

		March 31, 2013					
		Financial liabilities at fair value through profit or loss	Financial liability measured at amortized cost	Hedging derivative instruments	Total		
			(In millions of Ko	rean won)			
Current financial liabilities Financial liabilities at fair value							
through profit or loss	₩	1,267 ₩		- ₩	- ,—		
Long-term borrowings		-	111,376	-	111,376		
Debentures		-	2,094,615	-	2,094,615		
Derivative financial liabilities				13,824	13,824		
		1,267	2,205,991	13,824	2,221,082		
Trade and other accounts payable		-	2,525,345	-	2,525,345		
Short-term borrowings			5,118,118	<u> </u>	5,118,118		
Total	₩	1,267 W	9,849,454	⁴ 13,824 ₩	9,864,545		
			March 31, 2	2013			
		Financial	Financial	2013			
		liabilities at fair value through profit or loss	liability measured at amortized cost	Hedging derivative instruments	Total		
			(In millions of Ko	rean won)			
Non-current financial liabilities Financial liabilities at fair value							
through profit or loss	₩	152,122 ₩		- ₩			
Long-term borrowings		-	387,170	-	387,170		
Debentures		-	17,886,523	-	17,886,523		
Derivative financial liabilities				84,883	84,883		
		152,122	18,273,693	84,883	18,510,698		
Trade and other accounts payable		<u>-</u>	2,522,961		2,522,961		
Total	₩	152,122 ₩	20,796,654 ₩	84,883 ₩	21,033,659		

27. Categories of Financial Instruments, Continued

				De	ecembe	er 31, 20	12	
		Financial assets at fair value through profit or loss		Loans receiva	bles	ma	eld-to- aturity ial assets	Total
				(in mii	iions o	r Korear	i won)	
Current financial assets Financial assets at fair value through profit or loss	₩	15,327	₩	ı	- ₩	/	- ₩	15,327
Held-to-maturity financial assets		-			-		139	139
Loans and receivables		-			439		-	439
Short-term financial instruments				61,	582			61,582
		15,327		62,	021		139	77,487
Trade and other accounts receivable				8,066,	955		<u> </u>	8,066,955
Total	₩	15,327	₩	8,128,	976 ₩	<i>+</i>	139 ₩	8,144,442
			De	cember	31, 201	2		
Financial assets at fa value through profit or los		Loans and receivables	fi fir	vailable- or-sale nancial assets	mat fina as	d-to- curity ncial sets	Hedging derivative instruments	Total
		(In	mill	lions of k	Corean	won)		
Non-current financial assets Financial assets at fair value through profit or loss 42.08	4 \\	- W			₩	- ₩		W 42.004
loss ₩ 42,08 Available-for-sale financial	ı vv	- ٧٧		-	VV	- 77	-	₩ 42,081
assets Held-to-maturity financial	-	-		24,401		-	-	24,401
assets	-	-		-	1	,430	-	1,430
Loans and receivables	-	345,763		-		-	4 040	345,763
Derivative financial assets	<u>-</u> -	-		-		-	1,349	1,349
42,08	1 	345,763		24,401	1	,430	1,349	415,024
Trade and other accounts receivable	<u>-</u> .	188,316						188,316
Total ₩ 42,08	1 ₩	534,079 W		24,401	₩1	,430 ₩	1,349	₩_603,340

27. Categories of Financial Instruments, Continued

	December 31, 2012							
	-	Financial liabilities at fair value through profit or loss		Financial liability measured at amortized cost	: 1/ -	Hedging derivative instruments	_	Total
				(In millions of	Ko	rean won)		
Current financial liabilities								
Financial liabilities at fair value through profit or loss	₩	4,382		ı	₩		₩	4,382
Long-term borrowings	VV	4,362	VV	110,184	VV	_	VV	110,184
Debentures		-		2,170,153		_		2,170,153
Derivative financial liabilities		-		-		22,167		22,167
		4,382		2,280,337		22,167	_	2,306,886
Trade and other accounts payable		_		3,175,214		_		3,175,214
Short-term borrowings		_		4,626,514				4,626,514
Total	₩	4,382	₩	10,082,065	₩	22,167	₩	10,108,614
	=						=	
		Financial		Decembe	er 31	, 2012		
		liabilities at fair value through profit or loss		Financial liability measured at amortized cost		Hedging derivative instruments		Total
				(In millions of I	Kor	ean won)		
Non-current financial liabilities Financial liabilities at fair value								
through profit or loss	₩	95,380	₩	-	₩	_	₩	95,380
Long-term borrowings		, -		409,291		-		409,291
Debentures		-		17,009,901		-		17,009,901
Derivative financial liabilities						93,242	_	93,242
		95,380		17,419,192		93,242	_	17,607,814
Trade and other accounts payable				2,494,278			_	2,494,278
Total	₩	95,380	₩	19,913,470	₩	93,242	₩	20,102,092

27. Categories of Financial Instruments, Continued

Details of financial income and expense for the three-month periods ended March 31, 2013 and 2012, are as follows:

	2013	2012
	(In millions o	f Korean won)
Financial assets at fair value through profit or loss Gains on evaluation of derivatives Gains on trading of derivatives	₩ 5,931 83,054	₩ 22,315 26,608
Loans and receivables Interest income Losses on foreign currency transactions Gains(losses) on foreign currency translation	4,165 (383) 188,735	(735)
Financial liabilities at fair value through profit or loss Losses on evaluation of derivatives Losses on trading of derivatives	(85,366) (54,301)	,
Financial liability measured at amortized cost Interest expense Gains(losses) on foreign currency transactions Gains(losses) on foreign currency translation Comprehensive income recognized during the year	(259,515) (46,221) (132,034) (102,948)	31,753 30,147
Hedging derivative instruments Interest expense Comprehensive income recognized during the year	(6,494) (55,145)	, ,
Others Capitalization of interest	61,115	39,672
	₩ <u>(399,407)</u>	₩ <u>(203,343)</u>

28. Risk Management

The Group has exposure to the following risks from its use of financial instruments:

- · credit risk
- liquidity risk
- · market risk
- · operational risk

This note presents information about the Group's exposure to each of the above risks, the Group's objectives, policies and processes for measuring and managing risk, and the Group's management of capital. Further quantitative disclosures are included throughout these consolidated financial statements.

28. Risk Management, Continued

(a) Risk management framework

The Management Committee has overall responsibility for the establishment and oversight of the Group's risk management framework. The Committee has established the Risk Management Committee, which is responsible for developing and monitoring the Group's risk management policies.

The Group's risk management policies are established to identify and analysis the risks faced by the Group, to set appropriate risk limits and controls, and to monitor risks and adherence to limits. Risk management policies and systems are reviewed regularly to reflect changes in market conditions and the Group's activities. The Group's Audit Committee oversees how management monitors compliance with the Group's risk management policies and procedures, and reviews the adequacy of the risk management framework in relation to the risks faced by the Group.

(b) Equity risk management

While the equity management of the Group maintains the ability to continue as an ongoing entity, it also minimizes the issuance costs of equity in order to maximize the returns on owner's equity. Moreover, the management of the Group periodically inspects the structure of equity, and makes a continuous effort to improve the debt ratios through various actions such as short- and long-term borrowings, disposals of asset, and capital increase by issuing new shares

Details of accounts which are managed for capital management purposes as of March 31, 2013 and December 31, 2012, are summarized as follows:

	March 31, 2013	B December 31, 2012				
		(In millions of Korean won, except net liabilities ratio)				
Liabilities						
Short-term borrowings ∀	<i>t</i> 5,118,118	3 ₩ 4,626,514				
Current portion of long-term debts	111,376	110,184				
Current portion of debentures	2,094,615	2,170,153				
Current portion of finance lease liabilities	263,488	241,156				
Long-term borrowings, net of current portion	387,170	409,291				
Debentures, net of current portion	17,886,523	17,009,901				
Finance lease liabilities	2,403,768	2,381,929				
Total Liabilities	28,265,058	26,949,128				
Assets						
Cash and cash equivalents	174,384	245,466				
Short-term financial instruments	65,036	-				
Total assets	239,420	307,048				
Net liabilities	28,025,638	26,642,080				
Total equity ∀						
Net liabilities ratio	329.5	5% 318.3%				

28. Risk Management, Continued

(c) Financial risk management

Credit Risk

Credit risk is the risk of financial loss to the Group if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises principally from the Group's receivables from customers and investment securities.

The Group establishes an allowance for impairment that represents its estimate of incurred losses in respect of trade and other receivables and investments. The main components of this allowance are a specific loss component that relates to individually significant exposures. The collective loss allowance is determined based on historical data of payment statistics for similar financial assets. The book value of financial assets means maximum exposure in respect of credit and counterparty risk.

The maximum exposure by credit risk as of March 31, 2013 and December 31, 2012, are summarized as follows:

		March 31, 2013		December 31, 2012
	_	(In millions	of K	orean won)
Held-to-maturity financial assets	₩	1,633	₩	1,569
Financial assets at fair value through profit or loss		35,977		57,408
Short-term financial instruments		65,036		61,582
Loans and receivables		361,359		346,202
Cash and cash equivalents		171,928		242,746
Trade and other accounts receivable ¹		7,859,324		8,255,271
Derivative financial assets	_	98	_	1,349
Total	₩	8,495,355	₩	8,966,127

¹ The Group has received blank promissory notes from customers and made deposit transfer agreements to decrease the credit risk of trade accounts receivable.

Liquidity risk

Liquidity risk is the risk that the Group will encounter difficulty in meeting the obligations associated with its financial liabilities that are settled by delivering cash or another financial asset. The Group's approach to managing liquidity is to ensure, as far as possible, that it will always have sufficient liquidity to meet its liabilities when due, under both normal and stressed conditions.

28. Risk Management, Continued

(c) Financial risk management, Continued

Aggregate maturities of the Group's financial liabilities as of March 31, 2013 and December 31, 2012, are summarized as follows:

		March 31, 2013							
	Book value	Cash flows in contract	1 year or less	1 ~ 5 years	More than 5 years				
		(In mill	ions of Korean v	von)					
Non-derivative financial liabilities									
Debentures	₩ 19,981,138 ₩	24,951,182 ₩	2,878,604 ₩	⁴ 11,661,176 ₩	10,411,402				
Borrowings	5,616,664	5,674,346	5,190,235	354,576	129,535				
Finance lease liabilities	2,667,256	2,976,797	315,855	1,254,736	1,406,206				
Trade and other accounts payable 1	2,381,050	2,381,050	2,261,857	119,193	-				
Other guarantees	2,225	172,790	172,790						
Total	₩ 30,648,333 ₩	36,156,165 ₩	10,819,341 \	<u>13,389,681</u> ₩	<u>11,947,143</u>				
Derivative financial liabilities Derivative financial liabilities		252,096	15,091	205,265	31,740				

1 These trade and other accounts payable exclude financial lease liabilities.

	December 31, 2012							
	Book value	Cash flows in contract	1 year or less	1 ~ 5 years	More than 5 years			
		(In milli	ons of Korean v	von)				
Non-derivative financial liabilities								
Debentures	₩ 19,180,054 ₩	24,048,031₩	2,950,057₩	11,481,622₩	9,616,352			
Borrowings	5,145,988	5,207,411	4,773,077	307,153	127,181			
Finance lease liabilities Trade and other accounts	2,623,085	2,978,580	298,293	1,212,119	1,468,168			
payable 1	3,046,407	3,050,110	2,934,987	115,123	-			
Other guarantees	2,047	172,049	172,049					
Total	₩29,997,581	35,456,181 ₩	11,128,463 W	13,116,017 ₩	11,211,701			
Derivative financial liabilities Derivative financial liabilities	215,171	282,093	60,195	212,659	9,239			

¹ These trade and other accounts payable exclude finance lease liabilities.

28. Risk Management, Continued

(c) Financial risk management, Continued

Currency risk

The Group is exposed to currency risk on sales, purchases and borrowings that are denominated in a currency other than the respective functional currencies of Corporation entities, primarily the US Dollars (USD), but also Canadian Dollars (CAD) and Australian Dollars (AUD). The Group is exposed to foreign currency risks related in recognition of financial lease liabilities for assets and liabilities in foreign currency and LNG transport ships. The Group uses currency forward and other derivative instruments to hedge the risk of changes in foreign currency change arising from foreign currency liabilities.

In respect of other monetary assets and liabilities denominated in foreign currencies, the Group ensures that its net exposure is kept to an acceptable level by buying or selling foreign currencies at spot rates when necessary to address short-term imbalances.

The book values of foreign currency assets and liabilities as of March 31, 2013 and December 31, 2012, are summarized as follows:

	March 31, 2013							
	USD	EUR	AUD	CAD	JPY	CHF	GBP	MYR
			(In mil	lions of Kore	ean won)			
Assets								
Cash and cash equivalents	46,595	992	33,384	3,707	-	-	-	22
Trade and other accounts								
receivable	450,582	21,718	5,910	-	-	-	-	-
Loans and receivables	305,852	-	11,002	-	-	-	-	-
Non-trade receivables	6,781	-	2,593	1,545	-	-	-	-
Available-for-sale financial								
assets	-	-	2,259	-	-	-	-	-
Current portion of other non-								
financial assets	6							
Total assets	809,816	22,710	55,148	5,252		_		22
Liabilities								
Trade and other accounts								
payable	1,557,689	121	77,034	45,184	_	-	_	-
Borrowings	249,112	-	· -	257,930	_	-	-	-
Debentures	4,526,247	85,513	347,427	328,329	460,251	1,112,450	-	-
Finance lease liabilities	2,667,256	-	-	-	-	-	-	-
Total liabilities	9,000,304	85,634	424,461	631,443	460,251	1,112,450		
Net exposure	(8,190,488)	(62,924)	(369,313)	(626,191)	(460,251)	(1,112,450)		22

28. Risk Management, Continued

(c) Financial risk management, Continued

				March 3	31, 2013			
	THB	CNY	MXN	RUB	HKD	SGD	AED	MZN
			(In m	illions of	Korean wo	n)		
Assets	0	0.0	4 0 4 4	005			70	20
Cash and cash equivalents Trade and other accounts receivable	2	86	1,344	205 15	-	<u>-</u>	79	39
Loans and receivables	-	_	18	152	_	_	_	_
Non-trade receivables	-	-	-	-	-	_	-	-
Available-for-sale financial assets	-	-	-	36	-	-	-	-
Current portion of other non-financial								
assets		-	-	-	-			
Total assets	2	86	1,362	408	-	-	79	39
Liabilities								
Trade and other accounts payable	_	_	393	14	_	_	22	-
Borrowings	-	-	-	-	-	-	-	-
Debentures	-	28,632	-	-	142,544	35,851	-	-
Finance lease liabilities		-	-	-	-	-	-	
Total liabilities		28,632	393	14	142,544	35,851	22	
Net exposure	2	(28,546)	969	394	(142,544)	(35,851)	57	39
			De	cember	31, 2012			
	USD	EUR	AUD	CAI) JPY	CHF	GBP	MYR
			(In mil	lions of k	(orean won)			
Assets								
Cash and cash equivalents	39,66		,	,	218		-	16
Trade and other accounts receivable Loans and receivables	430,78 290,01	,		,	900		-	-
Non-trade receivables	18,31		46		128		_	_
Available-for-sale financial assets	8:			,	-		-	-
Current portion of other non-financial		_						
assets	6							
Total assets	778,91	9 6,656	47,16	6 13,5	546			16
Liabilities								
Trade and other accounts payable	2,087,37	2 15,863	76,23	1 35,9	915		308	-
Borrowings	1,069,03	3 -	15,59	5 216,7	716		-	-
Debentures	4,252,26		333,42	9 322,8	315 486,52	25 762,515	-	-
Finance lease liabilities Other financial liabilities	2,623,08	5 - 2 -		-	-		-	-
		_	405.05		- 400.54	700 545		
Total liabilities	10,031,75	9 100,839	425,25	575,4	486,52	25 762,515	308	
Net exposure	(9,252,84	0) (94,183	(378,08	9) (561,9	900) (486,52	25) (762,515	(308)	16

28. Risk Management, Continued

(c) Financial risk management, Continued

	December 31, 2012								
	THB	CNY	MXN	RUB	HKD	SGD	AED	MZN	
			(In millions	s of Korean w	on)			
Assets									
Cash and cash equivalents Trade and other accounts	2	19	38	-	-	-	103	842	
receivable	-	-	-	11	-	-	-	-	
Loans and receivables	-	-	17	150	-	-	-	-	
Non-trade receivables Available-for-sale financial	-	-	-	-	-	-	-	-	
assets Current portion of other non-	-	-	-	102	-	-	-	-	
financial assets									
Total assets	2	19	55	263			103	842	
Liabilities Trade and other accounts									
payable	-	-	360	_	-	-	_	_	
Borrowings	-	-	-	-	-	-	-	-	
Debentures	-	27,501	-	-	137,489	35,019	-	-	
Finance lease liabilities	-	-	-	-	-	-	-	-	
Other financial liabilities	-	-	-	-	-	-	-	-	
Total liabilities		27,501	360	-	137,489	35,019		_	
Net exposure	2	(27,482)	(305)	263	(137,489)	(35,019)	103	842	

Foreign currency exchange rate as of March 31, 2013 and December 31, 2012, are as follows:

	March 31, 2013	December 31, 2012		
	(In Ko	rean won)		
USD	1,112.10	1,071.10		
EUR	1,425.21	1,416.26		
AUD	1,158.09	1,111.43		
CAD	1,094.43	1,076.05		
JPY	11.80	12.48		
CHF	1,171.00	1,173.10		
GBP	1,690.11	1,730.95		
MYR	358.92	349.80		
THB	37.92	34.97		
CNY	178.95	171.88		
MXN	89.97	82.51		
RUB	35.72	35.29		
HKD	143.26	138.18		
SGD	896.28	875.48		
AED	302.78	291.61		
MZN	36.92	36.35		

28. Risk Management, Continued

(c) Financial risk management, Continued

Sensitivity analysis of income before taxes from changes of foreign exchange rate for the three-month period ended March 31, 2013, is as follows:

		10% Increase	10% Decrease		
		(In millions of Korean w			
Income before income taxes	₩	(39,833)₩	39,833		

Interest rate risk

The Group borrows funds at fixed and variable interest rate. Also, the Group's management monitors the level of interest rates and maintains the balance of borrowings at variable rates and fixed rates.

Variable interest rate borrowings as of March 31, 2013 and December 31, 2012, are summarized as follows:

		March 31, 2013		December 31, 2012	
	_	(In millions of Korean won)			
Short-term borrowings	₩	37,512	₩	-	
Long-term borrowings		372,364		397,139	
Debentures		551,696		698,493	
Finance lease liabilities	_	2,667,256	_	2,623,085	
	₩_	3,628,828	₩	3,718,717	

Sensitivity analysis of income before taxes from changes of interest rate for the three-month period ended March 31, 2013 and for the year ended December 31, 2012, is as follows:

		March 31, 2013			Decem	1, 2012	
		100bp Increase	100bp Decrease		100bp Increase		100bp Decrease
			(ln	millions of Ko	ean won)		
Income before income taxes	₩	(36,288)	₩	36,288 ₩	(37,187)	₩	37,187

(d) Fair value of financial assets and liabilities

The level of fair value hierarchy is as follows:

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities
- Level 2: inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly (i.e., as prices) or indirectly (i.e., derived from prices)
- Level 3: inputs for the asset or liability that are not based on observable market data (unobservable inputs).

28. Risk Management, Continued

(d) Fair value of financial assets and liabilities, Continued

The fair value measurements classified by fair value hierarchy as of March 31, 2013 and December 31, 2012, are as follows:

				Marc	h 31,	2013		
		Level 1		Level 2		Level 3		Total
			(I	n millions of	Kore	an won)		
Available-for-sale financial assets Financial assets at fair value through	₩	2,259	₩	-	₩	-	₩	2,259
profit or loss Derivative instruments assets / Foreign currency swap Financial liabilities at fair value through profit or loss Derivative instruments liabilities / Foreign currency swap Derivative instruments liabilities / Interest rate swap Derivative instruments liabilities / Foreign currency forwards		-		35,977		-		35,977
		-		98		-		98
		-		153,389		-		153,389
		-		88,117		-		88,117
		-		2,696		-		2,696
		-		7,894		-		7,894
				D	L 24	0040		
	_			Decem	per 3	l, 2012		
	_	Level 1		Level 2		Level 3		Total
	-	Level 1	_			Level 3	n) –	Total
Available-for-sale financial assets Financial assets at fair value through	₩	3,422	₩	Level 2		Level 3	n) ₩	Total 3,422
	₩		₩	Level 2	of Ko	Level 3	•	
Financial assets at fair value through profit or loss	₩		₩	Level 2 (In millions	of Ko	Level 3	•	3,422
Financial assets at fair value through profit or loss Derivative instruments assets / Foreign currency swap	₩		₩	Level 2 (In millions - 57,408	of Ko	Level 3	•	3,422 57,408
Financial assets at fair value through profit or loss Derivative instruments assets / Foreign currency swap Financial liabilities at fair value through profit or loss	₩		₩	Level 2 (In millions - 57,408 1,349	of Ko	Level 3	•	3,422 57,408 1,349
Financial assets at fair value through profit or loss Derivative instruments assets / Foreign currency swap Financial liabilities at fair value through profit or loss Derivative instruments liabilities / Foreign currency swap	- - ₩		₩	Level 2 (In millions 57,408 1,349 99,762	of Ko	Level 3	•	3,422 57,408 1,349 99,762

The following table presents available-for-sale financial assets that are valued at historical cost as of March 31, 2013 and December 31, 2012:

Category		March 31, 2013		December 31, 2012	
		(In millions of Korean won)			
Available-for-sale financial assets 1	₩	20,982	₩	20,979	

¹ The available-for-sale financial assets are unlisted equities. Because the range of reasonable fair value estimates is significant and the probabilities of the various estimates cannot be reasonably assessed and therefore, these instruments are measured at cost.

29. Transactions and Balances with Related Parties

Detail list of related parties as of March 31, 2013, is as follows:

Relationship	Related parties
Subsidiaries	Korea Gas Technology Corp. KOGAMEX Investment Manzanillo B.V. KOMEX-GAS, S. de R.L. de C.V. KG Timor Leste Ltd. KG Mozambique Ltd. KG Krueng Mane Ltd. KOGAS Vostok LLC KOGAS Canada Ltd. KOGAS lraq B.V. KOGAS Badra B.V. KOGAS Mansuriyah B.V. KOGAS Akkas B.V. KOGAS Australia Pty. Ltd. Kogas Canada LNG Ltd Kogas Prelude Pty. Ltd. KOGAS Mozambique Lda. Kyung-Ki CES Corp. Manzanillo Gas Tech, S. de R.L. de C.V. KGLNG E&P Pty Ltd. KGLNG E&P II Pty Ltd.
Associates	Korea Ras Laffan LNG Ltd. Korea LNG Ltd. Hyundai Yemen LNG Company Korea LNG Trading Co., Ltd. Kor-Uz Gas Chemical Investment Ltd. South-East Asia Gas Pipeline Company Limited Sulawesi LNG Development TOMORI E&P LIMITED AMEC Partners Korea Ltd.
Joint ventures	Kor-Uz Gas cylinder Investment Ltd. Kor-Uz Gas C&G Investment Ltd. CORDOVA GAS RESOURCES Ltd. GLNG Operations Pty Ltd GLNG Property Pty Ltd JV SACOTECH Koman Energy FZCO Terminal KMS de GNL, S. De R.L. De C.V.
Others 1	Korea Southern Power Co., Ltd. Korea Midland Power co., Ltd. Korea Western Power Co., Ltd Korea East-West Power Co., Ltd. Korea South-East Power Co., Ltd

¹ Significant subsidiaries of Korea Electric Power Corporation, which exercises significant influence on the Corporation.

29. Transactions and Balances with Related Parties, Continued

Significant transactions which occurred in the normal course of business with related parties for the three-month periods ended March 31, 2013 and 2012, are summarized as follows:

			Sales and oth	ner income		Purchase other exp	
Related party	Transaction		2013	2012		2013	2012
			(In millions of	Korean won)			
Korea Ras Laffan LNG Ltd.	Dividends	₩	37,656 ₩	35,519	₩	- ₩	-
Korea LNG Ltd.	Dividends		6,528	6,882		-	-
Hyundai Yemen LNG Company	Interest income		422	214		-	-
Korea LNG Trading Co., Ltd.	Costs of sales		-	-		26,435	36,972
	Interest expense		-	-		2,343	2,957
South-East Asia Gas Pipeline Company Limited	Interest income		773	_		_	_
Korea Southern Power Co.,							
Ltd. (*)	Revenue		1,122,438	1,001,719		-	-
Korea Midland Power Co.,							
Ltd. (*)	Revenue		779,019	712,021		-	-
Korea Western Power Co.,							
Ltd. (*)	Revenue		749,775	768,961		-	-
Korea East-West Power Co.,							
Ltd. (*)	Revenue		471,953	500,469		-	-
Korea South-East Power Co.,							
Ltd. (*)	Revenue		250,656	247,426		-	-

^(*) Special consumption tax amounts are included.

29. Transactions and Balances with Related Parties, Continued

Account balances with related parties as of March 31, 2013 and December 31, 2012, are summarized as follows:

			Receivables		Pay	yables
Related party	Account	_	March 31, 2013	December 31, 2012	March 31, 2013	December 31, 2012
		_	(In millions	of Korean won)		
Korea Ras laffan LNG Ltd.	Non-trade accounts receivable	₩	- ₩	4,483 ₩	<i>t</i> - ₩	+ -
Korea LNG Ltd.	Non-trade accounts					
	receivable		1,704	-	-	-
Hyundai Yemen LNG Company Korea LNG Trading	Accrued income		7,938	7,516	-	-
Co., Ltd.	Finance lease liabilities		-	-	808,102	778,309
	Current portion of finance lease liabilities Non-trade accounts	9	-	-	31,509	30,347
	payable		_	_	3,867	1,005
	Accrued expense		_	_	5,683	4,182
	Prepaid expense		-	-	1,253	, -
Korea Southern Power	Trade accounts				•	
Co., Ltd.	receivable		405,955	471,023	_	-
Korea Midland Power	Trade accounts					
Co., Ltd.	receivable		263,937	314,239	-	-
Korea Western Power	Trade accounts					
Co., Ltd.	receivable		259,649	316,309	-	-
Korea East-West	Trade accounts					
Power Co., Ltd.	receivable		142,354	199,661	-	-
Korea South-East	Trade accounts					
Power Co., Ltd.	receivable		79,780	108,327	-	-

Loans to related parties as of March 31, 2013 and December 31, 2012, are summarized as follows:

			March 31, 2013		December 31, 2012
		_	(In millio	ns of	Korean won)
Associate	South-East Asia Pipeline Company Limited Hyundai Yemen LNG Company	₩	34,305 107,825	₩	28,474 103,850
Total		₩_	142,130	₩	132,324

As of March 31, 2013, the Group has provided payment guarantees amounting to USD 125 million, CAD 27 million, AUD 23 million and KRW 2,400 million for the long-term debts of Terminal KMS de GNL, S. de R.L. de C.V. and others to KEB, HSBC and others.

Except for guarantees described above, the Group has provided guarantees for the shareholder of Donggi-Senoro LNG Company and Donggi-Senoro LNG Company on funding obligation as a

29. Transactions and Balances with Related Parties, Continued

shareholder of Sulawesi LNG Development. Also the Group has provided guarantees on the financing obligation under agreement on the joint operation with KGLNG investors, guarantees on KGLNG Liquefaction according to the GLNG liquefaction plant (Train 1, Train 2) EPC contract.

Key management compensation for the three-month periods ended March 31, 2013 and 2012, consists of:

		2013		2012
	_	(In millions	of K	rean won)
Short-term employee benefits Retirement benefits Other long-term employees benefits	₩	443 141 174	₩	486 98 -
Total	₩_	758	₩_	584

30. Commitments and Contingencies

The Group is involved in various lawsuits and claims for alleged damages totaling \$4,298 million and \$4,263 million as of March 31, 2013 and December 31, 2012, respectively, which arose in the ordinary course of business.

As of March 31, 2013, the Group has provided guarantees on the payment of debts amounting to USD 1 million (2012: USD 7 million).

Details of commitments held by the Group as of March 31, 2013, are as follows:

	Financial institutions	Limit	Amount
	(In millions of Korean won, thousand Canadian dollars and	ds of US dollars and thousands of Euros	in thousands of)
Bank overdraft	Kookmin Bank and other	115,000	4,625
Commitments to letter of credit	Korea Exchange Bank	USD 54,500	EUR 4,565
	Woori Bank	USD 53,144	USD 53,144
Limit on foreign currency			
borrowings	Credit Agricole and others	USD1,620,000	USD109,643
			CAD201,400
	SCOTIA	CAD 70,000	-
Foreign currency commitment	Korea Exchange Bank	1,139	188
-	Korea Exchange Bank and		
	other	USD 101,381	USD 52,408
	JBIC	CAD 27,000	CAD 27,000
Commitment to collateral	Korea Exchange Bank	2,400	2,400
Credit limit	Korea Exchange Bank	400,000	-

Commitment to purchase raw materials

The Group has made contracts with RASGAS and other companies to purchase LNG amounting to 32,440 thousand tons annually.

31. Change in Accounting Treatment for Settled Income from Natural Gas Sales

The Group has changed the accounting treatment for the settled income from natural gas sales according to responses from the Korea Accounting Standards Board in 2012.

The Group has retrospectively applied the change in accounting treatment for settled income, and the comparative statement of comprehensive income for the three-month period ended March 31, 2012, has, therefore, been restated.

		March 31, 2012		
		Before adjustment		After adjustment
		(In millions of Korean won)		
Revenue	₩	11,870,541	₩	11,370,986
Cost of sales		11,067,822		10,567,635
Gross profit		802,719		803,351
Operating income		718,077		718,077
Net income		411,290		411,290

THE ISSUER

Korea Gas Corporation

171 Dolmaro Bundang-gu, Seongnam Gyunggi-do, 463-754 Korea

PRINCIPAL PAYING AGENT AND TRANSFER AGENT

The Bank of New York Mellon, London Branch

40th Floor, One Canada Square London, E14 5AL United Kingdom

PAYING AGENT AND TRANSFER AGENT

The Bank of New York Mellon

101 Barclay Street, Floor 4E New York, NY 10286 United States

REGISTRAR

101 Barclay Street, Floor 4E New York, NY 10286 United States

EURO REGISTRAR

The Bank of New York Mellon (Luxembourg) S.A.

Vertigo Building—Polaris 2-4 rue Eugène Ruppert L-2453 Luxembourg

DEALERS

Barclays Bank PLC

5 The North Colonnade, Canary Wharf London E14 4BB United Kingdom

Citigroup Global Markets Limited

Citigroup Centre, Canada Square, Canary Wharf London E14 5LB United Kingdom

Credit Suisse Securities (Europe) Limited

One Cabot Square London E14 4QJ United Kingdom

Goldman Sachs International

Peterborough Court, 133 Fleet Street London EC4A 2BB United Kingdom

BNP Paribas

10 Harewood Avenue London NW1 6AA United Kingdom

Crédit Agricole Corporate and Investment Bank

27/F, Two Pacific Place 88 Queensway Hong Kong

Deutsche Bank AG, Singapore Branch

One Raffles Quay #17-00 South Tower Singapore 048583

The Hongkong and Shanghai Banking Corporation Limited

Level 17, HSBC Main Building 1 Queen's Road Central Hong Kong

J.P. Morgan Securities plc

25 Bank Street, Canary Wharf London E14 5JP United Kingdom

Merrill Lynch International

2 King Edward Street London EC1A 1HQ United Kingdom

Morgan Stanley & Co. International plc

25 Cabot Square, Canary Wharf London E14 4QA United Kingdom

UBS AG, Hong Kong Branch

52F Two International Finance Centre 8 Finance Street, Central Hong Kong

The Korea Development Bank

14 Eunhaeng-ro Youngdeungpo-gu Seoul, Korea 150-973

Mizuho Securities Asia Limited

12th Floor, Chater House 8 Connaught Road Central Hong Kong

The Royal Bank of Scotland plc

135 Bishopsgate London EC2M 3UR United Kingdom

LEGAL ADVISORS TO THE ISSUER

As to New York law

As to Korean law

Cleary Gottlieb Steen & Hamilton LLP

c/o 39/F Bank of China Tower One Garden Road Hong Kong

Bae, Kim & Lee LLC 133 Teheran-ro, Gangnam-gu Seoul 135-723 Korea

LEGAL ADVISOR TO THE DEALERS

As to New York law

Simpson Thacher & Bartlett LLP

25th Floor, West Tower Mirae Asset Center 1 26 Eulji-R0 5-Gil, Jung-gu Seoul, Korea

INDEPENDENT ACCOUNTANTS OF THE COMPANY

Samil PricewaterhouseCoopers

LS Yongsan Tower 191 Hangangno 2-ga, Yongsan-gu Seoul 140-702 Korea