

## **Korea National Oil Corporation**

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

## U.S.\$9,000,000,000

## **Global Medium Term Note Program**

This Offering Circular replaces and supersedes the offering circular dated July 1, 2014 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.\$9,000,000,000 Global Medium Term Note Program (the "Program"), Korea National Oil Corporation (the "Issuer" or the "Company") may from time to time issue notes (the "Notes") denominated in any currency agreed between the Issuer and the relevant Dealer(s) (as defined below).

The Notes may be issued in bearer or registered form (respectively, "Bearer Notes" and "Registered Notes"). The maximum aggregate nominal amount of all Notes from time to time outstanding under the Program will not exceed U.S.\$9,000,000,000 (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 purchase such Notes.

Approval in-principle has been received from the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") for the listing and quotation of Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted to the Official List of the Singapore Stock Exchange. 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 that are applicable to each Tranche (as defined under "Terms and Conditions of the Notes") of Notes will be set out in a pricing supplement (the "Pricing Supplement") which, with respect to Notes to be listed on the Singapore Stock Exchange, will be submitted to the Singapore Stock Exchange before the date of listing of the Notes of such Tranche.

The Singapore Stock Exchange assumes no responsibility for the correctness of any of the statements made, opinions expressed or reports contained herein. Approval in-principle from, and admission to the Official List of, and listing and quotation of any Notes on, the Singapore Stock Exchange are not to be taken as an indication of the merits of the Issuer, the Program or the Notes.

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

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

The Notes have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or any state securities laws and, unless so registered, may not be offered or sold, except pursuant to an exemption from, or in a transaction not subject to, the registration requirements of the Securities Act and applicable state securities laws. Accordingly, the Notes will be offered and sold (a) in the United States, only to "qualified institutional buyers" (as defined in Rule 144A under the Securities Act) or to "accredited investors" (as defined in Rule 501(a)(1), (2), (3) or (7) under the Securities Act) that are institutions and (b) in "offshore transactions" to persons other than "U.S. persons" (each as defined in Regulation S under the Securities Act). See "Subscription and Sale and Transfer and Selling Restrictions."

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

Arranger
Citigroup
Dealers

Barclays
BofA Merrill Lynch
Crédit Agricole CIB
Deutsche Bank
HSBC
The Korea Development Bank
Standard Chartered Bank

BNP PARIBAS
Citigroup
Credit Suisse
Goldman Sachs International
J.P. Morgan
Société Générale Corporate & Investment Banking
UBS

The Issuer, having made all reasonable enquiries, confirms 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 Issuer accepts 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 Issuer accepts 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.

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 Issuer in connection with the Program. No Dealer accepts any responsibility or liability in relation to the information contained or incorporated by reference in this Offering Circular or any other information provided by the Issuer in connection with the Program. The Dealers accordingly disclaim all and any liability whether arising in tort or contract or otherwise which it might otherwise have in respect of this Offering Circular.

No person is or has been authorized by the Issuer to give any information or to make any representation not contained in or not consistent with 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 the Issuer or any of 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 the Issuer or any of 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 Issuer. 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 the Issuer or any of the Dealers to any person to subscribe for or to purchase any Notes.

Neither the delivery of this Offering Circular nor the offering, sale or delivery of any Notes shall in any circumstances imply that the information contained herein concerning the Issuer is correct at any time subsequent to the date hereof or that any other information supplied in connection with the Program is correct as of any time subsequent to the date indicated in the document containing the same. The Dealers expressly do not undertake to review the financial condition or affairs of the Issuer during the life of the Program or 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.

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

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 Issuer 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 Issuer 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, Japan, Hong Kong, Singapore 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 Issuer 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 (the "SEC") 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 European Economic Area 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 Issuer or any Dealer to publish a prospectus pursuant to Article 3 of the Prospectus Directive or supplement a prospectus pursuant to Article 16 of the Prospectus Directive, in each case, in relation to such offer, 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 term, as applicable, and the Issuer has consented in writing to its use for the purpose of such offer. Except to the extent sub-paragraph (ii) above may apply, neither the Issuer 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 Issuer or any Dealer to publish or supplement a prospectus for such offer.

For the purposes of the foregoing paragraph, the expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in each Relevant Member State.

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 or the Issuer 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."

### 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 OF THE NEW HAMPSHIRE REVISED STATUTES ("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.

### **AVAILABLE INFORMATION**

To permit compliance with Rule 144A in connection with any resales or other transfers of Notes that are "restricted securities" within the meaning of the Securities Act, the Issuer has undertaken in a deed poll dated September 29, 2010 (the "Deed Poll") to furnish, upon the request of a holder of such Notes or any beneficial interest therein, free of charge at the specified offices of the Paying Agents, to such holder or to a prospective purchaser designated by him, the information required to be delivered under Rule 144A(d)(4) under the Securities Act if, at the time of the request, the Issuer is neither a reporting company under Section 13 or 15(d) of the U.S. Securities Exchange Act of 1934, as amended (the "Exchange Act"), nor exempt from reporting pursuant to Rule 12g3-2(b) thereunder.

### PRESENTATION OF FINANCIAL INFORMATION

The Issuer maintains its financial books and records and prepares its financial statements in accordance with the Korean International Financial Reporting Standards ("Korean IFRS") and uses the dollar as its functional currency and the Won as its presentation currency in accordance with Korean IFRS. Investors should be cautioned that Korean IFRS differs in certain respects from generally accepted accounting principles in other countries, including generally accepted accounting principles in the United States ("U.S. GAAP"). The Issuer has made no attempt to identify or quantify the impact of differences between Korean IFRS and U.S. GAAP. See "Risk Factors — Risks related to Korea — 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."

The audited consolidated financial statements of the Issuer as of and for the years ended December 31, 2013 and 2014 contained in this Offering Circular have been presented in accordance with Korean IFRS. The unaudited condensed consolidated interim financial statements of the Issuer as of June 30, 2015 and for the six-month periods ended June 30, 2014 and 2015 contained in this Offering Circular have been presented in accordance with Korean IFRS No. 1034 "Interim Financial Reporting."

All annual and interim financial and other information in the Offering Circular regarding the Issuer's activities, financial condition and results of operations are presented on a consolidated basis.

In November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion and classified all income and expenses relating to the downstream operations as discontinued operations for the year ended December 31, 2014, and retrospectively restated the comparative consolidated statements of comprehensive loss for the year ended December 31, 2013 and the six months ended June 30, 2014. See Note 7 to the Company's audited consolidated financial statements and Note 6 to the Company's unaudited condensed consolidated interim financial statements appearing elsewhere in this Offering Circular.

### PRESENTATION OF RESERVES DATA

The determination of oil and natural gas reserves involves the preparation of estimates that have an inherent degree of associated uncertainty. Categories of proved and probable reserves have been established to reflect the level of these uncertainties and to provide an indication of the probability of recovery. The estimation and classification of reserves requires the application of professional judgment combined with geological and engineering knowledge to assess whether or not specific reserves classification criteria have been satisfied. Knowledge of concepts including uncertainty and risk, probability and statistics, and deterministic and probabilistic estimation methods is required to properly use and apply reserves definitions.

The crude oil and natural gas reserve estimates presented herein with respect to the oil and gas fields of the Company have been measured in accordance with the guidelines of the respective jurisdictions in which the fields are located.

The crude oil and natural gas reserve estimates of Harvest Operations presented herein are based on the guidelines contained in the Canadian Oil and Gas Evaluation Handbook (the "COGE Handbook") and the reserve definitions contained in both National Instrument 51-101 — *Standards of Disclosure for Oil and Gas Activities* ("NI 51-101") and the COGE Handbook. The crude oil and natural gas reserves estimates presented herein in respect of Harvest Operations are based on reports prepared by GLJ Petroleum Consultants Ltd. (the "Independent Reserves Evaluators") for the years ended December 31, 2012, 2013 and 2014.

"Proved reserves" generally mean those estimated quantities which geological and engineering data demonstrate with reasonable certainty to be recoverable in future years from known reservoirs under existing economic and operating conditions as of the date the estimate is made. "Proved developed reserves" generally mean those reserves that are expected to be recovered through existing wells with existing equipment and operating methods. "Proved undeveloped reserves" generally mean those reserves that are expected to be recovered from new wells on undrilled acreage or from existing wells where a relatively major expenditure is required for recompletion. However, such definitions may vary according to the applicable guidelines of the respective jurisdictions in which the fields are located.

Disclosure provided herein in respect of barrel of oil equivalent ("BOE") should be understood as follows. A BOE conversion ratio of 6 million cubic feet: 1 barrel is based on an energy equivalency conversion method primarily applicable at the burner tip and does not represent a value equivalency at the wellhead. Given the value ratio based on the current price of crude oil as compared to natural gas is significantly different from the energy equivalency of 6:1, utilizing a conversion ratio at 6:1 may be misleading as an indication of value.

### CERTAIN DEFINED TERMS AND CONVENTIONS

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 "Issuer", "Company" or "KNOC" shall mean Korea National Oil Corporation, a statutory juridical entity established under the Korea National Oil Corporation Act of 1978, as amended (the "KNOC Act"), or Korea National Oil Corporation and its consolidated subsidiaries collectively, as required or as indicated by context. All references to "U.S." shall mean the United States of America. In this Offering Circular, all references to "Won" or "W" are to the lawful currency of Korea, all references to "dollars," "\$", "U.S.\$" or "US\$" are to the lawful currency of the United States of America (the "U.S." or the "United States"), all references to "S\$" are to the lawful currency of Singapore, all references to "Japanese Yen" are to the lawful currency of Japan, all references to "Chinese Renminbi" are to the lawful currency of the People's Republic of China, all references to "euro" or "€" are to the lawful currency of the European Union, all references to "British Pounds", "£" or "GBP" are to the lawful currency of the United Kingdom, all references to "Swiss Franc" or "CHF" are to the lawful currency of Swiss Confederation, all references to "Hong Kong dollars" or "HKD" are to the lawful currency of Hong Kong Special Administrative Region of the People's Republic of China and all references to "Canadian dollars", "C\$" or "CAD" are to the lawful currency of Canada. For the reader's convenience, certain Won amounts in this Offering Circular have been translated into dollars at the market average exchange rate, announced by Seoul Money Brokerage Services, Ltd. in Seoul, between Won and dollars, rounded to the nearest tenth of one Won (the "Market Average Exchange Rate"). Unless otherwise stated, the translations of Won into dollars have been made at the Market Average Exchange Rate in effect on June 30, 2015, which was Won 1,124.1 to US\$1.00. For a discussion of historical information regarding the rate of exchange between the Won and the dollar, see "Exchange Rates." No representation is made that the Won or dollar amounts referred to in this Offering Circular could have been or could be converted into dollars or Won, as the case may be, at any particular rate or at all.

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 Issuer is a statutory juridical entity established in Korea pursuant to the KNOC Act. All of the Issuer's directors and officers and certain other persons named in this Offering Circular reside in Korea, and all or a significant portion of the assets of the directors and officers and certain other persons named in this Offering Circular and, substantial part of the Issuer'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 Issuer 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.

### FORWARD-LOOKING STATEMENTS

This Offering Circular contains certain "forward-looking statements" that are based on the Issuer's current expectations, assumptions, estimates and projections about the Issuer and the oil industry. The forward looking statements are subject to various risks and uncertainties. Generally, these forward-looking statements can be identified by the use of forward-looking terminology such as "anticipate", "believe", "estimate", "expect", "intend", "target", "seek", "aim", "contemplate", "project", "plan", "goal", "should" and similar expressions or the negatives thereof. Those statements include, among other things, the discussions of the Issuer's business strategy and expectations concerning its market position, future operations, cash flows, margins, profitability, liquidity and capital resources. Reliance on any forward-looking statement involves risks and uncertainties, and although the Issuer believes that the assumptions on which the forward-looking statements are based are reasonable, any of those assumptions could prove to be inaccurate, and, as a result, the forward-looking statements based on those assumptions could be incorrect. The uncertainties in this regard include, but are not limited to, those identified in the risk factors discussed elsewhere in this Offering Circular. See the section entitled "Risk Factors" in this Offering Circular. In light of these and other uncertainties, you should not conclude that the Issuer will necessarily achieve any plans and objectives or projected financial results referred to in any of the forward-looking statements. The Issuer does not undertake to release the results of any revisions of these forward-looking statements to reflect future events or circumstances, except as required by law.

### TABLE OF CONTENTS

DOCUMENTS INCORPORATED BY REFERENCE	viii
GENERAL DESCRIPTION OF THE PROGRAM	ix
SUMMARY OF THE PROGRAM	1
RISK FACTORS	5
FORM OF THE NOTES	22
TERMS AND CONDITIONS OF THE NOTES	34
USE OF PROCEEDS	61
EXCHANGE RATES	62
CAPITALIZATION	63
SELECTED FINANCIAL AND OTHER DATA	64
MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	67
BUSINESS	90
MANAGEMENT	126
RELATED PARTY TRANSACTIONS	130
REGULATION	131
TAXATION	135
INDEPENDENT AUDITORS	145
SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS	146
BOOK-ENTRY CLEARANCE SYSTEMS	154
GENERAL INFORMATION	158
INDEX TO CONSOLIDATED FINANCIAL STATEMENTS	F-1

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 may be no obligation on the Stabilizing Manager(s) (or persons acting on behalf of any Stabilizing Manager(s)) to undertake any stabilizing action. Such stabilizing, if commenced, may be discontinued at any time, and must be brought to an end after a limited period.

### 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, if published later, the most recently published interim consolidated financial statements of the Issuer from time to time (see "General Information" for a description of the financial statements currently published by the Issuer); and
  - (b) all supplements or amendments to this Offering Circular circulated by the Issuer 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 Issuer 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 Issuer at its office 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 Singapore Stock Exchange.

The Issuer will, in connection with the listing of the Notes on the Singapore Stock Exchange, so long as the rules of such exchange so require, in the event of any material change in the condition of the Issuer which 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 Singapore Stock Exchange.

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 may from time to time issue Notes denominated in any currency, subject 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 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" below.

This Offering Circular and any supplement will only be valid for the offering of Notes during the period of 12 months from the date of this Offering Circular in an aggregate nominal amount of the Notes which, when added to the aggregate nominal amount then outstanding of all Notes previously or simultaneously issued under the Program, does not exceed U.S.\$9,000,000,000 or its equivalent in other currencies. For the purpose of calculating the U.S. dollar equivalent of the aggregate nominal 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, 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 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 nominal 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" below shall have the same meanings in this summary.

IssuerKorea National Oil CorporationDescriptionGlobal Medium Term Note Program.ArrangerCitigroup Global Markets Inc.

### Notes with 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 of at least £100,000 or its equivalent. See "Subscription and Sale and Transfer and Selling Restrictions."

Issuing and Principal Paying Agent .... The Bank of New York Mellon, London Branch

Registrar ...... The Bank of New York Mellon

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

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 and the relevant Dealer.

may be redenominated in euro. The relevant provisions applicable to

any such redenomination are contained in Condition 5.

Maturities	Such maturities as may be agreed between the Issuer 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 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.
Form of Notes	The Notes will be issued in registered form or in bearer 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 and the relevant Dealer and on redemption, and will be calculated on the basis of such Day Count Fraction (as defined in "Terms and Conditions of the Notes") as may be agreed between the Issuer and the relevant Dealer.
Floating Rate Notes	Floating Rate Notes will bear interest at a rate determined:
C C C C C C C C C C C C C C C C C C C	(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 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 such other basis as may be agreed between the Issuer and the relevant Dealer, all as indicated in the applicable Pricing Supplement.
	The margin (if any) relating to such floating rate will be agreed between the Issuer and the relevant Dealer for each Series (as defined under "Terms and Conditions of the Notes") of Floating Rate Notes.
Index Linked 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 and the relevant Dealer may agree.
Other provisions in relation to Floating Rate Notes and Index Linked Interest	
Notes	Floating Rate Notes and Index Linked Interest Notes may also have a maximum interest rate, a minimum interest rate or both. Interest on Floating Rate Notes and Index Linked Interest Notes in respect of each Interest Period, as agreed prior to issue by the Issuer 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 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 and the relevant Dealer may agree.

Zero Coupon Notes	Zero Coupon Notes will be offered and sold at a discount to their nominal amount and will not bear interest other than in the case of late payment.
Change of Control	Upon the occurrence of a Change of Control, each holder of Notes will have the right to require the Issuer to redeem all or any part of such holder's Notes at a redemption price equal to 100% of the principal amount thereof plus accrued but unpaid interest, if any, to the date of redemption, as further described in Condition 8(d)(i).
Redemption	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 Event of Default (as defined in "Terms and Conditions of the Notes"), or that such Notes will be redeemable at the option of the Issuer and/or the Noteholders (as defined in "Terms and Conditions of the Notes") upon giving notice to the Issuer or the Noteholders, 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 and the relevant Dealer. The applicable Pricing Supplement may provide that the Notes may be redeemable in two or more installments of such amounts and on such dates as are indicated in the applicable Pricing Supplement.
Denomination of Notes	The Notes will be issued in such denominations as may be agreed between the Issuer and the relevant Dealer save that the minimum denomination of each Note will be such 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 relevant Specified Currency. 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.
Taxation	All payments in respect of the Notes will be made without deduction for or on account of withholding taxes imposed by any Tax Jurisdiction (as defined in "Terms and Conditions of the Notes"), subject as provided in Condition 9. In the event that any such deduction is made, the Issuer will, save in certain limited circumstances provided in Condition 9, be required to pay additional amounts to cover the amounts so deducted.
Certain Covenants	The terms of the Notes will contain a negative pledge provision and certain other covenants, as further described in Condition 4.
Cross Default	The terms of the Notes will contain a cross default provision as further described in Condition 11.
Status of the Notes	The Notes and any related Receipts (as defined in "Terms and Conditions of the Notes") and Coupons (as defined in "Terms and Conditions of the Notes") will constitute direct, unconditional, unsubordinated and, subject to the provisions of Condition 4, unsecured obligations of the Issuer and will rank pari passu among themselves (save for certain obligations preferred by law) and equally with all other unsecured and unsubordinated obligations of the Issuer, from time to time outstanding.

Listing	Approval in-principle has been received from the Singapore Stock Exchange for the listing and quotation of Notes that may be issued pursuant to the Program and which are agreed at or prior to the time of issue thereof to be so listed on the Singapore Stock Exchange. Such permission will be granted when such Notes have been admitted to the Official List of the Singapore Stock Exchange. For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, such Notes will be traded in a minimum board lot size of \$\$200,000 (or its equivalent in other specified currencies). The Notes may also be listed on such other or further stock exchange(s) as may be agreed between the Issuer and the relevant Dealer in relation to each Series. Unlisted Notes may also be issued. The applicable Pricing Supplement will state whether or not the relevant Notes are to be listed or admitted to trading and, if so, on which stock exchange(s).
Governing Law	The Notes will be governed by, and construed in accordance with, English law.
Selling Restrictions	There are restrictions on the offer, sale and transfer of the Notes in the United States of America, the European Economic Area (the "EEA"), the United Kingdom, Japan, Hong Kong, Singapore 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."

### 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, or incorporated by reference into, 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. Additional risks not currently known to the Company or those which the Company believes are immaterial may also impair its business operations.

### Risks related to the Company

The Company's operations are affected by the volatility of prices for crude oil, natural gas and petroleum products and price differentials between heavy and light oil, and a substantial or extended decline or fluctuations in such prices or differentials would have a material adverse effect on the Company's business, financial condition and results of operations.

International crude oil, natural gas and petroleum product prices are subject to global supply and demand, and fluctuate due to many factors beyond the Company's control. These factors include competition within the oil and natural gas industry and with other industries in supplying consumers with competing commodities, international economic trends, exchange rate and interest rate fluctuations, expectations of inflation, domestic and foreign governmental regulations, concerns regarding the security of energy supply, political and other events in major oil and gas producing and consuming nations and actions taken by members of the Organization of the Petroleum Exporting Countries ("OPEC") and other oil exporting countries.

The prices of oil and natural gas have fluctuated greatly during the recent period of volatility in the global credit and financial markets. For example, the Company's average sales prices for crude oil were US\$90.87, US\$92.20 and US\$83.72 per barrel in 2012, 2013 and 2014, respectively. The Company's average crude oil sales price was US\$43.92 per barrel in the first six months of 2015.

Furthermore, the financial condition and results of operations of Harvest Operations Corp. ("Harvest Operations"), the Company's wholly owned subsidiary acquired in December 2009, is also affected by the price differentials between light oil and heavy oil. For 2014, Harvest Operations' production was approximately 23% light and medium gravity crude oil, 32% heavy oil, 10% natural gas liquids and 35% natural gas. Processing and refining heavy oil is more expensive than processing and refining light oil and accordingly, producers of heavy oil receive lower prices than light oil for their production. The price differential between light oil and heavy oil has fluctuated widely during recent years, and has resulted in substantial increase in the volatility of heavy oil prices. An increase in the heavy oil price differential, normally caused by seasonal supply and demand, pipeline constraints and heavy oil processing capacities of refineries, all of which are beyond the control of Harvest Operations, usually results in Harvest Operations receiving lower prices for its heavy oil.

It is impossible to accurately predict future crude oil, natural gas or petroleum product price movements or price differentials between heavy and light oil. Accordingly, crude oil and natural gas prices may not remain at, and may vary significantly from, their current levels. When international crude oil and natural gas prices are low, the Company earns less sales revenue, and therefore, earns less income because the Company's production costs remain roughly constant. Conversely, when crude oil and natural gas prices are high, the Company earns more sales revenue and its income increases. As a result, a substantial or extended decline in international crude oil and natural gas prices or price differentials between heavy and light oil would have a material adverse effect on the Company's business, financial condition and results of operations. The Company currently engages in only limited hedging transactions or other derivative trading to reduce the impact of the fluctuations of crude oil or gas prices on its financial condition.

## Exploration drilling involves numerous risks, including risks that the Company will encounter no commercially productive crude oil or natural gas reserves.

The Company is currently involved in exploration activities in various geographic areas, including in some areas where natural conditions may be challenging and where the costs of such exploration activities may be high. As a result, the Company may incur cost overruns or may be required to curtail, delay or cancel drilling operations because of many factors, including, but not limited to, the following:

- unexpected drilling conditions;
- pressure or irregularities in geological formations;
- equipment failures or accidents;
- adverse weather conditions and natural disasters;
- compliance with environmental regulation;
- · governmental requirements and standards; or
- delays in the availability of drillships and delivery and maintenance of equipment.

If the Company fails to conduct successful exploration activities or to acquire or retain assets holding proved reserves, its proved reserves will decline as it extracts crude oil and natural gas from the reservoirs. In addition, the volume of production from crude oil and natural gas properties generally decline as reserves are depleted. The Company's future production depends significantly upon its success in finding or acquiring additional reserves and retaining and developing such reserves. If the Company is unsuccessful, it may not meet its production or growth targets, and its total proved reserves and production will decline, which would adversely affect the Company's results of operations and financial condition.

# The Company's exploration, development and production activities require substantial expenditure and investments, and the Company's plans for, and its ability to make, such expenditures and investments are subject to various risks.

Exploring, developing and producing crude oil and natural gas fields are capital-intensive activities with high risks. The Company incurred capital expenditures (consisting of cash used for acquisitions of (1) property, plant and equipment, (2) intangible assets other than goodwill and (3) investments in associates and joint ventures) of Won 2,885 billion for 2013, Won 2,891 billion for 2014, Won 1,317 billion for the first six months of 2014 and Won 891 billion for the first six months of 2015. The Company's capital expenditure budget for 2015 for its exploration, development and production activities is approximately Won 3,251 billion on a consolidated basis, which represents a decrease from its 2014 budget of Won 3,803 billion due to expectations of decreased acquisition activities during 2015.

The Company's ability to carry out its exploration, development and production activities and make the necessary capital expenditures and investments is subject to many risks, contingencies and other uncertainties, which may prevent the Company from achieving its desired results, or which may significantly increase the expenditures and investments that the Company makes, including, but not limited to, the following:

- the Company's ability to generate sufficient cash flows from operations to finance its expenditures, investments and other requirements, which are affected by changes in crude oil and natural gas prices and other factors;
- the availability and terms of external financing;
- the Company's mix of exploration and development activities conducted on an independent basis and those conducted jointly with other partners;
- the extent to which the Company's ability to influence or adjust plans for exploration- and developmentrelated expenditures is limited under joint operating agreements for those projects in which the Company has partners;

- government approvals required for exploration- and development-related expenditures and investments in jurisdictions in which the Company conducts its business; and
- economic, political and other conditions in jurisdictions in which the Company conducts its business.

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

The Company was established under the KNOC Act to, among other policy objectives, secure Korea's supply of crude oil in times of large oil price fluctuations or shortages. 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 crude oil and natural gas industry, which may not necessarily be in the Company's best commercial interests or the interests of the Noteholders. As of the date of this Offering Circular, the Government holds 100% of the Company's issued share capital. Accordingly, the Government is able to elect the Company's board of directors including the president of the board of directors (the "President"), as well as control its management. Although the Company's management runs the day-to-day operations, the Government may determine material policies relating to the direction of the Company's business. For example, public policy considerations relating to the level of the Company's exploration and production activities or stockpiling activities may affect the Company's results of operations. The Government has historically influenced, and is likely to continue to influence, the Company's strategy and operations. See "Business — Relationship with the Government."

The Company is also heavily regulated by a variety of laws and government bodies, including the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance. The Ministry of Trade, Industry and Energy, among other things, establishes policies relating to crude oil production and stockpiling and supervises the Company's administration of the Special Accounts for Energy and Resources ("SAER") funds. In addition, the Company must receive the Ministry of Trade, Industry and Energy's consent in most instances, and in some cases must seek amendments to current laws, to expand its operations into new businesses outside of its core operations. This may cause delays in or cancellations of the Company's plans to expand its core business, which may adversely affect the Company's results of operations and financial condition. See "Regulation."

The crude oil and natural gas reserve estimates in this Offering Circular are only estimates, and may require substantial revisions as a result of future drilling, testing and production, and as such, the Company's actual production, revenues and expenditures may also differ materially from estimates.

This Offering Circular includes estimates made by the Company of the Company's proved crude oil and natural gas reserves. Petroleum engineering is a subjective process of estimating underground accumulations of crude oil and natural gas that cannot be measured in an exact manner. The reliability of the estimates of the value and quantity of economically recoverable crude oil and natural gas reserves, rates of production, and the timing of development expenditures depend upon several variables and assumptions, including but not limited to the following:

- quality and quantity of the technical and economic data used in the estimation process;
- extensive engineering judgments;
- interpretation of geological and geophysical data;
- · continuity of current fiscal policy and regulatory regime in the countries where the reserves are located;
- assumptions concerning future crude oil and natural gas prices;
- · capital expenditures; and
- assumptions concerning future operating costs, development and production costs and workover and remedial costs.

Many of the factors, assumptions and variables involved in estimating reserves are beyond the Company's control and may prove to be incorrect over time. As a result, the Company's reserve estimates may require substantial upward or downward revisions if subsequent drilling, testing and production reveal different results. Any downward adjustment could indicate lower future production and thus adversely affect the Company's business, financial condition and future prospects.

Any failure to acquire rights to or discover additional crude oil and natural gas reserves that can be developed for commercially viable production or any failure to develop the proved undeveloped reserves in which the Company has invested could adversely affect the Company's business, financial condition and results of operations.

Success of the Company's business depends largely on acquiring rights to or discovering additional crude oil and natural gas reserves that can be developed for commercially viable production. If the acquisition and exploration activities in which the Company participated or which it conducts are not successful, the Company's total proved reserves and future production will decline. In addition, approximately 49.2% of the Company's proved reserves were undeveloped as of June 30, 2015. The Company's future success will also depend on its ability to develop these reserves in a timely and cost-effective manner. If the Company is unable to generate profitable production from such reserves, its business, financial condition and results of operations could be adversely affected.

There are many reasons why the Company may not be able to acquire rights to, or discover crude oil and natural gas reserves, or develop them for commercially viable production, including, but not limited to, the following:

- the Company may be unable to negotiate commercially reasonable terms for such acquisition, exploration, development or production activities;
- the Company may be unable to limit development and production costs because of, for example, adverse
  weather, natural disasters, environmental considerations, equipment shortages, procurement delays or
  difficulties arranging transportation for production, all of which may make it uneconomical to proceed
  with developing such reserves;
- the Company may face difficulties arising from political, environmental and other conditions in the areas
  where the reserves are located or through which its products are transported or where its products are
  stored; or
- a partner company on which the Company relies as operator may commit errors or misjudgments, and the Company has limited ability to control day-to-day activities on a project on which it is not the operator.

## The Company may encounter problems with its joint overseas exploration and production projects over which it may have limited control, and such problems may adversely affect its business.

Many of the Company's overseas exploration and production projects and other infrastructure projects are conducted with consortium partners or in joint ventures. The Company sometimes lacks a controlling interest in these projects even though the Company sometimes holds the largest interest in the projects among the consortium partners, and may have limited ability to influence or control operations or future developments. Therefore, the Company at times is 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 or among the other 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 or refinancing these projects, may require the consent of all other partners. These limitations may adversely affect the Company's ability to sell, refinance, or otherwise operate and profit from 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 them to a number of risks, including the risk that these projects may not be able to fulfill their obligations under contracts with customers, 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 results of operations and financial condition.

## Failure to implement key elements of the Company's strategy could have a material adverse effect on its business and results of operations.

A major element of the Company's business strategy is to achieve organic growth through exploration activities and pursue selective acquisitions to optimize its asset portfolio. The Company produced approximately 234,900 barrels of oil equivalent of crude oil and natural gas per day as of June 30, 2015, and is targeting to maintain its production at approximately 230,000 barrels per day until the end of 2015. Both the process of drilling new productive wells and acquisition of other companies are affected by many factors beyond the Company's control, and it may not be able to achieve the desired objectives. Where the Company enters into joint ventures with partners in exploration and production projects, the Company may not act as an operator and will need to depend on its partners for their financial commitment and technical expertise. The Company cannot guarantee that its partners will successfully execute the business plans and strategies formulated for the joint ventures.

The ability to meet increasing exploratory and development drilling targets depends to a large extent on the ability to secure access to rigs. Third party rigs are in great demand at a time of limited rig availability, and there can be no guarantee that the Company or the operator of any exploration and development project in which the Company participates will be able to secure access to rigs in a sufficient quantity at a cost effective price to meet drilling targets at acceptable costs, or at all.

# The Company may be unable to complete attractive acquisitions or other similar transactions, and any inability to do so may disrupt the Company's business. The Company may also need to incur additional debt to finance such expansion activities.

One key aspect of the Company's business strategy calls for acquisitions of businesses and assets that complement or expand its current business. In furtherance of such strategy, the Company acquired a 50% interest in Offshore International Group, Inc. ("OIG") in February 2009, a 100% interest in Harvest Energy Trust in December 2009, an 85% interest in KNOC Caspian LLP (formerly known as Sumbe JSC) in December 2009, a 100% interest in Dana Petroleum Plc ("Dana Petroleum") in October 2010, a 95% interest in Altius Holdings Inc. ("Altius") in March 2011, a 23.7% interest in the Eagle Ford shale oil formation in March 2011, a 67% interest in certain offshore oil producing assets from Northstar in the Gulf of Mexico region and a 10% interest in Parallel Petroleum Corp. in December 2011, a 14.99% interest in EPE Global (which holds all of the oil and gas exploration and production assets of El Paso Corporation) in May 2012 and a 28.3% additional interest in the Bittern oilfields in the North Sea from Hess Corp. in September 2012 (in addition to the 4.7% interest that Dana Petroleum already owned), as well as several other acquisitions either by itself or as part of a consortium.

The Company plans to continue its search for other suitable acquisition opportunities. However, the Company cannot provide assurance that it will be able to identify additional attractive opportunities for its expansion activities. Even if the Company does identify attractive opportunities, it cannot provide assurance that it will be able to outbid competing acquirers or to complete the transactions without encountering administrative, technical, political, financial or other difficulties, or that the Company will be able to carry out any such transactions in accordance with its current business plans, which could make such transactions more expensive and difficult for the Company.

Furthermore, participating in acquisitions or joint venture transactions requires significant capital. The Company currently finances its capital expenditures and investments through its income, capital contributions from the Government, issuances of bonds and revolving credit facilities with several banks. As the Company

pursues further growth opportunities for the future, the Company may need to raise additional capital through loans or in international capital markets through issuance of bonds or other debt instruments. However, the Company cannot guarantee that such capital will be available when needed due to conditions in the capital markets, or that even if such capital is available, it will be available on commercially acceptable terms or in sufficient amounts to make the expenditures required. In addition, the incurrence of additional debt may significantly increase the Company's debt-to-equity ratio from its ratio of 162.0% as of June 30, 2015, which may limit the Company's future ability to raise additional debt or increase its borrowing costs, and may adversely affect the price of the Notes.

If the Company is unable to achieve the expected benefits of acquisitions, including realization of adequate rate of return on prices paid, successful integration of the acquired businesses and/or assets, the Company's business, financial condition and results of operations may be adversely affected.

Success of an acquisition or other similar transactions depends, in part, on the Company's ability to realize adequate return on the prices paid for properties, the anticipated synergies, cost savings and growth opportunities from integrating the business of the acquired company or the asset with its business. In December 2009, the Company acquired a 100% interest in Harvest Energy Trust for approximately Won 2,677 billion, in October 2010, the Company acquired a 100% interest in Dana Petroleum through a hostile tender offer for the outstanding shares and convertible bonds of Dana Petroleum for a total bid price of approximately GBP 1.87 billion, in March 2011, the Company acquired a 95% interest in Altius for approximately US\$515 million and a 23.7% interest in the Eagle Ford shale oil formation for approximately US\$1.55 billion, in May 2012, the Company acquired a 14.99% interest in EPE Global (which holds all of the oil and gas exploration and production assets of El Paso Corporation) for approximately US\$500 million and in September 2012, the Company acquired, through Dana Petroleum, a 28.3% additional stake in the Bittern oilfields located in the North Sea from Hess Corp. for approximately US\$135 million (in addition to the 4.7% interest that Dana Petroleum already owned). The prices paid by the Company for acquisitions, including the foregoing acquisitions, were based, in part, on engineering and economic assessments made by the Company's engineers. These assessments include a number of material assumptions regarding such factors as recoverability and marketability of crude oil, natural gas and natural gas liquids, future prices of oil, natural gas and natural gas liquids and operating costs, future capital expenditures and royalties and other taxes which will be imposed over the producing life of the reserves. Many of these factors are subject to change and are beyond the Company's control. In particular, the prices of and markets for petroleum and natural gas may change from those anticipated at the time of making acquisitions. In addition, all engineering assessments involve a measure of geological and engineering uncertainty, which could result in lower production and reserves than those attributed to the properties when they were acquired.

Furthermore, the integration of two independent companies is a complex, costly and time-consuming process. The difficulties of combining the operations of two companies include, among others:

- retaining key employees and senior management team;
- · lack of experience in managing large operations;
- consolidating corporate and administrative infrastructures;
- preserving important relationships of the companies;
- integrating and managing information technology systems of the companies;
- using the acquired company's liquid capital and other assets efficiently to develop the business of the combined company;
- consolidating research and development operations;
- diverting management's attention from ongoing business concerns;
- · coordinating geographically separate organizations; and
- the time required before the benefits of the acquisition are realized.

There can be no assurance that the Company will receive all of the anticipated benefits of any transaction, including recovery of costs paid for properties or companies, or that any of the risks described above will not occur. For example, in November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion, and recorded Won 338 billion as loss from discontinued operation and Won 54 billion as loss on disposal of discontinued operation for the year ended December 31, 2014. The Company's failure or inability to identify suitable candidates and complete acquisitions, joint ventures or other similar transactions, to raise sufficient capital for the transactions at a commercially reasonable cost and eventually recover such costs, or to receive anticipated benefits of any such transaction could significantly harm its business, financial condition and results of operations.

# Exploring, developing, producing, transporting and stockpiling activities involve numerous risks that may result in accidents and other substantial operating risks and costs, for which the Company may not be fully insured.

The Company is subject to exploration, development, production, equipment, transportation and stockpiling risks that are common among upstream oil and gas companies, including, but not limited to, the following:

- exploration and production risks: risks related to fluctuations in production that may be affected by reserve levels, accidents, mechanical difficulties, work stoppages, adverse natural conditions, such as bad weather, as well as the inability to manage unforeseen production costs;
- equipment risks: risks related to adequacy and condition of the production facilities, including situations where equipment, especially the equipment for stockpiling, becomes obsolete;
- transportation risks: risks related to the condition of pipelines and vulnerability and costs of other modes
  of transportation, such as oil tankers, for example the leakage of crude oil in April 2011 along a remote
  section of the Rainbow pipeline owned and operated by Plains Midstream Canada which affected
  transport of crude oil produced by Harvest Operations in the region; and
- stockpiling risks: risks related to the condition of storage tanks and other stockpiling facilities and their compliance with safety and environmental standards.

In particular, the Company's business is subject to significant risk of pipeline explosions, oil spills and leaks, unexpected geological formations or pressures, sudden blowouts, violent explosions of oil, natural gas or water from drilling wells followed by uncontrolled flow, fires and mechanical failures and collapsed holes, particularly in horizontal wellbores. There can be no assurances that such accidents will not occur.

The occurrence of any of these events could result in the 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, stockpile facilities or production facilities 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. The Company maintains insurance against certain of these risks and losses in accordance with customary industry practice. However, these insurance policies do not cover all potential liabilities that may result from these risks. The occurrence of any of these events not fully covered by insurance would require the Company to cover the damages with its own funds, thereby reducing its profits, which could have a material adverse effect on the Company's financial condition and results of operations.

# The Company is exposed to political, economic, regulatory and legal risks related to countries where it participates in exploration, development and production projects.

The Company currently has operations and assets in various foreign countries and regions, including Iraq, Yemen, Uzbekistan, Vietnam, Kazakhstan, Libya, Egypt and Nigeria, and is working to expand its operations into other countries to further enhance its reserve base and diversify its geographic risk profile. The Company is subject to political, legal and regulatory environments in these countries, some of which are known to be

unstable, and differ in certain significant respects from those prevailing in developed countries. The Company is currently involved in disputes in certain countries in which it operates. See "Business — Legal Matters."

Expansion of the Company's operations abroad requires management attention and personnel resources. In addition, the Company's results of operations may be adversely affected by a number of factors in the countries in which it operates or has interests, including, but not limited to, the following:

- changes in international and domestic political and economic conditions as well as social conditions;
- challenges caused by distance, language, local business customs and cultural differences;
- difficulty in obtaining licenses, permits or other regulatory approvals from local authorities and in enforcing the Company's rights under contracts;
- with respect to those countries that are members of OPEC, the lowering of petroleum production volume pursuant to OPEC policy;
- changes in laws, regulations or government policies, or in the interpretation or enforcement of laws, regulations and government policies, including changes driven by resource nationalism, or uncertainties thereof:
- measures which may be introduced to control inflation;
- changes in the rate or method of taxation;
- imposition of additional restrictions on currency conversion and remittances abroad;
- military hostilities, war, political unrest or acts of terrorism targeted at the Company's fields or facilities;
- reduction in tariff protection and other import restrictions;
- natural disasters and epidemics or outbreaks such as Ebola or Middle East Respiratory Syndrome;
- international economic sanctions; and
- changes in the usage and costs of state-controlled transportation services.

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

The Company engages in certain activities relating to Russia and may become subject to sanctions under relevant laws and regulations of the United States and other jurisdictions as a result of such activities, which may adversely affect its business and reputation.

The U.S. Department of the Treasury's Office of Foreign Assets Control, or OFAC, administers and enforces certain laws and regulations (which hereinafter is referred to as OFAC sanctions) that impose restrictions upon U.S. persons with respect to activities or transactions with certain countries, governments, entities and individuals that are the subject of OFAC sanctions, including certain Russian persons and entities sanctioned in connection with ongoing events in Ukraine. In particular, Directive 4 under Executive Order 13662, which was enacted in March 2014, prohibits the provision, exportation, or reexportation, directly or indirectly, of goods, services (except for financial services), or technology in support of exploration or production for deepwater, Arctic offshore, or shale projects that have the potential to produce oil in Russia, or in maritime areas claimed by Russia and extending from its territory, by persons acting within U.S. jurisdiction.

Even though non-U.S. persons generally are not directly bound by OFAC sanctions, in recent years U.S. authorities have brought a number of enforcement actions against non-U.S. persons holding them liable on various legal theories if they directly or indirectly involve U.S. persons or U.S. origin goods or services in their transactions or by engaging in transactions completed in part in the United States (such as, for example, wiring an international payment that clears through a bank branch in New York or transporting U.S.-origin goods into sanctioned regions).

The Ukraine Freedom Support Act ("UFSA"), enacted in December 2014, is a so-called "secondary" sanctions law that provides authority to the U.S. President to impose U.S. sanctions on foreign parties that engage in certain activities in the Russian energy and military sectors, among others. With respect to the energy sector, it is sanctionable to knowingly make a "significant investment" in a Russian deepwater (greater than 500 feet), Arctic offshore, or shale project ("Targeted Projects") intended to produce oil. A range of sanctions may be imposed on companies that engage in sanctionable activities, including among other things the blocking of any property subject to U.S. jurisdiction in which the sanctioned company has an interest.

Additionally, the U.S. Department of Commerce's Bureau of Industry and Security ("BIS"), which administers U.S. export controls, also maintains prohibitions against the provision of specified U.S. origin goods or technology in support of exploration for, or production of, oil or gas in Targeted Projects, or any U.S.-origin goods or technology to Targeted Projects operated by specified government entities.

In July 2014, prior to the promulgation of the BIS export restrictions and the Ukraine Freedom Support Act, the Company entered into a drilling contract for its drillship with Gazprom Geologorazvedka LLC, a subsidiary of Gazprom OAO, for a term of three years and fee of approximately US\$170 million. Gazprom OAO became designated under Directive 4 of Executive Order 13662 in September 2014, which prohibits the provision of U.S. origin goods, or services (other than financial services) in support of Targeted Projects with the potential to produce oil. Gazprom OAO is also on BIS's Entity List, which prohibits the unlicensed export of any U.S. origin item to Gazprom OAO in connection with any Targeted Project producing oil or gas. More general BIS controls prohibit the unlicensed export of specified U.S.-origin equipment or technology to any party within Russia in connection with Targeted Projects. As the Company remains contractually bound to perform the agreed services, in June 2015, the Company removed all U.S.-origin equipment and goods from its drillship in response to these restrictions. In June 2015, the drillship reached its contract destination for drilling operations and began drilling activities pursuant to the contract, which are located in a Russian deepwater zone. Primary drilling operations were completed in August 2015, and the Company's drillship is currently in the winding-up process at its current drilling site, which is expected to be completed by October 2015.

The Company believes that its activities relating to Russia are not prohibited under applicable U.S. sanctions law and BIS regulations, as it removed all U.S.-origin equipment from the drillship and no U.S. persons or entities are involved in performing the contract. It also does not believe that its Russian activities constitute a "significant investment" sanctionable under UFSA. Furthermore, the President of the United States has stated that he currently intends not to use the sanctioning authority given under the UFSA.

However, there can be no assurance that the Company's activities relating to Russia will not be deemed to comply with OFAC sanctions or BIS export controls or to involve sanctionable activity under the indirect U.S. sanctions, or that any other government will not determine that its activities do not comply with applicable sanctions or export restrictions of other countries. Moreover, sanctions against Russia are evolving rapidly, and future changes in law could also adversely affect the Company. In addition, broadly similar sanctions are in place in the European Union and certain other jurisdictions, involving travel restrictions and the freezing of funds and economic resources of designated persons, as well as export and financing restrictions with respect to such persons.

The Company's business and reputation could be adversely affected if its activities relating to Russia do not comply with OFAC sanctions or export controls, or involve sanctionable activity under the indirect U.S. sanctions, or if any other government were to determine that its activities relating to Russia do not comply with applicable sanctions of other countries. Any prohibition or conditions placed on the Company's assets located in the United States may adversely affect its business, and any other sanctions imposed could also adversely affect its business. It is also possible that certain investors could be prohibited from trading in or receiving payments on the Company's securities. If the U.S. government were to challenge the compatibility of the Company's activities relating to Russia with its sanctions programs or export restrictions or assert that such activities are sanctionable, while no assurance can be given that any such measures would be successful, the Company intends to take all practicable measures to ensure that prohibitions or conditions are not placed on its U.S. assets or other activities.

## The Company's business operations may be adversely affected by present or future environmental or safety regulations.

The Company's activities, including activities through Harvest Operations, are subject to a wide variety of federal, state and local laws and regulations and permit requirements relating to the safety and protection of human health and the environment, both in Korea, Canada and in other jurisdiction in which it has operations. For a discussion of the environmental laws and regulations in Korea that are relevant for the Company, see "Regulation — Environmental Legislation." The Company incurs, and expects to incur, capital and operating costs in order to comply with such laws and regulations, which are becoming increasingly complex. The introduction of new laws and regulations, the imposition of tougher requirements in licenses, or increasingly strict enforcement or new interpretations of existing laws, regulations and licenses may require further expenditure to modify operations, install pollution control equipment, or curtail or cease certain operations. In addition, the discovery of previously unknown contaminations may require site clean-ups and the payment of fees, fines or other payments for pollution, discharges or other breaches of environmental requirements. In addition, in joint projects where the Company does not act as the operator, it relies on its partners to comply with the applicable environmental regulations and may incur additional expenses or liabilities if its partners fail to comply.

The Company believes that the facilities and operations in which it holds interests are in material compliance with the requirements of the relevant environmental protection laws and safety regulations. While the costs of the measures taken to comply with such laws or regulations have not had a material adverse effect on the Company's financial condition or results of operations to date, the costs of such measures and liabilities related to damages caused by the Company's operations may increase in the future. Also, if the Company is unable to comply with the applicable laws and regulations, the local government may, at its discretion, close the non-complying facility, or force the Company to cease operations until proper compliance is made. Such increases in environmental or safety compliance costs or disruptions in operations may have a material adverse effect on the Company's results of operations and financial condition.

### The Company faces competition from other oil and natural gas companies in a majority of its operations.

The oil and gas industry is highly competitive. As the Company seeks to expand its operation in accordance with its growth plans and act as operator in an increasing number of projects under development, the Company expects to come into increasing competition with much larger, well-established companies with substantially greater financial, human, technical and other resources. Some of these competitors have been engaged in the oil and gas business for much longer than the Company, and have strong market power through a combination of different factors, such as diversification and reduction of risk, financial strength, exploitation of benefits of integration and economic scale, strengthening of their positions in the global market and their relations with the governments of oil and gas producing countries. Many of these competitors also have greater financial capacity to fund acquisitions of oil and gas properties and conduct oil and gas exploration, development and production than the Company. As such, they may be able to identify, bid for and purchase a greater number of properties and prospects, including operatorships and licenses, than the Company's financial or human resources permit. The Company's competitors include major international oil and gas companies, independent oil and gas companies and state-owned oil and gas companies. Significant competitive pressure could make it difficult for the Company to acquire additional exploration licenses and development and production leases or acquire attractive companies and assets in the oil and gas sector, thereby causing a material adverse effect on its business, financial condition and results of operations.

## The Company's business may be materially and adversely affected by legal claims and regulatory actions against it.

The Company is subject to the risk of legal claims and regulatory actions in the ordinary course of its business, which may expose the Company to substantial monetary damages and legal costs, injunctive relief, criminal and civil penalties, sanctions against the Company's management and employees and regulatory restrictions on the Company's operations, as well as significant reputational harm. See "Business — Legal Matters."

In December 2014, a committee of the Korean national assembly commenced investigations into various overseas resources projects conducted during the previous administration under former President Lee. As part of such investigations, in March 2015, the national assembly committee conducted an inspection of the Company and its investments in Harvest Operations and North Atlantic Refining Limited, as well as other acquisitions made by the Company during President Lee's tenure. The investigations were completed in May 2015, and no significant sanctions were imposed on the Company as a result of the investigations.

In March 2015, the Board of Audit and Inspection of Korea commenced an inspection of the Company, Korea Resources Corporation and Korea Gas Corporation, as well as the Ministry of Strategy and Finance and the Ministry of Trade, Industry and Energy, primarily to assess the performance of state-financed overseas resource development projects as well as the administration of SAER loans by the energy and resources related state- owned enterprises. The inspection was completed in June 2015, and the result is expected to be notified to the Company in October 2015.

In March 2015, the Seoul Central District Prosecutor's Office commenced an investigation into the Company and Keangnam Enterprises, Ltd. ("Keangnam") regarding its SAER loans to Keangnam and Keangnam's involvement in the development projects in Kamchatka. Keangnam was a former member of the consortium that had invested in the Kamchatka project in 2006. The Company withdrew from the Kamchatka project in 2010. There have been press reports that Keangnam diverted certain portions of the loan to other accounts rather than using the funds for their intended purposes. Keangnam is currently under various other investigations regarding its involvement in other resource development projects and loans. In September 2015, the Seoul Central District Prosecutor's Office announced that it has concluded its investigation of various overseas resources projects conducted during the previous administration under former President Lee. No charges against the Company were filed in connection with the investigation.

In June 2015, the Seoul Central District Prosecutor's Office arrested Mr. Young Won Kang, former chief executive officer of the Company who left the Company in June 2012, and in July 2015 indicted him on charges of breach of fiduciary duty, for allegedly wasting corporate funds by making financially unsound acquisitions during his tenure, including North Atlantic Refining Limited. Mr. Kang's trial is currently ongoing at the Seoul Central District Court. The Company believes that the investigation will not have a material effect on its financial liability, based on the current status of the trial.

The Company is unable to predict the outcome of these and other investigations, lawsuits and regulatory actions, and the scope of the investigations in these matters may increase. Additional investigations may be launched by governmental authorities or civil claims may be filed against the Company in the future with respect to these or other alleged legal violations by the Company and its officers and employees. An adverse determination in any such proceedings may result in significant regulatory sanctions as well as reputational harm to the Company, which in turn may have a material adverse effect on the Company's business, results of operations and financial condition.

## The Company may be exposed to potential claims made by current or previous employees for unpaid wages and may also incur increased labor costs as a result of the expansion of the scope of ordinary wages.

Under the Labor Standards Act and Labor Severance Payment Security Act of Korea, the amount of compensation to which an employee is legally entitled, such as overtime allowance for night shifts or work performed outside of working hours as well as severance pay, is determined by the definition of "ordinary wage."

Prior to the Supreme Court's decision as described below, the Ministry of Labor had released guidelines which recognized base salary and certain fixed monthly allowances as the components of ordinary wage. Pursuant to such guidelines, many companies excluded fixed bonuses paid bimonthly, quarterly or semi-annually from the definition of ordinary wage in calculating overtime allowances, although certain lower courts had held that fixed bonuses, whether paid monthly or not, should be included in the definition of ordinary wage if such bonuses are paid regularly to all employees.

On December 18, 2013, the Supreme Court of Korea delivered a decision which provided a standard rule for determining what kinds of payments should be included as part of ordinary wage. According to this decision,

fixed bonuses paid regularly are included in ordinary wage, and any collective bargaining agreement or labormanagement agreement which provides for exclusion of such regular bonuses from the scope of ordinary wage is void as such provision is in violation of the mandatory provisions of Korean law. However, with respect to wage agreements executed on or prior to December 18, 2013, the Supreme Court of Korea further ruled that an employee's claim for extra payments will not be granted on principles of good faith if such claim imposes an unexpected financial burden on the employer and results in material managerial difficulty or poses a threat to the existence of the employer, to the extent that such claim is made on the basis of rescission of any existing wage agreement that sets the total amount of wage but excludes regular bonus payments from the scope of ordinary wage.

In connection with the Supreme Court's decision described above, in May 2015, 208 employees belonging to the Company's labor union filed a lawsuit at the Seoul Central District Court for unpaid wages amounting to approximately Won 5 billion. The final outcome of such lawsuit remains uncertain. While the number of total employees eligible to file a similar lawsuit cannot be ascertained at this time, the Company believes that it is unlikely that additional employees will file similar lawsuits, as the initial lawsuit was initiated by the Company's labor union upon discussion with employees belonging to the labor union. However, there can be no assurance that similar lawsuits will not occur in the future, or that the Company will successfully defend the current or any future lawsuits, all of which may have an adverse effect on the Company's business and results of operations.

## Harvest Operations is subject to certain risks related to the BlackGold oil sands project, which in turn may have an adverse effect on the Company.

The Company acquired a 100.0% interest in an oil sands lease for the BlackGold area located in northeastern Alberta in August 2006. In August 2010, the interest in the BlackGold oil sands project was transferred to Harvest Operations for approximately CAD 374 million, which was funded by Harvest Operations through the issuance of additional capital stock to the Company. The initial phase of the project, targeting production of 10,000 barrels per day, has been approved by provincial regulators. The expansion phase of the BlackGold project, which is targeted to expand production to 30,000 barrels per day, was approved by provincial regulators in 2013. The construction of necessary production facilities at the project site was completed in February 2015, and the production process is expected to start once the oil price environment becomes more favorable. During the second quarter of 2010, Harvest Operations signed a lump sum engineering, procurement and construction contract with a third party to build required facilities at the BlackGold project site, including the central processing facility. This construction contract was amended in the second quarter of 2012 from having a fixed price structure to a cost reimbursement structure. Further development of the BlackGold project will require substantial capital investment by Harvest Operations. The BlackGold project competes for cash flows against Harvest Operations' other capital projects and cash commitments. Harvest Operations may not have sufficient capital resources to finance all its projects and may delay or curtail certain development projects, including the BlackGold project. To help Harvest Operations fund the BlackGold project's initial capital, the Company has also injected approximately CAD 86 million of capital through the issuance of additional capital stock by Harvest Operations in 2010. Harvest Operations may require additional capital from the Company if it cannot finance the BlackGold project through operating cash flow, additional borrowings or proceeds from the sale of its assets.

As is the case with any large scale, technically complex project, the ongoing development of the BlackGold project subjects Harvest Operations to risks associated with cost overruns, scheduling delays and unforeseen technical challenges, including as a result of third-party performance failures, fluctuating market conditions, delays in regulatory approvals and other unexpected challenges. Any failure on Harvest Operations' part to recognize or respond to these and other risks may adversely affect the success of its operations, financial position and cash flows, which in turn could materially and adversely affect the Company's business and results of operations, or require the Company to make additional capital injections.

### Risks related to Korea

The Company is significantly supported by the Government, and its current business and future growth could be materially and adversely affected if financial and economic conditions in Korea deteriorate.

The Company is wholly owned by the Government and serves as an execution arm for Government policies and businesses relating to oil, supported by significant capital contributions and other support from the Government. The Company's headquarters and significant parts of its operations, customers and assets are also 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 need for energy, including crude oil and natural gas.

Due to recent liquidity and credit concerns and volatility in the global financial markets, the value of the Won relative to the U.S. dollar and other foreign currencies and the stock prices of Korean companies have fluctuated significantly. In particular, there has been increased volatility in light of concerns regarding, among other things, the financial difficulties affecting many governments worldwide, in particular in southern Europe and Latin America, as well as the recent slowdown of economic growth in China and other major emerging market economies, in addition to political and social instability in various countries in the Middle East and Northern Africa, including Iraq, Syria and Yemen, as well as in Ukraine and Russia. Accordingly, the overall prospects for the Korean and global economies in 2015 and beyond remain uncertain. Any future deterioration of the Korean or global economy could adversely affect the business, financial condition and results of operations of the Company.

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

- difficulties in the financial sectors in Europe and elsewhere and increased sovereign default risks in selected countries and the resulting adverse effects on the global financial markets;
- adverse changes or volatility in foreign currency reserve levels, commodity prices (including oil prices), exchange rates (including fluctuation of the dollar, the euro or Japanese yen exchange rates or revaluation of the Chinese renminbi), interest rates, inflation rates or stock markets;
- continuing adverse conditions in the economies of countries 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:
- declines in consumer confidence and a slowdown in consumer spending;
- increasing levels of household debt;
- increasing delinquencies and credit defaults by consumer and small- and medium-sized enterprise borrowers;
- further decreases in the market prices of Korean real estate;
- 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;
- 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 restructuring Korean conglomerates, other large troubled companies, their suppliers or the financial sector;

- loss of investor confidence arising from corporate accounting irregularities or corporate governance issues at certain Korean companies;
- increases in social expenditures to support an aging population in Korea or decreases in economic productivity due to the declining population size in Korea;
- geo-political uncertainty and risk of further attacks by terrorist groups around the world;
- the occurrence of severe health epidemics in Korea or other parts of the world, including the recent Ebola and Middle East Respiratory Syndrome outbreaks;
- 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;
- natural disasters that have a significant adverse economic or other impact on Korea or its major trading partners;
- hostilities or political or social tensions involving oil producing countries in the Middle East or North Africa and any material disruption in the supply of oil or increase in the price of oil; and
- an increase in the level of tensions or an outbreak of hostilities between North Korea and Korea or the United States.

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

Relations between Korea and North Korea have been tense throughout Korea's modern history. The level of tension between the two Koreas has fluctuated and may increase abruptly as a result of current and future events. In particular, 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 and other actions against Korea. Some of the significant incidents in recent years include the following:

- In August 2015, two Korean soldiers were injured in a landmine explosion near the South Korean demilitarized zone. Claiming the landmines were set by North Koreans, the South Korean army re-initiated its propaganda program toward North Korea utilizing loudspeakers near the demilitarized zone. In retaliation, the North Korean army fired artillery rounds on the loudspeakers, resulting in the highest level of military readiness for both Koreas. High-ranking officials from North and South Korea subsequently met for discussions, and entered into an agreement on August 25, 2015 intending to deflate military tensions.
- In 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 to February 2013, which increased tensions in the region and elicited strong objections worldwide. Following the third round of nuclear tests, North Korea also made threats to take further actions, potentially including a fourth round of nuclear tests. 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, which may aggravate social and political pressures within North Korea. There can be no assurance that the level of tension affecting 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 that Act and Decree (collectively referred to as the "Foreign Exchange Transaction Laws"), if the Government deems that certain emergency circumstances, including sudden fluctuations in interest rates or exchange rates, extreme difficulty in stabilizing the balance of payments or substantial disturbance in the Korean financial and capital markets, are likely to occur, it may impose any necessary restriction such as requiring Korean or foreign investors to obtain prior approval from the Minister of Strategy and Finance for the acquisition of Korean securities or for the repatriation of interest, dividends or sales proceeds arising from Korean securities or other types of capital transactions. Moreover, if the Government deems it necessary on account of war, armed conflict, natural disaster or grave and sudden changes in domestic or foreign economic circumstances or similar events or circumstances, the Minister of 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, the Company prepared and included in this Offering Circular its annual financial statements as of and for the years ended December 31, 2013 and 2014 and its condensed consolidated interim financial statements as of June 30, 2015 and for the six-month periods ended June 30, 2014 and 2015 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 addition, the Company is not a listed company but makes public disclosures regarding aspects of its business pursuant to the Act on the Management of Public Agencies and other laws applicable to the Company. These disclosure rules differ in many material respects from those 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 Relating 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 KNOC Act, the Government is allowed, but not obligated, 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. In addition, any secured indebtedness incurred by the Company would have priority over its unsecured indebtedness to the extent of the assets securing such indebtedness.

### The Notes are subject to transfer restrictions.

The Notes will not be registered under the Securities Act or any state securities laws of the United States and may not be offered or sold to any person in the United States, or to, or for the account or benefit of, U.S. persons except pursuant to an exemption from, or, in a transaction not subject to, the registration requirements of the Securities Act. 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.

There can be no assurance 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 an active trading market for the Notes were to develop, the Notes could trade at prices that may be higher or lower than the offering price depending on many factors, including:

- prevailing interest rates;
- the Company's results of operations, financial condition and future prospects;
- political and economic developments in and affecting Korea;
- · the market conditions for similar securities; and
- the financial condition and stability of the Korean oil industry and the Korean and Singaporean financial markets.

### **Risks Relating to Forward-Looking Statements**

This Offering Circular contains forward-looking statements that are the management's present expectations of future events and are subject to 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, political and social conditions;

- adverse trends in regulatory, legislative and judicial developments, including litigation and environmental regulatory restrictions and liabilities;
- changes in interest rates and foreign exchange rates;
- development projects and exploration prospects and the speculative nature of oil and gas exploration and development, including the risk of obtaining necessary licenses and permits;
- uncertainties inherent in estimating proved or potential oil and gas reserves;
- development and drilling potential and development of undeveloped reserves, including the risks and hazards associated with oil and gas development and operating or technical difficulties in connection with oil and gas development activities;;
- expansion and other development trends of the oil and gas industry, and regulatory, administrative or
  economic conditions affecting the oil and gas industry, including changes to applicable oil and gas and
  other laws regulating the oil and gas industry;
- risks related to gathering and processing facilities and pipeline systems;
- business strategy, including expansion and growth of operations;
- · oil and gas prices and demand;
- future earnings and cash flow;
- factors affecting future profitability;
- · seasonality;
- long-term reliance on third parties;
- claims made in respect of the Company's operations, property or assets, and contests over such claims, particularly title to undeveloped properties;
- competition for, among other things, capital, the acquisition of reserves, equipment, export pipeline capacity and skilled personnel;
- environmental risks and hazards and the costs of compliance with environmental regulations;
- the Company's estimated financial information; 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 materialize, actual results may vary materially from those estimated, anticipated or projected, as well as from historical results. Specifically but without limitation, revenues could decrease, costs (including capital costs) could increase, investments could be delayed and anticipated improvements in performance might not be fully realized.

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 disclaims any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to the Company or any person acting on the Company's behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

### FORM OF THE NOTES

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 outside the United States to non-U.S. persons 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 Regulation D under the Securities Act.

### **Bearer Notes**

Each Tranche of Bearer Notes will be in bearer form and 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, Luxembourg"). Whilst 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, Luxembourg and Euroclear and/or Clearstream, Luxembourg, as applicable, has given a like certification (based on the certifications it has received) to the Principal Paying Agent ("non-U.S. beneficial ownership certification").

On and after the date (the "Exchange Date") which is 40 days after the 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 non-U.S. beneficial ownership certification as described above unless such certification has already been given. 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, Luxembourg against presentation or surrender (as the case may be) of the Permanent Bearer Global Note without any further requirement for certification beyond the initial non-U.S. beneficial ownership certification as described above.

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, Luxembourg (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. In the case of definitive Bearer Notes that are issued in exchange for any Permanent Bearer Global Notes, such exchange shall only be permitted if the issuance of definitive Bearer Notes are issued in integral multiples of the Specified Denomination. For these purposes, an "Exchange Event" means that (i) an Event of Default (as defined in Condition 11) has occurred and is continuing, (ii) the Issuer has been notified that both Euroclear and Clearstream, Luxembourg 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 alternative clearing system is available or (iii) the Issuer 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 (provided that, in certain circumstances where the Notes are held through Euroclear and

Clearstream, Luxembourg, such adverse tax consequences are the result of a change in, or amendment to, the laws and regulations (taxation or otherwise) of a Tax Jurisdiction). For so long as the Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, the Issuer will appoint and maintain a Singapore Paying Agent (as defined below) (unless the Issuer obtains an exemption from the Singapore Stock Exchange), where the definitive Bearer Notes may be presented or surrendered for payment or redemption, in the event that a Permanent Bearer Global Note is exchanged for definitive Bearer Notes, announcement of such exchange shall be made by the Issuer or on the Issuer's behalf through the Singapore Stock Exchange and such announcement will include all material information with respect to the delivery of the definitive Bearer Notes, including details of the Singapore Paying Agent. In the event of the occurrence of an Exchange Event, Euroclear and/or Clearstream, Luxembourg (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 may also give notice to the Principal Paying Agent requesting 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 that have an original maturity of more than 365 days and on all 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 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.

Notes that 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, Luxembourg, 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 only 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 save as otherwise provided in Condition 2 and may not be held otherwise than through Euroclear or Clearstream, Luxembourg 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").

The Registered Global Notes will either (a) be deposited with a custodian for, and registered in the name of a nominee of, the Depository Trust Company ("DTC") for the accounts of Euroclear and Clearstream, Luxembourg or (b) be deposited with a common depositary for, and registered in the name of a common nominee of, Euroclear and Clearstream, Luxembourg, as specified in the applicable Pricing Supplement. Persons holding beneficial interests in the 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.\$250,000 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 7(d)) as the registered holder of the Registered Global Notes. None of the Issuer, 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 7(d)) 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, an "Exchange Event" means that (a) an Event of Default has occurred and is continuing, (b) in the case of Notes registered in the name of a nominee for DTC, either DTC has notified the Issuer 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, (c) in the case of Notes registered in the name of a nominee for a common depositary for Euroclear and Clearstream, Luxembourg, the Issuer has been notified that both Euroclear and Clearstream, Luxembourg 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 (d) the Issuer has 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 (provided that, in certain circumstances where the Notes are held through Euroclear and Clearstream, Luxembourg, such adverse tax consequences are the result of a change in, or amendment to, the laws and regulations (taxation or otherwise) of a Tax Jurisdiction).

For so long as any Notes are listed on the Singapore Stock Exchange and the rules of the Singapore Stock Exchange so require, the Issuer will appoint and maintain a paying agent in Singapore (the "Singapore Paying Agent") (unless the Issuer obtains an exemption from the Singapore Stock Exchange), where the definitive Registered Notes may be presented or surrendered for payment or redemption, in the event that a Permanent Registered Global Note is exchanged for definitive Registered Notes. In addition, in the event that a Permanent Registered Global Note is exchanged for definitive Registered Notes, announcement of such exchange shall be made by the Issuer or on the Issuer's behalf through the Singapore Stock Exchange and such announcement will include all material information with respect to the delivery of the definitive Registered Notes, including details of the Singapore Paying Agent. In the event of the occurrence of an Exchange Event, DTC, Euroclear and/or Clearstream, Luxembourg (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 (d) above, the Issuer may also give notice to the Registrar requesting exchange. Any such exchange shall occur not later than ten 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 and 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, Luxembourg, 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."

Pursuant to the Agency Agreement (as defined under "Terms and Conditions of the Notes"), the Principal Paying Agent 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 which are different from the common code and ISIN 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

For so long as any of the Notes is represented by a Global Note (as defined in "Terms and Conditions of the Notes") held on behalf of Euroclear and/or Clearstream, Luxembourg each person (other than Euroclear or Clearstream, Luxembourg) who is for the time being shown in the records of Euroclear or of Clearstream, Luxembourg as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear or Clearstream, Luxembourg 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 and its 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 its 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, Clearstream, Luxembourg 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.

The Notes may be accelerated by the holder thereof in certain circumstances described in Condition 11. 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 Euroclear, Clearstream, Luxembourg and/or DTC, as the case may be, will become entitled to proceed directly against the Issuer on the basis of statements of account provided by Euroclear, Clearstream, Luxembourg and/or DTC on and subject to the terms of a deed of covenant dated September 29, 2010 (the "Deed of Covenant"), executed by the Issuer. In addition, 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.

### Form of Pricing Supplement

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

[Date]

### **Korea National Oil Corporation**

Issue of [Aggregate Nominal Amount of Tranche] [Title of Notes]

under the U.S.\$9,000,000,000

### **Global Medium Term Note Program**

which transfers can be made)

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 set forth in the Offering Circular dated September 21, 2015 [and the supplemental Offering Circular dated [•]]. This Pricing Supplement contains the final terms of the Notes and must be read in conjunction with such Offering Circular [as so supplemented].

[The following alternative language applies if the first tranche of an issue that 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 must be read in conjunction with the Offering Circular dated [current date], save 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 Supplements]

suv	supparagraphs. Haucs denote directions for completing the Fricing Supplements				
1.	Issuer:	Korea National Oil Corporation			
2.	(i) Series Number:	[•]			
	(ii) Tranche Number:	[•] (If fungible with an existing Series, details of that Series, including the date on which the Notes become fungible)			
3.	Specified Currency or Currencies:	[•]			
4.	Aggregate Nominal Amount:				
	(i) Series:	[●]			
	(ii) Tranche:	[•]			
5.	(i) Issue Price:	[•] per cent. of the Aggregate Nominal Amount [plus accrued interest from [Issue Date] (in the case of fungible issues only, if applicable)]			
	(ii) [Net proceeds (after deducting underwriting discounts but not estimated expenses): (required only for listed issues)	[•]			
	(iii) [Use of proceeds]	[•] (if different from the use of proceeds specified in the Offering Circular)			
6.	Specified Denominations: (in the case of Registered Notes, this means the minimum integral amount in	[•] (N.B. Notes must have a minimum denomination of €100,000 (or equivalent) in order to benefit from			

the wholesale exemption set out in Article 3.2(d) of the Prospectus Directive in that Member State.)

(N.B. Where Bearer Notes with multiple denominations above U.S.\$200,000 or equivalent are being used, the following sample wording should be followed:

"U.S.\$200,000 and integral multiples of U.S.\$1,000 in excess thereof up to and including U.S.\$399,000. No Notes in definitive form will be issued with a denomination above U.S.\$399,000.")

- 7. (i) Issue Date:
  - (ii) Interest Commencement Date:
- 8. Maturity Date:
- 9. Interest Basis:
- 10. Redemption/Payment Basis:
- 11. Change of Interest Basis or Redemption/Payment Basis:
- 12. Put (other than Condition 8(d)(i))/Call Options:
- 13. (i) Status of the Notes:
  - (ii) Date Board approval for issuance of Notes obtained:
- 14. Listing:
- 15. Method of distribution:

[ullet]

[Fixed rate — specify date]

Floating rate — Interest Payment Date falling in [specify months and year]

[[●] per cent. Fixed Rate] [[LIBOR/EURIBOR] +/
- [●] per cent. Floating Rate] [Zero Coupon]
[Index Linked Interest] [Dual Currency Interest]
[specify other] (further particulars specified below)

[Redemption at par] [Index Linked Redemption]
[Dual Currency Redemption] [Partly Paid]
[Installment] [specify other]

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

[Investor Put] [Issuer Call] [(further particulars specified below)]

[Senior]/[Subordinated]

[•] (N.B. Only relevant where Board (or similar) authorization is required for the particular tranche of Notes)

[Singapore/specify other/None] (N.B. Notes under this Programme cannot be admitted to trading on an EU regulated market without the preparation of a prospectus compliant with the disclosure requirements under the EU Prospectus Directive)

[Syndicated/Non-syndicated]

# PROVISIONS RELATING TO INTEREST (IF ANY) PAYABLE

16. Fixed Rate Note Provisions:

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

(i) Rate[(s)] of Interest:

[•] per cent. per annum [payable [annually/semi-annually/quarterly] in arrear] (If payable other than annually, consider amending Condition 6)

(ii) Interest Payment Date(s):

[[•] in each year up to and including the Maturity Date]/[specify other] [N.B.: This will need to be amended in the case of long or short coupons]

(iii) Fixed Coupon Amount(s):

[•] per [ ] in nominal amount

	(iv) Broken Amount(s):	[Insert particulars of any initial or final broken interest amounts which do not correspond with the Fixed Coupon Amount]
	(v) Day Count Fraction:	[30/360 or Actual/Actual (ICMA) or [specify other]]
	(vi) Determination Date(s):	[●] in each year
		[Insert regular interest payment dates, ignoring issue date or maturity date in the case of a long or short first or last coupon NB: This will need to be amended in the case of regular interest payment dates which are not of equal duration. NB: Only relevant where Day Count Fraction is Actual/Actual (ICMA)]
	(vii) Business Day Convention:	[Following Business Day Convention]
	(viii) 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 sub-paragraphs of this paragraph)
	(i) Specified Period(s)/Specified Interest Payment Dates:	[•]
	(ii) Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention/ [specify other]]
	(iii) Additional Business Centre(s):	[●]
	(iv) Manner in which the Rate of Interest and Interest Amount is to be determined:	[Screen Rate Determination/ISDA Determination/specify other]
	(v) Party responsible for calculating the Rate of Interest and Interest Amount (if not the Principal Paying Agent):	[●]
	(vi) 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 TARGET 2 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 Telerate Page 248 ensure it is a page which shows a composite rate or amend the fallback provisions appropriately)

	(vii) ISDA Determination:	
	— Floating Rate Option:	[●]
	— Designated Maturity:	[●]
	— Reset Date:	[●]
	(viii) Margin(s):	[+/-][●] per cent. per annum
	(ix) Minimum Rate of Interest:	[●] per cent. per annum
	(x) Maximum Rate of Interest:	[●] per cent. per annum
	(xi) Day Count Fraction:	[Actual/365 Actual/365 (Fixed) Actual/365 (Sterling) Actual/360 30/360 30E/360 Other] (See Condition 6 for alternatives)
	(xii) Fall back 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.	Zero Coupon Note Provisions:	[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Accrual Yield:	[●] per cent. per annum
	(ii) Reference Price:	[●]
	(iii) Any other formula/basis of determining amount payable:	[●] (Consider applicable day count fraction if euro denominated)
	(iv) Day Count Fraction in relation to Early Redemption Amount and Late Payment on Zero Coupon Notes:	[Condition 8(e)(iii) and Condition 8(j) apply/ specify other] (Consider applicable day count fraction if not U.S. dollar denominated)
19.	Index Linked Interest Note Provisions:	[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Index/Formula:	[give or annex details]
	(ii) Calculation Agent responsible for calculating the interest due:	[•]
	(iii) Provisions for determining Coupon where calculation by reference to Index and/or Formula is impossible or impracticable:	[•]
	(iv) Specified Period(s)/Specified Interest Payment Dates:	[●]
	(v) Business Day Convention:	[Floating Rate Convention/Following Business Day Convention/Modified Following Business Day Convention/Preceding Business Day Convention/ specify other]
	(vi) Additional Business Centre(s):	[●]
	(vii) Minimum Rate of Interest:	[•] per cent. per annum
	(viii) Maximum Rate of Interest:	[•] per cent. per annum

	(ix) Day Count Fraction:	[●]
20.	Dual Currency Note Provisions:	[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Rate of Exchange/method of calculating Rate of Exchange:	[give details]
	(ii) Calculation Agent, if any, responsible for calculating the principal and/or interest payable:	[•]
	(iii) Provisions applicable where calculation by reference to Rate of Exchange impossible or impracticable:	[•]
	(iv) Person at whose option Specified Currency(ies) is/are payable:	[•]
	PROVISIONS RELATING TO REDEMPTION	
21.	Issuer Call:	[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Optional Redemption Date(s):	[●]
	(ii) Optional Redemption Amount of each Note and method, if any, of calculation of such amount(s):	[●] per Note of [●] Specified Denomination
	(iii) If redeemable in part:	
	(a) Minimum Redemption Amount:	[•]
	(b) Higher Redemption Amount:	[●]
	(iv) 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 is 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 and the Principal Paying Agent)
22.	Investor Put (other than Condition 8(d)(i)):	[Applicable/Not Applicable] (If not applicable, delete the remaining sub-paragraphs of this paragraph)
	(i) Optional Redemption Date(s):	[•]
	(ii) Optional Redemption Amount of each Note and method, if any, of calculation of such amount(s):	[●] per Note of [●] Specified Denomination
	(iii) 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 is 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 and the Principal Paying Agent)

23. Final Redemption Amount of each Note:

[Par/specify other/see Appendix]

24. Early Redemption Amount of each Note 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 8(e)):

[•]

### 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]]

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

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

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

- 26. Additional Financial Centre(s) or other special provisions relating to Payment Dates:
- [Not Applicable/give details] (Note that this item relates to the place of payment and not Interest Period end dates to which items 17(iii) and 19(vi) 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. NB: new forms of Global Note(s) may be required for Partly Paid issues.]

29. Details relating to Installment Notes: amount of each installment, date on which each payment is to be made:

[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))] [(if Redenomination is applicable, specify the terms of the redenomination in an Annex to the Pricing Supplement)]
31.	Other terms or special conditions:	[Not Applicable/give details]
	DISTRIBUTION	
32.	(i) If syndicated, names of Managers:	[Not Applicable/give names]
	(ii) Stabilizing Manager (if any):	[Not Applicable/give name]
33.	If non-syndicated, name of relevant Dealer:	[•]
34.	Whether TEFRA D or TEFRA C rules applicable or TEFRA rules not applicable:	[TEFRA D/TEFRA C/TEFRA not applicable]
35.	Additional selling restrictions:	[Not Applicable/give details]
		(If Item 34 confirms that either TEFRA C or TEFRA D applies, then specify each of the selling restrictions and representations that should be complied with to ensure that the issuance of Notes is U.S. Treas. Reg. § 1.163-5(c)(2)(i)(C) (i.e., TEFRA C) or U.S. Treas. Reg. § 1.163-5(c)(2)(i)(D) (i.e., TEFRA D) compliant, as applicable)
	OPERATIONAL INFORMATION	
36.	Any clearing system(s) other than Euroclear and Clearstream, Luxembourg and the relevant identification number(s):	[Not Applicable/give name(s) and number(s)]
37.	Delivery:	Delivery [against/free of] payment
38.	In the case of Registered Notes, specify the location of the office of the Registrar if other than New York:	[Not Applicable/give location]
39.	Additional Paying Agent(s) (if any):	[•]
	ISIN:	[•]
	Common Code:	[•]
	(insert here any other relevant codes such as	

# [LISTING APPLICATION

CUSIP and CINS codes)

This Pricing Supplement comprises the final terms required to list the issue of Notes described herein pursuant to the U.S.\$9,000,000,000 Global Medium Term Note Program of Korea National Oil Corporation.]

### RESPONSIBILITY

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

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, 5, 6, 7, 8 (except Condition 8(b)), 12, 13, 14, 15 (insofar as such Notes are not listed or admitted to trading on any stock exchange) or 17, 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 of the Notes 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 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 Terms and 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 Terms and Conditions, replace or modify the following Terms and 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 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 National Oil Corporation (the "Issuer") pursuant to the Agency Agreement (as defined below).

References herein to the "Notes" shall be references to the Notes of this Series 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;
  - (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, the Receipts (as defined below) and the Coupons (as defined below) have the benefit of the agency agreement dated September 29, 2010 as supplemented by a supplemental agency agreement dated October 5, 2012, as further amended and/or supplemented from time to time (the "Agency Agreement"), and made between the Issuer, The Bank of New York Mellon, London Branch as issuing and principal paying agent (the "Principal Paying Agent," which expression shall include any successor agent) and the other paying agents named therein (together with the Principal Paying Agent, the "Paying Agents," which expression shall include any additional or successor paying agents), The Bank of New York Mellon as exchange agent (the "Exchange Agent," which expression shall include any additional or successor exchange agent) and as registrar (the "Registrar," which expression shall include any successor registrar) and a transfer agent and the other transfer agents named therein (together with the Registrar, the "Transfer Agent" which expression shall include any additional or successor transfer agents).

Interest bearing definitive Bearer Notes (unless otherwise indicated in the applicable Pricing Supplement) have 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 Terms and Conditions and may specify other terms and conditions which shall, to the extent so specified or to the extent inconsistent with these Terms and Conditions, replace or modify these Terms and 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 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 "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) except for their respective Issue Dates, Interest Commencement Dates and/or Issue Prices.

The Noteholders, the Receiptholders and the Couponholders are entitled to the benefit of a deed of covenant dated September 29, 2010 (the "Deed of Covenant") made by the Issuer. The original of the Deed of Covenant is held by the common depositary for Euroclear (as defined below) and Clearstream, Luxembourg (as defined below).

Copies of the Agency Agreement, a deed poll dated September 29, 2010 (the "Deed Poll") and made by the Issuer, the applicable Pricing Supplement and the Deed of Covenant are available during normal business hours at the specified office of each of the Principal Paying Agent, the Registrar and the other Paying Agents and Transfer Agents (such agents and the Registrar being together referred to as the "Agents"). Copies of the applicable Pricing Supplement are obtainable during normal business hours at the specified office of each of the Agents save 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 that Series and such Noteholder must produce evidence satisfactory to the Issuer or the relevant Paying Agent as to its holding of such Notes and 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, the Deed Poll, the Deed of Covenant and the applicable Pricing Supplement which are applicable to them. The statements in these Terms and 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 Terms and 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, the applicable Pricing Supplement will prevail.

## 1. FORM, DENOMINATION AND TITLE

The Notes are in bearer form or in registered form as specified in the applicable Pricing Supplement and, in the case of definitive Notes, serially numbered, in the Specified Currency and the Specified Denomination(s). 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.

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 on the Redemption/ Payment Basis shown in the applicable Pricing Supplement.

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

Subject as set out below, title to the 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 and the Paying Agents 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.

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, Luxembourg"), each person (other than Euroclear or Clearstream, Luxembourg) who is for the time being shown in the records of Euroclear or of Clearstream, Luxembourg as the holder of a particular nominal amount of such Notes (in which regard any certificate or other document issued by Euroclear or Clearstream, Luxembourg 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 and the Paying 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 and the registered holder of any Registered Note shall be treated by the Issuer and any Paying 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 that 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, Luxembourg, as the case may be. References to DTC, Euroclear and/or Clearstream, Luxembourg 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.

## 2. TRANSFERS OF REGISTERED NOTES

### (a) Transfers of interests in Registered Global Notes

Transfers of beneficial interests in Registered Global Notes will be effected by DTC, Euroclear or Clearstream, Luxembourg, 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, Luxembourg, 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.

## (b) Transfers of Registered Notes in definitive form

Subject as provided in paragraphs (e), (f) and (g) below, 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 10 to the Agency Agreement). Subject as provided above, the Registrar or, as the case may be, the relevant Transfer Agent will, within three 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 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.

# (c) Registration of transfer upon partial redemption

In the event of a partial redemption of Notes under Condition 8, the Issuer shall not be required to register the transfer of any Registered Note, or part of a Registered Note, called for partial redemption.

# (d) 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 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.

# (e) Transfers of interests in Regulation S Global Notes

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

- (i) upon receipt by the Registrar of a written certification substantially in the form set out in Schedule 8 to 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:
  - (A) to a person whom the transferor reasonably believes is a QIB in a transaction meeting the requirements of Rule 144A; or
  - (B) to a person who is an Institutional Accredited Investor, subject to delivery of the Registrar of a Transfer Certificate from the transferor to the effect that such transfer is being made to an Institutional Accredited Investor, a duly executed investment letter from the relevant transferee substantially in the form set out in the Agency Agreement (an "IAI Investment Letter"); or
- (ii) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer of such satisfactory evidence as the Issuer may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with 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 (A) above, such transferee may take delivery through a Legended Note in global or definitive form and, in the case of (B) above, such transferee may take delivery only through a Legended Note in definitive form. After expiry of the applicable Distribution Compliance Period (i) 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 (ii) such certification requirements will no longer apply to such transfers.

# (f) Transfers of interests in Legended Notes

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

- (i) 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 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, Luxembourg; or
  - (ii) to a transferee who takes delivery of such interest through a Legended Note:
  - (A) 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
  - (B) 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
- (iii) otherwise pursuant to the Securities Act or an exemption therefrom, subject to receipt by the Issuer of such satisfactory evidence as the Issuer may reasonably require, which may include an opinion of U.S. counsel, that such transfer is in compliance with 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, Luxembourg, 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 such satisfactory evidence as may reasonably be required by the Issuer, 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.

# (g) 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.

## (h) 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

The Notes and any relative Receipts and Coupons are direct, unconditional, unsubordinated and (subject to the provisions of Condition 4) unsecured obligations of the Issuer and rank pari passu among themselves and will rank *pari passu* with all other present and future unsecured and unsubordinated obligations of the Issuer, save for such as may be preferred by mandatory provisions of applicable law.

## 4. CERTAIN COVENANTS

## (a) Negative Pledge

So long as any of the Notes of this Series remains outstanding, the Issuer will not itself, and will not permit any Principal Subsidiary (as defined below) to, 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 International Investment Securities or (ii) any payment under any guarantee of any such International Investment 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 (as defined in the Agency Agreement) passed at a meeting of the holders of Notes of this Series.

The foregoing shall not operate to restrict or prohibit (i) the existence of any Security for the benefit of the holders of any International Investment Securities created by a Principal Subsidiary prior to it becoming a Principal Subsidiary, *provided* that the same shall not have been created in contemplation thereof or in connection therewith, (ii) the creation or existence of any Security consisting of a security interest 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 any Principal Subsidiary makes an investment and to which the Issuer or any Principal Subsidiary transfers Receivables and related assets) and (iii) the creation of any Security over the assets of a capital project securing payment of interest or principal of, payment under any guarantee of, or payment under any indemnity relating to, any International Investment Securities issued by the Issuer or that Principal Subsidiary, where the International Investment Securities are issued to finance such capital project and the financier's rights of recovery are limited to the assets of such capital project.

In this Condition, a "capital project" means a long-term investment project to acquire, develop, improve, and/or maintain oil or gas fields or oil or gas exploration, development and production related equipment.

## (b) Consolidation, Merger and Sale of Assets

The Issuer, without the consent of the holders of the Notes, 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; provided that

(i) any successor corporation expressly assumes the Issuer's obligations under these Conditions and the Agency Agreement, (ii) after giving effect to the transaction, with respect to the Issuer or any such successor corporation, no Event of Default 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 has delivered to the Principal Paying Agent a certificate executed by a duly authorized officer of the Issuer 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.

## (c) Certain Definitions

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

"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 Won or are denominated in Won and more than 50 per cent. of the aggregate principal amount thereof is initially distributed outside Korea by or with the authorization of the Issuer; 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.

"Principal Subsidiary" means:

- (i) any Subsidiary (as defined below) of the Issuer:
- (x) whose net sales, as shown by the then latest audited financial statements or accounts (consolidated where applicable, but without intercompany adjustments for consolidation with the Issuer) of such Subsidiary, constitute at least 10% of the consolidated net sales of the Issuer as shown by the then latest audited consolidated accounts of the Issuer; or
- (y) whose total assets, as shown by the then latest audited financial statements or accounts (consolidated where applicable, but without intercompany adjustments for consolidation with the Issuer) of such Subsidiary, constitute at least 10% of the total consolidated assets of the Issuer as shown by the then latest audited consolidated accounts of the Issuer;

# provided that:

- (1) in the case of a Subsidiary acquired, or a company becoming a Subsidiary, after the end of the financial period to which the latest audited consolidated accounts of the Issuer relate, the reference to the then latest audited consolidated accounts of the Issuer for the purposes of the calculation above shall, until audited consolidated accounts of the Issuer for the financial period in which the acquisition is made or, as the case may be, in which the relevant company becomes a Subsidiary are published, be deemed to be a reference to the then latest audited consolidated accounts of the Issuer adjusted to consolidate the last audited accounts (consolidated where applicable) of such Subsidiary in such accounts;
- (2) if at any relevant time in relation to the Issuer or any Subsidiary in respect of which financial consolidation is relevant no consolidated accounts are prepared and audited, net sales and total assets of the Issuer and/or any such Subsidiary shall be determined on the basis of pro-forma consolidated accounts prepared for this purpose by the auditors for the time being of the Issuer;

- (3) if at any relevant time in relation to any Subsidiary no accounts are audited, its net sales and total assets (consolidated where applicable, but without intercompany adjustments for consolidation with the Issuer) shall be determined on the basis of pro-forma accounts (consolidated where applicable, but without intercompany adjustments for consolidation with the Issuer) of the relevant Subsidiary prepared for this purpose by the auditors for the time being of the Issuer; and
- (4) if the accounts of any Subsidiary (not being a Subsidiary referred to in proviso (1) above) are not consolidated with those of the Issuer, then the determination of whether or not such Subsidiary is a Principal Subsidiary shall be based on a pro-forma consolidation of its accounts (consolidated where applicable, but without intercompany adjustments for consolidation with the Issuer) with the then latest consolidated audited accounts (determined on the basis of the foregoing) of the Issuer; or
  - (ii) any Subsidiary of the Issuer to which is transferred all or substantially all of the assets of a Subsidiary which immediately prior to such transfer was a Principal Subsidiary, provided that the Principal Subsidiary which so transfers its assets shall forthwith upon such transfer cease to be a Principal Subsidiary.

"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" shall mean such accounting principles which are generally accepted in Korea at the date or time of any computation.

"Subsidiary" means, at any particular time, (i) at least 50% of whose issued equity share capital (or equivalent) is then beneficially owned, by the Issuer, (ii) any person which is then directly or indirectly controlled by the Issuer or (iii) any subsidiary subject to consolidation with the Issuer's financial statements under Relevant GAAP. For a person to be "controlled" by another means that the other (whether directly or indirectly and whether by the ownership of share capital, the possession of voting power, contract or otherwise) has the power to appoint and/or remove a majority of the members of the board of directors or other governing body of that person or otherwise controls or has the power to control the affairs and policies of that person.

#### 5. REDENOMINATION

# (a) 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 Principal Paying Agent, Euroclear and Clearstream, Luxembourg and at least 30 days' prior notice to the Noteholders in accordance with Condition 15, 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:

- (i) the Notes and the Receipts shall be deemed to be redenominated in euro in the denomination of €0.01 with a nominal amount for each Note and Receipt equal to the nominal amount of that Note or Receipt in the Specified Currency, converted into euro at the Established Rate, provided that, if the Issuer determines, with the agreement of the Principal Paying Agent, that the then market practice in respect of the redenomination in 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 Paying Agents of such deemed amendments;
- (ii) save to the extent that an Exchange Notice has been given in accordance with paragraph (iv) below, the amount of interest due in respect of the Notes will be calculated by reference to the aggregate nominal 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 €0.01;

- (iii) 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 €1,000, €10,000, €100,000 and (but only to the extent of any remaining amounts less than €1,000 or such smaller denominations as the Principal Paying Agent may approve) €0.01 and such other denominations as the Principal Paying Agent shall determine and notify to the Noteholders:
- (iv) 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 euro-denominated 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 Principal Paying Agent may specify 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;
- (v) 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 cheque;
- (vi) 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, it will be calculated by applying the Rate of Interest to each Specified Denomination, 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;
- (vii) if the Notes are Floating Rate Notes, the applicable Pricing Supplement will specify any relevant changes to the provisions relating to interest; and
- (viii) such other changes shall be made to this Condition as the Issuer may decide, after consultation with the Principal Paying Agent, and as may be specified in the notice, to conform it to conventions then applicable to instruments denominated in euro.

# (b) Definitions

In the 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 roundings in accordance with applicable European Community regulations) into euro established by the Council of the European Union pursuant to Article 123 of the Treaty;

"€" and "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 paragraph (a) 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, as amended.

#### 6. INTEREST

## (a) 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 equal to the Rate(s) of Interest. Interest will be payable in arrear on the Interest Payment Date(s) in each year up to (and including) the Maturity Date.

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.

As used in the Conditions, "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.

If interest is required to be calculated for a period ending other than a Fixed Interest Period, such interest shall be calculated by applying the Rate of Interest to each Specified Denomination, 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.

"Day Count Fraction" means, in respect of the calculation of an amount of interest in accordance with this Condition 6(a):

- (i) if "Actual/Actual (ICMA)" is specified in the applicable Pricing Supplement:
- (a) 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 and (2) the number of Determination Dates (as specified in the applicable Pricing Supplement) that would occur in one calendar year; or
- (b) in the case of Notes where the Accrual Period is longer than the Determination Period during which the Accrual Period ends, the sum of:
  - (1) 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
  - (2) 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
- (ii) 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.

# In the Conditions:

"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 Determination 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, means one cent.

# (b) Interest on Floating Rate Notes and Index Linked Interest Notes

## (i) 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 arrear on either:

- (A) the Specified Interest Payment Date(s) (each an "Interest Payment Date") in each year specified in the applicable Pricing Supplement; or
- (B) if no Specified Interest Payment Date(s) is/are specified in the applicable Pricing Supplement, each date (each 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 Terms and 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 that is not a Business Day, then, if the Business Day Convention specified is:

- (1) in any case where Specified Periods are specified in accordance with Condition 6(b)(i)(B) above, the Floating Rate Convention, such Interest Payment Date (i) in the case of (x) above, shall be the last day that is a Business Day in the relevant month and the provisions of (B) below shall apply mutatis mutandis or (ii) 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 (A) such Interest Payment Date shall be brought forward to the immediately preceding Business Day and (B) 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
- (2) the Following Business Day Convention, such Interest Payment Date shall be postponed to the next day which is a Business Day; or
- (3) 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
- (4) 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 that is both:

- (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 London and any Additional Business Centre specified in the applicable Pricing Supplement; and
- (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 centre of the country of the relevant Specified Currency (if other than London and any Additional Business Centre and 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 Trans-European Automated Real-Time Gross Settlement Express Transfer (TARGET 2) System (the "TARGET 2 System") is open.

## (ii) 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.

## (A) 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 plus or minus (as indicated in the applicable Pricing Supplement) the Margin (if any). For the purposes of this sub-paragraph (A), "ISDA Rate" for an Interest Period means a rate equal to the Floating Rate that would be determined by the Principal Paying Agent under an interest rate swap transaction if the Principal Paying Agent were acting as 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 (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 (A), "Floating Rate," "Calculation Agent," "Floating Rate Option," "Designated Maturity" and "Reset Date" have the meanings given to those terms in the ISDA Definitions.

# (B) Screen Rate Determination for Floating Rate Notes

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, be 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 highest quotation, one only of such quotations) and the lowest (or, if there is more than one such lowest quotation, one only of such quotations) shall be disregarded by the Principal Paying Agent for the purpose of determining the arithmetic mean (rounded as provided above) of such offered quotations.

The Agency Agreement contains provisions for determining the Rate of Interest in the event that the Relevant Screen Page is not available or if, in the case of (1) above, no such offered quotation appears or, in the case of (2) above, fewer than three such offered quotations appear, in each case as at the time specified in the preceding paragraph.

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.

## (iii) 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 (ii) 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 (ii) above is greater than such Maximum Rate of Interest, the Rate of Interest for such Interest Period shall be such Maximum Rate of Interest.

## (iv) Determination of Rate of Interest and calculation of Interest Amounts

The Principal Paying Agent, in the case of 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. In the case of Index Linked Interest Notes, 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 will calculate the amount of interest (the "Interest Amount") payable on the Floating Rate Notes or Index Linked Interest Notes in respect of each Specified Denomination for the relevant Interest Period. Each Interest Amount shall be calculated by applying the Rate of Interest to each Specified Denomination, 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.

"Day Count Fraction" means, in respect of the calculation of an amount of interest in accordance with this Condition 6(b):

- (i) if "Actual/365" 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);
- (ii) if "Actual/365 (Fixed)" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 365;
- (iii) 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 or Interest Payment Date falling in a leap year, 366:
- (iv) if "Actual/360" is specified in the applicable Pricing Supplement, the actual number of days in the Interest Period divided by 360;
- (v) 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 (the number of days to be calculated on the basis of a year of 360 days with 12 30-day months (unless (a) the last day of the Interest Period is the 31st day of a month but the first day of the Interest Period is a day other than the 30th or 31st day of a month, in which case the month that includes that last day shall not be considered to be shortened to a 30-day month, or (b) the last day of the Interest Period is the last day of the month of February, in which case the month of February shall not be considered to be lengthened to a 30-day month)); and
- (vi) if "30E/360" or "Eurobond Basis" is specified in the applicable Pricing Supplement, the number of days in the Interest Period divided by 360 (the number of days to be calculated on the basis of a year of 360 days with 12 30-day months, without regard to the date of the first day or last day of the Interest Period unless, in the case of the final Interest Period, the Maturity Date is the last day of the month of February, in which case the month of February shall not be considered to be lengthened to a 30-day month).

# (v) Notification of Rate of Interest and Interest Amounts

The Principal Paying Agent 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 notices to Noteholders will be published in accordance with Condition 15 as soon as possible after their determination but in no event later than the fourth London Business Day thereafter. 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 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 15. 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 (including dealing in foreign exchange and foreign currency deposits) in London.

## (vi) 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(b), whether by the Principal Paying Agent or, if applicable, the Calculation Agent, shall (in the absence of willful default, bad faith or manifest error) be binding on the Issuer, the Principal Paying Agent, the Calculation Agent (if applicable), the other Paying Agents and all Noteholders, Receiptholders and Couponholders and (in the absence as aforesaid) no liability to the Issuer, 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.

### (c) Interest on Dual Currency 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.

# (d) 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.

# (e) 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:

- (1) the date on which all amounts due in respect of such Note have been paid; and
- (2) 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 15.

### 7. PAYMENTS

## (a) Method of payment

Subject as provided below:

(i) 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 cheque in such Specified Currency drawn on, a bank in the principal financial centre 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

(ii) 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 cheque.

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 9.

# (b) 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 paragraph (a) 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)).

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 paragraph (a) above 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 paragraph (a) 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 they appertain do not constitute valid obligations of the Issuer. Upon the date on 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 five years after the Relevant Date (as defined in Condition 9) in respect of such principal (whether or not such Coupon would otherwise have become void under Condition 10) or, if later, two 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 Interest 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 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 Fixed Interest 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 or 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.

## (c) Payments in respect of Bearer Global Notes

Payments of principal and interest (if any) in respect of 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 Paying Agent to which it was presented and such record shall be prima facie evidence that the payment in question has been made.

# (d) 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") 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 (i) a holder does not have a Designated Account or (ii) 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 cheque in the Specified Currency drawn on a Designated Bank (as defined below) and mailed by uninsured mail as soon as reasonably practicable after the relevant due date to the holder (or the first named of joint holders) of the Registered Note appearing in the Registrar at the close of business on the Record Date (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 centre of the country of such Specified Currency (which, if the Specified Currency is Australian dollars or New Zealand dollars, shall be Sydney or Auckland, 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 cheque 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 Register (i) where in global form, at the close of the business day (being for the purpose a day on which DTC and/or Euroclear and Clearstream, Luxembourg, as applicable, are open for business) and (ii) where 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 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 cheque 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.

None of the Issuer or 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.

# (e) 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 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 Euroclear or Clearstream, Luxembourg as the beneficial holder of a particular nominal amount of Notes represented by such Global Note must look solely to Euroclear or Clearstream, Luxembourg, 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:

- (i) the Issuer has 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;
- (ii) 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
- (iii) such payment is then permitted under United States law without involving, in the opinion of the Issuer, adverse tax consequences to the Issuer.

#### (f) Payment Day

If the date for payment of any amount in respect of any Note, Receipt or Coupon is not a Payment Day, 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 that (subject to Condition 9) is:

(i) 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 centre of the country of the relevant Specified Currency (if other than the place of presentation and any Additional

Financial Centre and which if the Specified Currency is Australian dollars or New Zealand dollars shall be Melbourne and Wellington, respectively) or (2) in relation to any sum payable in euro, a day on which the TARGET 2 System is open; and

- (ii) 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:
  - (A) the relevant place of presentation (in the case of Notes in definitive form); and
  - (B) London and any Additional Financial Centre specified in the applicable Pricing Supplement.

## (g) Interpretation of principal and interest

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

- (i) any additional amounts which may be payable with respect to principal under Condition 9;
- (ii) the Final Redemption Amount of the Notes;
- (iii) the Early Redemption Amount of the Notes;
- (iv) the Optional Redemption Amount(s) (if any) of the Notes;
- (v) in relation to Notes redeemable in installments, the Installment Amounts;
- (vi) in relation to Zero Coupon Notes, the Amortized Face Amount (as defined in Condition 8(e)); and
- (vii) any premium and any other amounts which may be payable by the Issuer under or in respect of the Notes.

Any reference in these Terms and 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 9.

### 8. REDEMPTION AND PURCHASE

# (a) Redemption at maturity

Unless previously redeemed or purchased and cancelled as specified below, each Note (including each Index Linked Redemption Note and Dual Currency 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.

# (b) 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 nor an Index Linked Interest Note nor a Dual Currency Interest Note) or on any Interest Payment Date (if this Note is either a Floating Rate Note or 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 Principal Paying Agent and, in accordance with Condition 15, the Noteholders (which notice shall be irrevocable), if:

- (i) on the occasion of the next payment due under the Notes, the Issuer has or will become obliged to pay additional amounts as provided or referred to in Condition 9 as a result of any change in, expiration of or amendment to the laws or regulations of a Tax Jurisdiction (as defined in Condition 9), or any change in the application or official interpretation of such laws or regulations, which change or amendment becomes effective on or after the date on which agreement is reached to issue the first Tranche of the Notes; and
- (ii) such obligation cannot be avoided by the Issuer taking reasonable measures available to it, *provided that* (1) no such notice of redemption shall be given earlier than 60 days prior to the earliest date on which the Issuer would be obliged to pay such additional amounts were a payment in respect of the Notes then due and (2) at the time of such notice of redemption is given, such obligation to pay such additional amounts remains in effect.

Prior to the publication of any notice of redemption pursuant to this Condition, the Issuer shall deliver to the Principal Paying Agent (1) a certificate signed by an authorized officer of the Issuer stating that the Issuer is entitled to effect such redemption and setting forth a statement of facts showing that the conditions precedent to the right of the Issuer so to redeem have occurred and (2) an opinion of independent legal advisers of recognized standing to the effect that the Issuer has or will become obliged to pay such additional amounts as a result of such change or amendment.

Notes redeemed pursuant to this Condition 8(b) will be redeemed at their Early Redemption Amount referred to in paragraph (e) below together (if appropriate) with interest accrued to (but excluding) the date of redemption.

# (c) Redemption at the option of the Issuer (Issuer Call)

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

- (i) not less than 15 nor more than 30 days' notice to the Noteholders in accordance with Condition 15; and
- (ii) not less than 15 days before the giving of the notice referred to in (i), notice to the Principal Paying Agent and is 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 more than the Higher 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 Euroclear, Clearstream, Luxembourg and/or DTC 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 15 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 paragraph (c) and notice to that effect shall be given by the Issuer to the Noteholders in accordance with Condition 15 at least five days prior to the Selection Date.

### (d) Change of Control; Redemption of the Notes only at the option of the Noteholders (Investor Put)

## (i) Change of Control

Upon the occurrence of a Change of Control (as defined below), each holder of the Notes will have the right to require the Issuer to redeem all or any part of such holder's Notes at a redemption price equal to 100% of the principal amount thereof plus accrued but unpaid interest, if any, to the date of redemption (the "Change of Control Redemption Price"). Within 30 days following a Change of Control, the Issuer shall cause the Principal Paying Agent to deliver a notice to each holder stating that (i) 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; (ii) the redemption date (which shall be no earlier than 30 days nor later than 60 days from the date such notice is delivered); and (iii) the procedures determined by the Issuer, consistent with the Notes and the Agency Agreement, that a holder must follow in order to have its Notes redeemed.

"Change of Control" means the central government of Korea ceasing to own and control (directly or indirectly or in combination) at least 51% of the Issuer's issued and outstanding capital stock.

(ii) Redemption of the Notes only at the option of the Noteholders (Investor Put)

If Investor Put is specified in the applicable Pricing Supplement with respect to any Series of Notes, upon the holder of any Note giving to the Issuer in accordance with Condition 15 not less than 15 nor more than 30 days' notice 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 Optional Redemption Amount together, if appropriate, with interest accrued to (but excluding) the Optional Redemption Date. Registered Notes may be redeemed under this Condition 8(d)(ii) in any multiple of their lowest Specified Denomination.

To exercise the right to require redemption of this Note, the holder of this Note must deliver, at the specified office of any 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 Paying Agent or, as the case may be the Registrar falling within the notice period, a duly completed and signed notice of exercise in the form (for the time being current) obtainable from any specified office of any 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 cheque, an address) to which payment is to be made under this Condition 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(b). If this Note is in definitive form, the Put Notice must be accompanied by this Note or evidence satisfactory to the Paying Agent concerned that this Note will, following delivery of the Put Notice, be held to its order or under its control.

Any Put Notice given by a holder of any Note pursuant to this paragraph shall be irrevocable except where prior to the due date of redemption an Event of Default shall have occurred and be continuing in which event such holder, at its option, may elect by notice to the Issuer to withdraw the notice given pursuant to this paragraph and instead to declare such Note forthwith due and payable pursuant to Condition 11.

# (e) Early Redemption Amounts

For the purpose of paragraph (b) above and Condition 11, each Note will be redeemed at the Early Redemption Amount calculated as follows:

- (i) in the case of a Note with a Final Redemption Amount equal to the Issue Price, at the Final Redemption Amount thereof;
- (ii) in the case of a Note (other than a Zero Coupon Note but including an Installment 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 Notes are 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
- (iii) 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 =  $RP \times (1+AY)y$ 

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 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.

## (f) 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 paragraph (e) above.

## (g) 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.

### (h) Purchases

The Issuer may at any time purchase Notes by tender (available to all holders of the Notes alike) or in the open market at any price. If the Issuer 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 Principal Paying Agent for cancellation and are cancelled and retired by the Principal Paying Agent. The Issuer will not sell, and will cause its affiliates not to sell, any Notes as to which it or they hold or acquire any beneficial interest; *provided* that affiliates of the Issuer may sell Notes to the Issuer or to other such affiliates. Notes purchased or otherwise acquired by the Issuer may be held, resold or, at its discretion, surrendered to the Principal Paying Agent for cancellation.

## (i) Cancellation

All Notes that 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 paragraph (g) above (together with all unmatured Receipts, Coupons and Talons cancelled therewith) shall be forwarded to the Principal Paying Agent and cannot be reissued or resold.

## (j) 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 paragraph (a), (b), (c) or (d) above or upon its becoming due and repayable as provided in Condition 11 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 (e)(iii) 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:

- (i) the date on which all amounts due in respect of such Zero Coupon Note have been paid; and
- (ii) 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 the Registrar and notice to that effect has been given to the Noteholders in accordance with Condition 15.

### 9. TAXATION

All payments of principal and interest in respect of the Notes, Receipts and Coupons by the Issuer will be made without withholding or deduction for or on account of any present or future taxes, duties, assessments or governmental charges of whatever nature imposed or levied by or on behalf of a Tax Jurisdiction unless such withholding or deduction is required by law. In such event, the Issuer 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 will not be less than 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:

- (i) to or on behalf of a holder of such Note, Receipt or Coupon who is subject to such taxes, duties, assessments or governmental charges in respect of such Note by reason of such holder being or having been connected with a Tax Jurisdiction other than merely by holding such Note or receiving principal or interest in respect thereof; or
- (ii) to or on behalf of a holder of such Note, Receipt or Coupon who would not be liable for or subject to such deduction or withholding by making a declaration of non-residence or other similar claim for exemption to the relevant tax authority if, after having been requested in writing by the Issuer to make such a declaration or claim, such holder fails to do so; or
- (iii) to or on behalf of a holder of such Note, Receipt or Coupon who presents a Note (where presentation is required) more than 30 days after the relevant date except to the extent that the holder thereof would have been entitled to such additional amounts on presenting the same for payment on the last day of such 30-day period; for this purpose the "relevant date" means:
  - (a) the due date for payment thereof; or
  - (b) if the full amount of the moneys payable on such date has not been received by the Principal Paying Agent or the Registrar, as the case maybe, on or prior to such due date, 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 15; or
- (iv) if withholding or deduction is imposed on a payment to or for the benefit of an individual and such payment is required to be made pursuant to European Council Directive 2003/48/EC (as amended from time to time), or any law implementing or complying with, or introduced in order to conform to, such Directive; or
- (v) to or on behalf of a holder of a holder of such Note, Receipt or Coupon who would have been able to avoid the withholding or deduction by the presentation (where presentation is required) of the relevant Note, Receipt or Coupon to, or otherwise accepting payment from, another paying agent in a Member State of the European Union; or
  - (vi) any combination of (i), (ii), (iii), (iv) or (v) above.

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

As used herein: "Tax Jurisdiction" means Korea or any political subdivision or any authority thereof or therein having power to tax.

## 10. PRESCRIPTION

The Notes (whether in bearer form or registered form), Receipts and Coupons will become void unless presented for payment within a period of five years (in the case of principal) and two years (in the case of interest) after the Relevant Date (as defined in Condition 9) 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 7(b) or any Talon that would be void pursuant to Condition 7(b).

### 11. EVENTS OF DEFAULT

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

- (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 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 contained in these Conditions 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 these Conditions and demanding that the Issuer remedy the same, shall have been given to the Issuer, with a copy to the Principal Paying Agent and the Registrar, by the Noteholders of at least 10% in aggregate principal amount of the Notes at the time outstanding;
- (iv) any Debt of the Issuer 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 Issuer 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 Issuer 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 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 the Notes or thereafter, or appointing a receiver, liquidator, assignee, custodian, trustee or sequestrator (or similar official) of the Issuer 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 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 of a voluntary case under any applicable bankruptcy, insolvency, reorganization, rehabilitation, compulsory composition or other similar law in effect on the date 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 for any substantial part of its property, or cease to carry on the whole or substantially the whole of its business, or make any general assignment for the benefit of creditors, or enter into any composition with its creditors, or take corporate action in furtherance of any such action.

If an Event of Default with respect to the Notes occurs and is continuing, the Notesholders of not less than 25% in aggregate principal amount of the Notes then outstanding may declare the principal amount (and premium, if any) of, and all accrued but unpaid interest on, all the Notes to be due and payable immediately, by a notice in writing to the Issuer 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 to the Noteholders in writing. 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 pays or deposits with the Principal Paying Agent all amounts then due with

respect to the Notes (other than amounts due solely because of such declaration) and cures all other Events of Default with respect to the Notes, such defaults may be waived and such declaration may be annulled and rescinded by the Noteholders of more than 50% in aggregate principal amount of the Notes then outstanding by written notice thereof to the Issuer at the office of the Principal Paying Agent.

In this Condition, "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 any mortgage, charge, pledge, encumbrance or other security interest (a "Lien") on any property or asset of such person, whether or not such obligations are assumed by such person and (vi) all obligations of others guaranteed by such person to the extent of such guarantees 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 (v), the lesser of the fair market value (as determined in good faith by the board of directors of such person) at such date of the property or asset of such person subject to a Lien securing the obligations of others and the amount of such obligations secured.

# 12. 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 at the specified office of the Principal Paying Agent (in the case of Bearer Notes, Coupons or Talons) 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 may reasonably require. Mutilated or defaced Notes, Receipts, Coupons or Talons must be surrendered before replacements will be issued.

## 13. PAYING AGENTS

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

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

- (a) there will at all times be a Principal Paying Agent;
- (b) so long as the Notes are listed on any stock exchange, there will at all times be a Paying Agent (in the case of Bearer Notes) 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;
- (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 City;
- (d) the Issuer undertakes that it will ensure that it maintains 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 (as amended from time to time) or any law implementing or complying with, or introduced in order to conform to such Directive; and
- (e) so long as the Notes are listed on the Singapore Exchange Securities Trading Limited (the "Singapore Stock Exchange") and the rules of the Singapore Stock Exchange so require, if the Notes are issued in definitive form, there will at all times be a Paying Agent in Singapore unless the Issuer obtains an exemption from the Singapore Stock Exchange.

In addition, the Issuer shall forthwith appoint a Paying Agent having a specified office in New York City in the circumstances described in Condition 7(e). Any variation, termination, appointment or change with respect to any Paying Agent shall only take effect (other than in the case of insolvency, when it shall be of immediate effect) after not less than 30 nor more than 45 days' prior notice thereof shall have been given to the Noteholders in accordance with Condition 15.

In acting under the Agency Agreement, the Paying 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 Paying 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 paying agent.

### 14. 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 10.

### 15. NOTICES

All notices regarding the Bearer Notes will be deemed to be validly given if published (i) in a leading English language daily newspaper of general circulation in London and Asia. It is expected that such publication will be made in the Financial Times in London and the Asian Wall Street Journal. The Issuer shall also ensure that notices are duly published in a manner which complies with the rules of any stock exchange or other relevant authority on which the Bearer Notes are for the time being listed or by which they have been admitted to listing. 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 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, in addition, for so long as any Registered Notes are listed on a stock exchange and the rules of that stock exchange (or any other 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 Euroclear, Clearstream, Luxembourg and/or DTC, be substituted for such publication in such newspaper(s) the delivery of the relevant notice to Euroclear, Clearstream, Luxembourg, and/or DTC 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 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. 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 Euroclear, Clearstream, Luxembourg and/or DTC.

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). Whilst any of the Notes are represented by a Global Note, such notice may be given by any holder of a Note to the Principal Paying Agent or the Registrar through Euroclear, Clearstream, Luxembourg and/or DTC, as the case may be, in such manner as the Principal Paying Agent, the Registrar and Euroclear, Clearstream, Luxembourg and/or DTC, as the case may be, may approve for this purpose.

### 16. MEETINGS OF NOTEHOLDERS, MODIFICATION AND WAIVER

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 or Noteholders holding not less than 10 per cent. in nominal amount of the Notes for the time being remaining outstanding. The quorum at any such meeting for passing an Extraordinary Resolution is one or more persons holding or representing not less than 50 per cent. 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 date of maturity of the Notes or any date for payment of interest thereof, reducing or cancelling the amount of principal or the rate of interest payable in respect of the Notes or altering the currency of payment of the Notes, Receipts or Coupons), the quorum shall be one or more persons holding or representing in the aggregate not less than 75 per cent. in nominal amount of the Notes for the time being outstanding, or at any adjourned such meeting one or more persons holding or representing in the aggregate a clear majority, 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.

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

- (i) any modification (except as mentioned above) of any of the provisions of the Notes, the Receipts, the Coupons, the Conditions, or the Agency Agreement which is not prejudicial to the interests of the Noteholders; or
- (ii) any modification of the Notes, the Receipts, the Coupons, the Conditions, the Deed of Covenant or the Agency Agreement 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 of the jurisdiction in which the Issuer is incorporated.

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 15 as soon as practicable thereafter.

# 17. FURTHER ISSUES

The Issuer shall be at liberty from time to time without the consent of the Noteholders, the Receiptholders or the Couponholders to create and issue further notes having terms and conditions the same as the Notes or the same in all respects save for the amount and date of the first payment of interest thereon and so that the same shall be consolidated and form a single Series with the outstanding Notes.

# 18. CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999

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

### 19. GOVERNING LAW AND SUBMISSION TO JURISDICTION

### (a) Governing law

The Agency Agreement, the Deed Poll, the Deed of Covenant, the Notes, the Receipts and the Coupons are governed by, and shall be construed in accordance with, English law. Any matter, claim or dispute arising out of or in connection with the Agency Agreement, the Deed Poll, the Deed of Covenant, the Notes, the Receipts and the Coupons, whether contractual or non-contractual, shall be governed by and determined in accordance with English law.

## (b) Submission to jurisdiction

The Issuer irrevocably agrees, for the sole benefit of the Noteholders, the Receiptholders and the Couponholders that, save as provided below, the courts of England and Wales shall have exclusive jurisdiction over any dispute or claim arising out of or in connection with the Notes, the Receipts and the Coupons or their subject matter or formation (including non-contractual disputes or claims).

The Issuer hereby irrevocably waives any objection which it may have now or hereafter to the laying of the venue of any such proceedings in any such courts and any claim that any such proceedings have been brought in an inconvenient forum and hereby further irrevocably agrees that a judgment in any such proceedings brought in the English courts shall be conclusive and binding upon it and may be enforced in the courts of any other jurisdiction.

Nothing contained in this Condition shall limit the right of the Noteholders, the Receiptholders and the Couponholders to take proceedings against the Issuer in any other court of competent jurisdiction, nor shall the taking of proceedings in one or more jurisdictions preclude the taking of proceedings in any other jurisdiction, whether concurrently or not, to the extent permitted by the law of such other jurisdiction.

## (c) Appointment of Process Agent

The Issuer appoints Dana Petroleum Limited at its registered office at Kings Close, 62 Huntley Street, Aberdeen AB10 1RS, United Kingdom as its agent for service of process and undertakes that, in the event of Dana Petroleum Limited ceasing so to act or ceasing to be registered in England it will appoint another person as its agent for service of process in England in respect of any Proceedings. Nothing in this clause shall affect the right to serve process in any other manner permitted by law.

## (d) Waiver of immunity

The Issuer hereby irrevocably and unconditionally waives with respect to Notes, the Receipts and the Coupons 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 proceedings.

### (e) Other documents

The Issuer has in the Agency Agreement, the Deed Poll and the Deed of Covenant submitted to the jurisdiction of the English courts and has appointed an agent for service of process in terms substantially similar to those set out above.

# **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 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 dollars and rounded to the nearest tenth of one Won. No representation is made that the Won or dollar amounts referred to herein could have been or could be converted into dollars or Won, as the case may be, at any particular rate or at all.

Period	At End of Period	Average Rate <sup>(1)</sup>	High	Low
		(Won per US\$1.00)		
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	1,055.3	1,095.0	1,159.1	1,051.5
2014	1,099.2	1,053.2	1,118.3	1,008.9
2015 (through September 21)	1,166.7	1,120.7	1,203.1	1,068.1
January	1,090.8	1,088.9	1,108.7	1,077.3
February	1,099.2	1,098.4	1,109.8	1,088.3
March	1,105.0	1,112.6	1,133.9	1,096.5
April	1,068.1	1,088.7	1,109.4	1,068.1
May	1,108.0	1,091.3	1,108.0	1,069.5
June	1,124.1	1,112.2	1,124.1	1,099.9
July	1,166.3	1,143.2	1,168.9	1,118.3
August	1,176.3	1,179.1	1,198.1	1,164.3
September (through September 21)	1,166.7	1,184.7	1,203.1	1,166.7

Source: Seoul Money Brokerage Services, Ltd.

<sup>(1)</sup> The average rate for each year is calculated as the average of the Market Average Exchange Rates on each business day during the relevant year (or portion thereof). The average rate for a month is calculated as the average of the Market Average Exchange Rates on each business day during the relevant month (or portion thereof).

# **CAPITALIZATION**

The following table sets forth the Company's capitalization (defined as the sum of consolidated long-term debt and total equity) as of June 30, 2015 which is derived from the Company's unaudited condensed consolidated interim financial statements as of June 30, 2015. This table should be read in conjunction with the Company's unaudited condensed consolidated interim financial statements and accompanying notes included elsewhere in this Offering Circular.

	As of June 30, 2015(1)		
	(In billion and in million		
Long-term debt:			
Long-term borrowings, net of discounts	₩ 2,293	\$ 2,040	
Bonds payable, net of discounts and including premiums	9,433	8,392	
Total long-term debt	₩11,726	\$10,432	
Owner's equity:			
Share capital	₩10,123	\$ 9,895	
Accumulated deficit	(2,442)	(2,172)	
Other components of equity	(235)	(210)	
Non-controlling interests	797	709	
Total equity	8,244	7,334	
Total capitalization <sup>(2)(3)</sup>	₩19,970	\$17,766	

<sup>(1)</sup> Translated Won and dollar amounts at the Market Average Exchange Rate of Won 1,124.1 to US\$1.00 on June 30, 2015.

<sup>(2)</sup> Since June 30, 2015, there has been no change in the Company's share capital.

<sup>(3)</sup> Except as set forth herein, there has been no material change in the Company's capitalization since June 30, 2015.

#### SELECTED FINANCIAL AND OTHER DATA

#### **Selected Financial Data**

The following tables present selected consolidated financial and other 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. The selected consolidated financial data as of and for the years ended December 31, 2013 and 2014 have been derived from the consolidated financial statements of the Company included in this Offering Circular. The selected consolidated financial data as of June 30, 2015, and for the six-month periods ended June 30, 2014 and 2015 have been derived from the unaudited condensed consolidated interim financial statements of the Company included in this Offering Circular, which have been prepared in accordance with Korean IFRS No. 1034, "Interim Financial Reporting." The Company's results of operations for the first six months of 2015 may not be indicative of its results of operations for any subsequent quarter or for the fiscal year 2015. The annual financial statements included in this Offering Circular have been prepared in accordance with Korean IFRS. All annual and interim financial data and other data in this Offering Circular regarding the Company's activities, financial condition and results of operations are presented on a consolidated basis.

In November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion and classified all income and expenses relating to the downstream operations as discontinued operations for the year ended December 31, 2014, and retrospectively restated the comparative consolidated statements of comprehensive loss for the year ended December 31, 2013 and the six months ended June 30, 2014. See Note 7 to the Company's audited consolidated financial statements and Note 6 to the Company's unaudited condensed consolidated interim financial statements appearing elsewhere in this Offering Circular.

		As of D	ecember 31,	As of June 30,	
		2013	2014	2015	
			(In billions of V	Won)	
Consolidated Statement of Financial Position Data:		****		*****	
Total assets			,	₩27,807	
Total liabilities			- /-	19,563	
Total equity		<i>'</i>	- /	8,244	
Share capital			- ,	10,123 27,807	
Total habilities and equity	abilities and equity				
	For the Yo		For the Six-Mont June		
	2013	2014	2014	2015	
	(resta		(resta	nted)	
Consolidated Statement of Comprehensive Loss Data:		(In bill	ions of Won)		
Continuing Operations					
Revenue	<b>₩</b> 5,265	₩ 4,358	₩ 2,237	₩ 1,523	
Cost of sales	(3,579)	(3,440)	(1,623)	(1,453)	
Gross profit	1,686	918	614	70	
Selling and administrative expenses	(514)	(445)	(217)	(189)	
Operating profit (loss)	1,173	473	397	(119)	
Other non-operating income	38	139	110	31	
Other non-operating expenses	(145)	(267)	(145)	(63)	
Other loss, net	(679)	(1,720)	(326)	(253)	
Finance income	155	80	55	56	
Finance costs	(626)	(621)	(272)	(339)	

		Year Ended For the Six-Month Pember 31, June 30,		
	2013	2014	2014	2015
	(rest	(In b	(resta	ted)
Income (loss) on investments in associates and joint			,	
ventures, net	1	(42)	12	(40)
Loss before income tax	(83)	(1,957)	(169)	(727)
Income tax benefit	(41)	(684)	(12)	(431)
Loss from continuing operations	(42)	(1,273)	(157)	(296)
<b>Discontinued Operations</b>				
Loss from discontinued operations, net of tax	(674)	(338)	(14)	_
Loss for the period	(716)	(1,611)	(171)	(296)
Income (loss) attributable to:				
Owners of the Company	(729)	(1,603)	(174)	(264)
Non-controlling interests	13	(9)	3	(32)
Other comprehensive income (loss), net of tax:				
Items that will never be reclassified to profit or loss:	2.4	(10)	(4)	(1)
Actuarial gains (losses) on defined benefit plans	24	(18)	(4)	(1)
Retained earnings adjustments in equity method Items that are or may be reclassified to profit or loss:	0	(4)	_	_
Net change in the unrealized fair value of available-				
for-sale financial investments, net of tax	21	(153)	217	80
Net change in fair value of available-for-sale financial	21	(133)	217	00
assets reclassified to profit or loss	_	_	_	6
Equity adjustments arising from investments in				
equity-method investees	1	(5)	3	(0)
Net change in the unrealized fair value of derivatives				
using cash flow hedge accounting, net of tax	41	20	6	(4)
Foreign currency translation differences	(258)	(147)	(519)	58
Other comprehensive income (loss) for the period, net of				
tax	(170)	(303)	(297)	138
Total comprehensive loss for the period, net of tax	₩ (885)	<b>₩</b> (1,914)	₩ (468)	₩ (157)
Total comprehensive income (loss) attributable to:				
Owners of the Company	(893)	(1,924)	(459)	(142)
Non-controlling interests	8	10	(9)	(15)
Consolidated Cash Flow Data:				
Net cash provided by (used in) operating activities	1,561	1,542	1,108	(598)
Net cash used in investing activities	2,503	2,025	1,162	966
Net cash provided by (used in) financing activities	1,347	17	(65)	1,716

# Selected Reserve, Production and Operating Data

The Company's engineers estimate its proved oil and gas reserve quantities based on its internal surveys and data collected from third-party operators of production facilities in which the Company has a working interest, including those held by the Company's subsidiaries. All information in this Offering Circular relating to oil and gas reserves is net to the Company's interest unless stated otherwise. The following table sets forth the present value and estimated volume of the Company's oil and gas proved reserves, as well as other figures relevant to the Company's operations.

		of or for the Y ded December	As of or for the Six- Month Period Ended	
	2012	2013	2014	June 30, 2015
Proved reserves <sup>(1)</sup> :				
Crude oil (million barrels)	468.3	437.7	461.4	455.8
Natural gas (billions of cubic feet)	1,550.7	1,227.9	1,338.4	1,271.2
Total (million barrels of oil equivalent)	734.3	656.2	687.3	671.5
Oil and gas production <sup>(2)</sup> :				
Crude oil (million barrels)	49.3	46.6	45.7	25.3
Natural gas (billions of cubic feet)	185.0	196.6	189.2	101.0
Total (million barrels of oil equivalent)	81.2	80.5	78.1	42.5
Average daily oil and gas production(3):				
Crude oil (barrels)	135,011.0	127,679.5	125,075.1	139,629.0
Natural gas (millions of cubic feet)	506.9	538.7	518.2	557.9
Total (barrels of oil equivalent)	219,488.2	217,468.1	213,867.6	<u>234,924.0</u>
Average sales prices <sup>(4)</sup> :				
Crude oil (US\$/barrel)	90.87	92.20	83.72	43.92
Natural gas (US\$/thousands of cubic feet)	5.35	5.84	5.22	3.56
Reserves to production ratio	9.0	8.2	8.8	

<sup>(1)</sup> The reserve data include reserve data of Harvest Operations as estimated under Canadian oil and gas reporting standards, COGEH and NI 51-101, as evaluated by the Independent Reserves Evaluators. If the reserve data of Harvest Operations as estimated under the Securities Act oil and gas reporting standards were included, the proved crude oil reserves, natural gas reserves and combined reserves as of December 31, 2012, 2013 and 2014 and as of June 30, 2015 may differ from the corresponding amounts shown in the table above.

<sup>(2)</sup> Includes production volume from subsidiaries or assets acquired during the period after their respective acquisition dates.

<sup>(3)</sup> Calculated by dividing the total oil and gas production by the actual number of days in the period.

<sup>(4)</sup> Calculated by dividing total consolidated revenue from sale of oil or gas, as applicable, by total amount of oil or gas sold, as applicable. As such, excludes from calculation any production from the Company's affiliates where the Company's interests are accounted for either as available-for-sale securities or by using the equity method.

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

All financial information included below is given on a consolidated Korean IFRS basis, unless otherwise specified. The following discussion and analysis should be read in conjunction with the Company's consolidated financial statements, together with the accompanying notes, included elsewhere in this Offering Circular. The unaudited condensed consolidated interim financial information for the six-month period ended June 30, 2015 presented in this Offering Circular may not be indicative of the Company's full year results for 2015.

#### Overview

The Company is the national oil and gas company of Korea and is wholly owned by the Government. The Company's revenues are derived principally from the sales of crude oil and natural gas produced from 29 productive projects located in Korea and abroad. As of June 30, 2015, the Company's daily crude oil and natural gas production was approximately 234,900 barrels of oil equivalent. In addition, the Company conducts oil and gas exploration and development activities and has interests in 15 exploratory projects and seven development projects located across 21 countries. The Company derives its sales from the following six business segments: oil and gas sales, petroleum distribution, oil stockpiling, financing, drillship chartering and others. Until November 2014, the Company also generated revenues from the refinery segment, which it classified as discontinued operations following the disposal of the downstream operations. Previously included in the refinery segment were revenues from the sale of refined oil products produced from the refinery operated through Harvest Operations. In November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion and classified all income and expenses relating to the downstream operations as discontinued operations for the year ended December 31, 2014, and retrospectively restated the comparative consolidated statements of comprehensive loss for the year ended December 31, 2013 and the six months ended June 30, 2014. See Note 7 to the Company's audited consolidated financial statements and Note 6 to the Company's unaudited condensed consolidated interim financial statements appearing elsewhere in this Offering Circular. See "Risk Factors — Risks Related to the Company — If the Company is unable to achieve the expected benefits of acquisitions, including realization of adequate rate of return on prices paid, successful integration of the acquired businesses and/or assets, the Company's business, financial condition and results of operations may be adversely affected."

The following is a brief explanation of the Company's current operating segments.

Oil and gas sales. Included in this segment are revenues from (1) sale of oil and gas produced from the Company's production projects, and (2) oil trading activities. The main factors affecting the Company's revenues from this segment are sales volume and sales prices of oil and refined oil products, and to a lesser extent, volume of trading transactions undertaken by the Company and the level of profits generated in those transactions.

*Petroleum distribution*. Included in this segment are revenues from the wholesale gasoline and gas oil distribution business, and from operation of approximately 1,141 discount gas stations located throughout Korea as of June 30, 2015.

Oil stockpiling. Income from this segment consists principally of income from the lease of its stockpile facilities and lending and sale of stockpile oil to domestic refineries. The revenues derived from the lease of stockpile facilities are dependent on the volume of oil stored in the Company's stockpile facilities on behalf of the Company's customers and the level of lease fees received from these customers. The revenues derived from the lending and sale of stockpile oil to domestic refineries are dependent on the price of crude oil and the volume of crude oil lent or sold.

Financing. The Company records as its assets and liabilities the SAER loans that are borrowed and used directly for the Company's own exploration and production projects, and also receives as 'administration fees' the difference between the interest the Company charges other oil and gas developers for the SAER loans that it

on-lends and the interest that the Company is required to pay the Government for such loans. Such fees are recorded as income under this segment, with no associated expenses. The main factors affecting the Company's revenues from this segment are the volume of SAER loans on-lent by the Company and the difference in the interest rate it charges the borrowers and the interest rate it pays the Government.

*Drillship chartering.* The revenues from leasing the Doo Sung, the Company's semi-submersible drillship, are determined primarily by the number of days the drillship is on lease during the financial reporting period and the day rates received for the lease by the Company.

*Others.* Included in this segment are revenues from the oil information services, other research services and other miscellaneous services incidental to the Company's operations.

# Major Factors Affecting the Company's Results of Operations

The Company's results of operations have been affected primarily by the following factors:

- fluctuations in prices of crude oil and natural gas;
- the production volumes of the Company's crude oil and natural gas;
- the Company's strategy to expand production levels; and
- the Government's support for the Company.

# Crude Oil and Natural Gas Prices

The prices at which the Company's crude oil is sold fluctuate generally in line with the fluctuation in international crude oil prices, and natural gas sales price generally move in line with crude oil prices. International crude oil prices have demonstrated significant volatility during the last several years, driven largely by changes in global energy demand and the current economic downturn caused by the credit crisis. For example, the Company's average sales prices for crude oil were US\$90.87, US\$92.20 and US\$83.72 per barrel in 2012, 2013 and 2014, respectively. The Company's average crude oil sales price was US\$43.92 per barrel in the first six months of 2015.

#### Crude Oil and Natural Gas Production Volumes

The Company's crude oil and natural gas production volumes depend primarily on the level of the proven and developed reserves in the projects in which it has an interest, as well as other factors such as political and military events in countries where the Company's producing projects are located, and actions by members of OPEC that affect production levels. The level of proven and developed reserves is affected by such factors as:

- the extent to which the Company acquires interests in producing reserves or acquires other companies that own producing reserves;
- the rate at which explorations lead to successful discoveries and the speed at which successful exploration and development move to production;
- the speed at which the Company and its joint venture partners deplete the reserves through production of crude oil and natural gas; and
- the expiration and extension of the terms of the concessions under which the Company and its joint venture partners produces crude oil and natural gas.

See "Business — Reserves Data — Reserves" for additional information on the Company's reserves.

#### Strategy to Expand Production Levels

A major element of the Company's business strategy is to achieve organic growth through exploration activities and pursue selective acquisitions to optimize its asset portfolio, which would provide the basis for the

Company to compete with larger global oil companies engaged in oil and gas exploration, development and production. In pursuit of this strategy, the Company has completed several recent acquisitions, including the following acquisitions:

- a 50% interest in OIG for US\$600 million in February 2009;
- a 100% interest in Harvest Energy Trust for Won 2,677 billion in December 2009;
- an 85% interest in KNOC Caspian LLP (formerly known as Sumbe JSC) for US\$335 million in December 2009;
- a 100% interest in Dana Petroleum for Won 3,442 billion in October 2010;
- a 95% interest in Altius Holdings Inc. for US\$515 million in March 2011;
- a 23.7% interest in Eagle Ford shale oil formation in the Maverick Basin from Anadarko through KNOC Eagle Ford Corporation for approximately US\$1.55 billion in March 2011. The Company's investment in Eagle Ford was made entirely in the form of a carry without payment of any upfront cash, funding 100% of Anadarko's 2011 capital costs in the basin, and up to 90% thereafter until the carry was exhausted at the end of 2013;
- certain offshore oil producing assets from Northstar Offshore Energy Partners LLC ("Northstar") in the Gulf of Mexico region (the "Northstar Assets") for approximately US\$201 million (the Company's share being 67%), through ANKOR E&P Holdings Corporation and in consortium with STX Energy E&P Offshore Management, LLC and SCL Resources, LLC, in December 2011;
- a 10.0% interest in Parallel Petroleum Corp. from PLLL Holdings, LLC, an affiliate of Apollo Global Management LLC, for approximately US\$72 million, in consortium with Samsung C&T Corp. in December 2011;
- a 28.3% additional stake in the Bittern oilfields located in the North Sea from Hess Corp. for approximately US\$135 million through Dana Petroleum PLC in September 2012, raising the Company's total interest in the field to 33%. The additionally acquired interest added approximately 5,500 barrels of oil equivalent to the Company's daily production volume from the Bittern oilfields;
- a 14.99% interest in EP Energy Global LLC and its subsidiaries ("EPE Global"), which holds all of the oil and gas exploration and production assets of El Paso Corporation ("El Paso") in May 2012. The Company, as part of a consortium led by Apollo Global Management, LLC, signed a definitive agreement with El Paso to acquire a 14.99% interest in EPE Global for approximately US\$500 million. EPE Global holds several unconventional oil and gas exploration and production assets located throughout the United States as well as Brazil and Egypt. In January 2014, EP Energy Corporation, which holds assets previously held by EPE Global, completed its initial public offering of 35,200,000 shares of its common stock, and the Company's ownership interest decreased from 14.99% to 12.82% as the initial public offering increased the total number of EP Energy Corporation's common stock; and
- a 30.0% interest in two onshore and one offshore oil fields located in the United Arab Emirates in March 2012. The Company, in consortium with GS Energy Corp., signed an agreement with Abu Dhabi National Oil Corporation ("ADNOC") to acquire a 40.0% interest in the fields (with GS Energy Corp. acquiring 10.0%). The remaining 60.0% interest in the fields is owned by ADNOC. Pursuant to the agreement, which has a term of 30 years, the Company and GS Energy Corp. will also be expected to invest approximately US\$2 billion of the estimated US\$5 billion required to develop the fields.

The Company funded these acquisitions through debt financing, cash on hand and capital contributions by the Government. Exploration and development of oil and natural gas are capital intensive activities. The Company relies on loans (including loans from the SAER), internally generated funds and capital contributions from the Government to fund such activities. The implementation by the Company of its strategy to increase its production levels may lead to increased levels of debt and debt servicing costs in the future.

#### Government Support and Regulation

The Company is wholly owned by the Government. The Government provides financial support for the Company, mainly in the form of capital contributions used mainly for acquisition of oil producing assets and stockpile oil, and in the form of SAER loans used for the Company's exploration and production activities.

While receiving support from the Government, the Company is also heavily regulated by a variety of laws and government bodies, including the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance. The Government, among other things, approves the Company's annual budget, guides the Company's long-term business strategy, and appoints the Company's management, including its President.

Through its control of the Company, the Government has historically influenced, and is likely to continue to influence, the Company's strategy and operations. 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 oil and gas industry, which may not necessarily be in the Company's best commercial interests. See "Risk Factors — Risks related to the Company — The Company is subject to the control of the Government, and its activities are heavily regulated," and "Business — Relationship with the Government."

# **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 notes 2 and 4 to the Company's audited consolidated financial statements and notes 2 and 3 to the Company's unaudited condensed consolidated interim financial statements appearing 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 and results of operations.

#### **Recent Accounting Changes and Pronouncements**

The preparation of the Company's financial statements is affected by accounting changes and pronouncements made by the Korea Accounting Standards Board from time to time. See notes 3 and 4 to the Company's audited consolidated financial statements appearing elsewhere in this Offering Circular for a summary of recent accounting changes and pronouncements, as well as a summary of accounting standards issued but not yet effective.

# **Results of Operations**

First Six Months of 2014 Compared to First Six Months of 2015

	For the Six M June		Chang	ges
	2014	2015	Amount	%
	(restated) (In billions of Won, except percentages)			
Continuing Operations				
Revenue	<b>₩</b> 2,237	₩ 1,523	<b>₩</b> (714)	(31.9)
Cost of sales	(1,623)	(1,453)	170	(10.5)
Gross profit	614	70	(544)	(88.6)
Selling and administrative expenses	(217)	(189)	28	(12.9)
Operating profit (loss)	397	(119)	(516)	N.A.*
Other non-operating income	110	31	(79)	(71.8)
Other non-operating expenses	(145)	(63)	82	(56.6)
Other loss, net	(326)	(253)	73	(22.4)
Finance income	55	56	1	1.8
Finance costs	(272)	(339)	(67)	24.6
ventures, net	12	(40)	(52)	N.A.*
Loss before income tax	(169)	(727)	(558)	330.2
Income tax benefit	(12)	(431)	(419)	3,491.7
Loss from continuing operations	(157)	(296)	(139)	88.5
<b>Discontinued Operations</b>				
Loss from discontinued operations, net of tax	(14)		(14)	N.A.*
Loss for the period	₩ (171)	<del>W</del> (296)	₩ (125)	73.1

Not Applicable

# Revenue

The following table presents a breakdown of the Company's revenue and changes therein for the first six months of 2014 and 2015.

	For the Six Months Ended June 30,		Chang	es
	2014 2015		Amount	%
	(restated) (In b	illions of Won, exce	ept percentages)	
Oil and gas sales	₩1,957	₩1,303	₩(654)	(33.4)
Petroleum distribution	113	82	(31)	(27.4)
Oil stockpiling	89	65	(24)	(27.0)
Financing	1	1	0	0.0
Drillship chartering	39	24	(15)	(38.5)
Others	38	47	9	23.7
Total revenue	₩2,237	₩1,523	₩(714)	(31.9)

The Company's total revenue in the first six months of 2015 decreased by 31.9% to Won 1,523 billion from Won 2,237 billion in the first six months of 2014. The decrease in total revenue was primarily attributable to a decrease in revenues from oil and gas sales.

Oil and gas sales. Oil and gas sales decreased by 33.4% to Won 1,303 billion in the first six months of 2015 from Won 1,957 billion in the first six months of 2014. The decrease in sales was primarily due to a decrease in oil and gas prices in the first six months of 2015, as a result of decreases in international crude oil and natural gas prices in the first six months of 2015 compared to the first six months of 2014, which was partially offset by an increase in the volume of oil and gas sold. The Company's average oil sales price per barrel decreased by 45.8% to US\$43.92 per barrel in the first six months of 2015 from US\$80.98 per barrel in the first six months of 2014, and average gas sales price per thousand cubic feet decreased by 36.8% to US\$3.56 in the first six months of 2015 from US\$5.70 in the first six months of 2014. The volume of oil and gas sold increased by 10.0% to 33 million barrels of oil equivalent in the first six months of 2015 from 30 million barrels of oil equivalent in the first six months of 2015 from new production wells in Vietnam and United States, as well as an increase in production to raise the Company's operating cash flow.

Petroleum distribution. Revenues from petroleum distribution decreased by 27.4% to Won 82 billion in the first six months of 2015 from Won 113 billion in the first six months of 2014 primarily due to a decrease in the volume of gasoline and gas oil sold at the Company's discount gas stations, as a result of increased competition from gas stations operated by domestic refineries, due in part to a decrease in exports of refined oil products by such refineries. The volume of gasoline and gas oil sold at the Company's discount gas stations decreased by 18.0% to 368 million liters in the first six months of 2015 from 449 million liters in the first six months of 2014.

*Oil Stockpiling.* Revenues from oil stockpiling activities decreased by 27.0% to Won 65 billion in the first six months of 2015 from Won 89 billion in the first six months of 2014 primarily due to a decrease in income from lending of the Company's stockpiled crude oil to other oil companies.

*Financing.* Revenues from financing activities remained constant at Won 1 billion in the first six months of 2015 compared to the first six months of 2014. The balance of outstanding SAER funds administered by the Company, including the portion utilized by the Company, increased to Won 2,210 billion as of June 30, 2015 from Won 1,985 billion as of June 30, 2014.

*Drillship chartering*. Revenues from drillship chartering activities decreased by 38.5% to Won 24 billion in the first six months of 2015 from Won 39 billion in the first six months of 2014. The decrease in revenues from drillship chartering activities was primarily due to lower utilization of the drillship in the first six months of 2015. The drillship's utilized days decreased to 91 days in the first six months of 2015 from 161 days in the first six months of 2014, primarily due to mutual termination of a drilling contract with the contract counterparty in April 2015.

# Cost of Sales and Gross Profit

The Company's cost of sales decreased by 10.5% to Won 1,453 billion in the first six months of 2015 from Won 1,623 billion in the first six months of 2014, primarily due to a decrease in cost of sales relating to the Company's oil and gas sales segment by 10.4% to Won 1,274 billion in the first six months of 2015 from Won 1,422 billion in the first six months of 2014, primarily due to the Company's continuing efforts to reduce fixed production costs in light of the low oil and gas price environment, as well as a decrease in depreciation costs on the Company's oil and natural gas assets due to a recognition of impairment expenses on such assets during the second half of 2014.

In terms of cost of sales by type of cost, the Company's cost of sales decreased primarily as a result of an increase in the cost of sales reduction impact of changes in merchandise inventories and a decrease in cost of sales relating to raw materials used, which were significantly offset by an increase in purchased inventories. The Company's cost of sales reduction impact relating to changes in merchandise inventories, which primarily relate to changes in inventories of crude oil purchased for the Company's oil trading activities and gasoline and gas oil purchased for the Company's discount gas stations (and are calculated by subtracting the inventory amount at the end of the period from the inventory amount at the beginning of the period) increased significantly to an increase in inventories of Won 483 billion in the first six months of 2015 from an increase in inventories of Won 1 billion in the first six months of 2014, primarily due to purchases of oil products for trading purposes during the first half of 2015 due to favorable trading market conditions, and were not sold before the end of the period. The

purchased oil products are currently expected to be sold by the end of 2015. Such cost of sales reduction impact of changes in merchandise inventories was offset in large part by an increase in cost of sales relating to purchased inventories, which more than tripled to Won 557 billion in the first six months of 2015 from Won 176 billion in the first six months of 2014, which also relates to the purchase of oil products for trading purposes. Cost of sales relating to raw materials used decreased by 92.6% to Won 9 billion in the first six months of 2015 from Won 121 billion in the first six months of 2014, primarily due to reclassification of certain costs as other cost of sales in the first six months of 2015, which were previously classified as cost of sales relating to raw materials used in the first six months of 2014, as part of adjustments in line item classification in accordance with the Company's accounting practice.

Gross profit decreased by 88.6% to Won 70 billion in the first six months of 2015 from Won 614 billion in the first six months of 2014, due primarily to a higher rate of decrease in revenues in the first six months of 2015 compared to the rate of decrease in cost of sales, as a significant portion of the Company's cost of sales, relating primarily to fixed facility maintenance and labor costs for its oil and gas fields, as well as depreciation costs on the Company's oil and gas assets, do not vary significantly based on changes in global oil or gas prices, while revenues are more directly affected by changes in oil and gas prices and the Company's production volume. Gross margin, which represents the ratio of gross profit to total revenue (or gross profit of the segment to revenue for the segment, as applicable), decreased by 2,280 basis points to 4.6% in the first six months of 2015 from 27.4% in the first six months of 2014. Gross margin for the oil and gas sales segment decreased to 2.2% in the first six months of 2015 from 27.3% in the first six months of 2014, primarily due to a decrease in the Company's average sales price for crude oil and natural gas as discussed above. Gross margin for the petroleum distribution segment decreased to 3.7% in the first six months of 2015 from 4.4% in the first six months of 2014, primarily due to increased competition from gas stations operated by domestic refineries as discussed above, and the resulting decrease in the Company's margins for the segment in order to effectively compete with such gas stations. Gross loss margin for the oil stockpiling segment was 29.2% in the first six months of 2015, compared to a gross profit margin of 13.5% in the first six months of 2014, primarily due to an increase in rental fees for storage facilities in connection with the Company's oil trading activities, resulting in a higher rate of increase in cost of sales for the segment compared to the increase in revenues. Gross margin for the drillship chartering segment decreased to 37.5% in the first six months of 2015 from 64.1% in the first six months of 2014, primarily due to lower utilization of the drillship in the first six months of 2015 as described above, thereby resulting in a decrease in revenues for the segment, while the cost of sales remained relatively constant, as the cost of sales for the drillship, which primarily relate to labor costs for the ship's crew, maintenance costs and depreciation expenses, do not vary significantly based on the drillship's utilization. Gross margin for the financing segment was 100% for the first six months of 2015 and 2014, as there was no cost of sales incurred for this segment.

#### Selling and Administrative Expenses

Selling and administrative expenses decreased by 12.9% to Won 189 billion in the first six months of 2015 from Won 217 billion in the first six months of 2014, primarily due to decreases in sales commission expenses and commissions and fees expenses. Sales commission expenses, which comprise of commissions and other expenses mainly related to sales of oil and gas by the Company, decreased by 21.7% to Won 54 billion in the first six months of 2015 from Won 69 billion in the first six months of 2014 primarily due to the decrease in oil and gas sales as discussed above. Commissions and fees expenses, which comprise of audit fees and other fees paid for engaging professional services, decreased by 48.3% to Won 15 billion in the first six months of 2015 from Won 29 billion in the first six months of 2014 primarily due to the Company's continuing efforts to reduce such expenses in light of the low oil and gas price environment.

# Operating Profit

As a result of the foregoing, the Company recorded an operating loss of Won 119 billion in the first six months of 2015, compared to an operating profit of Won 397 billion in the first six months of 2014. Operating loss margin, which represents the ratio of operating loss to total revenue, was 7.8% in the first six months of 2015, while operating margin, which represents the ratio of operating profit to total revenue, was 17.7% in the first six months of 2014.

## Other Non-Operating Income

Other non-operating income decreased by 71.8% to Won 31 billion in the first six months of 2015 from Won 110 billion in the first six months of 2014, primarily due to a decrease in gains on exemption of debt. When the Company borrows funds from the SAER for its own oil and gas exploration activities (from which repayment obligations the Company may be forgiven if the Government so decides upon the exploration project being deemed unsuccessful), and on-lends such funds to its joint venture exploration projects or subsidiaries for exploration funding, the Company establishes an allowance for doubtful accounts for the interest and principal of the loan and recognizes other bad debt expense if there is a likelihood of unsuccessful oil or gas discovery by such projects or subsidiaries. If the exploration project is ultimately unsuccessful and the partners to the project agree to terminate the project, then the Company recognizes as gains on exemption of debt the amount of accrued interest and the principal amount of the loan applicable to such unsuccessful project payable by the Company, if the Company is not obligated to repay the Government. The significant decrease in gains on exemption of debt to Won 1 billion in the first six months of 2015 from Won 91 billion in the first six months of 2014 was due to the decision to terminate the exploration projects in the Bazian project in Iraq and other areas during the first six months of 2014 after not being able to discover any commercially viable oil or gas, and the resulting Korean government's forgiveness of the SAER loan used by the Company for exploration activities at the site, whereas there were no such significant exploration project terminations during the first six months of 2015.

#### Other Non-Operating Expenses

Other non-operating expenses decreased by 56.6% to Won 63 billion in the first six months of 2015 from Won 145 billion in the first six months of 2014, primarily due to a decrease in other bad debt expense. The Company did not record any other bad debt expense in the first six months of 2015, compared to an expense of Won 86 billion in the first six months of 2014, primarily due to the relinquishing of the Company's exploration rights in the Bazian project in Iraq and other areas, and the subsequent write-downs by the Company during the first six months of 2014 of the loans made by the Company to the projects, whereas there were no such significant exploration project terminations during the first half of 2015.

# Other Loss, Net

The following table presents a breakdown of the Company's net other loss for the first six months of 2014 and 2015.

	For the Six Months Ended June 30,		Changes	
	2014	2015	Amount	%
	(restated) (In bill	pt percentages)		
Gains (losses) on disposal of property, plant and				
equipment, net	₩ 3	₩ (8)	₩ (11)	N.A.*
Impairment losses on property, plant and equipment	0	(137)	(137)	N.A.*
Impairment losses and write-off of intangible assets other				
than goodwill	(325)	(94)	231	(71.1)
Losses on foreign currency translation, net	(2)	(15)	(13)	650.0
Losses on foreign currency transactions, net	(6)	(1)	5	(83.3)
Other gains, net <sup>(1)</sup>	5	1	(4)	(80.0)
Total other loss, net	₩(326)	₩(253)	₩ 73	(22.4)

<sup>(1)</sup> Includes net losses on transaction of derivatives, net gains on valuation of derivatives, net gains and losses on disposal of intangible assets other than goodwill and net other gains and losses.

<sup>\*</sup> Not Applicable

Net other losses decreased by 22.4% to Won 253 billion in the first six months of 2015 from Won 326 billion in the first six months of 2014, primarily due to a decrease in impairment losses and write-off of intangible assets other than goodwill, which was offset in part by an increase in impairment losses on property, plant and equipment.

- Impairment losses and write-off of intangible assets other than goodwill, which comprise of losses and write-offs recognized in connection with unsuccessful oil or gas exploration projects, decreased by 71.1% to Won 94 billion in the first six months of 2015 from Won 325 billion in the first six months of 2014, primarily as a result of Won 239 billion of impairment loss on intangible assets, relating to termination of exploration contracts in Norway, Egypt and England due to failure to discover commercially viable oil and gas, whereas there were no such significant exploration project terminations during the first six months of 2015.
- The Company recorded impairment losses on property, plant and equipment of Won 137 billion in the first six months of 2015, whereas it did not record any such impairment losses in the first six months of 2014, primarily due to impairment loss on oil and gas properties, due in turn to significantly declining gas prices during the first six months of 2015 and the corresponding reduction in the estimated cash flow from the recoverable oil and gas from the Company's properties, which fell below the properties' book value. The changes in global oil prices during the first half of 2014 did not result in any estimated future cash flow from the Company's properties falling below their book value.

#### Finance Income (Costs), Net

The following table presents a breakdown of the Company's net finance income (costs) and changes therein for the first six months of 2014 and 2015.

	For the Six Months Ended June 30,		Chan	ges
	2014	2015	Amount	%
	(restated) (In billions of Won, except percentages)			
Interest expenses, net	<b>₩</b> (176)	<b>₩</b> (161)	₩ 15	(8.5)
Impairment of available-for-sale financial assets	0	(26)	(26)	N.A.*
Gains (losses) on foreign currency translation, net	(15)	(80)	(65)	433.3
Gains (losses) on foreign currency transactions, net	6	2	(4)	(66.7)
Others, net <sup>(1)</sup>	(32)	(17)	15	(46.9)
Total finance income (costs), net	<b>₩</b> (217)	₩(283)	₩(66)	30.4

<sup>(1)</sup> Includes dividend income, gain on disposal of financial assets, net gains (losses) on valuation of derivatives, net gains (losses) on transaction of derivatives and other financial costs.

# \* Not Applicable

Net finance costs increased by 30.4% to Won 283 billion in the first six months of 2015 from Won 217 billion in the first six months of 2014, primarily due to an increase in net losses on foreign currency translation and impairment of available-for-sale financial assets, which were partially offset by a decrease in net interest expenses.

• Net losses on foreign currency translation increased significantly to Won 80 billion in the first six months of 2015 from Won 15 billion in the first six months of 2014, primarily as a result of a larger depreciation in the average value of the Canadian dollar against other currencies during the first six months of 2015 compared to the first six months of 2014. The Company, in preparing its consolidated financial statements, aggregates the foreign currency translation gains and losses of itself and its subsidiaries, and as such, the Company's consolidated foreign currency gains and losses are affected by changes in the exchange rates of the dollar, the functional currency of the Company, as well as the functional currencies of its subsidiaries.

- The Company recorded an impairment of available-for-sale financial assets of Won 26 billion in the first six months of 2015, whereas it did not record any such impairment in the first six months of 2014, primarily due to the impairment of Company's equity investment in Troika Resource Investment PEF, as the fair value of the securities fell below the acquisition cost.
- Net interest expense decreased by 8.5% to Won 161 billion in the first six months of 2015 from Won 176 billion in the first six months of 2014, primarily as a result of a decrease in the average interest rate applicable to the Company's debt.

Income (loss) on Investments in Associates and Joint Ventures, Net

The Company recognized a net loss on investments in associates and joint ventures of Won 40 billion in the first six months of 2015, compared to net income of Won 11 billion in the first six months of 2014, primarily as a result of a share of equity method loss of Won 21 billion from Offshore International Group, Inc. and loss of Won 16 billion from Deep Basin Partnership in the first six months of 2015 due to declining global oil prices and the corresponding decrease in the net income of these companies.

# Profit (Loss) Before Income Tax

As a result of the foregoing, the Company's loss before income tax increased significantly to Won 727 billion in the first six months of 2015 from Won 169 billion in the first six months of 2014.

# Income Tax Benefit

Income tax benefit increased significantly to Won 431 billion in the first six months of 2015 from Won 12 billion in the first six months of 2014, primarily due to the effect of reduction in the statutory tax rate of Dana Petroleum from 62% to 50% between the periods and the resulting decrease in the recognized deferred tax liability, as well as the increase in loss before income tax during the first six months of 2015. See Note 24 to the Company's unaudited condensed consolidated interim financial statements included in this Offering Circular.

The Company is subject to Korean income taxes, including resident surtax, at the aggregate statutory rate of 11.0% on taxable income up to Won 200 million, 22.0% on taxable income in excess of Won 200 million up to Won 20 billion and 24.2% on taxable income in excess of Won 20 billion, as well as income and other taxes in the jurisdictions in which it operates, including through its subsidiaries. The statutory tax rates applicable to the Company's overseas subsidiaries (such as Dana Petroleum) in the jurisdictions in which they operate are typically different from the Korean statutory rate applicable to the Company. Therefore, the income tax benefit or expense recognized in the Company's consolidated statement of comprehensive income (loss), which aggregates the tax expense or benefit of the Company and its subsidiaries, are generally different from the amount of income tax benefit or expense calculable by applying the Korean statutory rate to the Company's consolidated income or loss before income tax.

# Loss from Continuing Operations

As a result of the foregoing, the Company's loss from continuing operations increased by 88.5% to Won 296 billion in the first six months of 2015 from Won 157 billion in the first six months of 2014.

# Loss from Discontinued Operations, Net of Tax

In November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion and classified all income and expenses relating to the downstream operations as discontinued operations for the year ended December 31, 2014, and retrospectively restated the comparative consolidated statements of comprehensive loss for the year ended December 31, 2013 and the six months ended June 30, 2014.

As a result, the Company recorded loss from discontinued operations, net of tax of Won 14 billion in the first six months of 2014, whereas it did not record any corresponding income or loss for the first six months of 2015. The loss from discontinued operations in the first six months of 2014 was due to the declining profit by North Atlantic Refining Limited, resulting from declining refining margins, as well as global decline in refined product prices.

# Profit (Loss) for the Period

As a result of the foregoing, the Company's loss for the period increased by 73.1% to Won 296 billion in the first six months of 2015 from Won 171 billion in the first six months of 2014. Net loss margin, which represents the ratio of net loss to total revenue, increased to 19.4% in the first six months of 2015 from 7.6% in the first six months of 2014.

# 2013 Compared to 2014

	For the Ye Decemb		Chan	ges		
	2013	2014	Amount	%		
	(restated) (In billi	ons of Won, e	xcept percent	cept percentages)		
Continuing Operations						
Revenue	<b>₩</b> 5,265	₩ 4,358	<b>₩</b> (907)	(17.2)		
Cost of sales	(3,579)	(3,440)	139	(3.9)		
Gross profit	1,686	918	(768)	(45.6)		
Selling and administrative expenses	(514)	(445)	69	(13.4)		
Operating profit	1,173	473	(700)	(59.7)		
Other non-operating income	38	139	101	265.8		
Other non-operating expenses	(145)	(267)	(122)	84.1		
Other loss, net	(679)	(1,720)	(1,041)	153.3		
Finance income	155	80	(75)	(48.4)		
Finance costs	(626)	(621)	5	(0.8)		
Gain (loss) on investments in associates and joint ventures, net	1	(42)	(43)	N.A.*		
Loss before income tax	(83)	(1,957)	(1,874)	2,257.8		
Income tax benefit	(41)	(684)	(643)	1,568.3		
Loss from continuing operations	(42)	(1,273)	(1,231)	2,931.0		
<b>Discontinued Operations</b>						
Loss from discontinued operations, net of tax	(674)	(338)	336	(49.9)		
Loss for the year	<del>W</del> (716)	₩(1,611)	₩ (89 <u>5</u> )	125.0		

<sup>\*</sup> Not Applicable

#### Revenue

The following table presents a breakdown of the Company's revenue and changes therein for 2013 and 2014.

		ear Ended ber 31,	Changes	
	2013	2014	Amount	%
	(restated) (In billion	ns of Won, ex	cept percen	tages)
Oil and gas sales	₩4,708	₩3,817	₩(891)	(18.9)
Petroleum distribution	229	222	(7)	(3.1)
Oil stockpiling	144	148	4	2.8
Financing	3	2	(1)	(33.3)
Drillship chartering	91	97	6	6.6
Others	91	72	(18)	(20.9)
Total revenue	₩5,265	₩4,358	₩(907)	(17.2)

The Company's total revenue in 2014 decreased by 17.2% to Won 4,358 billion from Won 5,265 billion in 2013. The decrease in total revenue was primarily attributable to a decrease in revenues from oil and gas sales.

Oil and gas sales. Oil and gas sales decreased by 18.9% to Won 3,817 billion in 2014 from Won 4,708 billion in 2013. The decrease in sales was primarily due to a decrease in oil and gas prices in 2014, as a result of decreases in international crude oil and natural gas prices in 2014 compared to 2013, which was further enhanced by a decrease in the volume of oil and gas sold. The Company's average oil sales price per barrel decreased by 9.2% to U\$\$83.72 per barrel in 2014 from U\$\$92.20 per barrel in 2013, and average gas sales price per thousand cubic feet decreased by 10.6% to U\$\$5.22 in 2014 from U\$\$5.84 in 2013. The volume of oil and gas sold decreased by 4.6% to 58.1 million barrels of oil equivalent in 2014 from 60.9 million barrels of oil equivalent in 2013, primarily due to decreased production rates from aging production projects, strategic reduction in production by certain subsidiaries in anticipation of changes in international crude oil prices, as well as sales of certain non-strategic production assets during 2014 in an effort to promote organic growth of the Company.

Petroleum distribution. Revenues from petroleum distribution decreased by 3.1% to Won 222 billion in 2014 from Won 229 billion in 2013 primarily due to an increase in the proportion of gasoline and gas oil sold by the Company where the Company recognizes only the Company's commission from the sale as revenue (rather than the total value of the gasoline or gas oil supplied), which was partially offset by an increase in the overall volume of gasoline and gas oil sold at the Company's discount gas stations increased by 8.6% to 925 million liters in 2014 from Won 853 million liters in 2013.

*Oil Stockpiling*. Revenues from oil stockpiling activities increased by 2.8% to Won 148 billion in 2014 from Won 144 billion in 2013 primarily due to an increase in income from lending of the Company's stockpiled crude oil to other oil companies.

Financing. Revenues from financing activities decreased by 33.3% to Won 2 billion in 2014 from Won 3 billion in 2013, primarily due to a decrease in interest income from loans resulting from a decrease in the amount of outstanding loans in dollar terms. The balance of outstanding SAER funds administered by the Company, including the portion utilized by the Company, increased to Won 2,093 billion as of December 31, 2014 from Won 2,077 billion as of December 31, 2013, primarily due to the decrease in value of the Won against the dollar as of such dates, even though the amount of outstanding funds decreased in dollar terms.

*Drillship chartering*. Revenues from drillship chartering activities increased by 6.6% to Won 97 billion in 2014 from Won 91 billion in 2013. The increase in revenues from drillship chartering activities was primarily due to higher utilization of the drillship in 2014. The drillship's utilized days increased to 330 days in 2014 from 317 days in 2013.

## Cost of Sales and Gross Profit

The Company's cost of sales decreased by 3.9% to Won 3,440 billion in 2014 from Won 3,579 billion in 2013, primarily due to a decrease in cost of sales relating to the Company's oil and gas sales segment by 4.3% to Won 3,014 billion in 2014 from Won 3,150 billion in 2013, primarily due to a decrease in the Company's oil and gas production activities resulting from the decrease in international crude oil and natural gas prices.

In terms of cost of sales by type of cost, the Company's cost of sales decreased primarily as a result of decreases in cost of sales relating to changes in merchandise inventories and raw materials used, which were partially offset by an increase in other cost of sales. The Company's cost of sales relating to merchandise inventories, which primarily relate to crude oil purchased for the Company's term-trading activities and gasoline and gas oil purchased for the Company's discount gas stations, changed to an increase in inventories of Won 1 billion in 2014 from a decrease in inventories of Won 308 billion in 2013, primarily due to the termination of the Company's oil term-trading business in 2013. In 2011, the Company began its term-trading business of purchasing crude oil from Iraq and supplying such crude oil as feedstock for the Company's downstream operations. The Company terminated such activities during 2013 and replaced the crude oil it had been purchasing from Iraq with relatively cheaper crude oil from North America to improve the margins of its downstream operations. Cost of sales relating to raw materials used decreased by 46.6% to Won 211 billion in 2014 from Won 395 billion in 2013, primarily due to reclassification of certain costs as other cost of sales in 2014, which were previously classified as cost of sales relating to raw materials used in 2013, as part of adjustments in line item classification in accordance with the Company's accounting practice. Other cost of sales, comprising of incidental costs related to exploration activities, legal and regulatory costs and other incidental marketing costs, increased by 119.4% to Won 566 billion in 2014 from Won 258 billion in 2013, primarily due to the reclassification of certain costs as explained above, as well as increases in certain depreciation, amortization and other transport costs incidental to overseas exploration activities that are classified as other expenses.

Gross profit decreased by 45.6% to Won 918 billion in 2014 from Won 1,686 billion in 2013, due primarily to a higher rate of decrease in revenues in 2014 compared to the rate of decrease in cost of sales, as a significant portion of the Company's cost of sales, relating primarily to fixed facility maintenance and labor costs for its oil and gas fields, as well as depreciation costs on the Company's oil and gas assets, do not vary significantly based on changes in global oil or gas prices, while revenues are more directly affected by changes in oil and gas prices and the Company's production volume. Gross margin, which represents the ratio of gross profit to total revenue (or gross profit of the segment to revenue for the segment, as applicable), decreased by 1,090 basis points to 21.1% in 2014 from 32.0% in 2013. Gross margin for the oil and gas sales segment decreased to 21.0% in 2014 from 33.1% in 2013, primarily due to a decrease in the Company's average sales price for crude oil and natural gas as discussed above. Gross margin for the petroleum distribution segment increased to 3.9% in 2014 from 3.4% in 2013, primarily due to a decrease in the cost of gasoline and gas oil purchased for sale. Gross loss margin for the oil stockpiling segment worsened to 18.8% in 2014 from 15.4% in 2013, primarily due to an increase in rental fees for storage facilities in connection with the Company's oil trading activities as well as labor costs for the stockpile facilities, resulting in a higher rate of increase in cost of sales for the segment compared to the increase in revenues. Gross margin for the drillship chartering segment improved to 66.6% in 2014 from 62.2% in 2013, primarily due to higher utilization of the drillship in 2014 as described above, thereby resulting in an increase in revenues for the segment, while the cost of sales decreased. Gross margin for the financing segment was 100% for 2014 and 2013, as there is no cost of sales incurred for this segment.

# Selling and Administrative Expenses

Selling and administrative expenses decreased by 13.4% to Won 445 billion in 2014 from Won 514 billion in 2013, primarily due to decreases in sales commission expenses and commissions and fees expenses. Sales commission expenses, which comprise of commissions and other expenses mainly related to sales of oil and gas by the Company, decreased by 28.4% to Won 136 billion in 2014 from Won 190 billion in 2013 primarily due to the decrease in oil and gas sales as discussed above. Commissions and fees expenses, which comprise of audit fees and other fees paid for engaging professional services, decreased to Won 58 billion in 2014 from Won 81 billion in 2013 primarily due to the Company's continuing efforts to reduce such expenses in light of the low oil and gas price environment.

# Operating Profit

As a result of the foregoing, the Company's operating profit decreased by 59.7% to Won 473 billion in 2014 from Won 1,173 billion in 2013. Operating margin, which represents the ratio of operating profit to total revenue, decreased to 10.9% in 2014 from 22.3% in 2013.

#### Other Non-Operating Income

Other non-operating income more than tripled to Won 139 billion in 2014 from Won 38 billion in 2013, primarily due to an increase in gains on exemption of debt. When the Company borrows funds from the SAER for its own oil and gas exploration activities (from which repayment obligations the Company may be forgiven if the Government so decides upon the exploration project being deemed unsuccessful), and on-lends such funds to its joint venture exploration projects or subsidiaries for exploration funding, the Company establishes an allowance for doubtful accounts for the interest and principal of the loan and recognizes other bad debt expense if there is a likelihood of unsuccessful oil or gas discovery by such projects or subsidiaries. If the exploration project is ultimately unsuccessful and the partners to the project agree to terminate the project, then the Company recognizes as gains on exemption of debt the amount of accrued interest and the principal amount of the loan applicable to such unsuccessful project payable by the Company, if the Company is not obligated to repay the Government. The significant increase in gains on exemption of debt to Won 97 billion in 2014 from Won 19 billion in 2013 was due to the decision to terminate the exploration projects in Iraq and Donghae during 2014 after not being able to discover any commercially viable oil or gas, and the resulting Korean government's forgiveness of the SAER loan used by the Company for exploration activities at the site, whereas the project terminations during 2013 did not result in significant SAER loan forgiveness.

#### Other Non-Operating Expenses

Other non-operating expenses increased by 84.1% to Won 267 billion in 2014 from Won 145 billion in 2013, primarily due to increases in accrual for provisions and other bad debt expense. Accrual for provisions increased by 75.0% to Won 168 billion in 2014 from Won 96 billion in 2013 primarily due to an increase in the provision for the Company's ongoing litigation, upon assessment of the estimated outcome of such litigations. Other bad debt expense more than doubled to Won 69 billion in 2014 from Won 28 billion in 2013, primarily due to the failure to discover any commercially viable oil and gas in Iraq and Donghae as mentioned above, and the subsequent write-downs by the Company.

#### Other Loss, Net

The following table presents a breakdown of the Company's net other loss for 2013 and 2014.

	For the Year Ended December 31,		Changes	
	2013	2014	2014 Amount	
	(restated) (In bill	ions of Won,	except percent	tages)
Gains on disposal of property, plant and equipment, net	₩ 29	₩ 363	₩ 334	1,151.7
Losses on disposal of intangible assets other than goodwill, net	0	(40)	(40)	N.A.*
Impairment losses on property, plant and equipment	(177)	(776)	(599)	338.4
Impairment losses and write-off of intangible assets other than				
goodwill	(550)	(1,283)	(733)	133.3
Gains (losses) on foreign currency translation, net	0	(22)	(22)	N.A.*
Gains (losses) on foreign currency transactions, net	(3)	8	11	N.A.*
Other gains, net <sup>(1)</sup>	23	29	6	45.0
Total other loss, net	₩(679)	<b>₩</b> (1,720)	₩(1,041)	153.3

<sup>(1)</sup> Includes net other gains, net gains on transaction of derivatives and net gains on valuation of derivatives.

Not Applicable

Net other losses increased by 153.3% to Won 1,720 billion in 2014 from Won 679 billion in 2013, primarily due to increases in impairment losses on intangible assets and impairment losses on property, plant and equipment.

- Impairment losses and write-off of intangible assets other than goodwill, which comprise of losses and write-offs recognized in connection with unsuccessful oil or gas exploration projects, increased by 133.3% to Won 1,283 billion in 2014 from Won 550 billion in 2013, primarily as a result of Won 826 billion of impairment loss on intangible assets, relating to termination of exploration contracts in Africa, Egypt and England due to failure to discover commercially viable oil and gas, and Won 457 billion of impairment loss on goodwill, relating to the significantly declining oil prices which affected the goodwill recognized in connection with the acquisition of Dana Petroleum by the Company.
- Impairment losses on property, plant and equipment more than quadrupled to Won 776 billion in 2014 from Won 177 billion in 2013, primarily due to the impairment loss on oil and gas properties, due in turn to significantly declining oil prices and the corresponding reduction in the value of the recoverable oil and gas from the Company's properties.

#### Finance Income (Costs), Net

The following table presents a breakdown of the Company's net finance income (costs) and changes therein for 2013 and 2014.

	For the Ye Decemb		Changes	
	2013	2014	Amount	%
	(restated) (In billions	of Won, ex	cept perce	ntages)
Interest expenses, net	₩(392)	₩(360)	₩ 32	(8.2)
Dividend income	43	5	(38)	(88.4)
Gain on disposal of financial assets	21	3	(18)	(85.7)
Losses on foreign currency translation, net	(82)	(137)	(55)	67.1
Gains (losses) on foreign currency transactions, net	(4)	2	6	N.A.*
Others, net <sup>(1)</sup>	(56)	(53)	3	(5.4)
Total finance costs, net	₩(471)	₩(541)	<b>₩</b> (70)	14.9

<sup>(1)</sup> Includes net gains (losses) on valuation of derivatives financial instruments, net gains (losses) on settlement of derivative financial instruments, gain on disposal of financial liabilities and other financial costs.

# \* Not Applicable

Net finance costs increased by 14.9% to Won 541 billion in 2014 from Won 471 billion in 2013, primarily due to an increase in net losses on foreign currency translation and a decrease in dividend income, which were partially offset by a decrease in net interest expenses.

- Net losses on foreign currency translation increased by 67.1% to Won 137 billion in 2014 from Won 82 billion in 2013, primarily as a result of a larger depreciation in the average value of the Canadian dollar against other currencies during 2014 compared to 2013. The Company, in preparing its consolidated financial statements, aggregates the foreign currency translation gains and losses of itself and its subsidiaries, and as such, the Company's consolidated foreign currency gains and losses are affected by changes in the exchange rates of the dollar, the functional currency of the Company, as well as the functional currencies of its subsidiaries.
- Dividend income decreased by 88.4% to Won 5 billion in 2014 from Won 43 billion in 2013, primarily as a result of a special dividend of Won 32 billion from EP Energy in August 2013, in connection with a sale of certain production assets by EP Energy, whereas there was no such special dividend during 2014.
- Net interest expense decreased by 8.2% to Won 360 billion in 2014 from Won 392 billion in 2013, primarily as a result of reduction in interest expenses incurred by Harvest Operations due to its bond

issuance in May 2013, which were issued at comparatively lower interest rates as the bonds were guaranteed by the Company, as well as payments during 2013 of certain capital costs required to be paid by the Company. The acquisition price in connection with Eagle Ford shale production assets in March 2011 was in the form of a carry at interest without payment of any upfront cash, and required the Company to fund almost all of Anadarko's 2011 capital costs in the assets, and up to 90% thereafter until the carry is exhausted, which was completed during 2013.

#### Gain (loss) on Investments in Associates and Joint Ventures, Net

The Company recognized a net loss on investments in associates and joint ventures of Won 42 billion in 2014, compared to a net gain of Won 1 billion in 2013, primarily as a result of a share of equity method loss of Won 13 billion from Offshore International Group, Inc. and loss of Won 7 billion from Parallel Petroleum LLC due to declining global oil prices and the corresponding decrease in the net income of these companies, as well as the termination of certain exploration projects by Offshore International Group, Inc.

# Profit (Loss) Before Income Tax

As a result of the foregoing, the Company's loss before income tax increased significantly to Won 1,957 billion in 2014 from Won 83 billion in 2013.

# Income Tax Benefit

Income tax benefit increased significantly to Won 684 billion in 2014 from Won 41 billion in 2013, primarily due to the corresponding increase in loss before income tax during 2014.

The Company is subject to Korean income taxes, including resident surtax, at the aggregate statutory rate of 11.0% on taxable income up to Won 200 million, 22.0% on taxable income in excess of Won 200 million up to Won 20 billion and 24.2% on taxable income in excess of Won 20 billion, as well as income and other taxes in the jurisdictions in which it operates, including through its subsidiaries. The statutory tax rates applicable to the Company's overseas subsidiaries (such as Dana Petroleum) in the jurisdictions in which they operate are typically different from the Korean statutory rate applicable to the Company. Therefore, the income tax benefit or expense recognized in the Company's consolidated statement of comprehensive income (loss), which aggregates the tax expense or benefit of the Company and its subsidiaries, are generally different from the amount of income tax benefit or expense calculable by applying the Korean statutory rate to the Company's consolidated income or loss before income tax.

# Loss from Continuing Operations

As a result of the foregoing, the Company's loss from continuing operations increased significantly to Won 1,273 billion in 2014 from Won 42 billion in 2013.

## Loss from Discontinued Operations, Net of Tax

In November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion and classified all income and expenses relating to the downstream operations as discontinued operations for the year ended December 31, 2014, and retrospectively restated the comparative consolidated statements of comprehensive loss for the year ended December 31, 2013.

Loss from discontinued operations, net of tax decreased by 49.9% to Won 338 billion from Won 674 billion in 2013, primarily due to a higher rate of decrease in expense from discontinued operations compared to the rate of decrease in income from discontinued operations. Included in loss from discontinued operations, net of tax in 2014 was loss on disposal of discontinued operations of Won 54 billion, as the disposal occurred in November 2014, whereas no such loss on disposal occurred in 2013.

Income from discontinued operations decreased by 30.4% to Won 3,296 billion in 2014 from Won 4,734 billion in 2013, primarily as a result of a 24.9% decrease in the volume of refined products sold to approximately 28.0 million barrels in 2014 from approximately 37.3 million barrels in 2013, mainly due to production suspensions in January and March 2014 caused by power outages and planned maintenance, as well as the lack of revenue during December 2014 as the disposition was made during November 2014. Such decrease was further enhanced by a 4.0% decrease in the cost of refined products sold to US\$107.18 per barrel from US\$111.60 per barrel in 2013, primarily due to a decrease in international oil and gas prices during 2014.

Expense from discontinued operations decreased by 35.7% to Won 3,492 billion in 2014 from Won 5,435 billion in 2013, primarily due to the corresponding decrease in profit, as well as a 65.0% decrease in impairment losses on property, plant and equipment to Won 171 billion in 2014 from Won 488 billion in 2013, as a significant portion of the impairment losses for North Atlantic Refining Limited was already recognized during 2012 and 2013 due to declining refining margins and global refined product prices, and the remaining impairment amount for 2014 was relatively lower.

# Profit (Loss) for the Year

As a result of the foregoing, the Company's loss for the year increased by 125.0% to Won 1,611 billion in 2014 from Won 716 billion in 2013. Net loss margin, which represents the ratio of net loss to total revenue, increased to 37.0% in 2014 from 13.6% in 2013.

#### Financial Condition, Liquidity and Capital Resources

#### Cash Flows

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

	For the Year Ended December 31,		For the Six-Mont June	
	2013	2014	2014	2015
		(In billions of Won)		
Net cash flows provided by (used in) operating activities	₩1,561	₩1,542	₩ 1,108	₩ (598)
Net cash flows provided by (used in) investing activities	2,503	2,025	(1,162)	(966)
Net cash flows provided by (used in) financing activities	1,347	17	(65)	1,716
Effect of exchange rate fluctuations on cash held	(31)	8	(6)	8
Net increase (decrease) in cash and cash equivalents	374	(458)	(125)	160
Cash and cash equivalents at the beginning of the period	592	966	966	509
Cash and cash equivalents at the end of the period	966	509	841	669

The Company recorded net cash flows provided by operating activities of Won 1,561 billion in 2013, Won 1,542 billion in 2014 and Won 1,108 billion in the first six months of 2014 and cash flows used in operating activities of Won 598 billion in the first six months of 2015.

- The Company's net cash provided by operating activities decreased slightly to Won 1,542 billion in 2014 from Won 1,561 billion in 2013.
- The Company recorded net cash used in operating activities of Won 598 billion in the first six months of 2015, compared to net cash provided by operating activities of Won 1,108 billion in the first six months of 2014. The significant change in cash from operating activities between the first six months of 2015 and 2014 was primarily due to the significant decrease in global oil and gas prices between the periods, and the corresponding decrease in cash generated from oil and gas sales, as well as cash used for purchases of oil products for trading purposes, payment of applicable taxes in connection with the sale of the Company's property in Ulsan, and repayment of debt which are related to operating activities.

Net cash flows used in investing activities was Won 2,503 billion in 2013, Won 2,025 billion in 2014, Won 1,162 billion in the first six months of 2014 and Won 966 billion in the first six months of 2015.

- The Company's net cash used in investing activities in 2013 consisted primarily of cash outflows of Won 2,395 billion for acquisition of property, plant and equipment and Won 490 billion for acquisition of intangible assets other than goodwill, which were offset in part by a cash inflow of Won 333 billion in proceeds from disposal of short-term trading financial assets. The cash outflows from the acquisition of property, plant and equipment, and acquisition of intangible assets other than goodwill reflect the capital expenditures made by the Company for various production assets in 2013.
- The Company's net cash used in investing activities in 2014 consisted primarily of cash outflows of Won 2,452 billion for acquisition of property, plant and equipment and Won 360 billion for acquisition of intangible assets other than goodwill, which were offset in part by a cash inflow of Won 851 billion in proceeds from disposal of property, plant and equipment. The cash outflows from the acquisition of property, plant and equipment, and acquisition of intangible assets other than goodwill reflect the capital expenditures made by the Company for various production assets in 2014. The proceeds from disposal of property, plant and equipment reflect proceeds from the sale of the Company's property in Ulsan during 2014, which is the primary reason for the decrease in net cash used in investing activities in 2014 compared to 2013.
- The Company's net cash used in investing activities in the first six months of 2015 consisted primarily of cash outflows of Won 722 billion for acquisition of property, plant and equipment and Won 101 billion for acquisition of intangible assets other than goodwill. The Company's net cash used in investing activities in the first six months of 2014 consisted primarily of cash outflows of Won 1,081 billion for acquisition of property, plant and equipment and Won 182 billion for acquisition of intangible assets other than goodwill. The cash outflows from the acquisition of property, plant and equipment, and acquisition of intangible assets other than goodwill reflect the capital expenditures made by the Company for various production assets in the first six months of 2015 and in the first six months of 2014. The decrease in cash used in investing activities in the first six months of 2015 from the first six months of 2014 primarily reflect decreased investments in new ventures in light of the low oil and gas price environment.

The Company had net cash flows provided by financing activities of Won 1,347 billion in 2013, Won 17 billion in 2014 and Won 1,716 billion in the first six months of 2015, whereas it recorded net cash flow used in financing activities of Won 65 billion in the first six months of 2014.

- The Company's net cash provided by financing activities in 2013 consisted primarily of cash inflows from net increase in bonds payables of Won 552 billion, net proceeds from short-term borrowings of Won 360 billion, proceeds from increase in share capital of Won 294 billion, net proceeds from long-term borrowings of Won 220 billion and proceeds from partial disposition of interest in subsidiaries of Won 183 billion, which were offset in part by cash outflow from repayment of current portion of long-term liabilities of Won 219 billion. The Company's bonds payables and borrowings increased in 2013 to finance the Company's social overhead capital construction projects in Iraq, as well as refinancing of other debt.
- The Company's net cash provided by financing activities in 2014 consisted primarily of cash inflows from net increase in long-term borrowings of Won 299 billion, net increase in short-term borrowings of Won 43 billion and proceeds from increase in share capital of Won 61 billion, which were offset in large part by cash outflows from repayment of current portion of long-term liabilities of Won 220 billion and net decrease in bonds payables of Won 105 billion. The decrease in cash provided by financing activities from 2013 to 2014 mainly reflected the Company's continuing effort to reduce its debt and interest expenses.
- The Company's net cash provided by financing activities of Won 1,716 billion in the first six months of 2015 consisted primarily of cash inflows from net increase in bonds of Won 763 billion, net increase in short-term borrowings of Won 554 billion and net increase in long-term borrowings of Won 367 billion.

The Company's bonds and other borrowings increased in the first six months of 2015 to finance the Company's capital expenditures and other operating activities, to help offset the decrease in cash flows from operating activities as discussed above. The Company's net cash used in financing activities of Won 65 billion in the first six months of 2014 consisted primarily of dividends paid of Won 50 billion. The Company also recorded cash outflow of Won 1,113 billion for repayment of bonds and cash inflow of Won 1,080 billion from proceeds from issuance of bonds.

# Capital Requirements

The Company requires capital primarily to invest in exploration, development and production projects, to purchase interests in other companies engaged in exploration, development and production activities, to purchase crude oil for its stockpile program, for capital expenditures relating to the construction and maintenance of stockpile facilities, the maintenance of its semi-submersible drillship, and for the repayments of outstanding debt.

In March 2011, KNOC acquired a 95% interest in Altius Holdings Inc., a Kazakhstani oil exploration and production firm, for US\$515 million through KNOC Black Hill Ltd., and also acquired a 23.7% interest in the Eagle Ford Shale oil formation located in Maverick Basin of southern Texas owned by Anadarko Petroleum Corporation for approximately US\$1.55 billion through KNOC Eagle Ford Corporation. The Company's investment in Eagle Ford was made entirely in the form of a carry without payment of any upfront cash, funding approximately 100% of Anadarko's 2011 capital costs in the basin, and up to 90% thereafter until the carry was exhausted at the end of 2013. In December 2011, the Company, through ANKOR E&P Holdings Corporation, and in consortium with STX Energy E&P Offshore Management, LLC and SCL Resources, LLC, acquired the Northstar Assets for approximately US\$201 million, with the Company's share being 67%. In December 2011, the Company, in consortium with Samsung C&T Corp., acquired a 10.0% interest in Parallel Petroleum for approximately US\$72 million. In May 2012, the Company, as part of a consortium led by Apollo Global Management, LLC, acquired a 14.99% interest in EPE Global (which holds all of the oil and gas exploration and production assets of El Paso Corporation) for approximately US\$500 million. In September 2012, the Company, through Dana Petroleum, acquired a 28.3% additional stake in the Bittern oilfields located in the North Sea from Hess Corp. for approximately US\$135 million, raising its total interest in the field to 33%. The Company may enter into additional acquisitions or make cash contributions to its subsidiaries in the future.

The Company had previously committed to provide US\$1.9 billion of social overhead capital ("SOC") construction in the Kurdistan region of Iraq, in return for its acquisition of oil exploratory wells in 2007 from the Kurdistan regional government, and made a payment of US\$25 million for SOC construction and US\$200 million as a signing bonus. Pursuant to an amendment to the Production Sharing Contract with the Kurdistan regional government in 2010, the parties agreed that, in addition to the US\$700 million of construction which is currently being constructed by the Company, the Kurdistan regional government will undertake the remaining US\$1.175 billion of SOC construction and the Company will pay for such SOC construction instead of directly providing the construction. Pursuant to a further amendment to the Production Sharing Contract with the Kurdistan regional government in July 2012, the Company committed to make a cash payment of US\$100 million as "capacity building payment", and return all of the Company's interests in two exploratory fields and half of its interest in one exploratory field which did not show significant development potential. Pursuant to the same agreement, the Company's remaining obligation to pay for the remaining US\$1.075 billion of SOC construction was extinguished in return for a reduction in the amount of guaranteed crude oil to be provided by the Kurdistan regional government in connection with the original acquisition. In relation to the SOC construction discussed above, the Company recognized Won 1,301 billion as mining rights, and the corresponding SOC-related liabilities of Won 178 billion as current provision and Won 73 billion as non-current provision as of June 30, 2015. See note 44(f) to the Company's audited consolidated financial statements and note 29(e) to the Company's unaudited condensed consolidated interim financial statements, each included in this Offering Circular.

The Company expects that investments in exploration, development and production projects will continue to be the primary use for its capital requirements. The Company may adjust its capital spending on an on-going basis subject to changes in the price of oil, the production outlook of the global crude oil and natural gas industry and global economic conditions in general. The Company also may delay or not implement some of its current capital spending plans based on its assessment of market conditions. In addition, the Company expects to incur costs for the management and construction of the stockpile facilities, as well as purchases of stockpile oil upon annual consultation with the Korean government and in accordance with the stockpiling master plan in effect.

The Company incurred capital expenditures (consisting of cash used for acquisitions of (1) property, plant and equipment, (2) intangible assets other than goodwill and (3) investments in associates and joint ventures) of Won 2,885 billion for 2013, Won 2,891 billion for 2014, Won 1,317 billion for the first six months of 2014 and Won 892 billion for the first six months of 2015.

Repayment of both short-term and long-term borrowings will also require considerable resources. In the ordinary course of its business, the Company enters into short-term and long-term borrowing arrangements for general operations and to fund its oil stockpile activities. The Company also provides payment guarantees for its affiliates. As of June 30, 2015, the Company provided a guarantee of US\$630 million for Harvest Operations' bond issued in April 2013 and guarantee of CAD 1 billion for Harvest Operation's credit facility, and provided a performance guarantee of approximately Won 131 billion on behalf of Dana Petroleum to other participants in the Bittern and Exxon oil fields, for expenses in restoring, decommissioning, dismantling and removing facilities and structures in the field. See Note 44 to the Company's audited consolidated financial statements and Note 29 to the Company's unaudited condensed consolidated interim financial statements appearing elsewhere in this Offering Circular.

The following table sets forth contractual maturities of the Company's financial liabilities (excluding financial guarantee liabilities), significant contractual obligations and estimated commitments as of June 30, 2015.

	Payments Due by Period							
Financial Liabilities	Contractual Cash Flows <sup>(1)</sup>	Less than 1 Year	1 to 2 Year	2 to 5 Years	After 5 Years			
	(In billions of Won)							
Bonds payable	₩12,195	₩1,831	₩3,046	₩4,875	₩2,443			
Borrowings	3,412	863	1,144	876	530			
Trade and other payables	1,448	931	15	244	258			
Derivative liabilities	162	62	6	53	41			
Total	₩17,218	₩3,687 ₩4,211		₩6,049	₩3,271			
<b>Contractual Obligations and Estimated Commitments</b>								
Purchase commitments <sup>(2)</sup>	₩ 155	<b>₩</b> 21	₩ 51	₩ 66	₩ 17			
Decommissioning and environmental								
liabilities	2,482	61	91	441	1,889			
Others	652	227	176	109	140			
Total	₩ 3,289	₩ 309	₩ 317	₩ 616	<del>W</del> 2,046			

<sup>(1)</sup> Includes interest payments, but excludes the effect of offsetting contracts.

# Capital Resources and Liquidity

The Company operates in an industry with significant financing requirements and has historically financed its operations primarily through capital contributions from the Government, cash generated by operating activities and short-term and long-term borrowings. The Company expects that these sources will continue to be its principal sources of cash in the future.

The Company's share capital is allowed to be invested solely by the Government in accordance with the KNOC Act. The Company increased its share capital by Won 294 billion in 2013, by Won 61 billion in 2014 and

<sup>(2)</sup> Includes drilling commitments and others.

by Won 31 billion in the first six months of 2015. The Company increased its paid-in capital in recent periods to increase its stockpile reserve amount and fund the construction and maintenance of stockpile facilities. The Company's total equity was Won 10,284 billion as of December 31, 2013, Won 8,370 billion as of December 31, 2014 and Won 8,244 billion as of June 30, 2015.

Total long-term borrowings, excluding current portion, were Won 1,733 billion as of December 31, 2013, Won 1,894 billion as of December 31, 2014 and Won 2,293 billion as of June 30, 2015. Total bonds payable, excluding current portion and net of discounts and premiums, were Won 7,377 billion as of December 31, 2013, Won 8,864 billion as of December 31, 2014 and Won 9,433 billion as of June 30, 2015. Total short-term borrowings and current portion of long-term borrowings and bonds payable were Won 2,806 billion as of December 31, 2013, Won 1,258 billion as of December 31, 2014 and Won 2,301 billion as of June 30, 2015. The Company plans to fund a portion of its investments in exploration, development and production projects with loans from the SAER. For SAER loans, in the event the exploration project does not result in successful production of oil or gas, the Company may apply to have such loans forgiven after satisfying certain criteria set by the Ministry of Trade, Industry and Energy. The Company issued US\$250 million floating rate notes and HKD390 million fixed rate notes in February 2012, CHF300 million fixed rate notes and €50 million fixed rate notes in March 2012, US\$1 billion fixed rates notes in April 2012, two series of an aggregate US\$1 billion fixed rate notes in Junuary 2014 and two series of an aggregate US\$800 million fixed rate notes in July 2014 for general corporate purposes including its capital expenditure needs.

In May 2013, Harvest Operations also issued US\$630 million 2.125% senior notes due 2018, which was unconditionally and irrevocably guaranteed by the Company.

The Company's ability to rely on debt financing could be affected by such factors as the liquidity of the Korean and the global financial markets, prevailing interest rates, the Company's credit ratings and the Government's policies and support regarding Won currency and foreign currency borrowings.

The Company had a working capital (current assets minus current liabilities) deficit of Won 1,888 billion as of December 31, 2013, Won 1,252 billion as of December 31, 2014 and Won 1,224 billion as of June 30, 2015.

The Company currently anticipates that the net proceeds from the offerings to be made from time to time pursuant to this Offering Circular, expected future capital contributions from the Government and the cash flow that the Company generates from its operations, together with its existing cash and cash equivalents and credit sources (including its credit facilities), will be sufficient to meet its currently anticipated needs for working capital, capital expenditures and business expansion in the near future. The Company has established a contingency plan to minimize the impact of changes in global oil and gas prices on the Company's liquidity, and to maintain a stable cash flow. The Company plans to undertake selective exploration activities based on projected cash flows from the project, as part of its efforts to reduce capital expenditures. The Company is also continually evaluating overall lifting costs from each of its producing fields, to achieve an optimal level of production and to reduce its operating expenses.

However, the Company may need to raise additional capital sooner than it expects among others in order to respond to changes in Government policies, fund more rapid expansion and respond to changes in the global crude oil and natural gas market conditions. Furthermore, to fund any such expansion plans as required by future government policies, the Company's debt-to-equity ratio may rise significantly from its current levels.

#### **Market Risks**

In the ordinary course of business, the Company is exposed to certain financial and market risks, including primarily risks arising from fluctuations in oil and gas prices and exchange rate between the dollar and the Won.

# Commodity Price Risk

The Company is exposed to fluctuations in prices of crude oil, natural gas and other petroleum products, which are commodities whose prices are determined by reference to international market prices. International oil and gas prices are volatile and are influenced by global as well as regional supply and demand conditions. This volatility has a significant effect on the Company's sales and profit.

Historically, prices for oil have fluctuated widely for many reasons, including:

- global and regional supply and demand, and expectations regarding future supply and demand for crude oil and petroleum products;
- political, economic and military developments in oil producing regions, particularly the Middle East;
- access to pipelines, railways and other means of transporting crude oil, gas and petroleum products;
- prices and availability of alternative fuels and energy technologies;
- the ability of the members of OPEC and other crude oil producing nations, to set and maintain specified levels of production and prices;
- · domestic and foreign governmental regulations and actions, including export restrictions and taxes; and
- global and regional economic conditions, weather and natural disasters, including any major oil spills.

International gas prices typically follow changes in international oil prices, although movements in sale prices of natural gas are not always directly proportional to those of crude oil prices. The Company and its subsidiaries use forward commodity contracts to hedge market risks resulting from fluctuations in oil and gas prices for its stockpile reserves or oil and gas productions, and any gains or losses arising from changes in fair value on such derivatives are recognized directly in the statements of other comprehensive income, as the Company classifies such hedging activities as a cash flow hedge. As of December 31, 2014 and June 30, 2015, a 10% increase in crude oil prices, with all other variables held constant, would have increased the Company's profit before tax by Won 320 billion and Won 108 billion, respectively, with a 10% decrease in crude oil prices having the opposite effect.

# Foreign Currency Risk

The Company's foreign exchange exposure gives rise to market risk associated with exchange rate movements, which primarily relate to the Company's operating activities and its investments in foreign subsidiaries. Foreign exchange gain/loss resulting from sales of crude oil and natural gas is determined by the exchange rates as of the dates on which the sales are recorded during the period. The Company enters into currency forward contracts and cross currency swaps to hedge the risks from changes in foreign currency exchange rates.

As of December 31, 2014 and June 30, 2015, the Company had foreign currency assets with aggregate Won equivalent amounts of Won 438 billion and Won 333 billion, respectively. As of December 31, 2014 and June 30, 2015, the Company had significant foreign currency liabilities with aggregate Won equivalent amounts of Won 2,107 billion and Won 2,730 billion, respectively. As of December 31, 2014 and June 30, 2015, a 5% increase in exchange rates of other foreign currencies, with all other variables held constant, would have decreased the Company's profit before tax by Won 86 billion and Won 116 billion, respectively, with a 5% decrease in exchange rates having the opposite effect.

#### Interest Rate Risk

The Company is exposed to interest rate risks arising from its long-term debt. Upward fluctuations in interest rates increase the cost of new debt and the interest cost of outstanding floating rate borrowings. Certain portions of the Company's long-term debt and all of the Company's short-term borrowings have floating interest rates that are determined by reference to the 1-month to 6-month London interbank offered rates, respectively. For the year ended December 31, 2014, a 1% increase in interest rates of such floating rate borrowings, with all other variables held constant, would have decreased the Company's profit before tax by Won 32 billion, with a 1% decrease having the opposite effect. For the six months ended June 30, 2015, a 1% increase in interest rates of such floating rate borrowings, with all other variables held constant, would have decreased the Company's profit before tax by Won 26 billion, with a 1% decrease having the opposite effect.

The Company uses interest rate swaps to hedge against its interest rate exposure. As of June 30, 2015, the Company recognized Won 100 billion as non-current interest rate swap derivative liabilities in its unaudited condensed consolidated interim statement of financial position as of June 30, 2015 associated with the interest rate swaps.

# Inflation

Inflation in Korea was 2.2% in 2012, 1.3% in 2013 and 1.3% in 2014. The effects of inflation in Korea on the Company's financial condition and results of operations are reflected primarily in salary and selling and administration expenses. Inflation in Korea has not had a significant impact on the Company's results of operations to date.

#### BUSINESS

#### Overview

The Company is the national oil and gas company of Korea and is wholly owned by the Government. The Company was incorporated in 1979 under the KNOC Act to serve as the executing body for oil-related policies of the Government. The Company engages in a wide range of oil and gas activities, including:

- exploration, development and production of crude oil and natural gas in Korea and abroad;
- stockpiling of oil in furtherance of the Government's energy policies, as well as engaging in wholesale
  gasoline and gas oil distribution and discount gas station businesses and construction of related stockpile
  facilities:
- · management of the SAER funds on behalf of the Government; and
- performance of other activities related to its business purpose, such as the operation of a semisubmersible drillship, collection and publication of oil-related information, and conducting research and development related to oil and natural gas.

Until November 2014, the Company also engaged in a downstream refining business through Harvest Operations.

The Company carries out the Government's oil policy objectives by engaging in exploration and production activities, managing the nation's oil stockpile and acting as the administrator of the SAER funds pursuant to master plans announced by the Government. The Company receives substantial financial support from the Government in the form of capital contributions and SAER loans to undertake these activities. The Ministry of Trade, Industry and Energy directs and supervises the Company's business activities, as well as appointing its standing directors and the President pursuant to the KNOC Act and other laws applicable to the Company. The Company is audited from time to time by the Board of Audit and Inspection and is required to regularly report its business activities and plans to the Government.

As of June 30, 2015, the Company had a daily crude oil and natural gas production of approximately 234,900 barrels of oil equivalent, and had interests in 29 productive projects, seven development projects, and 15 exploratory projects, located across 21 countries. Starting from January 1, 2014, the Company revised its method of classifying its oil and gas assets, by classifying them as projects within certain regions, rather than by individual fields. The Company is seeking to maintain its production level at approximately 230,000 barrels of oil equivalent per day until the end of 2015, but hopes to increase the Company's production level further in the near future through organic growth, production optimization and selective acquisitions, which would provide the basis for the Company to compete with larger global oil companies engaged in oil and gas exploration, development and production. The Company acquired a 50% interest in OIG in February 2009, a 100% interest in Harvest Energy and an 85% interest in KNOC Caspian LLP (formerly known as Sumbe JSC) in December 2009, a 100% interest in Dana Petroleum in October 2010, a 95% interest in Altius and a 23.7% interest in the Eagle Ford shale oil formation in March 2011 and certain offshore oil producing assets from Northstar in the Gulf of Mexico region (the Company's share being 67%) and a 10% interest in Parallel Petroleum Corp. in December 2011. In May 2012, the Company, as part of a consortium led by Apollo Global Management, LLC, acquired a 14.99% interest in EPE Global (which holds all of the oil and gas exploration and production assets of El Paso Corporation) for approximately US\$500 million. In September 2012, the Company, through Dana Petroleum, acquired a 28.3% additional stake in the Bittern oilfields located in the North Sea from Hess Corp. for approximately US\$135 million, raising its total interest in the field to 33%.

Since 1980, the Company has also been operating and managing Korea's national oil stockpile facilities and reserves in response to the global oil shocks during the 1970s. Aiming to further strengthen Korea's ability to cope with market disruptions caused by short-term oil shortages, the Government announced the Fourth Stockpiling Master Plan in December 2014. Pursuant to the Fourth Stockpiling Master Plan, the Company is required to maintain its stockpiling capacity at 146 million barrels until the end of 2025. The Company had reserve levels of approximately 92 million barrels as of June 30, 2015, and the Company is seeking to reach a stockpile reserve level of 107 million barrels by 2025 pursuant to the Fourth Stockpiling Master Plan. The

Company also generates income from the stockpiling program by leasing a part of its storage facilities to foreign oil producing companies and domestic refineries, as well as by engaging in lending activities with respect to part of its stockpile reserves. In furtherance of the Government's policy to control increasing gasoline prices, the Company engages in the wholesale gasoline and gas oil distribution business, and also operates approximately 1,141 discount gas stations or "Al-tteul Gas Stations" located throughout Korea with Korea Expressway Corporation and National Agricultural Cooperative Federation, as of June 30, 2015. To support the Company's stockpiling projects, the Company also constructs the stockpiling facilities.

To ensure a stable supply of energy and natural resources for the Korean economy and to promote the development of new energy resources, the Government established the SAER in 1995 which combines six energy-related funds that the Government had been operating previously. Pursuant to the SAER Act, the Minister of Trade, Industry and Energy oversees the management and operation of the SAER, and has delegated to the Company the administrative tasks related to the day-to-day operation of SAER and the administration of the SAER loans for oil-related projects. The Company also borrows a portion of the SAER funds to further expand its exploration and other oil-related activities as well as to on-lend such funds to other companies engaged in such activities.

In October 2009, KNOC Canada, a wholly owned subsidiary of the Company, entered into an agreement to purchase all of the issued and outstanding trust units of Harvest Energy Trust, an investment trust established under the laws of the Province of Alberta, Canada. Following internal reorganizations in April and May 2010, the resulting entity continuing operations under the name Harvest Operations Corp., became a wholly owned direct subsidiary of the Company. Harvest Operations' upstream operations are located throughout Alberta, British Columbia and Saskatchewan. Harvest Operations' downstream business consists of a refinery with 115,000 barrels per stream day nameplate capacity and an associated retail and wholesale marketing division with 52 company-branded retail gasoline outlets, home heating, commercial, wholesale and bunkers business, all operating in Canada. In November 2014, the Company disposed of North Atlantic Refining Limited, which held the Company's downstream operations and related assets, for cash considerations of approximately Won 67 billion and classified all income and expenses relating to the downstream operations as discontinued operations for the year ended December 31, 2014, and retrospectively restated the comparative consolidated statements of comprehensive loss for the year ended December 31, 2013 and the six months ended June 30, 2014. See Note 7 to the Company's audited consolidated financial statements and Note 6 to the Company's unaudited condensed consolidated interim financial statements appearing elsewhere in this Offering Circular for a discussion of the profits, losses and other financial information relating to the discontinued operation, for the years ended December 31, 2013 and 2014.

The Company also performs various other functions related to its status as Korea's largest oil and gas developer and the Government's policy-executing arm for matters related to oil. The Company owns the Doo Sung, Korea's only semi-submersible drillship, which operates in various exploration projects around the world. The Company also collects, compiles and publishes both domestic and international oil-related statistics, as well as conducting research related to the exploration, development and production of oil and natural gas.

For the year ended December 31, 2014, the Company had revenue of Won 4,358 billion, operating profit of Won 473 billion and loss for the year of Won 1,611 billion. The Company had total assets of Won 26,891 billion and total equity of Won 8,370 billion as of December 31, 2014. For the six-month period ended June 30, 2015, the Company had revenue of Won 1,523 billion, operating loss of Won 119 billion and loss for the period of Won 296 billion. The Company had total assets of Won 27,807 billion and total equity of Won 8,244 billion as of June 30, 2015.

#### Relationship with the Government

The Company was established as a statutory juridical entity in 1979 under the KNOC Act to ensure a stable supply of oil and to support the development of the Korean economy by developing oil fields in Korea and abroad, stockpiling petroleum reserves and engaging in other oil-related activities.

The Company is wholly owned by the Government, as the Government is required under the KNOC Act to contribute all of the Company's authorized capital of up to Won 13 trillion. The Company may only be privatized

through an amendment of Article 4 of the KNOC Act by the National Assembly, which states that the Government shall fund the Company's authorized capital. Pursuant to the KNOC Act, the Government may also guarantee the repayment of the Company's bonds and its other loans, and provide financial subsidies for the Company's business activities, although it is not obligated to do so.

The Government, through the Ministry of Trade, Industry and Energy, directs and supervises the Company's activities relating to the exploration, development and production of oil resources in Korea and abroad, the purchase and stockpiling of oil reserves, the construction and management of stockpile facilities, the collection, processing and publication of oil trading information and enhancement of oil distribution channels. Pursuant to the KNOC Act and the Act on the Management of Public Agencies, the President of Korea appoints, and has the authority to remove, the Company's President and the standing member of the Audit Committee, while the Minister of Strategy and Finance appoints the Company's non-standing directors. Furthermore, the Company is required to publicly disclose certain information relating to its operation and management, including, among other matters, its management objectives, budget and business plan, financial statements, personnel data, articles of incorporation, bond register and the minutes of the board of directors (other than certain confidential information) and the audit reports of its Audit Committee.

The Board of Audit and Inspection, which is an independent Government agency that audits all Governmental agencies and Government-controlled entities, audits the Company from time to time. The audit includes a review of the Company's financial statements and an inspection of the Company's business operations and performance. The Board of Audit and Inspection reports its audit results to the President of Korea. The Company must report any issues identified by the Board of Audit and Inspection during the audit, as well as plans to remedy such issues, to the relevant standing committee of the National Assembly of Korea. The Company must also present mid- to long-term management objectives covering five fiscal years to the Minister of Trade, Industry and Energy and the Minister of Strategy and Finance on an annual basis. The Company is further subject to unscheduled inspections and investigations from time to time by the National Assembly under the Act on Inspection and Investigation of Government Administration of 1988, as amended.

# Energy Development Base Plan

Under the Low Carbon Green Growth Act, effective as of October 31, 2013 (the "Green Growth Act") and the Energy Act, effective as of October 31, 2013 (the "Energy Act"), the Government must establish 20-year master plans, revised every five years, for the development, distribution, research and management of energy resources both domestic and abroad. The First Energy Development Base Plan, issued in 2008, sought to improve Korea's energy security, use efficiency and the environment.

The Second Energy Development Base Plan was issued in January 2014 and its objectives include the following:

- reduction of energy and electricity demand in Korea through efficient management of resources and tariffs;
- improving distribution network of electricity;
- enhancing environmental protection and safety requirements;
- strengthening Korea's energy security through development of alternative energy sources and overseas energy development;
- · establish network for more stable distribution of traditional energy sources, such as oil and gas; and
- implement energy policies to further improve quality of life for Korean citizens as well as improving transparency in energy policy determination processes.

To further strengthen offshore resources development, the Second Energy Base Plan seeks to increase KNOC's ratio of investment in exploratory sites from around 10% currently to 20% or more by 2017, to promote more organic growth of its production capacity compared to previous growth primarily through acquisition of production assets, as well as promoting exchanges of technology, information and manpower, and joint exploratory projects with leading foreign global enterprises.

Furthermore, the Second Energy Base Plan requires KNOC to make its storage facilities available to foreign oil producing countries for storing oil and petroleum products in Korea, which may be subject to preemptive use by Korea in times of emergency, to ensure stability in the supply of oil resources and enhance Korea's energy security.

# Overseas Resources Development Master Plan

Under the Overseas Resources Development Business Act of 1983, as last amended on July 24, 2015 and effective as of October 24, 2015 (the "Overseas Resources Development Act"), the Government must establish 10-year master plans, revised every 3 years, for the development of overseas natural resources. Under the Overseas Resources Development Act, if a Korean resident plans to develop overseas natural resources, such person must report his or her plans to the Minister of Trade, Industry and Energy.

Pursuant to the Overseas Resources Development Act, the Government is authorized to provide funds to a Korean resident to conduct necessary research and analysis for an overseas resources development business and to acquire the rights to develop such resources. The Government may also provide funds for the installation and operation of facilities required for the development, and funds for leasing or buying the necessary land for the development.

To ensure the proper use of Government funds, the Ministry of Trade, Industry and Energy delegated to the Company the authority to inspect the books, documents and materials of oil-related businesses to which the Government has provided financial support and to evaluate the feasibility of the Government's financial support for the costs being incurred by such businesses.

In December 2010, the Ministry of Knowledge Economy, which was responsible for regulatory supervision of all areas currently handled by the Ministry of Trade, Industry and Energy prior to the governmental organizational changes introduced in 2013, with the exception of international trade, issued the Fourth Overseas Resources Development Master Plan covering the period from 2009 to 2019 pursuant to the Overseas Resources Development Act.

Objectives of the Fourth Overseas Resources Development Master Plan include the following:

- Increase Korea's self-sufficiency rate for oil and gas, calculated by dividing the amount of oil and gas produced by domestic entities by the amount of oil and gas imported into Korea, to 30% by 2019 from a rate of 9.0% in 2009. The target self-sufficiency rate for oil and gas is calculated by taking into account (i) production plans of currently acquired exploration, development and production fields; (ii) projected production volume in light of the exploration success rate; and (iii) production volume of new fields planned to be acquired;
- Assist the growth of the Company, Korea Gas Corporation and Korea Resources Corporation into global natural resource development corporations through acquisition of oil and gas assets and companies.
- Expand the global presence of the Company and other companies involved in development of overseas resources by establishing development strategies tailored for each resource-producing region, including by entering into partnerships or forming consortiums with other Korean companies to provide construction or other services along with resource development activities;
- Support the operation and growth of the Company and other companies involved in development of
  overseas resources by increasing the size of Export-Import Bank of Korea's funds earmarked for such
  purpose and guarantees provided by the Korea Trade Insurance Corporation, as well as providing policy
  support to diversify funding sources for overseas resource development;
- Expand the infrastructure for development of overseas resources by supporting research and development
  activities of Government-invested corporations involved in resources development, investing in education
  of resource development specialists and establishing additional private and public research centers; and
- Focus on the development of rare metals including lithium, non-traditional energy sources such as oil sands and oil shale, and the polar region including Greenland and the Arctic Ocean.

## Stockpiling Master Plan

The Company operates and manages Korea's national oil stockpile facilities and reserves, which began in 1980 in response to the global oil shocks during the 1970s. Pursuant to the Petroleum and Petroleum Substitute Fuel Business Act (the "Petroleum Business Act"), the Ministry of Trade, Industry and Energy sets goals for the national oil stockpile program and announces a master plan to implement these goals. The stockpiling master plan must include matters relating to the oil stockpile target level, the types and amount of oil to be stockpiled and the management of stockpile facilities.

Pursuant to the Petroleum Business Act, the Government announced the Fourth Stockpiling Master Plan in December 2014. Under the Fourth Stockpiling Master Plan, the Company is required to maintain its stockpiling capacity at 146 million barrels until the end of 2025. The Company had reserve levels of approximately 92 million barrels as of June 30, 2015, and the Company is seeking to reach a stockpile reserve level of 107 million barrels by 2025 pursuant to the Fourth Stockpiling Master Plan. Under the Fourth Stockpiling Master Plan, the budget for achieving the Company's stockpiling capacity target was Won 2.4 trillion and the budget for achieving the Company's reserve level target was Won 3.2 trillion.

Under the Petroleum and Petroleum Substitute Fuel Business Enforcement Regulation, the Ministry of Trade, Industry and Energy has the authority to require the Company to give priority to financing the purchase of a portion of the target stockpile reserves and the construction and expansion of the stockpiling facilities with the revenue generated from the Company's stockpiling activity. To support the Fourth Stockpiling Master Plan, the Company expects to generate income from the stockpiling program by leasing a part of its storage facilities to foreign oil producing companies and domestic refineries, and by engaging in trading activities with respect to part of its stockpile reserves.

# Administration of the Special Accounts for Energy and Resources

In 1995, the Government established the SAER pursuant to the SAER Act, which combines six energy-related funds that were previously operated by the Government. Prior to 1995, to ensure a stable supply of energy and natural resources for the Korean economy and to promote the development of new energy resources, the Government operated six energy and resources related funds, namely the Oil Business Fund, the Coal Industry Support Fund, the Coal Industry Stabilization Fund, the Overseas Mineral Resources Development Fund, the Energy Use Rationalization Fund and the Natural Gas Safety Management Fund. These funds were designed to support a variety of public and private projects, including those relating to the exploration and development of energy resources both domestically and abroad, the stockpiling of energy resources, the restructuring of the coal and other energy-related industries, the safe distribution of natural gas, the development of alternative energy sources and research activities related to the foregoing.

The Government's annual budget for the SAER is prepared with input from Government-controlled and private entities engaged in the energy and natural resources business, the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance, and approved by the National Assembly. The SAER budget in 2013 and 2014 amounted to Won 6,153 billion and Won 5,491 billion, respectively, and has been set at Won 5,952 billion for 2015.

Pursuant to the SAER Act, the Minister of Trade, Industry and Energy oversees the management and operation of the SAER. The Minister of Trade, Industry and Energy has delegated to the Company the administrative tasks related to the day-to-day operation of the SAER and the administration of SAER loans for oil-related projects. The day-to-day administrative tasks include the collection of various taxes, assessments and other government revenues which constitute a part of the sources for the SAER funds as well as the disbursement of the SAER funds according to the budget. These administrative activities do not have any significant impact on the Company's financial condition and results of operation. The only task that is not delegated to the Company is the maintenance of the coal stockpile and coal stockpile facilities, which is delegated to Korea Coal Corporation.

A significant portion of the SAER budget consists of loans to be made for various energy- and resourcerelated projects. The funds for the loans are first provided by the Company, as the day-to-day administrator of the entire SAER, to the following six government agencies that manage and on-lend the funds: the Company, Korea Resources Corporation, Korea Coal Corporation, Korea Energy Management Corporation, Mine Reclamation Corp. and Korea Gas Safety Corporation. The Company manages the SAER loans related to the oil industry, while the other loans are managed by the other five Government agencies for their respective energy fields.

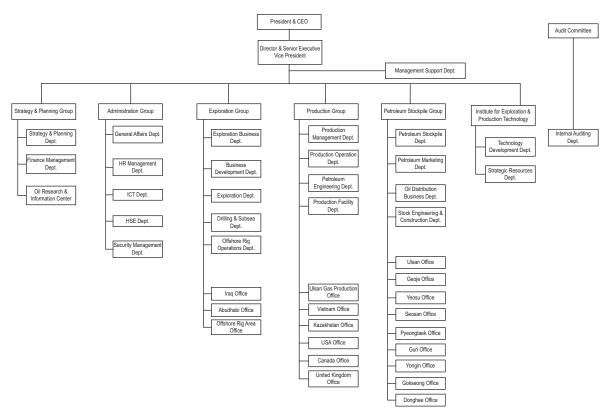
There are generally two types of SAER loans for the oil industry: loans for domestic and international oil exploration and production projects and loans to support general oil-related projects, such as the construction of oil pipelines. The loans for the oil industry are available for use by the Company and by certain qualifying third-party borrowers engaging in oil-related businesses.

The funds from the SAER that are earmarked for loans to the oil industry are provided to the Company and then on-lent by the Company to third parties; therefore, such funds are not recorded as loans or borrowings on the Company's financial statements.

The SAER loans used by the Company that were outstanding as of June 30, 2015 equaled Won 425 billion (after excluding loans relating to exploration fields which failed to discover commercially viable oil reserves, as payment obligations for such loans will be relieved). In administering the oil related SAER loans, the Company receives applications for the loans, which are reviewed by the Government's loan review committee to analyze the technical feasibility of the projects and the business plans. Under the SAER Act, loans used to fund exploration projects that do not result in discoveries are exempted from repayment of all or part of the principal amount of the loan and interest if they meet established criteria set by the Ministry of Trade, Industry and Energy.

# **Organizational Structure**

The following diagram illustrates the Company's organizational structure as of the date hereof.



The Company has an integrated exploration and development structure whereby separate divisions specialize in, and are responsible for, individual stages of exploration, development and production. The Company has broadly organized its divisions by function with exploration-related activities including, exploration planning, technology assessment and drilling conducted through the Exploration Group and development and production-related activities conducted through the Production Group. The Petroleum Stockpile Group oversees all activities relating to the operation of the Company's stockpiling facilities, as well as oil trading businesses. The Business Development Department within the Exploration Group, assesses new business opportunities whereas the Institute for Exploration & Production Technology focuses on establishing the Company's mid-to-long-term research and development strategy and conducting research and development to enhance the Company's technological competitiveness.

# **Exploration, Development and Production**

#### **Overview**

The Company engages in crude oil and natural gas exploration, development and production in Korea and abroad. The Company's operations include projects that the Company operates with a 100% ownership interest or a shared ownership with joint venture partners.

Contractual arrangements among participants in a joint venture are usually governed by an operating agreement, which usually provides that costs, entitlements to production, and liabilities are to be shared according to each party's percentage interest in the joint venture. Upon completion of the initial exploration phase, and if the Company and its joint venture partners determine that a project has commercially viable development potential, the project will enter the development phase and join the production and development portfolio.

As of June 30, 2015, the Company had interests in 51 projects, and it was the operator in 37 projects.

#### Reserves Data

The Company's estimated proved reserves of crude oil and natural gas as of June 30, 2015 totaled approximately 455.8 million barrels of crude oil and approximately 1,271.2 billion cubic feet of natural gas, respectively. As of June 30, 2015, proved developed reserves accounted for 48.5% and 52.6% of the Company's total proved crude oil and natural gas reserves, respectively.

The following table sets forth the Company's estimated proved reserves (including proved developed reserves and proved undeveloped reserves) and proved developed reserves of crude oil and natural gas as of December 31, 2012, 2013 and 2014, and June 30, 2015. The reserve data presented below and elsewhere in this Offering Circular are based on the Company's valuation of the reserves as of the date hereof, and are therefore subject to changes if further valuations of the reserves are conducted which revises the prior estimates.

	Crude Oil	Natural Gas	Combined	
	(Millions of barrels)	(Billions of cubic feet)	(Barrel of oil equivalent, in millions)	
Proved developed and undeveloped reserves				
Reserves as of December 31, 2012 <sup>(1)</sup>	468.3	1,550.7	734.3	
Revisions of previous estimates	18.3	(67.1)	12.9	
Extensions and discoveries	24.4	86.0	36.0	
Improved recovery	0.7	0.1	0.3	
Acquisitions	0.5	1.0	0.7	
Disposals	(27.9)	(96.2)	(47.5)	
Production for the year	(46.6)	(196.6)	(80.5)	
Reserves as of December 31, 2013 <sup>(1)</sup>	437.7	1,277.9	656.2	
Revisions of previous estimates	(10.7)	34.4	(8.0)	
Extensions and discoveries	93.0	271.0	138.5	
Improved recovery	0.1	0.0	0.1	
Acquisitions	0.6	4.6	1.4	
Disposals	(13.6)	(60.3)	(23.7)	
Production for the year	(45.7)	(189.2)	(77.2)	
Reserves as of December 31, 2014 <sup>(1)</sup>	461.4	1,338.4	687.3	
Revisions of previous estimates	19.7	33.8	26.7	
Extensions and discoveries	_	_	_	
Improved recovery	_	_	_	
Acquisitions	_	_	_	
Disposals	_	_	_	
Production for the year	(25.3)	(101.0)	(42.5)	
Reserves as of June 30, 2015 <sup>(1)</sup>	455.8	1,271.2	671.5	
Proved developed reserves <sup>(1)</sup>				
As of December 31, 2012	272.0	1,062.1	456.3	
As of December 31, 2013	216.8	858.2	364.7	
As of December 31, 2014	246.0	769.8	378.3	
As of June 30, 2015	220.9	669.0	336.1	

<sup>(1)</sup> The reserve data include reserve data of Harvest Operations, as estimated under Canadian oil and gas reporting standards, COGEH and NI 51-101, as evaluated by the Independent Reserves Evaluators. If the reserve data of Harvest Operations as estimated under the Securities Act oil and gas reporting standards were included, the proved developed and undeveloped crude oil reserves, natural gas reserves and combined reserves as of December 31, 2012, 2013 and 2014 and June 30, 2015 may differ from the corresponding amounts shown in the tables above.

In general, the Company's engineers estimate its proved crude oil and natural gas reserve quantities based on its internal surveys, external reserve reports and data collected from third-party operators of production facilities in which the Company has a working interest.

The following tables set forth the Company's crude oil and natural gas proved reserves (including proved developed and proved undeveloped reserves) and proved developed reserves by country as of December 31, 2012, 2013 and 2014, and June 30, 2015.

	As of December 31,					As of June 30,		
	2012		201	2013		2014		.5
	Proved Developed and Undeveloped	Proved Developed	Proved Developed and Undeveloped		Proved Developed and Undeveloped of barrels)	Proved Developed	Proved Developed And Undeveloped	Proved Developed
Crude oil reserves								
Korea	0.4	0.4	0.2	0.2	0.0	0.0	0.0	0.0
$Canada^{(1)} \ldots \ldots$	199.7	91.0	184.5	76.4	169.1	60.6	164.5	55.9
Peru	27.8	13.8	25.8	17.0	28.2	17.3	30.0	16.0
Vietnam	21.9	19.6	19.5	17.2	16.9	16.8	14.8	14.7
United States of								
America	68.3	33.7	73.8	32.8	113.5	87.4	117.0	79.9
United Kingdom <sup>(2)</sup>	92.3	58.2	79.5	43.3	66.0	33.3	59.5	26.8
Libya	6.3	6.3	5.9	5.9	5.5	5.5	5.3	5.3
<i>Iraq</i>	_	_	_	_	23.4	5.4	23.4	5.4
Indonesia	3.9	3.9	2.9	2.9	_	_	_	_
Kazakhstan	44.5	44.5	42.4	20.7	36.1	17.7	38.5	14.9
Venezuela	2.7	0.1	2.7	0.1	2.7	0.1	2.7	0.1
China	0.5	0.5	0.4	0.4				
Total	468.3	272.0	437.7	216.8	461.4	246.0	455.8	220.9
	(billions of cubic feet)							
Natural gas reserves								
<i>Korea</i>	41.5	41.5	25.0	25.0	20.8	13.4	16.6	9.2
Vietnam	183.7	183.5	159.3	159.2	141.9	141.9	130.9	130.9
$Canada^{(1)} \dots \dots$	316.1	233.5	288.7	215.5	290.6	208.5	268.8	186.7
Peru	23.7	12.3	11.8	8.4	7.2	11.0	10.7	9.3
<i>Yemen</i>	87.2	87.2	82.7	82.7	77.7	77.7	76.8	76.8
United States of								
America	650.3	313.3	485.7	267.1	727.7	270.1	707.9	222.3
United Kingdom <sup>(2)</sup>	215.0	178.4	190.5	85.1	57.5	47.0	44.7	33.5
Indonesia	18.0	11.9	19.0	14.9		_		_
Venezuela	15.2	0.5	15.1	0.3	15.1	0.2	15.0	0.2
Total	1,550.7	1,062.1	1,277.9	858.2	1,338.4	769.8	1,271.2	669.0

<sup>(1)</sup> The reserve data of Harvest Operations are as estimated under Canadian oil and gas reporting standards, COGEH and NI 51-101, as evaluated by the Independent Reserves Evaluators. The reserves of Harvest Operations as estimated under the Securities Act oil and gas reporting standards as of December 31, 2012, 2013 and 2014 and June 30, 2015 may differ from the amounts shown in the tables above.

<sup>(2)</sup> Indicates the reserve data of Dana Petroleum, whose headquarters are located in the United Kingdom. However, Dana Petroleum's production sites are located throughout Europe and Africa, including the Netherlands, Norway and Egypt.

Estimation and evaluation of reserves naturally involve multiple uncertainties. The accuracy of any reserve evaluation depends on the quality of available information and engineering and geological interpretation. Based on the results of drilling, testing and production after the date of this Offering Circular, reserves may be significantly restated upwards or downwards. Changes in the price of crude oil and natural gas may also affect the Company's reserve estimates as well as estimates of the Company's discounted future net cash flows because those reserves are evaluated, and the discounted future net cash flows are estimated, based on prices and costs as of the date of the evaluation. A relative decrease in the amount of the Company's estimated proved reserves and future discounted net cash flows could, if material, affect the amount of the Company's depreciation and depletion expenses, impairment charges or certain other financial information derived from or relating to such information reported in the Company's financial statements in future periods. Significant changes in these amounts could have a material adverse effect on the Company's financial condition and results of operations and cause future results to differ materially from those reported in this Offering Circular. See "Risk Factors — Risks related to the Company — The crude oil and natural gas reserve estimates in this Offering Circular are only estimates, and may require substantial revisions as a result of future drilling, testing and production, and as such, the Company's actual production, revenues and expenditures may also differ materially from estimates."

### **Production and Development**

The Company is the largest producer of oil and gas in Korea, contributing to approximately 41% of Korea's total oil and natural gas production for the six months ended June 30, 2015. The Company currently has 29 projects in production. There are also seven projects that are under development.

As of June 30, 2015, the Company's daily average net production was approximately 234,900 barrels of oil equivalent. Oil producing projects owned by Dana Petroleum, oil producing projects owned by Harvest Operations in Canada and oil producing projects located in the Maverick Basin Eagle Ford shale oil formation in the United States owned by KNOC Eagle Ford Corporation are the Company's most important operating oil producing projects, accounting for approximately 25.8%, 18.5% and 17.9%, respectively, of the Company's net oil production for the six months ended June 30, 2015. Gas producing projects located in the Maverick Basin Eagle Ford shale oil formation in the United States owned by KNOC Eagle Ford Corporation, gas producing projects owned by Harvest Operations in Canada and gas producing projects owned by Dana Petroleum are the Company's most important operating gas producing projects, accounting for approximately 39.3%, 21.6% and 13.3%, respectively, of the Company's net natural gas production for the six months ended June 30, 2015. The following is a summary of the Company's current production and development activities by country and region.

Country	Project Name	Type of Project	KNOC Share	Investment as of 6/30/15	Operated by	Arrangement Type	Participation Year
				(In thousands)			
Production Projects							
Korea	Donghae-1	Gas	100.00%	US\$769,793	KNOC	Concession agreement	1998
Canada	Harvest	Oil	100.00%	US\$3,843,878 (a)	KNOC	Lease	2009
Vietnam	15-1	Oil	14.25%	US\$1,631,735	KNOC	PSA*	1998
Vietnam	11-2	Gas	39.75%	US\$574,115	KNOC	PSA	1992
USA	ANKOR Offshore	Oil	51.00%	US\$897,944	KNOC	Lease	2008
	Maverick Eagle	Shale Oil	23.70%	US\$1,924,989	Third	Lease	2011
					Party		
	Parallel Petroleum	Oil & gas	10.00%	US\$54,350	Third Party	Lease	2011
	Northstar	Oil & gas	67.00%	US\$126,102	KNOC	Lease	2011
	EP Energy	Oil & gas	12.82%	US\$500,300	Third Party	Lease	2012
	Old Home	Oil	23.38%	US\$33,251	KNOC	Lease	2010
United Kingdom (five							
projects)	Dana Petroleum	Oil & gas	100.00%	US\$4,957,086 (b)	KNOC	Concession agreement	2010
Netherlands (three							
projects)	Dana Petroleum	Oil & gas	100.00%	(b)	KNOC	Concession agreement	2010

Country	Project Name	Type of Project	KNOC Share	Investment as of 6/30/15	Operated by	Arrangement Type	Participation Year
				(In thousands)			
Norway	Dana Petroleum	Oil	100.00%	(b)	KNOC	Concession agreement	2010
Egypt (two projects)	Dana Petroleum	Oil	100.00%	(b)	KNOC	PSA	2010
Peru		Oil	20.00%	US\$992,323		Concession agreement	1995
	Savia Peru (Z-2B)	Oil	50.00%	US\$650,580	Joint	Service agreement	2009
Libya	Elephant	Oil	2.00%	US\$209,161	Third Party	PSA	1990
Yemen	LNG	Gas	1.06%	US\$27,253	Third Party	Gas Development Agreement	1997
Venezuela	Onado	Oil	5.64%	US\$ 34,197	Third Party	Available for Sale	1997
Kazakhstan	Altius	Oil	95.00%	US\$518,068	KNOC	Concession agreement	2011
	ADA	Oil	40.00%	US\$84,829	KNOC	Concession Agreement	2005
	KNOC Caspian	Oil	85.00%	US\$360,571	KNOC	Concession agreement	2009
Development Project	S						
Canada	Black Gold (a)	Oil sands	100.00%	US\$327,107 (a)	KNOC	Lease	2006
United Kingdom (two projects)	Dana Petroleum	Oil & gas	100.00%	(b)	KNOC	Concession	2010
Norway	Dana Petroleum	Oil & gas	100.00%	(b)	KNOC	agreement Concession agreement	2010
Egypt	Dana Petroleum	Oil	100.00%	(b)	KNOC	PSA	2010
USA		Oil & gas		US\$450	Third Party		2011
Iraq		Oil	15.00%	US\$151,691	KNOC	Concession agreement	2008

<sup>\*</sup> Production Sharing Agreement.

- (a) Interests in these projects are held through Harvest Operations. US\$3,843,878,000 represents the total amount of investment made by the Company in Harvest Operations, which was acquired by a subsidiary of the Company in December 2009.
- (b) Interests in these projects are held through Dana Petroleum. US\$4,957,086,000 represents US\$3,496,454,000 of investment made by the Company in Dana Petroleum, which was acquired through a hostile tender offer in October 2010, and US\$1,460,632,000 of investments made by the Company in Korea Captain Company Limited, which the Company transferred entirely to Dana Petroleum in October 2011, in consideration for additional shares issued by Dana Petroleum to the Company.
- (c) The Company is currently undergoing a withdrawal process from Block 4. Although Block 4 is in a development stage, it is classified as a production project according to the Company's revised criteria for classifying projects.

#### Major Production Projects

# Korea

Donghae-1 Gas Project. In 1998, the Company discovered a commercially viable gas field located under the sea near the southeastern coast of Korea, and named it "Donghae-1." Located about 60 kilometers southeast of Ulsan city, the Donghae-1 gas project is estimated to hold recoverable reserves of about 22 billion cubic feet of natural gas with approximately 0.1 million barrels of condensate as of June 30, 2015. The Donghae-1 gas

project was the first commercially productive gas field within Korean boundaries, and it allowed the Company to advance its knowledge and skill in gas field development and production. The Company owns 100.00% of the Donghae-1 gas project, and expects to deliver natural gas from the project daily to domestic consumers until about 2018.

#### Canada

Harvest projects. The Company's interests in production fields located in Canada are owned through Harvest Operations, a wholly owned subsidiary of the Company acquired in December 2009. Harvest Operations' upstream operations are principally located in the western Canadian sedimentary basin. Harvest Operations has a high degree of operational control as it is the operator on properties that generate the majority of its production. Harvest Operations' major production fields include Deep Basin, Red Earth, Hay River, West and East Central Alberta, Cecil, SE Saskatchewan and Heavy Oil, which are located throughout Alberta, British Columbia and Saskatchewan. Harvest Operations had net interests in approximately 5,265 gross producing oil wells and approximately 3,980 net producing oil wells, and in approximately 2,678 gross producing gas wells and approximately 996 net producing gas wells, located throughout Alberta, British Columbia and Saskatchewan as of December 31, 2014, and had a daily crude oil and natural gas production of approximately 42,700 barrels of oil equivalent for the six months ended June 30, 2015.

Oil and gas produced from these fields, which ranged from approximately 2,226 to 12,310 barrels of oil equivalent per day in 2014, are sometimes processed at nearby processing facilities and are transported to sales points through pipelines or other infrastructures, both of which may be owned by Harvest Operations or other third parties.

#### Peru

Block 8. The Company acquired a 20.00% interest in Block 8 in 1996 through a competitive bidding process. The three other equity holders in Block 8 are Daewoo International Corporation, SK Innovation Co., Ltd. and Pluspetrol Norte S.A., who own an 11.70%, 8.30% and 60.00% interest, respectively. Block 8 is located in Maranon Basin in northern Peru, covering an area of approximately 1,800 square kilometers. Block 8 consists of four oil fields, Corrientes, Pavayacu, Yanayacu and Chambira, with approximately 70 active wells. Hydrocarbon in Block 8 was first discovered in 1971, and production began in 1974. For the six months ended June 30, 2015, Block 8 produced approximately 9,600 barrels of crude oil per day, and as of June 30, 2015, has produced 129 million barrels of oil since the Company acquired an equity interest. Approximately 60% of the oil produced in Block 8 comes from the Corrientes field. The crude oil produced in Block 8 is mostly sold to refineries located in the western coast and inland Peru through the North Peru pipeline, and to refineries in the east of the field through river barges.

Block Z-2B. In February 2009, the Company acquired a 50.00% interest in Offshore International Group, Inc. ("OIG"), whose subsidiary, Savia Peru S.A. ("Savia Peru", formerly Petro-Tech Peruana S.A.), has an operation service contract for a producing field in Block Z-2B in the Talara Basin off the northwestern coast of Peru. Ecopetrol S.A., the national oil company of Colombia, acquired the other 50.00% interest in OIG. For the six months ended June 30, 2015, Savia Peru produced approximately 11,000 barrels of crude oil per day and 18.4 million cubic feet of gas per day in its field in Block Z-2B, which covers an area of approximately 1,999 square kilometers.

### United States of America

ANKOR Offshore Project. In March 2008, the Company and Samsung C&T Corporation each acquired an 80.00% and a 20.00% interest, respectively, in the ANKOR Offshore Project located on the shelf of the Gulf of Mexico. ANKOR Offshore Project contains several significant producing fields. In February 2012, the Company sold a 29.0% interest in the ANKOR Offshore Project to a consortium of Korean companies for approximately US\$253 million, as part of an effort to increase Korean private sector involvement in resource development and to enhance the Company's liquidity. As a result of the sale, the Company's interest in the ANKOR Project was reduced from 80% to 51%. KNOC USA Corporation, a wholly-owned subsidiary of the Company that holds the

Company's interests in the ANKOR Offshore Project, and Samsung C&T Corporation formed ANKOR Energy to manage their respective interests in the ANKOR Offshore Project. ANKOR Energy began its operations in March 2008, and currently produces approximately 9,600 barrels of oil equivalent per day. It has estimated oil and gas reserves of approximately 45 million barrels of oil equivalent.

Eagle Ford. In March 2011, KNOC Eagle Ford Corporation, a wholly owned subsidiary of the Company, entered into a joint venture agreement with Anadarko. Under the joint venture agreement, the Company, through KNOC Eagle Ford Corporation, acquired a 23.7% interest in Anadarko's Maverick Basin assets, located in southwest Texas, which is mainly comprised of the liquids-rich Eagle Ford shale assets. In exchange, the Company funded approximately US\$1.55 billion of Anadarko's 3-year capital costs from 2011 to 2013 in the Maverick Basin, and reimbursed Anadarko for net cash outflows relative to the Company's interests. For the six months ended June 30, 2015, Anadarko produced approximately 260,000 barrels of oil equivalent per day. In addition, as part of the arrangement with Anadarko, the Company acquired a 24.9% working interest in midstream (gathering, processing, treating and transporting) systems and facilities associated with the Maverick Basin assets for approximately US\$27 million. In December 2012 and January 2013, KNOC Eagle Ford Corporation sold 4.74% interests in each of the upstream asset and midstream asset to Vogo Eagle Ford LLC, for US\$321 million and US\$32 million, respectively. Anadarko holds approximately 288,046 net acres with an average working interest of approximately 71% in the Maverick Basin, of which the Company is entitled to interests in 80,000 net acres in Eagle Ford shale and approximately 16,000 additional prospective net acres for the deeper dry-gas Pearsall shale, as well as Pearsall opportunities underlying the Eagle Ford shale.

Old Home. In December 2010, the Company and GS E&R Co. Ltd. (formerly known as STX Energy Co., Ltd.) jointly acquired a 46.8% interest in an oil field located in Escambia Country, Alabama, for US\$49 million from Renaissance Petroleum Company, LLC, which owns the remaining interest in the field. The Company has approximately a 23.4% interest in the field. The field produces approximately 330 barrels of oil equivalent of crude oil and gas per day, and has estimated oil and gas reserves of approximately 8 million barrels of oil equivalent.

Northstar project. In December 2011, the Company, through ANKOR E&P Holdings Corporation and in consortium with GS E&R Co. Ltd. (formerly known as STX Energy E&P Offshore Management, LLC) and SCL Resources, LLC, jointly acquired a 100.0% interest in an offshore oil field located in the Gulf of Mexico region for approximately US\$201 million from Northstar. The Company has approximately a 67.0% interest in the field. The field produces approximately 2,800 barrels of oil equivalent of crude oil and gas per day, and has estimated oil and gas reserves of approximately 8 million barrels of oil equivalent.

Parallel projects. In December 2011, the Company, in consortium with Samsung C&T Corp., jointly acquired a 100.0% interest in Parallel Petroleum Corp. (with the Company's share being 10.0%) from PLLL Holdings, LLC, an affiliate of Apollo Global Management LLC, for approximately US\$722 million. Parallel Petroleum Corp. holds eight onshore producing oil fields and two onshore producing gas fields located throughout Texas and New Mexico in the United States. The fields on a combined basis produce approximately 6,900 barrels of oil equivalent of oil and gas per day, and have a combined estimated oil and gas reserves of approximately 72 million barrels of oil equivalent.

EPE Global projects. In February 2012, the Company, as part of a consortium led by Apollo Global Management, LLC, signed a definitive agreement with El Paso Corporation to acquire a 100.0% interest in EPE Global (with the Company's share being 14.99%) for approximately US\$7.15 billion. EPE Global held several conventional and unconventional oil and gas exploration and production assets located throughout primarily in the United States as well as Brazil. In January 2014, EP Energy Corporation ("EP Energy"), which now holds the interest in assets previously held by EPE Global, completed its initial public offering of 35,200,000 shares of its common stock at a public offering price of US\$20.00 per share. EP Energy's common stock commenced trading on the New York Stock Exchange on January 17, 2014 under the ticker symbol "EPE." As the IPO has increased the total number of EP Energy's common stock, the Company's share has decreased from 14.99% to 12.82%. EPE Global holds approximately 2 million net acres of oil and gas properties located throughout the United States, and has approximately 726 million barrels of oil equivalent (proved reserves). For the six months ended June 30, 2015, fields held by EPE Global produced approximately 127,400 barrels of oil equivalent of oil and gas per day.

#### Vietnam

Block 15-1. The Company entered into a production sharing agreement (a "PSA") for a 14.25% interest in Block 15-1 with PetroVietnam Exploration and Production Company (which owns 50.00%), Perenco (which owns 23.25%), SK Innovation (which owns 9.00%) and Geopetrol (which owns 3.50%) in September 1998. Block 15-1 is located 50 kilometers offshore of Vietnam, and covers an area of 800 square meters. Cuu Long Joint Operating Company is the operating company for Block 15-1. The Company performed a leading role in the exploration stage and discovered a large, high-quality oil field in Su Tu Den field in September 2000, which was selected as "One of the World's Top Discoveries of 2000" by the American Association of Petroleum Geologists. Oil production in Su Tu Den field began in October 2003.

Following the discovery at Su Tu Den field, Cuu Long Joint Operating Company successfully discovered oil in Su Tu Vang field in October 2001, natural gas and condensate in Su Tu Trang field in November 2003, and oil in Su Tu Nau field in September 2005. In Su Tu Den Southwest and Northeast fields, 39 production wells are producing oil and gas at an average of 20,000 barrels of oil equivalent per day as of June 30, 2015. In the Su Tu Vang field, 14 production wells are producing oil and gas at an average of 10,400 barrels of oil equivalent per day as of June 30, 2015. The Su Tu Trang field also commenced production in 2012 and produces approximately 15,600 barrels of oil equivalent of oil and gas per day. In the Su Tu Nau field, nine production wells are producing approximately 35,400 barrels of oil equivalent of oil and gas per day as of June 30, 2015.

Block 11-2. The Company first obtained operatorship of Block 11-2 in May 1992, and discovered the Rong Doi and Rong Doi Tay gas fields in May 1998. The Company entered into a gas sales purchase agreement with PetroVietnam, and commenced development construction, with gas production in the fields beginning in December 2006. The Company is the sole operator and carries out exploration, development and production activities within Block 11-2, which is located 320 kilometers offshore of Vietnam and covers an area of 691 square kilometers. The Company owns a 39.75% interest in Block 11-2 and holds a 35.25% interest on behalf of a Korean consortium, which is comprised of LG International Corp., Daesung Industrial Company, Daewoo International Corp., Hyundai Corp. and Seoul City Gas Co., Ltd. PetroVietnam Exploration and Production Company holds the remaining 25.00% participating interest in Block 11-2. Seven production wells in Block 11-2 are producing natural gas and condensate at an average of 131 million cubic feet per day and approximately 3,300 barrels per day. The recoverable reserves are estimated at 73 million barrels of oil equivalent.

#### **United Kingdom**

Dana Petroleum Projects. In October 2010, the Company acquired a 100% interest in Dana Petroleum through a hostile tender offer. Dana Petroleum is an oil and gas exploration and production company incorporated in the United Kingdom and headquartered in Aberdeen, United Kingdom, with a significant portion of its production and exploration assets located in the North Sea and Egypt. In March 2011, Dana Petroleum added six new offshore production fields through acquisition of production assets from Petro-Canada UK Limited. In October 2011, the Company transferred its entire interest in the KCCL to Dana Petroleum in consideration for additional shares issued by Dana Petroleum to the Company. In September 2012, the Company, through Dana Petroleum, acquired a 28.3% additional stake in the Bittern oilfields located in the North Sea from Hess Corp. for approximately US\$135 million, raising its total interest in the field to 33%, together with the 4.7% interest that Dana Petroleum had already owned. In October 2013, the Company, through Dana Petroleum, sold a 19% stake in the Otter oilfield located in the North Sea to Abu Dhabi National Energy Company PJSC for approximately US\$4.28 million. Dana Petroleum had proved and probable oil and gas reserves of approximately 123.0 million barrels of oil equivalent as of June 30, 2015, and had average daily oil and gas production of approximately 48,800 barrels of oil equivalent in the first six months of 2015. As of June 30, 2015, Dana Petroleum had interests in 49 production fields, which included 25 fields in the United Kingdom, eight fields in Egypt, one field in Norway and 15 fields in the Netherlands. The reserve levels of Dana Petroleum are currently undergoing evaluation by professional reserve estimators and are subject to change. The most significant contributions in terms of production are associated with participation in the fields of Greater Guillemot Area, Greater Kittiwake Area, Hudson and Bittern in the United Kingdom, Jotun in Norway, East Zeit in Egypt, the Dutch assets purchased through the acquisition of Petro Canada Netherlands B.V. on August 13, 2010 and production from the Babbage field in the United Kingdom which started production in August 2010. As of June 30, 2015, the Company has provided guarantees to creditors for certain obligations of Dana Petroleum. See "Related Party Transactions."

#### Libya

Elephant Project. The Company initially acquired a 5.80% interest in the Elephant project pursuant to an exploration production sharing agreement in October 1990. The Company entered into an extension in 2008, which extended the termination date until 2032 from 2015, but reduced the Company's interest to 2.00%. The Elephant project is located in the Murzuk Basin, 800 kilometers south of Tripoli, and covers an area of approximately 139 square kilometers. Mellitah Oil & Gas B.V. is the operator of the Elephant project. Oil was first discovered on this site in February 1999 and commercial production began in May 2004, with the Company having received approximately 15 million barrels of crude oil from the project as of June 30, 2015. The Elephant project consists of 12 wells and produces an average of approximately 50,000 barrels of crude oil per day in the first six months of 2015. The crude oil produced in the Elephant project is transported through a pipeline from Sharara to the Mellitah plant near the Mediterranean Sea.

#### Venezuela

Onado Project. The Company currently owns a 5.64% interest in the Onado Project, after initially acquiring a 12.00% interest in 1997 and undergoing ownership changes in 1998, 2002 and 2006. Other owners are Corporación Venezolana del Petróleo, S.A., Compañía General de Combustibles S.A. and EP Petroecuador, which own 60.00%, 26.00% and 8.36% interest, respectively. The Onado Project is located near Maturin in the center of Venezuela, and covers an area of approximately 160 square kilometers. Petronado Empresa Mixta S.A. is the current operator of the Onado Project. Hydrocarbon in the Onado Project was first discovered in 1971, and the Onado Project currently produces crude oil and natural gas in an amount of approximately 1,000 barrels of oil equivalent per day.

# Yemen

LNG Project. The Company began participation in the Yemen LNG Project as part of the SK consortium in 1997 and currently owns a 1.06% interest in the project. The project launched an LNG liquefaction plant in 2005, which was completed in 2010. The reserves within the Marib area which are currently dedicated to the project include 9.15 trillion cubic feet of proven gas reserves and an additional 0.7 trillion cubic feet of probable gas reserves. The plant and terminal are located in Balhaf, Yemen. First shipment was in November 2009. The project has produced approximately 35.2 million tons of LNG as of June 30, 2015. The operator of the project ceased production in April 2015 due to security concerns around the region. The Company and other participants of the project are continually monitoring the situation to re-start production as soon as practicable.

Block 4-Production. The Company owns a 50.0% interest in Block 4 pursuant to a PSA entered into with the Yemeni government in 2007, and the subsequent dissolution of the consortium which initially purchased the interest in the block. Block 4 is located in the Sabatayn (Marib – Shabwa) basin, in the southeastern part of Yemen, covering an area of approximately 2,000 square kilometers. A total of 91 exploratory and development wells have been drilled since 1987 and three oil fields, West Ayad, Amal and East Ayad, have been discovered as a result. Block 4 is classified as both a production project (pursuant to the Company's classification, even though the field is in a development state) and an exploratory project, as the Company conducted both production/development activities and exploratory activities in the area. In July 2013, the board of directors of the Company approved a withdrawal plan from the field due to the failure to discover viable oil reserves and the political instability in the region and in September 2013, the Company notified the Yemeni government of the withdrawal and the return of the Company's interests. The Company is currently in the process of carrying out the withdrawal plan.

#### Kazakhstan

Akzhar, Besbolek, Karataikyz and Alimbai blocks. The Company acquired a 95.0% interest in Altius, a Canadian company listed on the Kazakhstan Stock Exchange, for US\$515 million in March 2011. A local partner of the Company acquired the remaining 5.0%. Altius owns the Akzhar, Besbolek, Karataikyz and Alimbai blocks in western Kazakhstan, which hold estimated reserves of 37.9 million barrels, 1.8 million barrels, 0.6 million barrels and 3.3 million barrels of oil, respectively. The four fields Altius owns are in the production stage and Alimbai block recently changed its contract condition to production stage from exploration stage in January 2014. The Akzhar, Besbolek, Karataikyz and Alimbai fields have daily oil production of approximately 6,000 barrels, 1,200 barrels, 130 barrels, and 440 barrels, respectively, from 293 production wells as of June 30, 2015.

Arystan and Kulzhan projects. In December 2009, KNOC Kaz B.V., a wholly owned subsidiary of the Company located in Kazakhstan, acquired an 85% ownership interest in KNOC Caspian LLP (formerly known as Sumbe JSC) in Kazakhstan, which owns the Arystan and Kulzhan projects located in western Kazakhstan. The Arystan project has daily production of approximately 5,800 barrels of oil equivalent as of June 30, 2015 and holds estimated reserves of 54.1 million barrels as of June 30, 2015. Kulzhan project has daily production of approximately 2,470 barrels of oil equivalent as of June 30, 2015 and holds estimated reserves of 5.7 million barrels as of June 30, 2015.

ADA Block. The Company acquired a 22.50% interest pursuant to a share purchase agreement with LGI Corporation in the ADA Block in November 2005. The Company purchased an additional 17.50% interest in the ADA Block in June 2009 and currently owns a total 40.00% interest. The ADA Block, covering an area of 31.2 square kilometers, is located in the northeastern part of the Caspian Sea in Kazakhstan. The Company's exploratory drilling in the Bashenkol prospect resulted in the discovery of a well with proved oil reserves of approximately 19 million barrels, test production of which was approved by Kazakhstan authorities in 2009. The contract for commercial production was entered into in April 2013 between ADA Oil LLP, the operator, and the Kazakhstan government. Since the test production, the Company has produced approximately 5.7 million barrels of crude oil from this block.

# Major Development Projects

# United Kingdom

Western Isles Development. Dana Petroleum, which the Company acquired in October 2010, has a 77% interest in the development of the Western Isles region. Dana Petroleum plans to develop two discovered oil fields in the North Sea and these fields are estimated to hold proved and probable reserves of approximately 33.0 million barrels of oil equivalent of crude oil and gas. The first oil production is expected in 2017.

#### Canada

BlackGold Oil Sands Project. The Company acquired a 100.0% interest in an oil sands lease for the BlackGold area in August 2006. The BlackGold area is located 140 kilometers southeast of Fort McMurray within the Athabasca Oil Sands region of northern Alberta. Oil sands contain crude bitumen, which is a heavy and thick form of crude oil that does not flow unless it is heated or diluted with lighter hydrocarbons. In August 2010, the Company transferred its interest in the BlackGold project to Harvest Operations for approximately CAD 374 million, which was funded by Harvest Operations through the issuance of additional capital stock to the Company. To help Harvest Operations fund BlackGold project's initial capital, the Company has also injected approximately CAD 86 million of capital through the issuance of additional capital stock by Harvest Operations in 2010.

Harvest Operations received the relevant regulatory approval for the initial phase of the BlackGold project, for production of 10,000 barrels per day and a second phase expansion that would increase production to 30,000 barrels per day was approved in 2013. During the second quarter of 2010, Harvest Operations signed a lump sum engineering, procurement and construction contract (the "EPC Contract") with a third party to build required facilities at the BlackGold project site, including the central processing facility. This construction contract was

amended in the second quarter of 2012 from having a fixed price structure to a cost reimbursement structure. The engineering, procurement and construction portion of the EPC Contract was completed in February 2015 and the production from the first phase of the project is expected to commence once the oil price environment becomes more favorable.

Harvest projects. Harvest Operations actively undertook additional development activities during 2014 and the first six months of 2015 at its fields. These activities include, but are not limited to, drilling additional wells, continuing enhanced oil recovery projects in the larger oil reservoirs in the Hay River, Red Earth, Deep Basin and West Central Alberta areas and further developing various proven targets generally defined by 3D seismic data. Harvest Operations also expects to invest in the optimization of its existing producing wells and upgrading of its facilities and production infrastructure.

# Iraq

Hawler Area Block. The Company acquired a 15.00% interest in the Hawler Area Block in the Kurdistan autonomous region in Iraq in November 2008. Other participants in the project are Oryx Petroleum, which also serves as the operator and owns a 65.00% interest, and the Kurdistan regional government, which owns a 20.00% interest. Located in the Zagros basin in the northeast onshore area of Iraq, the Hawler Area Block covers an area of 1,532 square kilometers. The operator of the block drilled three exploratory wells and discovered oil and gas reservoirs in all of the three wells through well testing in 2013. In February 2014, the operator of the block announced its first discovery of an exploratory well in the Hawler Area Block at the Demir Dagh-2 site and is building 11 development drilling and production facilities. As of December 31, 2014, the block is estimated to hold proved and probable reserves of approximately 417 million barrels of oil.

#### **United States**

River Bend. In November 2011, the Company, in consortium with GS E&R Co., Ltd., acquired a 15.0% interest (with the Company's share being 7.5%) in the River Bend field in Alabama, United States. The operators attempted 13 exploratory drillings from 2013 to the first half of 2015 and discovered commercially viable oil and gas from seven wells. The field began active production in December 2013. The Company and the operator are currently conducting additional exploratory activities in the field, along with the ongoing production activities.

# **Production Volume and Pricing**

The following table sets forth the Company's historical annual crude oil and natural gas production by country and the Company's average sales price for the years ended December 31, 2012, 2013 and 2014, and the six-month period ended June 30, 2015.

	For the Ye	ar Ended De	cember 31,	For the Six Month Period Ended June 30,	Production For the Six Month Period as % of
	2012	2013	2014	2015	2014 Total
<b>Crude oil production</b> <sup>(1)(2)</sup> (thousands of barrels, except percentages or otherwise indicated)					
Korea	263	290	198	68	34.3%
Canada	14,248	12,381	10,948	4,672	42.7%
Vietnam	2,665	2,409	2,666	2,060	77.3%
United States of America	6,991	9,562	12,592	7,495	59.5%
Peru	3,182	2,882	2,991	1,372	45.9%
United Kingdom	16,085	12,818	10,443	6,512	62.4%
Indonesia	1,037	1,135	_	_	—%
Libya	649	390	423	175	41.4%
Kazakhstan	4,083	4,673	5,293	2,828	53.4%
Venezuela	22	25	18	9	50.0%
<i>Yemen</i>	19	13	_	_	—%
<i>Iraq</i>	_	_	80	82	102.5%
China	35	26	_	_	%
Total	49,279	46,603	45,652	25,273	55.4%
Average sales price <sup>(3)</sup> (US\$ per barrel)	90.87	92.20	83.72	43.92	
(millions of cubic feet, except percentages or otherwise indicated)					
Korea	15,561	16,466	11,589	4,207	36.3%
Canada	44,793	40,629	38,982	21,805	55.9%
Vietnam	23,626	24,344	17,382	11,067	63.7%
United States of America	63,081	80,515	85,260	47,377	55.6%
United Kingdom	28,310	24,927	27,574	13,469	48.8%
<i>Peru</i>	3,694	2,891	3,335	1,668	50.0%
Indonesia	2,875	2,416	_	_	—%
Kazakhstan	_	_	822	468	56.9%
<i>Yemen</i>	2,978	4,352	4,133	893	21.6%
Venezuela	87	98	77	28	36.4%
Total	185,005	196,637	189,154	100,982	53.4%
Average sales $price^{(3)}$ (US\$ per thousand cubic feet)	5.35	5.84	5.22	3.56	

Not applicable.

<sup>(1)</sup> Production volumes for regions where the Company does not own 100% interest consist of the Company's share of the production from all of the Company's cooperative projects with other companies in that region.

<sup>(2)</sup> Includes production volume from subsidiaries or assets acquired during the period after their respective acquisition dates.

<sup>(3)</sup> Calculated by dividing total consolidated revenue from sale of oil or gas, as applicable, by total amount of oil or gas sold, as applicable. As such, excludes from calculation any production from the Company's affiliates where the Company's interests are accounted for either as available-for-sale securities or by using the equity method.

<sup>(4)</sup> Represents production of natural gas for sale.

# Major Exploration Projects

The Company undertakes a number of projects to expand its commercially viable production facilities and fields. As exploring for oil and gas is a time-consuming and capital-intensive process, the Company's New Ventures and Exploration Group carefully analyzes each prospective location along with its partners and third party technical experts to determine the proper scope of each project, as well as consult an internal committee composed of heads of other departments and technical experts before making investment decisions. The Company is currently conducting exploratory activities in 15 projects. The following is a summary of the Company's major exploration projects as of June 30, 2015.

<b>Exploration Projects</b>	Company Ownership	Arrangement Type	Status	Operated By
Iraq Sangaw South	60.00%	$PSA^{(1)}$	Conducting exploratory drilling	KNOC
Yemen 70	12.35%	PSA	Exploration suspended due to force majeure	Third party
Malaysia 2B	15.00%	PSA	Preparing for exploratory drilling	Joint
Nigeria 0PL 321 & 323	43.88%	PSA	Litigation in progress with Nigerian government for revocation of exploration rights. See "Legal Matters."	KNOC
Kazakhstan Zhambyl	9.45%	License Contract	Conducting exploratory drilling	Joint
Uzbekistan West Fergana & Chinabad	65.00%	Exploration Agreement	Geological and geophysical evaluation	KNOC
United Kingdom <sup>(2)</sup> (seven projects)	100.00%	Various	Exploratory drilling and geological and geophysical study	Dana/Third Party
and 3	30.00%	Joint Venture & Field Entry Agreement	Evaluating 3D seismic data	Joint
Korea (Block JDZ-Subzone 1/Block VI-1 South, Central, East, North/ Block VIII)	30.00 ~ 100.00%	Exploration Right	Application for joint development in progress / evaluating the results of exploratory drilling and 3D seismic data / conducting development activities / preparing for 3D seismic data acquisition	KNOC

<sup>(1)</sup> Production Sharing Agreement

# Iraq

Sangaw South Block. The Company initially acquired a 60.00% interest in the Sangaw South Block in the Kurdistan autonomous region in Iraq in November 2008, with the Kurdistan regional government owning the remaining 40.00% (and the Kurdistan regional government promising to transfer 20.00% of its interest to a third party to be appointed later by it). The Company also serves as the operator in the block. In connection with the initial Production Sharing Contract with the Kurdistan regional government, the Company committed to provide US\$1.9 billion of SOC construction in the Kurdistan region. Pursuant to an amendment to the Production Sharing Contract in July 2012, the Company committed to make a cash payment of US\$100 million and return all of the Company's interests in two exploratory fields and half of its interest in Sangaw South Block. Pursuant to this amendment, the Company's obligation to pay for the remaining US\$1.075 billion of SOC construction was extinguished in return for a reduction in the amount of guaranteed crude oil to be provided by the Kurdistan

<sup>(2)</sup> Interests in these sites are held through Dana Petroleum. 100.0% represents the Company's interests in Dana Petroleum

regional government in connection with the original acquisition. The Company returned half of its interest in the Sangaw South Block to the Kurdistan regional government and reduced its interest to 30.00%. In the first six months of 2014, the Company re-acquired its 30.00% interest in the Sangaw South Block upon expiration, because new prospective potential was carried out by mutual evaluation with other operators of a near-by block. The Sangaw South Block is located in the Zagros basin in the northeastern onshore area of Iraq, the Sangaw South Block covers an area of 354 square kilometers. The Company drilled two exploratory wells in 2011 and 2014, and is currently in the process of evaluating 3D seismic data and conducting additional evaluation drilling.

#### Yemen

Block 70. The Company entered into a PSA with the Yemeni government for a 61.75% interest in Block 70 as part of a Korean consortium through direct negotiation in April 2005. In August 2008, the Korean consortium sold a 30.88% interest in Block 70 to Total E&P Yemen, and again sold a portion of its interest to Total E&P Yemen and OMV Aktiengesellschaft in June 2010, which reduced the Company's interest in Block 70 to 12.35%. Total E&P Yemen is the operator for the block. Block 70 is located in the Sab'atayn basin in the middle onshore area of Yemen, and covers an area of 1,367 square kilometers. The Company and its partners collected new 2D seismic survey data from February 2007 to April 2007 and finished processing and interpreting the data in August 2007. Total E&P Yemen, the operator of the project, declared force majeure and suspended exploration activity in April 2015 due to internal military conflict within Yemen.

### Malaysia

Block 2B. The Company acquired a 15.00% interest in the 2B Block in Sarawak province in Malaysia in June 2013. Other participants in the project are Shell (through Sarawak Shell Berhad) which also serves as the operator and owns a 50.00% interest, Mubadala Petroleum which owns a 20.00% interest and Petronas Carigali which owns a 15.00% interest. Located in the Deepwater Sarawak basin in east Malaysia, the 2B Block covers an area of 5,922 square kilometers. The operator drilled the first exploratory well in the Kuda Laut field from October 2013 to November 2013 and the second exploratory well in the Kekek prospect from March 2014 to April 2014. Sarawak Shell Berhad, the Company and its partners are currently preparing for third exploratory drilling, which is expected to commence in the second half of 2015.

### Nigeria

OPL 321 & 323. The Company signed PSAs with the Nigerian National Petroleum Corporation in March 2006 for a 43.88% interests in each of OPL 321 and OPL 323, offshore deepwater blocks located in the Gulf of Guinea, West Africa. OPL 321 is located about 80 kilometers from Lagos and OPL 323 is adjacent to the east of OPL 321, with OPL 321 covering an area of 1,166 square meters and OPL 323 covering an area of 994 square kilometers. Through geological and geophysical surveys conducted in 2007 and 2008, the Company discovered several prospects in OPL 321 and OPL 323. The estimated crude oil reserves in OPL 321 and OPL 323 are 1,809 million barrels and 1,724 million barrels, respectively. The Company is currently involved in a legal proceeding against the Nigerian government regarding the cancellation of the PSA for OPL 321 and OPL 323. See "— Legal Matters."

#### Kazakhstan

Zhambyl Block. The Company acquired a 9.45% interest in the Zhambyl Block pursuant to a Supplement Agreement with KazMunaiGas, Kazakhstan's national oil corporation, in January 2009. Pursuant to the agreement, the exploration period will last for eight years, starting in April 2008. KazMunaiGas owns a 73.00% interest in the Zhambyl Block, with KC Kazakh B.V., a consortium comprised of the Company and seven other Korean companies, owning the remaining 27.00%. The Zhambyl Block, covering an area of 2,000 square kilometers, is located in the northwestern part of the Caspian Sea. The Company and its partners confirmed the existence of crude oil and gas reserves in the block through exploratory drillings completed in the first half of 2013 and the second half of 2014, and is currently in the process of evaluating commercial feasibility of the project.

#### Uzbekistan

West Fergana/Chinabad Block. The Company acquired a 100.00% interest in the West Fergana/Chinabad Block in February 2010 pursuant to an Exploration Agreement with the Uzbekneftegaz. The Company then assigned all of its rights and obligations for the block to its affiliate KNOC Fergana II Ltd., a subsidiary registered in Malaysia. The Company then further transferred 20.00% of its interest in KNOC Fergana II Ltd. to POSCO and 15.00% to Samchully Co., Ltd. The West Fergana/Chinabad Block is located in the northeastern part of Uzbekistan in the Fergana basin, and covers an area of approximately 6,170 square kilometers. The Company and its partners are currently preparing for initial exploratory drilling.

#### United Arab Emirates ("UAE")

Areas 1, 2 and 3, Abu Dhabi. The Company acquired a 30% interest in Areas 1, 2 and 3 in Abu Dhabi through a Joint Venture Field Entry Agreement ("JVFEA") entered into with ADNOC in March 2012, in consideration of cash payments and a commitment to engage in 6.25 years of exploration activities. Area 1 and Area 2 are on-shore fields whereas Area 3 is an off-shore area in the region. Al Dhafra Petroleum Operations Company Ltd., serving as the co-operator, was established in December 2013. Two appraisal wells in the Haliba field in Area 1 were drilled in December 2013 and in March 2014, and viable crude oil reserves for approximately 10,000 barrels of oil per day were discovered. The Company is currently drilling an additional appraisal well in the Haliba field, and plans to drill another appraisal well during 2015 to better evaluate the amount of total reserves in the Haliba field and establish a field development plan, with the target to begin production from the Haliba field by the end of 2017. The Company is currently in the process of evaluating the 3D seismic data collected on the project.

#### Korea

Korea is surrounded by extensive continental shelves with an area of approximately 300,000 square kilometers, which contain potential for oil and gas reserves. Between 1972 and 1982, oil and gas exploration in Korea was led by western oil companies. In 1983, the Company began its own exploration projects within Korea, and has conducted significant 2D seismic surveys and drilled many exploratory wells since then.

There are currently three offshore sedimentary basins (Yellow Sea Basin (West Sea Basin), Jeju Basin and Ulleung Basin) around the Korean peninsula.

Yellow Sea Basin. The Yellow Sea Basin is composed of three exploration blocks containing numerous sub-basins that are relatively less explored than the other sedimentary basins in offshore Korea. The Company and several foreign companies conducted seismic data acquisition and offshore drilling, totaling 35,827 line-kilometers of 2D seismic data, 298 square kilometers of 3D seismic data and six exploratory wells. Although exploration results have not been successful, the Company has been trying to make hydrocarbon discoveries in the region. Based on recent studies conducted by the Industry-University-Institute Cooperation in 2013, the Company identified several potential areas in the West Sea Basin. The Company and China National Offshore Oil Corporation ("CNOOC") have been conducting joint studies to better understand the geologic information on the South Yellow Sea Basin ("SYSB") since 2002. The Company and CNOOC will also conduct further studies to identify hydrocarbon potential areas in the SYSB.

Jeju Basin. The Jeju Basin is in the northeastern part of the East China Sea Shelf Basin, which is the largest Mesozoic-Cenozoic basin in the continental margin of China. The Jeju Basin is sub-divided into the Socotra sub-basin located in Block V, the Domi sub-basin located in Block VI-2 and the Jeju sub-basin spanning Block V and the western part of the Joint Development Zone (the "JDZ") between Korea and Japan. Exploration at these blocks began in the 1960s by foreign oil companies, and there are currently 57,133 L-kilometers of 2D seismic data and 563 square kilometers of 3D seismic data as well as 15 exploratory wells in the region. The Company and several Japanese oil companies also conducted joint studies on petroleum potential throughout the JDZ from 2004 to 2009, which involved integrating existing data with satellite-derived oil seepage slicks. Although the exploration and studies in the region have resulted in only a few oil and gas showings and have yet

to reveal reserves substantial enough for commercial development, the Company believes there is significant potential for oil and gas reserves in the Jeju Basin judging by the discovery of oil and gas fields in the Chinese part of the East China Sea Shelf Basin.

Ulleung Basin. The Ulleung Basin is located in the southwestern part of the East Sea, and contains Block VI-1 and Block VIII, each covering an area of 12,918 square kilometers and 8,481 square kilometers, respectively. Initial exploration efforts in Block VI-1 began in 1970 by the Royal Dutch Shell Oil Company. It acquired 5,193 L-kilometers of 2D seismic survey data and drilled one exploratory well. Although not tested, the exploratory well encountered numerous gas shows. Since 1983, the Company and other oil companies have conducted 21,004 L-kilometers of 2D seismic survey and 3,979 square kilometers of 3D seismic survey and drilled 24 exploratory wells, most of which are focused on the shelf area and found twelve minor gas deposits. These efforts led to the eventual discovery of Donghae-1 gas project in 1998. Additional gas reservoirs around Donghae-1 gas project were confirmed in 2005 and 2006, and were further developed between 2008 and 2009.

Starting in 2003, the Company expanded its exploration efforts to the continental slope and the deepsea area of the Ulleung Basin. In February 2007, Woodside Energy (Korea) Pte. Ltd. ("Woodside") and the Company agreed to explore deepwater areas of Block VIII and the northern part of Block VI-1("8/6-1N"). Pursuant to a Joint Operating Agreement, the Company and Woodside hold each a 50% interest in 8/6-1N. The Company and Woodside conducted a 2D seismic survey of approximately 5,107 L-kilometers in 2008 and drilled an exploratory well named Jujak-1 in 2012. In May 2014, the Company and Woodside conducted 507 square kilometers of 3D marine seismic survey. The Company expects to begin exploratory drilling in Block VIII by the end of 2015. In 2011, Daewoo International Corporation ("Daewoo International"), holding a 70% interest and serving as the operator, started the exploration of the southern part of Block VI-1("6-1S"). Daewoo International and the Company conducted a 3D seismic survey of 1,086 square kilometers and drilled one exploratory well so far in 6-1S. In the first half of 2014, the Company started to develop the middle section of Block VI-1 ("6-C"), covering approximately 2,710 square kilometers. In September 2011, the Company obtained the right to explore underwater resources at 6-C pursuant to an agreement entered into with the Korean government. Currently, the Company holds a 70.0% interest in 6-C and Daewoo International holds a 30.0% interest in 6-C. In March 2014, the Company started to explore the Gorae-8 gas project (within 6-C) located approximately 5.4 kilometers away from the Donghae-1 gas project, and expects to begin production from the project in 2016. The Gorae-8 gas project is estimated to hold reserves of approximately 22.3 billion cubic feet of natural gas and approximately 185,000 barrels of condensate. The Company is currently analyzing the 224 square kilometers of 3D seismic data collected on the Gorae-8 project. The Company acquired the right to explore the eastern part of Block VI-1 ("6-1E") from the Korean government in 2013, and conducted a review of 6-1E during 2014 as part of the overall evaluation of the Company's projects in Korea. The Company is currently reviewing the evaluation data and considering additional exploration in 6-1E.

# Dana Petroleum

Exploratory Activities by Dana Petroleum. As of June 30, 2015, Dana Petroleum was conducting various exploration activities at seven projects located in the United Kingdom, the Netherlands, Norway, Egypt, Guinea, Cameroon and Denmark.

#### Types of Exploration, Development and Production Agreements Entered into by the Company

The Company participates in the exploration, development and production of crude oil and natural gas ("E&P project") in a number of countries and geographic regions and is therefore subject to a broad range of rules and regulations which cover many aspects of exploration, development and production activities, including lease tenure, production sharing rates, royalties, pricing, environmental protection, export taxes and foreign exchange. The Company enters into a wide range of contractual arrangements governing the Company's E&P projects and its interest in oil and natural gas from those projects. Depending on the type of E&P project, the Company holds its interest in a project or an area through a PSA, concession agreement or service contract, or permits and licenses from a government-controlled entity or a national oil company of the country in which such

E&P project is located. After acquiring its interest in an E&P project, the Company also enters into joint operating agreements to designate an operator of the E&P project and to determine the operational details of the exploration, development and production process.

The terms of different contractual arrangements vary substantially among different countries and geographic regions, project types and the time the agreements were entered into. To evaluate geological, geophysical, engineering and transportation issues involved in exploration and production, the Company also may enter into a TEA prior to entering into a PSA, which contains terms similar to a PSA.

### **Production Sharing Agreements**

Most of the Company's exploration, development and production arrangements are governed by PSAs. Under a typical PSA, the government or the national oil company owning rights over the particular block at issue is the licensee and the Company and its partners, if any, assume the role of a contractor engaged in the exploration and development of the specific block, usually on the condition that the host government does not directly participate in the E&P project. The contractor is typically required to provide all the financing and bear all exploration and development costs and the associated risks. To compensate for these investments and the risks, upon the successful development and production of oil or natural gas in the relevant block, the contractor recovers its costs and receives the economic benefit of a portion of the produced oil and natural gas in accordance with a production sharing formula set out in the PSA.

A typical PSA has a term of two to six years for the exploration period, renewable upon the parties' agreement. During the exploration period, the contractor may be required to relinquish a portion of the original contract block to the government or the national oil company, excluding the areas in which oil or natural gas has been discovered. Moreover, the contractor is usually required to complete a minimum amount of survey and drilling during the exploration period.

#### Concession Agreements, Permits and Licenses

In addition to PSAs, the Company also enters into concession agreements. In a concession agreement, the government grants to the contractor an exclusive right to explore for, develop, produce, transport and dispose of crude oil and natural gas within a specified block. Thus the contractor bears the risk of exploration, development and production activities as well as the related costs, including financing for the operations. In principle, the contractor has the right to all of the production, less any production related fees, royalties or taxes that are payable in cash or in kind. The contractor recovers its investments and associated operating, exploration and development costs from the sale proceeds of the oil or natural gas produced, after such deductions.

A concession agreement usually requires the contractor to undertake a minimum amount of exploratory work as scheduled in the agreement. From the commencement date, the contractor is usually required to pay the host governmental entity an annual fixed sum for its exploration and development rights. Once crude oil and natural gas are produced in commercial quantities, the contractor is required to pay a royalty in lieu of the annual fixed payment. The amount of royalty payment is usually higher than that of the annual fixed payment. In addition, the contractor is required to pay the governmental entity bonuses when the production volume reaches the thresholds specified in the agreement, and production taxes to the host country's government. The contractor may also be obligated to grant to the host country's government a right to purchase certain amounts of crude oil at discounted prices.

The Company and its partners, if any, also enter into arrangements similar to concession agreements called "permits", "licenses", or "exploration and production contracts" granted by the relevant governmental authority to explore and develop specified areas. Under permits, licenses or exploration and production contracts, the contractor bears the risk of exploration, development and production activities and is responsible for the related financing. The contractor has the right to all of the production less any royalties that are payable in kind or cash whereby it can recover all of its investments and associated operating, exploration and development costs from the sale proceeds of the oil or natural gas produced. The Company is generally required to pay production taxes, bonuses or royalties, the amount of which may be in proportion to the actual volume of the produced oil or

natural gas. Moreover, similar to the concession arrangements in the Middle East or typical PSAs, the contractor is also obligated to complete a minimum amount of exploration work as specified in the applicable agreement.

#### Service Contract

A service contract is a particular exploration, development and production arrangement entered into in countries where local laws restrict the ownership by foreign investors over domestic oil and natural gas. A foreign company, as a contractor, enters into a service contract with the host government or the national oil company, which delineates certain exploration, development and production targets that the contractor is obligated to meet within a specified period. Upon completion of the exploration and development stages and the commencement of oil and natural gas production, the ownership of certain facilities, such as exploration and developmental wells along with operational facilities, are transferred to the relevant host government or the national oil company, which then assumes the production activities.

Pursuant to a compensation agreement entered into with the host government or the national oil company together with a service contract, the contractor under the service contract recovers all investments and financing costs associated with the project from the produced crude oil and natural gas. In addition, the contractor receives compensation for its services, typically a predetermined percentage of the proceeds from the sale of the produced oil and natural gas received by the host government or the national oil company for a certain period, either in cash or in kind. Certain countries allow the contractors to purchase the produced oil or natural gas themselves.

# **Joint Operating Agreements**

When the Company participates in exploration, development and production projects together with other companies, it enters into joint operating agreements ("JOAs"). Under a typical JOA, a joint venture is formed and each joint venture partner holds its respective undivided proportionate interest in the underlying contractual arrangement and the rights and obligations under such arrangement. The JOA typically designates an operator who is exclusively in charge of all petroleum-related operations, which usually includes preparing work programs and budgets, procuring equipment and materials relating to operations, establishing insurance programs, and issuing cash call notices to the joint venture partners. The operator is also responsible for determining and executing operation and budget plans and managing all day-to-day operational matters.

The operational activities conducted by the operator are generally funded by monthly cash calls based on the annual work program and budget approved by the operating committee, which is usually composed of representatives from each of the joint venture partners. If the operational costs exceed the approved operational budget, the operator is usually required to obtain an additional approval of the operating committee. The operating committee has the authority to make all material decisions concerning the joint operating project.

Representatives of each joint venture partner review joint venture accounts and records and provide reports before they are sent to the relevant government entities. Liabilities with respect to uninsured operations are generally borne by all joint venture partners in proportion to their respective interests in the project. The JOAs generally specify that the operator will acquire insurance on behalf of the joint venture partners, unless such joint venture partner or partners choose to acquire insurance individually, or self-insure their risks.

The JOAs generally terminate on the earlier of an agreement by the parties to terminate the joint venture or the termination of the underlying contractual arrangements. In addition, the ability of the joint venture partners (including the operator) to transfer or assign their rights under the JOA or otherwise withdraw from the joint venture is generally subject to pre-emptive or first refusal rights in favor of the remaining joint venture partners as set forth in the relevant JOA.

### **Exploratory and Development Wells**

The following table sets forth the number of net exploratory and development wells the Company drilled, or in which the Company participated, and the results thereof, for the periods indicated.

# **Exploratory and Development Wells**

Year		Total
2012	Net exploratory wells drilled <sup>(1)</sup>	27.71
	Crude oil	13.14
	Natural gas	1.50
	Dry <sup>(2)</sup>	13.07
	Net development wells drilled(1)	282.59
	Crude oil	260.85
	Natural gas	21.74
	Dry <sup>(2)</sup>	_
2013	Net exploratory wells drilled <sup>(1)</sup>	20.88
	Crude oil	6.78
	Natural gas	1.03
	Dry <sup>(2)</sup>	13.08
	Net development wells drilled(1)	297.20
	Crude oil	229.50
	Natural gas	67.70
	Dry <sup>(2)</sup>	_
2014	Net exploratory wells drilled <sup>(1)</sup>	18.88
	Crude oil	10.34
	Natural gas	2.43
	Dry <sup>(2)</sup>	6.11
	Net development wells drilled(1)	276.98
	Crude oil	266.45
	Natural gas	10.53
	Dry <sup>(2)</sup>	

<sup>(1) &</sup>quot;Net" wells refer to the wells after deducting interests of others.

# Sales and Marketing

The Company sells all of its domestically produced natural gas to Korea Gas Corporation. Natural gas produced in other countries, such as Vietnam and Indonesia, is sold directly to customers worldwide, including energy companies and trading companies. Most of the Company's crude oil and natural gas produced outside of Korea is sold to major domestic and international refineries, and energy and resource trading companies.

# Sales of Crude Oil

The Company sells various types of crude oil with different gradations of quality and chemical content. The Company generally sells its crude oil and condensate oil to oil refineries, trading companies and petrochemical companies worldwide. The Company estimates the demand for crude oil from potential buyers and uses such estimates to determine the volume of crude oil to supply.

The price of crude oil is directly correlated to the global market price because it is a publicly traded commodity. The contract price of crude oil is determined through negotiations with buyers based upon the pricing standards adopted by each oil-producing country. For example, the price of oil produced in Indonesia is determined based on the Indonesian Crude Oil Price, which is based on price assessments announced by three private oil-rating companies in Indonesia. Prices of oil produced in other regions are typically determined based on the prevailing international oil price in the region. The Company determines its spot oil prices by either adding a premium or providing a discount to the public crude oil prices discussed above.

<sup>(2) &</sup>quot;Dry" wells are wells with insufficient reserves to sustain commercial production.

The crude oil and condensates are sold under free on board terms directly or through trading companies to oil refineries, power companies and petrochemical companies. Generally, there are two types of oil sales contracts — term contracts and spot contracts. A term contract is an annual contract usually lasting from January to December of the same year or from April to March of next year (each such period, a "term year"). The Company determines the sales volume for the term year based on the estimated production for such term year estimated by the project operator at the end of the year before the beginning of the corresponding term year.

The Company decides when and to whom it sells its products taking market conditions into consideration. The Company also maintains favorable business relationships with major domestic refineries to ensure stable energy supply into Korea. The Company partially conducts its crude oil marketing and sales activities through its Petroleum Marketing Department, usually pursuant to term contracts. The Company hedges a portion of its crude oil sales through swap or option contracts and such hedging decisions are recommended by its Risk Management Department and decided on by the relevant subsidiaries.

Harvest Operations markets its crude oil and natural gas liquids ("NGLs") production to a diverse portfolio of intermediaries and end users with the majority of oil contracts continually renewing on a 30 day basis and the NGL contracts on one year terms with both commodities receiving the prevailing monthly market prices. Harvest Operations has a small number of condensate purchase contracts, required for blending heavy oil to meet pipeline specifications, that are a combination of one year and monthly spot contracts, both at the prevailing monthly market prices.

### Sales of Natural Gas

The Company sells and supplies natural gas to Korea Gas Corporation, as well as various customers around the world. The Company's revenues derived from natural gas sales accounted for approximately 21% of its total sales for the six-month period ended June 30, 2015. Due to its gaseous state, natural gas must be transported to the market either through pipelines or by a tanker after liquefaction into liquefied natural gas ("LNG"). Petroleum gas or propane and butane are also liquefied for transportation. Such liquefying facilities and pipelines require significant capital investment. In order to recover the high cost of investment, suppliers of LNG or natural gas seek buyers to whom they can sell a steady volume of gas over a long period of time to ensure consistent flow of future revenue. Moreover, upstream natural gas suppliers, such as the Company, have commonly sold gas products jointly with other companies instead of individually. For example in Vietnam, the Company and other oil and gas companies supply most of their natural gas to Vietnam Oil and Gas Corporation, Vietnam's state-owned oil and gas corporation pursuant to long-term gas supply agreements. Vietnam Oil and Gas Corporation, in turn, sells the natural gas to various purchasers, including power companies, gas companies, petrochemical companies, trading companies and oil refineries within Vietnam and worldwide pursuant to long-term sales contracts and purchase agreements. The Company supplies 100% of the natural gas produced at the domestic Donghae-1 gas project to Korea Gas Corporation pursuant to a long-term supply contract.

Approximately 93% of Harvest Operations' natural gas production is currently being sold at the monthly average price of Alberta Energy Company ("AECO"), with most of the remaining 5% of its production being transported on the Alliance Pipeline (a natural gas pipeline that transports gas from Western Canada to eastern regions) and receiving a Chicago-based price. A marginal amount (2%) of production is dedicated to aggregator contracts, which are reflective of market prices and are under contract until 2015.

# **Petroleum Stockpiling**

# Overview and Strategy

Korea is the world's eighth largest consumer of petroleum according to the 2014 Statistical Review of World Energy by BP p.l.c. and meets substantially all of its oil needs from imports. To mitigate the risks to the Korean economy posed by disruptions in oil supply or fluctuations in oil prices, the Government has adopted a series of oil stockpiling plans which have been implemented by the Company. The Company currently owns and operates nine stockpiling facilities, with a total storage capacity of 146 million barrels. The Company stockpiles crude oil, refined oil products (including kerosene, gasoline and diesel) and liquefied petroleum gas ("LPG").

The Company's stockpile facilities are located in Yeosu, Ulsan, Seosan, Geoje, Pyeongtaek, Guri, Yongin, Donghae and Gokseong.

Under the Government's Third Stockpiling Master Plan, which was announced in May 2009, the Company's total stockpiling capacity was increased to 146 million barrels in April 2010. Pursuant to the Fourth Stockpiling Master Plan, which was announced in December 2014, the Company is seeking to reach a stockpile reserve level of 107 million barrels by 2025. Korea's stockpile reserve level as of June 30, 2015, which includes the reserves held by the Company and companies in private industry, is approximately 297 days of net oil imports based on calculation standards of the International Energy Agency (the "IEA"). Korea joined the IEA as a member in 2002 and became a party to the Agreement on an International Energy Program, which requires that participating countries maintain oil reserve levels of at least 90 days of net oil imports. The Government contributed a total of approximately Won 5.6 trillion to the Company for execution of the Stockpiling Master Plans as of June 30, 2015, of which approximately Won 2.4 trillion was used to construct stockpile facilities and Won 3.2 trillion was used to purchase additional stockpile oil reserves.

The Company's stockpiling strategy prior to 1999 consisted mainly of purchasing and storing oil supplies and providing oil to domestic refineries when anticipated deliveries of crude oil do not arrive on time or when there is a shortage of crude oil due to other emergencies. The Company also leases excess storage facilities to domestic oil companies. Since 1999, the Company has sought to increase its stockpile level and generate more income from its stockpiling activities by participating in international stockpile arrangements and engaging in oil trading activity.

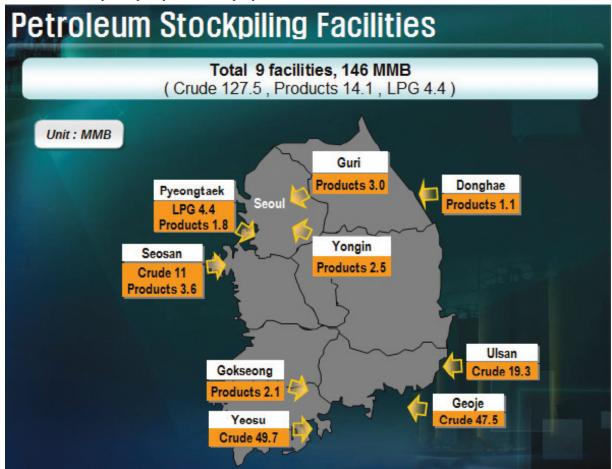
International Stockpiling. As a means of increasing the Company's stockpile level, the Company enters into contracts with national oil companies of oil-producing countries, major international oil companies and oil trading companies to store their petroleum in the Company's stockpile facilities as part of these companies' distribution network for markets in northeast Asia. The Company receives a fee for allowing these companies to use its stockpile facilities, and as part of the arrangement, these companies are obligated to supply petroleum to the Company at the market price up to the volume of the leased storage space during periods of oil shortage or other emergencies. Participation in international stockpiling arrangements has allowed the Company to increase its oil reserve levels, generate revenue from its stockpile facilities and create opportunities to purchase crude oil for domestic use in emergencies.

Oil Trading. Since 2000, the Company has been engaging in swap trading for a portion of its oil reserves to supplement its revenues and increase its oil reserves, but only at levels that would not compromise its oil reserve maintenance objectives. The Company uses its oil reserves as well as its storage facilities to enter into oil trading transactions with oil and commodities trading companies. The Company fixes its buy or sell price using hedging financial products before entering into the trading transactions to minimize its risks.

Gasoline and Gas Oil Wholesale and Discount Gas Stations. In order to reform the oil product distribution landscape in Korea and to minimize price increase, the Company began engaging in gasoline and gas oil wholesale and operation of discount gas stations with the opening of the first discount gas station in December 2011. The Company purchases gasoline and gas oil at wholesale prices from refineries, as well as acquiring them from overseas sources utilizing its stockpile facilities, and delivers such oil to the discount gas stations. As of June 30, 2015, the Company, along with Korea Expressway Corporation and National Agricultural Cooperative Federation, operated approximately 1,141 such discount gas stations located throughout Korea. The Company believes that the discount gas stations have the effect of also lowering the prices of other commercial gas stations located nearby, and hopes to continue to increase the number of such stations in the near future. Pursuant to a mandate from the Government, the Company may consider a spin-off of its gasoline and gas oil wholesale and distribution business in the future.

# Operation of Stockpiling Facilities

The Company's stockpile facilities are located throughout Korea. The map below provides details of the location and stockpile capacity of the Company's facilities as of the date hereof.



# Ulsan

The Ulsan stockpile facility is located on a 1.8 square kilometer tract of land in Ulsan on Korea's southeastern coast, and first began operation in 1981. As of June 30, 2015, the Ulsan facility had both aboveground and underground storage facilities, with a total capacity of 19.3 million barrels of crude oil.

# Geoje

The Geoje stockpile facility, which has been in operation since 1985, is located on a 2.7 square kilometer tract of land near Korea's southern coast in South Kyungsang province. As of June 30, 2015, the Geoje facility had storage tanks both aboveground and underground, with total storage capacity of 47.5 million barrels of crude oil. The Company recently completed the construction of a loading dock near the facility to assist in the transportation of crude oil into the facility. See "— Engineering and Construction — Construction of Petroleum and LPG Storage Facilities."

#### Yeosu

The Yeosu stockpile facility has been in operation since 1998 and is located on a 3.8 square kilometer tract of land in South Jeolla province near the southern coast of Korea. As of June 30, 2015, the Yeosu site, which has both aboveground and underground storage facilities, had a total capacity of 49.7 million barrels of crude oil.

#### Seosan

The Seosan stockpile facility has been in operation since 2005 and is located on a 0.9 square kilometer tract of land near Korea's southwestern coast in South Choongchong province. As of June 30, 2015, the Seosan facility, which is aboveground, had a total capacity of 11.0 million barrels of crude oil and 3.6 million barrels of refined oil products.

# Pyeongtaek

The Pyeongtaek stockpile facility, which has been in operation since 1989, is located on a 0.7 square kilometer tract of land near Seoul in Gyeonggi province. As of June 30, 2015, the Pyeongtaek facility had storage tanks both aboveground and underground, with a total capacity of 4.4 million barrels of LPG and 1.8 million barrels of refined oil products.

#### Guri

The Guri stockpile facility, which has been in operation since 1981, is located on a 0.6 square kilometer tract of land near Seoul in Gyeonggi province. The Guri facility is underground, with a capacity to store 3.0 million barrels of refined oil products as of June 30, 2015.

#### Yongin

The Yongin stockpile facility, which commenced operation in 1998, is located on a 1.2 square kilometer site near Seoul in Gyeonggi province. The Yongin facility is aboveground, and as of June 30, 2015, it housed 11 storage tanks with a total stockpile capacity of 2.5 million barrels of refined oil products, with each tank having a storage capacity ranging from 150,000 barrels to 275,000 barrels. Due to the facility's proximity to populated areas, it is constructed with a concrete membrane and is designed to withstand earthquakes to the same extent as nuclear power plants in Korea.

# Gokseong

The Gokseong stockpile facility has been in operation since 1999 and is located on a 0.4 square kilometer tract of land in South Jeolla province. As of June 30, 2015, the Gokseong facility, which is located aboveground, had a total capacity of 2.1 million barrels of refined oil products.

# Donghae

The Donghae stockpile facility is located on a 0.1 square kilometer site in Kangwon province and has been operational since 2000. It is located on the eastern coast of Korea, and as of June 30, 2015, it housed five aboveground storage tanks with a total capacity of 1.1 million barrels of refined oil products, with each tank having a storage capacity ranging from 100,000 barrels to 300,000 barrels.

#### **Engineering and Construction**

### Overview

In support of the Company's stockpiling and exploration and production business, the Company is also engaged in the construction of crude oil and gas storage facilities throughout Korea, as well as the construction of production facilities. The Company constructed nine stockpile facilities that it currently operates pursuant to the Stockpiling Master Plans, as well as the production facilities used in the Donghae-1 gas project and the Vietnam Block 11-2 gas project. Pursuant to the Third Stockpiling Master Plan, the Company completed the construction of a loading dock at Geoje in July 2012 and also completed additional stockpile facilities at its Pyeongtaek site in May 2009 and at its Ulsan site in April 2010. The Company completed the construction of a new storage facility at its Pyeongtaek location with a capacity of 225,000 barrels of refined oil products in June 2014, which is being

used to supply products to Al-tteul gas stations operated by the Company. The Company also plans to replace certain aboveground storage facilities at its Ulsan site by constructing new underground storage facilities, which is expected to be completed by 2020, and also build additional aboveground storage facilities at its Yeosu site, which is expected to be completed by 2017. Furthermore, the Company is also constructing additional pipelines between the Company's Seosan stockpile facility and refinery facilities operated by Hanhwa Total Petrochemical Co., Ltd., to ensure stable supply of oil to domestic refineries even during energy distribution emergencies. The new pipelines are expected to be completed in September 2015. The Company is also working to expand its construction business overseas and assisting domestic construction companies to increase their competitiveness in overseas construction markets by providing technological support.

# Construction of Petroleum and LPG Stockpile Facilities

Stockpile facilities consist of aboveground tank facilities or underground cavern facilities. Aboveground facilities are easier to construct, and thus require a shorter construction period, usually from three to five years, are easier to maintain initially, and are not restricted in where they can be built or in the types of product that can be stored there. However, aboveground facilities are also more vulnerable to external threats such as theft, terrorist attacks or fires, more expensive to construct, and have a shorter life cycle, usually lasting from 15 to 20 years. Underground facilities provide higher security and safety, have a semi-permanent life cycle, are more environmentally friendly and require lower construction and maintenance costs. However, they also take longer to build, usually from five to eight years, may be built only on sites that meet specific geological requirements, and are limited in the types of petroleum products that can be stored in them. The Company currently has eight aboveground tank facilities and five underground facilities.

The Company recently began updating the repair system at its Geoje underground storage facilities to further upgrade and enhance its existing storage capacity, which is estimated to be completed by 2018. Furthermore, as part of the Government's plan to develop a new seaport in Ulsan, the Company is currently transferring the Ulsan storage facility's offshore loading platform to another location, which is expected to be completed by the end of 2017.

# Construction of Production Facilities

The Company also supports its exploration and development projects by constructing production facilities used at some of its oil and gas fields. The Company constructed the offshore platform, onshore terminal, subsea production system, and the subsea and onshore pipeline at the Donghae-1 gas project. The Company also constructed the natural gas production facilities at the Vietnam Block 11-2 gas project in Rong Doi, consisting of two offshore platforms, a subsea pipeline and a floating storage and offloading unit. The Company also provides construction support for construction of production platforms or pipelines at several of its production or exploration sites, including Vietnam Block 15-1, Western Isle block, Blackgold Project and Arystan block.

### **Other Businesses**

# Operation of Semi-submersible Drillship

The Company owns and operates a semi-submersible drillship, named "Doo Sung", and leases this facility and its crew under contracts to international, government-owned or independent oil and gas companies for use in their drilling activities in offshore oil and natural gas fields. The Doo Sung was constructed in 1984, and carries a crew of approximately 136. The Doo Sung has successfully drilled 119 boreholes in locations such as Alaska, China, Vietnam, Malaysia, Russia, Myanmar and Indonesia. Semi-submersible drillships are floating vessels that can be submerged by means of a water ballast system such that the lower hulls are below the water surface during drilling operations. The Doo Sung is moved from one drilling site to another with the assistance of tugboats.

The Company's revenues from the drillship chartering segment was Won 24 billion, and the Doo Sung had a utilization rate of 50% and an average day rate of US\$282,500 for the six months ended June 30, 2015. The contract drilling industry remains highly competitive. Demand for the Company's drilling services is based upon many factors which are beyond its control, including:

- market price of oil and natural gas and the stability thereof;
- production levels and related activities of the OPEC and other oil and natural gas producers;
- global oil supply and demand;
- · regional natural gas supply and demand;
- worldwide expenditures for offshore oil and natural gas drilling;
- long-term effect of worldwide energy conservation measures;
- the development and use of alternatives to hydrocarbon-based energy sources; and
- worldwide economic activity.

Drilling contracts are generally awarded on a competitive bid basis. Pricing, safety record and technical expertise are key factors in determining which qualified contractor is awarded a job. Other drillship availability, location and specifications also can be significant factors in the determination. The Doo Sung has been engaged mainly on drilling sites located in Korea, Southeast Asia and the eastern coast of Russia. Operators also may consider crew experience and efficiency. Some of the Company's contracts are on a negotiated basis.

The Doo Sung entered into two contracts for 2013 and 2014. One contract was with Malaysia Shell at a day rate of US\$215,280 for the period from January 2013 to May 2013 and from January 2014 to May 2014. The other contract was with one of Gazprom's subsidiaries at a day rate of US\$300,000 for the period from June to November of both 2013 and 2014. In addition, the Doo Sung completed a contract with Daewoo International for its domestic drilling project, at a day rate of US\$265,000 for the period from December 2014 to January 2015. The Company mutually terminated a drilling contract with the contracting counterparty in April 2015, which limited the drillship's utilization during the first six months of 2015.

The Doo Sung is currently carrying out another drilling contract with Gazprom Geologorazvedka LLC, a subsidiary of Gazprom OAO, for a term of three years and fee of approximately US\$170 million. Gazprom OAO is currently on the Sectoral Sanctions Identifications List maintained by OFAC, and the Entity List maintained by the Bureau of Industry and Security, and the Company may be subject to sanctions under relevant laws and regulations as a result of the contract, although the Company has stripped the Doo Sung of all U.S.-origin equipment and parts to minimize the Company's exposure to sanctions. See "Risk Factors — Risks related to the Company — The Company engages in certain activities relating to Russia and may become subject to sanctions under relevant laws and regulations of the United States and other jurisdictions as a result of such activities, which may adversely affect its business and reputation."

The following table sets forth the utilization rate, calculated as a percentage of the number of days for which the Doo Sung was utilized, over the number of days in the year, and the range of contracted day rates for the Doo Sung for each of the years ended December 31, 2012, 2013 and 2014, and the six months ended June 30, 2014 and 2015.

	For th	e Year Ended Decer	For the Six Months ended June 30,		
	2012	2013	2014	2014	2015
Utilization rate	12%, 45 days	87%, 317 days	90%, 330 days	89%, 161 days	50%, 91 days
Contracted day rates	US\$210,000	US\$215,280 ~	US\$215,280~	US\$215,280	US\$265,000~
		US\$300,000	US\$300,000		US\$300,000

#### Petroleum Information and Publication

Due to Korea's heavy dependence on foreign oil, efficient and accurate collection of information related to the global oil market is essential to Korea's ability to promptly respond to international market developments. In furtherance of its position as the execution arm of Korea's oil-related policies and operations, the Company, through its Oil Research & Information Center, also engages in collection, compilation, analysis and publication of domestic and international oil-related information. The information provided by the Company is used widely not only in the oil industry, but also in decision-making process for oil policies by the Government. The Company is currently certified by the Government to provide the official domestic oil usage and pricing data.

The Company currently publishes oil-related information through the following media:

<b>Publication Title</b>	Content	Medium	Language
Petronet	Multimedia internet website with comprehensive oil information service network, consisting of an extensive database on all Korean oil-related information. Both paid and free subscriptions are available.	Internet	Korean/ English
Korea Monthly Oil Statistics	Provides historical and up-to-date statistics on Korean oil supply and demand, including export, import, production, consumption and inventories, as well as details of domestic refinery information such as operating rate, production and market share, and analysis of Korean oil statistics.	Printed/ Internet	Korean/ English
Korean Oil News	Provides comprehensive monthly news coverage of the Korean oil industry and economic trends, as well as expert opinions and analysis of the Korean oil market, renewable and alternative energy, Government policies and oil and gas exploration and development by Korean companies. It also includes the latest statistics on Korean oil supply, demand and local prices for oil products.	Internet	English
Daily Petroleum Status	Provides major international oil prices and indices (such as Dubai, Brent and West Texas Index), major news related to the domestic and international oil market, and prices of domestic oil (crude and refined) products.	Internet	Korean
Weekly International Oil Price Status	Provides weekly price status of international crude oil, oil products, as well as an update on the status of the Singapore oil market.	Internet	Korean
Weekly Domestic Oil Price Status	Provides weekly price status of domestic oil products, classified by gas stations, refineries and distributors.	Internet	Korean
Annual Oil Supply Statistics	Compilation of annual statistics relating to domestic oil imports, refineries and distributors.	Printed	Korean
Opinet	Publishes real-time fuel prices for domestic gas stations, as well as oil sale prices for all domestic oil distributors and refineries, both through <a href="https://www.opinet.co.kr">www.opinet.co.kr</a> and other devices such as Global Positioning System navigators and mobile phones.	Internet	Korean

# **Affiliates**

Of the Company's affiliates, certain information with regard to affiliates that are accounted for using the equity method as of such date are set forth in the table below.

	As of or for the six months ended June, 2015(1)					
Entity	Country of Incorporation	Equity Interest	Total Assets	Total Liabilities	Revenue	Net Income (Loss)
	(Ir	n billions of	Won, exc	cept for perce	entages)	
KNOC Bazian Limited	Malaysia	67%	144	194	_	6
KNOC Nigerian West Oil Company Limited	Nigeria	75%	154	217	_	4
KNOC Nigerian East Oil Company Limited	Nigeria	75%	253	322	_	4
KNOC Aral Ltd	Malaysia	51%	39	39	_	0
Kernhem B. V	Netherlands	37%	235	236	24	9
KC Kazakh B. V	Netherlands	35%	709	807	_	19
KADOC Ltd	Netherlands	75%	196	218	_	4
Dolphin Property Limited	Nigeria	75%	0	0	_	0
ADA OIL LLP <sup>(2)</sup>	Kazakhstan	13%	147	140	24	9
KNOC Ferghana Ltd	Malaysia	50%	64	70	_	1
KNOC Ferghana2 Ltd	Malaysia	65%	20	21	_	0
Offshore International Group Inc	U.S.A.	50%	1,085	399	101	25
Parallel Petroleum LLC	U.S.A	10%	1,038	347	27	1
Oilhub Korea Yeosu Co., Ltd	Korea	29%	529	398	31	3
Korea Oil Terminal Co., Ltd	Korea	51%	3	4	_	1
Deep Basin Partnership	Canada	79%	210	149	11	16
HKMS Partnership	Canada	69%	107	106	7	0

<sup>(1)</sup> Translated into Won amounts at the Market Average Exchange Rate as of June 30, 2015 of Won 1,124.1 to US\$1.00.

# **Employees and Labor Relations**

As of June 30, 2015, the Company had 1,374 employees on a non-consolidated basis. The following table describes the total number of employees by department as of the periods indicated.

Department	As of December 31, 2014	As of June 30, 2015
Strategy & Planning	158	158
Administration (inclusive of HSE Dept.)	163	146
E&P Planning, New Ventures & Rig Operation	34	32
Exploration	120	118
Production	212	202
Overseas E&P Offices	155	156
Petroleum Stockpile & Business	124	124
Stockpile Offices	294	277
Legal, PR & Secretariat	41	41
E&P Technology Institute	60	56
Auditing	20	22
Others (Training, Labor union, etc.)	27	42
Total	1,408	1,374

<sup>(2)</sup> As ADA OIL LLP is an affiliate of Kernhem B.V., equity method for ADA OIL LLP was applied considering the indirect ownership interest held by Kernhem B.V.

Most of the Company's eligible employees are members of the labor union. The Company has not experienced any strikes, work stoppages, labor disputes or actions which affected the operation of any of the Company's businesses, and the Company considers its relations with its workforce to be generally good. The Company re-negotiated its collective bargaining agreement with the labor union in December 2014, which is scheduled to expire in December 2016. The negotiation for a new collective bargaining agreement will begin upon expiration of the current agreement. The collective bargaining agreement provides for, among other things, various employment benefits, the scope of union activities and negotiation procedures.

The Company, like most Korean companies, grants its employees annual increases in basic wages and pays periodic bonuses. 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.

### **Safety and Environmental Matters**

### Safety

Safety standards and regulations in the domestic oil industry are issued, and compliance is monitored, by the Ministry of Trade, Industry and Energy and the Korea Occupational Safety and Health Agency, a Government body under the control of the Ministry of Employment and Labor.

Because a number of the Company's stockpile facilities are located in industrial areas, the Company has established a series of preventative measures to improve the safety of its employees and surrounding communities and minimize disruptions or other adverse effects on its business, such as providing each individual member of the communities in areas surrounding its stockpile facilities with printed materials to explain and illustrate safety and protection knowledge and skills.

The Company has also undertaken various measures including improving its computer systems, increasing safety and maintenance training for employees and improving the Company's patrolling equipment (used to detect leaks, fire and other defects in pipes and stockpile facilities). The Company believes that its safety standards are at least comparable to domestic and international safety standards relating to the oil industry. In addition, the Company has been operating its safety system in compliance with international safety standards such as Process Safety Management since 1996 and International Organization for Standardization 9001 since 1998.

The Government from time to time conducts spot-checks of the Company's facilities to ensure that they are in compliance with occupational health and safety regulations. These spot-checks have never identified any major violations or resulted in monetary fines or other penalties.

To further enhance its management of such safety and other operational risks, which may increase as the Company follows its expansion plans, the Company implemented a comprehensive enterprise risk management ("ERM") system in November 2010. The ERM system allows the Company to centralize the detection, analysis and management of various safety, financial and other operational risks related to its business.

### **Environmental Matters**

The Company is subject to numerous international, national, regional and local environmental laws and regulations concerning its oil and gas exploration and production operations, stockpiling operation and other activities. In particular, these laws and regulations:

- require an environmental impact assessment report to be submitted and approved prior to the commencement of exploration, development and production activities;
- restrict the type, quantities and concentration of various substances that can be released into the environment in connection with drilling and production activities;
- limit or prohibit drilling activities on certain lands lying within protected areas and certain other areas;
   and

• impose penalties for pollution resulting from oil, natural gas and petrochemical operations, including criminal and civil liabilities for serious pollution.

These laws and regulations may also restrict air emissions and discharge to surface and subsurface water resulting from the operation of oil and natural gas processing plants, pipeline systems and other facilities that the Company and its joint venture partners own or operate. In addition, the Company's operations may be subject to laws and regulations relating to the generation, handling, storage, transportation, disposal and treatment of waste materials. Moreover, since exploration and production activities may take place on sites that are ecologically sensitive (tropical forest, marine environment, etc.), each site may require a specific approach to minimize the impact on the related ecosystem, biodiversity and human health.

The Company anticipates that the environmental laws and regulations to which it is subject will become increasingly strict and therefore likely to have an increasing impact on its operations. It is impossible, however, to predict accurately the effect of future developments in such laws and regulations on the Company's future earnings and operations. Some risk of environmental costs and liabilities is inherent in certain of the Company's operations and products, as it is with other companies engaged in similar businesses, and there can be no assurance that material costs and liabilities will not be incurred. The Company does not currently expect any material adverse effect on its financial conditions or results of operations as a result of compliance with such laws and regulations. In addition to complying with laws, regulations and standards to which the Company is subject, it is the Company's policy to exercise maximum due care with respect to environmental matters in the course of its operations, and to maintain adequate insurance coverage.

The Company also has been conducting regular environmental checks on its operations and facilities by a third-party consultant, pursuant to the International Organization for Standardization 14001 since 1998, to identify any potential areas of problem and to assess ways of improving its compliance with environmental laws.

#### **Insurance**

The Company's operations are subject to hazards and risks inherent in the drilling, production and storage of petroleum products. As protection against these operations risks, the Company maintains insurance coverage against some, but not all, potential losses, including the loss of wells, as well as liabilities related to costs of pollution control and environmental compliance. In some cases, the agreement under which the Company operates its fields and sells the petroleum products require it to carry insurance, while in other cases, the Company's management exercises its discretion and determines the fields for which to purchase insurance coverage, taking into account the costs of such insurance and related risks. The Company's insurance coverage includes property damage insurance for certain of its oil and gas fields, its stockpile facilities and the semi-submersible drillship and business interruption insurance for its production activities. The Company also has insurance against damage from terrorism for all of its stockpile and offshore facilities. 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.

# **Legal Matters**

From time to time the Company is involved in litigations or proceedings that have arisen in the ordinary course of its business, including disputes with respect to its exploration, development and production rights.

In January 2008, the Company and other participating companies were notified by the Iraqi federal government that the Company's agreement with the Kurdistan regional government for participating in the development of the oil blocks in the Kurdistan autonomous region in northern Iraq would be invalid without obtaining proper approval from the Iraqi federal government. The Iraqi federal government's actions stemmed from a proposed amendment in Iraqi energy resources law. The Company was initially advised by legal consultants in England and Iraq that there is no legal basis for the above alleged invalidity of the agreement. Discussions between the Iraqi federal government and the Kurdistan regional government regarding the validity of production agreements entered into by the Kurdistan regional government independent of the Iraqi federal

government, as well as the legality of the Kurdistan regional government's authority to export oil, is currently on-going. The Company is currently preparing for the return of its interests in the Bazian Block, one of its exploration blocks in the Kurdistan autonomous region in Iraq, to the Iraqi federal government.

In January 2009, the Company was notified by the Nigerian government that the PSA entered into in 2006 in respect of the OPL 321 and OPL 323 offshore blocks will be revoked. The Nigerian Ministry of Petroleum Resources alleged that the revocation was due to the Company's failure to make payment in full of a certain signing bonus promised by the Company as the winning bidder during the initial bidding process for the blocks in 2005. The Company and its subsidiaries, KNOC Nigerian East Oil Company Limited and KNOC Nigerian West Oil Limited, filed for judicial review of the Nigerian government's decision with the Federal High Court of Nigeria in March 2008 to declare the revocation null and void, claiming that the Nigerian government has already acknowledged the receipt of full payment of the signing bonus. Owel Petroleum Services Nig. Limited ("Owel Petroleum"), which had allegedly been the local vehicle for the losing bidder during the bidding process for the OPL blocks, later joined the proceedings to be awarded the OPL blocks. In August 2009, the Federal High Court of Nigeria ruled in favor of the Company, and Owel Petroleum and the Nigerian government have subsequently appealed the decision. In April 2012, the Nigerian Court of Appeal partially ruled against Owel Petroleum, and both the Company and Owel Petroleum appealed that decision in June 2012. The final outcome of the case has not been decided as of the date of this Offering Circular.

In May 2015, 208 employees belonging to the Company's labor union filed a lawsuit at the Seoul Central District Court for unpaid wages amounting to approximately Won 5 billion. The final outcome of such lawsuit remains uncertain. While the number of total employees eligible to file a similar lawsuit cannot be ascertained at this time, the Company believes that is it unlikely that additional employees will file similar lawsuits, as the initial lawsuit was initiated by the Company's labor union upon discussion with employees belonging to the labor union.

As of the date of this Offering Circular, it is the Company's view that other than as disclosed above and in "Risk Factors — The Company's business may be materially and adversely affected by legal claims and regulatory actions against it," there are no other current or expected litigation or governmental 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 condition of the Company.

### **Intellectual Property and Research & Development**

The Company's general policy is to seek intellectual property protection for those inventions and improvements likely to be utilized by its activities or to give it a competitive advantage compared to other fuel sources. The Company relies on a variety of patents, 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 34 patents and one utility model patent as of June 30, 2015. 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.

As of June 30, 2015, the Company employed 56 researchers (including seven with doctorate and 22 with master's degrees) and 27 other employees in its Research and Development Department. The Company incurred research and development costs of approximately Won 4 billion in 2014.

# **Properties**

The Company's headquarters and principal offices are located in Ulsan, at 305, Jongga-ro, Jung-gu, Ulsan, 681-816, Korea. The Company has title over nine stockpile branch offices and the stockpile facilities at Ulsan, Yeosu, Pyeongtaek, Geoje, Seosan, Guri, Yongin, Gokseong and Donghae, as well as the production office for the Donghae-1 gas project.

#### **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. The Articles of Incorporation also requires the Company to establish an Audit Committee as a committee of the board of 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 the Act on the Management of Public Agencies, the KNOC Act, the Company's Articles of Incorporation and its internal regulations, and include establishing the budget, issuing debentures and amending the Company's Articles of Incorporation when necessary.

Under the KNOC Act, the Act on the Management of Public Agencies and the Articles of Incorporation of the Company, the President, who serves as the Company's chief executive, is nominated by the Company's Officer and Executive Recommending Committee. The Officer and Executive Recommendation Committee recommends a pool of candidates, which is then deliberated by the Committee for Management of Public Agencies established pursuant to the Act on Management of Public Agencies. After such deliberations, the President is appointed by the President of Korea upon the recommendation of the Minister of Trade, Industry and Energy.

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 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 and the Articles of Incorporation of the Company, if the board of directors of the Company determines that the President's ability to perform its duties has been seriously impaired (due to reasons such as the President's violation of applicable laws or the Company's Articles of Incorporation, or the President's failure to diligently perform its duties), the board of directors may pass a resolution to propose dismissal of the President to the Minister of Trade, Industry and Energy.

Standing directors other than the President and the standing member of the Audit Committee are appointed by the President. The standing directors assist the President and act on his or her 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 Committee for Management of Public Agencies from a pool of candidates recommended by the Officer and Executive Recommendation Committee.

Pursuant to the Articles of Incorporation of the Company or, if applicable, as mandated by applicable laws, the board of directors may establish by resolution committees to facilitate its efficient operation in carrying out various management functions. The Audit Committee and the Officer and Executive Recommendation Committee have been established pursuant to applicable laws.

The Audit Committee is comprised of three members, of whom two members are non-standing directors. The Audit Committee has at least one member who is an accounting or financial expert, and its chairperson is a non-standing director. The principal function of the Audit Committee is to conduct internal review of the Company's operations and accounting, and to present its opinion to the board of directors, thereby ensuring the independence and professionalism of the Company.

The Officer and Executive Recommendation Committee is comprised of non-standing directors and private citizens appointed by the board of directors, and is chaired by one of the non-standing directors elected by the members of the Committee to serve as chairperson. The Officer and Executive Recommendation Committee is responsible for the selection and recommendation of candidates to serve as President, standing member of the Audit Committee or non-standing directors.

In addition to the Audit Committee and the Officer and Executive Recommendation Committee, the board of directors has established the Investment Review Committee, the Business Administration Committee, the

Investment Risk Management Committee, the Financial Risk Management Committee as well as various other committees to further facilitate the management activities of the board of directors.

The Investment Review Committee is comprised of four members, all of whom are non-standing directors. The Investment Review Committee is responsible for reviewing and making recommendations to the board of directors regarding exploration and production business activities, including the review of proposed plans and the evaluation of on-going business activities.

The Business Administration Committee is comprised of four members, all of whom are non-standing directors. The Business Administration Committee reviews and makes recommendations to the board of directors with respect to budget proposals, financial reports and other business matters, including matters relating to business performance targets and trends in international petroleum prices.

The Investment Risk Management Committee is comprised of no more than seven members, including internal and external experts as well as the standing director in charge of risk management. The Investment Risk Management Committee reviews and makes recommendations to the board of directors on all issues relating to the Company's new oil and gas projects, acquisitions or disposals of equity interests as well as other investment activities of the Company.

The Financial Risk Management Committee is comprised of seven Company employees, including the head of the Finance Department, and one outside expert. The Financial Risk Management Committee reviews and makes recommendations to the board of directors on all issues relating to risks associated with foreign currency exchange rates, interest rates, international and domestic oil and gas prices, credit, liquidity and any other financial activities of the Company.

The Company's address is 305, Jongga-ro, Jung-gu, Ulsan, 681-816, Korea. Summary biographical information regarding the Company's directors is set out below.

### **Standing Directors**

The Company's standing directors are as follows:

Name	Age	Position	Director Since	Date Term Ends
Moon Kyu Suh*	63	President and Chief Executive Officer	August 2012	August 2015
Youn Sung Byun	58	Standing Member of Audit Committee	February 2015	February 2017
Joong Hyun Kim	59	Senior Executive Vice President	November 2012	November 2015
Byung Jin Song	58	Executive Vice President for Strategy & Planning Group	November 2012	November 2015
Chang Seok Jeong	56	Executive Vice President for Production Group	September 2013	September 2015*
Kang Hyun Shin	56	Executive Vice President for Petroleum Stockpile Group	September 2013	September 2015*

<sup>\*</sup> The term of this director has expired, but pursuant to the Act on the Management of Public Institutions, the director is continuing his duties until his term is officially extended or a successor is appointed.

Moon Kyu Suh has served as a standing director, President and Chief Executive Officer of the Company since August 2012. Mr. Suh previously served as Senior Executive Vice President of the Company. He holds a bachelor's degree from Korea University.

Youn Sun Byun has served as standing member of the Audit Committee of the Company since February 16, 2015. Prior to joining the Company, Mr. Byun previously served as the representative chief executive officer of PEACH Holdings Co., Ltd. and PEACH Telecom Co., Ltd. He holds a bachelor's degree in electrical engineering from Korea University and a doctorate in economics from Georgia State University.]

Joong Hyun Kim has served as a standing director and Senior Executive Vice President since November 19, 2012. Mr. Kim also previously served as Vice President of the Stock Engineering & Construction Department and the Overseas Engineering & Construction Department. Mr. Kim holds a bachelor's degree in civil engineering from Kookmin University and a master's degree in civil engineering from Yonsei University.

Byung Jin Song has served as a standing director and Executive Vice President for the Strategy & Planning Department since November 1, 2012. Mr. Song previously served as Vice President of the Company's Planning and Coordination Department and the E&P Planning Department, and as Managing Director of the Company's New Ventures Department. He holds a bachelor's degree in business administration from Yeungnam University and a master's degree in business administration from Kyungbuk University.

Chang Seok Jeong has served as a standing director and Executive Vice President for the Production Group since September 13, 2013. Mr. Jeong previously served as General Manager of the Company's Vietnam Office and Vice President of Asia Production Department. He holds a bachelor's degree and a master's degree in resource engineering from Seoul National University.

Kang Hyun Shin has served as a standing director and Executive Vice President for Petroleum Stockpile Group since September 13, 2013. Mr. Shin previously served as Vice President of the Company's Petroleum Marketing Department and as Manager of Management Planning Team. He holds a bachelor's degree in civil administration from Seoul National University.

# **Non-Standing Directors**

The Company's non-standing directors are as follows:

Name	Age	Position	<b>Director Since</b>	Date Term Ends
Kyae Hyeong Lee	61	Vice President for Industry- Academic cooperation, Danguk University	January 2014	January 2016
Won Shik Shin	68	Director, Koref Technology	January 2014	January 2016
Byeong ok Ahn	60	Professor, Gongju University	January 2014	January 2016
Hag Yong Sung	59	Professor, Ulsan University	August 2014	August 2016
Han Joo Yoo	56	Professor, Soongsil University	October 2014	October 2016
Woon Wha Park	49	CEO, KT&C Co., Ltd.	October 2014	October 2016
Bo Hyun Chon	61	Professor, Inha University	February 2015	February 2017

Kyae Hyeong Lee has served as a non-standing director since January 28, 2014. Mr. Lee currently serves as a vice president of Industry-Academic Cooperation at Danguk University. He holds a bachelor's degree in social education from Seoul National University and a master's degree in public policy from University of Wisconsin-Madison.

Won Shik Shin has served as a non-standing director since January 28, 2014. Mr. Shin currently serves as a director of Koref Technology. He holds a bachelor's and a master's degree in economics from Seoul National University.

Byeong ok Ahn has served as a non-standing director since January 28, 2014. Mr. Ahn currently serves as a professor at Gongju University. He holds a bachelor's degree in law from Korea University, a master's degree in public administration from Yonsei University and a doctorate in political science from Kyeonghui University.

Hag Yong Sung has served as a non-standing director since August 12, 2014. Mr. Sung is currently a professor of business administration at Ulsan University. He holds a bachelor's degree in chemical engineering from Pusan National University and a master's degree in business administration from Ulsan University.

Han Joo Yoo has served as a non-standing director since October 28, 2014. Mr. Yoo is currently a professor of business administration at Soongsil University. He holds a bachelor's degree and a master's degree in business administration from Sogang University and a doctorate in business administration from Korea University.

Woon Wha Park has served as a non-standing director since October 28, 2014. Mr. Park is currently the chief executive officer of KT&C Co., Ltd. He holds a bachelor's degree in French literature from Dangook University.

Bo Hyun Chon has served as a non-standing director since February 9, 2015. Mr. Chon is currently a professor of energy resource engineering at Inha University. He holds a bachelor's degree in mineral and petroleum engineering from Seoul National University and a master's degree and a doctorate in petroleum engineering from Texas A&M University.

#### RELATED PARTY TRANSACTIONS

The Company engages in a variety of transactions with related parties in its ordinary course of business, including providing long-term loans to its affiliates from time to time. The following table sets forth the amount of long-term loans outstanding with respect to loans made to affiliates as of December 31, 2013, 2014 and June 30, 2015. See note 42 to the Company's audited consolidated financial statements included elsewhere in this Offering Circular for further information about the Company's related party transactions.

As of

	As of De	June 30,	
Related Parties	2013	2014	2015
		(In millions of Wo	on)
KNOC Kamchatka Petroleum Ltd	₩ —	₩ 83	₩ 412
KNOC Bazian Ltd	60,948	_	_
Dolphin Property Ltd	4,578	_	_
KNOC Nigerian West Oil Company Limited	23,565	24,277	25,307
KNOC Nigerian East Oil Company Limited	28,312	29,137	27,770
KC Kazakh B. V	95,284	133,723	158,911
Offshore International Group Inc.	4,738	_	_
KNOC Ferghana2 Ltd	10,207	12,061	12,583
KADOC Ltd.	51,993	98,430	103,306
Kernhem B.V	46,162	48,082	49,171
ADA Oil LLP	10,477	10,913	11,160

As of June 30, 2015, the Company provided a guarantee of US\$630 million for Harvest Operations' bond issued in April 2013 and guarantee of CAD 1 billion for Harvest Operation's credit facility, and provided a performance guarantee of approximately Won 131 billion on behalf of Dana Petroleum to other participants in the Bittern and Exxon oil fields, for expenses in restoring, decommissioning, dismantling and removing facilities and structures in the field. See Note 44 to the Company's audited consolidated financial statements and Note 29 to the Company's unaudited condensed consolidated interim financial statements appearing elsewhere in this Offering Circular.

#### REGULATION

The Company was established as a juridical entity under the KNOC Act and is subject to the rules and regulations of the KNOC Act. The Company is also subject to all general rules and regulations applicable to corporations under the Act on the Management of Public Agencies, unless otherwise provided for in the KNOC Act.

#### The KNOC Act

Under the KNOC Act, the Company is established as a statutory juridical entity for the purpose of efficient performance of businesses relating to development of oil resources, oil stockpile and enhancement of oil distribution channels. In order to achieve these objectives, the KNOC Act allows the Company to undertake, among others, the following activities:

- Exploration and development of oil resources;
- Export and import, stockpiling, transportation, lease and sales of crude oil and oil products;
- Construction, maintenance, management and lease of oil stockpile facilities;
- Enhancement of oil distribution channels;
- Investment, financing, guarantee of debt and materials lease for corporations engaged in businesses relating to energy and resources; and
- Technology support, research and development and provision of information for businesses set forth above.

The Company's authorized capital is Won 13 trillion which is to be funded solely by the Government. Under the KNOC Act, the Ministry of Trade, Industry and Energy is granted the power to direct and supervise the Company's activities relating to its business of exploration, development and production of oil resources inside and outside of Korea, purchase and operation of the oil stockpile, construction and management of oil stockpile facilities, collection, processing and production of oil trading information, and enhancement of oil distribution channels.

In addition, the Company may issue bonds for its business to the extent not exceeding 200% of the sum of the Company's capital and reserve, by a resolution of its board of directors in accordance with the KNOC Act. The Company may also incur indebtedness (such as loans) for its operations. The Government may guarantee the repayment of the Company's bonds and the principal and interest amount of its loans, and provide subsidies in respect of the Company's business activities. However, the Notes are not guaranteed by the Government.

# Petroleum and Petroleum Substitute Fuel Business Act

Under the Petroleum and Petroleum Substitute Fuel Business Act, the Ministry of Trade, Industry and Energy is required to set goals for oil stockpiling to stabilize the supply and demand of oil as well as its prices, and develop a master plan each year to implement these goals. The stockpiling master plan must include matters relating to the oil stockpile target level, categories of oil to be stockpiled and stockpiling facilities. Under the Government's Fourth Stockpiling Master Plan, the Company is required to implement the Government's goal of maintaining the stockpile capacity at 146 million barrels and achieve stockpile oil reserves of 107 million barrels.

Persons who intend to operate an oil export-import business are required to have their business registered with the Minister of Trade, Industry and Energy. However, this requirement does not apply to exports and imports of oil undertaken by the Company to implement the oil stockpile plan under the KNOC Act.

#### Overseas Resources Development Business Act

Under the Overseas Resource Development Business Act, the development of overseas resources may be conducted in one of the following manners:

• a Korean national developing overseas resources individually or jointly with foreigners (including development through local companies established overseas);

- a Korean national providing technical services to foreigners that are developing overseas resources; or
- a Korean national providing funding to foreigners that are developing overseas resources and importing all or part of the overseas resources they develop.

The Government must establish and execute a master plan for the development of overseas resources. If a Korean national desires to operate an overseas resources development business, such person must report the plan for overseas resources development to the Minister of Trade, Industry and Energy.

The Government may provide funds to an overseas resource developer to conduct the necessary research and analysis for starting an overseas resources development business and to acquire the right to develop such resources. The Government may also provide funds for the installation and operation of facilities required for an overseas resources development business, and funds for leasing or buying land necessary to conduct an overseas resources development business.

If the stability and normal functioning of the national economy are harmed or feared to be harmed when a serious disruption to the supply and demand of resources occurs due to an imbalance of supply and demand of resources in Korea and abroad, or there are concerns over such occurrence, the Minister of Trade, Industry and Energy may order overseas resources developers to bring to Korea the whole or part of the overseas resources developed by such developer to stabilize the supply and demand of resources, and the overseas resources developers subject to such an order must comply with the order in the absence of special circumstances.

The Company has been delegated by the Ministry of Trade, Industry and Energy to inspect or investigate matters necessary for the operation of overseas oil development businesses.

# **Submarine Mineral Resources Development Act**

The Submarine Mineral Resources Development Act aims to contribute to the growth of the Korean industry by developing, in a reasonable manner, submarine resources in (i) the Korean peninsula, (ii) the ocean adjacent to the coastlines of islands belonging to Korea, and (iii) the continental shelf under Korea's control to the greatest extent possible. Submarine mining rights are the rights authorized by the Ministry of Trade, Industry and Energy to explore, gather and acquire submarine resources from submarine resource areas owned by Korea, and such rights are categorized into exploration rights and production rights. The exploration rights cannot be granted for a period greater than 10 years from the date of the issuance unless there are special circumstances. The production rights cannot be granted for a period exceeding 30 years from the date of the issuance. A holder of a submarine mining right must pay a mining fee to the Ministry of Trade, Industry and Energy in accordance with the standard stipulated in the Presidential Decree when producing submarine resources in the submarine resource areas. If the submarine resource produced by the holder of production rights is natural gas, the natural gas may be sold to gas wholesalers pursuant to the Urban Gas Business Act or to installers of gas supply facilities other than urban gas businesses. In such cases, there is no need to obtain a permit under the Urban Gas Business Act relating to the gas wholesale business.

# Legislation Relating to the Operation and Management of the Company

# Act on the Management of Public Agencies

The KNOC Act prescribes that the affairs regarding the Company's structure and management must be governed by the Act on the Management of Public Agencies. Under the Act on the Management of Public Agencies, the Company is required to make public many aspects of its affairs including, among others, the objectives of management, its budget and business plan, its financial statements and supplementary documents, status of personnel including directors and officers, its articles of incorporation, its bond register and the minutes of the board of directors (but confidential information on the management provided for in the minutes of board of directors need not be disclosed to the public) and the audit report of its Audit Committee. Full-time officers and employees may not be engaged in activities having purposes of commercial advantage. The Company's fiscal year must be the same as the Korean government's fiscal year. The Company must present mid- to long-term

management objectives covering five fiscal years to the Minister of Trade, Industry and Energy and the Minister of Strategy and Finance on an annual basis. The Company may be audited by the Board of Audit and Inspection of Korea based on its business activities and accounting.

### Act on the Special Accounts for Energy and Resources

The SAER Act has been enacted to implement certain special accounts for energy and resources-related projects so as to supply energy, stabilize prices and efficiently promote resources-related projects. The SAER Act is managed and supervised by the Ministry of Trade, Industry and Energy. Those accounts may be categorized into investment accounts and loan accounts.

Revenue from the investment account is composed of surcharges and additional charges arising out of the Petroleum and Petroleum Substitute Fuel Business Act, the Urban Gas Business Act and the Mining Industry Act. Expenditure from the investment account is composed of operating expenses needed for energy and resources related businesses and contributions or subsidies for such businesses as well as contributions or investments to institutions or groups engaged in the energy and resources-related businesses.

Revenue from the loan account is composed of income from the principal and interest amount arising out of the loan amount. Expenditure is composed of loans to the subject institutions to support energy and resourcesrelated businesses.

If there are insufficient funds to meet the expenditure, long term loans may be arranged within the limits set by the resolution of the National Assembly. Temporary loans may also be arranged if there is a temporary shortage of funds, provided that repayment on the principal amount of the temporary loan must be made within the relevant accounting year. Any expenditure not made within the relevant accounting year may be carried over to the following accounting year notwithstanding any provisions in the State Finance Act.

The Ministry of Trade, Industry and Energy may commission the Company to manage finances such as the receipt of revenue, payment and settlement of the budget relating to this account (excluding management of coal stockpiling facilities and coal reserves) and to manage the reserve funds.

# Regulations on Contractual Business of Public Enterprises and Semi-Government Institutions

Contracts entered into by the Company must conform to Regulations on Contractual Business of Public Enterprises and Semi-Governmental Institutions ("Regulations on Contractual Business") determined by the Ministry of Strategy and Finance in accordance with the Act on the Management of Public Agencies. According to the Regulations on Contractual Business, if it is deemed necessary for the business characteristics of public enterprises and semi-government entities or for fairness and transparency, or if there are any other inevitable reasons, a standard or procedure different from those set forth in the Regulations on Contractual Business may be newly established. For those matters not specified in the Regulations on Contractual Business, the Act on Contracts to which the Government Is a Party will be applied. In principle, contracts must be made through open bids, but if it is deemed necessary, nominated competitive bids or private contracts may also be made.

#### **Environmental Legislation**

#### Air Environment Preservation Act

The purpose of the Air Environment Preservation Act is to protect public health and prevent environmental damage arising from air pollution. The Air Environment Preservation Act provides for the Ministry of Environment to determine standards for the sulphur content of fuel. 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 the Air Environment Preservation Act, the Minister of Environment or mayor or provincial governor may prohibit the use of fuels other than gaseous fuel such as liquefied natural gas and liquefied petroleum gas which release relatively smaller amounts of pollutants in an area or facility designated by the Enforcement Decree of the Air Environment Preservation Act as a place where these permitted fuels should be used, regardless of the restriction measures on the use of fuel under the Air Environment Preservation Act.

### Marine Environment Management Act

The purpose of the Marine Environment Management Act is to prevent dangers arising from marine life damage or marine pollution, and create a clean and safe marine environment. Under the Marine Environment Management Act, no one may discharge pollutants from a ship, marine facility or marine space to the ocean or discharge waste generated from land. Any person who owns a marine facility must prepare and keep a log of noxious liquid substances in the facility, including the volume of use and matters relating to the carrying in and out of such noxious liquid substances. The owner of a marine facility must equip the marine facility with the materials and chemicals used for the prevention and control of pollutants.

#### Soil Environment Conservation Act

The purpose of the Soil Environment Conservation Act is to prevent potential danger or injury to public health and the environment due to soil contamination and to conserve the soil ecosystem by properly maintaining and preserving soil, including by restoring contaminated soil.

The level of soil contamination is determined by the ordinance of the Ministry of Environment. A person who causes soil contamination must, where any damages occur due to such soil contamination, compensate for the damages caused and restore the contaminated soil. Where there exist two or more persons who cause soil contamination, and it is impossible to determine which one has caused the damages, each of them must jointly and severally compensate for such damages and restore the contaminated soil.

If anyone who produces, transports, stores, handles, processes or treats soil contaminants discharges or leaks them in the process, such person must report such fact without delay to the competent administrative agency. The competent administrative agency that receives such a report may survey the cause and the level of soil contamination. If the competent administrative agency determines that the soil has been contaminated, then the person who causes such soil contamination may be ordered to restore the contaminated soil and, if such order is not complied with, such person will become subject to criminal liabilities.

### Environmental Impact Assessment Act

The purpose of the Environmental Impact Assessment Act is to promote the environmentally friendly and sustainable development of business by assessing in advance the impact on the environment of the business which is subject to the environmental impact assessment when the business plan is established and implemented and, thus, promoting the comfortable and secure lives of citizens. Anyone who desires to operate a business that is subject to the environmental impact assessment must prepare such assessment which will be reviewed by the Minister of Environment. The Minister of Environment may supplement or adjust the business plan according to its review.

To avoid damage to the environment from of the operation of a business, its impact on the environment must be investigated according to the assessment items agreed in advance and the result must be notified to the approval institution or the Minister of Environment ("Post Investigation of Impact on the Environment"). An energy development business is one of the businesses that are subject to the environmental impact assessment and the Post Investigation of Impact on the Environment. Among other things, the following businesses are subject to the environmental impact assessment and the Post Investigation of Impact on the Environment:

- Businesses in the development of underwater mining under the Submarine Mineral Resources Development Act which have the objective of energy development;
- Businesses in the mining industry under the Mining Industry Act having the objective of energy development (limited to those equal to or exceeding 300,000 square meters of mining area); and
- Oil business operator's installation of (i) oil storage facilities under the Petroleum and Petroleum Substitute Fuel Business Act and (ii) oil stockpile facilities under the KNOC Act (limited to those equal to or exceeding 100,000 kilo liters of storage volume).

### TAXATION

### **United States Taxation**

The following is a summary of certain United States 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 United States 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 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, persons that hold Notes in bearer form or persons that have a "functional currency" other than the U.S. dollar. This summary also does not address the Medicare tax on net investment income. Any special United States federal income tax considerations relevant to a particular issue of Notes, including any Index Linked 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 United States 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 currency other than the U.S. dollar (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 Specified 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.

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, market discount and premium denominated in a

Specified Currency will be determined in the manner described under "Original Issue Discount" and "Premium and Market Discount" below. The conversion of U.S. dollars to a currency other than the U.S. dollar and the immediate use of such 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 the United States holder receives property (other than cash) in respect of the sale, exchange or retirement of a Note, the amount realized will be the fair market value of such property at the time of such sale, exchange or retirement. 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 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 discussed below with respect to market discount, 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. The deduction of capital losses is subject to limitations.

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. United States holders of Notes generally will be subject to the special tax accounting rules for obligations issued with original issue discount ("OID," and such Notes "OID Notes") 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 United States 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 OID 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 OID 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 any length and may vary in length over the term of an OID 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 OID Note allocable to each accrual period is determined by (a) multiplying the "adjusted issue price" (as defined below) of the OID Note at the beginning of the accrual period by the "yield to maturity" (as defined below) of such OID 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. If the total amount of OID on a Note calculated pursuant to the preceding sentence is less than the product of (a) 0.25% of the Note's "stated redemption price at maturity" (generally, the sum of all payments on the Note other than payments of qualified stated interest) and (b) the number of complete years to the Note's maturity, the Note will be treated as having no OID. 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 OID 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 OID 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 OID 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 OID 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 OID 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.

All payments on an OID 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, then as payments of principal.

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 or bearing market discount in the hands of the United States holder, the United States holder making such election will also be deemed to have made the election (discussed below in "Premium and Market Discount") to amortize premium or to accrue market discount in income currently on a constant-yield basis.

In the case of an OID 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 Specified Currency using the constant-yield method described above, and (b) translating the amount of the Specified 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 OID 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 OID Note denominated in U.S. dollars. All payments on an OID 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 OID 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 OID Note, as the case may be) and the amount accrued (using the exchange rate applicable to such previous accrual).

A subsequent United States holder of an OID Note that purchases the Note at a cost less than its remaining redemption amount (as defined below), or an initial United States holder that purchases an OID Note at a price other than the Note's issue price, also generally will be required to include in gross income the daily portions of OID, calculated as described above. However, if the United States holder acquires the OID Note at a price greater than its adjusted issue price, such holder is required to reduce its periodic inclusions of OID income to reflect the premium paid over the adjusted issue price. The "remaining redemption amount" for a Note is the total of all future payments to be made on the Note other than payments of qualified stated interest.

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 OID 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 and Market Discount. A United States holder of a Note that purchases the Note at a cost greater than its remaining redemption amount (as defined in the third preceding paragraph) 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 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. OID Notes purchased at a premium will not be subject to the OID rules described above. 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.

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 Specified 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.

If a United States holder of a Note purchases a Note, other than a Short-Term Note, at a price that is lower than its remaining redemption amount, or in the case of an OID Note, its adjusted issue price, by at least 0.25% of its remaining redemption amount multiplied by the number of remaining whole years to maturity, the Note will be considered to have "market discount" in the hands of such United States holder. In such case, gain realized by the United States holder on the disposition of the Note generally will be treated as ordinary income to the extent of the market discount that accrued on the Note while held by such United States holder. In addition, the United States holder could be required to defer the deduction of a portion of the interest paid on any indebtedness incurred or maintained to purchase or carry the Note. In general terms, market discount on a Note will be treated as accruing ratably over the term of such Note, or, at the election of the holder, under a constant yield method. Market discount on a Foreign Currency Note will be accrued by a United States holder in the Specified Currency. The amount includible in income by a United States holder in respect of such accrued market discount will be the U.S. dollar value of the amount accrued, generally calculated at the exchange rate in effect on the date that the Note is disposed of by the United States holder.

A United States holder may elect to include market discount in income on a current basis as it accrues (on either a ratable or constant-yield basis), in lieu of treating a portion of any gain realized on a sale of a Note as ordinary income. If a United States holder elects to include market discount on a current basis, the interest deduction deferral rule described above will not apply. Any accrued market discount on a Foreign Currency Note that is currently includible in income will be translated into U.S. dollars at the average exchange rate for the accrual period (or portion thereof within the United States holder's taxable year). Any such election, if made, applies to all market discount bonds acquired by the taxpayer on or after the first day of the first taxable year to which such election applies and is revocable only with the consent of the IRS.

*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.

First, the OID Regulations treat none of the interest on a Short-Term Note as qualified stated interest. Thus, all Short-Term Notes will be OID 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.

Second, 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, and as short-term capital gain to the extent the gain exceeds accrued OID. Notwithstanding the foregoing, a cash-basis United States holder of a Short-Term Note may elect to accrue OID on a current basis or to accrue the "acquisition discount" on the Note under the rules described below. If a United States holder elects to accrue OID or acquisition discount, 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 OID on a Short-Term Note in income on a current basis. Alternatively, a United States holder of a Short-Term Note can elect to accrue the acquisition discount, if any, with respect to the Note on a current basis. If such an election is made, the OID rules will not apply to the Note. Acquisition discount is the excess of the Short-Term Note's stated redemption price at maturity (i.e., all amounts payable on the Short-Term Note) over the purchase price. Acquisition discount will be treated as accruing ratably or, at the election of the United States holder, under a constant-yield method based on daily compounding.

Finally, the market discount rules will not apply to a Short-Term Note.

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.

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. Any amounts withheld under the backup withholding rules will be allowed as a credit against a United States holder's United States federal income tax liability, if any, or as a refund, provided the required information is timely furnished to the IRS.

Information with Respect to Foreign Financial Assets. Individual United States holders that own "specified foreign financial assets" with an aggregate value in excess of US\$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.

Reportable Transactions. A U.S. taxpayer that participates in a "reportable transaction" will be required to disclose its participation to the IRS. Under the relevant rules, if the Notes are denominated in a currency other than the U.S. dollar, a U.S. holder may be required to treat a foreign currency exchange loss from the Notes as a reportable transaction if the loss exceeds the relevant threshold in the regulations (US\$50,000 in a single taxable if the U.S. holder is an individual or trust, or higher amounts for other non-individual U.S. holders), and to disclose its investment by filing Form 8886 with the IRS. A penalty in the amount of US\$10,000 in the case of a natural person and US\$50,000 in all other cases is generally imposed on any taxpayer that fails to timely file an information return with the IRS with respect to a transaction resulting in a loss that is treated as a reportable transaction. Prospective investors should consult their own tax advisors regarding the application of these rules.

### **Korean Taxation**

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

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

### Tax on Interest

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

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

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

In addition, in order to obtain the benefit of a reduced rate available under applicable tax treaties, a Non-Resident holder must submit an application for reduced rate to the party liable for the withholding before the receipt of the relevant interest payment (if there is no change in the contents of such application, it is not required to submit such application again within 3 years thereafter), together with a certificate of the Non-Resident holder's tax residence issued by a competent authority of the Non-Resident holder's resident country. If the Non-resident holder was unable to receive the benefit of a reduced rate due to his or her failure to timely submit the aforementioned application, the Non-Resident holder may still receive a tax return if the submission is made within three years from the last day of the month in which the withholding occurs.

### 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 are currently exempt from taxation by virtue of STTCL, provided that the issuance of the Notes is deemed to be an overseas issuance under the STTCL.

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

In order to obtain the benefit of a tax treaty exemption, a Non-Resident seller must submit to the purchaser or the withholding agent prior to or at the time of sale, such evidence of tax residence of the seller as the Korean tax authorities may require in support of the claim for treaty protection. Such evidence normally consists of a certificate from the relevant tax authorities confirming the seller's residence in a relevant jurisdiction. In the absence of sufficient proof, the payer or the Company must withhold taxes in accordance with applicable law as discussed above.

Furthermore, for a Non-Resident to obtain the benefit of a tax exemption on certain Korean source income (e.g., interest payments 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.

### 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 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 may be imposed on transfers of the Notes by inheritance or gift. Prospective purchasers should consult their personal tax advisors regarding the consequences of the imposition of the Korean inheritance or gift tax.

### Stamp Duty and Securities Transaction Tax

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

### Tax Treaties

At the date of this Offering Circular, Korea has tax treaties with, inter alia, Australia, Austria, Belgium, Canada, Denmark, Finland, France, Germany, Ireland, Italy, Japan, Luxembourg, The Netherlands, New Zealand, Norway, Singapore, Sweden, Switzerland, the United Kingdom and the United States of America, under which the rate of withholding tax on interest is reduced, generally to between 10 and 16.5% (including local income tax), and the tax on capital gains is often eliminated.

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

### Withholding and Gross Up

As mentioned above, interest on the Notes is exempt from any withholding or deduction on account of income tax or corporation tax pursuant to STTCL. However, in the event that the payer or the Company is required by law to make any withholding or deduction for or on account of any Korean taxes (as more fully described in "Terms and Conditions of the Notes — Taxation") the Company 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.

### **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 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 will (unless during such period it elects otherwise) instead operate a withholding system in relation to such payments. The rate of withholding is 35%. However, the beneficial owner of the interest (or similar income) payment may elect that certain provision of information procedures should be applied instead of withholding, provided that certain conditions are met. 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 similar measures to the Savings Directive.

The Council of the European Union has adopted a Directive amending the Savings Directive (the "Amending Directive") which, if implemented, would broaden the Savings Directive's scope of the rules described above. The Member States will have until January 1, 2016 to adopt national legislation necessary to comply with the Amending Directive, which legislation must apply from January 1, 2017. The changes made under the Amending Directive include extending the scope of the Savings Directive to payments made to, or secured for, certain other entities and legal arrangements (including certain trusts and partnerships), where certain conditions are satisfied. They also broaden the definition of "interest payment" to cover certain additional types of income. Investors who are in any doubt as to their position should consult their professional advisers.

However, the European Commission has proposed the repeal of the Savings Directive from January 1, 2017 in the case of Austria and from January 1, 2016 in the case of all other Member States (subject to on-going requirements to fulfil administrative obligations such as the reporting and exchange of information relating to, and accounting for withholding taxes on, payments made before those dates). This is to prevent overlap between the Savings Directive and a new automatic exchange of information regime to be implemented under Council Directive 2011/16/EU on Administrative Cooperation in the field of Taxation (as amended by Council Directive 2014/107/EU). The proposal also provides that, if it proceeds, Member States will not be required to apply the new requirements of the Amending Directive.

If a payment under a Note were to be made and an amount of, or in respect of, tax were to be withheld from that payment pursuant to the Savings Directive (as amended from time to time) or any law implementing or complying with, or introduced in order to conform to such 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 (as amended from time to time).

### The proposed financial transactions tax

The European Commission has published a proposal (the "Commission's Proposal") for a Directive for a common financial transactions tax ("FTT") in Belgium, Germany, Estonia, Greece, Spain, France, Italy, Austria, Portugal, Slovenia and Slovakia (the "Participating Member States").

The Commission's proposal has very broad scope and could, if introduced in its current form, apply to certain dealings in the Notes (including secondary market transactions) in certain circumstances. The issuance and subscription of Notes should, however, be exempt.

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

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

Joint statements issued by several participating Member States indicate an intention to implement the FTT by January 1, 2016. Prospective holders of the Notes are advised to seek their own professional advice in relation to the FTT.

### **United Kingdom Provision of Information Requirements**

The comments below are of a general nature and are based on current United Kingdom ("UK") tax law as applied in England and Wales and published practice of HM Revenue & Customs ("HMRC"), the UK tax authorities. Such law may be repealed, revoked or modified and such practice may not bind HMRC and/or may

change (in each case, possibly with retrospective effect) resulting in UK tax consequences different from those discussed below. The comments below deal only with UK rules relating to information that may need to be provided to HMRC in connection with the Notes. They do not deal with any other UK tax consequences of acquiring, owning or disposing of the Notes. Each prospective investor should seek advice based on its particular circumstances from an independent tax adviser.

HMRC has powers to obtain information relating to securities in certain circumstances. This may include details of the beneficial owners of the Notes (or the persons for whom the Notes are held), details of the persons to whom payments derived from the Notes are or may be paid and information and documents in connection with transactions relating to the Notes. Information may be required to be provided by, amongst others, the holders of the Notes, persons by or through whom payments derived from the Notes are made or who receive such payments (or who would be entitled to receive such payments if they were made), persons who effect or are a party to transactions relating to the Notes on behalf of others and certain registrars or administrators. In certain circumstances, the information obtained by HMRC may be exchanged with tax authorities in other countries.

### INDEPENDENT AUDITORS

The consolidated financial statements of the Issuer as of and for the year ended December 31, 2013 and 2014, included in this Offering Circular, have been audited by KPMG Samjong Accounting Corp., independent auditors, as stated in their report appearing herein which contains an other matter paragraph that states that 1) the consolidated financial statements as of and for the year ended December 31, 2013, prior to the retrospective adjustments on discontinued operations as described in Note 7 to the consolidated financial statements, were audited by them in accordance with the previous generally accepted auditing standards in the Republic of Korea, and 2) their report for such audit was based on the reports of other auditors.

With respect to the unaudited condensed consolidated interim financial statements of the Issuer as of June 30, 2015 and for the six-month periods ended June 30, 2014 and 2015, included in this Offering Circular, the independent auditors (KPMG Samjong Accounting Corp.) have reported that they applied limited procedures in accordance with professional standards for a review of such information. However, their separate report appearing herein states that they did not audit and they do not express an opinion on such interim financial information. Accordingly, the degree of reliance on their separate report on such information should be restricted in light of the limited nature of the review procedures applied.

### SUBSCRIPTION AND SALE AND TRANSFER AND SELLING RESTRICTIONS

The Dealers have, in an amended and restated program agreement dated September 21, 2015 as further amended and/or supplemented from time to time (the "Program Agreement"), agreed with the Issuer a basis upon which they or any of them may from time to time agree to purchase Notes. Any such agreement will extend to those matters stated under "Form of the Notes" and "Terms and Conditions of the Notes." In the Program Agreement, the Issuer has agreed to reimburse the Dealers for certain of their expenses in connection with the establishment of the Program and the issue of Notes under the Program and to indemnify the Dealers against certain liabilities incurred by them in connection therewith.

In order to facilitate the offering of any Tranche of the Notes, certain persons participating in the offering of the Tranche may to the extent permitted by applicable laws and regulations engage in transactions that stabilize, maintain or otherwise affect the market price of the relevant Notes for a limited period after the issue date. Specifically such persons may overallot 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 and must be brought to an end after a limited period.

If a jurisdiction requires that any offering of Notes under the Programme be made by a licensed broker or dealer and the Dealers or any affiliate of the Dealers is a licensed broker or dealer in that jurisdiction, the offering shall be deemed to be made by that Dealer or its affiliate on behalf of the Issuer in such jurisdiction.

### **Certain Relationships**

The Dealers and certain of their affiliates may have performed certain investment banking and advisory services for the Issuer and its affiliates from time to time for which they have received customary fees and expenses and may, from time to time, engage in transactions with and perform services for the Issuer and its affiliates in the ordinary course of their business. The Dealers or certain of their affiliates may purchase the Notes and be allocated the Notes for asset management and/or proprietary purposes but not with a view to distribution.

The Dealers or their respective affiliates may purchase the Notes for their own account and enter into transactions, including credit derivatives, such as asset swaps, repackaging and credit default swaps relating to the Notes and/or other securities of the Issuer or its subsidiaries or associates, at the same time as the offer and sale of the Notes or in secondary market transactions. Such transactions would be carried out as bilateral trades with selected counterparties and separately from any existing sale or resale of the Notes to which this Offering Circular relates (notwithstanding that such selected counterparties may also be purchasers of the Notes).

### **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) or person 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 acknowledge, represent and agree as follows (terms used in this paragraph that are defined in Rule 144A or in Regulation S are used herein as defined therein):

- (a) that either: (i) 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 (ii) it is an Institutional Accredited Investor which has delivered an IAI Investment Letter or (iii) it is outside the United States and is not a U.S. person;
- (b) that the Notes are being offered and sold in a transaction not involving a public offering in the United States within the meaning of the Securities Act, and 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;
- (c) 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 (i) to the Issuer or any affiliate thereof, (ii) 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, (iii) outside the United States in compliance with Rule 903 or Rule 904 under the Securities Act, (iv) pursuant to the exemption from registration provided by Rule 144 under the Securities Act (if available) or (v) pursuant to an effective registration statement under the Securities Act, in each case in accordance with all applicable U.S. state securities laws;
- (d) 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 (c) above, if then applicable;
- (e) 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;
- (f) that the Notes, other than the Regulation S Global Notes, will bear a legend to the following effect unless otherwise agreed to by the Issuer:

"THIS SECURITY HAS NOT BEEN 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 (I) 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 (II) 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 (I) TO THE ISSUER OR ANY AFFILIATE THEREOF, (II) 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, (III) OUTSIDE THE UNITED STATES IN COMPLIANCE WITH RULE 903 OR RULE 904 UNDER THE SECURITIES ACT, (IV) PURSUANT TO THE EXEMPTION FROM REGISTRATION PROVIDED BY RULE 144 UNDER THE SECURITIES ACT (IF AVAILABLE) OR (V) 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 THIS SECURITY IS TRANSFERRED A NOTICE SUBSTANTIALLY TO THE EFFECT OF THIS LEGEND.

THIS SECURITY 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 THIS SECURITY 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 THIS SECURITY SHALL BE DEEMED, BY ITS 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 THIS SECURITY AND ANY SECURITIES ISSUED IN EXCHANGE OR SUBSTITUTION THEREFOR, WHETHER OR NOT ANY NOTATION THEREOF IS MADE HEREON).";

(g) 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 (i)(A) outside the United States in compliance with Rule 903 or 904 under the Securities Act or (B) to a QIB in compliance with Rule 144A and (ii) 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:

"THIS SECURITY HAS 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 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 PART."; and

(h) that the Issuer 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 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.

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:

- (a) that the Institutional Accredited Investor has received a copy of the Offering Circular and such other information as it deems necessary in order to make its investment decision;
- (b) that the Institutional Accredited Investor understands that any subsequent transfer of the Notes is subject to certain restrictions and conditions set forth in the 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;
- (c) that, in the normal course of its business, the Institutional Accredited Investor invests in or purchases securities similar to the Notes;
- (d) 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 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;
- (e) 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
- (f) 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.\$250,000 (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.\$100,000 (or its foreign currency equivalent) principal amount or, in the case of sales to Institutional Accredited Investors, U.S.\$250,000 (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.\$100,000 (or its foreign currency equivalent) or, in the case of sales to Institutional Accredited Investors, U.S.\$250,000 (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 in certain transactions exempt from the registration requirements of the Securities Act.

The Notes in bearer form are subject to U.S. tax law requirements and may not be offered, sold or delivered within the United States or its possessions or to a United States person, except in certain transactions permitted by U.S. tax regulations. Terms used in this paragraph have the meanings 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, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that it will not offer, sell or deliver such 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 available 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 that may be purchased by a QIB pursuant to Rule 144A is U.S.\$100,000 (or the approximate equivalent thereof in any other currency). To the extent that the Issuer is not subject to or does not comply with the reporting requirements of Section 13 or 15(d) of the Exchange Act or the information furnishing requirements of Rule 12g3-2(b) thereunder, the Issuer has agreed to furnish to holders of Notes and to prospective purchasers designated by such holders, upon request, such information as may be required by Rule 144A(d)(4).

Each issuance of Index Linked Notes or Dual Currency Notes shall be subject to such additional U.S. selling restrictions as the Issuer and the relevant Dealer may agree as a term of the issuance and purchase of such Notes, which additional selling restrictions shall be set out in the applicable Pricing Supplement.

### European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each such Member State, 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 as completed by the pricing supplement in relation thereto 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 Notes to the public in that Relevant Member State:

- (a) if the final terms in relation to the Notes specify that an offer of those Notes may be made other than pursuant to Article 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 final terms 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 final terms, as applicable;
  - (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 150 natural or legal persons (other than qualified investors as defined in 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 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 to the public" in relation to any Securities 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 Securities to be offered so as to enable an investor to decide to purchase or subscribe the Securities, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State and the expression "Prospectus Directive" means Directive 2003/71/EC (as amended, including by Directive 2010/73/EU), and includes any relevant implementing measure in each Relevant Member State.

The European Economic Area selling restriction described above is in addition to any other applicable selling restriction set out below.

### United Kingdom

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

- (a) in relation to any Notes which have 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 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; 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 Law of Japan (Law. No. 25 of 1948 as amended) (the "FIEL") and disclosure under the FIEL has not been and will not be made with respect to any Notes. 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 will not offer or sell any Notes, directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to a resident of Japan except (1) pursuant to an exemption from the registration requirements of the FIEL and (2) in compliance with any other applicable laws and regulations and ministerial guidelines of Japan.

### Hong Kong

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

(a) it has not offered or sold, and will not offer or sell, in Hong Kong 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 (Winding Up and Miscellaneous Provisions) 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 the Notes which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the Securities and Futures Ordinance of Hong Kong and any rules made thereunder.

### 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, pursuant to an offer made under Section 275 of the SFA except:

- (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), or to any person arising from an offer referred to in Section 275(1A) or 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.

### Korea

Each Dealer has represented, warranted and agreed, and each further Dealer appointed under the Program will be required to represent, warrant and agree, that Notes have not been offered, sold or delivered, and will not be offered, sold or delivered, directly or indirectly, to, or for the account or benefit of, any resident of Korea (as defined under the Foreign Exchange Transactions Law of Korea and its Enforcement Decree), except as otherwise permitted by applicable Korean laws and regulations.

### 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 the 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 nor any other Dealer shall have any responsibility therefor.

Neither the Issuer 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 any such sale.

With regard to each Tranche, the relevant Dealer will be required to comply with such other additional restrictions as the Issuer 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, Luxembourg (together, the "Clearing Systems") currently in effect. The information in this section concerning the Clearing Systems has been obtained from sources that the Issuer believes to be reliable, but none of the Issuer 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 Issuer 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.

### **Book-entry Systems**

### DTC

DTC has advised the Issuer that it is a limited purpose trust company organized under the New York Banking Law, a "banking organization" within the meaning of the New York Banking Law, a "clearing corporation" within the meaning of the New York Uniform Commercial Code and a "clearing agency" registered pursuant to Section 17A of the Exchange Act. DTC holds securities that its participants ("Participants") deposit with DTC. DTC also facilitates the settlement among Participants of securities transactions, such as transfers and pledges, in deposited securities through electronic computerized book-entry changes in Participants' accounts, thereby eliminating the need for physical movement of securities certificates. Direct Participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. Access to the DTC System is also available to others such as securities brokers and dealers, banks and trust companies that clear through or maintain a custodial relationship with a Direct Participant, either directly or indirectly ("Indirect Participants").

Under the rules, regulations and procedures creating and affecting DTC and its operations (the "Rules"), DTC makes book-entry transfers of 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 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 Participants with DTC are registered in the name of DTC's partnership nominee, Cede & Co. The deposit of DTC Notes with DTC and their registration in the name of Cede & Co. effect no change in beneficial ownership. DTC has no knowledge of the actual Beneficial Owners of the DTC 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 Cede & Co. 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. will consent or vote with respect to DTC Notes. Under its usual procedures, DTC mails an Omnibus Proxy to the Issuer as soon as possible after the record date. The Omnibus Proxy assigns Cede & Co.'s consenting or voting rights to those Direct Participants to whose accounts the DTC 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 DTC. DTC's practice is to credit Direct Participants' accounts on the due date for payment in accordance with their respective holdings shown on DTC's records unless DTC has reason to believe that it will not receive payment on the due date. Payments by Participants to Beneficial Owners will be governed by standing instructions and customary practices, as is the case with securities 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 or the Issuer, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of principal and interest to DTC is the responsibility of the Issuer, 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, Luxembourg

Euroclear and Clearstream, Luxembourg 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, Luxembourg provide various services including safekeeping, administration, clearance and settlement of internationally traded securities and securities lending and borrowing. Euroclear and Clearstream, Luxembourg also deal with domestic securities markets in several countries through established depository and custodial relationships. Euroclear and Clearstream, Luxembourg have established an electronic bridge between their two systems across which their respective participants may settle trades with each other. Euroclear and Clearstream, Luxembourg customers are worldwide financial institutions, including underwriters, securities brokers and dealers, banks, trust companies and clearing corporations. Indirect access to Euroclear and Clearstream, Luxembourg 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 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, Luxembourg. 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 expects 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 also expects 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 or the Issuer. Payment of principal, premium, if any, and interest, if any, on Notes to DTC are the responsibility of the Issuer.

### 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, Luxembourg 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, Luxembourg 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, Luxembourg 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, Luxembourg 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, Luxembourg 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, Luxembourg 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, Luxembourg 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, Luxembourg 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 Agents or any Dealer will be responsible for any performance by DTC, Clearstream, Luxembourg 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.

### GENERAL INFORMATION

### **Authorization and Regulatory Issues**

The establishment of the Program and the issue of Notes hereunder has been duly authorized by a resolution of the Board of Directors of the Issuer dated August 26, 2010. Each issue of Notes under the Program will be authorized by the Board of Directors of the Issuer at the time of issuance.

### **Documents Available**

So long as Notes are capable of being issued under the Program, copies of the following documents will, when published, be available free of charge from the registered office of the Issuer and from the principal office of the Principal Paying Agent for the time being in London.

- (i) the constitutional documents (with an English translation thereof) of the Issuer;
- (ii) the consolidated audited financial statements of the Issuer in respect of the years ended December 31, 2013 and 2014 (in English);
- (iii) the consolidated unaudited financial statements of the Issuer in respect of the six-month periods ended June 30, 2014 and 2015 (in English);
- (iv) the most recently published audited annual consolidated financial statements of the Issuer and the most recently published unaudited condensed consolidated interim financial statements of the Issuer;
- (v) the Program Agreement, the Agency Agreement, the Deed Poll, the Deed of Covenant and the forms of the Global Notes, the Notes in definitive form, the Receipts, the Coupons and the Talons;
  - (vi) a copy of this Offering Circular; and
- (vii) any future offering circulars, prospectuses, information memoranda and supplements including Pricing Supplements (save that a Pricing Supplement relating to an unlisted Note will only be available for inspection by a holder of such Note and such holder must produce evidence satisfactory to the Paying Agent as to its holding of Notes and identity) to this Offering Circular and any other documents incorporated herein or therein by reference.

### **Clearing Systems**

The Notes have been accepted for clearance through Euroclear and Clearstream, Luxembourg. The appropriate Common Code and ISIN for each Tranche of Notes allocated by Euroclear and Clearstream, Luxembourg will be specified in the applicable Pricing Supplement. If the Notes are to clear through an additional or alternative clearing system the appropriate information will be specified in the applicable Pricing Supplement.

### Significant or Material Change

Save as disclosed in the Offering Circular, there has been no significant change in the financial or trading position of the Issuer and its subsidiaries taken as a whole since June 30, 2015 and there has been no material adverse change in the financial position or prospects of the Issuer and its subsidiaries taken as a whole since June 30, 2015.

### Litigation

The Issuer is not involved in any legal, arbitration, administrative or other proceedings (including any proceedings which are pending or threatened of which the Issuer is aware) which may have or have had in the 12 months preceding the date of this document a significant effect on the financial position of the Issuer and its subsidiaries taken as a whole.

### INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	Page
INTERIM FINANCIAL STATEMENTS	
Independent auditors' review report	F-2
Unaudited condensed consolidated interim statements of financial position as of June 30, 2015 and December 31, 2014	F-4
Unaudited condensed consolidated interim statements of comprehensive income (loss) for the six months ended June 30, 2015 and 2014	F-5
Unaudited condensed consolidated interim statements of changes in equity for the six months ended June 30, 2015 and 2014	F-6
Unaudited condensed consolidated interim statements of cash flows for the six months ended June 30, 2015 and 2014	F-7
Notes to the unaudited condensed consolidated interim financial statements for the six months ended June 30, 2015 and 2014	F-9
ANNUAL FINANCIAL STATEMENTS	- /
Independent auditors' report	F-51
Consolidated statements of financial position as of December 31, 2014 and 2013	F-53
Consolidated statements of comprehensive loss for the years ended December 31, 2014 and 2013	F-54
Consolidated statements of changes in equity for the years ended December 31, 2014 and 2013	F-55
Consolidated statements of cash flows for the years ended December 31, 2014 and 2013	F-57
Notes to the consolidated financial statements	F-59

### **Independent Auditors' Review Report**

Based on a report originally issued in Korean

The Board of Directors and Shareholder Korea National Oil Corporation:

### **Reviewed financial statements**

We have reviewed the accompanying condensed consolidated interim financial statements of Korea National Oil Corporation and its subsidiaries (the "Group"), which comprise the condensed consolidated statement of financial position as of June 30, 2015, the condensed consolidated statements of comprehensive income (loss) for the three-month and the six-month periods ended June 30, 2015 and 2014, changes in equity and cash flows for the six-month periods ended June 30, 2015 and 2014 and notes, comprising a summary of significant accounting policies and other explanatory information.

### Management's responsibility

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

### Auditor's review responsibility

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

We conducted our reviews in accordance with the Review Standards for Quarterly and Semiannual Financial Statements established by the Securities and Futures Commission of the Republic of Korea. A review of interim financial statements consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with Korea Standards on Auditing and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

### Conclusion

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

### Other matters

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

The consolidated statement of financial position of the Group as of December 31, 2014, and the related consolidated statements of comprehensive loss, changes in equity and cash flows for the year then ended, which are not accompanying this report, were audited by us in accordance with Korean Standards on Auditing and our report thereon, dated February 27, 2015, expressed an unqualified opinion. The accompanying condensed consolidated statement of financial position of the Group as of December 31, 2014, presented for comparative purposes, is consistent, in all material respects, with the audited consolidated financial statements from which it has been derived.

KPMG Samjong Accounting Corp.

KPMG Samjing Accounting Corp.

Seoul, Korea August 28, 2015

This report is effective as of August 28, 2015, the review report date. Certain subsequent events or circumstances, which may occur between the review report date and the time of reading this report, could have a material impact on the accompanying condensed consolidated interim financial statements and notes thereto. Accordingly, the readers of the review report should understand that the above review report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

# Unaudited Condensed Consolidated Interim Statements of Financial Position As of June 30, 2015 and December 31, 2014

- ,	Note	2015	2014	
		In thousands of Korean won		
Assets				
Cash and cash equivalents	26	₩ 668,945,135	508,505,823	
Current financial assets	26	33,074,242	14,585,590	
Trade and other receivables	26	791,363,109	941,156,630	
Inventories		623,461,668	151,679,512	
Current income tax assets	<b>=</b> 0	59,997,235	70,919,103	
Current non-financial assets	7,8	243,421,018	257,292,034	
Current assets		2,420,262,407	1,944,138,692	
Non-current financial assets	26	1,287,264,179	1,136,788,538	
Long-term trade and other receivables	26	98,435,316	93,838,391	
Property, plant and equipment	10	13,762,333,257	13,821,982,615	
Goodwill	11	820,637,208	857,048,504	
Intangible assets other than goodwill	12	3,953,432,416	3,850,828,416	
Investments in associates and joint ventures	9	913,748,854	859,236,636	
Deferred tax assets		1,023,024,270	903,175,901	
Non-current non-financial assets	7	3,528,277,799	3,424,305,829	
Non-current assets		25,387,153,299	24,947,204,830	
Total assets		₩27,807,415,706	26,891,343,522	
Liabilities and equity				
Trade and other payables	26	₩ 931,207,928	1,417,940,562	
Current financial liabilities	13,26	2,363,470,515	1,260,897,165	
Current income tax liabilities		47,338,135	125,838,115	
Current non-financial liabilities	8,14	116,947,325	133,328,054	
Current provisions	16	184,994,707	258,469,204	
Current liabilities		3,643,958,610	3,196,473,100	
Long-term trade and other payables	26	516,969,208	452,705,928	
Non-current financial liabilities	13,26	11,826,093,419	10,904,889,881	
Defined benefit liability	15	10,317,317	14,031,961	
Deferred tax liabilities		1,116,845,351	1,430,501,146	
Non-current provisions	16	2,449,461,387	2,523,072,751	
Non-current liabilities		15,919,686,682	15,325,201,667	
Total liabilities		19,563,645,292	18,521,674,767	
Equity				
Share capital	17	10,123,356,280	10,091,919,780	
Accumulated deficit	18	(2,441,809,947)	(2,177,312,124)	
Other components of equity	19	(235,262,080)	(357,504,008)	
Equity attributable to the owner of the parent		7,446,284,253	7,557,103,648	
Non-controlling interests		797,486,161	812,565,107	
Total equity		8,243,770,414	8,369,668,755	
Total equity and liabilities		<del>W</del> 27,807,415,706	26,891,343,522	

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

# Unaudited Condensed Consolidated Interim Statements of Comprehensive Income (Loss) For the three and six-month periods ended June 30, 2015 and 2014

For the three and six-mon	Polito	June 30, 2015		June 30	), 2014
	Note	Three-month period ended	Six-month period ended	Three-month period ended (Restated)	Six-month period ended (Restated)
			In thousands of	f Korean won	
Continuing Operations	4.20	W 014 22 C 004	1 500 001 777	1 161 500 001	2 227 102 227
Revenue	4,20 4,25	₩ 814,226,084 723,576,940	1,522,901,777 1,452,808,404	1,161,533,021 952,939,015	2,237,183,225 1,623,097,942
Gross profit	4	90,649,144	70,093,373	208,594,006	614,085,283
Selling and administrative expenses	4,25	99,853,295	188,971,783	101,313,238	216,910,124
Operating profit (loss)	4	(9,204,151)	(118,878,410)	107,280,768	397,175,159
Other non-operating income Other non-operating expenses Other loss, net Finance income Finance costs Income (Loss) on investments in associates and joint	4,21 4,21 4,22 4,23,26 4,23,26	28,483,994 32,339,517 (147,419,641) 37,881,263 107,072,412	31,160,907 63,028,888 (252,849,679) 55,963,010 338,846,286	93,004,420 110,926,772 (157,472,385) 30,670,593 64,279,063	110,317,430 145,115,495 (325,528,781) 54,943,614 272,379,103
ventures, net	4,9	(23,240,783)	(40,399,261)	27,895,968	11,713,947
Loss before income tax	4	(252,911,247)	(726,878,607)	(73,826,471)	(168,873,229)
Income tax benefit	24	(103,799,283)	(431,147,896)	(93,964,895)	(12,243,874)
Loss from continuing operations		(149,111,964)	(295,730,711)	20,138,424	(156,629,355)
Discontinued operations					
Loss from discontinued operations, net of tax	6			(69,142,284)	(14,434,556)
Loss for the period		<del>W</del> (149,111,964)	(295,730,711)	(49,003,860)	(171,063,911)
Other comprehensive income (loss), net of tax  Items that will never be reclassified to profit or loss  Actuarial losses on defined benefit plans  Items that are or may be reclassified to profit or loss  Unrealized net changes in fair values of available-for-sale		₩ (507,206) (507,206) 351,470,100	(545,783) (545,783) 138,941,653	(2,952,481) (2,952,481) (344,188,159)	(4,396,735) (4,396,735) (292,795,860)
financial assets	26	66,571,962	79,689,083	75,521,530	217,370,879
assets reclassified to profit or loss	23,26	6,328,740	6,328,740	_	_
method investees	9	(431,828)	(460,841)	2,495,721	3,143,419
using cash flow hedge accounting, net of tax  Foreign currency translation differences	26	8,495,730 270,505,496	(4,349,184) 57,733,855	5,486,882 (427,692,292)	5,992,785 (519,302,943)
Other comprehensive income (loss) for the period, net of					
tax		350,962,894	138,395,870	(347,140,640)	(297,192,595)
Total comprehensive income (loss) for the period $\ \ldots \ \ldots$		₩ 201,850,930	(157,334,841)	(396,144,500)	(468,256,506)
Loss attributable to Owners of the Company Non-controlling interests		(150,073,839) 961,875	(263,952,040) (31,778,671)	(59,886,538) 10,882,678	(174,311,172) 3,247,261
Loss for the period		₩(149,111,964)	(295,730,711)	(49,003,860)	(171,063,911)
Total comprehensive income (loss) attributable to: Owners of the Company		187,356,516	(142,255,895)	(395,387,102)	(458,807,161)
Non-controlling interests		14,494,414	(15,078,946)	(757,398)	(9,449,345)
Total comprehensive income (loss) for the period $\ \ldots \ \ldots$		₩ 201,850,930	(157,334,841)	(396,144,500)	(468,256,506)

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

# Unaudited Condensed Consolidated Interim Statements of Changes in Equity For the six-month periods ended June 30, 2015 and 2014

	Share capital	Accumulated deficit	Other components of equity	Subtotal	Non-controlling interests	Total equity
			In thousands of Korean won	orean won		
Balance at January 1, 2014	₩10,030,492,780	(513,370,001)	(54,440,419)	9,462,682,360	821,199,849	10,283,882,209
Total comprehensive income (loss) for the period Income (Loss) for the period		(174,311,172) (4,396,735)	(280,099,254)	(174,311,172) (284,495,989)	3,247,261 (12,696,606)	(171,063,911) (297,192,595)
Total comprehensive loss		(178,707,907)	(280,099,254)	(458,807,161)	(9,449,345)	(468,256,506)
Transactions with owners of the Company, recognized directly in equity  Issuance of share capital	39.454.000			39,454,000		39,454,000
Dividends		(43,071,939)		(43,071,939)	(14,448,783)	(57,520,722)
Change in Ownership interest in substitution					14,020,447/	14,020,447
Total transactions with owners of the Company	39,454,000	(43,071,939)		(3,617,939)	387,664	(3,230,275)
Balance at June 30, 2014	₩10,069,946,780	(735,149,847)	(334,539,673)	9,000,257,260	812,138,168	9,812,395,428
Balance at January 1, 2015	<del>W</del> 10,091,919,780	(2,177,312,124)	(357,504,008)	7,557,103,648	812,565,107	8,369,668,755
Total comprehensive income (loss) for the period  Loss for the period  Other comprehensive income (loss)		(263,952,040) (545,783)	122,241,928	(263,952,040) 121,696,145	(31,778,671) 16,699,725	(295,730,711) 138,395,870
Total comprehensive loss		(264,497,823)	122,241,928	(142,255,895) (15,078,946)	(15,078,946)	(157,334,841)
Transactions with owners of the Company, recognized directly in equity						
Issuance of share capital	31,436,500			31,436,500		31,436,500
Total transactions with owners of the Company	31,436,500			31,436,500		31,436,500
Balance at June 30, 2015	<del>W</del> 10,123,356,280	(2,441,809,947)	(235,262,080)	7,446,284,253	797,486,161	8,243,770,414

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

### Unaudited Condensed Consolidated Interim Statements of Cash Flows For the six-month periods ended June 30, 2015 and 2014

	2015 2014		2014
		In thousands of Korean won	
Cash flows from operating activities			
Loss for the period	₩	(295,730,711)	(171,063,911)
Adjustment for:			
Net pension plan costs		6,358,660	5,052,651
Depreciation of property, plant and equipment		674,044,167	727,147,166
Amortization of intangible assets other than goodwill		100,733,338	118,295,717
Bad debt expense		4,187,634	_
Reversal of other provisions		(24,408,753)	
Gains on exemption of debts		(672,946)	(91,083,658)
Accrual for other provisions		53,589,470	56,602,741
Other bad debt expense			85,956,984
Gains on disposal of property, plant and equipment		(74,968)	(3,278,347)
Gains on disposal of intangible assets other than goodwill		(1,859,274)	
Gains on valuation of derivatives (other profit or loss)		(2,322,469)	(777,221)
Gains on foreign currency translation (other profit or loss)		(6,616,117)	(8,438,869)
Losses on disposal of property, plant and equipment		7,718,152	153,347
Losses on disposal of intangible assets other than goodwill		12,252	880,812
Losses on valuation of derivatives (other profit or loss)		<del>-</del>	777,216
Impairment of property, plant and equipment		137,083,000	
Impairment of intangible assets other than goodwill		93,658,766	324,904,411
Losses on foreign currency translation (other profit or loss)		21,192,430	10,770,380
Income tax benefit		(431,147,896)	(11,304,430)
Interest income		(18,131,110)	(16,919,007)
Dividend income		(3,752,118)	(128,636)
Gains on disposal of available-for-sale financial assets		_	(2,884,632)
Gains on valuation of derivatives (finance income)		_	(2,385,502)
Gains on foreign currency translation (finance income)		(28,925,969)	(17,647,204)
Interest expense		179,491,372	193,867,351
Impairment of available-for-sale financial assets		25,981,528	_
Losses on valuation of derivatives (finance cost)		_	508,376
Losses on foreign currency translation (finance cost)		108,946,637	30,453,757
Other finance costs		20,914,296	36,657,542
Share of loss (income) in associates and joint ventures, net		40,399,260	(10,664,532)
Losses on disposal of investments in associates and joint ventures		_	2,347,148
Gains on disposal of investments in associates and joint ventures		_	(3,396,564)
		956,399,342	1,425,466,997
Changes in:			
Inventories		(457,644,992)	(41,771,075)
Trade and other receivables		105,628,147	(90,998,535)
Other receivables relating to operating activities		10,859,547	165,678,191
Trade and other payables		(388,480,700)	(86,646,163)
Other payables relating to operating activities		(26,133,042)	219,653,933
Defined benefit liability		(2,512,020)	(2,614,063)
Provisions		(140,252,199)	(69,691,043)
Cash generated from operating activities		(237,866,628)	1,348,014,331
Dividend received		3,752,118	128,636
Interest paid		(232,598,619)	(187,327,705)
Interest received		3,320,298	20,557,912
Income tax paid		(134,170,529)	(73,315,399)
•			
Net cash provided by (used in) operating activities		(597,563,360)	1,108,057,775

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

# Unaudited Condensed Consolidated Interim Statements of Cash Flows — (Continued) For the six-month periods ended June 30, 2015 and 2014

•		2015	2014
		In thousands of	Korean won
Cash flows from investing activities:			
Payment for business combination, net of cash acquired (note 5)	₩	(31,055,894)	_
Disposal of investments in associates and joint ventures			3,305,013
Acquisition of investments in associates and joint ventures		(68,345,148)	(53,810,710)
Proceeds from disposal of property, plant and equipment		31,572,706	90,278,775
Acquisition of property, plant and equipment		(722,135,803)	(1,081,203,364)
Proceeds from disposal of intangible assets other than goodwill		1,798,938	3,842,553
Acquisition of intangible assets other than goodwill		(101,474,613)	(182,207,444)
Acquisition of other non-current non-financial assets		(26,067,148)	_
Proceeds from disposal of short-term trading financial assets			5,273,976
Acquisition of available-for-sale financial assets			(5,072,744)
Increase in leasehold deposits provided		(12,647)	(5,068,652)
Decrease in leasehold deposits provided		14,684	71,751
Increase in long-term and short-term financial assets		(10,674,533)	
Decrease in long-term and short-term financial assets		1,339,989	89,166,699
Increase in short-term and long-term loans		(117,450,986)	(66,673,157)
Collection of short-term and long-term loans		77,997,826	39,944,027
Decrease in leasehold deposits received		(1,628,977)	
Net cash used in investing activities		(966,121,606)	(1,162,153,277)
Cash flow from financing activities			
Proceeds from increase in issued capital		31,436,500	39,454,000
Proceeds from short-term borrowings		609,231,414	5,490,752
Repayments of short-term borrowings		(54,949,500)	(358,221)
Repayments of current portion of long-term liabilities		<del>-</del>	(4,472,351)
Proceeds from issuance of bonds		1,038,407,831	1,080,163,549
Repayment of bonds		(274,747,500)	(1,113,229,782)
Proceeds from long-term borrowings		392,160,908	18,661,792
Repayments of long-term borrowings		(25,219,442)	(55,198,598)
Dividends paid			(50,427,796)
Proceeds from partial disposition of interest in subsidiaries			14,836,447
Net cash provided by (used in) financing activities		1,716,320,211	(65,080,208)
Net increase (decrease) in cash and cash equivalents before net effect of foreign			
exchange differences		152,635,245	(119,175,710)
Effect of exchange rate fluctuations on cash held		7,804,067	(6,427,583)
Increase (Decrease) in cash and cash equivalents		160,439,312	(125,603,293)
Cash and cash equivalents at January 1		508,505,823	966,031,817
Cash and cash equivalents at June 30	₩	668,945,135	840,428,524

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements June 30, 2015

### 1. Reporting Entity

Korea National Oil Corporation (the "Company" or the "Parent Company") was incorporated on March 3, 1979 to engage in the development of oil fields, distribution of crude oil, maintenance of petroleum reserve stock and improvement of the petroleum distribution infrastructure under the Korea National Oil Corporation Act. The Company's head office is located at 305, Jongga-Ro, Jung-Gu, Ulsan in Korea. The Company also has 9 petroleum stockpile sites, 1 domestic gas field management office, 8 overseas offices in Vietnam and other countries and overseas subsidiaries and affiliates in the United States and other countries.

As of June 30, 2015, the Company's issued capital is \$10,123,356 million, which is wholly owned by the government of the Republic of Korea.

The condensed consolidated interim financial statements comprise the Company and its subsidiaries (together referred to as the "Group" and individually as "Group entities") and the Group's interests in associates and joint ventures.

### (a) The lists of subsidiaries as of June 30, 2015 and December 31, 2014 are as follows:

			Owne	rship (%)
Subsidiary name	Principal activity	Country of incorporation	June 30, 2015	December 31, 2014
ANKOR E&P Holdings Corp	Exploration and			
	production (E&P)	United States	100.00	100.00
Dana Petroleum Limited	E&P	United Kingdom	100.00	100.00
KNOC Eagleford Corp	E&P	United States	100.00	100.00
Harvest Operations Corp	E&P	Canada	100.00	100.00
KNOC Kaz B.V	Holding Company	Netherlands	100.00	100.00
KNOC Exploração e Produção de Petro do				
Brasil Ltda	E&P	Brazil	100.00	100.00
KNOC NEMONE	E&P	Indonesia	100.00	100.00
KNOC NEMTWO	E&P	Indonesia	100.00	100.00
KNOC Sumatra Ltd	E&P	Indonesia	100.00	100.00
KNOC Yemen Ltd	E&P	Yemen	60.00	60.00
KNOC Trading Singapore Pte. Ltd	Trading and			
	Marketing	Singapore	100.00	100.00
KNOC Trading Corporation	Trading and			
	Marketing	United States	100.00	100.00

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### (b) Financial information of subsidiaries

(i) Financial information of subsidiaries as of and for the six-month period ended June 30, 2015 is as follows:

Company	Assets	Liabilities	Revenue	Net profit (loss)
		In millions of K	Torean won	
ANKOR E&P Holdings Corp	₩1,223,922	679,721	61,534	(22,837)
Dana Petroleum Limited(*)	5,843,479	3,686,494	441,027	247,745
KNOC Eagleford Corp	2,876,769	765,266	261,647	3,840
Harvest Operations Corp	4,643,818	3,525,555	217,379	(290,275)
KNOC Kaz B.V.(*)	1,521,250	636,823	126,891	(12,791)
KNOC Exploração e Produção de Petro do Brasil Ltda	20	537	_	(84)
KNOC NEMONE	126	46,199	_	(81)
KNOC NEMTWO	151	41,146	_	
KNOC Sumatra Ltd	1,531	_	_	40
KNOC Yemen Ltd	61	154,888	_	(59,503)
KNOC Trading Singapore Pte Ltd	276	40	275	53
KNOC Trading Corporation	1,736	122	725	150

<sup>(\*)</sup> The amounts presented are after reflecting the difference between the fair value and the book value that arose during the business combination.

(ii) Financial information of subsidiaries as of and for the year ended December 31, 2014 is as follows:

Company	Assets	Liabilities	Revenue	Net profit (loss)
<del></del>		In millions of <b>K</b>	Korean won	
ANKOR E&P Holdings Corp	₩1,235,190	680,210	220,177	(93,466)
Dana Petroleum Limited(*1)	5,836,302	3,970,789	1,184,384	(609,807)
KNOC Eagleford Corp	2,836,393	775,501	689,707	27,757
Harvest Operations Corp.(*2)	4,844,729	3,366,532	855,036	(434,218)
KNOC Kaz B.V.(*1)	1,513,170	619,469	365,721	(35,101)
KNOC Exploração e Produção de Petro do Brasil Ltda	23	477	_	(105)
KNOC NEMONE	90	45,061	_	(4,618)
KNOC NEMTWO	111	40,197	_	(3,915)
KNOC Sumatra Ltd	1,892	435	_	9,775
KNOC Yemen Ltd	25,132	117,015	_	(17,597)
KNOC Trading Singapore Pte Ltd	185	4	459	50
KNOC Trading Corporation	1,486	58	1,643	315

<sup>(\*1)</sup> The amounts presented are after reflecting the difference between the fair value and the book value that arose during the business combination.

<sup>(\*2)</sup> Revenue in relation to discontinued operation is not included. The total revenue including the discontinued operation is  $\mathbf{W}4,130,117$  million.

### Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### 2. Basis of Preparation

### (a) Statement of compliance

The condensed consolidated interim financial statements of the Group have been prepared in accordance with Korea International Financial Reporting Standards ("K-IFRS") 1034, 'Interim Financial Reporting'. Selected explanatory notes are included to explain events and transactions that are significant to an understanding of the changes in financial position and performance of the Group since the last annual consolidated financial statements as of and for the year ended December 31, 2014. The condensed consolidated interim financial statements do not include all the information and disclosures required in the annual financial statements.

### (b) Basis of measurement

The condensed consolidated financial statements have been prepared on the historical cost basis, except for derivatives, financial assets at fair value through profit or loss, available-for-sale financial instruments and liabilities for defined benefit plans, as disclosed in the Group's annual consolidated financial statements as of and for the years ended December 2014 and 2013.

### (c) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The accompanying condensed consolidated interim financial statements are prepared in the Company's functional currency, the United States dollar, and presented in Korean won, the Group's presentation currency, for the financial reporting purposes in accordance with K-IFRS 1021, 'The Effects of Changes in Foreign Exchange Rates'. The Group is required to present its financial statements in Korean won in accordance with regulations in Korea.

### (d) Use of estimates and judgments

The preparation of the condensed consolidated interim financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

In preparing these condensed consolidated interim financial statements, the significant judgments made by management in applying the Group's accounting policies and the key sources of estimation uncertainty were the same as those that applied to the consolidated financial statements as of and for the year ended December 31, 2014.

### 3. Significant Accounting Policies

The accounting policies applied by the Group in these condensed consolidated interim financial statements are the same as those applied by the Group in its consolidated financial statements as of and for the year ended December 31, 2014.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### 4. Segment and Other Information

An operating segment is a component of the Group that engages in business activities and has discrete financial information that is reviewed regularly by the Group's chief operating decision maker (the Chief Executive Officer), to make decisions about resources to be allocated to the segments and assess their performance.

# (a) For management purposes, the Group is organized into business units based on their goods and services and has seven reportable operating segments as follows:

Segments	Goods and services	Location of business
Oil and gas	Exploration, development and production of domestic and overseas resources and purchases and sales of crude oil	Domestic and overseas
Petroleum distribution	The whole sale gasoline and gas oil distribution business	Domestic
Refinery(*)	Refining of crude oil and sales of the refined petroleum products	Overseas
Oil stockpiling	Import and export of crude oil and petroleum products; lending and sales of oil stockpiles; management, operation and lending of oil stockpiling facilities	Domestic
Financing	Financing for companies engaged in energy and natural resources energy and natural resources development activities	Domestic
Drillship chartering	Drillship chartering business	Domestic and overseas
Others	Oil information services, other research services, etc.	Domestic and overseas

<sup>(\*)</sup> The refinery segment is classified as a discontinued operation due to its disposal in November 2014 as described in note 6.

Segment profit and loss are determined the same way that consolidated operating profit for the period is determined under K-IFRS, except that it excludes certain expenses pertaining to headquarters' salaries, training costs, service fees and other corporate related costs. Those expenses are included in reconciling items as selling and administrative expenses in the tables below. There are no inter-segment revenues.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (b) Segment results for the period

(i) For the six-month period ended June 30, 2015

	Oil and gas	Petroleum distribution	Oil stockpiling	Financing	Drillship chartering	Others(*1)		Reconciling items(*2)	Group total
				In millio	ons of Korea	n won			
Revenue	, ,	,	65,216 84,191	804	23,980 14,514		1,522,902 1,452,809		1,522,902 1,452,809
Gross profit (loss) Selling and administrative	29,458	3,412	(18,975)	804	9,466	45,928	70,093		70,093
expenses	150,193	_	_	340		_	150,533	38,438	188,971
Reportable segment operating profit (loss) Other non-operating	(120,735	3,412	(18,975)	464	9,466	45,928	(80,440)	(38,438)	(118,878)
income							31,160	_	31,160
Other non-operating expenses							63,029	_	63,029
Other loss, net							(252,850)	_	(252,850)
Finance income							55,963	_	55,963
Finance costs  Loss on investments in associates and joint							338,846	_	338,846
ventures, net							(40,399)		(40,399)
Loss before income tax	₩						(688,441)	(38,438)	(726,879)
Depreciation and amortization	₩ 728,107	_	37,772	_	1,712	_	767,591	7,187	774,778

<sup>(\*1)</sup> Others include \(\forall \) 26,043 million of third party tariff income and storage income.

<sup>(\*2)</sup> Primarily consists of headquarter salaries, training costs, service fees and other corporate related costs, including depreciation and amortization, that are not allocated to the segments.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

# (ii) For the six-month period ended June 30, 2014

	Oil and gas	Petroleum distribution	Oil stockpiling	Financing	Drillship chartering	Others	Continuing operation total	Reconciling items(*)	Refinery (Discontinued operation)	Group total
				In	millions of	Korean v	on			
Revenue	₩1,956,600	113,451	89,475	1,053	38,890	37,714	2,237,183	_	2,138,806	4,375,989
Cost of sales			77,479		13,771	1,501	1,623,098		2,149,606	3,772,704
Gross profit Selling and administrative	534,653	5,051	11,996	1,053	25,119	36,213	614,085	_	(10,800)	603,285
expenses	185,278			510			185,788	31,122	4,002	220,912
Reportable segment operating										
profit(loss)	349,375	5,051	11,996	543	25,119	36,213	428,297	(31,122)	(14,802)	382,373
Other non-operating income							110,317	_		110,317
Other non-operating expenses							145,115	_	239	145,354
Other income(loss),										,
net							(325,529)	_	189	(325,340)
Finance income							54,944	_	2,533	57,477
Finance costs Profit on investments							272,379	_	1,176	273,555
in associates and joint ventures,										
net							11,714			11,714
Loss before income tax	₩						(137,751)	(31,122)	(13,495)	(182,368)
Depreciation and amortization	₩ 797,325	_	36,844	_	1,328	_	835,497	3,266	6,680	845,443

<sup>(\*)</sup> Primarily consists of headquarter salaries, training costs, service fees and other corporate related costs, including depreciation and amortization that are not allocated to the segments.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (c) Segment assets and liabilities

## (i) As of June 30, 2015

	Oil and gas	Petroleum distribution	Oil stockpiling	Financing	Drillship chartering	Reportable segment total	Reconciling items(*2)	Group total
	On unu gus				Korean wo			
Assets	₩20.329.070	42,843	6,052,060			26,493,967	_	26,493,967
Adjustments:	,,	,	-, ,	-, -	,	-,,		-,,
Headquarters' land,								
buildings, tools &								
fixtures							349,352	349,352
Headquarters' software and							,	ŕ
memberships							12,663	12,663
Headquarters' loans to							,	,
employees							94,011	94,011
Headquarters' deferred tax								
assets							357,718	357,718
Headquarters' derivative								
assets							18,106	18,106
Headquarters' financial								
assets and etc							481,599	481,599
	₩20,329,070	42,843	6,052,060	3,149	66,845	26 493 967	1 313 449	27,807,416
				===	====			=======================================
Liabilities	18,612,818	600,795	59,207	_	987	19,273,807	_	19,273,807
Adjustments:								
Headquarters' derivative								
liabilities							155,085	155,085
Headquarters' financial								
liabilities and etc							134,753	134,753
	₩18,612,818	600,795	59,207		987	19,273,807	289.838	19,563,645
Investments in associates								
and others(*1)	₩ 1,268,720	39,164	_	_	_	1,307,884	_	1,307,884
Acquisitions of property,								
plant and equipment	752,986	_	22,845	_	3,666	779,497	_	779,497
Acquisitions of intangible								
assets other than						44= 0:-		
goodwill	117,040	_	_	_	_	117,040	84	117,124

<sup>(\*1)</sup> Investments in associates and others consist of investment in associates and joint ventures and loans to related parties.

<sup>(\*2)</sup> Primarily consists of loans for employees, deferred tax assets and others which are not allocated to the reportable segments.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (ii) As of December 31, 2014

	Oil and gas	Petroleum distribution	Oil stockpiling	Financing	Drillship chartering	Reportable segment total	Reconciling items(*2)	Group total
					Korean wo	n		
Assets	₩20,256,787	82,789	5,388,078	3,668	66,863	25,798,185	_	25,798,185
Adjustments:								
Headquarters' land, buildings, tools & fixtures							297,544	297,544
memberships							14,550	14,550
Headquarters' loans to employees							89,305	89,305
Headquarters' deferred tax								
assets							339,226	339,226
Headquarters' derivative assets							7,634	7,634
Headquarters' financial assets and etc							344,900	344,900
	₩20,256,787	82,789	5,388,078	3,668	66,863	25,798,185	1,093,159	26,891,344
Liabilities	17,870,654	100,457	41,751		9,625	18,022,487		18,022,487
Adjustments:								
Headquarters' derivative liabilities							259,008	259,008
Headquarters' financial								
liabilities and etc							240,180	240,180
	₩17,870,654	100,457	41,751		9,625	18,022,487	499,188	18,521,675
Investments in associates and								
others(*1)	₩ 1,177,722	38,221	_	_	_	1,215,943	_	1,215,943
and equipment	2,373,935	_	93,747	_	6,061	2,473,743	64,106	2,537,849
Acquisitions of intangible assets other than								
goodwill	377,704	_	_		_	377,704	3,681	381,385

<sup>(\*1)</sup> Investments in associates and others consist of investment in associates and joint ventures and loans to related parties.

## (d) Information about main customers

There is no customer comprising more than 10% of total sales.

<sup>(\*2)</sup> Primarily consists of loans for employees, deferred tax assets and others which are not allocated to the reportable segments.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

#### 5. Business combination

### (a) General information

Harvest Operations Corp., one of the Group's subsidiaries, acquired all of the issued and outstanding common shares of Hunt Oil Company of Canada, Inc., which was a private oil and gas company with operations immediately offsetting the subsidiary's lands and production in Canada. The acquisition was accounted for as a business combination, and the acquired assets and liabilities were recognized as their provisional fair value. Details of the business combination occurred during the six-month period ended June 30, 2015 are as follows:

	Main operation	Acquisition date	Acquired equity interest (%)	Consideration transferred
		In millions of	Korean won	
Hunt Oil Company of Canada, Inc	Oil and gas	2015-02-27	100.00	₩32,055

## (b) Identifiable assets and liabilities

Provisional fair values of assets and liabilities acquired by business combination as at the date of acquisition are as follows:

	Amount
	In millions of Korean won
Cash	₩ 1,959
Account receivables	837
Prepaid expenses	182
Property, plant and equipment	36,580
Exploration and evaluation assets	5,834
Deferred tax assets	700
	46,092
Account payables	(3,880)
Decommissioning liabilities	(2,803)
Deferred tax liabilities	(7,354)
	(14,037)

## 6. Discontinued Operations

The refinery segment has been reclassified as a discontinued operation as North Atlantic Refining Limited, which was the refinery segment, was disposed of in November 2014. The segment was not previously classified as a discontinued operation or held-for-sale as of June 30, 2014. The comparative consolidated statement of comprehensive loss has been restated to present the discontinued operation separately from continuing operations.

### (a) Result of discontinued operation for the six-month period ended June 30, 2014 is as follows:

	2014
	In millions of Korean won
Income	₩ 2,141,528
Expense	(2,155,023)
Loss before income tax	(13,495)
Income tax expense	(940)
Loss from discontinued operation, net of tax	₩ (14,435)

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

# (b) Cashflows from (used in) discontinued operation for the six-month period ended June 30, 2014 are as follows:

	2014
	In millions of Korean won
Net cash used in operating activities	₩ (7,405)
Net cash from investing activities	22,479
Net cash used in financing activities	(15,074)
Net cash from discontinued operation	₩ —

# (c) The effect of disposal on the financial position of the Group on date of disposal is as follows:

	Nov 13, 2014
	In millions of Korean won
Inventories	₩ 94,616
Trade and other Receivables	33,038
Other assets	2,068
Cash and Cash Equivalents	30,862
Trade and other Payables	(54,969)
Provisions	(16,258)
Other liabilities	(10,864)
Net assets and liabilities	78,493
Consideration received, satisfied in cash	66,690
Cash and cash equivalents disposed	(30,862)
Net cash inflow	₩ 35,828

## 7. Non-financial assets

Details of non-financial assets as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015		Decemb	ber 31, 2014	
	Current	Non-current	Current	Non-current	
		In millions of	Korean won		
Advance payments	₩120,309	_	115,183	_	
Prepaid expenses	59,418	11,674	79,897	11,671	
Oil stockpiles	_	3,516,604	_	3,412,635	
Non-current assets held for sale (note 8)	63,694		62,212		
	₩243,421	3,528,278	<u>257,292</u>	3,424,306	

Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### 8. Non-current Assets and Liabilities Held For Sale

Assets and liabilities held for sale as of June 30, 2015 and December 31, 2014 are as follows:

		June 30	, 2015		December 31, 2014			
	KNOC NEMON LTD(*1	E NEMTWO	Disposal of Land and others(*2)	Total	KNOC NEMONE LTD(*1)	KNOC NEMTWO LTD(*1)	Disposal of Land and others(*2)	Total
			In	millions of	f Korean wo	n		
Cash and cash equivalents	₩ 12	6 151	_	277	90	110	_	200
Property, plant and								
equipment			63,417	63,417			62,012	62,012
Assets held for sale	<b>₩</b> 12	151	63,417	63,694	90	110	62,012	62,212
Account payables and other								
payables	1	8 18	_	36	17	17	_	34
Non-current financial								
liabilities	27,20	<u>8</u> <u>22,219</u>		49,427	26,549	21,727		48,276
Liabilities held for sale	₩27,22	22,237		49,463	26,566	21,744		48,310

<sup>(\*1)</sup> KNOC NEMONE and KNOC NEMTWO, the Group's subsidiaries, have resolved and proceeded to discontinue their operations in 2009 and received approval to close the areas from the government of Indonesia in 2011. It is expected to complete their liquidations in 2015.

<sup>(\*2)</sup> Disposal of KNOC headquarter building and related assets was approved by the board of directors in April 2012. After its relocation to Ulsan, the Group entered into a sales contract of the properties on November 20, 2014. The sale is expected to be completed in 2015.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## 9. Investments in associates and joint ventures

## (a) Summary of investments in associates and joint ventures

(i) As of June 30, 2015

Entity	Principal activity	Country	Equity interest (%)	Acquisition cost	Book value
		In millions of	In millions of Korean won		
<investments associates="" in=""></investments>					
Kernhem B.V	Exploration and				
	Production(E&P)	Netherlands	36.67	₩ 11,486	6,876
Oilhub Korea Yeosu Co. Ltd	Storing of oil	Korea	29.00	38,002	37,868
ADA Oil LLP(*1)	E&P	Kazakhstan	12.50	19,728	10,240
Parallel Petroleum LLC(*2)	E&P	United States	10.00	43,128	52,467
				112,344	107,451
<investments in="" joint="" ventures=""></investments>					
KNOC Inam Ltd.(*3)	Exploration	Malaysia	40.00	_	_
KNOC Kamchatka Petroleum					
Ltd.(*3)(*4)	Exploration	Cyprus	55.00	1	_
KC Karpovsky B.V.(*3)	Exploration	Netherlands	35.00	10	_
KNOC Bazian Ltd.(*3)(*4)	Exploration	Malaysia	66.72	_	_
Dolphin Property Ltd.(*4)	Lease	Nigeria	75.00	67	219
KNOC Nigerian West Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	67	_
KNOC Nigerian East Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	67	_
KNOC Aral Ltd.(*3)(*4)	Exploration	Malaysia	51.00	_	_
KNOC kamchatka Co. Ltd.(*3)	Exploration	Cyprus	50.00	7,640	_
KC kazakh B.V.(*3)	Exploration	Netherlands	35.00	255	_
Offshore International Group,					
Inc.	E&P	United States	50.00	717,443	681,095
KNOC Ferghana Ltd.(*3)	Exploration	Malaysia	50.00	1	_
KNOC Ferghana2 Ltd.(*3)(*4)	Exploration	Malaysia	65.00	_	_
KADOC Ltd.(*3)(*4)	Exploration	Malaysia	75.00	1	_
Korea Oil Terminal Co., Ltd.(*4)	Storing of oil	Korea	51.00	1,296	1,296
Deep Basin Partnership(*4)	E&P	Canada	79.30	90,532	62,303
HKMS Partnership(*4)	Gas processing				
	plant operation	Canada	68.55	62,954	61,385
				880,334	806,298
				₩992,678	913,749

<sup>(\*1)</sup> Classified as an investment in associate because the Group's associate, Kernhem B.V., holds 75% of the equity interest and by effective equity interest, the Group has the ability to exercise significant influence over the entity.

<sup>(\*2)</sup> Classified as an investment in associate because the Group can designate one director in its board of directors. Despite the percentage of ownership of below 20%, the Group has the ability to exercise significant influence over the entity.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

- (\*3) Joint ventures that have a book value of less than  $\P$ 1 million.
- (\*4) Despite the percentage of ownership of over 50%, the investment is classified as an investment in associate because the Group is unable to exercise control over investees solely and when making significant decisions, the Group requires consents from all the other shareholders in accordance with the agreements made.

### (ii) As of December 31, 2014

Entity	Principal activity	Country	Equity interest (%)	Acquisition cost	Book value
		In millions o	f Korean won		
<investments associates="" in=""></investments>					
Kernhem B.V	Exploration and				
	Production(E&P)	Netherlands	36.67	₩ 11,231	10,100
Oilhub Korea Yeosu Co. Ltd	Storing of oil	Korea	29.00	37,160	36,954
ADA Oil LLP(*1)	E&P	Kazakhstan	12.50	19,291	11,502
Parallel Petroleum LLC(*2)	E&P	United States	10.00	42,172	40,170
				109,854	98,726
<investments in="" joint="" ventures=""></investments>					
KNOC Inam Ltd.(*3)	Exploration	Malaysia	40.00	_	_
KNOC Kamchatka Petroleum					
Ltd.(*3)(*4)	Exploration	Cyprus	55.00	1	_
KC karpovsky B.V.(*3)	Exploration	Netherlands	35.00	10	_
KNOC Bazian Ltd.(*3)(*4)	Exploration	Malaysia	66.72	_	_
Dolphin Property Ltd.(*4)	Lease	Nigeria	75.00	66	243
KNOC Nigerian West Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	66	_
KNOC Nigerian East Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	66	_
KNOC Aral Ltd.(*3)(*4)	Exploration	Malaysia	51.00	_	_
KNOC kamchatka Co. Ltd.(*3)	Exploration	Cyprus	50.00	7,471	_
KC kazakh B.V.(*3)	Exploration	Netherlands	35.00	249	_
Offshore International Group, Inc	E&P	United States	50.00	701,551	687,310
KNOC Ferghana Ltd.(*3)	Exploration	Malaysia	50.00	1	_
KNOC Ferghana2 Ltd.(*3)(*4)	Exploration	Malaysia	65.00		_
KADOC Ltd.(*3)(*4)	Exploration	Malaysia	75.00	1	_
Korea Oil Terminal Co., Ltd.(*4)	Storing of oil	Korea	51.00	1,267	1,267
Deep Basin Partnership(*4)	E&P	Canada	77.81	54,753	46,489
HKMS Partnership(*4)	Gas processing				
	plant operation	Canada	53.76	26,570	25,202
				792,072	760,511
				₩901,926	859,237

<sup>(\*1)</sup> Classified as an investment in associate because the Group's associate, Kernhem B.V., holds 75% of the equity interest and by effective equity interest, the Group has the ability to exercise significant influence over the entity.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

- (\*2) Classified as an investment in associate because the Group can designate one director in its board of directors. Despite the percentage of ownership is below 20%, the Group has the ability to exercise significant influence over the entity.
- (\*3) Joint ventures that have a book value of less than  $\mathbf{W}1$  million.
- (\*4) Despite the percentage of ownership of over 50%, the investment is classified as an investment in associate because the Group is unable to exercise control over investees solely and when making significant decisions, it requires consents from all the other shareholders in accordance with the agreements made.

## (b) Changes in carrying value

(i) For the six-month period ended June 30, 2015

Entity	Beginning balance	Acquisition			method	Changes in equity adjustments in equity method	Other changes (*1)	Ending Balance
			Iı	n millions o	f Korean won			
<investment associates="" in=""></investment>								
Kernhem B.V		_	_	_	(3,529)	154	151	6,876
Oilhub Korea Yeosu Co. Ltd		_	_	_	914	(839)	839	37,868
ADA Oil LLP		_	_	_	(1,469)	(20)	227	10,240
Parallel Petroleum LLC	40,170		_		11,132		1,165	52,467
	98,726	_	_	_	7,048	(705)	2,382	107,451
<investment in="" joint="" ventures=""></investment>								
KNOC Inam Ltd.(*2)	_	_			_	_		
KNOC Kamchatka Petroleum								
Ltd.(*2)		_	_	_			_	_
KC karpovsky B.V. (*2)	_		_	_			_	_
KNOC Bazian Ltd.(*2)	_				_	_		
Dolphin Property Ltd	243				(26)	(2)	4	219
KNOC Nigerian West Oil								
Company Ltd.(*2)	_	_	_	_	_		_	_
KNOC Nigerian East Oil								
Company Ltd.(*2)	_							
KNOC Aral Ltd.(*2)	_	_	_		_		_	_
KNOC kamchatka Co.								
Ltd.(*2)	_	_	_	_	_	_	_	_
KC kazakh B.V.(*2)	_	_	_	_	_	_	_	_
Offshore International Group,								
Inc	687,310				(21,297)		15,082	681,095
KNOC Ferghana Ltd.(*2)	_				_			_
KNOC Ferghana2 Ltd.(*2)	_	_	_	_			_	_
KADOC Ltd.(*2)		_	_	_			_	
Korea Oil Terminal Co., Ltd	1,267		_	_			29	1,296
Deep Basin Partnership	46,489	33,767	_		(16,449)	_		62,303
HKMS Partnership	25,202	34,989	=	<u>(404)</u>			(430)	61,385
	760,511	68,756	=	(404)	(35,744)	(2)	13,181	806,298
	₩859,237	68,756	_	(404)	(28,696)	(707)	15.563	913,749
	=====	===	=		=======================================	==	====	

<sup>(\*1)</sup> Others include the effect of exchange rates fluctuations.

<sup>(\*2)</sup> Joint ventures that have book value of less than  $\mathbf{W}1$  million.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

(ii) For the year ended December 31, 2014

Entity	Beginning balance	Acquisition	Disposals	Dividends received	Share of profit and loss in equity method	adjustments	Other changes (*1)	Ending Balance
			In	millions of	Korean won			
<pre><investment associates="" in=""> Kernhem B.V Oilhub Korea Yeosu Co.</investment></pre>	₩ 12,632	_	_	_	(125)	(2,804)	397	10,100
Ltd	12,382	_		_	(1,740) (2)	(1,547) (1,335)	1,466 457	36,954 11,502
Faroe Petroleum plc(*2) Parallel Petroleum LLC			(132,162)	(527)	(2,662) (7,421)		(381) 1,589	40,170
	245,523	_	(132,162)	(527)	(11,950)	(5,686)	3,528	98,726
<pre><investment in="" joint="" ventures=""> KNOC Inam Ltd.(*3)</investment></pre>								
KNOC Kamchatka Petroleum								
Ltd.(*3)	_	_	_	_	_	_	_	_
KNOC Bazian Ltd.(*3)	_	_	_	_				
Dolphin Property Ltd KNOC Nigerian West Oil	_	_	_	_	132	101	10	243
Company Ltd.(*3) KNOC Nigerian East Oil	_	_	_	_	_		_	_
Company Ltd.(*3)	_	_	_	_	_	_	_	_
KNOC Aral Ltd.(*3)	_	_	_	_	_		_	_
Ltd.(*3)	_	_	_	_		_	_	_
KC kazakh B.V.(*3) Offshore International Group,	_	_	_	_	_	_	_	_
Inc.	672,783	_	(14)	_	(12,883)	_	27,424	687,310
KNOC Ferghana Ltd.(*3)	_	_	_	_		_	_	_
KNOC Ferghana2 Ltd.(*3) KNOC Samsung Lantian Oil Development Co.,	_	_	_	_	_	_	_	_
Ltd.(*4)	6,459	_	(6,447)		_	_	(12)	_
KADOC Ltd.(*3)	· —	_	` _ ´	_	_	_	` <u> </u>	_
Korea Oil Terminal Co., Ltd	_	1,214	_	_	_	_	53	1,267
Deep Basin Partnership	_	52,463	_	(2,213)	(4,488)	_	727	46,489
HKMS Partnership		25,459			(32)		(225)	25,202
	679,242	79,136		(2,213)	(17,271)	101		760,511
	₩924,765	79,136	(138,623)	(2,740)	(29,221)	(5,585)	31,505	859,237

<sup>(\*1)</sup> Others include the effect of exchange rates fluctuations.

<sup>(\*2)</sup> Classified as available-for-sale financial assets because the Group lost its significant influence on the investee.

<sup>(\*3)</sup> Joint ventures that have book value of less than  $\mathbb{W}1$  million.

<sup>(\*4)</sup> The Group disposed shares of KNOC Samsung Lantian Oil Development Co., Ltd. In 2014.

Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## 10. Property, Plant and Equipment

(a) Changes in property, plant and equipment for the six-month period ended June 30, 2015 and for the year ended December 31, 2014 are as follows:

(i) For the six-month period ended June 30, 2015

	Beginning balance	Acquisitions	Disposals	Depreciation	Impairment losses		Others(*)	Ending balance
			In	millions of K	orean won			
Land	₩ 503,119	_	(68)	_	_	_	11,069	514,120
Buildings	164,213	3,307	_	(3,213)	_	774	3,695	168,776
Structures	1,271,619	207	_	(22,635)	_	_	28,293	1,277,484
(Contributions to								
construction)	(127)	_	_	2	_	_	(3)	(128)
Machinery	273,115	1,301	(72)	(15,297)	_	24	5,787	264,858
(Contributions to								
construction)	(4,591)	_	_	154	_	_	(101)	(4,538)
Vessels	44,540	3,666	_	(1,515)	_	_	1,058	47,749
Vehicles	2,727	288	_	(379)	_	_	38	2,674
Tools & fixtures	30,081	295	(1,220)	(4,011)	_	686	(211)	25,620
Construction-in-								
progress	61,962	18,284	_	_	_	(7,892)	1,509	73,863
Others	27,507	4,136	(1,791)	(2,475)	_	169	(15)	27,531
Oil & gas								
properties	11,455,935	748,013	(53,337)	(625,534)	(137,083)	(21,501)	5,252	11,371,745
(Government								
grants)	(8,117)			859			(163)	(7,421)
	₩13,821,983	779,497	<u>(56,488)</u>	<u>(674,044</u> )	<u>(137,083)</u>	(27,740)	56,208	13,762,333

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations and changes in the present value of decommissioning costs.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (ii) For the year ended December 31, 2014

	Beginning balance	Acquisitions	Disposals	Depreciation (*1)	Impairment losses(*2)		Others(*3)	Ending balance
			In	millions of K	orean won			
Land	₩ 662,805	20,571	(174,735)	_	(9,764)	(15,770)	20,012	503,119
Buildings	71,653	48,223	(5,829)	(3,868)	(9,444)	56,568	6,910	164,213
Structures	1,374,410	45,719	(7,249)	(55,059)	(149,677)	11,249	52,226	1,271,619
(Contributions to								
construction)	(125)	) —	_	3	_	_	(5)	(127)
Machinery	256,400	16,866	(4,477)	(29,681)	_	23,500	10,507	273,115
(Contributions to								
construction)	(4,703)	) —	_	295	_	_	(183)	(4,591)
Vessels	41,192	5,934	_	(2,637)	(1,771)	_	1,822	44,540
Vehicles	3,386	550	(11)	(869)	(233)	(137)	41	2,727
Tools & fixtures	11,026	22,218	(8)	(5,403)	(99)	1,887	460	30,081
Construction-in-								
progress	173,969	59,529	(1,200)	_	_	(170,094)	(242)	61,962
Others	15,978	9,343	(59)	(6,655)	(18)	371	8,547	27,507
Oil & gas								
properties	12,190,447	2,308,896	(300,185)	(1,391,024)	(775,546)	(469,469)	(107,184)	11,455,935
(Government								
grants)	(9,952)			2,155			(320)	(8,117)
	<del>W</del> 14,786,486	2,537,849	<u>(493,753)</u>	(1,492,743)	(946,552)	(561,895)	(7,409)	13,821,983

<sup>(\*1)</sup> Includes depreciation from the discontinued operation amounting to \(\forall 12,228\) million.

## (b) Details of impairments recognized by segments

(i) Impairments recognized for the six-month period ended June 30, 2015

	Oil and Gas(*1)
	In millions of Korean won
Generals	
Type of assets	Oil and gas properties
Scope	5 Cash generating units ("CGUs")
Valuation Method	Value in use
Assumptions	
Pre-tax discount rate	8.0~10.0%
Commodity Prices(*2)	International indices
Production quantities	Estimated production quantities
•	based on reserve reports
Recoverable amounts	₩ 291,492
Impairment losses	137,083
Reason for impairment	Increase in expected capital
•	expenditures and decrease in
	gas prices

<sup>(\*2)</sup> Includes impairment losses from discontinued operation amounting to \(\forall 171,006\) million.

<sup>(\*3)</sup> Others include the effect of exchange rates fluctuations and others.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### (ii) Impairments recognized for the year ended December 31, 2014

	Oil and Gas(*1)	Refinery				
	In millions of Korean won					
Generals						
Type of assets	Oil and gas properties	General assets				
Scope	21 CGUs	Assets for sale				
Valuation Method	Value in use	Fair value less cost to sell				
Assumptions						
Pre-tax discount rate	6.0~17.2%	N/A				
Oil prices(*2)	International indices	N/A				
Production quantities	Estimated production quantities					
	based on reserve reports	N/A				
Recoverable amounts	₩813,634	_				
Impairment losses(*3)	775,546	171,006				
Reason for impairment	Decrease in international oil prices	Decrease in disposable value				

<sup>(\*1)</sup> The CGUs of the oil and gas segment are fields or wells.

## 11. Goodwill

Changes in goodwill for the six-month period ended June 30, 2015 and the year ended December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	s of Korean won
Beginning balance	₩857,049	1,406,616
Disposal	(6,838)	(25,450)
Impairment	_	(457,038)
Other changes(*)	(29,574)	(67,079)
Ending balance	₩820,637	<u>857,049</u>

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations.

<sup>(\*1)</sup> The CGUs of the oil and gas segment are fields or wells.

<sup>(\*2)</sup> The commodity prices are based on the long-term forecasts from globally recognized research institutions.

<sup>(\*2)</sup> The oil prices are based on the long-term forecasts from globally recognized research institutions.

<sup>(\*3)</sup> The Group recognized impairment losses of the lands, buildings, structures, vessels, vehicles, tools & fixtures and others of the refinery segment amounting to \(\pmu\_9,764\) million, \(\pmu\_9,444\) million, \(\pmu\_{149,677}\) million, \(\pmu\_{1771}\) million, \(\pmu\_{233}\) million, \(\pmu\_{99}\) million, and \(\pmu\_{18}\) million, respectively.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## 12. Intangible Assets Other Than Goodwill

Changes in intangible assets other than goodwill for the six-month period ended June 30, 2015 and for the year ended December 31, 2014 are as follows:

## (a) For the six-month period ended June 30, 2015

	Beginning balance	Acquisi- tions	Disposals	Amorti- zation	lmpairment losses and other(*1)	Reclassifi- cations	Others (*2)	Ending balance
			1	n millions of	Korean won			
Exploration and								
evaluation assets	₩ 831,878	113,911	(118)	(143)	(59,181)	5,616	52,339	944,302
Software	10,965	144	_	(1,951)	_	106	195	9,459
Mining rights	2,997,127	3,051	_	(96,881)	(80)	21,319	65,823	2,990,359
Development cost	7,891	_	_	(1,673)	_	_	140	6,358
Land use right	176	_	_	(3)	_	_	4	177
Others	2,791	18		(82)	(34,398)		34,448	2,777
	₩3,850,828	<u>117,124</u>	<u>(118)</u>	<u>(100,733)</u>	<u>(93,659)</u>	<u>27,041</u>	<u>152,949</u>	3,953,432

<sup>(\*1)</sup> Includes the write-offs of \(\forall 93,659\) million which are recognized due to relinquishments of exploration in Yemen and Norway and others.

### (b) For the year ended December 31, 2014

	Beginning balance	Acquisi- tions	Disposals	Amorti- zation	Impairment losses and other(*1)	Reclassifi- cations	Others (*2)	Ending balance
			I	n millions of	Korean won			
Exploration and								
evaluation assets	₩1,237,058	371,257	(48,938)	_	(775,318)	_	47,819	831,878
Software	10,874	3,328	_	(3,872)	_	365	270	10,965
Mining rights	2,640,041	6,235	_	(255, 367)	(20,626)	501,185	125,659	2,997,127
Development cost	10,296	345	_	(3,199)	_	139	310	7,891
Land use right	174	_	_	(6)	_	_	8	176
Others	32,806	220		(165)	(30,035)		(35)	2,791
	₩3,931,249	<u>381,385</u>	<u>(48,938)</u>	<u>(262,609)</u>	<u>(825,979)</u>	501,689	<u>174,031</u>	3,850,828

<sup>(\*1)</sup> Includes the write-offs of \(\frac{\text{\$\text{\$\text{\$\text{\$\text{W}}}}}{825,979}\) million, which are recognized due to failure to find reserves (dry hole cost) in Europe, expired mining rights in Africa and others.

<sup>(\*2)</sup> Others include the effect of exchange rates fluctuations and others.

<sup>(\*2)</sup> Others include the effect of exchange rates fluctuations and others.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### 13. Financial liabilities

Financial liabilities as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	of Korean won
Current liabilities		
Short-term borrowings	₩ 797,699	214,360
Current portion of bonds payable	1,503,666	1,043,434
Current derivatives liabilities	62,106	3,103
	2,363,471	1,260,897
Non-current liabilities		
Long-term borrowings	2,292,841	1,894,403
Bonds payable	9,433,246	8,864,202
Non-current derivatives liabilities	100,006	145,378
Other financial liabilities		907
	11,826,093	10,904,890
Total	₩14,189,564	12,165,787

#### 14. Current Non-financial Liabilities

Current non-financial liabilities as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	of Korean won
Advance receipts	₩ 11,378	15,204
Unearned revenue	14,763	26,017
Withholdings	41,343	43,797
Non-current liabilities held for sale (note 8)		48,310
Total	₩116,947	133,328

## 15. Employee Benefits

The Group sponsors defined contribution plans and defined benefit plans which are subject to the employees' option.

### (a) Defined contribution pension plan

Funding for the defined contribution pension plan is separately managed by the plan's administrator. When employees terminate their employment before the benefits have vested, the Group's obligation to make a contribution to the plan decreases on a pro rata basis.

The amounts the Group is obligated to contribute and recognize in the statements of comprehensive loss according to the defined contribution pension plan for the six-month periods ended June 30, 2015 and 2014 are \dark 2,097 million and \dark 603 million, respectively. There is no accrued pension expense outstanding as of June 30, 2015.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (b) Defined benefit pension plan

(i) Details of expense relating to defined benefit plans for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014
	In millions	of Korean won
Current service cost	₩ 3,889	4,826
Interest cost	1,312	4,095
Expected return on plan assets	(1,018)	(3,868)
Losses from settlement	79	_
Transfer to other accounts	(128)	(132)
	₩ 4,134	4,921

(ii) The details of defined benefits liabilities as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	s of Korean won
Present value of defined benefit obligation	₩ 65,366	60,501
Fair value of plan assets	(55,049)	(46,469)
Net employee benefits obligation from defined benefit plans	₩ 10,317	14,032

#### 16. Provisions

### (a) Provisions as of June 30, 2015 and December 31, 2014 are as follows:

(i) As of June 30, 2015

	Current(*4)	Non-current	Total
	In millions of Korean won		
Decommissioning cost(*1)	₩ 1,826	2,375,801	2,377,627
Social Overhead Capital(*2)	178,002	73,368	251,370
Allowance for salaries	997		997
Provision for litigations(*3)	3,171		3,171
Others	999	292	1,291
	₩184,995	2,449,461	2,634,456

<sup>(\*1)</sup> The Group recognized provisions for future dismantling, removing and restoring obligations of wells and related facilities. Most of the costs incur at or after the completion of production and the management recognized its best estimations as provisions.

<sup>(\*2)</sup> The Group is committed to providing construction services with regards to the Kurdish regional government's Social Overhead Capital to obtain rights on certain exploratory areas (see note 29(e) for further discussion). This commitment has been classified as a provision due to its uncertain timing of related cash outflows.

<sup>(\*3)</sup> Hanhwa Corp. and Hyundai Heavy Industries filed suit claiming refunds of the acquisition costs and premium paid to the Group to acquire interests in Yemen 4 oil field (Note 29). In this regard, litigation provisions recognized in the prior year have been reversed and paid and will be paid upon the conclusion of the first trial. The Group also recognized litigation provision in relation to an ongoing litigation with Trinidad as of June 30, 2015 (Note 29).

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (ii) As of December 31, 2014

	Current(*)		Non-current	Total
		In millions of Korean won		
Decommissioning cost	₩ 2	,937	2,354,849	2,357,786
Social Overhead Capital	249	,791	109,323	359,114
Allowance for salaries	2	,428	_	2,428
Provision for litigations	3	,313	57,871	61,184
Others			1,030	1,030
	₩258	,469	2,523,073	2,781,542

# (b) Changes in provisions for the six-month period ended June 30, 2015 and for the year ended December 31, 2014 are as follows:

## (i) For the Six-month period ended June 30, 2015

	Beginning balance	Provision	Accretion expenses	Reversal	Payment	Others(*)	Ending balance
			In millio	ons of Korea	n won		
Decommissioning cost	₩2,357,786	6,585	53,589	_	(42,192)	1,859	2,377,627
Social Overhead Capital	359,114	_	3,517	_	(116,108)	4,847	251,370
Allowance for salaries	2,428	_	975	_	(2,427)	21	997
Provision for litigations	61,184	_	_	(24,409)	(9,251)	(24,353)	3,171
Others	1,030				(550)	811	1,291
	₩2,781,542	6,585	58,081	<u>(24,409)</u>	<u>(170,528)</u>	<u>(16,815)</u>	2,634,456

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations, reclassification from provision for litigation to account payable and others.

## (ii) For the year ended December 31, 2014

	Beginning balance	Provision	Accretion expenses	Payment	Others(*)	Ending balance
		I	n millions of	Korean won		
Decommissioning cost	₩2,276,237	29,548	112,151	(115,575)	55,425	2,357,786
Social Overhead Capital	546,567	905	16,637	(220,668)	15,673	359,114
Allowance for salaries	_	_	2,326	_	102	2,428
Provision for litigations	3,468	55,451	_	_	2,265	61,184
Others	1,888			(16)	(842)	1,030
	₩2,828,160	85,904	131,114	<u>(336,259)</u>	72,623	<u>2,781,542</u>

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations and others.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## 17. Issued Capital

The Company's total issued capital is invested solely by the Korean government in accordance with the Korean National Oil Corporation Act and the authorized issued capital is \(\formall 13\) trillion as of June 30, 2015. The changes in issued capital during the six-month period ended June 30, 2015 are as follows:

<u>Date</u>	Description	Amount
	In millions of Korean won	
Beginning balance		₩10,091,920
2015.02.27	Contribution for oil stockpiling business	14,731
2015.06.24	Contribution for oil stockpiling business	16,705
Ending balance		₩10,123,356

## 18. Accumulated Deficit

Details of accumulated deficit as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014	
	In millions of Korean won		
Legal reserve(*1)	₩ —	929,848	
Reserve for business expansion(*2)	_	895,310	
Undisposed accumulated deficit	(2,441,810)	(4,002,470)	
Accumulated deficit	₩(2,441,810)	(2,177,312)	

<sup>(\*1)</sup> In accordance with the Commercial Act in the Republic of Korea, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of issued capital. The legal reserve cannot be used as a source for cash dividends and may only be used to offset an accumulated deficit.

### 19. Other Components of Equity

Other components of equity of the Parent Company as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	of Korean won
Other capital surpluses	₩ 24,954	24,954
Accumulated other comprehensive loss	(260,216)	(382,458)
	₩(235,262)	(357,504)

<sup>(\*2)</sup> The Korea National Oil Corporation Act requires the Company to appropriate, from retained earnings, an amount equal to at least 20% of net income for each accounting period as a reserve for business expansion until the reserve equals issued capital after having appropriated retained earnings for the legal reserve. This reserve cannot be used as a source for cash dividends and may only be used to offset an accumulated deficit.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### 20. Revenue

Details of sales for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015				June 30, 2014	1
'	Domestic	Overseas	Total	Domestic	Overseas	Total
			In millions of	Korean won		
Sales of goods and finished goods	₩134,457	1,251,187	1,385,644	202,751	1,867,300	2,070,051
Revenues from services provided	9,758	79,437	89,195	21,456	106,909	128,365
Interest income	804	_	804	1,053	_	1,053
Income on government grants	1,217	_	1,217	1,344	_	1,344
Others	1,360	44,682	46,042	2,307	34,063	36,370
	₩147,596	1,375,306	1,522,902	228,911	2,008,272	2,237,183

### 21. Other Non-operating Income and Expense

(a) Details of other non-operating income for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014
	In millions of	Korean won
Reversal of other provisions	₩24,409	_
Gains on exemption of debts(*)	673	91,084
Compensation and indemnity		2
Rental income		86
Others	5,645	19,145
	₩31,161	110,317

<sup>(\*)</sup> Gains on exemption of debts in relation to conditional loan (no repayment of principal and interest until the exploration is proven to be successful) are recognized due to expired mining right in Korea in 2015 and a relinquishment of exploration in Bazian area located in Iraq in 2014 and others.

# (b) Details of other non-operating expenses for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014
	In millions of	Korean won
Interest costs on the provision for decommissioning	₩53,589	56,362
Other bad debt expense(*)	_	85,957
Donations	2,166	1,103
Others	7,274	1,693
	₩63,029	145,115

<sup>(\*)</sup> The other debt expenses in relation to loans are recognized due to a relinquishment of exploration in Bazian area located in Iraq and others in 2014.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## 22. Other loss, net

Details of other loss for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014	
	In millions of Korean won		
Gains on disposal of property, plant and equipment	₩ 75	3,088	
Gains on disposal of intangible assets other than goodwill	1,859	_	
Gains on valuation of derivatives	2,322	777	
Gains on foreign currency translation	6,616	8,439	
Gains on foreign currency transactions	19,329	17,339	
Other gains	2,323	21,272	
Losses on disposal of property, plant and equipment	(7,718)	(153)	
Losses on disposal of intangible assets other than goodwill	(12)	(881)	
Losses on valuation of derivatives	_	(777)	
Losses on transactions of derivatives	(665)	_	
Impairment losses on property, plant and equipment	(137,083)	_	
Impairment losses on intangible assets other than goodwill	(93,659)	(324,904)	
Losses on foreign currency translation	(21,192)	(10,770)	
Losses on foreign currency transactions	(20,140)	(23,323)	
Other losses	(4,905)	(15,636)	
	₩(252,850)	(325,529)	

## 23. Finance Income and Cost

## (a) Finance income for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014	
	In millions of Korean won		
Interest income	₩18,131	16,620	
Dividend income	3,752	129	
Gains on disposal of financial assets	_	2,885	
Gains on valuation of derivatives	_	2,386	
Gains on foreign currency translation	28,926	15,414	
Gains on foreign currency transactions	5,154	17,510	
	₩55,963	54,944	

## (b) Finance costs for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014	
	In millions of Korean won		
Interest expense	₩179,491	192,970	
Impairment of available-for-sale financial assets(*)	25,982	_	
Losses on valuation of derivatives	_	508	
Losses on transactions of derivatives	_	85	
Losses on foreign currency translation	108,947	30,454	
Losses on foreign currency transactions	3,512	11,705	
Other finance cost	20,914	36,657	
	₩338,846	<u>272,379</u>	

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### 24. Income Tax Benefit

## (a) Income tax benefit for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014	
	In millions of Korean won		
Current income tax	₩ 76,511	108,788	
Finalization of tax credit from prior periods	(15,007)	(950)	
Deferred tax directly charged to equity	(17,784)	(71,350)	
Changes in temporary differences	(435,500)	(20,936)	
Foreign currency translation differences	(39,368)	(27,796)	
Income tax benefit	₩(431,148)	(12,244)	

# (b) A reconciliation between actual income tax and the income tax computed by applying the statutory rate of 24.2% to loss before income tax for the six-month periods ended June 30, 2015 and 2014 is as follows:

	June 30, 2015	June 30, 2014	
	In millions of Korean won		
Loss before income taxes	<b>₩</b> (726,879)	(168,873)	
Benefits at the statutory income tax rate (24.2%)(*1)	₩(175,905)	(40,867)	
Adjustments to prior year tax return	(18,748)	2,635	
Non-deductible expenses and profits	35,449	15,955	
Effect from tax deduction and reduction	_	(4,916)	
Difference in recognition of deferred tax assets	5,045	36,813	
Effect from temporary differences not recognized in prior years	(4,244)	(6,268)	
Differences in tax rates in overseas entities	(14,408)	(20,559)	
Effect of changes in tax rates(*2)	(271,329)	4,611	
Others, net	12,992	352	
Income tax benefit	₩(431,148)	(12,244)	
Effective tax rate	59.31%	7.25%	

<sup>(\*1)</sup> The applicable tax rate for the six-month periods ended June 30, 2015 and 2014 is 24.2%, which is the Korea statutory corporate income tax rate where the Company is domiciled.

<sup>(\*)</sup> Includes the write-off recognized due to the difference between acquisition cost and fair value of an equity investment for Troika Resource Investment PEF. Reclassified income or loss from other comprehensive income (loss) before tax is \( \forall \)8,349 million.

<sup>(\*2)</sup> The effect in 2015 is primarily related to tax credit as a result of a reduction in the tax rate of Dana petroleum, a subsidiary of the Company, from 62% to 50% during the period.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

# 25. Expenses Classified by Nature

(a) Expenses classified by nature for the six-month period ended June 30, 2015 are as follows:

	Selling and administrative expenses	Cost of sales	Total
	In millions of Korean won		
Changes in inventories			
Merchandises	₩ —	(482,848)	(482,848)
Finished goods		21,492	21,492
Other inventories	_	3,471	3,471
Purchased inventories	_	556,669	556,669
Raw materials used	_	8,903	8,903
Salaries	56,943	57,697	114,640
Severance and retirement benefits	4,306	1,925	6,231
Employee benefits	10,590	5,539	16,129
Insurance	3,079	17,866	20,945
Depreciation	9,596	664,448	674,044
Amortization	3,533	97,200	100,733
Commissions and fees	14,570	31,227	45,797
Advertising	541	213	754
Education and training	2,925	9,705	12,630
Vehicle maintenance	1,161	251	1,412
Books and printing	534	15	549
Business development	204	44	248
Rent	5,998	27,119	33,117
Communications	831	426	1,257
Transport	_	49,447	49,447
Taxes and dues	1,708	43,289	44,997
Supplies	1,338	2,132	3,470
Utilities	775	29,807	30,582
Repairs	5,523	92,970	98,493
Research and development	654	1,617	2,271
Travel	1,431	558	1,989
Clothing expenses	6	61	67
Investigation and analysis	4	475	479
Association fee	558	12	570
Bad debt expense	4,188	_	4,188
Sales commission	53,880	388	54,268
Others	4,096	210,690	214,786
	₩188,972	1,452,808	1,641,780

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

# (b) Expenses classified by nature for the six-month period ended June 30, 2014 are as follows:

	Selling and administrative expenses	Cost of sales	Total
		lions of Korean	
Changes in inventories	****	nons of Horeum	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
Merchandises	₩ —	(1,006)	(1,006)
Finished goods		(33,751)	(33,751)
Other inventories	_	(49,765)	(49,765)
Purchased inventories	_	175,638	175,638
Raw materials used		120,794	120,794
Salaries	62,109	68,010	130,119
Severance and retirement benefits	2,165	543	2,708
Employee benefits	10,641	2,902	13,543
Insurance	2,463	49,313	51,776
Depreciation	3,906	716,561	720,467
Amortization	3,375	114,921	118,296
Commissions and fees	28,989	44,833	73,822
Advertising	856	296	1,152
Education and training	2,925	7,583	10,508
Vehicle maintenance	888	888	1,776
Books and printing	650	17	667
Business development	260	52	312
Rent	6,457	29,154	35,611
Communications	983	574	1,557
Transport	_	25,838	25,838
Taxes and dues	2,996	28,730	31,726
Supplies	2,264	2,066	4,330
Utilities	347	40,111	40,458
Repairs	4,804	118,954	123,758
Research and development	1,157	988	2,145
Travel	2,422	690	3,112
Clothing expenses	368	73	441
Investigation and analysis	4	127	131
Association fee	618	14	632
Sales commission	69,003	31,010	100,013
Others	6,260	126,940	133,200
	<del>W</del> 216,910	1,623,098	1,840,008

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## **26.** Categories of financial instruments

(a) Details of current financial assets by category as of June 30, 2015 and December 31, 2014 are as follows:

(i) As of June 30, 2015

		oans and ceivables	Hedging Financial assets	Total
		In millio	ons of Korea	n won
Cash and cash equivalents	₩	668,945	_	668,945
Derivative assets		_	8,328	8,328
Short-term financial instruments		13,369	_	13,369
Others		11,377		11,377
		693,691	8,328	702,019
Trade and other receivables		791,363		791,363
	₩1	,485,054	8,328	1,493,382

### (ii) As of December 31, 2014

		oans and ceivables	Hedging Financial assets	Total
	In millions of Korean wo			ı won
Cash and cash equivalents	₩	508,506	_	508,506
Derivative assets		_	1,801	1,801
Short-term financial instruments		2,436	_	2,436
Others		10,348		10,348
		521,290	1,801	523,091
Trade and other receivables		941,157		941,157
	₩1	,462,447	1,801	1,464,248

The fair values of the financial assets listed above measured in amortized costs do not significantly differ from their book values.

# (b) Details of non-current financial assets by category as of June 30, 2015 and December 31, 2014 are as follows:

## (i) As of June 30, 2015

	Loans and receivables	Available-for-sale financial instruments	Hedging financial assets	Total
		In millions of Kor	ean won	
Available-for-sale financial instruments	₩ —	663,792	_	663,792
Loans	599,951	_	_	599,951
Derivative assets		_	17,815	17,815
Others	5,706			5,706
	605,657	663,792	17,815	1,287,264
Trade and other receivables	98,435			98,435
	₩704,092	663,792	17,815	1,385,699

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## (ii) As of December 31, 2014

	Loans and receivables	Available-for-sale financial instruments	Hedging financial assets	Total
		In millions of Korean won		
Available-for-sale financial instruments	₩ —	566,895	_	566,895
Loans	555,252	_	_	555,252
Derivative assets	_	_	7,634	7,634
Others	7,008			7,008
	562,260	566,895	7,634	1,136,789
Trade and other receivables	93,838			93,838
	₩656,098	566,895	7,634	1,230,627

The fair values of the financial assets listed above measured in amortized costs do not significantly differ from their book values.

# (c) Details of current financial liabilities by category as of June 30, 2015 and December 31, 2014 are as follows:

## (i) As of June 30, 2015

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio		
Short-term borrowings	₩ 797,699	_	797,699
Bonds payable	1,503,666	_	1,503,666
Derivative liabilities		62,106	62,106
	2,301,365	62,106	2,363,471
Trade and other payables	931,208		931,208
	₩3,232,573	<u>62,106</u>	3,294,679

## (ii) As of December 31, 2014

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio	ns of Korean won	
Short-term borrowings	₩ 214,360	_	214,360
Bonds payable	1,043,434	_	1,043,434
Derivative liabilities		3,103	3,103
	1,257,794	3,103	1,260,897
Trade and other payables	1,417,941		1,417,941
	₩2,675,735	3,103	2,678,838

The fair values of the financial liabilities listed above measured in amortized costs do not significantly differ from their book values.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

# (d) Details of non-current financial liabilities by category as of June 30, 2015 and December 31, 2014 are as follows:

# (i) As of June 30, 2015

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio		
Long-term borrowings	<b>₩</b> 2,292,841	_	2,292,841
Bonds payable	9,433,246	_	9,433,246
Derivative liabilities		100,006	100,006
	11,726,087	100,006	11,826,093
Trade and other payables	516,969		516,969
	₩12,243,056	100,006	12,343,062
(ii) As of December 31, 2014	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio	ons of Korean won	
Long-term borrowings	₩ 1,894,403	_	1,894,403
Bonds payable	8,864,202	_	8,864,202
Derivative liabilities	_	145,378	145,378
Others	907		907
	10,759,512	145,378	10,904,890
Trade and other payables	452,706		452,706

The fair values of the financial liabilities listed above measured in amortized costs do not significantly differ from their book values.

₩11,212,218

145,378

11,357,596

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

# (e) Net gains or losses by financial instruments for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014
	In millions of	Korean won
Cash and cash equivalents		
Interest income	₩ 1,558	362
Financial assets at fair value through profit or loss (derivatives):		
Gain on valuation, net	_	1,878
Loss on transaction, net	_	(85)
Available-for-sale financial investments:		
Dividend income	3,752	129
Impairment loss	(25,982)	_
Loss on transaction	_	2,885
Loans and receivables:		
Interest income, net	14,588	6,674
Other financial assets with amortized cost:		
Other financial income (interest income)	_	9,584
Other financial liabilities with amortized cost:		
Interest expense, net	(177,506)	(192,970)
Other financial cost	(20,914)	(36,657)
Loss on foreign currency translation, net	(80,021)	(15,040)
Gain on foreign currency transactions, net	1,642	5,805
Net financial losses	₩(282,883)	(217,435)
Available-for-sale financial investments:		
Other comprehensive income recognized for the current period, net of tax	₩ 86,018	217,371
Hedge financial liabilities	-,-	,
Other comprehensive income (loss) recognized for the current period, net of tax	(4,349)	5,993
Total other comprehensive income	₩ 81,669	223,364

### 27. Risk Management

### (a) Capital management

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and capital ratios in order to support its business and maximize the owners' value. The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain the sound capital structure, the Group may adjust the dividend payment to the owner, reduce issued capital, or issue new shares. No changes were made in the objectives, policies or processes for managing capital for the six-month period ended June 30, 2015.

The Group's debt-to-equity ratio as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions of Korean won	
Total borrowings and debt instruments	₩14,027,452	12,016,399
Cash and cash equivalents	(668,945)	(508,506)
Net borrowings and debt securities	13,358,507	11,507,893
Total equity	8,243,770	8,369,669
Net borrowings and debt securities-to-equity ratio	162.04%	137.50%

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

### (b) Financial risk management

The Group is exposed to various risks related to its financial instruments such as market risk (currency risk, interest rate risk and price risk) and credit risk.

#### (i) Risk management structure

The board of directors is responsible for implementing and monitoring the Group's risk management structure and the management regularly updates the policies for each risk and confirms the validity of the policies. The purpose of the risk management policies is to identify the risks that could potentially affect the Group's financial results and reduce, to an acceptable level, avoid or eliminate those risks. The policies are reviewed regularly to reflect the current market conditions and the Group's activities. The Group makes constant efforts to improve the policies by monitoring on real time basis and with support from the outside experts. The audit committee oversees the Group's compliance to the risk management policies and procedures and reviews the efficiency of the structure.

#### (ii) 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, investment securities, derivatives and financial guarantee contracts.

Credit risk also arises from transactions with financial institutions, and such transactions include transactions of cash and cash equivalents, various deposits, and financial instruments such as derivative contracts. The Group manages its exposure to this credit risk by only entering into transactions with banks that have high international credit ratings. The Group implements a credit risk management policy under which the Group only transacts business with counterparties that have a certain level of credit rate evaluated based on financial condition, historical experience, and other factors.

Book values of the financial assets represent the maximum amounts exposed to the credit risk. Details of the Group's level of maximum exposure to credit risk as of June 30, 2015 and December 31, 2014 are as follows:

	Jun	e 30, 2015	December 31, 2014
		In millions	of Korean won
Cash and cash equivalents	₩	668,945	508,506
Derivatives assets		26,143	9,435
Available-for-sale financial investments		663,792	566,895
Loans and receivables	1	,520,201	1,610,039
Financial guarantee contracts		_	68,215

Details of maturities for loans and receivables and their impaired amounts as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015		Decembe	r 31, 2014
	Balance Impairment		Balance	Impairment
	In millions of Korean won			
Not past due	₩1,969,370	(491,564)	1,915,383	(469,215)
0 ~ 30 days	9,555	_	115,417	_
31 ~ 60 days	15,255	_	13,703	_
More than 61 days	19,625	(2,040)	36,858	(2,107)
	₩2,013,805	<u>(493,604)</u>	2,081,361	<u>(471,322)</u>

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

Details of changes in allowance for impairment of loans and receivables for the six-month period ended June 30, 2015 and the year ended December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	of Korean won
Beginning balance	₩471,322	394,447
Impairment	4,188	70,055
Write-off	(16)	(24,411)
Others(*)	18,110	31,231
Ending balance	₩493,604	471,322

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations and others.

Agings of past due but not impaired financial assets as of June 30, 2015 and December 31, 2014 are as follows:

### (1) As of June 30, 2015

	Book value	Less than 6 months	6~12 Months	1~2 years	2~5 years	More than 5 years
		In m	illions of K	orean won		
Loans and receivables	₩42,395	34,095	4,634	3,073	593	_
② As of December 31, 2014						
	Book value	Less than 6 months	6~12 Months	1~2 years	2~5 years	More than 5 years
		In m	illions of K	orean won		
Loans and receivables	₩163,871	128,868	20,107	14,896	_	

## (c) Market risk

## (i) Crude oil price risk

Crude oil price risk is the risk that the profit or cash flows will fluctuate due to changes in the international market prices of crude oil. The Group utilizes derivative instrument contracts for expected price volatility in the international market to hedge the crude oil prices risk and to maintain the level of profitability. With all other variables held constant, the Group's profit before tax for the six-month periods ended June 30, 2015 and 2014 from changes in crude oil prices are as follows:

	June 3	0, 2015	June 3	0, 2014
	Increase by 10%	Decrease by 10%	Increase by 10%	Decrease by 10%
		In millions of Korean won		
Increase (decrease) of profit before tax	₩107,956	(107,956)	164,280	(164,280)

### (ii) Interest rate risk

The Group is exposed to interest rate risk due to its borrowings with floating interest rates. Assuming a 100 basis point increase or decrease in interest rate as of June 30, 2015, the Group's total equity and its profit or loss will also increase or decrease.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

Except for the effect of derivative transactions, this analysis considers the Group's total exposed risks associated with the fluctuation in interest rate. This analysis assumes that all other variables are held constant and the same method is applied with the method used in the prior periods. The details of increase or decrease in the total equity and profit or loss for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 3	0, 2015	June 3	0, 2014
	Increase by 1% Decrease by 1%		Increase by 1%	Decrease by 1%
	In millions of Korean won			
Increase (decrease) of profit before tax	₩(26,231)	26,231	(15,739)	15,739

## (iii) Foreign currency risk

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The Group is exposed to currency risk from the sales, purchases and borrowings not in United States dollar. The Group reduces currency risk from fluctuations in foreign exchange rates by carrying out interest swap and currency swap transactions.

Without considering the effect of the derivatives aforementioned, the Group's exposures to foreign currency risk as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015			December 31, 2014		
	Currency unit	Foreign currencies	Equivalent Korean won	Foreign currencies	Equivalent Korean won	
		In thousands	of foreign currence	eies and millions	of Korean won	
Financial assets denominated in foreign						
currencies	KRW	332,994	₩ 332,994	438,015	₩ 438,015	
Financial liabilities denominated in foreign	KRW	319,927	319,927	120,254	120,254	
currencies	EUR	297,000	374,371	297,001	396,947	
	SGD	100,458	83,879	100,537	83,622	
	HKD	3,807,000	552,015	3,497,000	495,525	
	CHF	865,000	1,050,274	865,000	961,387	
	AUD	405,000	349,458	55,000	49,450	
	GBP	_		16	27	
			₩2,729,924		₩2,107,212	

The exchange rates applied for the six-month periods ended June 30, 2015 and 2014 and as of June 30, 2015 and December 31, 2014 are as follows:

	Average exc	Average exchange rates		change rates	
	June 30, 2015	June 30, 2014	June 30, 2015	December 31, 2014	
		In US dollar per or	ne foreign currency		
KRW	0.0009	0.0009	0.0008	0.0009	
EUR	1.1157	1.3708	1.1213	1.2159	
SGD	0.7407	0.7930	0.7427	0.7566	
HKD	0.1289	0.1289	0.1289	0.1289	
CHF	1.0560	1.1223	1.0801	1.0111	
JPY	_	0.0097	_	_	
AUD	0.7819	0.9143	0.7676	0.8179	
GBP	1.5232	1.6686	_	1.5561	

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

The Company and its subsidiaries use various functional currencies depending on their primary economic environment in which the entities operate. The functional currencies of the main subsidiaries, Harvest Operations Corp., Dana Petroleum Limited, KNOC Kaz B.V. are CAD, GBP and KZT, respectively. A sensitivity analysis below indicates the effect on the Group's profit before tax from the fluctuations in each function currency exchange rate. For the six-month periods ended June 30, 2015 and 2014, the effect of a 5% increase or decrease in each functional currency exchange rate on profit before tax assuming all other variables held constant is as follows:

		June 30, 2015		June 3	0, 2014
		Increase by 5%	Decrease by 5%	Increase by 5%	Decrease by 5%
'			In millions of	f Korean won	
Increase (decrease) of profit before tax	KRW	653	(653)	18,822	(18,822)
	HKD	(27,601)	27,601	(22,883)	22,883
	CHF	(52,514)	52,514	(49,237)	49,237
	EUR	(19,492)	19,492	(33,878)	33,878
	Others	(16,682)	16,682	(9,821)	9,821

### (d) Liquidity risk

The details of contractual maturities of financial liabilities as of June 30, 2015 are as follows:

	Book value	Contractual cash flows(*1)	Less than 1 year	1 ~ 2 years	2 ~ 5 years	More than 5 years(*2)
·		Iı	n millions of Ko	orean won		
Short-term borrowings	₩ 797,699	800,994	800,994	_	_	
Bonds payable	10,936,912	12,195,008	1,830,721	3,046,381	4,875,251	2,442,655
Long-term borrowings	2,292,841	2,611,331	61,724	1,143,855	876,060	529,692
Trade and other payables	1,448,177	1,448,177	931,208	15,074	244,221	257,674
Derivatives liabilities	162,112	162,112	62,106	5,743	53,289	40,974
	₩15,637,741	17,217,622	3,686,753	4,211,053	6,048,821	3,270,995

<sup>(\*1)</sup> Contractual cash flows include the estimated interest payments but exclude the effects of offsetting contracts.

The Group had a working capital (current assets minus current liabilities) deficit of  $\mathbb{W}1,223,696$  million as of June 30, 2015. The Group's management currently anticipates that the net proceeds from the sale of non-core assets, expected future capital contributions from the Government and the cash flows that the Group generates from its operations, together with its existing cash and cash equivalents, credit facility and other credit sources, will be sufficient to meet its currently anticipated needs for working capital, capital expenditures and business expansion throughout the foreseeable future.

#### (e) Other price risk

Other price risk is the risk that the fair value or cash flows of financial instruments will fluctuate because of changes in market prices other than interest rate risk and foreign currency risk. The Group's marketable

<sup>(\*2)</sup> Loans from Special Accounting for Energy and Resources ("SAER") included in borrowings have no specific maturity as they were borrowed under the condition that the Group is not obligated to make repayment of the principal and interest until the exploration is proven to be successful.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

available-for-sale equity securities are exposed to market price risk arising from the fluctuation in the price of the securities. However, the Group's management believes that the effect of the fluctuation in the price of the securities on the financial statements is not significant.

#### 28. Related Parties Disclosures

(a) The Group's major related parties as of June 30, 2015 are as follows:

Type	Related parties	_
Associates	Kernhem B.V.	
	Oilhub Korea Yeosu Co., Ltd.	
	ADA Oil LLP	
	Parallel Petroleum LLC	
Joint ventures	KNOC Inam Ltd	
	KNOC Kamchatka Petroleum Ltd.	
	KC Karpovsky B.V.	
	KNOC Bazian Ltd.	
	Dolphin Property Ltd.	
	KNOC Nigerian West Oil Company Ltd.	
	KNOC Nigerian East Oil Company Ltd.	
	KNOC Aral Ltd.	
	KNOC Kamchatka Co. Ltd.	
	KC Kazakh B.V.	
	Offshore International Group, Inc.	
	KNOC Ferghana Ltd.	
	KNOC Ferghana2 Ltd.	
	KADOC Ltd.	
	Korea Oil Terminal Co. Ltd.	
	Deep Basin Partnership	
	HKMS Partnership	

- (b) The Group's related parties' transactions mostly consist of loans to joint ventures and associates for their business operation purpose and the Group recognizes related interests and bad debt expenses. The Group determines the interest rate of the loans with the consideration of the country risk premium of the associates and joint ventures and other risk related to the associates and joint ventures.
- (c) Significant transactions with related parties for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015			June 30, 2014	
	_	Sales I others	Purchases and others	Sales and others	Purchases and others
			In millions of	Korean won	
Joint ventures	₩	7,239	324	739	85,957
Associates		3,488	_	2,782	
	₩	10,727	<u>324</u>	<u>3,521</u>	<u>85,957</u>

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

(d) The outstanding receivables, except for the loans, arising from the transactions with related parties as of June 30, 2015 and December 31, 2014 are as follows:

	June 30	, 2015	December	31, 2014
	Receivables	Payables	Receivables	Payables
	I			
Joint ventures	₩56,500	11,529	45,421	_
Associates	7,984	367	7,482	_
	₩64,484	11,896	52,903	_

(e) The loans to related parties as of June 30, 2015 and December 31, 2014 are as follows:

	June 30, 2015	December 31, 2014
	In millions	of Korean won
Joint ventures	₩328,288	297,711
Associates	65,846	58,995
	₩394,134	356,706

<sup>(</sup>f) As of June 30, 2015, there are no guarantees provided to related parties.

(g) The compensation for the key management personnel of the Company for the six-month periods ended June 30, 2015 and 2014 are as follows:

	June 30, 2015	June 30, 2014	
	In millions of Korean wor		
Salaries	₩292	269	
Severance and retirement benefits	24		
	₩316	<u>291</u>	

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

## 29. Contingencies and Commitments

(a) Details of the Group's significant litigations as of June 30, 2015 are as follows:

Plaintiff	Defendant	Description	Amount	Process			
In millions of Korean won and thousands of foreign currencies							
KNOC	Nigerian government and etc.	Claiming the validity of the exploration right in OPL 321 and 323(*1)	_	In third trial			
AAA, DR.Owolabi	KNOC	Claiming compensation for cooperation in the process of acquiring Nigerian mining rights(*2)	USD 100,000	In first trial			
Trinidad	Harvest Operations Corp.	Claiming compensation for monetary damages from termination of rig usage(*3)	CAD 15,649	In first trial			
Hanhwa Corp.	KNOC	Claiming refunds of the premium paid to the Group acquire interests in Yemen 4 oil field(*4)	KRW 5,988	In second trial			
Hyundai Heavy Industries	KNOC	Claiming refunds of the acquisition costs and premium paid to the Group acquire interests in Yemen 4 oil field(*5)	KRW 35,655	Decision of first trial made			

<sup>(\*1)</sup> In January 2009, the Group was notified by the President of the Federal Republic of Nigeria about the voidance of the allocation of OPL 321 and 323. The Nigerian Federal High Court granted a judgment in favor of the Group in August 2009. This judgment was appealed by the Nigerian Government and in April 2012, the appeal was allowed by the Nigerian Court of Appeals setting aside the Nigerian Federal High Court's judgment. The Group filed an appeal at the Supreme Court of Nigeria against the judgment of the Nigerian Court of Appeals. The book value of the related assets is \(\forall 157,152\) million. The Group did not recognize a provision nor any impairment for the related assets as the Group believes that the favorable outcome of the litigation is more likely than not.

Except as noted above, the Group does not believe it has a present obligation and has not recognized any provisions for these lawsuits.

<sup>(\*2)</sup> This litigation was instituted at the High Court of Lagos State alledging that the Group entered into a secretive remunerative agreement and paying the brokerage and other fees due to the plaintiffs for sponsoring its acquisitions of OPL 321 and OPL 323. The plaintiff claimed general damages for the plaintiff's loss of the business associated with the defendant's acquisition of the right to OPL 321 and OPL 323. The Group did not recognize a provision as the Group believes that it is more likely than not that its defenses against the suit will be successful.

<sup>(\*3)</sup> The managment of Harvest Operations Corp. has estimated the settlement costs to be CAD 3.5 million and recognized a provision for the estimated settlement.

<sup>(\*4)</sup> The Group paid all claim amounts in February, 2015 based on the loss of the first trial and a second trial is in the process by appealing to the decision as of June 30, 2015.

<sup>(\*5)</sup> The Group recognizes account payable amounted to \$24,753 million based on the court decision made in July, 2015.

## Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

(b) As of June 30, 2015 the Group has received guarantees provided by non-related parties for the Group's obligations and indebtedness as follows:

Provider	Description	Reporting Currency Amounts	Contractual Currency Unit	Contractual Currency Amounts	Description of guarantee
	In millions	s of Korean wo	on and thousa	nds of foreign	currencies
BBVA Colombia	Performance guarantee	₩ 13,132	USD	11,683	Fulfillment and correct execution of the contractual obligations for Colombia CPO 2 and CPE 7
Bank of Tokyo Mitsubishi UFJ	Performance guarantee	3,087	USD	2,746	Bank guarantee on exploration operation expenses for Malaysia 2B
Sumitomo Bank	Guarantee for payment in foreign currency	224,820	USD	200,000	Others
Sumitomo Bank	Guarantee for payment in foreign currency	112,410	USD	100,000	Others

(c) A summary of the Group's significant contractual obligations and estimated commitments as of June 30, 2015 is as follows:

	Contractual cash flows	Less than 1 year	1 ~ 2 years	2 ~ 5 years	More than 5 years
		In millio	ons of Korear	ı won	
Purchase commitments(*1)	₩ 154,753	20,816	50,903	65,842	17,192
Decommissioning and environment liabilities	2,482,393	61,091	90,936	441,275	1,889,091
Others(*2)	651,544	227,267	175,633	108,886	139,758
	₩3,288,690	309,174	317,472	616,003	2,046,041

<sup>(\*1)</sup> Includes drilling commitments and others.

<sup>(\*2)</sup> Includes SOC commitments, operating leases and others.

<sup>(</sup>d) The Company, in relation to the acquisition of Dana Petroleum Limited's equity interest, has provided a guarantee for any potential environmental and bodily damages during the exploration and production activities by Dana Petroleum Norway AS to the Norwegian government.

<sup>(</sup>e) In 2007 and 2008, the Company and Korean Consortium entered into an agreement (Production Sharing Contract) for the exploration and production of the oil fields, located in Iraq, with the Kurdish regional government (KRG), in accordance with the local Kurdish oil exploration laws. In 2008, the Iraqi federal government announced that such agreement in the region without obtaining proper approval from the federal government would be invalid to the Company and other participating companies in the region. The Company was advised by legal consultants in the UK and in Iraq that there is no legal basis on the alleged nullity of the agreement by the Iraqi government.

<sup>(</sup>f) In 2008, the Company entered into an exclusive agreement with the Kurdish regional government ("KRG") to obtain rights on five exploratory areas. In consideration of obtaining these rights, the Company committed to pay USD 1.9 billion of construction services for the government's Social Overhead Capital (SOC).

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

However, the agreement was amended twice until 2012. The Company's rights on three exploratory areas, including Qush Tappa, were terminated and the Company's USD 1.9 billion commitment was reduced to USD 825 million. In addition, the quantity of return-guaranteed crude oil was reduced.

As of June 30, 2015, the Company recorded mining rights of \(\foathbb{W}\)1,301,069 million. In addition, the Company recorded a current and non-current provision of \(\foathbb{W}\)178,002 million and \(\foathbb{W}\)73,368 million, respectively, which represents that the Company's estimated obligation of expected payments for KRG's SOC construction.

- (g) The Company is in the process of arranging the liquidation of KNOC Yemen Ltd. with YICOM, an acquirer. According to the arrangement, the Company may have a possibility of settlement, of which the amount cannot be estimated.
- (h) As of June 30, 2015, other significant commitments and contingencies of the Company's subsidiaries are as follows:
  - (i) Harvest Operations Corp. and its subsidiaries

In October 2010, Harvest issued senior notes amount of USD 500 million (maturing: October 1, 2017). The senior notes are unconditionally guaranteed by all of Harvest's wholly-owned subsidiaries as the incurrence of additional secured indebtedness and dividend payments to the stockholder may be restricted in violation of the covenants associated with the notes.

The Company provided a payment guarantee on senior notes issued by Harvest Operations Corps., its subsidiary, on May 2013 for the principal amount of USD 630 million and their corresponding interest. The payment guarantee is effective until the maturity date (May 14, 2018) of the bonds.

On April 22, 2015, Harvest amended its credit facility and replaced it with a CAD 940 million syndicated revolving credit facility maturing on April, 30, 2017. On July 15, 2015, Harvest obtained an additional CAD 60 million commitment under its syndicated revolving credit facility, bringing the total available under the credit facility to CAD 1.0 billion. The amended credit facility is guaranteed by the Company. According to a new covenant, the total Debt to Capitalization ratio of 70% or less is required to be maintained

# (ii) Dana Petroleum and plc and its subsidiaries

Dana entered into credit facilities agreements in a form of syndicated loan for up to USD 1.0 billion. The Company has drawn borrowings amounting to USD 605 million as of June 30, 2015 and its stand by L/C open amount is approximately USD 68 million. In relation to the credit facilities, certain financial ratios and cash flows are required to be in compliance with debt covenants and its oil and certain gas properties have been pledged as collateral.

The Company agreed USD 300 million subordinated loan facility with Dana Petroleum Limited, a subsidiary of the Company.

The Company provided a performance guarantee of USD 116.9 million to Dana Petroleum Limited for the expenses that will incur for restoration of the sites, decommissioning, dismantling and removal of the facilities and structures.

# Notes to the Unaudited Condensed Consolidated Interim Financial Statements — (Continued) June 30, 2015

(i) As of June 30, 2015, the Group's significant commitments with the financial institutions are as follows:

Detail of contracts	Financial institutions	Reporting currency	Contractual currency	Credit limit	Executed amount
		In millions of K	orean won and	in thousands o	f US dollar
Trade finance	Deutsche Bank	₩ 494,604	USD	440,000	272,453
	DBS(*)	337,230	USD	300,000	63,444
	ING(*)	112,410	USD	100,000	_
	Hongkong and Shanghai Banking				
	Corporation(*)	112,410	USD	100,000	_
	Korea Development Bank	281,025	USD	250,000	_
	Bank of America(*)	179,856	USD	160,000	_
	Royal Bank of Scotland(*)	168,615	USD	150,000	98,458
		₩1,686,150		1,500,000	434,355
Financial loans	BNP Paribas	₩ 562,050	USD	500,000	
	DBS(*)	337,230	USD	300,000	25,000
	Mizuho Bank	224,820	USD	200,000	_
	Bank of America(*)	179,856	USD	160,000	_
	ING(*)	112,410	USD	100,000	95,000
	Royal Bank of Scotland	168,615	USD	150,000	_
	Hongkong and Shanghai Banking				
	Corporation(*)	112,410	USD	100,000	_
	Credit Agricole	112,410	USD	100,000	_
	Bank of Tokyo-Mitsubishi UFJ	56,205	USD	50,000	
		₩1,866,006		1,660,000	120,000

<sup>(\*)</sup> A portion of or all of lines of credit for trade finance and financial loans have been integrated and the integrated line of credit is \(\formall 911\) billion (USD810 million).

# **Independent Auditors' Report**

The Board of Directors and Shareholder Korea National Oil Corporation:

We have audited the accompanying consolidated statements of financial position of Korea National Oil Corporation and its subsidiaries (the "Group") as at December 31, 2014 and 2013, the consolidated statements of comprehensive loss, changes in equity and cash flows for the years then ended, and notes, comprising a summary of significant accounting policies and other explanatory information.

# Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with Korean International Financial Reporting Standards, and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

# **Auditors' Responsibility**

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with Korean Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on our judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

# **Opinion**

In our opinion, the consolidated financial statements present fairly, in all material respects, the consolidated financial position of the Group as of December 31, 2014 and 2013 and its consolidated financial performance and its consolidated cash flows for the years then ended in accordance with Korean International Financial Reporting Standards.

# **Other Matters**

The accompanying consolidated statement of financial position of the Group as of December 31, 2013, and the related consolidated statements of loss and other comprehensive loss, changes in equity and cash flows for the year then ended, prior to the retrospective adjustments on discontinued operations as described in note 7, were audited by us in accordance with the previous auditing standards generally accepted in Republic of Korea. We did not audit the financial statements of four subsidiaries and one 50% owned joint venture. The financial statements of the four subsidiaries constitute 48.0% of the Group's consolidated total assets (before the elimination of the intra-group balances) as of December 31, 2013 and 82.1% of the Group's consolidated revenue (before the elimination of revenue and cost resulting from intra-group transactions and the retrospective adjustment on discontinued operations) for the year ended December 31, 2013. The Group's investment in the

joint venture as of December 31, 2013 was \(\formalfont{W}672,783\) million and its equity in profit of the joint venture was \(\formalfont{W}9,800\) million for the year ended December 31, 2013. Other auditors audited those financial statements and our report, insofar as it relates to the subsidiaries and joint venture, was based solely on the reports of other auditors.

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.

KPMG Samjong Accounting Corp.

KPMG Saming Accounting Corp.

Seoul, Korea

February 27, 2015

This report is effective as of February 27, 2015, the audit report date. Certain subsequent events or circumstances, which may occur between the audit report date and the time of reading this report, could have a material impact on the accompanying consolidated financial statements and notes thereto. Accordingly, the readers of the audit report should understand that the above audit report has not been updated to reflect the impact of such subsequent events or circumstances, if any.

# Consolidated Statements of Financial Position As of December 31, 2014 and 2013

	Note	2014	2013
		In thousands of	Korean won
Assets			
Cash and cash equivalents Current financial assets Trade and other receivables Inventories Current income tax assets Current non-financial assets Current assets Non-current financial assets Long-term trade and other receivables Property, plant and equipment Goodwill	8,9 10,12,40 11,40 15 38 16,17 10,12,13,40 11,40 19 20	₩ 508,505,823 14,585,590 941,156,630 151,679,512 70,919,103 257,292,034 1,944,138,692 1,136,788,538 93,838,391 13,821,982,615 857,048,504	966,031,817 120,451,718 1,021,629,733 187,958,393 61,880,362 494,625,247 2,852,577,270 1,218,428,690 108,765,400 14,786,486,244 1,406,615,636
Intangible assets other than goodwill	21 18 38 16	3,850,828,416 859,236,636 903,175,901 3,424,305,829	3,931,248,659 924,765,106 354,969,109 3,216,683,715
Non-current assets		24,947,204,830	25,947,962,559
Total assets		₩26,891,343,522	28,800,539,829
Liabilities			
Trade and other payables  Current financial liabilities  Current income tax liabilities  Current non-financial liabilities  Current provisions	22,40 23,24,40 38 17,28 27	₩ 1,417,940,562 1,260,897,165 125,838,115 133,328,054 258,469,204	1,473,284,763 2,856,551,429 10,095,502 124,763,554 275,395,802
Current liabilities		3,196,473,100	4,740,091,050
Long-term trade and other payables  Non-current financial liabilities  Defined benefit liability  Deferred tax liabilities  Non-current provisions	22,40 23,24,40 26 38 27	452,705,928 10,904,889,881 14,031,961 1,430,501,146 2,523,072,751	255,315,265 9,125,342,439 6,751,951 1,836,393,222 2,552,763,693
Non-current liabilities		15,325,201,667	13,776,566,570
Total liabilities		18,521,674,767	18,516,657,620
Equity Issued capital	29 30,31 32	10,091,919,780 (2,177,312,124) (357,504,008) 7,557,103,648	
Non-controlling interests		812,565,107	821,199,849
Total equity		8,369,668,755	10,283,882,209
Total equity and liabilities		₩26,891,343,522	28,800,539,829

See accompanying notes to the consolidated financial statements.

# Consolidated Statements of Comprehensive Loss For the years ended December 31, 2014 and 2013

•	Note	2014	2013 (Restated)
Continuing Onewations		In thousands of	Korean won
Continuing Operations Revenue	6,33	₩ 4,358,117,749	5,265,482,026
Cost of sales	39	3,439,873,292	3,579,210,267
Gross profit		918,244,457	1,686,271,759
Selling and administrative expenses	39	445,378,189	513,739,044
Operating profit		472,866,268	1,172,532,715
Other non-operating income	34	139,468,540	38,379,743
Other non-operating expenses	34	(266,860,119)	(144,866,175)
Other loss, net	35 36,40	(1,719,940,535) 79,958,384	(678,594,830) 154,767,401
Finance costs	37,40	(621,038,153)	(626,002,578)
Gain (loss) on investments in associates and joint ventures, net	18	(41,575,496)	999,369
Loss before income tax		(1,957,121,111)	(82,784,355)
Income tax benefit	38	(684,335,163)	(41,047,175)
Loss from continuing operations		(1,272,785,948)	(41,737,180)
Discontinued operations	7		
Loss from discontinued operations, net of tax		(338,346,504)	(674,024,520)
Loss for the year		₩(1,611,132,452)	(715,761,700)
Other comprehensive income (loss), net of tax			
Items that will never be reclassified to profit or loss	26	₩ (18.343,252)	24 220 000
Actuarial gains (losses) on defined benefit plans	26	₩ (18,343,252) (3,907)	24,339,900 457
Items that are or may be reclassified to profit or loss		(3,507)	137
Net change in the unrealized fair value of available-for-sale			
financial assets, net of tax	40	(152,517,668)	21,052,313
investees	18	(5,478,246)	1,407,625
Net change in the unrealized fair value of derivatives using cash			
flow hedge accounting, net of tax	40	20,170,210	41,372,402
Foreign currency translation differences		(146,772,486)	(257,893,300)
Other comprehensive loss for the year, net of tax		(302,945,349)	(169,720,603)
Total comprehensive loss for the year		$\underbrace{+(1,914,077,801)}_{}$	(885,482,303)
Income (loss) attributable to:		W/(1 (02 522 025)	(720.061.072)
Owners of the Company			(728,861,072) 13,099,372
Loss for the year		₩(1,611,132,452)	(715,761,700)
		**(1,011,132,132)	(713,701,700)
Total comprehensive income (loss) attributable to:  Owners of the Company		₩(1,923,933,773)	(893,356,508)
Non-controlling interests		9,855,972	7,874,205
Total comprehensive loss for the year		$\overline{\mathbf{W}}(1,914,077,801)$	(885,482,303)

See accompanying notes to the consolidated financial statements.

Consolidated Statements of Changes in Equity For the years ended December 31, 2014 and 2013

	Share capital	Retained earnings (accumulated deficit)	Other components of equity	Subtotal	Non- controlling interests	Total equity
Balance at January 1, 2013	₩ 9,736,914,780	201,543,314	In thousands of Korean won 134,395,373 10,072,853	Korean won 10,072,853,467	661,873,082	10,734,726,549
		(728,861,072)		(728,861,072) 13,099,372	13,099,372	(715,761,700)
profit or loss  Defined benefit plan actuarial losses, net of tax		24,339,900		24,339,900		24,339,900
Items that are or may be reclassified subsequently to		Ĉ.		Ĉ.		Ĉ.
Net change in the unrealized fair value of available- for-sale financial assets net of tax			21 052 313	21 052 313		21 052 313
Equity adjustments arising from investments in			71,007,010	21,077,017		71,07,710
equity-method investees			1,407,625	1,407,625		1,407,625
using cash flow hedge accounting, net of tax	1		41,372,402	41,372,402		41,372,402
Exchange differences on translation of foreign operations	I	1	(252,668,132)	(252,668,132)	(5,225,168)	(257,893,300)
Total comprehensive income (loss) for the year		(704,520,715)	(188,835,792)	(893,356,507)	7,874,204	(885,482,303)
Transactions with owners of the Company, recognized directly in equity  Issuance of share capital	293 578 000			293 578 000		293 578 000
Dividends		(10,392,600)		(10,392,600)	_	(42,364,056)
Changes in ownership interests in subsidiaries					183,424,019	183,424,019
Total transactions with owners of the Company	293,578,000	(10,392,600)		283,185,400	151,452,563	434,637,963
Balance at December 31, 2013	₩10,030,492,780	(513,370,001)	(54,440,419)	9,462,682,360	821,199,849	10,283,882,209

See accompanying notes to the consolidated financial statements.

# Consolidated Statements of Changes in Equity — (Continued) For the years ended December 31, 2014 and 2013

	Share capital	earnings (accumulated deficit)	Other components of equity	Subtotal	Non- controlling interests	Total equity
Balance at January 1, 2014	₩10,030,492,780	(513,370,001)	In thousands of Korean won (54,440,419) 9,462,68	Xorean won 9,462,682,360	821,199,849	10,283,882,209
Loss for the year	l	(1,602,523,025)		(1,602,523,025)		(8,609,427) (1,611,132,452)
profit or loss  Defined benefit plan actuarial  losses, net of tax		(18,343,252) (3,907)		(18,343,252) (3,907)		(18,343,252)
60	l	l	(152,517,668)	(152,517,668)		(152,517,668)
equity adjustments ansing from investments in equity-method investees			(5,478,246)	(5,478,246)		(5,478,246)
derivatives using cash flow hedge accounting, net of tax	l	l	20,170,210	20,170,210		20,170,210
operations			(165,237,885)	(165,237,885)	18,465,399	(146,772,486)
Total comprehensive income (loss) for the year		(1,620,870,184)	(303,063,589)	$\overline{(1,923,933,773)}$	9,855,972	(1,914,077,801)
Transactions with owners of the Company, recognized directly in equity Issuance of share capital Dividends Changes in ownership interests in subsidiaries	61,427,000			61,427,000 (43,071,939)		61,427,000 (70,819,822) 9,257,169
Total transactions with owners of the Company	61,427,000	(43,071,939)		18,355,061	(18,490,714)	(135,653)
Balance at December 31, 2014	<del>W</del> 10,091,919,780	(2,177,312,124)	(357,504,008)	7,557,103,648	812,565,107	8,369,668,755

See accompanying notes to the consolidated financial statements.

# Consolidated Statements of Cash Flows For the years ended December 31, 2014 and 2013

	2014	2013
	In thousands of	Korean won
sh flows from operating activities		
Loss for the year	₩(1,611,132,452)	(715,761,700)
Adjustment for:		
Net pension plan costs	11,694,258	12,663,052
Depreciation of property, plant and equipment	1,492,743,482	1,548,058,086
Amortization of intangible assets other than goodwill	262,608,618	157,729,831
Bad debt expense	(569,684)	_
Gains on exemption of debts	(96,533,646)	(18,835,861)
Accrual for other provisions	167,601,802	96,181,135
Other bad debt expense	69,485,634	28,322,504
Gains on disposal of property, plant and equipment	(377,791,284)	(32,028,564)
Gains on disposal of intangible assets other than goodwill	(1,703,639)	(8,419)
Gains on valuation of derivatives (other profit or loss)	(774,415)	(8,851,387)
Gains on foreign currency translation (other profit or loss)	(7,899,235)	(5,027,805
Losses on disposal of property, plant and equipment	14,375,586	3,085,780
Losses on disposal of intangible assets other than goodwill	41,987,066	
Losses on valuation of derivatives (other profit or loss)	774,410	6,444,846
Impairment on property, plant and equipment	946,552,254	665,070,919
impairment and write-off of intangible assets other than goodwill	825,979,042	549,937,542
Impairment on goodwill	457,038,443	_
Losses on foreign currency translation (other profit or loss)	29,551,178	5,425,735
Income tax benefit	(596,451,641)	(67,403,834
Interest income	(34,635,404)	(53,499,524
Dividends income	(4,807,355)	(43,215,577
Gains on disposal of available-for-sale financial investments	(2,893,891)	(21,057,599
Gains on valuation of derivatives (finance income)	_	(5,303,095
Gain on redemption of financial liabilities	_	(3,885,444
Gains on foreign currency translation (finance income)	(11,534,554)	(41,262,651)
Interest expense	394,660,817	447,290,897
Losses on valuation of derivatives (finance cost)	2,020,344	1,493,679
Losses on foreign currency translation (finance cost)	148,902,648	87,106,004
Other finance costs (Interest expense)	52,288,703	64,215,575
Share of loss (profit) in associates and joint ventures, net	42,586,212	(999,369
Losses on disposal of investments in associates and joint ventures	2,354,683	
Gains on disposal of investments in associates and joint ventures	(3,365,399)	_
Loss on disposal of discontinued operation	54,024,188	_
•	3,878,269,221	3,371,646,456
hanges in:		
Inventories	37,843,325	1,232,821
Trade and other receivables	(24,877,240)	(63,249,722
Other receivables relating to operating activities	156,645,636	(272,447,779
Trade and other payables	158,988,915	(172,820,212)
Other payables relating to operating activities	(142,258,780)	145,623,432
Defined benefit liability	(39,773,830)	(8,036,794)
Provisions	(271,721,154)	(86,783,892)
Cash generated from operating activities	2,141,983,641	2,199,402,610
Dividend received	5,333,965	43,215,577
nterest paid	(490,825,700)	(437,010,342)
nterest received	38,612,528	26,701,115
ncome tax paid	(152,692,239)	(271,518,967)
Net cash provided by operating activities	1,542,412,195	1,560,789,993

See accompanying notes to the consolidated financial statements.

# Consolidated Statements of Cash Flows — (Continued) For the years ended December 31, 2014 and 2013

	2014	2013
	In thousands of	Korean won
Cash flows from investing activities:		
Disposal of investments in associates and joint ventures	<b>₩</b> 5,543,479	19,727,679
Acquisition of investments in associates and joint ventures	(79,058,447)	_
Proceeds from disposal of property, plant and equipment	678,070,042	223,355,446
Property dispositions	198,022,483	
Acquisition of property, plant and equipment	(2,452,102,662)	(2,394,783,013)
Proceeds from disposal of assets held for sale	52,330,382	_
Proceeds from disposal of intangible assets other than goodwill	8,654,840	8,662,006
Acquisition of intangible assets other than goodwill	(359,830,574)	(490,244,189)
Acquisition of non-current non-financial assets	(95,970,934)	(130, 152, 107)
Proceeds from disposal of short-term trading financial assets	15,724,991	332,860,800
Acquisition of short-term trading financial assets		(5,517,377)
Acquisition of available-for-sale financial investments	(11,750,343)	(21,750,084)
Proceeds from disposal of available-for-sale financial investments	9,671,986	41,268,013
Increase in long-term and short-term financial assets	_	(5,193,819)
Decrease in long-term and short-term financial assets	89,306,976	26,336,903
Increase in leasehold deposits provided	(39,081,824)	· · · —
Decrease in leasehold deposits provided	17,782,167	
Collection of short-term and long-term loans	(133,001,119)	(215,682,389)
Decrease in short-term and long-term loans	32,909,405	107,843,034
Increase in leasehold deposits received	1,868,583	652,795
Decrease in leasehold deposits received	(3,529)	_
Proceeds from change in scope of consolidation, net	35,827,797	
Net cash used in investing activities	(2,025,086,301)	(2,502,616,302)
Cash flow from financing activities		
Proceeds from increase in issued capital	61,427,000	293,578,000
Proceeds from short-term borrowings	263,596,573	917,930,755
Repayments of short-term borrowings	(220,502,771)	(558,413,441)
Repayments of current portion of long-term liabilities	(219,617,413)	(219,008,000)
Proceeds from issue of bond payables	2,310,012,129	2,333,659,791
Repayments of bond payables	(2,415,168,194)	(1,781,823,902)
Proceeds from long-term borrowings	459,184,671	285,310,496
Repayments of long-term borrowings	(160,073,731)	(65,404,677)
Dividends paid	(70,819,822)	(42,364,056)
Proceeds from partial disposition of interest in subsidiaries	9,257,169	183,424,019
Net cash provided by financing activities	17,295,611	1,346,888,985
Net increase (decrease) in cash and cash equivalents before net effect of foreign exchange differences	(465,378,495)	405,062,676
Effect of exchange rate fluctuations on cash held	7,852,501	(31,309,027)
Increase (decrease) in cash and cash equivalents	(457,525,994)	373,753,649
Cash and cash equivalents at January 1	966,031,817	592,278,168
Cash and cash equivalents at December 31	₩ 508,505,823	966,031,817
<del>-</del>		

# Notes to the Consolidated Financial Statements For the years ended December 31, 2014 and 2013

# 1. Reporting Entity

# (a) Description of the controlling company

Korea National Oil Corporation (the "Company" or the "Parent Company") was incorporated on March 3, 1979 to engage in the development of oil fields, distribution of crude oil, maintenance of petroleum reserve stock and improvement of the petroleum distribution infrastructure under the Korea National Oil Corporation Act. The Company's head office is located at 305, Jongga-Ro, Jung-Gu, Ulsan in Korea. The Company also has 9 petroleum stockpile sites, 1 domestic gas field management office, 8 overseas offices in Vietnam and other countries and overseas subsidiaries and affiliates in the United States and other countries.

As of December 31, 2014, the Company's issued capital is ₩10,091,920 million, which is wholly owned by the government of the Republic of Korea.

The consolidated financial statements comprise the Company and its subsidiaries (together referred to as the "Group" and individually as "Group entities") and the Group's interests in associates and joint ventures.

The list of subsidiaries as of December 31, 2014 and 2013 is disclosed in Note 5.

# 2. Basis of Preparation

### (a) Statement of compliance

The consolidated financial statements have been prepared in accordance with Korean International Financial Reporting Standards ("K-IFRS"), as prescribed in the Act on External Audits of Corporations in the Republic of Korea.

The consolidated financial statements were authorized for issue by the Board of Directors on February 27, 2015.

# (b) Basis of measurement

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the statement of financial position:

- · derivative financial instruments are measured at fair value
- financial instruments at fair value through profit or loss are measured at fair value
- · available-for-sale financial assets are measured at fair value
- liabilities for defined benefit plans are recognized at the net of the total present value of defined benefit obligations less the fair value of plan assets

### (c) Functional and presentation currency

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The accompanying consolidated financial statements are prepared in the Group's functional currency, the United States dollar, and presented in Korean won, the Group's presentation currency, for the financial reporting purposes in accordance with K-IFRS 1021, 'The Effects of Changes in Foreign Exchange Rates'. The Group is required to present its financial statements in Korean won in accordance with regulations in Korea.

Assets and liabilities for each statement of financial position presented (i.e. including comparatives) were translated at the closing rate at the date of that statement of financial position, income and expenses for each

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

statement presenting profit or loss and other comprehensive income (i.e. including comparatives) were translated at the average exchange rates of the period and all resulting exchange differences were recognized in other comprehensive income.

# (d) Use of estimates and judgments

The preparation of the consolidated financial statements in conformity with K-IFRS requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognized in the period in which the estimates are revised and in any future periods affected.

# (i) Management's judgment

Information about critical judgments in applying accounting policies that have the most significant effect on the amounts recognized in the consolidated financial statements is included in the following notes

Note 25: Loans from Special Accounting for Energy and Resources ("SAER")

# (ii) Assumptions and estimation uncertainties

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year are included in the following notes

- Note 19: Property, Plant and Equipment estimation of factors for depreciation
- Note 20: Goodwill main assumptions for recoverable amounts
- Note 21: Intangible assets other than goodwill main assumptions for recoverable amounts
- Note 26: Employee Benefits main actuarial assumptions
- Note 27 and 44: Provisions and Contingencies assumptions for possibility of cash outflows and their amounts
  - Note 38: Income tax benefit possibility of realization of deferred tax assets

# (iii) Measurement of fair value

A number of the Group's accounting policies and disclosures require the measurement of fair values, for both financial and non-financial assets and liabilities. The Group has an established control framework with respect to the measurement of fair values. This includes a valuation team that has overall responsibility for overseeing all significant fair value measurements, including Level 3 fair values, and reports directly to the CFO.

The valuation team regularly reviews significant unobservable inputs and valuation adjustments. If third party information, such as broker quotes or pricing services, is used to measure fair values, then the valuation team assesses the evidence obtained from the third parties to support the conclusion that such valuations meet the requirements of K-IFRS, including the level in the fair value hierarchy in which such valuations should be classified.

Significant valuation issues are reported to the Group's Audit Committee.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

When measuring the fair value of an asset or a liability, the Group uses market observable data as far as possible. Fair values are categorized into different levels in a fair value hierarchy based on the inputs used in the valuation techniques as follows.

- Level 1: quoted prices (unadjusted) in active markets for identical assets or liabilities.
- Level 2: inputs other than quoted prices included in 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).

If the inputs used to measure the fair value of an asset or a liability fall into different levels of the fair value hierarchy, then the fair value measurement is categorized in its entirety in the same level of the fair value hierarchy as the lowest level input that is significant to the entire measurement.

Information about the assumptions made in measuring fair values is included in the following notes:

Note 40 — Categories of financial instruments

# 3. Changes in Accounting Policies

Except for the changes below, the Group has consistently applied the accounting policies set out in note 4 to all periods presented in these consolidated financial statements. The Group has adopted the following new standards and amendments to standards with a date of initial application of January 1, 2014.

- (i) Offsetting Financial Assets and Financial Liabilities (Amendments to K-IFRS No. 1032 'Financial Instruments: Presentation')
- (ii) Recoverable Amount Disclosures for Non-Financial Assets (Amendments to K-IFRS No. 1036 'Impairment of Assets')
  - (iii) K-IFRS No. 2121, 'Levies'

The details of changes in accounting policies are as follows.

# (a) Offsetting Financial Assets and Financial Liabilities (Amendments to K-IFRS No. 1032 'Financial Instruments: Presentation')

The Group has adopted amendments to K-IFRS 1032, 'Offsetting Financial Assets and Financial Liabilities' since January 1, 2014. The amendments clarify the meaning of 'currently has a legally enforceable right of set-off'. According to the amendments, the right to set off should not be contingent on a future event, and legally enforceable in the normal course of business, in the event of default, and in the event of insolvency or bankruptcy of the entity and all of the counterparties. The amendments also state that some gross settlement systems would be considered equivalent to net settlement if they eliminate or result in insignificant credit and liquidity risk and process receivables and payables in a single settlement process or cycle.

# (b) Recoverable Amount Disclosures for Non-Financial Assets (Amendments to K-IFRS No. 1036 'Impairment of Assets')

The Group has adopted amendments to K-IFRS 1036 'Impairment of Assets' since January 1, 2014. The amendments require the disclosure of information about the recoverable amount of impaired assets, if that amount is based on fair value less costs of disposal. They also require the disclosure of additional information

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

about that fair value measurement. In addition, if the recoverable amount of impaired assets based on fair value less costs of disposal was measured using a present value technique, the amendments also require the disclosure of the discount rates that have been used in the current and previous measurements.

# (c) K-IFRS No. 2121, 'Levies'

The Group has adopted K-IFRS No.2121, 'Levies' since January 1, 2014. K-IFRS No. 2121 is an Interpretation of K-IFRS No. 1037 'Provisions, Contingent Liabilities and Contingent Assets', on the accounting for levies imposed by governments. K-IFRS 1037 sets out criteria for the recognition of a liability, one of which is the requirement for the entity to have a present obligation as a result of a past event (or 'obligating event'). K-IFRS 2121 clarifies that the obligating event that gives rise to a liability to pay a levy is the activity described in the relevant legislation that triggers the payment of the levy.

The interpretation does not provide guidance on the accounting for the costs arising from recognizing the liability to pay a levy. Other K-IFRSs should be applied to determine whether the recognition of a liability to pay a levy gives rise to an asset or an expense.

Management believes the impact of the amendments on the Group's consolidated financial statements is not significant, and the Group did not retrospectively apply the new standards and amendments to standards stated above.

# 4. Significant Accounting Policies

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, except for changes in accounting policies as explained in note 3.

Certain comparative amounts in the statement of comprehensive income have been reclassified or rerepresented as a result of an operation discontinued during the current year (see note 7).

# (a) Basis of consolidation

### (i) Non-controlling interests

Non-controlling interests are measured at their proportionate share of the acquiree's identifiable net assets at the date of acquisition. Changes in the Group's interest in a subsidiary that do not result in a loss of control are accounted for as equity transactions.

# (ii) Subsidiaries

Subsidiaries are entities controlled by the Group. The Group controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases.

# (iii) Loss of control

When the Group loses control over a subsidiary, it derecognizes the assets and liabilities of the subsidiary, and any related NCI and other components of equity. Any resulting gain or loss is recognized in profit or loss. Any interest retained in the former subsidiary is measured at fair value when control is lost.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (iv) Interests in equity-accounted investees

The Group's interests in equity-accounted investees comprise interests in associates and a joint venture. Associates are those entities in which the Group has significant influence, but not control or joint control, over the financial and operating policies. A joint venture is an arrangement in which the Group has joint control, whereby the Group has rights to the net assets of the arrangement, rather than rights to its assets and obligations for its liabilities.

Interests in associates and the joint venture are accounted for using the equity method. They are initially recognized at cost, which includes transaction costs. Subsequent to initial recognition, the consolidated financial statements include the Group's share of the profit or loss and OCI of equity-accounted investees, until the date on which significant influence or joint control ceases.

### (v) Transactions eliminated on consolidation

Intra-group balances and transactions, and any unrealized income and expenses arising from intra-group transactions, are eliminated. Unrealized gains arising from transactions with equity-accounted investees are eliminated against the investment to the extent of the Group's interest in the investee. Unrealized losses are eliminated in the same way as unrealized gains, but only to the extent that there is no evidence of impairment.

### (vi) Acquisitions from entities under common control

The assets and liabilities acquired under business combinations under common control are recognized at the carrying amounts recognized previously in the consolidated financial statements of the ultimate parent. The difference between consideration transferred and carrying amounts of net assets acquired is recognized as part of share premium.

# (b) Discontinued operations

A discontinued operation is a component of the Group's business, the operations and cash flows of which can be clearly distinguished from the rest of the Group and which:

- represents a separate major line of business or geographical area of operations;
- is part of a single coordinated plan to dispose of a separate major line of business or geographic area of operations; or
- is a subsidiary acquired exclusively with a view to resale.

Classification as a discontinued operation occurs at the earlier of disposal or when the operation meets the criteria to be classified as held for sale.

When an operation is classified as a discontinued operation, the comparative consolidated statement of profit or loss and OCI is re-presented as if the operation had been discontinued from the start of the comparative period.

# (c) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, demand deposits, and short-term investments in highly liquid securities that are readily convertible to known amounts of cash with maturities of three months or less from the acquisition date and which are subject to an insignificant risk of changes in value. Equity investments are excluded from cash and cash equivalents.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (d) Inventories

Inventories are measured at the lower of cost and net realizable value. The cost of inventories is based on the moving-weighted average method, and includes expenditures for acquiring the inventories, production or conversion costs and other costs incurred in bringing them to their existing location and condition. Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

The amount of any write-down of inventories to net realizable value and all losses of inventories are recognized as an expense in the period the write-down or loss occurs. The amount of any reversal of any write-down of inventories, arising from an increase in net realizable value, are recognized as a reduction in the amount of inventories recognized as an expense in the period in which the reversal occurs.

# (e) Non-derivative financial assets

The Group recognizes and measures non-derivative financial assets by the following four categories: financial assets at fair value through profit or loss, held-to-maturity investments, loans and receivables and available-for-sale financial assets. The Group recognizes financial assets in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Upon initial recognition, non-derivative financial assets are measured at their fair value plus, in the case of a financial asset not at fair value through profit or loss, transaction costs that are directly attributable to the asset's acquisition or issuance.

# (i) Financial assets at fair value through profit or loss

A financial asset is classified as financial assets are classified 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.

# (ii) Held-to-maturity investments

A non-derivative financial asset with a fixed or determinable payment and fixed maturity, for which the Group has the positive intention and ability to hold to maturity, are classified as held-to-maturity investments. Subsequent to initial recognition, held-to-maturity investments are measured at amortized cost using the effective interest method.

### (iii) Loans and receivables

Loans and receivables are financial assets with fixed or determinable payments that are not quoted in an active market. Subsequent to initial recognition, loans and receivables are measured at amortized cost using the effective interest method except for loans and receivables of which the effect of discounting is immaterial.

# (iv) Available-for-sale financial assets

Available-for-sale financial assets are those non-derivative financial assets that are designated as available-for-sale or are not classified as financial assets at fair value through profit or loss, held-to-maturity investments or loans and receivables. Subsequent to initial recognition, they are measured at fair value, which changes in fair value, net of any tax effect, recorded in other comprehensive income in equity. Investments in equity instruments

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

that do not have a quoted market price in an active market and whose fair value cannot be reliably measured and derivatives that are linked to and must be settled by delivery of such unquoted equity instruments are measured at cost.

# (v) De-recognition of financial assets

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire, or it transfers the rights to receive the contractual cash flows on the financial asset in a transaction in which substantially all the risks and rewards of ownership of the financial asset are transferred. Any interest in transferred financial assets that is created or retained by the Group is recognized as a separate asset or liability.

If the Group retains substantially all the risks and rewards of ownership of the transferred financial assets, the Group continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

# (vi) Offsetting between financial assets and financial liabilities

Financial assets and financial liabilities are offset and the net amount is presented in the consolidated statement of financial position only when the Group currently has a legally enforceable right to offset the recognized amounts, and there is the intention to settle on a net basis or to realize the asset and settle the liability simultaneously.

### (f) Derivative financial instruments, including hedge accounting

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

# (i) Hedge accounting

The Group holds forward exchange contracts, interest rate swaps, currency swaps and other derivative contracts to manage interest rate risk and foreign exchange risk. The Group designated derivatives as hedging instruments to hedge the risk of changes in the fair value of assets, liabilities or firm commitments (a fair value hedge) and foreign currency risk of highly probable forecasted transactions or firm commitments (a cash flow hedge).

On initial designation of the hedge, the Group formally documents the relationship between the hedging instrument(s) and hedged item(s), including the risk management objectives and strategy in undertaking the hedge transaction, together with the methods that will be used to assess the effectiveness of the hedging relationship.

### Fair value hedge

Changes in the fair value of a derivative hedging instrument designated as a fair value hedge are recognized in profit or loss. The gain or loss from remeasuring the hedging instrument at fair value for a derivative hedging instrument and the gain or loss on the hedged item attributable to the hedged risk are recognized in profit or loss in the same line item of the consolidated statement of comprehensive income.

The Group discontinues fair value hedge accounting if the hedging instrument expires or is sold, terminated or exercised, or if the hedge no longer meets the criteria for hedge accounting. Any adjustment arising from gain or loss on the hedged item attributable to the hedged risk is amortized to profit or loss from the date the hedge accounting is discontinued.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# Cash flow hedge

When a derivative is designated to hedge the variability in cash flows attributable to a particular risk associated with a recognized asset or liability or a highly probable forecasted transaction that could affect profit or loss, the effective portion of changes in the fair value of the derivative is recognized in other comprehensive income, net of tax, and presented in the hedging reserve in equity. Any ineffective portion of changes in the fair value of the derivative is recognized immediately in profit or loss.

If the hedging instrument no longer meets the criteria for hedge accounting, expires or is sold, terminated, exercised, or the designation is revoked, then hedge accounting is discontinued prospectively. The cumulative gain or loss on the hedging instrument that has been recognized in other comprehensive income is reclassified to profit or loss in the periods during which the forecasted transaction occurs. If the forecasted transaction is no longer expected to occur, then the balance in other comprehensive income is recognized immediately in profit or loss.

# (ii) Separable embedded derivatives

Embedded derivatives are separated from the host contract and accounted for separately only if the following criteria have been met:

- the economic characteristics and risks of the embedded derivative are not closely related to those of the host contract;
- a separate instrument with the same terms as the embedded derivative would meet the definition of a derivative; and
- the hybrid instrument is not measured at fair value with changes in fair value recognized in profit or loss.

Changes in the fair value of separable embedded derivatives are recognized immediately in profit or loss.

# (iii) Other derivative financial instruments

Changes in the fair value of other derivative financial instrument not designated as a hedging instrument are recognized immediately in profit or loss.

# (g) Impairment of financial assets

A financial asset not carried at fair value through profit or loss is assessed at each reporting date to determine whether there is objective evidence that it is impaired. A financial asset is impaired if objective evidence indicates that a loss event has occurred after the initial recognition of the asset, and that the loss event had a negative effect on the estimated future cash flows of that asset that can be estimated reliably. However, losses expected as a result of future events, regardless of likelihood, are not recognized.

If there is objective evidence that financial instruments are impaired, impairment losses are measured and recognized. In addition, for an investment in an equity security, a significant or prolonged decline in its fair value below its cost is objective evidence of impairment.

# (i) Financial assets measured at amortized cost

An impairment loss in respect of a financial asset measured at amortized cost is calculated as the difference between its carrying amount and the present value of its estimated future cash flows discounted at the asset's original effective interest rate. Losses are recognized in profit or loss and reflected in an allowance account.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

When the Group considers that there are no realistic prospects of recovery of the asset, the relevant amounts are written off. If the amount of impairment loss subsequently decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, then the previously recognized impairment loss is reversed through profit or loss either directly or by adjusting an allowance account.

# (ii) Financial assets carried at cost

If there is objective evidence that an impairment loss has occurred on an unquoted equity instrument that is not carried at fair value because its fair value cannot be reliably measured, or on a derivative asset that is linked to and must be settled by delivery of such an unquoted equity instrument, 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.

### (iii) Available-for-sale financial assets

When a decline in the fair value of an available-for-sale financial asset has been recognized in other comprehensive income and there is objective evidence that the asset is impaired, the cumulative loss that had been recognized in other comprehensive income shall be reclassified from equity to profit or loss as a reclassification adjustment even though the financial asset has not been derecognized. Impairment losses recognized in profit or loss for an investment in an equity instrument classified as available-for-sale shall not be reversed through profit or loss. If, in a subsequent period, the fair value of a debt instrument classified as available-for-sale increases and the increase can be objectively related to an event occurring after the impairment loss was recognized in profit or loss, the impairment loss shall be reversed, with the amount of the reversal recognized in profit or loss.

# (h) Property, plant and equipment

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

The following costs are capitalized as oil and gas properties.

- · the costs incurred in development stage for constructing facilities and drilling wells for production
- the costs of acquiring production areas or fields with proved reserves
- the construction costs and other expenditures for initiating production
- · the estimated costs for decommissioning

Additionally, the Group depreciates the acquisition costs of oil and gas properties which are aggregated on an area-by-area basis or field-by-field basis. For the costs of oil and gas properties which are aggregated on an area-by-area basis, the Group depreciates the acquisition costs using proved reserves as the total estimated production when applying the unit-of-production depreciation method. For the costs of oil and gas properties which are aggregated on a field-by-field basis, the Group depreciates the acquisition costs using proved developed reserves as the total estimated production when applying the unit-of-production depreciation method.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Costs related to undeveloped oil and gas properties are not immediately included in the depletable pool of developed assets but are transferred to the depletable pool as the reserves become proved (for area-by-area basis) or developed (for field-by-filed basis) through drilling activities.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Property, plant and equipment, except for land and oil and gas properties, 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.

	Useful lives (years)
Buildings	20 ~ 40 years
Structures	$20 \sim 40 \text{ years}$
Machinery	$5 \sim 20 \text{ years}$
Vessels	35 yeas
Tools and fixtures	5 years
Vehicles	5 years

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. Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. The change is accounted for as a change in an accounting estimate.

# (i) Intangible assets

Intangible assets with finite useful lives acquired separately are carried at cost. Intangible assets acquired in a business combination are initially recognized at their fair value at the acquisition date (which is regarded as their cost). Subsequent to initial recognition, intangible assets acquired in a business combination are reported at cost less accumulated amortization and accumulated impairment losses.

Prior to acquiring the legal rights to explore an area, all costs related to exploration and evaluation of an area are charged directly to the statement of comprehensive loss. Once the legal rights to explore are acquired, all costs associated with acquisition of exploration rights, geological, geophysical and geographical research, drilling costs and evaluation of technical and commercial viability of economic production are capitalized as exploration and evaluation assets. All such costs are subject to review for impairment when facts and circumstances suggest that the carrying amount of the assets exceeds their recoverable amount. When technical feasibility and commercial viability are established, the relevant expenditure is transferred to oil and gas properties after impairment is assessed and any resulting impairment loss is recognized. If no potentially commercial petroleum is discovered from exploration drilling, the relating exploration and evaluation assets are written off through the statement of comprehensive loss.

The useful lives of intangible assets are assessed as either finite or indefinite. Intangible assets with finite lives are amortized over the useful economic life and assessed for impairment whenever there is an indication that the intangible asset may be impaired. The amortization period and the amortization method for intangible assets with a finite useful lives are reviewed at least each financial year end. Changes in the expected useful life or the expected pattern of consumption of future economic benefits embodied in the asset is accounted for by changing the amortization period or method, as appropriate, and are treated as changes in accounting estimates. The amortization expense on intangible assets with finite lives is recognized in the statement of comprehensive income in the expense category consistent with the function of the intangible asset.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Intangible assets with indefinite useful lives such as membership are not amortized, but are tested for impairment annually. Intangible assets with definite useful lives are amortized on a straight-line basis over estimated useful lives of 5 to 20 years.

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 income or loss when the asset is derecognized.

# (j) Oil stockpiles

The Group stockpiles crude oil and petroleum products to stabilize domestic demand and market prices and classifies those assets as oil stockpiles (non-current non-financial assets) of which the cost is determined using the moving-average method. The Group performs annual impairment test for oil stockpiles.

# (k) Borrowing costs

The Group capitalizes borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. Other borrowing costs are recognized in expense as incurred. A qualifying asset is an asset that requires a substantial period of time to get ready for its intended use or sale. Financial assets and inventories that are manufactured or otherwise produced over a short period of time are not qualifying assets. Assets that are ready for their intended use or sale when acquired are not qualifying assets.

To the extent that the Group borrows funds specifically for the purpose of obtaining a qualifying asset, the Group determines the amount of borrowing costs eligible for capitalization as the actual borrowing costs incurred on that borrowing during the period less any investment income on the temporary investment of those borrowings. To the extent that the Group borrows funds generally and uses them for the purpose of obtaining a qualifying asset, the Group shall determine the amount of borrowing costs eligible for capitalization by applying a capitalization rate to the expenditures on that asset. The capitalization rate shall be the weighted average of the borrowing costs applicable to the borrowings of the Group that are outstanding during the period, other than borrowings made specifically for the purpose of obtaining a qualifying asset. The amount of borrowing costs that the Group capitalizes during a period shall not exceed the amount of borrowing costs incurred during that period.

# (l) Government grants

Government grants are not recognized unless there is reasonable assurance that the Group will comply with the grant's conditions and that the grant will be received.

Government grants whose primary condition is that the Group purchases, constructs or otherwise acquires long-term assets are deducted in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduction to depreciation expense.

In case where the Group receives loans with interest rate lower than the market rate, the benefits from lower interest rates shall be recognized as government grants.

# (m) Impairment of non-financial assets

The carrying amounts of the Group's non-financial assets, other than assets arising from employee benefits, inventories, deferred tax assets and non-current assets held for sale, are reviewed at the end of the reporting period to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Intangible assets that have indefinite useful lives or that are not yet available for use, irrespective of whether there is any indication of impairment, are tested for impairment annually by comparing their recoverable amount to their carrying amount.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

For impairment testing, assets are grouped together into the smallest group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or groups of assets ("CGUs"). The recoverable amount of an asset or CGU is the greater of its value in use and its fair value less costs to sell. The value in use is estimated by applying a pre-tax discount rate that reflect current market assessments of the time value of money and the risks specific to the asset or CGU for which estimated future cash flows have not been adjusted, to the estimated future cash flows expected to be generated by the asset or CGU.

An impairment loss is recognized in profit or loss if the carrying amount of an asset or a CGU exceeds its recoverable amount.

# (n) Non-current assets held for sale

Non-current assets, or disposal groups comprising assets and liabilities, that are expected to be recovered primarily through sale rather than through continuing use, are classified as held for sale. In order to be classified as held for sale, the asset (or disposal group) must be available for immediate sale in its present condition and its sale must be highly probable. The assets or disposal group that are classified as non-current assets held for sale are measured at the lower of their carrying amount and fair value less cost to sell.

The Group recognizes an impairment loss for any initial or subsequent write-down of an asset (or disposal group) to fair value less costs to sell, and a gain for any subsequent increase in fair value less costs to sell, up to the cumulative impairment loss previously recognized in accordance with K-IFRS No. 1036, 'Impairment of Assets'.

A non-current asset that is classified as held for sale or part of a disposal group classified as held for sale is not depreciated (or amortized).

# (o) Non-derivative financial liabilities

The Group classifies non-derivative financial liabilities into financial liabilities at fair value through profit or loss or other financial liabilities in accordance with the substance of the contractual arrangement and the definitions of financial liabilities. The Group recognizes financial liabilities in the consolidated statement of financial position when the Group becomes a party to the contractual provisions of the financial liability.

# (i) Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include financial liabilities held for trading or designated as such upon initial recognition. Subsequent to initial recognition, financial liabilities at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss. Upon initial recognition, transaction costs that are directly attributable to the acquisition are recognized in profit or loss as incurred.

# (ii) Other financial liabilities

Non-derivative financial liabilities other than financial liabilities at fair value through profit or loss are classified as other financial liabilities. At the date of initial recognition, other financial liabilities are measured at fair value minus transaction costs that are directly attributable to the acquisition. Subsequent to initial recognition, other financial liabilities are measured at amortized cost using the effective interest method.

The Group derecognizes a financial liability from the consolidated statement of financial position when it is extinguished (i.e. when the obligation specified in the contract is discharged, cancelled or expires).

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (p) Employee benefits

# (i) Short-term employee benefits

Short-term employee benefits are employee benefits that are due to be settled within 12 months after the end of the period in which the employees render the related service. When an employee has rendered service to the Group during an accounting period, the Group recognizes the undiscounted amount of short-term employee benefits expected to be paid in exchange for that service.

# (ii) Retirement benefits: defined contribution plans

When an employee has rendered service to the Group during a period, the Group recognizes the contribution payable to a defined contribution plan in exchange for that service as a liability (accrued expense), after deducting any contribution already paid. If the contribution already paid exceeds the contribution due for service before the end of the reporting period, the Group recognizes that excess as an asset (prepaid expense) to the extent that the prepayment will lead to a reduction in future payments or a cash refund.

# (iii) Retirement benefits: defined benefit plans

A defined benefit plan is a post-employment benefit plan other than a defined contribution plan. The Group's net obligation in respect of defined benefit plans is calculated by estimating the amount of future benefit that employees have earned in return for their service in the current and prior periods; that benefit is discounted to determine its present value. The fair value of plan assets is deducted. The calculation is performed annually by an independent actuary using the projected unit credit method.

The discount rate is the yield at the reporting date on high-quality corporate bonds that have maturity dates approximating the terms of the Group's obligations and that are denominated in the same currency in which the benefits are expected to be paid. The Group recognizes all actuarial gains and losses arising from actuarial assumption changes and experiential adjustments in other comprehensive income when incurred.

Re-measurements of net defined benefit liabilities, which comprise actuarial gains and losses, the return on plan assets (excluding interest) and the effect of the asset ceiling (if any, excluding interest), are recognized immediately in other comprehensive income. The Group determines the net interest expense (income) on the net defined benefit liability (asset) for the period by applying the discount rate used to measure the defined benefit obligation at the beginning of the annual period to the then-net defined benefit liability (asset), taking into account any changes in the net defined benefit liability (asset) during the period as a result of contributions and benefit payments, net interest expense and other expenses related to defined benefit plans are recognized in profit or loss.

When the benefits of a plan are changed or when a plan is curtailed, the resulting change in benefit that relates to past service or the gain or loss in curtailment is recognized immediately in profit or loss. The Group recognizes gains and losses on the settlement of a defined benefit plan when the settlement occurs.

# (q) Provisions

Provisions are recognized when the Group has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Where some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement shall be recognized when, and only when, it is virtually certain that reimbursement will be received if the entity settles the obligation. The reimbursement shall be treated as a separate asset.

Provisions are reviewed at the end of each reporting period and adjusted to reflect the current best estimates. If it is no longer probable that an outflow of resources embodying economic benefits will be required to settle the obligation, the provision is reversed.

When there is a legal or contractual obligation for dismantling, removing facilities and restoring sites on which they are located to their original condition at the end of the useful lives of the facilities, the present value of the estimated future restoration costs are capitalized at the acquisition date as additions to the cost of oil and gas properties and are accounted for as a provision. The Group subsequently depreciates the restoration costs using the unit-of-production method and the difference between estimated restoration costs and their present value is charged to current operations by applying the effective-interest-rate method.

# (r) Foreign currencies

Transactions in foreign currencies are translated to the respective functional currencies of Group entities at exchange rates at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are retranslated to the functional currency using the reporting date's exchange rate. Non-monetary assets and liabilities denominated in foreign currencies that are measured at fair value are retranslated to the functional currency at the exchange rate at the date that the fair value was determined. Non-monetary assets and liabilities denominated in foreign currencies that are measured in terms of historical cost in a foreign currency are translated using the exchange rate at the dates of the transactions.

Foreign currency differences arising on retranslation are recognized in profit or loss, except for differences arising on the retranslation of available-for-sale equity instruments, a financial liability designated as a hedge of the net investment in a foreign operation, or qualifying cash flow hedges, which are recognized in other comprehensive income. When gains or losses on non-monetary items are recognized in other comprehensive income, exchange components of those gains or losses are recognized in other comprehensive income. Conversely, when gains or losses on non-monetary items are recognized in profit or loss, exchange components of those gains or losses are recognized in profit or loss, exchange components

# (s) Revenue

Revenue from sale of goods, rendering of services or use of the Group assets is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates. When two or more revenue generating activities or deliverables are sold under a single arrangement, each deliverable that is considered to be a separate unit of account is accounted for separately. The allocation of consideration from a revenue arrangement to its separate units of account is based on the relative fair values of each unit.

# (i) Sales of goods

Revenue from the sale of goods in the ordinary course of activities is measured at the fair value of the consideration received or receivable, trade discounts and volume rebates. 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 can be estimated reliably, there is no continuing management involvement with the goods, and the amount of revenue

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

can be measured reliably. The appropriate timing for transfer of risks and rewards varies depending on the individual terms and conditions of the sales contract. For international sales, this timing depends on the type of international commercial terms of the contract.

The Group recognizes revenue from the sales of product from a production area, only when the Group invests in the production area as a joint operation not as a joint venture. In addition, for the Group's joint operations, the Group capitalizes costs related to the production area as the oil and gas properties even if the Group is a non-operator.

# (ii) Sales of other 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 or services performed to date as a percentage of total services to be performed or the proportion that costs incurred to date bear to the estimated total costs of the transaction or other methods that reliably measures the services performed.

# (t) Income taxes

Income tax expense comprises current and deferred tax. Current tax and deferred tax are recognized in profit or loss except to the extent that it relates to a business combination, or items recognized directly in equity or in other comprehensive income.

### (i) Current tax

Current tax is the expected tax payable or receivable on the taxable profit or loss for the year, using tax rates enacted or substantively enacted at the end of the reporting period and any adjustment to tax payable in respect of previous years. The taxable profit is different from the accounting profit for the period since the taxable profit is calculated excluding the temporary differences, which will be taxable or deductible in determining taxable profit (tax loss) of future periods, and non-taxable or non-deductible items from the accounting profit.

# (ii) Deferred tax

The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Group expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. The Group recognizes a deferred tax liability for all taxable temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures, except to the extent that the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. In addition, the Group recognizes a deferred tax asset for all deductible temporary differences to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduces the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

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.

# (u) Operating Segments

An operating segment is a component of the Group that engages in business activities and has discrete financial information that is reviewed regularly by the Group's chief operating decision maker (the Chief Executive Officer), to make decisions about resources to be allocated to the segments and assess their performance.

### (v) New standards and interpretations not yet adopted

The following amendments to existing standards have been published and are mandatory for the Group for annual period beginning after January 1, 2014, and the Group has not early adopted them.

Management believes the impact of the amendments on the Group's consolidated financial statements is not significant.

K-IFRS No. 1019 'Employee Benefits' - Employee contributions

Amendments to K-IFRS 1019 introduced a practical expedient to accounting for defined benefit plan, when employees or third parties pay contributions if certain criteria are met. According to the amendments, the entity is permitted to recognize those contributions as a reduction of the service cost in the period in which the related service is rendered, instead of forecast future contributions from employees or third parties and attribute them to periods or service as negative benefits.

# 5. Subsidiaries

# (a) The list of subsidiaries directly owned by the Company as of December 31, 2014 and December 31, 2013 are as follows:

			Owners	ship (%)
Subsidiary name	Principal activity	Country of incorporation	December 31, 2014	December 31, 2013
ANKOR E&P Holdings Corp	Exploration and			
	production (E&P)	United States	100.00	100.00
Dana Petroleum Limited	E&P	United Kingdom	100.00	100.00
KNOC Eagle Ford Corp	E&P	United States	100.00	100.00
Harvest Operations Corp	E&P	Canada	100.00	100.00
KNOC Kaz B.V	Holding Company	Netherlands	100.00	100.00
KNOC Exploração e Produção de Petro do				
Brasil Ltda	E&P	Brazil	100.00	100.00
KNOC NEMONE	E&P	Indonesia	100.00	100.00
KNOC NEMTWO	E&P	Indonesia	100.00	100.00
KNOC Sumatra Ltd	E&P	Indonesia	100.00	100.00
KNOC Yemen Ltd	E&P	Yemen	60.00	60.00
KNOC Trading Singapore Pte. Ltd	Trading and			
	Marketing	Singapore	100.00	100.00
KNOC Trading Corporation(*)	Trading and			
	Marketing	United States	100.00	_

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (b) Financial information of subsidiaries

(i) Financial information of subsidiaries as of and for the year ended December 31, 2014 is as follows:

Company	Assets	Liabilities	Revenue	Net profit (loss)
		In millions of <b>K</b>	Korean won	
ANKOR E&P Holdings Corp	₩1,235,190	680,210	220,177	(93,466)
Dana Petroleum Limited(*)	5,836,302	3,970,789	1,184,384	(609,807)
KNOC Eagle Ford Corp	2,836,393	775,501	689,707	27,757
Harvest Operations Corp	4,844,729	3,366,532	855,036	(434,218)
KNOC Kaz B.V.(*)	1,513,170	619,469	365,721	(35,101)
KNOC Exploração e Produção de Petro do Brasil Ltda	23	477	_	(105)
KNOC NEMONE	90	45,061	_	(4,618)
KNOC NEMTWO	111	40,197	_	(3,915)
KNOC Sumatra Ltd	1,892	435	_	9,775
KNOC Yemen Ltd	25,132	117,015	_	(17,597)
KNOC Trading Singapore Pte. Ltd	185	4	459	50
KNOC Trading Corporation	1,486	58	1,643	315

<sup>(\*)</sup> The amounts presented are after reflecting the difference between the fair value and the book value that arose during the business combination.

(ii) Financial information of subsidiaries as of and for the year ended December, 2013 is as follows:

Company	Assets	Liabilities	Revenue	Net profit (loss)
		In millions of <b>F</b>	Korean won	
ANKOR E&P Holdings Corp	₩1,267,645	613,449	279,280	(38,357)
Dana Petroleum Limited(*)	6,455,994	3,824,008	1,719,649	(78,795)
KNOC Eagle Ford Corp	2,786,166	844,671	495,200	62,367
Harvest Operations Corp	5,282,705	3,319,952	1,007,934	(787,080)
KNOC Kaz B.V.(*)	1,635,083	618,462	473,095	128,467
KNOC Exploração e Produção de Petro do Brasil Ltda	26	441	_	(480)
KNOC NEMONE	4,754	43,302	_	(100)
KNOC NEMTWO	4,070	38,633	_	(85)
KNOC Sumatra Ltd	68,213	8,015	71,437	5,614
KNOC Yemen Ltd	52,174	122,755	_	(962)
KNOC Trading Singapore Pte. Ltd	131	_	87,105	138

<sup>(\*)</sup> The amounts presented are after reflecting the difference between the fair value and the book value that arose during the business combination.

<sup>(\*)</sup> In February 2014, the Group acquired 100% of KNOC Trading Corporation from North Atlantic Refining Limited, which was a subsidiary of Harvest Operations Corp. North Atlantic Refining Limited was disposed of during the year ended December 31, 2014 and excluded from consolidation scope.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(iii) The financial information of the subsidiaries that are related to the Group's non-controlling interests as of December 31, 2014 is as follows

Company	Ankor Energy LLC	KOA Energy LP	Eagle Ford MS LLC and Eagle Ford Energy LLC
	In m	illions of Korear	n won
Non-controlling interest	20%	98%	20%
Non-current assets	₩ —	222,058	2,618,601
Current assets	4,483	27,792	192,524
Non-current liabilities	_	(28,999)	(33,100)
Current liabilities	(4,457)	(6,266)	(41,349)
Net assets	25	214,585	2,736,676
Book value of the non-controlling interests	5	210,293	546,470
Revenue		61,976	758,042
Net income (loss)	_	(3,109)	61,400
Other comprehensive income	_	_	_
Total comprehensive income (loss)		(3,109)	61,400
Net income (loss) distributed to non-controlling interests	_	(3,056)	12,280
Total comprehensive income (loss) distributed to non-controlling			
interests	_	(3,056)	12,280

(iv) The financial information of the subsidiaries that are related to the Group's non-controlling interests as of December 31, 2013 is as follows

Company	Ankor Energy LLC	KOA Energy LP	Eagle Ford MS LLC and Eagle Ford Energy LLC
	In m	illions of Korear	won
Non-controlling interest	20%	98%	20%
Non-current assets	₩ -	235,311	2,406,754
Current assets	1,102	28,462	333,320
Non-current liabilities	_	(27,141)	(13,636)
Current liabilities	(1,120)	(3,348)	(157,745)
Net assets	(18)	233,284	2,568,693
Book value of the non-controlling interests	(4)	229,330	513,739
Revenue		82,548	495,200
Net income (loss)	_	(1,955)	62,367
Other comprehensive income	_	_	
Total comprehensive income (loss)	_	(1,955)	62,367
Net income (loss) distributed to non-controlling interests	_	(1,922)	12,473
Total comprehensive income (loss) distributed to non-controlling			
interests	_	(1,922)	12,473

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# 6. Segment and Other Information

Previously, the Group's operating segments were 1) resource development and refinery, 2) oil trading, 3) oil stockpiling, 4) financing, 5) drillship chartering and 6) others. With an initial application for the year ended December 31, 2014, the Group changed its operating segments to those described below. In addition, the refinery segment was disposed of in November 2014 and was classified as a discontinued operation (note 7). Operating segment information for the comparative periods presented below have been restated to retrospectively present the new basis of segmentation and to exclude the discontinued operations.

# (a) For management purposes, the Group is organized into business units based on their goods and services and has seven reportable operating segments as follows:

Segments	Goods and services	Location of business
Oil and gas	Exploration, development and production of domestic and overseas resources and purchases and sales of crude oil	Domestic and overseas
Petroleum distribution	The whole sale gasoline and gas oil distribution business	Domestic
Refinery(*)	Refining of crude oil and sales of the refined petroleum products	Overseas
Oil stockpiling	Import and export of crude oil and petroleum products; lending and sales of oil stockpiles; management, operation and lending of oil stockpiling facilities	Domestic
Financing	Financing for companies engaged in energy and natural resources energy and natural resources development activities	Domestic
Drillship chartering	Drillship chartering business	Domestic and overseas
Others	Oil information services, other research services, etc.	Domestic and overseas

<sup>(\*)</sup> The refinery segment is classified as a discontinued operation due to its disposal in November 2014 as described in Note 7.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Segment profit and loss is determined the same way that consolidated operating profit for the period is determined under K-IFRS, except that it excludes certain expenses pertaining to headquarters' salaries, training costs, service fees and other corporate related costs. Those expenses are included as reconciling items to selling and administrative expenses in the tables below.

# (b) Segment results for the year

# (i) For the year ended December 31, 2014

	Oil and gas	Petroleum distribution	Oil stockpiling	cing				Continuing operations total	Refinery (discontinued operation)	Group total
Davianua	<b>W</b> 2 017 016	222 450	147 760		In millions 96,931			1 250 117	2 275 001	7,633,198
Revenue			175,564	2,120		4,304		4,358,117 3,439,873		6,753,674
Gross profit (loss) Selling and administrative	803,175	8,683			64,543			918,244	(38,720)	879,524
expenses	363,966			1,102			80,310	445,378	6,183	451,561
Reportable segment operating profit (loss)	439,209	8,683	(27,796)	1,026	64,543	67,511	(80,310)	139,469	` <i>_</i>	139,469
Other expenses								266,860		266,860
Other loss, net								(1,719,941)		(1,890,758)
Finance income								79,958 621,038	,	100,654
Finance costs  Loss on investments in associates and joint ventures, net								(41,575)	, -	622,453 (41,575)
Loss before income										
tax	₩							(1,957,121)	(196,439)	(2,153,560)
Depreciation and amortization Impairment loss of	₩1,658,232	_	74,180	_	2,846	_	7,866	1,743,124	12,228	1,755,352
property, plant and equipment	775,546	_	_	_	_	_	_	775,546	171,006	946,552
Impairment loss of intangible assets other than goodwill	825,979		_					825,979		825,979
Impairment loss of	043,919	_		_	_	_	_	043,919	_	043,919
goodwill	457,038	_	_	_	_	_	_	457,038	_	457,038

<sup>(\*)</sup> Primarily consists of headquarter salaries, training costs, service fees and other corporate related costs, including depreciation and amortization, that are not allocated to the segments.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (ii) For the year ended December 31, 2013

	Oil and gas	Petroleum distribution	Oil stockpiling		Drillship chartering	Others	Reconciling items(*)	Continuing operations total	Refinery (discontinued operation)	Group total
· -				Ir	millions of	Korean v	won			
(Restated) Revenue	<del>W</del> 4 708 293	228,965	143 845	2 555	91,226	90 598	_	5 265 482	4,696,899	9 962 381
Cost of sales			166,023	-	34,491	7,164			4,937,606	, ,
Gross profit (loss) Selling and administrative	1,557,894	7,832	(22,178)	2,555	56,735	83,434	_	1,686,272	(240,707)	1,445,565
expenses	446,375			413			66,951	513,739	6,361	520,100
Reportable segment operating profit		7.022	(22.170)	2.1.12	5 6 5 2 5	02.424	(66.051)	1 150 500	(2.47.0(0)	025.465
(loss)	1,111,519	7,832	(22,178)	2,142	56,735	83,434	(66,951)	)1,172,533 38,380	(247,068) 186	925,465 38,566
Other expenses								144,866	488,019	632,885
Other loss, net								(678,594)	´ —	(678,594)
Finance income								154,767	36,648	191,415
Finance costs								626,003	2,129	628,132
Loss on investments in associates and joint ventures, net								999	_	999
,										
Loss before income tax	₩							(82,784)	(700,382)	(783,166)
D : .:										
Depreciation and amortization	₩1,530,336		76,172	_	2,382	_	8,808	1,617,698	88,090	1,705,788
property, plant and equipment Impairment loss of	177,052	_	_	_	_		_	177,052	488,019	665,071
intangible assets other than goodwill	549,938	_	_	_	_	_	_	549,938	_	549,938

<sup>(\*)</sup> Primarily consists of headquarter salaries, training costs, service fees and other corporate related costs, including depreciation and amortization, that are not allocated to the segments.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (c) Segment assets and liabilities

# (i) As of December 31, 2014

	Oil and gas	Petroleum distribution	Oil stockpiling	Financing	Drillship chartering	Reconciling items(*2)	Group total
				s of Korear			
Assets	₩20,256,787	82,789	5,388,078	3,668	66,863	_	25,798,185
Adjustments:							
Headquarters' land, buildings,							
tools & fixtures	_	_	_	_	_	297,544	297,544
Headquarters' software and							
memberships	_	_	_	_	_	14,550	14,550
Headquarters' loans to							
employees	_	_	_	_	_	89,305	89,305
Headquarters' deferred tax							
assets	_	_	_	_	_	339,226	339,226
Headquarters' interest rate							
swaps	_	_	_	_	_	7,634	7,634
Headquarters' financial assets							
and etc.						344,900	344,900
	₩20,256,787	82,789	5,388,078	3,668	66,863	1,093,159	26,891,344
Liabilities	17,870,654	100,457	41,751	_	9,625	_	18,022,487
Adjustments:		,	,		,		, ,
Headquarters' derivative							
liabilities	_	_	_	_	_	259,008	259,008
Headquarters' financial							
liabilities						240,180	240,180
	₩17,870,654	100,457	41,751	_	9,625	499,188	18,521,675
T							
Investments in associates and	W 1 177 700	20.220					1 215 042
others(*1)	<b>W</b> 1,1//,/22	38,220	_			_	1,215,942
Acquisitions of property, plant	2 272 025		02.747		6.061	64.107	2 527 050
and equipment	2,373,935	_	93,747	_	6,061	64,107	2,537,850
Acquisitions of intangible assets	277.704					2 (01	201 205
other than goodwill	377,704	_	_	_	_	3,681	381,385

<sup>(\*1)</sup> Investments in associates and others consist of investment in associates and joint ventures and loans to related parties.

<sup>(\*2)</sup> Primarily consists of loans for employees, deferred tax assets and others which are not allocated to the reportable segments.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (ii) As of December 31, 2013

	Oil and gas	Petroleum distribution	Oil stockpiling		Drillship chartering	Reconciling items(*2)	Reportable segment total	Refinery	Group total
•				In mil	lions of Ko	rean won			
Assets	₩22,308,332	79,169	5,365,875	2,632	68,944	_	27,824,952	348,633	28,173,585
Adjustments:									
Headquarters' land,									
buildings, tools &									
fixtures			_	_		199,682	199,682	_	199,682
Headquarters' software									
and memberships	_	_	_	_	_	15,678	15,678	_	15,678
Headquarters' loans to									
employees	_	_	_	_	_	56,930	56,930	_	56,930
Headquarters' deferred									
tax assets	_	_	_	_	_	175,435	175,435	_	175,435
Headquarters' interest									
rate swaps	_	_	_	_	_	57,247	57,247	_	57,247
Headquarters' financial									
assets and etc						121,983	121,983		121,983
	₩22,308,332	79,169	5,365,875	2,632	68,944	626,955	28,451,907	348,633	28,800,540
Liabilities	16,198,361	78,469	101,759	_	5,119		16,383,708	1,933,241	18,316,949
Adjustments:		,	,				, , , <u> </u>	, ,	, ,
Headquarters' derivative									
liabilities	_	_	_	_		49,592	49,592	_	49,592
Headquarters' financial									
liabilities						150,117			150,117
	₩16,198,361	78,469	101,759		5,119	199,709	16,583,417	1,933,241	18,516,658
Investments in									
associates and									
others(*1)	₩ 1.048.036	35,922	_	_	_	_	1,083,958	_	1,083,958
Acquisitions of property,		,					-,000,000		-,,
plant and									
equipment	2,227,145		10,356	_	9,270	91,486	2,338,257	56,526	2,394,783
Acquisitions of	, ,		,		,	,	, ,	,	, ,
intangible assets other									
than goodwill	471,061	_	_	_	_	19,183	490,244	_	490,244
-									

<sup>(\*1)</sup> Investments in associates and others consist of investment in associates and joint ventures and loans to related parties.

<sup>(\*2)</sup> Primarily consists of loans for employees, deferred tax assets and others which are not allocated to the reportable segments.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (d) Information about main customers

There is no customer comprising more than 10% of total sales.

# (e) Information about geographical areas

(i) Revenue by geographic area for the years ended December 31, 2014 and 2013 is as follows:

		2014	2013
		In millions of l	Korean won
	Domestic	₩1,040,991	1,131,782
	Canada	855,036	1,007,934
	United Kingdom	1,184,384	1,719,649
Continuing operations	United States	911,526	774,480
	Kazakhstan	365,721	473,095
	Indonesia	_	71,437
	Singapore	459	87,105
Discontinued operation (Refinery)		3,275,082	4,696,899
		₩7,633,199	9,962,381

In presenting information about geographical areas, segment revenue is based on the geographical location of the Group's entities which recorded the related revenue.

(ii) Non-current assets by geographic area as of December 31, 2014 and December 31, 2013 are as follows:

	December 31, 2014	December 31, 2013
	In millions of	Korean won
Domestic(*)	₩ 5,469,565	5,855,411
Canada	4,351,286	4,910,837
United Kingdom	4,902,800	5,532,250
United States	3,435,186	3,306,561
Kazakhstan	2,589,822	2,733,169
Iraq	1,428,984	1,280,051
Yemen	4,411	34,203
Colombia	_	28,296
Peru	68,086	50,152
Libya	81,113	116,424
Vietnam	469,438	408,483
Others	12,711	9,963
	₩22,813,402	24,265,800

<sup>(\*)</sup> The goodwill that cannot be allocated to an individual country amounting to \(\fomage \pm 429,766\) million and \(\fomage \pm 901,230\) million as of December 31, 2014 and 2013, respectively is included in domestic.

Non-current assets by geographic area include property, plant and equipment, goodwill, intangible assets other than goodwill, investments in associates and joint ventures, and non-financial assets.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# 7. Discontinued Operations

The refinery segment has been reclassified as a discontinued operation as North Atlantic Refining Limited, which was the refinery segment, was disposed of in November 2014. The segment was not previously classified as a discontinued operation or held-for-sale. The comparative consolidated statement of comprehensive loss has been restated to present the discontinued operation separately from continuing operations.

# (a) Results of discontinued operation for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of	Korean won
Income	₩ 3,295,968	4,734,497
Expense(*1)	(3,492,407)	(5,434,879)
Loss before income tax	(196,439)	(700,382)
Income tax benefit (expense)	(87,884)	26,357
Loss after tax	(284,323)	(674,025)
Loss on disposal of discontinued operation(*2)	(54,024)	
Loss from discontinued operation, net of tax	₩ (338,347)	(674,025)

<sup>(\*1)</sup> Impairments on property, plant, and equipment for the years ended December 31, 2014 and 2013 are \text{\psi}171,006 million and \text{\psi}488,019 million, respectively.

# (b) Cash flow from (used in) discontinued operation for the years ended December 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Net cash used in operating activities	₩ (60,752)	(188,684)	
Net cash from (used in) investing activities	(30,330)	241,146	
Net cash from (used in) financing activities	123,172	(59,863)	
Effect of foreign exchange translation	(954)		
Net cash from (used in) discontinued operation	₩ 31,136	<u>(7,401)</u>	

<sup>(\*2)</sup> Reclassification of cumulative foreign currency translation on disposal of subsidiary is \(\foreign 42,126\) million.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (c) Carrying value of assets and liabilities upon disposal and cash flows related to the disposal are as follows:

	2014
	In millions of Korean won
Inventories	₩ 94,616
Trade and other receivables	33,038
Other assets	2,068
Cash and cash equivalents	30,862
Trade and other payables	(54,969)
Provisions	(16,258)
Other liabilities	(10,864)
Net assets and liabilities	78,493
Consideration received, in cash	66,690
Cash and cash equivalents disposed	(30,862)
Net cash inflow	₩ 35,828

# 8. Cash and Cash Equivalents

Cash and cash equivalents in the statement of cash flows include cash and bank deposit and exclude bank overdrafts. Cash and cash equivalents in the consolidated statements of cash flows for the years ended December 31, 2014 and 2013 are comprised of the following items in the consolidated statements of financial position.

	December 31, 2014	December 31, 2013
	In millions of	Korean won
Cash in hands	<b>₩</b> 1,138	109
Other on demand deposits	201,919	183,310
Short-term deposits classified as cash equivalents	9,142	334,920
Short-term investments classified as cash equivalents	296,508	448,074
	508,707	966,413
Cash and cash equivalents included in the assets held for sales	(201)	(381)
	₩508,506	966,032
	=====	=====

# 9. Restricted Cash and Cash Equivalents

Restricted deposits as of December 31, 2014 and 2013 are as follows:

	December 31, 2014		<b>December 31, 2013</b>	
	Current	Non- current	Current	Non- current
	In millions of Korean won			
Asset retirement obligation	₩ —	2,015	_	5,240
Deposits for foreign workers		17		17
Compensations for fishermen	356	_	370	_
Investment for natural resource development	_	_	17,752	_
	₩356	2,032	18,122	5,257

Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### 10. Financial Assets

Details of financial assets as of December 31, 2014 and 2013 are as follows:

	December 31, 2014		December 31, 201	
	Current	Non- current	Current	Non- current
		In millions of		
Short-term financial instruments	₩ 2,436	_	103,440	_
Derivative assets (note 12)	1,801	7,634	8,477	49,640
Available-for-sale financial instruments (note 13)	_	566,895	_	641,902
Loans (note 14)	_	555,252	_	512,013
Long-term financial instruments	_	7,008	_	14,874
Others	10,349		8,535	
	₩14,586	1,136,789	120,452	1,218,429
Others		1,136,789		1,218,429

### 11. Trade and Other Receivables

Details of trade and other receivables as of December 31, 2014 and 2013 are as follows:

	Dece	ember 31, 201	14	December 31, 2013			
	Gross amounts	Allowance for doubtful accounts	Book value	Gross amounts	Allowance for doubtful accounts	Book value	
			In millions of	Korean won			
Current							
Trade accounts receivable	₩ 434,308	(2,107)	432,201	602,706	(2,566)	600,140	
Other receivables	508,956		508,956	421,490		421,490	
	943,264	(2,107)	941,157	1,024,196	(2,566)	1,021,630	
Non-current							
Trade accounts receivable	5,119	_	5,119	1,729	_	1,729	
Other receivables	88,719		88,719	107,036		107,036	
	93,838		93,838	108,765		108,765	
	₩1,037,102	(2,107)	1,034,995	1,132,961	(2,566)	1,130,395	

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### 12. Derivatives

### (a) Derivatives as of December 31, 2014 and 2013 are as follows:

	Decemb	er 31, 2014	Decem	per 31, 2013
	Current	Non-current	Current	Non-current
	In millions of Korean won			
Derivative assets				
Currency swap	₩ —	3,938	7,607	42,980
Interest rate swap	_	3,696	_	6,660
Other derivatives	1,801		870	
	₩1,801	7,634	8,477	49,640
Derivative liabilities				
Foreign exchange forwards	₩1,974	_	_	
Currency swap	_	145,378	49,592	13,284
Other derivatives	1,129		597	
	₩3,103	145,378	50,189	13,284

### (b) Details of foreign exchange forward contracts as of December 31, 2014 are as follows:

		Contract amount					
Counter party	Maturity	Currency	Sell	Currency	Buy	Contract rate of exchange	
	In millions of K	Korean won a	and thousar	nds of foreign	currencies		
DNB	2015-01-08	USD	15,668	GBP	10,000	1.5668	
ING	2015-01-08	USD	15,731	GBP	10,000	1.5731	
DNB	2015-02-09	USD	15,667	GBP	10,000	1.5667	
ING	2015-02-09	USD	15,727	GBP	10,000	1.5727	
SCOTIA	2015-03-09	USD	15,645	GBP	10,000	1.5645	
CBA	2015-03-09	USD	15,726	GBP	10,000	1.5726	
SCOTIA	2015-04-09	USD	15,641	GBP	10,000	1.5641	
CBA	2015-04-09	USD	15,722	GBP	10,000	1.5722	
SOCGEN	2015-05-08	USD	15,662	GBP	10,000	1.5662	
CIBC	2015-05-08	USD	15,714	GBP	10,000	1.5714	
SOCGEN	2015-06-08	USD	15,727	GBP	10,000	1.5727	
CIBC	2015-06-08	USD	15,682	GBP	10,000	1.5682	
BAML	2015-07-08	USD	15,650	GBP	10,000	1.5650	
LLOYDS	2015-07-08	USD	15,670	GBP	10,000	1.5670	
BAML	2015-08-07	USD	15,646	GBP	10,000	1.5646	
DNB	2015-08-07	USD	15,569	GBP	10,000	1.5569	
RBS	2015-09-08	USD	15,618	GBP	10,000	1.5618	
RBS	2015-09-08	USD	15,525	GBP	10,000	1.5525	
RBS	2015-10-08	USD	15,615	GBP	10,000	1.5615	
CBA	2015-10-08	USD	15,520	GBP	10,000	1.5520	
LLOYDS	2015-11-09	USD	15,641	GBP	10,000	1.5641	
LLOYDS	2015-12-08	USD	15,638	GBP	10,000	1.5638	
	DNB ING SCOTIA CBA SCOTIA CBA SOCGEN CIBC SOCGEN CIBC BAML LLOYDS BAML DNB RBS RBS RBS RBS CBA LLOYDS	party         Maturity           In millions of B           ING         2015-01-08           ING         2015-02-09           ING         2015-02-09           ING         2015-02-09           SCOTIA         2015-03-09           CBA         2015-03-09           SCOTIA         2015-04-09           CBA         2015-04-09           SOCGEN         2015-05-08           CIBC         2015-05-08           CIBC         2015-06-08           CIBC         2015-06-08           CIBC         2015-07-08           LLOYDS         2015-07-08           BAML         2015-07-08           BAML         2015-08-07           RBS         2015-09-08           RBS         2015-09-08           RBS         2015-10-08           CBA         2015-10-08           LLOYDS         2015-11-09	party         Maturity         Currency           In millions of Korean won a         USD           ING         2015-01-08         USD           ING         2015-02-09         USD           ING         2015-02-09         USD           ING         2015-02-09         USD           SCOTIA         2015-03-09         USD           CBA         2015-03-09         USD           SCOTIA         2015-03-09         USD           CBA         2015-04-09         USD           SOCGEN         2015-04-09         USD           SOCGEN         2015-05-08         USD           CIBC         2015-05-08         USD           CIBC         2015-06-08         USD           CIBC         2015-06-08         USD           BAML         2015-07-08         USD           BAML         2015-07-08         USD           BAML         2015-08-07         USD           BAML         2015-08-07         USD           RBS         2015-09-08         USD           RBS         2015-09-08         USD           RBS         2015-10-08         USD           CBA         2015-10-08	Counter party         Maturity         Currency         Sell           In millions of Korean won and thousand thousand thousand the party of the party	Counter party         Maturity         Currency         Sell         Currency           DNB         2015-01-08         USD         15,668         GBP           ING         2015-01-08         USD         15,668         GBP           ING         2015-01-08         USD         15,731         GBP           DNB         2015-02-09         USD         15,667         GBP           ING         2015-02-09         USD         15,727         GBP           SCOTIA         2015-03-09         USD         15,645         GBP           CBA         2015-03-09         USD         15,726         GBP           SCOTIA         2015-03-09         USD         15,641         GBP           CBA         2015-04-09         USD         15,641         GBP           SOCGEN         2015-04-09         USD         15,662         GBP           CIBC         2015-05-08         USD         15,722         GBP           CIBC         2015-05-08         USD         15,727         GBP           CIBC         2015-06-08         USD         15,682         GBP           CIBC         2015-07-08         USD         15,650         GBP      <	Counter party         Maturity         Currency         Sell         Currency         Buy           In millions of Korean won and thousands of foreign currencies           DNB         2015-01-08         USD         15,668         GBP         10,000           ING         2015-01-08         USD         15,731         GBP         10,000           DNB         2015-02-09         USD         15,667         GBP         10,000           ING         2015-02-09         USD         15,727         GBP         10,000           SCOTIA         2015-03-09         USD         15,645         GBP         10,000           CBA         2015-03-09         USD         15,641         GBP         10,000           SCOTIA         2015-04-09         USD         15,641         GBP         10,000           CBA         2015-04-09         USD         15,662         GBP         10,000           SOCGEN         2015-05-08         USD         15,714         GBP         10,000           CIBC         2015-06-08         USD         15,682         GBP         10,000           CIBC         2015-06-08         USD         15,650         GBP         10,000           BAML<	

### Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (c) Details of currency swap contracts as of December 31, 2014 are as follows:

			Contract amount				Contract in	iterest rate
Type	Counter party	Maturity	Currency	Sell	Currency	Buy	Sell (%)	Buy (%)
		In million	ns of Korean	won and the	ousands of fo	reign curren	cies	
Cash flow hedge	Barclays	2021-02-08	HKD	500,000	USD	64,185	4.38%	5.03%
Cash flow hedge	BNP	2016-02-15	HKD	780,000	USD	100,135	3.40%	3.69%
Cash flow hedge	BNP	2016-02-16	SGD	100,000	USD	78,431	3.15%	4.14%
Cash flow hedge	BNP	2021-03-04	HKD	390,000	USD	50,081	4.50%	5.20%
Cash flow hedge	RBS	2016-05-12	CHF	125,000	USD	140,213	2.64%	3.74%
Cash flow hedge	UBS	2016-05-12	CHF	200,000	USD	224	2.64%	3.74%
Cash flow hedge	UBS	2016-05-25	EUR	100,000	USD	142,850	3.95%	3.43%
Cash flow hedge	Barclays	2016-12-22	HKD	637,000	USD	81,869	3.20%	3.45%
Cash flow hedge	Barclays	2022-02-10	HKD	390,000	USD	50,282	3.95%	4.45%
Cash flow hedge	UBS	2017-03-08	CHF	100,000	USD	109,733	1.88%	3.34%
Cash flow hedge	Barclays	2017-03-08	CHF	200,000	USD	219,467	1.88%	3.34%
Cash flow hedge	UBS	2022-03-28	EUR	50,000	USD	65,075	4.00%	4.55%
Cash flow hedge	HSBC	2016-12-26	KRW	90,000	USD	80,524	3.89%	2.93%
Cash flow hedge	HSBC	2023-01-24	HKD	400,000	USD	51,600	2.85%	3.17%
Cash flow hedge	HSBC	2018-01-22	HKD	400,000	USD	51,600	1.80%	1.98%
Cash flow hedge	DBS	2023-02-04	EUR	37,000	USD	49,765	2.40%	3.19%
Cash flow hedge	Barclays	2025-06-24	EUR	60,000	USD	80,070	3.00%	4.06%
Cash flow hedge	Barclays	2023-07-03	EUR	50,000	USD	65,670	3.09%	4.31%
Cash flow hedge	HSBC	2018-07-03	AUD	55,000	USD	51,260	4.33%	3.05%
Cash flow hedge	RBS	2018-11-29	CHF	200,000	USD	210,970	1.63%	3.16%
Cash flow hedge	BNP	2018-11-29	CHF	40,000	USD	42,194	1.63%	3.17%
Cash flow hedge	HSBC	2019-10-08	AUD	125,000	USD	109,563	4.25%	0.99%
Cash flow hedge	HSBC	2019-10-08	AUD	75,000	USD	65,738	3.78%	1.06%
Cash flow hedge	ANZ	2019-10-08	AUD	150,000	USD	131,475	3.78%	1.01%

### (d) Details of interest swap contracts as of December 31, 2014 are as follows:

			Contract	Contract interest rate per annum		
Type	Counterparty	Maturity	amount	Sell (%)	Buy (%)	
		In 1	nillions of K	orean won		
Cash flow hedge	Barclays	2018-06-07	300,000	3M Libor+100bp	2.18%	
Cash flow hedge	Barclays	2018-06-07	200,000	3M Libor+80bp	1.98%	

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(e) Gain and loss on valuation and transaction of derivatives for the years ended December 31, 2014 and 2013 are as follows:

	Net income effects of valuations		Net income effects of transactions		Accumulated other comprehensive income (loss)(*)	
	2014	2013	2014	2013	2014	2013
		]	In millions K	orean of wo	n	
Currency forward	₩ —	_	_	_	_	_
Currency swap		_	841	_	21,308	15,544
Interest rate swap		_	_	_	(2,354)	12,162
Other derivatives	(2,020)	6,216		780	1,216	13,666
	₩(2,020)	6,216	<u>841</u>	780	20,170	41,372

<sup>(\*)</sup> The amounts in accumulated other comprehensive income(loss) are net of tax effect amounting to ₩6,241 million and ₩1,737 million for the years ended December 31, 2014 and 2013, respectively.

#### 13. Available-for-sale Financial Instruments

(a) Details of available-for-sale financial instruments as of December 31, 2014 and 2013 are as follows:

	Ownership interest(%)	December 31, 2014	December 31, 2013
	In 1	nillions of Korea	n won
Equity securities:			
Non-marketable			
Daehan Oil Pipeline Corporation(*1)(*2)	_	₩ —	11,686
Yemen LNG Company Limited(*2)	1.06	90,082	83,882
PETRO ONADO S.A.(*3)	5.64	18,036	17,315
Micronic Korea(*2)(*3)	16.70	841	807
Troika Resource Investment PEF	14.47	44,542	40,187
Global Dynasty Natural Resource PEF(*3)	15.00	4,743	3,374
Marketable:			
EP Energy Corp. (*3)(*4)	12.82	358,921	484,651
Faroe Petroleum plc(*5)	18.00	49,730	
		₩566,895	641,902

<sup>(\*1)</sup> The security is disposed during the year ended December 31, 2014.

<sup>(\*2)</sup> The dividend income associated with Yemen LNG Company Limited and others for the year ended December 31, 2014 is \(\forall \pm4,807\) million.

<sup>(\*3)</sup> Book values of non-marketable securities without a quoted price in an active market and a reliable fair value measurement held by the Group that were measured at cost as of December 31, 2014 and 2013 are \(\prec{\psi}\)23,620 million and \(\prec{\psi}\)546,334 million, respectively.

<sup>(\*4)</sup> EP Energy Corp. was newly listed on NYSE during the year ended December 31, 2014.

<sup>(\*5)</sup> Faroe Petroleum plc is reclassified as an available-for-sale financial instrument due to the Group's loss of its significant influence over the entity.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### (b) The details of available for sales financial instruments as of December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Beginning balance	₩ 641,902	618,583	
Acquisition	11,750	21,750	
Disposals	(11,663)	(35,617)	
Valuation adjustments(*1)	(183,829)	49,149	
Other changes(*2)(*3)	89,070	11,095	
Effect of movements in exchange rates	19,665	(23,058)	
Carrying book value	₩ 566,895	641,902	

<sup>(\*1)</sup> Amounts are presented before the effect of deferred income taxes amounting to \(\fomage 31,311\) million in 2014 and (-)\(\fomage 16,569\) million in 2013, which have been recognized directly in equity. In addition, the amount that was reclassified to profit or loss due to the disposal of the available-for-sale financial assets in 2013 was \(\fomage 11,582\).

#### 14. Long-term Loans

Details of loans as of December 31, 2014 and 2013 are as follows:

	December 31, 20	014 December 31, 2013
	In millio	ns of Korean won
Loans for tuitions(*1)	₩ 314	- 84
Loans for housing(*2)	88,983	56,825
Loans for vehicles(*3)		680
General loans	108,758	115,205
Loans to overseas fields operations	8	20
Loans to related parties(*4)		731,080
Allowance for doubtful accounts		(391,881)
	₩ 555,252	512,013

<sup>(\*1)</sup> The Group provides interest-free loans to employees who worked over a year for their children's tuitions. The loans are repaid from their monthly wages.

<sup>(\*2)</sup> The Group decided not to participate in a new issuance of stocks of Faroe Petroleum plc in 2014. The Group's shares had decreased from 22.63% to 18% and was reclassified to available-for-sale financial instruments from investments in associate.

<sup>(\*3)</sup> The Group acquired an available-for-sale financial instrument (EP Energy Corp.) by contributing the investment in subsidiary (KNOC EPE Corp.). As a result, the investment in subsidiary was reclassified to an available-for-sale financial instrument during the year ended December 31, 2013. As the transaction lacks commercial substance, it is presented as other changes.

<sup>(\*2)</sup> The Group provides loans for housing to employees without housing at market interest rates. The loans are due 5~10 years and repaid by lump sum at maturity.

<sup>(\*3)</sup> The Group provides interest-free loans to overseas secondees who purchase or lease a vehicle. The loans are due when the secondees return to Headquarters.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(\*4) The Group provides loans to KC Kazakh B.V. and 17 other related parties at 2.25~9.00% interest rates. The loans are due 5~25 years and the Group recognized related bad debt expenses of \(\mathbb{W}69,485\) million during the year-ended December 31, 2014.

#### 15. Inventories

Inventories as of December 31, 2014 and 2013 are as follows:

	December 31, 2014			December 31, 2013			
	Acquisition cost	Provision for loss on valuation	Carrying amount	Acquisition cost	Provision for loss on valuation	Carrying amount	
		I	n millions of	Korean won			
Raw materials	₩ 6,251	(776)	5,475	8,345	(590)	7,755	
Merchandises	15,070	_	15,070	14,128	_	14,128	
Work-in-progress	228	_	228	206	_	206	
Finished goods	48,359	_	48,359	96,544	_	96,544	
Supplies	81,487	_	81,487	68,222	_	68,222	
Goods in-transit	1,061		1,061	1,103		1,103	
Total	₩152,456	(776) ====	151,680	188,548	(590) ===	187,958	

The losses on the valuation of inventories charged to cost of sales for the year ended December 31, 2014 and 2013 are \$186 million and \$41 million, respectively.

#### 16. Non-Financial Assets

Details of non-financial assets as of December 31, 2014 and 2013 are as follows:

	December	r 31, 2014	December 31, 2013		
	Current	Non- current	Current	Non- current	
		In millions of l	Korean won		
Advance payments	₩115,182	_	330,041		
Prepaid expenses	79,898	11,671	109,865	32,400	
Oil stockpiles	_	3,412,635	_	3,183,974	
Non-current assets held for sale (Note 17)	62,212	_	54,719		
Others				310	
	₩257,292	3,424,306	<u>494,625</u>	3,216,684	

Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### 17. Non-current Assets and Liabilities Held For Sale

Assets and liabilities held for sale as of December 31, 2014 and 2013 are as follows:

			201	4		2013			
	KNO NEMO (*1	ONE	KNOC NEMTWO (*1)	Disposal of Land and others(*2)	Total	KNOC NEMONE (*1)	KNOC NEMTWO (*1)	KNOC Sumatra Ltd.	Total
				In m	nillions of H	Korean won			
Cash and cash equivalents Account receivables and other	₩	90	110	_	200	235	146	_	381
receivables		_	_	_	_	3,220	2,510	_	5,730
Inventories		_	_			1,264	1,384		2,648
Current non-financial assets		_	_		_	32	29		61
Long-term account receivables and other receivables		_	_	_	_	4	1	_	5
Property, plant and equipment		_	_	62,012	62,012	_	_	40,675	40,675
Intangible assets other than									
goodwill		_						5,219	5,219
Assets held for sale		90	110	62,012	62,212	4,755	4,070	45,894	54,719
Account payables and other									
payables		17	17	_	34	57	58	_	115
Non-current financial liabilities	26,	549	21,727		48,276	25,489	20,806		46,295
Liabilities held for sale	₩26,	566	21,744		<u>48,310</u>	25,546	20,864		<u>46,410</u>

<sup>(\*1)</sup> KNOC NEMONE and KNOC NEMTWO, the Group's subsidiaries, have resolved and proceeded to discontinue their operations in 2009 and received approval to close the areas from the government of Indonesia in 2011. KNOC NEMONE completed it tax investigation as of December 31, 2014 and KNOC NEMTWO completed its tax investigation in November 2013. It is expected to complete their liquidations in 2015.

<sup>(\*2)</sup> Disposal of KNOC headquarter building and related assets was approved by the board of directors in April 2012. After its relocation to Ulsan, the Group entered into a sales contract of the properties on November 20, 2014. The sale is expected to be completed by the first half of 2015.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### 18. Investments in Associates and Joint Ventures

#### (a) Summary of investments in associates and joint ventures

(i) As of December 31, 2014

Entity	Principal activity	Country	Equity interest (%)	Acquisition cost	Book value
		In millions o	f Korean won		
<investments associates="" in=""></investments>					
Kernhem B.V	Exploration and				
	Production(E&P)	Netherlands	36.67	₩ 11,231	10,100
Oilhub Korea Yeosu Co. Ltd	Storing of oil	Korea	29.00	37,160	36,954
ADA Oil LLP(*1)	E&P	Kazakhstan	12.50	19,291	11,502
Parallel Petroleum LLC(*2)	E&P	United States	10.00	42,172	40,170
				109,854	98,726
<investments in="" joint="" ventures=""></investments>					
KNOC Inam Ltd.(*3)	Exploration	Malaysia	40.00	_	_
KNOC Kamchatka Petroleum	-	•			
Ltd.(*3)(*4)	Exploration	Cyprus	55.00	1	_
KC karpovsky B.V.(*3)	Exploration	Netherlands	35.00	10	_
KNOC Bazian Ltd.(*3)(*4)	Exploration	Malaysia	66.72	_	_
Dolphin Property Ltd.(*4)	Lease	Nigeria	75.00	66	243
KNOC Nigerian West Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	66	
KNOC Nigerian East Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	66	_
KNOC Aral Ltd.(*3)(*4)	Exploration	Malaysia	51.00	_	_
KNOC kamchatka Co. Ltd.(*3)	Exploration	Cyprus	50.00	7,471	_
KC kazakh B.V.(*3)	Exploration	Netherlands	35.00	249	_
Offshore International Group, Inc	E&P	United States	50.00	701,551	687,310
KNOC Ferghana Ltd.(*3)	Exploration	Malaysia	50.00	1	_
KNOC Ferghana2 Ltd.(*3)(*4)	Exploration	Malaysia	65.00	_	_
KADOC Ltd.(*3)(*4)	Exploration	Malaysia	75.00	1	_
Korea Oil Terminal Co., Ltd.(*4)	Storing of oil	Korea	51.00	1,267	1,267
Deep Basin Partnership(*4)	E&P	Canada	77.81	54,753	46,489
HKMS Partnership(*4)	Gas processing				
	plant operation	Canada	53.76	26,570	25,202
				792,072	760,511
				₩901,926	859,237

<sup>(\*1)</sup> Classified as an investment in associate because the Group's associate, Kernhem B.V., holds 75% of the equity interest and by effective equity interest, the Group has the ability to exercise significant influence over the entity.

<sup>(\*2)</sup> Classified as an investment in associate because the Group can designate one director in its board of directors. Despite the percentage of ownership is below 20%, the Group has the ability to exercise significant influence over the entity.

<sup>(\*3)</sup> Joint ventures that have a book value of less than  $\mathbb{W}1$  million.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(\*4) Despite the percentage of ownership of over 50%, the investment is classified as an investment in associate because the Group is unable to exercise control over investees solely and when making significant decisions, the Group requires consents from all the other shareholders in accordance with the agreements made.

(ii) As of December 31, 2013

Entity	Principal activity	Country	Equity interest (%)	Acquisition Cost	Book value
Entity	Finicipal activity	In millions of Ko		Cost	value
<investments associates="" in=""></investments>		In minions of Ko	rean won		
Kernhem B.V.	Exploration and				
Tremment B. V	Production(E&P)	Netherlands	36.67	₩ 10,783	12,632
Oilhub Korea Yeosu Co. Ltd	Storing of oil	Korea	29.00	35,676	38,775
ADA Oil LLP(*1)	E&P	Kazakhstan	12.50	18,521	12,382
Faroe Petroleum plc	E&P	United Kingdom	22.63	157,451	135,205
Parallel Petroleum LLC(*2)	E&P	United States	10.00	40,488	46,529
				262,919	245,523
					243,323
<investments in="" joint="" ventures=""></investments>					
KNOC Inam Ltd.(*3)	Exploration	Malaysia	40.00	_	_
KNOC Kamchatka Petroleum					
Ltd.(*3)(*4)	Exploration	Cyprus	55.00	1	_
KC karpovsky B.V.(*3)	Exploration	Netherlands	35.00	10	_
KNOC Bazian Ltd.(*3)(*4)	Exploration	Malaysia	57.00	_	_
Dolphin Property Ltd.(*3)(*4)	Lease	Nigeria	75.00	63	_
KNOC Nigerian West Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	63	_
KNOC Nigerian East Oil Company					
Ltd.(*3)(*4)	Exploration	Nigeria	75.00	63	_
KNOC Aral Ltd.(*3)(*4)	Exploration	Malaysia	51.00	_	_
KNOC kamchatka Co. Ltd.(*3)	Exploration	Cyprus	50.00	7,172	_
KC kazakh B.V.(*3)	Exploration	Netherlands	35.00	239	_
Offshore International Group, Inc.(*4)	E&P	United States	50.00	673,547	672,783
KNOC Ferghana Ltd.(*3)(*4)	Exploration	Malaysia	50.00	1	_
KNOC Ferghana2 Ltd.(*3)(*4)	Exploration	Malaysia	65.00	_	_
KNOC Samsung Lantian Oil					
Development Co., Ltd	Production	China	44.00	5,802	6,459
KADOC Ltd.(*3)(*4)	Exploration	Malaysia	75.00	1	
				686,962	679,242
				₩949,881	924,765

<sup>(\*1)</sup> Classified as an investment in associate because the Group's associate, Kernhem B.V., holds 75% of the equity interest and by effective equity interest, the Group has the ability to exercise significant influence over the entity.

<sup>(\*2)</sup> Classified as an investment in associate because the Group can designate one director in its board of directors. Despite the percentage of ownership is below 20%, the Group has the ability to exercise significant influence over the entity.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

- (\*3) Joint ventures that have a book value of less than a million of Korean won.
- (\*4) Despite the percentage of ownership of over 50%, the investment is classified as an investment in associate because the Group is unable to exercise control over investees solely and when making significant decisions, the Group requires consents from all the other shareholders in accordance with the agreements made.

### (b) Changes in carrying value

(i) For the year ended December 31, 2014

Entity	Beginning balance	Acquisition	Disposals	Dividends received	Share of profit and loss of equity method	Changes in equity adjustments in equity method	Other changes (*1)	Ending balance
			In	millions of	Korean won			
<investment associates="" in=""></investment>								
Kernhem B.V	₩ 12,632	_	_	_	(125)	(2,804)	397	10,100
Oilhub Korea Yeosu Co.	20.555				(4.5.40)	(4. 5.45)	1 166	26051
Ltd	38,775	_	_	_	(1,740)	(1,547)	1,466	36,954
ADA Oil LLP	12,382		(122 162)	_	(2)	(1,335)	457	11,502
Faroe Petroleum plc	135,205		(132,162)		(2,662)	_	(381)	
Parallel Petroleum LLC	46,529			(527)	(7,421)		1,589	40,170
	245,523		(132,162)	(527)	(11,950)	(5,686)	3,528	98,726
<investment in="" joint="" ventures=""></investment>								
KNOC Inam Ltd.(*2)		_	_	_			_	_
KNOC Kamchatka Petroleum								
Ltd.(*2)	_	_	_	_	_		_	_
KC karpovsky B.V.(*2)	_	_	_	_			_	_
KNOC Bazian Ltd.(*2)		_	_					
Dolphin Property Ltd	_	_	_	_	132	101	10	243
KNOC Nigerian West Oil								
Company Ltd.(*2)		_	_	_			_	_
KNOC Nigerian East Oil								
Company Ltd.(*2)	_	_	_	_	_	_	_	_
KNOC Aral Ltd.(*2) KNOC kamchatka Co.	_	_	_	_	_	_	_	_
Ltd.(*2)								
KC kazakh B.V.(*2)								
Offshore International Group,								
Inc	672,783	_	(14)	_	(12,883)		27,424	687,310
KNOC Ferghana Ltd.(*2)		_	_	_		_		_
KNOC Ferghana2 Ltd.(*2)	_	_	_	_				_
KNOC Samsung Lantian Oil								
Development Co., Ltd	6,459	_	(6,447)		_		(12)	_
KADOC Ltd.(*2)	_	_	_	_		_		_
Korea Oil Terminal Co.,								
Ltd	_	1,214	_	_	_	_	53	1,267
Deep Basin Partnership	_	52,463	_	(2,213)	(4,488)	_	727	46,489
HKMS Partnership		25,459			(32)		(225)	25,202
	679,242	79,136	(6,461)	(2,213)	(17,271)	101	27,977	760,511
	₩924,765	79,136	(138,623)	(2,740)	(29,221)	(5,585)	31,505	859,237

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### (ii) For the year ended December 31, 2013

Entity	Beginning balance	Disposals	Share of profit and loss of equity method (*1)	Changes in equity adjustments in equity method(*2)	Other changes (*2)	Ending Balance
<investment associates="" in=""></investment>			in millions of	Korean won		
Kernhem B.V.	₩ 9,317		2,221	1,362	(268)	12,632
Oilhub Korea Yeosu Co. Ltd	39,076		(342)	627	(586)	38,775
ADA Oil LLP	11,292		680	623	(213)	12,382
Faroe Petroleum plc	131,840	_	2,584		781	135,205
Parallel Petroleum LLC	61,298	(17,503)	3,117	_	(383)	46,529
Turuner Tetrologin EDE		<u> </u>		2.612		
	252,823	(17,503)	8,260	2,612	(669)	245,523
<investment in="" joint="" ventures=""></investment>						
KNOC Inam Ltd.(*3)	_	_	_	_	_	_
KNOC Kamchatka Petroleum						
Ltd.(*3)	_	_	_	_	_	_
KC karpovsky B.V.(*3)	_	_	_	_	_	_
KNOC Bazian Ltd.(*3)	_	_		_	_	_
Dolphin Property Ltd.(*3)	_	_	_	_	_	_
KNOC Nigerian West Oil Company						
Ltd.(*3)	_	_		_	_	_
KNOC Nigerian East Oil Company						
Ltd.(*3)	_	_	_	_	_	_
KNOC Aral Ltd.(*3)	_	_	_	_	_	_
KNOC kamchatka Co. Ltd.(*3)	_	_	_	_	_	_
KC kazakh B.V.(*3)				_		
Offshore International Group, Inc	674,636	(1,397)	9,800	_	(10,256)	672,783
KNOC Ferghana Ltd.(*3)	_	_	_	_	_	_
KNOC Ferghana2 Ltd.(*3)	_	_	_	_	_	_
KNOC Samsung Lantian Oil	7.224		(000)	107	(0.0)	C 450
Development Co., Ltd	7,334	_	(990)	195	(80)	6,459
KADOC Ltd.(*3)						
	681,970	(1,397)	8,810	_195	(10,336)	679,242
	₩934,793	(18,900)	17,070	2,807	(11,005)	924,765

<sup>(\*1)</sup> For the year ended December 31, 2013, the Group recorded additional share of loss of equity method investments amounting to \(\formall^{1}\)16,899 million on the loans to the investments in associates that have book value of zero as their capital has been completely impaired.

<sup>(\*1)</sup> Others include the effect of exchange rates fluctuations.

<sup>(\*2)</sup> Joint ventures that have book value of less than  $\mathbb{W}1$  million.

<sup>(\*2)</sup> Others include the effect of exchange rates fluctuations.

<sup>(\*3)</sup> Joint ventures that have book value of less than a million of Korean won.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (c) The summary of financial information of major associates and joint ventures

### (i) For the year ended December 31, 2014

	2014				
		Total assets	Total liabilities	Revenue	Net income (loss)
		In	millions of I	Korean won	
<investment associates="" in=""></investment>					
Kernhem B.V	₩	236,028	228,797	101,795	1,328
Oilhub Korea Yeosu Co. Ltd		553,185	425,759	49,427	(5,999)
ADA Oil LLP		148,842	134,082	101,795	6,335
Parallel Petroleum LLC		638,274	293,687	139,913	(79,899)
<investment in="" joint="" ventures=""></investment>					
KNOC Bazian Ltd		141,801	184,723	_	(3,035)
Dolphin Property Ltd		328	4	_	1,076
KNOC Nigerian West Oil Company Ltd		150,644	208,323	_	(6,295)
KNOC Nigerian East Oil Company Ltd		247,785	310,719	_	(7,141)
KNOC Aral Ltd.		37,910	38,099	_	
KC kazakh B.V.		625,173	702,563	_	(28,750)
Offshore International Group, Inc	1	,137,593	441,979	373,879	10,374
KNOC Ferghana Ltd		61,195	66,001	_	(1,417)
KNOC Ferghana2 Ltd		18,947	20,002	_	(437)
KADOC Ltd.		178,114	195,553	_	(2,788)
Korea Oil Terminal Co., Ltd		1,791	59	5	(669)
Deep Basin Partnership		211,974	166,670	11,525	(4,489)
HKMS Partnership		70,798	70,865		(68)

### (ii) For the year ended December 31, 2013

	2013				
		Total assets	Total liabilities	Revenue	Net income (loss)
		In	millions of I	Korean won	
<investment associates="" in=""></investment>					
Kernhem B.V	₩	231,267	217,993		7,172
Oilhub Korea Yeosu Co. Ltd		530,333	396,627	36,326	(1,180)
ADA Oil LLP		134,677	116,153	65,171	9,664
Faroe Petroleum plc		802,225	398,933	271,919	(8,867)
Parallel Petroleum LLC		152,525	50,984	22,842	6,251
<investment in="" joint="" ventures=""></investment>					
KNOC Bazian Ltd		141,103	179,269	_	(4,235)
Dolphin Property Ltd		6,334	7,237	571	2,620
KNOC Nigerian West Oil Company Ltd		144,084	193,152	_	(8,155)
KNOC Nigerian East Oil Company Ltd		237,336	290,602	_	(2,600)
KNOC Aral Ltd.		36,373	36,555	_	(78)
KC kazakh B.V		394,271	442,235	_	1,147
Offshore International Group, Inc		1,219,539	562,101	414,859	53,870
KNOC Ferghana Ltd		58,750	61,945	_	(1,508)
KNOC Ferghana2 Ltd		16,128	16,704	_	(349)
KNOC Samsung Lantian Oil Development Co., Ltd		15,317	636	5,148	(2,250)
KADOC Ltd.		82,363	97,262	_	(10,209)

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### 19. Property, Plant and Equipment

(a) The acquisition cost and net book value of property, plant and equipment as of December 31, 2014 and 2013 are as follows:

(i) As of December 31, 2014

	December 31, 2014							
	Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment losses	Book value			
		In mi	llions of Korean v	von				
Land	₩ 503,119	_	_	_	503,119			
Buildings	185,121	_	(20,908)	_	164,213			
Structures	1,794,803	(127)	(523,184)	_	1,271,492			
Machinery	584,474	(4,591)	(311,359)	_	268,524			
Vessels	107,199	_	(62,659)	_	44,540			
Vehicles	9,096	_	(6,369)	_	2,727			
Tools & fixtures	73,890	_	(43,809)	_	30,081			
Construction-in-progress	61,962	_		_	61,962			
Others	57,265	_	(29,758)	_	27,507			
Oil & gas properties	21,078,753	(8,116)	(8,533,611))	(1,089,208)	11,447,818			
	₩24,455,682	(12,834)	(9,531,657)	(1,089,208)	13,821,983			

(ii) As of December 31, 2013

	December 31, 2013						
	Acquisition cost	Government grants	Accumulated depreciation	Accumulated impairment losses	Book value		
		In mil	lions of Korean v	von			
Land	₩ 691,425	_		(28,620)	662,805		
Buildings	108,907	_	(34,728)	(2,526)	71,653		
Structures	3,189,387	(125)	(869,453)	(945,524)	1,374,285		
Machinery	530,063	(4,703)	(273,663)	_	251,697		
Vessels	109,477	_	(59,885)	(8,400)	41,192		
Vehicles	10,102	_	(6,505)	(211)	3,386		
Tools & fixtures	50,363	_	(39,337)	_	11,026		
Construction-in-progress	173,969	_		_	173,969		
Others	35,649	_	(19,671)	_	15,978		
Oil & gas properties	20,769,688	(9,952)	(8,258,523)	(320,718)	12,180,495		
	₩25,669,030	<u>(14,780)</u>	<u>(9,561,765)</u>	<u>(1,305,999)</u>	14,786,486		

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (b) Changes in property, plant and equipment for the years ended December 31, 2014 and 2013 are as follows:

#### (i) For the year ended December 31, 2014

	Beginning balance	Acquisitions	Disposals	Depreciation (*1)	Impairment losses(*2)	Reclassifi- cations	Others (*3)	Ending balance
			In	millions of Ko	orean won			
Land	₩ 662,805	20,571	(174,735)	_	(9,764)	(15,770)	20,012	503,119
Buildings	71,653	48,223	(5,829)	(3,868)	(9,444)	56,568	6,910	164,213
Structures	1,374,285	45,719	(7,249)	(55,056)	(149,677)	11,249	52,221	1,271,492
Machinery	251,697	16,866	(4,477)	(29,386)	_	23,500	10,324	268,524
Vessels	41,192	5,934	_	(2,637)	(1,771)	_	1,822	44,540
Vehicles	3,386	550	(11)	(869)	(233)	(137)	41	2,727
Tools & fixtures	11,026	22,218	(8)	(5,403)	(99)	1,887	460	30,081
Construction-in-								
progress	173,969	59,529	(1,200)	_	_	(170,094)	(242)	61,962
Others	15,978	9,343	(59)	(6,655)	(18)	371	8,547	27,507
Oil & gas								
properties	12,180,495	2,308,896	(300,185)	(1,388,869)	(775,546)	(469,469)	(107,504)	11,447,818
	₩14,786,486	2,537,849	(493,753)	(1,492,743)	(946,552)	(561,895)	(7,409)	13,821,983

<sup>(\*1)</sup> Includes depreciation from the discontinued operation amounting to ₩12,228 million.

#### (ii) For the year ended December 31, 2013

	Beginning balance	Acquisitions		Depreciation (*1)	Impairment losses (*2)	Reclassifi- cations	Others (*3)	Ending balance
			In	millions of Ko	rean won			
Land	₩ 702,657	425	(1,294)		(30,716)	_	(8,267)	662,805
Buildings	75,778	3,117	(130)	(3,471)	(2,711)	_	(930)	71,653
Structures	1,890,298	56,053	(45)	(131,275)	(445,350)	_	4,604	1,374,285
Machinery	279,061	5,324	(221)	(29,429)	_	18	(3,056)	251,697
Vessels	43,976	9,270	_	(2,760)	(9,016)	_	(278)	41,192
Vehicles	3,963	941	(57)	(1,176)	(226)	_	(59)	3,386
Tools & fixtures	11,223	6,829	(1,088)	(5,343)	_	_	(595)	11,026
Construction-in-								
progress	98,472	113,279	(2,145)		_	(31,101)	(4,536)	173,969
Others	14,455	3,514	_	(5,339)	_	6,258	(2,910)	15,978
Oil & gas								
properties	11,743,512	2,196,031	(189,432)	(1,369,265)	(177,052)	3,402	(26,701)	12,180,495
	₩14,863,395	2,394,783	(194,412)	(1,548,058)	(665,071)	(21,423)	(42,728)	14,786,486

<sup>(\*1)</sup> Includes depreciation from the discontinued operation amounting to \$88,090 million.

<sup>(\*2)</sup> Includes impairment losses from discontinued operation amounting to \(\formall 171,006\) million.

<sup>(\*3)</sup> Others include the effect of exchange rates fluctuations and others.

<sup>(\*2)</sup> Includes impairment losses related to discontinued operation amounting to \\ \dagger 488,019 million.

<sup>(\*3)</sup> Others include the effect of exchange rates fluctuations and others.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### (c) Details of impairments recognized by segments for the year ended December 31, 2014.

	Oil and Gas(*1)	Refinery			
	In millions of Korean won				
Generals					
Type of assets	Oil and gas properties	General assets			
Valuation Method	Value in use	Fair value less cost to sell			
Assumptions					
Pre-tax discount rate	6.0~17.2%	N/A			
Oil prices(*2)	International indices	N/A			
Production quantities	Estimated production quantities				
	based on reserve reports	N/A			
Recoverable amounts	₩ 813,634	_			
Impairment losses(*3)	775,545	171,006			
Reason for impairment	Decrease in international oil prices	Decrease in disposable value			

<sup>(\*1)</sup> The CGUs of the oil and gas segment are fields or wells and the impairments were recognized for 21 CGUs and individual assets.

#### 20. Goodwill

#### (a) Changes in goodwill for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of I	Korean won
Beginning balance	₩1,406,616	1,467,973
Impairment(*1)	(457,038)	_
Other changes(*2)	(92,529)	(61,357)
Ending balance	₩ 857,049	1,406,616

<sup>(\*1)</sup> The Group recognized an impairment loss of \(\foathbf{W}\)457,038 million due to significant decrease in oil prices for goodwill recognized from the acquisition of Dana Petroleum Limited.

# (b) For the purpose of impairment testing, goodwill is allocated to individually operating entities determined to be CGUs. The goodwill amounts as of December 31, 2014 and 2013 are as follows:

ecember 31, 2014	December 31, 2013
In millions of	Korean won
₩475,073	976,136
334,201	376,274
47,775	54,206
₩857,049	1,406,616
)(	In millions of ₩475,073 334,201 47,775

<sup>(\*2)</sup> The oil prices are based on the long-term forecasts from globally recognized research institutions.

<sup>(\*3)</sup> The Group recognized impairment losses of the lands, buildings, structures, vessels, vehicles, tools&fixtures and others of the refinery segment amounting to \(\psi\_9,764\) million, \(\psi\_9,444\) million, \(\psi\_149,677\) million, \(\psi\_1771\) million, \(\psi\_233\) million, \(\psi\_99\) million, and \(\psi\_18\) million, respectively.

<sup>(\*2)</sup> Others include the effect of exchange rate fluctuations.

### Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

- (\*1) Dana Petroleum Limited's recoverable amount is estimated based on the value in use. The value in use is estimated from the cash inflows, which are discounted at 5.57%, derived from the oil production in the long-term production plan indicated in the reserve reports and based on the long-term oil price forecasts by the research institutions. The Group recognized an impairment of goodwill of \$\forall 457,038\$ million in the consolidated statements of comprehensive loss as other loss based on the value in use of \$\forall 2,247,476\$ million. The estimation of the value in use is effected by the assumptions used such as the discount rate in the discounted cash flows model. In the case of increase in the discount rate of 0.5%, the value in use decreases by \$\forall 5,727\$ million and in the case of decrease in the discount rate of 0.5%, the value in use increases by \$\forall 2,773\$ million.
- (\*2) Harvest Operations Corp.'s recoverable amount is estimated based on the fair value less costs of disposal. The Group estimated the fair value less costs of disposal using the market approach valuation technique. The Group used the market multiples as the entity value of a set of comparable companies divided by their reserves and multiplied that multiples to the subsidiaries' reserves from the reserve reports. There is no impairment of goodwill recognized based on the fair value less costs of disposal estimated for each CGU for the year ended December 31, 2014.
- (\*3) Altius Holding Inc.'s recoverable amount is estimated based on the value in use. The value in use is estimated from the cash inflows, which are discounted at 14.40%, derived from the oil production in the long-term production plan indicated in the reserve reports and based on the long-term oil price forecasts by the research institutions. There is no impairment of goodwill recognized based on the value in use estimated for each CGU for the year ended December 31, 2014. The estimation of the value in use is effected by the assumptions used such as the discount rate in the discounted cash flows model. In the case of increase in the discount rate of 0.5%, the value in use decreases by \times 10,768 million and in the case of decrease in the discount rate of 0.5%, the value in use increases by \times 10,998 million.

#### 21. Intangible Assets Other Than Goodwill

(a) The acquisition cost and net book value of intangible assets other than goodwill as of December 31, 2014 and 2013 are as follows:

(i) As of December 31, 2014

		December :	31, 2014	
	Acquisition cost	Accumulated amortization	Accumulated impairment losses	Book value
		In millions of I	Korean won	
Exploration and evaluation assets	₩3,067,512	_	(2,235,634)	831,878
Software	30,382	(19,417)	_	10,965
Mining rights	4,120,953	(1,082,023)	(41,803)	2,997,127
Development cost	30,213	(22,322)	_	7,891
Land use right	230	(54)	_	176
Others	54,072	(877)	(50,404)	2,791
	₩7,303,362	<u>(1,124,693)</u>	(2,327,841)	3,850,828

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### (ii) As of December 31, 2013

		December	31, 2013	
	Acquisition cost	Accumulated amortization	Accumulated impairment losses	Book value
		In millions of	Korean won	
Exploration and evaluation assets	₩2,752,754		(1,515,696)	1,237,058
Software	25,080	(14,206)	_	10,874
Mining rights	2,980,174	(320,675)	(19,458)	2,640,041
Development cost	28,521	(18,225)	_	10,296
Land use right	221	(47)	_	174
Others	51,816	(713)	(18,297)	32,806
	₩5,838,566	(353,866)	<u>(1,553,451)</u>	3,931,249

# (b) Changes in intangible assets other than goodwill for the years ended December 31, 2014 and 2013 are as follows:

(i) For the year ended December 31, 2014

	Beginning balance	Acquisi- tions	Disposals	Amorti- zation	Impairment losses and others(*1)	Reclassifi- cations	Others (*2)	Ending balance
				In millions of	Korean won			
Exploration and								
evaluation								
assets	₩1,237,058	371,257	(48,938)	_	(775,318)	_	47,819	831,878
Software	10,874	3,328	_	(3,872)	_	365	270	10,965
Mining rights	2,640,041	6,235	_	(255, 367)	(20,626)	501,185	125,659	2,997,127
Development								
cost	10,296	345	_	(3,199)	_	139	310	7,891
Land use right	174	_	_	(6)	_	_	8	176
Others	32,806	220		(165)	(30,035)		(35)	2,791
	₩3,931,249	381,385	(48,938)	(262,609)	(825,979)	501,689	174,031	3,850,828

<sup>(\*1)</sup> Includes the write-off of \(\forall 825,979\) million, which are recognized due to failure to find reserves (dry hole cost) in Europe, expired mining rights in Africa and others.

<sup>(\*2)</sup> Others include the effect of exchange rates fluctuations and others.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### (ii) For the year ended December 31, 2013

	Beginning balance	Acquisi- tions	Disposals	Amorti- zation In millions of	Impairment losses(*1) Korean won	Reclassifi- cations	Others (*2)	Ending balance
Exploration and evaluation								
assets	₩1,543,611	474,413	(8,654)		(546,467)	(15,322)	(210,523)	1,237,058
Software	9,377	4,971	_	(3,410)	_	_	(64)	10,874
Mining rights	2,824,070	8,796	_	(150,899)	(3,471)	(10,878)	(27,577)	2,640,041
Development								
cost	12,314	1,371	_	(3,277)		_	(112)	10,296
Land use right	183	_	_	(6)		_	(3)	174
Others	32,763	693		(138)			(512)	32,806
	₩4,422,318	<u>490,244</u>	(8,654)	<u>(157,730)</u>	<u>(549,938)</u>	<u>(26,200)</u>	<u>(238,791)</u>	3,931,249

<sup>(\*1)</sup> Includes the write-off of \(\forall 549,938\) million, which were recognized due to failure to find reserves in United Kingdom and Egypt exploration fields and expired mining rights of Norway exploration fields.

#### 22. Trade and Other Payables

Details of trade and other payables as of December 31, 2014 and December 31, 2013 are as follows:

		December	31, 2014	Decembe	er 31, 2013
		Current	Non-current	Current	Non-current
			In millions of	Korean won	
Trade accounts payable	₩	391,680	_	294,272	
Other accounts payable		841,694	248,710	1,020,450	72,025
Accrued expenses		112,605	198,019	121,664	178,970
Deposit received		_	3,964	_	1,933
Others		71,962	2,013	36,899	2,387
	₩1	,417,941	452,706	1,473,285	255,315

#### 23. Financial Liabilities

Financial liabilities as of December 31, 2014 and 2013 are as follows:

December	31, 2014	Decembe	er 31, 2013
Current	Non-current	Current	Non-current
	In millions of I	Korean won	
₩1,257,794	10,758,604	2,806,362	9,110,228
3,103	145,378	50,189	13,284
_	544	_	1,183
	364		647
₩1,260,897	10,904,890	2,856,551	9,125,342
	Current  ₩1,257,794 3,103 —	Current         Non-current           In millions of I           ₩1,257,794         10,758,604           3,103         145,378           —         544           —         364	Current         Non-current In millions of Korean won           ₩1,257,794         10,758,604         2,806,362           3,103         145,378         50,189           —         544         —           —         364         —

<sup>(\*2)</sup> Others include the reclassification of exploration and evaluation assets and the effect of exchange rates fluctuations and others.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### 24. Borrowings and Bonds Payables

### (a) Details of short-term borrowings as of December 31, 2014 and 2013 are as follows:

	Financial Institutions	Description	Interest rate (%)	2014	2013
		In millions of	Korean won		
Short- term borrowings in	DBS	Borrowings	1ML + 0.37	₩ 54,960	_
foreign currencies	Korea Development Bank	Borrowings	LIBOR $+ 0.75$	54,960	_
	Korea Development Bank	Borrowings	LIBOR $+ 1.30$	32,976	_
	Sumitomo Mitsui Bank	Borrowings	LIBOR $+ 0.70$	32,976	_
	Shinhan Bank London	Borrowings	3ML + 2.50	5,512	_
	HSBC	Credit line	_	_	9,520
	Bank of America	Borrowings	LIBOR $+ 0.80$	32,976	63,318
	Korea Development Bank	Borrowings	_		84,424
				₩214,360	<u>157,262</u>

### (b) Details of long-term borrowings as of December 31, 2014 and 2013 are as follows:

						2	2014	20	013
Financial Institution	Туре	Fixed/ Floating	Interest rate (%)	Maturity	Currency Unit	Foreign currency	Local currency	Foreign currency	Local currency
	In millio	ons of Kor	ean won and	thousands of	foreign cu	rrencies			
Bank of									
Communications	Bank Borrowings	Floating			USD	_	₩ —	200,000	211,060
BNP Paribas and	D 1 D '	TIL 4	1.75 ~ 2.25	2010 12 21	HOD	520,000	500 570	100 117	200 (21
others	Bank Borrowings	Floating	+ LIBOK	2018.12.31	USD	530,002	382,378	190,117	200,631
Mizuho Corporate Bank	Bank Borrowings	Floating	3MI + 0.75	2017 04 05	USD	200,000	210 840	200,000	211,060
CIBC and others	Bank Borrowings			2017.04.03		617,569	- ,	785,240	778,033
Shinhan Bank and	Dank Dorrowings	Trouting	(1)	2010.01.50	CHID	017,507	301,312	703,210	770,033
others	Bank Borrowings	Floating	3ML + 2.50	2017.08.31	USD	24,070	26,457	20,497	21,630
SAER(*2)	· ·		Treasury 3Y			ĺ	,	,	,
	BEP(*3)	Floating	-1.25	N/A(*2)	USD	197,349	216,927	215,547	227,466
SAER(*2)			Treasury 3Y						
	BEP(*3)	Floating		N/A(*2)	USD	204,004		236,333	249,402
SAER(*2)	General Borrowings	Floating		_	USD	_	_	8,520	8,991
Hyundai Heavy									
Industries, Hanhwa Corp	BEP(*3)	N/A	Interest free	N/A(*2)	USD	20,640	22 600	44,527	46,989
Jacobs	General Borrowings		interest free	N/A( · 2)	CAD	20,040	22,000		12,144
Kernhem	General Bollowings	1 IACU			CILD			12,237	12,144
	Bank Borrowings	Fixed	8.13	2019.12.04	USD	16,718	18,376	_	_
							1.895.649		1,967,406
Less: discount on bo	onds payable						(1,247		(1,916)
	1 7						1,894,402	•	1,965,490
Less: current portion	1						1,054,402		(232,195)
Less: present value of	discount on current po	ortion					_		192
	p.						XX1 904 402		
							₩1,894,402		1,733,487

<sup>(\*1)</sup> The borrowings under the credit facility are available by way of bankers' acceptances, Canadian prime rate loans, LIBOR based loans, or U.S. base rate loans. The effective interest rate as of December 31, 2014 is 3.41%.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

- (\*2) SAER stands for Special Accounting for Energy and Resources. Loans from SAER included in borrowings have no specific maturity as they were borrowed under the condition that the Group is not obligated to make repayment of the principal and interest until the exploration is proven to be successful.
- (\*3) BEP stands for Borrowings for Exploration and Production.

#### (c) Details of bonds payable as of December 31, 2014 and 2013 are as follows:

(1)	December 31, 2014		December	r 31, 2013			
	<b>.</b>						Local
Type	Interest rate (%)	Maturity	Currency Unit	Foreign currency	Local currency	Foreign currency	currency
<del></del>		In millions of	Korean w	on and thousand	ds of foreign	currencies	
Floating interest rate bonds							
payables				200,000 ₩		200,000	211,060
		2018.06.07	USD	300,000	329,760	300,000	316,590
		2018.07.03	AUD	55,000	49,450	55,000	51,698
		2018.07.18	USD	330,000	362,736	330,000	348,249
	3ML + 2.18	2015.02.03	USD	250,000	274,800	250,000	263,825
	_		USD	_	_	455,000	480,162
			USD	_	_	300,000	316,590
			JPY			13,500	135,629
		2019.10.08	AUD	225,000	202,295	_	_
E' al'atamatan handa	3ML + 0.35	2017.11.10	USD	100,000	109,920	_	_
Fixed interest rate bonds payables	2.88	2015.11.09	USD	700,000	769,440	700,000	738,710
payables	4.38	2013.11.09	HKD	500,000	70,850	500,000	68,045
	3.40	2016.02.15		780,000	110,526	780,000	106,150
	3.15	2016.02.15		100,000	83,175	100,000	83,275
	4.50	2021.03.04		390,000	55,263	390,000	53,075
	2.63	2016.05.12		325,000	361,215	325,000	386,318
	3.95	2016.05.12		100,000	133,652	100,000	145,626
	4.00	2016.10.27		1,000,000	1,099,200		
	3.20	2016.12.22		637,000	90,263	637,000	86,689
	3.89	2016.12.26		90,000	90,000	90,000	90,000
	3.95	2022.02.10		390,000	55,263	390,000	53,075
	1.88	2017.03.08	CHF	300,000	333,429	300,000	356,601
	4.00	2022.03.28	EUR	50,000	66,826	50,000	72,813
	3.13	2017.04.03	USD	1,000,000	1,099,200		
	1.80	2018.01.22		400,000	56,680	400,000	54,436
	2.85	2023.01.24	HKD	400,000	56,680	400,000	54,436
	1.97	2018.01.29	USD	70,000	76,944	70,000	73,871
	2.40	2023.02.04	EUR	37,000	49,451	37,000	53,882
	3.00	2025.06.24	EUR	60,000	80,191	60,000	87,376
	3.09	2023.07.03	EUR	50,000	66,826	50,000	72,813
	1.63	2018.11.29	CHF	240,000	266,743	240,000	285,281
	_	_	KRW		_	100,000	100,000
	_		USD		_	1,000,000	
	_	_	HKD		_	470,000	63,962
	_	_	USD		_	150,000	158,295
	_		KRW	_		110,000	110,000

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

				Decem	ber 31, 2014	Decemb	er 31, 2013
	nterest rate (%)	Maturity	Currency Unit	Foreign currency	Local currency	Foreign currency	Local currency
		In millions of	f Korean	won and th	ousands of fore	ign curren	cies
	6.88	2017.10.01	USD	492,558	541,420	490,162	517,267
	2.13	2018.05.14	USD	626,228	688,350	625,065	659,630
	2.75	2019.01.23	USD	500,000	549,600	) —	_
	4.00	2024.01.23	USD	500,000	549,600	) —	_
	3.25	2024.07.10	USD	550,000	604,560	) —	_
	2.75	2019.01.23	USD	250,000	274,800	) —	_
	4.25	2019.10.08	AUD	125,000	112,387	_	
					9,941,335	i	9,821,329
Less: discount on bonds payable					(37,044	·)	(27,491)
Add: premium on bonds payable					3,345	<u> </u>	
					9,907,636	)	9,793,838
Less: current portion					(1,044,240	))	(2,419,938)
Less: present value discount on current portio	n				806	) -	2,841
				;	₩ 8,864,202	<u>.</u>	7,376,741

#### 25. Loans from Special Accounting for Energy and Resources ("SAER")

The Company provides financial loans and related services on behalf of the Ministry of Trade Industry and Energy (formerly the Ministry of Knowledge Economy) of the Republic of Korea to Korean entities engaged in the energy and natural resources sector.

#### (a) Accounting

The Company recognizes as revenue commissions earned from providing loan services to the above Korean entities in accordance with SAER and does not include on its consolidated financial statements any amount of the loans provided or proceeds thereof, if any (i.e., net presentation). However, the Company presents loans and the borrowings as deductions in the consolidated statements of financial position and discloses related information in notes to the consolidated financial statements.

#### (b) Purpose and details of lending institution

Loans are provided to the above entities for the purpose of supporting the national energy and natural resource sector, and to stabilize potential volatility in market prices. Classification of business for loans is as follows:

Subsidiary	Details
Petroleum trading	General
Development and crude refineries	General
Exploration	Borrowings for Exploration and Production (no repayment of principal
-	and interest until the exploration is proven to be successful)

Loan applications are reviewed by the Urban Gas Association and Overseas Resources Development Association commissioned by the Minister of Knowledge and Economy, which grants final approval. The

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Company acts as an agent on behalf of the Minister of Knowledge and Economy to provide loan services to the user entities in accordance with SAER. Furthermore, the Company complies with the terms and conditions prescribed by the Minister of Trade Industry and Energy including the loan period, interest rates, repayment terms of the user and the commissions with respect to loan services.

#### (c) Details of loans

(i) Changes in loans from SAER by user for the year ended December 31, 2014 are as follows:

	January 1, 2014	Borrowings	Redemp -tion	Exemp- tion	Other	December 31, 2014	
		In	In millions of Korean won				
Petroleum trading	₩ 702,878	74,000	(194,247)	_	_	582,631	
Development and crude refineries	37,728	_	(8,290)	_	1,210	30,648	
Exploration	1,189,318	114,210	(31,344)	(50,781)	80,970	1,302,373	
Investment guarantees	142,759	27,716			7,148	177,623	
	₩2,072,683	215,926	<u>(233,881)</u>	<u>(50,781)</u>	89,328	2,093,275	

(ii) Changes in loans from SAER by user for the year ended December 31, 2013 are as follows:

	January 1, 2013	Borrowings	Redemp -tion	Exemp- tion	Other	December 31, 2013
Petroleum trading	₩ 804,706	62,000	(163,828)	_	_	702,878
Development and crude refineries	51,595	_	(13,597)	_	(270)	37,728
Exploration	1,195,084	55,801	(46,515)	(10,875)	(4,177)	1,189,318
Investment guarantees	122,789	22,601			(2,631)	142,759
	₩2,174,174	140,402	<u>(223,940)</u>	<u>(10,875)</u>	<u>(7,078)</u>	2,072,683

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (d) Details of user entities

(i) Changes in loans from SAER by user for the year ended December 31, 2014 are as follows:

	January 1, 2014	Borrowings	Redemption	Reduction	Other	December 31, 2014
			In millions of K	orean won		
Petroleum trading						
Korea Development Bank	₩117,320	10,388	(24,658)	_	_	103,050
Kookmin Bank	62,504	13,659	(14,148)	_	_	62,015
Korea Exchange Bank	25,427	2,184	(2,075)	_	_	25,536
Shinhan Bank	40,129	4,042	(8,344)	_	_	35,827
Citibank Korea Inc	3,377		(1,459)	_	_	1,918
Kyongnam Bank	14,871	617	(844)	_	_	14,644
The Kwangju Bank, Ltd	7,720	920	(943)	_	_	7,697
The Jeonbuk Bank, Ltd	20,516	3,702	(1,719)	_	_	22,499
Hana Bank	57,478	20,247	(7,842)	_	_	69,883
Busan Bank	7,838	963	(520)	_	_	8,281
NongHyup Bank	23,821	7,499	(11,882)	_	_	19,438
Woori Bank	9,005	9,779	(676)	_	_	18,108
National Federation of Fisheries						
Cooperatives	2,277		(1,506)	_	_	771
YESCO Co., Ltd	467		(136)	_	_	331
Ko-one Energy Service Co., Ltd	491		(491)	_	_	_
Industrial Bank of Korea	5,534		(3,391)		_	2,143
Korea Gas Corporation	261,795		(92,758)		_	169,037
Daehan Oil Pipeline Corporation	42,308		(20,855)		_	21,453
	702,878	74,000	(194,247)			582,631
Development and crude refineries						
Samhwan Corporation	4,506		_	_	188	4,694
Korea Gas Corporation	17,345		(4,328)	_	533	13,550
Hyundai Corporation	7,341		(1,832)	_	226	5,735
SK Innovation Co., Ltd	8,536		(2,130)	_	263	6,669
	37,728		(8,290)		1,210	30,648
Exploration	,		( ) /		,	,
Keangnam Enterprises Ltd	₩ 33,370		(2)	_	1,389	34,757
Golden E&P	7,165		_	_	299	7,464
Kumho Petro Chemical Co., Ltd	7,707		(1)	_	321	8,027
Daesung Industrial Co., Ltd	25,517	1,097	(2,010)	_	1,022	25,626
Daewoo International Corporation	159,881	20,689	(16,681)		30,637	194,526
Daewoo Shipbuilding & Marine	,	,	, , ,		,	,
Engineering Co., Ltd	11,397	1,098	_		522	13,017
Dong Won Corporation	6,546	_	_		272	6,818
Lotte Chemical Corporation	1,431		_	_	59	1,490
Majuko. Corp.	2,115	_	_		88	2,203
Samsung C&T Corporation	44,885	1,098	(1,887)	(13,150)	1,406	32,352
Samchully Co., Ltd	19,025				791	19,816
Samhwan Corporation	5,587	_	_		232	5,819
F	-,,					- ,

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

	January 1, 2014	Borrowings	Redemption	Reduction	Other	December 31, 2014
		I	n millions of Ko	rean won		
Seoul City Gas Co., Ltd	616	_	(615)	_	(1)	_
Seha Corporation	4,755	_		_	198	4,953
Aju Co. Ltd	5,134	1,098		_	262	6,494
KSEnergy Corporation	4,755	_		_	198	4,953
Kodeco Energy Co., Ltd	222,269	_	_	_	9,246	231,515
POSCO	13,593	_	_	_	565	14,158
Korea Gas Corporation	120,678	36,139	(6,284)	(19,373)	9,215	140,375
Korea Electronic Power						
Corporation	9,270	_	_	_	386	9,656
Hanhwa Corp	8,485	_	_	_	353	8,838
Hyundai Corporation	6,838	_	(1,397)	_	223	5,664
Hyundai Heavy Industries Co.,						
Ltd	11,139	_	(1)	_	463	11,601
Hyundai Hysco	20,881	7,669	_	_	1,203	29,753
GS	18,770	_	(4)	_	781	19,547
GS Energy Corporation	47,545	9,881	_	_	2,494	59,920
GS-Caltex Corporation	28,990	_	_	_	1,206	30,196
LG International Corporation	83,851	2,196	(1,986)	(14,600)	5,174	74,635
SK Gas Ltd	17,356	_	(11)	_	722	18,067
SK Innovation Co., Ltd	227,140	14,729	(465)	(3,658)	9,912	247,658
SK E&S Co., Ltd	7,000	18,516	_	_	1,099	26,615
STX Corporation	5,627				233	5,860
	1,189,318	114,210	(31,344)	(50,781)	80,970	1,302,373
Investment risk guarantees						
Korea Export Insurance						
Corporation	142,759	27,716			7,148	177,623
	₩2,072,683	215,926	(233,881)	(50,781)	89,328	2,093,275

### Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (d) Details of user entities, continued

(ii) Changes in loans from SAER by user for the year ended December 31, 2013 are as follows:

(,	January 1, 2013	Borrow -ings	Redemp - tion	Reduc	Other	December 31, 2013
		I	n millions of k	Korean w	on	
Petroleum trading						
Korea Development Bank	₩111,103	10,835	(4,618)	_	_	117,320
Kookmin Bank	51,107	12,950	(1,553)	_	_	62,504
Korea Exchange Bank	23,532	3,730	(1,835)	_	_	25,427
Shinhan Bank	36,228	5,940	(2,039)	_	_	40,129
Citibank Korea Inc	4,388	_	(1,011)			3,377
Kyongnam Bank	14,489	972	(590)		_	14,871
The Kwangju Bank, Ltd	9,895	447	(2,622)		_	7,720
The Jeonbuk Bank, Ltd	21,742	_	(1,226)	_	_	20,516
Hana Bank	45,543	13,701	(1,766)		_	57,478
Busan Bank	7,405	895	(462)	_	_	7,838
NongHyup Bank	23,932	9,500	(9,611)	_	_	23,821
Woori Bank	6,545	3,030	(570)	_	_	9,005
National Federation of Fisheries			, ,			
Cooperatives	2,388	_	(111)	_	_	2,277
YESCO Co., Ltd	603	_	(136)	_	_	467
Ko-one Energy Service Co., Ltd	635	_	(144)	_	_	491
Industrial Bank of Korea	5,534	_		_	_	5,534
Korea Gas Corporation	364,265	_	(102,470)	_	_	261,795
Daehan Oil Pipeline Corporation	75,372	_	(33,064)	_	_	42,308
1 1	804,706	62,000	(163,828)			702,878
Development and crude refineries			, , ,			
Daesung Industrial Co., Ltd	1,060	_	(1,084)	_	24	_
Daewoo International Corporation	739	_	(756)	_	17	_
Samhwan Corporation	4,573	_	`—	_	(67)	4,506
Seoul City Gas Co., Ltd	1,024	_	(1,047)	_	23	· —
Korea Gas Corporation	22,006	_	(4,500)	_	(161)	17,345
Hyundai Corporation	9,313	_	(1,904)	_	(68)	7,341
LG International Corporation	2,047	_	(2,091)	_	44	, <u> </u>
SK Innovation Co., Ltd	10,833	_	(2,215)	_	(82)	8,536
	51,595		(13,597)	_	(270)	37,728
Exploration	31,393	_	(13,391)		(270)	31,120
Keangnam Enterprises Ltd	₩ 33,870				(500)	33,370
Golden E&P		_	(1,084)	_	(84)	
	8,333	_	(1,004)	_		7,165
Kumho Petro Chemical Co., Ltd.	7,822	1 500	(2.022)	_	(115)	7,707
Daesung Industrial Co., Ltd	28,172	1,599	(3,923)	_	(331)	25,517
Daewoo International Corporation	164,800	206	(2,788)	_	(2,337)	159,881
Daewoo Shipbuilding & Marine Engineering	10.722	064			(100)	11 207
Co., Ltd.	10,723	864	_	_	(190)	11,397
Dong Won Corporation	6,644	2.4	(266)	_	(98)	6,546
Lotte Chemical Corporation	1,777	34	(366)	_	(14)	1,431

### Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

	January 1, 2013	Borrow - ings	Redemp - tion	Reduc - tion	Other	December 31, 2013
		I	n millions of F	Korean won		
Majuko. Corp	1,744	412	_	_	(41)	2,115
Samsung C&T Corporation	42,124	2,699	_	_	62	44,885
Samchully Co., Ltd	18,498	843	(13)	_	(303)	19,025
Samhwan Corporation	5,671	_	_	_	(84)	5,587
Seoul City Gas Co., Ltd	9,369	_	(2,018)	(6,921)	186	616
Seoul City Development	17	_	(17)	_	_	_
Seha Corporation	4,826	_	_	_	(71)	4,755
Aju Co. Ltd	4,366	864	_	_	(96)	5,134
KSEnergy Corporation	4,826	_	_	_	(71)	4,755
Kodeco Energy Co., Ltd	223,269	_	(9,176)	_	8,176	222,269
Kolon Global	157	_	_	(160)	3	_
POSCO	13,656	144	_	_	(207)	13,593
Korea Gas Corporation	100,481	23,112	(616)	_	(2,299)	120,678
Korea Electronic Power Corporation	9,409	_	_	_	(139)	9,270
Hanhwa Corp	8,612	_	_	_	(127)	8,485
Hyundai Corporation	12,398	_	(2,764)	(2,816)	20	6,838
Hyundai Heavy Industries Co., Ltd	11,306	_	_	_	(167)	11,139
Hyundai Hysco	15,651	5,667	_	_	(437)	20,881
GS	18,702	367	(10)	_	(289)	18,770
GS Energy Corporation	26,656	1,966	_	_	18,923	47,545
GS-Caltex Corporation	48,736	_	_	(758)	(18,988)	28,990
LG International Corporation	85,767	1,740	(2,416)	_	(1,240)	83,851
SK Gas Ltd	17,616	_	(1)	_	(259)	17,356
SK Innovation Co., Ltd	225,242	13,059	(8,041)	_	(3,120)	227,140
SK E&S Co., Ltd	4,927	2,225	_	_	(152)	7,000
STX Corporation	5,830	_	(122)	_	(81)	5,627
GS E&R Corp	13,087	_	(13,160)	(220)	293	_
	1,195,084	55,801	(46,515)	(10,875)	(4,177)	1,189,318
Investment risk guarantees	1,175,001	22,001	(10,515)	(10,075)	(1,1,1)	1,10,,510
Korea Export Insurance Corporation	122,789	22,601	_	_	(2,631)	142,759
•	₩2,174,174	140,402	(223,940)	(10,875)	(7,078)	2,072,683

#### 26. Employee Benefits

The Group sponsors defined contribution plans and defined benefit plans which are subject to the employees' option.

#### (a) Defined contribution pension plan

The Group operates a defined contribution plan ("DC plan") which is subject to the employees' option. Contributions to the DC plan are separately managed by the plan's administrator. When employees terminate their employment before the benefits have vested, the Group's obligation to make contribution to the plan decreases on a pro rata basis.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### (b) Defined benefit pension plan

The latest actuarial calculation on both plan assets and defined benefit obligation was performed as of December 31, 2014. The Group uses the projected unit credit method to determine the present value of its defined benefit obligations and the related current service costs.

(i) The components of defined benefits liabilities as of December 31, 2014 and 2013 are as follows:

	December 31, 2014	December 31, 2013	January 1, 2013
	In millions of Korean won		
Present value of defined benefit obligation from funded plans	₩ 60,501	162,126	171,594
Fair value of plan assets	(46,469)	(155,374)	(132,021)
Net liabilities incurred from defined benefit plans	₩ 14,032	6,752	39,573

(ii) Changes in the present value of defined benefit obligations for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of K	orean won
Beginning balance	₩ 162,126	171,594
Current service cost	11,554	10,968
Interest cost	7,059	7,530
Remeasurement components	25,560	(15,347)
Actual payments	(39,779)	(8,037)
Effect of movement in exchange rates	(4,248)	(6,765)
Others	_	2,183
Decrease upon disposal of subsidiary(*)	(101,771)	
Ending balance	₩ 60,501	<u>162,126</u>

<sup>(\*)</sup> Related to the disposal of a subsidiary as disclosed in note 7.

(iii) Changes in the fair value of plan assets for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Beginning balance	₩155,374	132,021	
Expected return on plan assets	6,471	5,835	
Actuarial gains	1,736	11,559	
Benefit paid by the plan	(39,779)	(8,012)	
Contributions paid into the plan	18,527	21,784	
Effect of movement in exchange rates	(3,614)	(7,813)	
Decrease upon disposal of subsidiary(*)			
Ending balance	₩ 46,469	155,374	

<sup>(\*)</sup> Related to the disposal of a subsidiary as disclosed in note 7.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(iv) Details of the fair value of plan assets as of December 31, 2014 and 2013 are as follows:

	Expe of	cted rate return	Fair v of plan		
	2014	2013	2014	2013	
		In millions of K			
Equity instruments	_	4.0%~5.0%	₩ —	60,169	
Debt instruments	_	4.0%~5.0%	_	25,787	
Others(*1)	5.35%	4.0%~5.0%	46,469	69,418	
Weighted average of expected rate of return(*2)	5.35%	4.0%~5.0%	46,469	155,374	

<sup>(\*1)</sup> Others are comprised of GCI, MIS, retirement insurance and transfer from national pension.

(v) Principal assumptions on actuarial valuation as of December 31, 2014 and 2013 are as follows:

	2014	2013
Discount rate	4.38%	4.80%~5.35%
Weight average expected rate of return	5.35%	4.00%~5.00%
Future salary and benefit levels	5.42%	3.50%~4.00%

(vi) Details of expenses relating to defined benefit plans for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of Korean won	
Current service cost	₩11,554	10,968
Interest cost	7,059	7,530
Expected return on plan assets	(6,471)	(5,835)
Allowance for subsidiaries	_	(79)
Transfer from other account	(385)	(306)
Other	(448)	_
	₩11,309	12,278

Expenses described above are recognized as the following items in the financial statements.

	2014	2013	
	In millions of Korean won		
Cost of sales	₩ 2,571	2,335	
Selling and administrative expenses	5,842	6,465	
Others	385	306	
Loss from discontinued operation	2,896	3,478	
	₩11,694	12,584	

<sup>(\*2)</sup> The expected rate of return is calculated based on the weighted average of expected rate of returns for each type of assets. The management evaluates the expected rate of returns based on the historical rate of return trends and the analysis of the predicted market during the period when the defined benefits liabilities exist.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(vii) Remeasurement component recognized in other comprehensive income for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Actuarial gains and losses	₩(25,560)	15,347	
Return on plan assets	1,736	11,559	
	₩(23,824)	26,906	

In addition, the amounts recongized for the year ended December 31, 2014 are included in retained earnings. The actuarial gains and losses amounting to \text{\psi}18,343 million (net of deferred tax amounting to \text{\psi}5,481 million) and \text{\psi}24,340 million (net of deferred tax amounting to \text{\psi}2,566 million) have been recognized as other comprehensive income for the years ended December 31, 2014 and 2013, respectively.

#### 27. Provisions

#### (a) Provisions as of December 31, 2014 and 2013 are as follows:

(i) As of December 31, 2014

	Current Non-curren		Total
	In millions of Korean won		
Decommissioning cost(*1)	<b>₩</b> 2,937	2,354,849	2,357,786
Social Overhead Capital(*2)	249,791	109,323	359,114
Allowance for salaries	2,428	_	2,428
Provision for litigations(*3)	3,313	57,871	61,184
Others(*4)		1,030	1,030
	₩258,469	<u>2,523,073</u>	2,781,542

<sup>(\*1)</sup> The Group recognized provisions for future dismantling, removing and restoring obligations of wells and related facilities. Most of the costs incur at or after the completion of production and the management recognized its best estimations as provisions.

<sup>(\*2)</sup> The Group is committed to providing construction services with regards to the Kurdish regional government's Social Overhead Capital to obtain rights on certain exploratory areas (see note 44 for further discussion). This commitment has been classified as a provision due to its uncertain timing of related cash outflows.

<sup>(\*3)</sup> During 2014, the Group lost in the first trial in connection with litigations filed by Hanhwa Corp. and Hyundai Heavy Industries claiming refunds of the acquisition costs and premium paid to the Group to acquire interests in Yemen 4 oil field. The Group plans to appeal to the decision and proceed to a second trial, and estimated the expected future cash outflows as the litigation amount and recognized litigation provisions accordingly.

<sup>(\*4)</sup> The reclassifications from non-current to current amounted to \\ \mathbb{W}\)189,284 million and \\ \mathbb{W}\)144,774 million for the years ended December 31, 2014 and 2013, respectively.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (ii) As of December 31, 2013

Current	Non-current	Total	
In millions of Korean won			
₩ —	2,276,237	2,276,237	
270,366	276,201	546,567	
3,468	_	3,468	
1,562	326	1,888	
₩275,396	2,552,764	2,828,160	
	<b>In mi ₩</b> —  270,366  3,468  1,562	In millions of Korear       ₩     —     2,276,237       270,366     276,201       3,468     —	

#### (b) Changes in provisions for the years ended December 31, 2014 and 2013 are as follows:

### (i) For the year ended December 31, 2014

	Beginning balance	Provision	Accretion expenses	Payment	Others(*)	Ending Balance
		Iı	n millions of	Korean won		
Decommissioning cost	₩2,276,237	29,548	112,151	(115,575)	55,425	2,357,786
Social Overhead Capital	546,567	905	16,637	(220,668)	15,673	359,114
Allowance for salaries	_	2,326	_	_	102	2,428
Provision for litigations	3,468	55,451	_	_	2,265	61,184
Others	1,888			(16)	(842)	1,030
	₩2,828,160	88,230	128,788	(336,259)	72,623	<u>2,781,542</u>

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations and others.

### (ii) For the year ended December 31, 2013

	Beginning balance	Provision	Accretion expenses	Payment	Others(*)	Ending Balance
		In	millions of I	Korean won		
Decommissioning cost	₩2,090,104	58,621	96,181	(24,552)	55,883	2,276,237
Social Overhead Capital	576,891	_	17,988	(31,880)	(16,432)	546,567
Provision for litigations	3,766	_	_	_	(298)	3,468
Others	5,676			(3,820)	32	1,888
	₩2,676,437	58,621	114,169	<u>(60,252)</u>	39,185	<u>2,828,160</u>

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations and others.

### 28. Current Non-Financial Liabilities

Details of current non-financial liabilities as of December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Advance receipts	₩ 15,204	4,432	
Unearned revenue	26,017	26,744	
Withholdings	43,797	47,178	
Non-current liabilities held for sale (note 17)	48,310	46,410	
	₩133,328	124,764	

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### 29. Issued Capital

The Company's total issued capital is invested solely by the Korean government in accordance with the Korean National Oil Corporation Act and the authorized issued capital is \\ \mathbf{W}13\) trillion as of December 31, 2014. The changes in issued capital for the year ended December 31, 2014 are as follows:

Date	Description	Amount
_	In millions of Korean won	
Beginning balance		₩10,030,493
2014. 02. 27	Contribution for oil stockpiling business	994
2014. 05. 22	Contribution for oil stockpiling business	38,460
2014. 12. 17	Contribution for oil stockpiling business	21,973
Ending balance		₩10,091,920

#### 30. Accumulated Deficit

#### (a) Details of accumulated deficit as December 31, 2014 and 2013 are as follows:

	Decer	nber 31, 2014	December 31, 2013
	In millions of Korean won		
Legal reserve(*1)	₩	929,848	869,743
Reserve for business expansion(*2)		895,310	835,206
Undisposed accumulated deficit	(	(4,002,470)	(2,218,319)
Accumulated deficit	₩(2	2,177,312)	(513,370)

<sup>(\*1)</sup> In accordance with the Commercial Act in the Republic of Korea, an amount equal to at least 10% of cash dividends is required to be appropriated as a legal reserve until the reserve equals 50% of issued capital. The legal reserve cannot be used as a source for cash dividends and may only be used to offset an accumulated deficit.

#### (b) Changes in accumulated deficit for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean wo		
Beginning balance	₩ (513,370)	201,543	
Net loss for the year attributed to owner of the Company	(1,602,523)	(728,861)	
Dividends	(43,072)	(10,393)	
Changes in equity method retained earnings	(4)	_	
Remeasurement components of defined benefits plan	(18,343)	24,341	
Accumulated deficit	₩(2,177,312)	<u>(513,370)</u>	

<sup>(\*2)</sup> The Korea National Oil Corporation Act requires the Company to appropriate, from retained earnings, an amount equal to at least 20% of net income for each accounting period as a reserve for business expansion until the reserve equals issued capital after having appropriated retained earnings for the legal reserve. This reserve cannot be used as a source for cash dividends and may only be used to offset an accumulated deficit.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### 31. Separate Statement of Appropriation of Retained Earnings

Separate statements of appropriation of retained earnings of the Company for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of Ko	rean won
I. Retained Earnings(Undisposed Deficit) before appropriations		
Unappropriated retained earnings carried over from prior years	₩ —	_
Net income (loss)	(2,700,907)	162,167
Remeasurement components	(12,927)	1,114
	(2,713,834)	163,281
II. Appropriations of retained earnings		
Legal appropriated retained earnings	_	60,105
Other reserves	_	60,105
Dividends		43,071
	_	163,281
III. Disposal of undisposed deficit		
Transfer from legal reserves	929,848	_
Transfer from other reserves	895,310	
	1,825,158	_
IV. Undisposed deficit to be carried forward to the subsequent year	₩ (888,676)	

For the year ended December 31, 2014, the Company's retained earnings are expected to be appropriated on February 27, 2015. For the year ended December 31, 2013, the Company's retained earnings were appropriated on February 27, 2014.

#### 32. Other Components of Equity

### (a) Other components of equity as of December 31, 2014 and 2013 are as follows:

	Decem	ber 31, 2014	December 31, 2013
		In millions of	Korean won
Other capital surpluses(*)	₩	24,954	24,954
Accumulated other comprehensive income		(382,458)	(79,395)
	₩(	357,504)	(54,441)

<sup>(\*)</sup> All other capital surpluses are gains from assets contributed.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (b) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2014 and 2013 are as follows:

			2014		
	Losses on valuation of available-for- sales financial instruments	Equity adjustments in equity method - debit	Exchange difference on translation of foreign operations	Gains on valuation of derivative instruments	Total
		In mil	lions of Korean v	won	
Beginning balance	₩ 53,029	(8,045)	(159,954)	35,575	(79,395)
Losses on valuation of available-for-sales					
financial instruments	(152,518)	_	_	_	(152,518)
Equity adjustments in equity method — debit	_	(5,478)	_	_	(5,478)
Exchange difference on translation of foreign					
operations	_	_	(165,237)	_	(165,237)
Gain on valuation of derivative instruments	_		_	20,170	20,170
Ending balance	₩ (99,489)	(13,523)	(325,191)	55,745	(382,458)
			2013		
	Gains on valuation of available-forsales financial instruments	Equity adjustments in equity method - debit	Exchange difference on translation of foreign operations	Gains on valuation of derivative instruments	Total
		In mil	lions of Korean v	won	
Beginning balance	₩31,977	(9,453)	92,714	(5,797)	109,441
financial instruments	21,052	_	_	_	21,052
Equity adjustments in equity method — debit	_	1,408	_	_	1,408
1 0 0					
Exchange difference on translation of foreign					
Exchange difference on translation of foreign operations	_	_	(252,668)	_	(252,668)
	_	_ _	(252,668)	41,372	(252,668) 41,372

#### 33. Revenue

Details of domestic and overseas sales for the years ended December 31, 2014 and 2013 are as follows:

		2014			2013	
	Domestic	Overseas	Total	Domestic	Overseas	Total
			In millions of	Korean won		
Sales of goods and finished goods	₩397,570	3,641,906	4,039,476	471,378	4,483,646	4,955,024
Revenues from services provided	33,707	210,992	244,699	15,278	219,793	235,071
Interest income	2,128	_	2,128	2,555	_	2,555
Income on government grants	3,326	_	3,326	6,031	_	6,031
Others	1,534	66,955	68,489	2,957	63,844	66,801
	₩438,265	3,919,853	4,358,118	<u>498,199</u>	4,767,283	5,265,482

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### 34. Other Non-operating Income and Expenses

### (a) Details of other income for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Gain on exemption of debt	₩ 96,534	18,836	
Compensation and indemnity	38	3	
Rental income	171	135	
Other income from overseas fields	23,633	13,408	
Others	19,093	5,998	
	₩139,469	38,380	

### (b) Details of other expenses for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Accrual for provisions	₩167,602	95,663	
Other bad debt expense	69,486	28,323	
Donations	2,725	6,302	
Other expenses from overseas fields	6,011	7,593	
Others	21,036	6,985	
	₩266,860	144,866	

#### 35. Other Profit and Loss

Details of other profit and loss for the years ended December 31, 2014 and 2013 are as follows:

		2014	2013
	]	Korean won	
Gains on disposal of property, plant and equipment	₩	377,791	31,831
Gains on disposal of intangible assets other than goodwill		1,704	8
Gains on transactions of derivatives(*)		_	780
Gains on valuation of derivatives(*)		774	8,851
Gains on foreign currency translation(*)		7,899	5,028
Gains on foreign currency transactions(*)		63,193	79,873
Other gains		51,058	21,826
Losses on disposal of property, plant and equipment		(14,376)	(3,075)
Losses on disposal of intangible assets other than goodwill		(41,987)	_
Losses on valuation of derivatives(*)		(774)	(6,445)
Impairment losses on property, plant and equipment		(775,546)	(177,052)
Impairment losses and write-off of intangible assets other than goodwill	(	1,283,017)	(549,938)
Losses on foreign currency translation(*)		(29,551)	(5,426)
Losses on foreign currency transactions(*)		(55,465)	(83,258)
Other losses		(21,644)	(1,598)
	₩(	1,719,941)	<u>(678,595)</u>

<sup>(\*)</sup> Gains and losses related to operating activities.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### 36. Finance Income

### (a) Details of finance income for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Interest income	₩34,635	52,747	
Dividend income	4,807	43,216	
Gains on disposal of financial assets	2,894	21,058	
Gains on valuation of derivatives financial instruments	_	5,303	
Gains on settlement of derivatives financial instruments	926	_	
Gains on disposal of financial liabilities	_	3,885	
Gains on foreign currency translation	11,535	4,757	
Gains on foreign currency transaction	25,161	23,801	
	₩79,958	154,767	

# (b) Interest income included in finance income for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of	Korean won
Cash and cash equivalents	₩13,660	17,043
Loans and receivables	20,975	35,704
	₩34,635	52,747

#### 37. Finance Costs

### (a) Details of finance costs for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Interest expense	₩394,661	444,928	
Losses on valuation of derivatives financial instruments	2,020	1,494	
Losses on settlement of derivatives financial instruments	85	_	
Losses on foreign currency translation	148,903	87,106	
Losses on foreign currency transaction	23,080	28,259	
Other financial costs	52,289	64,216	
	₩621,038	626,003	

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (b) Interest expenses included in finance costs for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Short-term borrowings	₩ 2,489	17,330	
Long-term borrowings	51,828	71,455	
Bonds	332,761	280,795	
Derivative liabilities	22,426	62,512	
Other financial liabilities	16,981	44,834	
	426,485	476,926	
Less: capitalized costs of borrowing	(31,824)	(31,998)	
	₩394,661	444,928	

The annual weighted average costs of capital of the borrowings are 3.25~4.73% and 3.24~9.17% for the years ended December 2014 and 2013, respectively.

#### 38. Income Tax Benefit

#### (a) The components of income tax benefit for the years ended December 31, 2014 and 2013 are as follows:

		2014	2013
	I	Korean won	
Current income tax	₩	275,487	311,279
Deferred tax directly charged to equity		30,571	(20,872)
Changes in deferred taxes arising from temporary differences	(	1,091,145)	(225,866)
Adjustment for prior periods		100,752	(105,588)
Income tax benefit	₩	(684,335)	(41,047)

# (b) Reconciliations of expected income tax benefit computed by applying the statutory income tax rate to loss before income taxes to the actual income tax benefit for the years ended December 31, 2014 and 2013 are as followings:

	2014	2013
	In millions of	Korean won
Loss before income tax	₩(1,957,121)	<u>(82,785)</u>
Benefits at the statutory income tax rate (24.2%)(*)	₩ (473,623)	(20,034)
Adjustments		
Adjustments to prior year tax return	2,644	(86,958)
Non-taxable income	(22,944)	(215)
Non-deductible expenses	46,103	22,938
Temporary differences not recognized in deferred tax assets	(28,664)	41,014
Effect from tax deduction and reduction	(4,335)	(99,023)
Effect from temporary differences not recognized in prior years	(19,791)	(27,047)
Differences in tax rates in overseas entities	(196,066)	70,524
Effect of changes in tax rates	12,341	57,754
Income tax benefit	₩ (684,335)	(41,047)
Effective tax benefit rate	% —	_

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (c) Income tax recognized as accumulated other comprehensive income for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013	
	In millions of Korean won		
Income tax recognized as accumulated other comprehensive income (loss)			
Gain on valuation of available-for-sale financial instruments	₩31,311	(16,569)	
Net change in the unrealized fair value of derivatives using cash flow hedge			
accounting	(6,241)	(1,737)	
Remeasurement components	5,481	(2,566)	
Equity adjustments arising from investments in equity-method investees	20		
	₩30,571	(20,872)	

<sup>(\*)</sup> The applicable statutory tax rate for the years ended December 31, 2014 and 2013 is 24.2%, which is the Korea statutory corporate income tax rate where the Company is domiciled. Additionally, the effective tax rates are not calculated for 2014 and 2013 as the Group incurred a loss before income tax for the both years.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(d) Changes in deferred income tax assets (liabilities) recognized in the statements of financial position for the years ended December 31, 2014 and 2013 are as follows:

(i) For the year ended December 31, 2014

			2014		
	Beginning balance	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income	Others	Ending balance
		In mil	lions of Korean w	on	
Deferred income tax on temporary differences					
Contributions for construction	<b>₩</b> 1,168	(72)	_	45	1,141
Investment in associates and others	59,498	49,192	_	4,623	113,313
Fiancial guarantee liabilities	3,568	(815)	_	113	2,866
Allowance for doubtful accounts	92,950	20,341	_	4,755	118,046
Available-for-sale financial instruments	(14,312)	(2,384)	31,311	668	15,283
Intangible assets	23,022	(1,572)	_	889	22,339
Impairment losses for intangible assets	37,990	10,106	_	2,022	50,118
Accrued expense	47,159	606	_	1,988	49,753
Asset retirement obligation	29,422	5,096	_	1,446	35,964
Property, plant and equipment	4,548	7,021	_	496	12,065
Land	(100,408)	34,411	_	(2,675)	(68,672)
Gain (loss) on valuation of derivatives	1,565	(37)	(6,051)	(201)	(4,724)
Defined benefit liabilities	(2,228)	(2,049)	4,127	(2)	(152)
Others	(8,508)	2,653	_	(240)	(6,095)
Deferred assets of subsidiaries	183,344	472,165	1,184	(94,763)	561,930
Differences in fair value and book value					
from business combination and others	(947,844)	209,638	_	(30,278)	(768,484)
Deferred tax liabilities of subsidiaries	(892,358)	256,274		(25,932)	(662,016)
	₩(1,481,424)	1,060,574	30,571	(137,046)	(527,325)
Deferred tax assets	₩ 354,969				903,176
Deferred tax liabilities	₩(1,836,393)				(1,430,501)

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(ii) For the year ended December 31, 2013

			2013		
	Beginning balance	Amounts recognized in profit or loss	Amounts recognized in other comprehensive income (loss)	Others	Ending balance
		In mil	lions of Korean wo	on	
Deferred income tax on temporary					
differences					
Contributions for construction	₩ 477	698		(7)	1,168
Investment in associates and others	16,152	43,584		(238)	59,498
Financial guarantee liabilities	4,335	(703)	_	(64)	3,568
Allowance for doubtful accounts	79,135	14,982	_	(1,167)	92,950
Available-for-sale financial instruments	(2,893)		(11,894)	474	(14,312)
Intangible assets	19,235	4,071	_	(284)	23,022
Impairment losses for intangible assets	69,448	(30,434)	_	(1,024)	37,990
Accrued income	29,054	(28,626)	_	(429)	(1)
Accrued expense	8,555	38,730	_	(126)	47,159
Asset retirement obligation	21,077	8,656	_	(311)	29,422
Property, plant and equipment	(17,172)	21,467	_	253	4,548
Land	(99,438)	(2,437)	_	1,467	(100,408)
Gain (loss) on valuation of derivatives	17,498	(9,213)	(6,705)	(15)	1,565
Defined benefit liabilities	(3,350)	1,416	(356)	62	(2,228)
Others	(21,115)	12,829	_	(221)	(8,507)
Deferred assets of subsidiaries	116,082	52,823	(1,917)	16,356	183,344
Differences in fair value and book value from					
business combination and others	(967,112)	4,635		14,633	(947,844)
Deferred tax liabilities of subsidiaries	(1,018,234)	140,614	_	(14,738)	(892,358)
	₩(1,748,266)	273,093	(20,872)	14,621	(1,481,424)
Deferred tax assets	₩ 236,537				354,969
Deferred tax liabilities	₩(1,984,803)				<u>(1,836,393)</u>

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

## 39. Expenses Classified by Nature

## (a) Expenses classified by nature for the year ended December 31, 2014 are as follows:

a	Selling and administrative		
	expenses	Cost of sales	Total
		lions of Korean	
	₩ —	(926)	(926)
Changes in inventories — finished goods	_	50,017	50,017
Changes in inventories — other inventories	_	(6,839)	(6,839)
Purchases of inventories	_	9,857	9,857
Raw materials used	_	211,270	211,270
Salaries	124,172	119,759	243,931
Severance and retirement benefits	5,842	3,268	9,110
Employee benefits	21,832	8,404	30,236
Insurance	5,070	40,828	45,898
Depreciation	12,970	1,467,545	1,480,515
Amortization	7,018	255,591	262,609
Commissions and fees	57,724	81,407	139,131
Advertising	1,873	534	2,407
Education and training	5,786	16,883	22,669
Vehicle maintenance	1,658	260	1,918
Books and printing	1,138	30	1,168
Business development	431	99	530
Rent	11,489	57,941	69,430
Communications	1,701	1,074	2,775
Transport	_	106,175	106,175
Taxes and dues	4,347	111,424	115,771
Supplies	2,877	3,812	6,689
Utilities	809	71,381	72,190
Repairs	8,690	258,066	266,756
Research and development	7,523	2,452	9,975
Travel	4,341	1,374	5,715
Clothing expenses	381	226	607
Investigation and analysis	9	1,119	1,128
Association fee	873	16	889
Bad debt expenses	570	_	570
Sales commission	136,398	995	137,393
Others	19,856	565,831	585,687
	₩445,378	3,439,873	3,885,251

## Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

## (b) Expenses classified by nature for the year ended December 31, 2013 are as follows:

Changes in inventories — merchandise         New Jonation 1907 (1912)         Total 1907 (1912)         Total 2007 (1912)		Selling and administrative		
Changes in inventories — merchandise         W —         307,817         307,817           Changes in inventories — finished goods         —         78,172         78,172           Raw materials used         —         394,728         394,728           Contributions for employees' welfare business         2,519         1,543         4,062           Salaries         113,212         135,366         248,578           Severance and retirement benefits         6,465         2,484         8,949           Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569		expenses	Cost of sales	<u>Total</u>
Changes in inventories—finished goods         —         78,172         78,172           Raw materials used         —         394,728         394,728           Contributions for employees' welfare business         2,519         1,543         4,062           Salaries         113,212         135,366         248,578           Severance and retirement benefits         6,465         2,484         8,949           Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Comm				
Raw materials used         —         394,728         394,728           Contributions for employees' welfare business         2,519         1,543         4,062           Salaries         113,212         135,366         248,578           Severance and retirement benefits         6,465         2,484         8,949           Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport <t< td=""><td>e</td><td>₩ —</td><td>,</td><td>,</td></t<>	e	₩ —	,	,
Contributions for employees' welfare business         2,519         1,543         4,062           Salaries         113,212         135,366         248,78           Severance and retirement benefits         6,465         2,484         8,949           Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135	· · ·	_	78,172	78,172
Salaries         113,212         135,366         248,78           Severance and retirement benefits         6,465         2,484         8,949           Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135         138,870         142,005           Supplies         3,902         4,548		_	394,728	394,728
Severance and retirement benefits         6,465         2,484         8,949           Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,226           Books and printing         13,10         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135         138,870         142,005           Supplies         3,902         4,548         8,450           Utilities         837         102,023	Contributions for employees' welfare business	2,519	1,543	4,062
Employee benefits         23,010         6,070         29,080           Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135         138,870         142,005           Supplies         3,902         4,548         8,450           Utilities         837         102,023         102,860           Repairs         9,388         254,056         263,444     <	Salaries	113,212	135,366	248,578
Insurance         4,357         50,065         54,422           Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135         138,870         142,005           Supplies         3,902         4,548         8,450           Utilities         837         102,023         102,860           Repairs         9,388         254,056         263,444           Research and development         18,427         3,011         21,438 <td>Severance and retirement benefits</td> <td>6,465</td> <td>2,484</td> <td>8,949</td>	Severance and retirement benefits	6,465	2,484	8,949
Depreciation         7,152         1,452,816         1,459,968           Amortization         6,482         151,248         157,730           Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135         138,870         142,005           Supplies         3,902         4,548         8,450           Utilities         837         102,023         102,860           Repairs         9,388         254,056         263,444           Research and development         18,427         3,011         21,438           Travel         5,338         1,020         6,358	Employee benefits	23,010	6,070	29,080
Amortization       6,482       151,248       157,730         Commissions and fees       80,951       73,776       154,727         Advertising       1,910       766       2,676         Education and training       6,554       21,026       27,580         Vehicle maintenance       1,317       2,009       3,326         Books and printing       1,310       34       1,344         Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262	Insurance	4,357	50,065	54,422
Commissions and fees         80,951         73,776         154,727           Advertising         1,910         766         2,676           Education and training         6,554         21,026         27,580           Vehicle maintenance         1,317         2,009         3,326           Books and printing         1,310         34         1,344           Business development         448         121         569           Rent         10,400         59,115         69,515           Communications         2,006         1,328         3,334           Transport         —         35,228         35,228           Taxes and dues         3,135         138,870         142,005           Supplies         3,902         4,548         8,450           Utilities         837         102,023         102,860           Repairs         9,388         254,056         263,444           Research and development         18,427         3,011         21,438           Travel         5,338         1,020         6,358           Clothing expenses         8         198         206           Investigation and analysis         10         252         262	Depreciation	7,152	1,452,816	1,459,968
Advertising       1,910       766       2,676         Education and training       6,554       21,026       27,580         Vehicle maintenance       1,317       2,009       3,326         Books and printing       1,310       34       1,344         Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       18,9771       43,290       233,061         Other	Amortization	6,482	151,248	157,730
Education and training       6,554       21,026       27,580         Vehicle maintenance       1,317       2,009       3,326         Books and printing       1,310       34       1,344         Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       18,077       43,290       233,061         Others       14,049       258,213       272,262	Commissions and fees	80,951	73,776	154,727
Education and training       6,554       21,026       27,580         Vehicle maintenance       1,317       2,009       3,326         Books and printing       1,310       34       1,344         Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       18,077       43,290       233,061         Others       14,049       258,213       272,262	Advertising	1,910	766	2,676
Books and printing       1,310       34       1,344         Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		6,554	21,026	27,580
Books and printing       1,310       34       1,344         Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	Vehicle maintenance	1,317	2,009	3,326
Business development       448       121       569         Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		1,310	34	1,344
Rent       10,400       59,115       69,515         Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		448	121	569
Communications       2,006       1,328       3,334         Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		10,400	59,115	69,515
Transport       —       35,228       35,228         Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	Communications	2,006	1,328	
Taxes and dues       3,135       138,870       142,005         Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262			,	,
Supplies       3,902       4,548       8,450         Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	1	3,135	,	
Utilities       837       102,023       102,860         Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		3,902	,	,
Repairs       9,388       254,056       263,444         Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	11		,	
Research and development       18,427       3,011       21,438         Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		9,388	,	· · · · · · · · · · · · · · · · · · ·
Travel       5,338       1,020       6,358         Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	•	18,427	,	
Clothing expenses       8       198       206         Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	-		,	
Investigation and analysis       10       252       262         Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262		,	,	· · · · · · · · · · · · · · · · · · ·
Association fee       782       17       799         Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	e i		-, -	
Sales commission       189,771       43,290       233,061         Others       14,049       258,213       272,262	· · ·			
Others				
			- ,	
		₩513,740	3,579,210	4,092,950

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### 40. Categories of financial instruments

## (a) Details of current financial assets by category as of December 31, 2014 and 2013 are as follows:

### (i) As of December 31, 2014

		oans and ceivables	Hedging financial assets	Total
		In millio	ns of Korea	n won
Cash and cash equivalents	₩	508,506	_	508,506
Derivative assets		_	1,801	1,801
Short-term financial instruments		2,436	_	2,436
Others		10,349		10,349
		521,291	1,801	523,092
Trade and other receivables		941,157		941,157
	₩1	,462,448	1,801	1,464,249
(ii) As of December 31, 2013		oans and ceivables	Hedging financial assets	Total

	Loans and receivables	financial assets	Total
	In millio	ns of Korea	n won
Cash and cash equivalents	₩ 966,032	_	966,032
Derivative assets	_	8,477	8,477
Short-term financial instruments	103,440	_	103,440
Others	8,535		8,535
	1,078,007	8,477	1,086,484
Trade and other receivables	1,021,630		1,021,630
	₩2,099,637	8,477	<u>2,108,114</u>

The fair values of the financial assets listed above measured at amortized costs do not significantly differ from their book values.

## (b) Details of non-current financial assets by category as of December 31, 2014 and 2013 are as follows:

## (i) As of December 31, 2014

	Loans and receivables	Available-for-sale financial instruments	Hedging financial assets	Total
		In millions of Kor	ean won	
Available-for-sale financial instruments	₩ —	566,895	_	566,895
Loans	555,252	_	_	555,252
Derivative assets	_	_	7,634	7,634
Long-term financial instruments	7,008			7,008
	562,260	566,895	7,634	1,136,789
Trade and other receivables	93,838			93,838
	₩656,098	566,895	7,634	1,230,627

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

## (ii) As of December 31, 2013

	Loans and receivables	Available-for-sale financial instruments	Hedging financial assets	Total
		In millions of Kor	ean won	
Available-for-sale financial instruments	₩ —	641,902	_	641,902
Loans	512,013	_	_	512,013
Derivative assets	_	_	49,640	49,640
Long-term financial instruments	14,873			14,873
	526,886	641,902	49,640	1,218,428
Trade and other receivables	108,765			108,765
	₩635,651	<u>641,902</u>	49,640	1,327,193

The fair values of the financial assets listed above measured at amortized costs do not significantly differ from their book values.

## (c) Details of current financial liabilities by category as of December 31, 2014 and 2013 are as follows:

### (i) As of December 31, 2014

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio		
Short-term borrowings	₩ 214,360	_	214,360
Long-term borrowings	_	_	_
Bonds payable	1,043,434	_	1,043,434
Derivative liabilities		3,103	3,103
	1,257,794	3,103	1,260,897
Trade and other payables	1,417,941		1,417,941
	₩2,675,735	3,103	2,678,838

## (ii) As of December 31, 2013

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio	ns of Korean won	
Short-term borrowings	₩ 157,262	_	157,262
Long-term borrowings	232,003	_	232,003
Bonds payable	2,417,097	_	2,417,097
Derivative liabilities		50,189	50,189
	2,806,362	50,189	2,856,551
Trade and other payables	1,473,285		1,473,285
	₩4,279,647	50,189	4,329,836

The fair values of the financial liabilities listed above measured at amortized costs do not significantly differ from their book values.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

## (d) Details of non-current financial liabilities by category as of December 31, 2014 and 2013 are as follows:

## (i) As of December 31, 2014

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In millio	ns of Korean won	
Long-term borrowings	₩ 1,894,403	_	1,894,403
Bonds payable	8,864,202	_	8,864,202
Derivative liabilities	_	145,378	145,378
Others	908	<u></u>	908
	₩10,759,513	145,378	10,904,891
Trade and other payables	452,706		452,706
	<del>W</del> 11,212,219	145,378	11,357,597
(ii) As of December 31, 2013	Financial liabilities with	Hedging financial	

	Financial liabilities with amortized cost	Hedging financial liabilities	Total
	In million		
Long-term borrowings	₩1,733,488	_	1,733,488
Bonds payable	7,376,741	_	7,376,741
Derivative liabilities	_	13,284	13,284
Others	1,830		1,830
	₩9,112,059	13,284	9,125,343
Trade and other payables	255,315		255,315
	₩9,367,374	13,284	9,380,658

The fair values of the financial liabilities listed above measured at amortized costs do not significantly differ from their book values.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

# (e) Net gains or losses by financial instruments for the years ended December 31, 2014 and 2013 are as follows

	2014	2013
	In millions of	Korean won
Financial assets at fair value through profit or loss (derivatives):		
Gain (loss) on valuation, net	₩ (1,346)	5,303
Loans and receivables:		
Interest income	34,635	52,747
Gain (loss) on foreign currency transactions, net	2,081	(4,457)
Gain (loss) on foreign currency translation, net	(34,151)	3,931
Available-for-sale financial investments:		
Dividend income	4,807	43,216
Gain on disposal	2,894	21,058
Other comprehensive income (loss), net of tax	(152,518)	21,052
Hedge financial assets:		
Loss on transaction	(54)	_
Loss on foreign currency translation, net	(12,264)	_
Other comprehensive income, net of tax	1,216	6,942
Financial liabilities at fair value through profit or loss (derivatives):		
Loss on valuation, net	(674)	(1,494)
Other financial liabilities with amortized cost:		
Interest cost	(394,661)	(444,927)
Gain (loss) on foreign currency translations, net	87,987	(106,751)
Gain on redemption of financial liabilities	_	3,885
Other financial cost	(52,289)	(64,216)
Hedge financial liabilities:		
Gain on transactions	895	_
Gain(loss) on foreign currency translation, net	(178,939)	20,471
Other comprehensive income, net of tax	18,954	34,430
	₩(673,427)	(408,810)

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

## (f) Offsetting of financial assets and financial liabilities

As of December 31, 2014 and 2013, financial assets and financial liabilities subject to offsetting, enforceable master netting arrangements and similar agreements are as follows:

#### (i) As of December 31, 2014

	Gross	Gross amounts of recognized financial	Net amounts of financial instruments	Related amou in the stat financial	tement of	
Type of assets	amounts recognized as financial instruments	instruments set off in the statement of financial	presented in the statement of financial position  In millions of Ko	Financial instruments orean won	Cash collateral received or pledged	Net Amounts
Financial assets Derivatives	₩ 9,435	_	9,435	(7,634)	_	1,801
Financial liabilities Derivatives	(148,481)	_	(148,481)	7,634	_	(140,847)
(ii) As of December 31, 201	3					
	Gross	Gross amounts of recognized financial	Net amounts of financial instruments	Related amou in the stat financial	tement of	
Type of assets	amounts recognized as financial instruments	instruments set off in the statement of financial	presented in the statement of financial position	Financial instruments	Cash collateral received or pledged	Net Amounts
T1			In millions of Ko	orean won		
Financial assets Derivatives(*)	₩ 58,118	_	58,118	(58,118)	_	_
Financial liabilities Derivatives(*)	(63,473)	_	(63,473)	58,118	_	(5,355)

<sup>(\*)</sup> Some of derivative contracts are made under International Swaps and Derivatives Association (ISDA) master netting agreements. In general, under such agreements the amounts owed by each counter party on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. In certain circumstances (i.e. when a default occurs), all standing transactions under the agreement are terminated, the termination value is assessed and only a single amount is payable in settlement of all transactions.

## 41. Risk Management

### (a) Capital management

The primary objective of the Group's capital management is to ensure that it maintains a strong credit rating and capital ratios in order to support its business and maximize the owners' value. The Group manages its capital structure and makes adjustments to it in light of changes in economic conditions. To maintain the sound capital structure, the Group may adjust the dividend payment to the owner, reduce issued capital, issue new shares, raise funds from bond offerings and dispose Group's non-core assets. No changes were made in the objectives, policies or processes for managing capital for the year ended December 31, 2014.

## Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

The Group's debt-to-equity ratio as of December 31, 2014 and 2013 are as follows:

	December 31, 2014	December 31, 2013
	In millions of	Korean won
Total borrowings and debt instruments	₩12,016,399	11,916,591
Cash and cash equivalents	(508,506)	(966,032)
Net borrowings and debt securities	11,507,893	10,950,559
Total equity	8,369,669	10,283,882
Net borrowings and debt securities-to-equity ratio	137.50%	106.48%

#### (b) Financial risk management

The Group is exposed to various risks related to its financial instruments such as market risk (currency risk, interest rate risk and price risk) and credit risk.

#### (i) Risk management structure

The board of directors is responsible for implementing and monitoring the Group's risk management structure and the management regularly updates the policies for each risk and confirms the validity of the policies. The purpose of the risk management policies is to identify the risks that could potentially affect the Group's financial results and reduce, to an acceptable level, avoid or eliminate those risks. The policies are reviewed regularly to reflect the current market conditions and the Group's activities. The Group makes constant efforts to improve the policies by monitoring on real time basis and with support from the outside experts. The audit committee oversees the Group's compliance to the risk management policies and procedures and reviews the efficiency of the structure.

#### (ii) 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, investment securities, derivatives and financial guarantee contracts.

Credit risk also arises from transactions with financial institutions, and such transactions include transactions of cash and cash equivalents, various deposits, and financial instruments such as derivative contracts. The Group manages its exposure to this credit risk by only entering into transactions with banks that have high international credit ratings. The Group implements a credit risk management policy under which the Group only transacts business with counterparties that have a certain level of credit rate evaluated based on financial condition, historical experience, and other factors.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Book values of the financial assets represent the maximum amounts exposed to the credit risk. Details of the Group's level of maximum exposure to credit risk as of December 31, 2014 and December 31, 2013 are as follows:

	December 31, 2014	
	In millions of	Korean won
Cash and cash equivalents	₩ 508,506	966,032
Derivatives assets	9,435	58,118
Available-for-sale financial investments	566,895	641,902
Loans and receivables(*)	1,610,039	1,765,689
Financial guarantee contracts	68,215	65,491

<sup>(\*)</sup> Comprised of loans, account receivables and non-trade receivables.

Details of maturities for loans and receivables and their impaired amounts as of December 31, 2014 and December 31, 2013 are as follows:

	December	31, 2014	Decembe	r 31, 2013
	Balance Impairment		npairment Balance	
		Korean won		
Not past due	₩1,915,383	(469,215)	1,957,045	(391,881)
0 ~ 30 days	115,417	_	8,550	_
31 ~ 60 days	13,703	_	101,846	
More than 61 days	36,858	(2,107)	92,695	(2,566)
	₩2,081,361	<u>(471,322)</u>	2,160,136	<u>(394,447)</u>

Details of changes in allowance for impairment of loans and receivables for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of	Korean won
Beginning balance	₩394,447	357,121
Impairment	70,055	28,323
Write-off	(24,411)	(4,237)
Others(*)	31,231	13,240
Ending balance	₩471,322	394,447

<sup>(\*)</sup> Others include the effect of exchange rates fluctuations and others.

Aging of past due but not impaired financial assets as of December 31, 2014 and 2013 are as follows:

(1) As of December 31, 2014

	Book value	6 months	6~12 Months	1~2 years	2~5 years	More than 5 years
		In m	illions of Ko	orean won		
Loans and receivables	₩163.871	128,868	20,107	14,896	_	

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

## ② As of December 31, 2013

	Book value	Less than 6 months				More than 5 years
		In m	illions of K	orean won		
Loans and receivables	₩200,525	112,975	1,172	86,197	181	

#### (iii) Market risk

### (1) Crude oil price risk

Crude oil price risk is the risk that the profit or cash flows will fluctuate due to changes in the international market prices of crude oil. The Group utilizes derivative instrument contracts for expected price volatility in the international market to hedge the crude oil price risk and to maintain the level of profitability. With all other variables held constant, the changes in Group's profit before tax for the years ended December 31, 2014 and 2013 from crude oil price fluctuations are as follows:

	20	)14	2013		
	Increase by 10%	Decrease by 10%	Increase by 10%	Decrease by 10%	
		In millions of			
Increase (decrease) of profit before tax	₩320,030	(320,030)	393,755	(393,755)	

### (2) Interest rate risk

The Group is exposed to interest rate risk due to its borrowings with floating interest rates. Assuming a 100 basis points increase or decrease in interest rates as of December 31, 2014, the Group's total equity and its profit or loss will also increase or decrease.

Except for the effect of derivative transactions, this analysis considers the Group's total exposed risks associated with the fluctuation in interest rate. This analysis assumes that all other variables are held constant and the same method is applied as the method used in the prior periods. The details of increase or decrease in the total equity and profit or loss are as follows:

		ear ended r 31, 2014	For the year ended December 31, 2013			
	Increase by 1%	Decrease by 1%	Increase by 1%	Decrease by 1%		
	In millions of Korean won					
Increase (decrease) of profit before tax	₩(32,354)	32,354	(35,116)	35,116		

### (3) Foreign currency risk

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the 'functional currency'). The Group is exposed to currency risk from the sales, purchases and borrowings not in United States dollar. The Group reduces currency risk from fluctuations in foreign exchange rates by carrying out interest swap and currency swap transactions.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Without considering the effect of the derivatives aforementioned, the Group's exposures to foreign currency risk as of December 31, 2014 and 2013 are as follows:

		Decembe	er 31, 2014	December 31, 2013			
	Currency unit	Foreign currencies	Equivalent Korean won	Foreign currencies	Equivalent Korean won		
		In thousands	of foreign curren	cies and millions	es and millions of Korean won		
Financial assets							
denominated in foreign currencies	KRW	438,015	₩ 438,015	649,477	₩ 649,477		
Financial liabilities	KRW	120,254	120,254	415,387	415,387		
		,	,	,			
denominated in foreign currencies	EUR	297,001	396,947	297,050	432,582		
	SGD	100,537	83,622	100,692	83,851		
	HKD	3,497,000	495,525	3,967,000	539,869		
	CHF	865,000	961,387	865,000	1,028,200		
	JPY	13,500,000	124,219	13,500,000	135,629		
	AUD	55,000	49,450	55,009	51,706		
	GBP	16	27	11	19		
	CAD	_	_	1,009	1,000		
	NOK	_		13	2		
			₩2,231,431		₩2,688,245		

The exchange rates applied for the years ended and as of December 31, 2014 and 2013 are as follows:

	Average ex	Average exchange rates		ange rates
	December 31, 2014	December 31, 2013	December 31, 2014	December 31, 2013
		In US dollar per or	ne foreign currency	
KRW	0.0009	0.0009	0.0009	0.0009
EUR	1.3281	1.3274	1.2159	1.3799
SGD	0.7890	0.7992	0.7566	0.7891
HKD	0.1289	0.1289	0.1289	0.1290
CHF	1.0932	1.0785	1.0111	1.1264
JPY	0.0094	0.0103	0.0083	0.0095
AUD	0.9013	0.9683	0.8179	0.8907
GBP	1.6480	1.5629	1.5561	1.6494
CAD	0.9058	0.9437	0.8611	0.9389
NOK	_	0.1655	_	0.1644

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

The Company and its subsidiaries use various functional currencies depending on their primary economic environment in which the entities operate. The functional currencies of the main subsidiaries, Harvest Operations Corp., Dana Petroleum Limited, KNOC Kaz B.V. are CAD, GBP and KZT, respectively. A sensitivity analysis below indicates the effect on the Group's profit before tax from the fluctuations in each function currency exchange rate. As of December 31, 2014 and 2013, the effect of a 5% increase or decrease in each functional currency exchange rate on profit before tax assuming all other variables held constant is as follows:

		2014		20	013
		Increase by 5%	Decrease by 5%	Increase by 5%	Decrease by 5%
			In millions of	Korean won	
Increase (decrease) of profit before tax	KRW	15,888	(15,888)	(16,145)	16,145
	HKD	(24,776)	24,776	(28,037)	28,037
	CHF	(48,069)	48,069	(53,378)	53,378
	EUR	(19,119)	19,119	(22,441)	22,441
	Others	(9,645)	9,645	(14,040)	14,040

#### (iv) Liquidity risk

The details of contractual maturities of financial liabilities and other contractual obligations as of December 31, 2014 are as follows:

	В	ook value	Contractual cash flows(*1)	Less than 1 year	1 ~ 2 years	2 ~ 5 years	More than 5 years(*2)
•			Iı	n millions of Ko	orean won		
Short-term borrowings	₩	214,360	215,936	215,936	_	_	_
Bonds payable		9,907,636	11,100,081	1,337,804	2,219,437	5,662,759	1,880,081
Long-term borrowings		1,894,403	2,444,871	53,615	53,615	1,569,568	768,073
Trade and other payables		1,870,647	1,870,647	1,672,628			198,019
Derivatives liabilities		148,481	148,481	3,103	62,698	65,073	17,607
Financial guarantee							
contracts(*3)		364	68,215	68,215			
	₩1	4,035,891	15,848,231	3,351,301	2,335,750	7,297,400	2,863,780

<sup>(\*1)</sup> Contractual cash flows include the estimated interest payments but exclude the effects of offsetting contracts.

The Group had a working capital (current assets minus current liabilities) deficit of \(\foathbf{W}\)1,252,334 million as of December 31, 2014. The Group's management currently anticipates that the net proceeds from the sale of noncore assets, expected future capital contributions from the Government and the cash flows that the Group generates from its operations, together with its existing cash and cash equivalents and credit sources, will be sufficient to meet its currently anticipated needs for working capital, capital expenditures and business expansion throughout the foreseeable future.

<sup>(\*2)</sup> Loans from Special Accounting for Energy and Resources ("SAER") included in borrowings have no specific maturity as they were borrowed under the condition that the Group is not obligated to make repayment of the principal and interest until the exploration is proven to be successful

<sup>(\*3)</sup> Maximum amounts possible in relation to the financial guarantee contracts are allocated to the earliest period.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (v) Other price risk

Other price risk is the risk that the fair value or cash flows of financial instruments will fluctuate because of changes in market prices other than interest rate risk and foreign currency risk. The Group's marketable available-for-sale equity securities are exposed to market price risk arising from the fluctuation in the price of the securities. However, the Group's management believes that the effect of the fluctuation in the price of the securities on the financial statements is not significant.

#### (c) Fair value measurement

(i) Fair value and book value of financial assets and liabilities as of December 31, 2014 and 2013 are as follows:

	December 31, 2014		December	31, 2013
Туре	Book value	Fair value	<b>Book value</b>	Fair value
<del></del>		In millions of	f Korean won	
Assets recognized at fair value				
Available-for-sale financial assets	₩543,275	543,275	95,568	95,568
Currency swap	3,938	3,938	50,587	50,587
Interest rate swap	3,696	3,696	6,660	6,660
Other derivatives	1,801	1,801	870	870
Investments in associates and joint ventures(*)	71,691	71,691		
	₩624,401	624,401	153,685	153,685
Liabilities recognized at fair value				
Interest rate swap	₩ 1,974	1,974	_	_
Currency swap	145,378	145,378	62,876	62,876
Other derivative liabilities	1,129	1,129	597	597
	₩148,481	148,481	63,473	63,473

<sup>(\*)</sup> The investments in joint ventures for Deep Basin Partnership and HKMS Partnership held by the Group are measured at the fair value at each financial statement date using the hypothetical liquidation book value to estimate the Group's interests in the net assets of the joint ventures. It measures the residual interests after the fulfillment of the partner's rights to better reflect the economic interests based on the agreements.

The fair values of the financial assets and liabilities measured at amortized costs do not significantly differ from their book values.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

### (ii) Fair value hierarchy

Fair values of financial instruments by hierarchy level as of December 31, 2014 are as follows:

	December 31, 2014			
Type	Level 1	Level 2	Level 3	Total
	In	millions of 1	Korean won	
Financial assets at fair value				
Available-for-sale financial assets	₩408,651	_	134,624	543,275
Investments in associates and joint ventures(*)	_	_	71,691	71,691
Derivative assets		9,435		9,435
	408,651	9,435	206,315	624,401
Financial liabilities at fair value				
Derivative liabilities	_	148,481	_	148,481

<sup>(\*)</sup> The investments in joint ventures for Deep Basin Partnership and HKMS Partnership, the Group applied a hypothetical liquidation book value method to calculate its equity share of net income for each reporting period.

### 42. Related Parties

(a) The Group's major related parties as of December 31, 2014 are as follows:

Type	Related party
Associates	Kernhem B.V.
	Oilhub Korea Yeosu Co., Ltd.
	ADA Oil LLP
	Faroe Petroleum plc(*1)
	Parallel Petroleum LLC
Joint ventures	KNOC Inam Ltd
	KNOC Kamchatka Petroleum Ltd.
	KC Karpovsky B.V.
	KNOC Bazian Ltd.
	Dolphin Property Ltd.
	KNOC Nigerian West Oil Company Ltd.
	KNOC Nigerian East Oil Company Ltd.
	KNOC Aral Ltd.
	KNOC Kamchatka Co. Ltd
	KC Kazakh B.V.
	Offshore International Group, Inc.
	KNOC Ferghana Ltd.
	KNOC Ferghana2 Ltd.
	KNOC Samsung Lantian Oil Development Co., Ltd.(*2)
	KADOC Ltd.
	Korea Oil Terminal Co., Ltd.
	Deep Basin Partnership
	HKMS Partnership

## Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(c) Significant transactions with related parties for the years ended December 31, 2014 and 2013 are as follows:

		Sales and others		Purcha oth	ses and ers
	Transaction	2014	2013	2014	2013
		In 1	millions of	Korean woi	ı
Joint ventures					
KC karpovsky B.V	Other bad debt expenses	₩ —	_	2,864	_
KC kazakh B.V	Interest on loans	579	_	_	_
KNOC Aral Ltd	Other bad debt expenses	_	_	_	14,710
KNOC Bazian Ltd	Other bad debt expenses	_	_	66,621	_
KNOC Ferghana Ltd	Other bad debt expenses	_	_	_	13,567
KNOC Nigerian West Oil Company Ltd	Interest on loans	2,297	7,553	_	_
KNOC Nigerian East Oil Company Ltd	Interest on loans	2,594	4,849	_	_
KNOC Samsung Lantian Oil Development					
Co., Ltd	Interest on loans	_	5	_	_
Offshore International Group	Interest on loans	202	249	_	_
KADOC Ltd	Interest on loans	2,164	1,743	_	_
		7,836	14,399	69,485	28,277
Annadatas			- 1,077		
Associates	Total and I am	262	272		
ADA Oil LLP	Interest on loans	263	272	_	_
	Revenues from other	2 120			
W 1 DW	services	3,120	1 206	_	_
Kernhem B.V.	Interest on loans	1,587	1,306	_	_
Oilhub Korea Yeosu Co., Ltd	Rental/service revenue	1,347	191		
	Lease			12,756	11,834
		6,317	1,769	12,756	11,834
		₩14,153	16,168	82,241	40,111

<sup>(\*1)</sup> The Investment in Faroe Petroleum plc is reclassified as available-for-sale financial instruments for the year ended December 31, 2014

<sup>(\*2)</sup> The investments were disposed during the year ended December 31, 2014

<sup>(</sup>b) The Group's related parties' transactions mostly consist of loans to joint ventures and associates for their business operation purpose and the Group recognizes related interests and bad debt expenses. The Group determines the interest rate of the loans with the consideration of the country risk premium of the associates and joint ventures and other risk related to the associates and joint ventures.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(d) The outstanding receivables and payables, except for the loans, arising from the transactions with related parties as of December 31, 2014 and 2013 are as follows:

		Receiva	ables	Pay	ables
	Transaction	2014	2013	2014	2013
		In 1	nillions of K	orean wo	n
Joint ventures					
Dolphin Property Ltd	Accrued interest	₩ —	3,331	_	_
KC kazakh B.V	Accrued interest	2,106	1,442	_	_
KNOC Bazian Ltd	Accrued interest	_	2,642	—	_
KNOC Nigerian West Oil Company Ltd	Accrued interest	18,955	15,897	—	_
KNOC Nigerian East Oil Company Ltd	Accrued interest	19,171	15,806	—	_
Offshore International Group	Accrued interest	_	427	—	_
KADOC Ltd	Accrued interest	5,189	2,814	—	_
		45,421	42,359	_	
Associates		4.456	4.4.50		
ADA Oil LLP	Accrued interest	1,476	1,153		_
	Account receivables	56	_	_	_
Kernhem B.V	Accrued interest	5,816	9,482	_	_
Oilhub Korea Yeosu Co., Ltd	Account payables		_		1,393
Parallel Petroleum LLC	Accrued interest	134		_	
		7,482	10,635	_	1,393
		₩52,903	52,994		1,393

(e) The loans to related parties as of December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of Korean wor	
Joint ventures		
KNOC Kamchatka Petroleum Ltd	₩ 83	_
KNOC Bazian Ltd.	_	60,948
Dolphin Property Ltd	_	4,578
KNOC Nigerian West Oil Company Ltd	24,277	23,565
KNOC Nigerian East Oil Company Ltd	29,137	28,312
KC kazakh B.V.	133,723	95,284
Offshore International Group	_	4,738
KNOC Ferghana2 Ltd.	12,061	10,207
KADOC Ltd.	98,430	51,993
	297,711	279,625
Associates		
Kernhem B.V.	48,082	46,162
ADA Oil LLP	10,913	10,477
	58,995	56,639
	₩356,706	336,264

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

The Group made additional loans and repayments and recognized other bad debt expenses amounting to \$87,912 million, \$5,309 million and \$66,849 million, respectively, for the year ended December 31, 2014. In addition, The Group recognized provision for loans due to equity method valuation amounting to \$13,364 million and a decrease in provision for loans due to the effect of exchange rates fluctuations amounting to \$15,117 million.

(f) As of December 31, 2014, the Group has provided the guarantees to related parties as follows:

#### In thousands of US dollars

Description	Guarantee amount	Beneficiary	Loan amount	Financial institution	Contract date
Guarantee of payment of		KC Caspian Explorer	]	Banc of America	
borrowing	\$22,194	LLP (a subsidiary of	\$62,283	Leasing&Capital,	2012.08.31
		KC kazakh B.V.)		LLC and others	

(g) The compensation to the key management personnel of the Group for the years ended December 31, 2014 and 2013 are as follows:

	2014	2013
	In millions of	Korean won
Salaries	₩840	613
Severance and retirement benefits	45	_53
	₩885	666

#### 43. Additional Cash Flow Statement Information

#### (a) Non-Cash Transactions

Significant non-cash investment and finance transactions excluded from statements of cash flows for the years ended December 31, 2014 and 2013 are as follows:

Transactions	2014	2013
	In millions of	Korean won
Replacement of current portion of bonds payables	₩1,043,434	2,417,094
Replacement of current portion of long-term borrowings	_	232,003

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

#### 44. Contingencies and Commitments

(a) Details of the Group's significant pending litigations as of December 31, 2014 are as follows:

Plaintiff	<b>Defendant</b> Description		Amount	Process	
	In thousands of USD and CAD				
KNOC	Nigerian government	Claiming the validity of the exploration right in OPL 321 and 323(*1)	_	In third trial process	
Offshore Exploration & Production LLC	KNOC	Refund of the purchase price paid by the plaintiff for equity interest(*2)	USD 28,300	In arbitration process	
AAA, DR.Owolabi	KNOC	Claiming compensation for cooperation in the process of acquiring Nigerian mining rights(*3)	USD 100,000	In first trial process	
Trinidad	Harvest Operations Corp.	Claiming compensation for monetary damages from termination of rig usage(*4)	CAD 15,649	In first trial process	

<sup>(\*1)</sup> In January 2009, the Group was notified by the President of the Federal Republic of Nigeria about the voidance of the allocation of OPL 321 and 323. The Nigerian Federal High Court granted a judgment in favor of the Group in August 2009. This judgment has been appealed by the Nigerian Government and in April 2012, the appeal was allowed by the Nigerian Court of Appeals setting aside the Nigerian Federal High Court's judgment. The Group filed an apeal at the Supreme Court of Nigeria against the judgment of the Nigerian Court of Appeals. The book value of the related assets is \(\forall \forall 93,785\) million but the Group did not recognize a provision as the Group believes that the favorable outcome of the litigation is more likely than not.

- (\*2) The Group objected to the release of certain funds from escrow accounts that the Group and the plaintiff had established, seeking instead to require the plaintiff to pay for indemnification for certain breaches of the representations and warranties. The plaintiff sued the Group in the United States District Court for the Southern District of New York (SDNY), seeking a judgment requiring the escrow agent to release the funds at issue from escrow. On December 3, 2013, the arbitral tribunal issued an interim award requiring the plaintiff to pay the interim award with funds other than those in escrow. The Group has sought confirmation of the arbitral interim awards, while the plaintiff has countered with a request that the court vacated the awards. The Group did not recognize a provision because the Group does not expect any outflow of resources embodying economic benefits that will require to settle the obligation from the result of this litigation.
- (\*3) This litigation was instituted at the High Court of Lagos State alledging that the Group entered into a secretive remunerative agreement and paying the brokerage and other fees due to the plaintiffs for sponsoring its acquisitions of OPL 321 and OPL 323. The plaintiff claimed general damages for the plaintiff's loss of the business associated with the defendant's acquisition of the right to POPL 321 and OPL 323. The Group did not recognize a provision as the Group believes that it is more likely than not that its defenses against the suit will be successful.
- (\*4) The management of Harvest Operations Corp. has estimated the settlement costs to be CAD 3.5 million and recognized a provision for the estimated settlement.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

Except as noted above, the Group does not believe it has a present obligation and has not recognized any provisions for these lawsuits.

(b) As of December 31, 2014 the Group has received guarantees provided by non-related parties for the Group's obligations and indebtedness as follows:

Provider	Description	Reporting Currency Amounts	Contractual Currency Unit	Contractual Currency Amounts	Description of guarantee
	In millions of Korean won and thousands of foreign currencies				
BBVA Colombia	Performance guarantee	₩ 12,842	USD	11,683	Fulfillment and correct execution of the contractual obligations for Colombia CPO 2 and CPE 7
Bank of Tokyo Mitsubishi UFJ	Performance guarantee	3,018	USD	2,746	Bank guarantee on exploration operation expenses for Malaysia 2B
Sumitomo Bank	Guarantee for payment in foreign currency	219,840	USD	200,000	Others
Sumitomo Bank	Guarantee for payment in foreign currency	109,920	USD	100,000	Others

(c) A summary of the Group's significant contractual obligations and estimated commitments as of December 31, 2014 is as follows:

	Contractual cash flows	Less than 1 year	1 ~ 2 years	2 ~ 5 years	More than 5 years
		In millions of Korean won			
Purchase commitments(*1)	₩ 130,129	44,727	28,610	28,396	28,396
Decommissioning and environment liabilities	2,687,491	55,484	98,000	414,754	2,119,253
Others(*2)	786,300	291,080	216,861	115,916	162,443
	₩3,603,920	391,291	343,471	559,066	2,310,092

<sup>(\*1)</sup> Includes drilling commitments and others.

<sup>(\*2)</sup> Includes SOC commitments, operating leases and others.

<sup>(</sup>d) The Group, in relation to the acquisition of Dana Petroleum Limited's equity interest, has provided a guarantee for any potential environmental and bodily damages during the exploration and production activities by Dana Petroleum Norway AS to the Norwegian government.

<sup>(</sup>e) In 2007 and 2008, the Group and Korean Consortium entered into an agreement (Production Sharing Contract) for the exploration and production of oil fields located in Iraq, with the Kurdish regional government (KRG), in accordance with the local Kurdish oil exploration laws. In 2008, the Iraqi federal government announced that such agreement in the region without obtaining proper approval from the federal government would be invalid to the Group and other participating companies in the region. The Group was advised by legal consultants in the UK and in Iraq that there is no legal basis on the alleged nullity of the agreement by the Iraqi government.

## Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(f) In 2009, the Group entered into an exclusive agreement with the Kurdish regional government ("KRG") to obtain rights on five exploratory areas. In consideration of obtaining these rights, the Group committed to pay \overline{\psi}2.0 trillion (USD 1.9 billion) of construction services for the government's Social Overhead Capital (SOC).

However, the agreement was amended twice until 2012. The Group's rights on three exploratory areas, including Qush Tappa, were terminated and the Group's \(\forall \)2.0 trillion (USD 1.9 billion) commitment was reduced to \(\forall \)867 billion (USD 825 million). In addition, the quantity of return-guaranteed crude oil was reduced.

The Group recorded mining rights in relation to this agreement and the carrying amount as of December 31, 2014 is \\ \mathbb{W}\)1,272,948 million. In addition, the Group recorded a current and non-current provision in relation to this agreement and the carrying amounts as of December 31, 2014 are \\ \mathbb{W}\)249,791 million and \\ \mathbb{W}\)109,322 million, respectively, which represent that the Company's estimated obligation of expected payments for KRG's SOC construction.

- (g) In January, 2015, the Group received an advance notice of taxation from National Tax Service for the overseas loans for consumption of stockpile oil for the income tax expense of \(\formal{W}\)477,577 million. In relation to this decision, the judgment on propriety before tax levying is currently in progress as of the date when the financial statements were authorized for issuance. The Group cannot estimate the timing of the judgment and the completion of the appeal and believes that the final decision to levy the tax is unlikely.
- (h) As of December 31, 2014, other significant commitments and contingencies of the Company's subsidiaries are as follows:

### (i) Harvest Operations Corp. and its subsidiaries

On April 30, 2010, Harvest entered into a credit facility maturing on April 30, 2017 for \(\foathbf{W}\)947 billion (CAD 1.0 billion) with the Canadian Imperial Bank of Commerce and other financial institutions. Under the credit facility covenants, Harvest should comply with the required pre-defined financial ratios every quarter and it has complied with the required pre-defined financial ratios as of September 30, 2014. In October 2010, Harvest issued senior notes amount of \(\foathbf{W}\)550 billion (USD 500 million) (maturing: October 1, 2017). The senior notes are unconditionally guaranteed by Harvest and all of its wholly-owned subsidiaries as the incurrence of additional secured indebtedness and dividend payments to the stockholder may be restricted in violation of the covenants associated with the notes.

In addition, the Company provided a payment guarantee on the global bonds issued by Harvest Operations Corps., its subsidiary, on May 2013 for the principal amount of \$692 billion (USD 630 million) and their corresponding interest. The payment guarantee is effective until the maturity date (May 14, 2018) of the bonds.

#### (ii) Dana Petroleum Limited and its subsidiaries

Dana entered into credit facilities agreements in a form of syndicated loan for up to \(\fowarrangle 1.1\) trillion (USD 1.0 billion). The Company has drawn borrowings amounting to \(\fowarrangle 254\) billion (USD 231 million) as of September 30, 2014 and its stand by L/C open amount is approximately \(\fowarrangle 167\) billion (USD 152 million). In relation to the credit facilities, certain financial ratios, total reserve values and cash flows are required to be in compliance with debt covenants and its oil and certain gas properties have been pledged as collateral.

In addition, the Company provided a performance guarantee of \(\formalfontarrow\)70 billion (USD 63.8 million) to Dana Petroleum Limited to the participant of Bittern oil field, Hess, for the expenses that will incur for restoration of the sites, decommissioning, dismantling and removal of the facilities and structures.

# Notes to the Consolidated Financial Statements — (Continued) For the years ended December 31, 2014 and 2013

(i) As of December 31, 2014, the Group's significant commitments with the financial institutions are as follows:

Detail of contract	Financial institutions	Reporting currency amount	Contractual currency unit	Credit line amount	
			In millions of Korean won and in thousands of US dollar		
Trade finance	Deutsche Bank	₩ 483,64	8 USD	440,000	
	DBS(*)	329,76	O USD	300,000	
	ING(*)	109,92	0 USD	100,000	
	Hongkong and Shanghai Banking				
	Corporation(*)	109,92	0 USD	100,000	
	Korea Development Bank	274,80	0 USD	250,000	
	Bank of America(*)	175,87	2 USD	160,000	
	Royal Bank of Scotland(*)	164,88	0 USD	150,000	
		₩1,648,80	0	1,500,000	
Financial loans	BNP Paribas	₩ 549,60	USD	500,000	
	DBS(*)	329,76	0 USD	300,000	
	Mizuho Bank	219,84	0 USD	200,000	
	Bank of America(*)	175,87	2 USD	160,000	
	ING(*)	109,92	0 USD	100,000	
	Royal Bank of Scotland(*)	164,88	0 USD	150,000	
	Hongkong and Shanghai Banking				
	Corporation(*)	109,92	0 USD	100,000	
	Credit.Agricole	109,92	0 USD	100,000	
	Bank of Tokyo-Mitsubishi UFJ	54,96	O USD	50,000	
		₩1,824,67	2	1,660,000	

<sup>(\*)</sup> A portion of or all of lines of credit for trade finance and financial loans have been integrated and the integrated line of credit is \(\formall{W}\)890 billion (USD 810 million).

### 45. Date of Authorization for Issue

The Group's financial statements as of and for the year ended December 31, 2014 were authorized for issuance on February 27, 2015 at the board of directors' meeting.

#### THE ISSUER

#### **Korea National Oil Corporation**

305, Jongga-ro Jung-gu Ulsan, 431-711 Korea

#### REGISTRAR AND EXCHANGE AGENT

## ISSUING AND PRINCIPAL PAYING AGENT

#### The Bank of New York Mellon

101 Barclay Street 4E New York NY 10286 United States of America

#### The Bank of New York Mellon, London Branch

One Canada Square 40th Floor London E14 5AL United Kingdom

#### LEGAL ADVISERS

To the Issuer as to Korean law

Lee & Ko

18th Fl., Hanjin Main Building 63 Namdaemun-ro Jung-gu Seoul 100-770, Korea

#### To the Dealers as to English law

Cleary Gottlieb Steen & Hamilton LLP c/o Hysan Place, 37th Floor 500 Hennessy Road Causeway Bay Hong Kong

#### INDEPENDENT AUDITORS

#### KPMG Samjong Accounting Corp.

10th Floor, Gangnam Finance Center 152, Teheran-ro, Gangnam-gu Seoul 135-984, Korea

#### **DEALERS**

#### **Barclays Bank PLC**

5 The North Colonnade Canary Wharf London E14 4BB United Kingdom

### **BNP Paribas**

63/F, Two International Finance Centre 8 Finance Street, Central Hong Kong

### Citigroup Global Markets Inc.

388 Greenwich Street New York, NY 10013 United States of America

## Crédit Agricole Corporate and Investment Bank

27/F, Two Pacific Place 88 Queensway Hong Kong

## Credit Suisse Securities (Europe) Limited

One Cabot Square London E14 4QJ United Kingdom

## Deutsche Bank AG, Singapore Branch

One Raffles Quay #17-00 South Tower Singapore 048583

### **Goldman Sachs International**

Peterborough Court 133 Fleet Street London EC4A 2BB United Kingdom

#### 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 4QJ United Kingdom

#### The Korea Development Bank

14 Eunhaeng-ro Yeongdeungpo-gu Seoul 150-973 Korea

## **Merrill Lynch International**

2 King Edward Street London EC1A 1HQ United Kingdom

#### Société Générale

29 Boulevard Haussmann 75009 Paris France

### **Standard Chartered Bank**

Marina Bay Financial Centre, Tower 1 8 Marina Boulevard, Level 20 Singapore 018981

### **UBS AG, Hong Kong Branch**

52th Floor, Two International Finance Centre 8 Finance Street, Central Hong Kong

## SINGAPORE LISTING AGENT

### Shook Lin & Bok LLP

1 Robinson Road #18-00 AIA Tower Singapore 048542