

KOREA ELECTRIC POWER CORP

Form 20-F

April 30, 2014

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As filed with the Securities and Exchange Commission on April 30, 2014

**UNITED STATES**

**SECURITIES AND EXCHANGE COMMISSION**

**Washington, D.C. 20549 F**

**Form 20-F**

**(Mark One)**

**.. REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934  
OR**

**p ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the fiscal year ended December 31, 2013**

**OR**

**.. TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from to**

**OR**

**.. SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934  
Date of event requiring this shell company report**

For the transition period from            to

Commission File Number: 001-13372

## KOREA ELECTRIC POWER CORPORATION

*(Exact name of registrant as specified in its charter)*

N/A  
*(Translation of registrant's name into English)*

The Republic of Korea  
*(Jurisdiction of incorporation or organization)*

512 YEONGDONGDAERO, GANGNAM-GU, SEOUL 135-791, KOREA

*(Address of principal executive offices)*

Younseung Lee, +822 3456 4217, winstraight@kepc.co.kr, +822 3456 4299

*(Name, telephone, e-mail and/or facsimile number and address of company contact person)*

### Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class:	Name of each exchange on which registered:
Common stock, par value Won 5,000 per share	New York Stock Exchange*
American depositary shares, each representing one-half of share of common stock	New York Stock Exchange

\* Not for trading, but only in connection with the listing of American depositary shares on the New York Stock Exchange, pursuant to the requirements of the Securities and Exchange Commission.

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Securities registered or to be registered pursuant to Section 12(g) of the Act:

None

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act:

Twenty Year 7.40% Amortizing Debentures, due April 1, 2016

One Hundred Year 7.95% Zero-to-Full Debentures, due April 1, 2096

6% Debentures due December 1, 2026

7% Debentures due February 1, 2027

6<sup>3</sup>/<sub>4</sub>% Debentures due August 1, 2027

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the last full fiscal year

covered by the annual report:

641,964,077 shares of common stock, par value of Won 5,000 per share

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this annual report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes  No

Note: Checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 from their obligations under those Sections.

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Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days: Yes  No

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files): Yes  No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of accelerated filer and large accelerated filer in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer  Accelerated filer  Non-accelerated filer

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP  International Financial Reporting Standards as issued by the International Accounting Standards Board  Other

If Other has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow. Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

(APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. Yes  No

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**CERTAIN DEFINED TERMS AND CONVENTIONS**

All references to Korea or the Republic in this annual report on Form 20-F, or this annual report, are references to the Republic of Korea. All references to the Government in this annual report are references to the government of the Republic. All references to we, us, our, ours, the Company or KEPCO in this annual report are references to Korea Electric Power Corporation and, as the context may require, its subsidiaries, and the possessive thereof, as applicable. All references to the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance include the respective predecessors thereof. All references to tons are to metric tons, equal to 1,000 kilograms, or 2,204.6 pounds. Any discrepancies in any table between totals and the sums of the amounts listed are due to rounding. All references to IFRS in this annual report are references to the International Financial Reporting Standards as issued by the International Accounting Standard Board. Unless otherwise stated, all of our financial information presented in this annual report has been prepared on a consolidated basis and in accordance with IFRS.

In addition, in this annual report, all references to:

KHNP are to Korea Hydro & Nuclear Power Co., Ltd.,

EWP are to Korea East-West Power Co., Ltd.,

KOMIPO are to Korea Midland Power Co., Ltd.,

KOSEP are to Korea South-East Power Co., Ltd.,

KOSPO are to Korea Southern Power Co., Ltd., and

KOWEPO are to Korea Western Power Co., Ltd.,  
each of which is our wholly-owned generation subsidiary.

**FORWARD-LOOKING STATEMENTS**

This annual report includes forward-looking statements (as defined in Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934), including statements regarding our expectations and projections for future operating performance and business prospects. The words believe, expect, anticipate, estimate, project and similar words used in connection with any discussion of our future operation or financial performance identify forward-looking statements. In addition, all statements other than statements of historical facts included in this annual report are forward-looking statements. Although we believe that the expectations reflected in such forward-looking statements are reasonable, we can give no assurance that such expectations will prove to be correct. We caution you not to place undue reliance on the forward-looking statements, which speak only as of the date of this annual report.

This annual report discloses, under the caption Item 3D. Risk Factors and elsewhere, important factors that could cause actual results to differ materially from our expectations ( Cautionary Statements ). All subsequent written and oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by the Cautionary Statements.



**Table of Contents****PART I****ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

Not applicable.

**ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

**ITEM 3. KEY INFORMATION****Item 3A. Selected Financial Data**

The selected consolidated financial data set forth below as of and for the years ended December 31, 2010, 2011, 2012 and 2013 have been derived from our audited consolidated financial statements which have been prepared in accordance with IFRS.

You should read the following data with the more detailed information contained in Item 5. Operating and Financial Review and Prospects and our consolidated financial statements included in Item 18. Financial Statements. Historical results do not necessarily predict future results.

**Consolidated Statement of Comprehensive Income (Loss) Data**

	2010	2011	2012	2013	
	(in billions of Won and millions of US\$, except per share data) <sup>(1)</sup>				
Sales	39,507	43,175	49,121	53,713	\$ 50,898
Gross Profit	3,319	450	661	3,117	2,954
Selling and administrative expenses	1,645	1,752	1,780	1,923	1,822
Other gains (losses)	118	166	(1,782)	129	122
Operating profit (loss)	2,260	(685)	(2,300)	1,948	1,846
Finance income (expense), net	(1,967)	(1,911)	(1,940)	(2,302)	(2,181)
Income (loss) before income taxes	370	(2,473)	(4,063)	(396)	(376)
Income tax (expense) benefit	(439)	(820)	985	571	541
Profit (loss) for the period	(69)	(3,293)	(3,078)	174	165
Other comprehensive income (loss)	(43)	(262)	(322)	186	176
Total comprehensive income (loss)	(112)	(3,555)	(3,400)	360	341
Profit (loss) attributable to:					
Owners of the Company	(120)	(3,370)	(3,167)	60	57
Non-controlling interests	51	77	89	114	108
Total comprehensive income (loss) attributable to:					
Owners of the Company	(152)	(3,628)	(3,448)	245	233
Non-controlling interests	40	73	48	115	109
Earnings (loss) per share					
Basic <sup>(2)</sup>	(193)	(5,411)	(5,083)	96	91
Earnings (loss) per ADS					
Basic <sup>(2)</sup>	(97)	(2,706)	(2,542)	48	46
Dividends per share				90	85

**Table of Contents****Consolidated Statements of Financial Position Data**

	2010	2011	As of December 31,		2013
	(in billions of Won and millions of US\$, except share and per share data) <sup>(1)</sup>				
Net working capital deficit <sup>(3)</sup>	(916)	(3,973)	(4,884)	(4,945)	\$ (4,686)
Property, plant and equipment, net	107,406	112,385	122,376	129,638	122,844
Total assets	129,518	136,468	146,153	155,527	147,377
Total shareholders equity	57,277	53,804	51,064	51,451	48,755
Equity attributable to owners of the Company	56,818	53,270	49,889	50,260	47,626
Non-controlling interests	459	534	1,175	1,191	1,129
Share capital	3,208	3,210	3,210	3,210	3,042
Number of common shares as adjusted to reflect any changes in capital stock	641,567,712	641,964,077	641,964,077	641,964,077	641,964,077
Long-term debt (excluding current portion)	32,848	39,198	45,525	52,801	50,034
Other long term liabilities	25,321	25,725	30,747	31,062	29,434

*Notes:*

- (1) The financial information denominated in Won as of and for the year ended December 31, 2013 has been translated into U.S. dollars at the exchange rate of Won 1,055.3 to US\$1.00, which was the Noon Buying Rate as of December 31, 2013.
- (2) Basic earnings per share are calculated by dividing net income available to holders of our common shares by the weighted average number of common shares issued and outstanding for the relevant period. Dilutive loss per share is not presented as such amount was anti-dilutive for the periods indicated.
- (3) Net working capital is defined as current assets minus current liabilities. For the periods indicated, current liabilities exceeded current assets, which gave rise to working capital deficit.

**Currency Translations and Exchange Rates**

In this annual report, unless otherwise indicated, all references to Won or ₩ are to the currency of Korea, and all references to U.S. dollars, Dollars, \$ or US\$ are to the currency of the United States of America, all references to Euro or € are references to the currency of the European Union, and all references to Yen or ¥ are references to the currency of Japan. Unless otherwise indicated, all translations from Won to U.S. dollars were made at Won 1,055.3 to US\$1.00, which was the noon buying rate of the Federal Reserve Board (the Noon Buying Rate) in effect as of December 31, 2013, which rates are available on the H.10 statistical release of the Federal Reserve Board. On April 11, 2014, the Noon Buying Rate was Won 1,035.4 to US\$1.00. The exchange rate between the U.S. dollar and Korean Won may be highly volatile from time to time and the U.S. dollar amounts referred to in this annual report should not be relied upon as an accurate reflection of our results of operations. No representation is made that the Won or U.S. dollar amounts referred to in this annual report could have been or could be converted into U.S. dollars or Won, as the case may be, at any particular rate or at all.

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The following table sets forth, for the periods and dates indicated, certain information concerning the Noon Buying Rate in Won per US\$1.00.

Year Ended December 31,	At End of Period	Average <sup>(1)</sup> (Won per US\$1.00)	High	Low
2009	1,163.7	1,274.6	1,570.1	1,149.0
2010	1,130.6	1,155.7	1,253.2	1,104.0
2011	1,158.5	1,106.9	1,197.5	1,049.2
2012	1,063.2	1,126.2	1,185.0	1,063.2
2013	1,055.3	1,094.7	1,161.3	1,050.1
October	1,060.8	1,065.9	1,075.5	1,057.5
November	1,057.8	1,061.6	1,072.7	1,054.8
December	1,055.3	1,055.6	1,061.4	1,050.1
2014 (through April 11)	1,035.4	1,067.1	1,084.2	1,035.4
January	1,080.4	1,067.1	1,083.7	1,050.3
February	1,066.0	1,071.3	1,084.2	1,062.1
March	1,064.7	1,070.5	1,079.6	1,064.1
April (through April 11)	1,035.4	1,050.1	1,058.3	1,035.4

Source: Federal Reserve Board.

Note:

(1) Represents the daily average of the Noon Buying Rates during the relevant period.

**Item 3B. Capitalization and Indebtedness**

Not Applicable

**Item 3C. Reasons for the Offer and Use of Proceeds**

Not Applicable

**Item 3D. Risk Factors**

*Our business and operations are subject to various risks, many of which are beyond our control. If any of the risks described below actually occurs, our business, financial condition or results of operations could be seriously harmed.*

**Risks Relating to KEPCO**

*Increases in fuel prices will adversely affect our results of operations and profitability as we may not be able to pass on the increased cost to consumers at a sufficient level or on a timely basis.*

Fuel costs constituted 45.1% and 47.8% of our sales and cost of sales, respectively, in 2013. Our generation subsidiaries purchase substantially all of the fuel that they use (except for anthracite coal) from suppliers outside Korea at prices determined in part by prevailing market prices in currencies other than Won. For example, most of the bituminous coal requirements (which accounted for approximately 43.0% of our entire fuel requirements in 2013 in terms of electricity output) are imported principally from Indonesia and Australia and, to a lesser extent, the United States and Russia, which accounted for approximately 41.6%, 38.2%, 9.5% and 9.5%, respectively, of the annual bituminous coal requirements of our generation subsidiaries in 2013. Approximately 89.0% of the bituminous coal requirements of our generation subsidiaries in 2013 were purchased under long-term contracts and the remaining 11.0% from the spot market. Pursuant to the terms of our long-term supply contracts,

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prices are adjusted periodically based on prevailing market conditions. In addition, our generation subsidiaries purchase a significant portion of their fuel requirements under contracts with limited duration. See Item 4B. Business Overview Fuel.

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If fuel prices increase sharply within a short span of time, our generation subsidiaries may be unable to secure requisite fuel supplies at prices commercially acceptable to them. In addition, any significant interruption or delay in the supply of fuel, bituminous coal in particular, from any of their suppliers may cause our generation subsidiaries to purchase fuel on the spot market at prices higher than the prices available under existing supply contracts, which would result in an increase in fuel costs. In recent years, however, the prices of our main fuel types, namely, bituminous coal, oil and liquefied natural gas, or LNG have generally declined in tandem with their international market prices. For example, the average free on board Newcastle coal 6300 GAR spot price index published by Platts declined from US\$96.2 per ton in 2012 to US\$85.1 per ton in 2013 and US\$73.8 per ton as of April 11, 2014. The prices of oil and LNG are substantially dependent on the price of crude oil, and according to Bloomberg (Bloomberg Ticker: PGCRDUBA), the average daily spot price of Dubai crude oil declined from US\$108.9 per barrel in 2012 to US\$105.4 per barrel in 2013 and to US\$104.1 per barrel as of April 11, 2014. However, we cannot assure you that the fuel prices will remain at similarly low levels or will not significantly increase in the remainder of 2014 or thereafter.

Because the Government regulates the rates we charge for the electricity we sell to our customers (see Item 4B. Business Overview Sales and Customers Electricity Rates ), our ability to pass on fuel and other cost increases to our customers is limited. If fuel prices increase rapidly and substantially and the Government, out of concern for inflation or for other reasons, maintains the current level of electricity tariff or does not increase it to a level to sufficiently offset the impact of high fuel prices, the fuel price increases will negatively affect our profit margins or even cause us to suffer operating and/or net losses (as was the case from 2008 to 2012 when we suffered consecutive net losses and, from time to time, operating losses) and our business, financial condition, results of operations and cash flows would suffer. In addition, partly because the Government may have to undergo a lengthy deliberative process to approve an increase in electricity tariff, which represents a key component of the consumer price index, the electricity tariff may not be adjusted to a level sufficient to ensure a fair rate of return to us in a timely manner or at all. Similarly, we cannot assure that any future tariff increase by the Government will be sufficient to fully offset the adverse impact on our results of operations from the current or potential rises in fuel costs.

Further to the announcement by the Ministry of Trade, Industry and Energy in February 2010, a new electricity tariff system went into effect on July 1, 2011. This system is designed to overhaul the prior system for determining electricity tariff chargeable to customers by more closely aligning the tariff levels to movements in fuel prices, with the aim of providing more timely pricing signals to the market regarding the expected changes in electricity tariff levels and encouraging more efficient use of electricity by customers. Previously, the electricity tariff consisted of two components: (i) base rate and (ii) usage rate based on the cost of electricity and the amount of electricity consumed by the end-users. Under the new tariff system, the electricity tariff also has a third component of fuel cost pass-through adjustment ( FCPTA ) rate, which is to be added to or subtracted from the sum of the base rate and the usage rate on a monthly basis based on the three-month average movements of coal, LNG and oil prices. The new tariff system is intended to provide greater financial stability and ensure a minimum return on investment to electricity suppliers, such as us. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Trade, Industry and Energy issued a hold order on July 29, 2011 suspending our billing and collecting of the FCPTA amount. The hold order remains in effect to-date. Furthermore, on January 11, 2013, the Ministry of Trade, Industry and Energy informed us that the FCPTA system needed to be reassessed in light of the other factors such as the prolonged unbilled period since the announcement of the FCPTA system. There is no assurance as to when the Government will lift the hold order and allow us to bill and collect the accumulated FCPTA amount or whether the new tariff system will undergo other amendments to the effect that it will not fully cover our fuel and other costs on a timely basis or at all, or will not have unintended consequences that we are not presently aware of. Any such development may have a material adverse effect on our business, financial condition, results of operations and cash flows. For further discussion, including in relation to accounting, see Item 5A. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment.

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

From time to time, the Government considers various policy initiatives to foster efficiency in the Korean electric power industry, and at times have adopted policy measures that have substantially altered our business and operations. For example, in January 1999, with the aim of introducing greater competition in the Korean electric power industry and thereby improving its efficiency, the Government announced a restructuring plan for the Korean electric power industry, or the Restructuring Plan. For a detailed description of the Restructuring Plan, see Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea. As part of this initiative, in April 2001 the Government established the Korea Power Exchange to enable the sale and purchase of electricity through a competitive bidding process, established the Korea Electricity Commission to ensure fair competition in the Korean electric power industry, and, in order to promote competition in electricity generation, split off our electricity generation business to form one nuclear generation company and five thermal generation companies, in each case, to be wholly owned by us. In 2002, the Government introduced a plan to privatize one of our five thermal generation subsidiaries, but this plan was suspended indefinitely in 2003 due to prevailing market conditions and other policy considerations.

In 2003, the Government established a Tripartite Commission consisting of representatives of the Government, leading businesses and labor unions in Korea to deliberate on ways to introduce competition in electricity distribution, such as by forming and privatizing new distribution subsidiaries. In 2004, the Tripartite Commission recommended not pursuing such privatization initiatives but instead creating independent business divisions within us to improve operational efficiency through internal competition. Following the adoption of such recommendation by the Government in 2004 and further studies by Korea Development Institute, in 2006 we created nine strategic business units (which, together with our other business units, were subsequently restructured into 14 such units in February 2012) that have a greater degree of autonomy with respect to management, financial accounting and performance evaluation while having a common focus on increasing profitability.

In August 2010, the Ministry of Trade, Industry and Energy announced the Proposal for the Improvement in the Structure of the Electric Power Industry, whose key initiatives included the following: (i) maintain the current structure of having six generation subsidiaries, (ii) designate the six generation subsidiaries as market-oriented public enterprises under the Public Agency Management Act in order to foster competition among them and autonomous and responsible management by them, (iii) create a supervisory unit to act as a control tower in reducing inefficiencies created by arbitrary division of labor among the six generation subsidiaries and fostering economies of scale among them and require the presidents of the generation subsidiaries to hold regular meetings, (iv) create a nuclear power export business unit to systematically enhance our capabilities to win projects involving the construction and operation of nuclear power plants overseas, (v) further rationalize the electricity tariff by adopting a fuel-cost based tariff system in 2011 and a voltage-based tariff system in a subsequent year, and (vi) create separate accounting systems for electricity generation, transmission, distribution and sales with the aim of introducing competition in electricity sales in the intermediate future. Pursuant to this Proposal, in December 2010 the Ministry of Trade, Industry and Energy announced guidelines for a cooperative framework between us and our generation subsidiaries, and in January 2011 the five thermal generation subsidiaries formed a joint cooperation unit and transferred their pumped-storage hydroelectric business units to KHNP. Furthermore, in January 2011 the six generation subsidiaries were officially designated as market-oriented public enterprises, whereupon the President of Korea appoints the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary is subject to approval by the minister of the Ministry of Strategy and Finance; the president of each such subsidiary is required to enter into a management contract directly with the minister of the Ministry of Trade, Industry and Energy; and the Public Enterprise Management Evaluation Commission conducts performance evaluation of such subsidiaries. Previously, our president appointed the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary was subject to approval by our president; the president of each such subsidiary entered into a management contract with our president; and our evaluation committee conducted performance evaluation of such subsidiaries.

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Other than as set forth above, we are not aware of any specific plans by the Government to resume the implementation of the Restructuring Plan or otherwise change the current structure of the electric power industry or the operations of us or our generation subsidiaries in the near future. However, for reasons relating to changes in policy considerations, socio-political, economic and market conditions and/or other factors, the Government may resume the implementation of the Restructuring Plan or initiate other steps that may change the structure of the Korean electric power industry or the operations of us or our generation subsidiaries. Any such measures may have a negative effect on our business, results of operation and financial conditions. In addition, the Government, which beneficially owns a majority of our shares and exercises significant control over our business and operations, may from time to time pursue policy initiatives with respect to our business and operations, and such initiatives may vary from the interest and objectives of our other shareholders.

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

We and our generation subsidiaries make plans for expanding or upgrading our generation capacity based on the Basic Plan Relating to the Long-Term Supply and Demand of Electricity, or the Basic Plan, which is generally revised and announced every two years by the Government. In February 2013, the Government announced the Sixth Basic Plan relating to the future supply and demand of electricity. The Sixth Basic Plan, which is effective for the period from 2013 to 2027, focuses on, among other things, (i) minimizing the need to construct new generation facilities through active consumer demand management, (ii) ensuring that we maintain adequate electricity reserve appropriate to the size of the national economy and (iii) expanding our generation capacity to promote efficient supply of electricity in consideration of the stability of the national electricity grid network and the specific needs of localities. In addition, while the Sixth Basic Plan did not contemplate the construction of additional nuclear plants in light of the heightened public concern over nuclear safety following the nuclear power plant meltdown in Japan in March 2011, there is no assurance that the Government will not implement a supplemental plan for the construction of additional nuclear plants in the future, which may increase the amount of our required capital expenditure.

In addition, on January 13, 2014, the Ministry of Trade, Industry and Energy adopted the Second Basic National Energy Plan following consultations with representatives from civic groups, the power industry and academia. The Second Basic National Energy Plan, which is a comprehensive plan that covers the entire spectrum of energy industries in Korea, will cover the period from 2013 to 2035 (compared to 2008 to 2030 under the First Basic National Energy Plan) and focuses on the following six key tasks: (i) shifting the focus of energy policy to demand management with a goal of reducing electricity demand by 15% by 2035, (ii) establishing a geographically decentralized electricity generation system so as to reduce transmission losses with a goal of supplying at least 15% of total electricity through such system by 2035, (iii) applying latest greenhouse gas emission reduction technologies to newly constructed generation units in order to further promote safety and environmental friendliness, (iv) strengthening exploration and procurement capabilities to enhance Korea's energy security and to ensure stable supply of energy and increasing the portion of electricity supplied from renewable sources to 11% by 2035, (v) reinforcing the system for stable supply of conventional energy, such as oil and gas, and (vi) introducing in 2015 an energy voucher system in lieu of a tariff discount system for the benefit of consumers in the low income group. In addition, the Second Basic National Energy Plan contemplates revising the target level of electricity generated by nuclear sources as a percentage of total electricity generated to 29%, compared to 41% under the First Basic National Energy Plan announced in 2008.

We cannot assure that the Sixth Basic Plan, the Second Basic National Energy Plan or the respective plans to be subsequently adopted will successfully achieve their intended goals, the foremost of which is to ensure, through carefully calibrated capacity expansion and other means, balanced overall electricity supply and demand in Korea at affordable costs to the end users while promoting efficiency and environmental friendliness in the consumption and production of electricity. If there is a significant variance between the projected electricity supply and demand considered in planning our capacity expansions and the actual electricity supply and demand or if these plans otherwise fail to meet their intended goals or have other unintended consequences, this may

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result in inefficient use of our capital, mispricing of electricity and undue financing costs on the part of us and our generation subsidiaries, among others, which may have a material adverse effect on our results of operations, financial condition and cash flows.

From time to time, we may experience temporary power shortages or circumstances bordering on power shortages due to factors beyond our control, such as extreme weather conditions. For example, due to extremely cold weather during winters of recent years, our electricity reserve level fell from time to time to a level lower than the normal level despite emergency measures mandated by the Government, such as reduced daytime railway services and reduced daytime industrial use of electricity during peak hours. In addition, due to the unanticipated late heat wave in mid-September 2011 and the resulting spike in the use of air conditioning, our reserve level fell to a level that resulted in temporary suspensions of electricity supply across several regions of Korea for several hours to prevent a full-scale blackout. Circumstances such as these may lead to increased end-user complaints and greater public scrutiny, which may in turn result in our need to modify our capacity expansion plans, and if we were to substantially modify our capacity plans, this may result in additional capital expenditures, which may have a material adverse effect on our results of operations, financial condition and cash flows.

In light of these temporary power shortages, the Government has increasingly expanded its efforts to encourage conservation of electricity, including through a public relations campaign, but there is no assurance such efforts will have the desired effect of substantially reducing the demand for electricity or improving efficient use thereof.

### ***We may require a substantial amount of additional indebtedness to refinance existing debt and for future capital expenditures.***

We anticipate that a substantial amount of additional indebtedness will be required in the coming years in order to refinance existing debt, make capital expenditures for construction of generation plants and other facilities and/or make acquisitions and investments related to overseas natural resources. In 2011, 2012 and 2013, our capital expenditures for construction of generation, transmission and distribution facilities amounted to Won 11,984 billion, Won 12,751 billion and Won 15,831 billion, respectively, and our budgeted capital expenditures for 2014, 2015 and 2016 amount to Won 19,898 billion, Won 18,479 billion and Won 16,339 billion, respectively. While we currently do not expect to face any material difficulties in procuring short-term borrowing to meet our liquidity and short-term capital requirements, there is no assurance that we will be able to do so. We expect that a portion of our long-term debt will need to be paid or refinanced through foreign currency-denominated borrowings and capital raising in international capital markets. Such financing may not be available on terms commercially acceptable to us or at all, especially if the global financial markets experience significant turbulence or a substantial reduction in liquidity or due to other factors beyond our control. If we are unable to obtain financing on commercially acceptable terms on a timely basis, or at all, we may be unable to meet our funding requirements or debt repayment obligations, which could have a material adverse impact on our business, results of operations and financial condition.

Recently, in light of the general policy guideline of the Government for public enterprises (including us and our generation subsidiaries) in general to reduce their respective overall debt levels, including by way of disposing of non-core assets, we are currently evaluating ways to reduce our debt levels. We cannot assure whether we or our generation subsidiaries will be able to successfully reduce debt burdens to a level contemplated by the Government or to a level that would be optimal for our capital structure. If we or our generation subsidiaries fail to reduce debt burdens to a level contemplated by the Government or the measures taken by us or our generation subsidiaries to reduce debt levels have unintended adverse consequences, such developments may have an adverse effect on our business, results of operation and financial condition.

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

The Won has fluctuated significantly against major currencies in recent years, especially as a result of the ongoing difficulties in the global financial markets. See Item 3A. Selected Financial Data Currency Translations



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and Exchange Rates. Depreciation of Won against U.S. dollar and other foreign currencies typically results in a material increase in the cost of fuel and equipment purchased by us from overseas since the prices for substantially all of the fuel materials and a significant portion of the equipment we purchase are denominated in currencies other than Won, generally in U.S. dollars. Changes in foreign exchange rates may also impact the cost of servicing our foreign currency-denominated debt. As of December 31, 2013, approximately 20.9% of our long-term debt (including the current portion but excluding issue discounts and premium) before accounting for swap transactions, was denominated in foreign currencies, principally U.S. dollars. In addition, even if we make payments in Won for certain fuel materials and equipment, some of these fuel materials may originate from other countries and their prices may be affected accordingly by the exchange rates between the Won and foreign currencies, especially the U.S. dollar. Since the substantial majority of our revenues are denominated in Won, we must generally obtain foreign currencies through foreign currency-denominated financings or from foreign currency exchange markets to make such purchases or service such debt. As a result, any significant depreciation of Won against the U.S. dollar or other major foreign currencies will have a material adverse effect on our profitability and results of operations.

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

As part of our overall business strategy, we plan to (i) strengthen reliability of our domestic operations by enhancing efficiency of our generation, transmission and distribution networks, (ii) expand overseas business by selectively exploring renewable energy, smart transmission and distribution facilities and fuel procurement projects in the overseas markets along with our traditional businesses in the generation sector, (iii) create a platform for new business growth opportunities by gaining first mover advantages in new businesses through technological development, and (iv) fulfill social responsibilities as an electricity provider by seeking a balance between our public policy mandate and profitability.

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

new and expanded business activities may require unanticipated capital expenditures and involve additional compliance requirements;

new and expanded business activities may result in less growth or profit than we currently anticipate, and there can be no assurance that such business activities will become profitable at the level we desire or at all;

certain of our new and expanded businesses, particularly in the areas of renewable energy, require substantial government subsidies to become profitable, and such subsidies may be substantially reduced or entirely discontinued;

we may fail to identify and enter into new business opportunities in a timely fashion, putting us at a disadvantage vis-à-vis competitors, particularly in overseas markets; and

we may need to hire or retrain personnel to supervise and conduct the relevant business activities.

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

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*We plan to pursue international expansion opportunities that may subject us to different or greater risks than those associated with our domestic operations.*

While our operations have, to-date, been primarily based in Korea, we may expand, on a selective basis, our overseas operations in the future. In particular, we may further diversify the geographic focus of our operations from Asia to the rest of the world, including the resource-rich Middle East, Australia and Africa as well as expand our project portfolio (which has to-date involved primarily construction and operation of conventional thermal generation units) to include construction and operation of nuclear power plants as well as mining and development of fuel sources in order to increase the level of self-sufficiency in the procurement of fuels.

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

challenges of complying with multiple foreign laws and regulatory requirements, including tax laws and laws regulating our operations and investments;

volatility of overseas economic conditions, including fluctuations in foreign currency exchange rates;

difficulties in enforcing creditors' rights in foreign jurisdictions;

risk of expropriation and exercise of sovereign immunity where the counterparty is a foreign government;

difficulties in establishing, staffing and managing foreign operations;

differing labor regulations;

political and economic instability, natural calamities, war and terrorism;

lack of familiarity with local markets and competitive conditions;

changes in applicable laws and regulations in Korea that affect foreign operations; and

obstacles to the repatriation of earnings and cash.

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

Furthermore, while we seek to enter into business opportunities in a prudent and selective manner, some of our new international business ventures, such as mining and resource exploration, carry inherent risks that are different from our traditional business of electricity power generation, transmission and distribution. While these new businesses in the aggregate currently do not comprise a material portion of our overall business, as we are relatively inexperienced in these types of businesses, the actual revenues and profitability from, and investments and expenditures into, these business ventures may be substantially different from what we planned or anticipated and have a material adverse impact on our overall business, results of operations, financial condition and cash flows.

*An increase in electricity generated by and/or sourced from private power producers may erode our market position and hurt our business, growth prospects, revenues and profitability.*

As of December 31, 2013, we and our generation subsidiaries owned approximately 81.5% of the total electricity generation capacity in Korea (excluding plants generating electricity for private or emergency use). New entrants to the electricity business will erode our market share and create significant competition, which could have a material adverse impact on our financial conditions and results of operation.

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In particular, we compete with independent power producers with respect to electricity generation. The independent power generators accounted for 13.2% of total power generation in 2013 and 18.5% of total generation capacity as of December 31, 2013. As of December 31, 2013, there were 10 independent power generators in Korea, excluding renewable energy producers. Prior to December 2010, private enterprises had not been permitted to own and operate coal-fired power plants in Korea. However, the Fifth Basic Plan announced in December 2010 included for the first time a plan for independent power producers to own and operate coal-fired power plants, namely four generation units with aggregate capacity of 2,290 megawatts for completion in 2016. In addition, in connection with the Sixth Basic Plan announced in February 2013, the Ministry of Trade, Industry and Energy accepted additional applications from independent power producers for construction of coal-fired power plants. 15 independent power producers applied for construction of a total of 40 additional coal-fired generation units with aggregate generation capacity of 37,100 megawatts, of which the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts. The Government also approved applications from independent power producers for construction of two additional generation units with aggregate generation capacity of 2,000 megawatts to prepare for the contingency of failed or delayed construction of the foregoing generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021. While it remains to be seen whether construction of these generation units will be completed as scheduled, if it were to be completed as scheduled or independent power producers are permitted to build additional generation capacity (whether coal-fired or not), our market share in Korea may decrease, which may have a material adverse effect on our results of operations and financial condition.

In addition, under the Community Energy System adopted by the Government in 2004, a minimal amount of electricity is supplied directly to consumers on a localized basis by independent power producers without having to undergo the cost-based pool system used by our generation subsidiaries and most independent power producers to distribute electricity nationwide. A supplier of electricity under the Community Energy System must be authorized by Korea Electricity Commission and be approved by the minister of the Ministry of Trade, Industry and Energy in accordance with the Electricity Business Act. The purpose of this system is to geographically decentralize electricity supply and thereby reduce transmission losses and improve the efficiency of energy use. These entities do not supply electricity on a national level but are licensed to supply electricity to limited geographic areas. As of March 31, 2014, the aggregate generation capacity of suppliers participating in the Community Energy System represented less than 1% of that of our generation subsidiaries in the aggregate. Accordingly, we currently do not expect the Community Energy System to be widely adopted, especially in light of the significant level of capital expenditure required for such direct supply. However, if the Community Energy System is widely adopted, it may erode our currently dominant market position in the generation and distribution of electricity in Korea, and may have a material adverse effect on our business, results of operations and financial condition.

***Labor unrest may adversely affect our operations.***

We and each of our generation subsidiaries have separate labor unions. As of December 31, 2013, approximately 69.7% of our and our generation subsidiaries' employees in the aggregate were members of these labor unions. Since a six-week labor strike in 2002 by union members of our generation subsidiaries in response to a proposed privatization of one of our generation subsidiaries, there has been no material labor dispute. However, we cannot assure you that there will not be a major labor strike or other material disruptions of operations by the labor unions of us and our generation subsidiaries if the Government resumes privatization or other restructuring initiatives or for other reasons, which may adversely affect our business and results of operations.

***Planned relocation of the headquarters of us and our generation subsidiaries may reduce our operational efficiency.***

In June 2005, as part of an initiative to foster balanced economic growth in the provinces, the Government announced a plan to relocate the headquarters of select government-invested enterprises, including us and our six

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generation and certain other subsidiaries, from the Seoul metropolitan area to other provinces in Korea. Currently, our headquarters and those of our generation subsidiaries are within close vicinity of each other in the City of Seoul. Pursuant to the Government's relocation policy, our headquarters are scheduled to be relocated to Naju in Jeolla Province, which is approximately 300 kilometers south of Seoul. Although the relocation was initially scheduled to occur by the end of 2012, due to construction delays, we currently expect that the relocation will occur by the end of 2014. In addition, the headquarters of certain of our subsidiaries are scheduled to be relocated to various other cities in Korea. While we intend to comply with the relocation plan, there can be no assurance that, following such relocation, we will be able to maintain the current level of operational efficiency due to geographic dispersion of our business units.

***Operation of nuclear power generation facilities inherently involves numerous hazards and risks, any of which could result in a material loss of revenues or increased expenses.***

Through KHNP, we currently operate 23 nuclear-fuel generation units. Operation of nuclear power plants is subject to certain hazards, including environmental hazards such as leaks, ruptures and discharge of toxic and radioactive substances and materials. These hazards can cause personal injuries or loss of life, severe damage to or destruction of property and natural resources, pollution or other environmental damage, clean-up responsibilities, regulatory investigation and penalties and suspension of operations. Nuclear power has a stable and relatively inexpensive cost structure (which is least costly among the fuel types used by our generation subsidiaries) and is the second largest source of Korea's electricity supply, accounting for 27% of electricity generated in Korea in 2013. Due to significantly lower unit fuel costs compared to those for thermal power plants, our nuclear power plants are generally operated at full capacity with only routine shutdowns for fuel replacement and maintenance, with limited exceptions.

From time to time, our nuclear generation units may experience unexpected shutdowns. For example, on February 9, 2012, Kori-1 experienced a station blackout for approximately 12 minutes during a scheduled maintenance overhaul. This incident was reported to the Nuclear Safety and Security Commission on March 12, 2012, leading to a further safety evaluation, after which Kori-1 resumed operations in August 2012. The breakdown, failure or suspension of operation of a nuclear unit could result in a material loss of revenues, an increase in fuel costs related to the use of alternative power sources, additional repair and maintenance costs, greater risk of litigation and increased social and political hostility to the use of nuclear power, any of which could have a material adverse impact on our financial conditions and results of operation.

In response to the damage to the nuclear facilities (including nuclear meltdowns) in Japan as a result of the tsunami and earthquake in March 2011, the Government announced plans to further enhance the safety and security of nuclear power facilities, including by establishing the Nuclear Safety and Security Commission (NSSC) in July 2011 for neutral and independent safety appraisals, subjecting nuclear power plants to additional safety inspections by governmental authorities and civic groups and requiring KHNP to prepare a comprehensive safety improvement plan. As a result of the foregoing, as well as a generally higher level of public and regulatory scrutiny of nuclear power following the recent nuclear incident in Japan, KHNP plans to implement a significant number of measures to improve the safety and efficiency of its generation facilities for target completion by 2015. We expect to incur additional compliance costs and capital expenditures in relation to our improvement measures, which could have a material adverse impact on our financial conditions and results of operation.

***Recent findings of falsified testing results and bribery and the subsequent prolonged shutdowns of certain of our nuclear generation units may adversely hurt our reputation, business, results of operations and financial condition.***

In May 2013, the Nuclear Safety and Security Commission (NSSC) announced that it discovered certain control cables used in three of our then-operating nuclear generation units, Shin-Kori #1 and #2, Shin-Wolsung #1, and three units under construction, Shin-Kori #3 and #4 and Shin-Wolsung #2, had been supplied based on

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forged testing results. These parts were custom-made and have critical functions in the case of emergency for activating certain safety signals. The forgery was made by a testing facility in charge of performance evaluation of the parts before delivery.

Upon such discovery, KHNP immediately began internal investigation of related certification documents and reported to the Prosecutor's Office all testing facilities and suppliers suspected of forgery for further investigation. Currently, the NSSC, with the full cooperation of KHNP, is conducting a full scale investigation into the appropriateness of all testing results at all of our nuclear generation units. In addition, the Prosecutor's Office has been conducting extensive investigation on all parties suspected of having been involved in the forgery and has brought several criminal and civil charges, including against several of KHNP's former and current officers and employees. In addition, one of KHNP's former CEOs and several former and current officers and employees of KHNP were arrested on separate bribery charges brought by the Prosecutor's Office as part of a wider investigation into the nuclear power industry in general, and in June 2013, KHNP's then CEO was dismissed by the Government for failure of oversight. KHNP has been fully cooperating with the authorities on these investigations and have promptly taken all appropriate disciplinary actions against KHNP's employees allegedly involved in such incidents. KHNP has also immediately suspended all existing relationships with all of the entities alleged to have participated in any related illegal or improper activities. KHNP as an entity has not been subject to any criminal charges or sanctions. The investigations by the NSSC and the Prosecutor's Office are still ongoing.

Immediately following the discovery of the forgery incident, Shin-Kori #1 and #2 and Shin-Wolsung #1 were shut down in May 2013 for further safety inspections. Shin-Kori #3 and #4 and Shin-Wolsung #2, where such parts were also used, currently remain under construction. Shin-Kori #1 and #2 and Shin-Wolsung #1 resumed operations in January 2014 following parts replacement and the NSSC approval. While we expect that the construction of the other units will proceed as originally planned, we cannot assure you that any or all of these units will complete construction as currently scheduled. As a result of the shutdown, we incurred additional operating expenses, including as a result of having had to purchase electricity generated from more expensive fuel sources while the aforementioned nuclear plants were suspended from operation.

The foregoing incidents follow a discovery in November 2012 that certain machinery parts, such as fuses and switches, used in KHNP's nuclear-fuel generation units Hanbit #5 and Hanbit #6 had been supplied using forged quality certification documents. These parts were generic parts that were not essential to the function or safety of our nuclear generation, and the forgery was made by the suppliers of these parts. Following such discovery, relationships with these suppliers were immediately terminated and these units were shut down in November 2012 pending a Government investigation into the extent of the forgeries and the replacement of the affected parts, and the NSSC performed inspections on all generic supply parts at all of KHNP's nuclear-fuel generation units. Upon completion of such investigation and inspections, Hanbit #5 and Hanbit #6 resumed operation in December 2012 and January 2013, respectively.

These incidents have had a material adverse effect, and may have a further material adverse effect, on our reputation, business, results of operation, financial condition as well as the general acceptance of nuclear power, especially if, as a result of these incidents or otherwise, there are findings of other criminal or other illegal or improper activities or if there are additional shutdowns that lead to greater social and political concerns over nuclear safety to the effect of impeding with our normal operation of nuclear generation units. See Item 4B. Business Recent Developments Recent incidents involving certain of our nuclear units.

***The construction and operation of our generation, transmission and distribution facilities involve difficulties, such as opposition from civic groups, which may have an adverse effect on us.***

From time to time, we encounter social and political opposition against construction and operation of our generation facilities (particularly nuclear units) and, to a lesser extent, our transmission and distribution facilities.

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As a recent example, we are currently facing intense opposition from local residents and civic groups to the construction of transmission lines in the Milyang area despite having offered various compensatory and other support programs. Such opposition has delayed the schedule for completion of this project. Although we and the Government have undertaken various community programs to address concerns of residents in areas near our facilities, civic and community opposition could result in delayed construction or relocation of our planned facilities, which could have a material adverse impact on our business and results of operation.

***We are subject to environmental regulations, including in relation to climate change, and our operations could expose us to substantial liabilities.***

We are subject to national, local and overseas environmental laws and regulations, including increasing pressure to reduce emission of carbon dioxide relating to our electricity generation activities as well as our natural resource development endeavors overseas. Our operations could expose us to the risk of substantial liability relating to environmental or health and safety issues, such as those resulting from discharge of pollutants and carbon dioxide into the environment and the handling, storage and disposal of hazardous materials. We may be responsible for the investigation and remediation of environmental conditions at current or former operational sites. We may also be subject to related liabilities (including liabilities for environmental damage, third party property damage or personal injury) resulting from lawsuits brought by governments or private litigants. In the course of our operations, hazardous wastes may be generated, disposed of or treated at third party-owned or -operated sites. If those sites become contaminated, we could also be held responsible for the cost of investigation and remediation of such sites for any related liabilities, as well as for civil or criminal fines or penalties.

We currently operate extensive programs to comply with various environmental regulations, including the Renewable Portfolio Standard ( RPS ) program, under which each generation subsidiary is required to generate a specified percentage of total electricity to be generated by such generation subsidiary in a given year in the form of renewable energy, with the target percentage being 2.0% in 2012, 2.5% in 2013 and incrementally increasing to 10.0% by 2022. Fines are to be levied on any subsidiary that fails to do so in the prescribed timeline. In 2012, while one of our generation subsidiaries met 100% of its target, five others were unsuccessful to do so. Our six generation subsidiaries met, on average, 90.8% of the target for 2012 and accordingly were fined an aggregate amount of Won 23.7 billion. Compliance by our generation subsidiaries of the 2013 target is currently under evaluation, and if we are found to have failed to meet the target for 2013 or for subsequent years, our generation subsidiaries may become subject to additional fines or other penalties. There is no assurance that such fine or other penalty will not be substantial, and if substantial, such fine or other penalty may have a material adverse effect on our business, results of operations or financial condition. The budgeted amount of capital expenditure for implementation of the RPS as currently planned for the period from 2013 to 2022 is approximately Won 13.7 trillion. We expect that such additional capital expenditure to be covered by a corresponding increase in electricity tariff. However, there is no assurance that the Government will in fact raise the electricity tariff to a level sufficient to fully cover such additional capital expenditures or at all. See also Item 4B. Business Overview Renewable Energy.

Our environmental measures, including the use of environmentally friendly but more expensive parts and equipment and budgeting capital expenditures for the installation of such facilities, may result in increased operating costs and liquidity requirement. The actual cost of installation and operation of such equipment and related liquidity requirement will depend on a variety of factors which may be beyond our control. There is no assurance that we will continue to be in material compliance with legal or social standards or requirements in the future in relation to the environment, including in respect of climate change. See Item 4B. Business Overview Environmental Programs and Business Overview Renewable Energy.

***Newly adopted coal consumption tax may have a material adverse effect on our business, operations and profitability.***

On January 1, 2014, largely based on policy considerations of tax equity among different fuel types as well as environmental concerns, the Ministry of Strategy and Finance announced that, effective July 1, 2014,

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consumption tax will apply to bituminous coal, which previously was not subject to consumption tax unlike other fuel types such as LNG or bunker oil. The base tax rate (which is subject to certain adjustments) will be Won 24 per kilogram for bituminous coal; however, due to concerns on the potential adverse effect on industrial activities, the applicable tax rate will be Won 19 per kilogram for bituminous coal with net heat generation of 5,000 kilo calories or more per kilogram, and Won 17 per kilogram for bituminous coal with net heat generation of less than 5,000 kilo calories per kilogram. In contrast, the applicable tax rate for LNG will be reduced from Won 60 per kilogram to Won 42 per kilogram. Since bituminous coal currently represents the largest fuel type for electricity generation, accounting for approximately 43.0% of our entire fuel requirements in 2013 in terms of electricity output, we expect the newly adopted consumption tax thereon will result in an increase of our overall fuel costs, notwithstanding the decrease in the consumption tax rate for LNG, which accounted for approximately 19.7% of our entire fuel requirements in 2013 in terms of electricity output. While we expect that such additional fuel costs will be covered by a corresponding increase in electricity tariff, there is no assurance that the Government will in fact raise electricity tariff to a level sufficient to fully cover such additional costs in a timely manner or at all, and if the Government does not do so, the increase in our overall fuel costs arising from the newly adopted coal consumption tax will adversely affect our results of operation and financial condition.

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

We manage interest rate exposure for our debt instruments by limiting our variable rate debt exposure as a percentage of our total debt and closely monitoring the movements in market interest rates. We also actively manage currency exchange rate exposure for our foreign currency-denominated liabilities by measuring the potential loss therefrom using risk analysis software and entering into derivative contracts to hedge such exposure when the possible loss reaches a certain risk limit. To the extent we have unhedged positions or our hedging and other risk management procedures do not work as planned, our results of operations and financial condition may be adversely affected.

### ***The amount and scope of coverage of our insurance are limited.***

Substantial liability may result from the operations of our nuclear generation units, the use and handling of nuclear fuel and possible radioactive emissions associated with such nuclear fuel. KHNP carries insurance for its generation units and nuclear fuel transportation, and we believe that the level of insurance is generally adequate and is in compliance with relevant laws and regulations. In addition, KHNP is the beneficiary of Government indemnity which covers a portion of liability in excess of the insurance. However, such insurance is limited in terms of amount and scope of coverage and does not cover all types or amounts of losses which could arise in connection with the ownership and operation of nuclear plants. Accordingly, material adverse financial consequences could result from a serious accident or a natural disaster to the extent it is neither insured nor covered by the government indemnity.

In addition, our thermal generation subsidiaries carry insurance covering certain risks, including fire, in respect of their key assets, including buildings and equipment located at their respective power plants, construction-in-progress and imported fuel and procurement in transit. Such insurance and indemnity, however, cover only a portion of the assets that the thermal generation subsidiaries own and operate and do not cover all types or amounts of loss that could arise in connection with the ownership and operation of these power plants. In addition, unlike us, our generation subsidiaries are not permitted to self-insure, and accordingly have not self-insured, against risks of their uninsured assets or business. Accordingly, material adverse financial consequences could result from a serious accident to the extent it is uninsured.

In addition, because neither we nor our generation subsidiaries, other than KHNP, carry any insurance against terrorist attacks, an act of terrorism would result in significant financial losses. See Item 4B. Business Overview Insurance.



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### ***We may not be able to raise equity capital in the future without the participation of the Government.***

Under applicable laws, the Government is required to directly or indirectly own at least 51% of our issued capital stock. As of February 17, 2014 the last day on which our shareholder registry was closed, the Government, directly and through Korea Finance Corporation (a statutory banking institution wholly owned by the Government), owned 51.1% of our issued capital stock. Accordingly, without changes in the existing Korean law, it may be difficult or impossible for us to undertake, without the participation of the Government, any equity financing in the future.

### ***Following from the recent decision of the Supreme Court of Korea, we may be exposed to potential claims made by current or previous employees for unpaid wages for the past three years under the expanded scope of ordinary wages and become subject to additional labor costs arising from the broader interpretation of ordinary wages under such decision.***

Under the Labor Standards Act, an employee is legally entitled to ordinary wages. Under the guidelines previously issued by the Ministry of Labor, ordinary wages include base salary and certain fixed monthly allowances for work performed overtime during night shifts and holidays. Prior to the Supreme Court decision described below, many companies in Korea had typically interpreted these guidelines as excluding from the scope of ordinary wages fixed bonuses that are paid other than on a monthly basis, namely on a bi-monthly, quarterly or biannually basis, although such interpretation had been a subject of controversy and had been overruled in a few court cases.

In December 2013, the Supreme Court of Korea ruled that regular bonuses fall under the category of ordinary wages on the condition that those bonuses are paid regularly and uniformly, and that any agreement which excludes such regular bonuses from ordinary wage is invalid. The Supreme Court further ruled that in spite of invalidity of such agreements, employees shall not retroactively claim additional wages incurred due to such court decision, in case that such claims bring to employees unexpected benefits which substantially exceeds the wage level agreed by employers and employees and cause an unpredicted increase in expenditures for their company, which would lead the company to material managerial difficulty or would threaten to the existence of the company. In that case, the claim is not acceptable since it is unjust and is in breach of the principle of good faith. Prior to such Supreme Court ruling, we determined wages in accordance with budget instructions from the Ministry of Strategy and Finance, which excluded bonuses from ordinary wages and which was determined with the consent of the relevant labor unions.

Following the Supreme Court decision, the Korea Power Plant Industry Union and others filed lawsuits in an aggregate amount of Won 44.6 billion against our six generation subsidiaries, based on claims that ordinary wage was paid without including certain items that should have been included as ordinary wage. Our management currently believes that we are not presently obligated to make any payments in relation to this matter and we accordingly had not made any provision in relation thereto as of December 31, 2013 since it is unclear how the Supreme Court ruling should be applied and it is not possible to reasonably estimate the amount of potential loss since such amount will depend on the nature of the future agreement between management and relevant labor unions and/or the outcome of the foregoing or related lawsuits. However, should the outcome of these or other lawsuits be finally determined against us, the resulting compensation we will be required to pay and any related increase in labor costs will have an adverse effect on our results of operation and cash flows.

### **Risks Relating to Korea and the Global Economy**

#### ***Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on us.***

We are incorporated in Korea, where most of our assets are located and most of our income is generated. As a result, we are subject to political, economic, legal and regulatory risks specific to Korea, and our business, results of operation and financial condition are substantially dependent on the Korean consumers' demand for

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electricity, which are in turn largely dependent on developments relating to the Korean economy. The Korean economy is closely integrated with, and is significantly affected by, developments in the global economy and financial markets.

While in the aftermath of the global financial crisis that started in the second half of 2008 there have been mixed signs of recovery for the global and Korean economy, substantial uncertainties remain in the form of anticipated tightening of the U.S. monetary policy, continued fiscal and financial challenges for the European, U.S. and global economies, fluctuations in oil and commodity prices, signs of cooling of the Chinese economy and a rise of military and political tension in the Crimean peninsula and former members of the Soviet Union. Accordingly, the overall prospects for the Korean and global economy in 2014 and beyond remain uncertain. While our aggregate financial exposure to the European countries that have been significantly affected by the ongoing fiscal and financial crisis remains less than 1% of our consolidated total assets, any future deterioration of the global economy may have an adverse impact on the Korean economy, which in turn could adversely affect our business, financial condition and results of operations. As the Korean economy is highly dependent on the health and direction of the global economy, the prices of our securities may be adversely affected by investors' reactions to developments in other countries. In addition, due to the ongoing volatility in the global financial markets, the value of the Won relative to the U.S. dollar has also fluctuated significantly in recent years, which in turn also may adversely affect our financial condition and results of operation.

Factors that determine economic and business cycles of the Korean or global economy are for the most part beyond our control and inherently uncertain. In light of the high level of interdependence of the global economy, any of the foregoing developments could have a material adverse effect on the Korean economy and financial markets, and in turn on our business and profitability.

More specifically, factors that could hurt the Korean economy in the future include, among others:

monetary tightening by the U.S. government known as tapering, further deterioration of the fiscal and financial difficulties in Europe, the slowdowns of the Chinese economy, as well as rising military and political tension in the Crimean peninsula and former members of the Soviet Union, which could have adverse effects on the global, and in turn Korean credit and financial markets as well as the exchange rates of Won to other major foreign currencies, particularly U.S. dollar;

increases in inflation levels, volatility in foreign currency reserve levels, commodity prices (including coal, oil, LNG prices), exchange rates (including fluctuation of U.S. dollar and Japanese Yen exchange rates or revaluation of the Renminbi), interest rates, stock market prices and inflows and outflows of foreign capital, either directly, into the stock markets, through derivatives or otherwise;

potential friction with Korea's trading partners arising, in part, from Korea's heavy reliance on exports;

adverse developments in the economies of countries to which Korea exports goods and services (such as China, the United States and Japan), or in emerging market economies in Asia or elsewhere that could result in a loss of confidence in the Korean economy;

the continued emergence of China, 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 relocation of the manufacturing base from Korea to China);

social and labor unrest or declining consumer confidence or spending resulting from layoffs, increasing unemployment and lower levels of income;

uncertainty and volatility in real estate prices arising, in part, from the Government's policy-driven tax and other regulatory measures;

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rising fiscal deficit as a result of a decrease in tax revenues and a substantial increase in the Government's expenditures for welfare and other social programs;

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political uncertainty or increasing strife among or within political parties in Korea, including as a result of the continued polarization of the positions of the ruling conservative party and the progressive opposition;

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

any other development that has a material adverse effect in the global economy, such as an act of war, a terrorist act or a breakout of an epidemic such as SARS, avian flu or swine flu or natural disasters such as earthquakes and tsunamis and the related disruptions in the relevant economies with global repercussions;

hostilities involving oil-producing countries in the Middle East and elsewhere and any material disruption in the supply of oil or a material increase in the price of oil resulting from such hostilities; and

an increase in the level of tensions or an outbreak of hostilities in the Korean peninsula.

Any future deterioration of the Korean economy could have an adverse effect on our business, financial condition and results of operation.

*Tensions with North Korea could have an adverse effect on us and the market value of our shares.*

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.

There recently has been increased uncertainty about the future of North Korea's political leadership and its implications for the economic and political stability of the region. Shortly after the death of Kim Jong-il, a long-standing former ruler of North Korea, in December 2011 his son Kim Jong-un was named North Korea's Supreme Commander of the Armed Forces. Whether Kim Jong-un will successfully solidify his political power or whether he will implement policies that will successfully assist North Korea in withstanding the many challenges it faces, however, remains uncertain. If the consolidation of power by Kim Jong-un is not successful or there exist any material conflicts among different political factions, there may be significant uncertainty regarding the policies, actions and initiatives that North Korea might pursue in the future. For example, in December 2013, Jang Sung-Taek, husband to Kim Jong-un's aunt, who was widely speculated to be the second in command, was executed on charges of sedition, among others. Although the implications of such developments remain uncertain, it may cause further political and social instability in North Korea and/or adoption of more hostile policies that could enhance friction with Korea and the rest of the world.

In recent years, there have been heightened security concerns stemming from North Korea's nuclear weapons and long-range missile programs and increased uncertainty regarding North Korea's actions and possible responses from the international community. In January 2003, North Korea renounced its obligations under the Nuclear Non-Proliferation Treaty and conducted multiple rounds of nuclear tests between October 2006 and February 2013, which increased tensions in the region and elicited strong objections worldwide. In response, the United Nations Security Council unanimously passed resolutions that condemned North Korea for the nuclear tests and expanded sanctions against North Korea, most recently in March 2013.

North Korea has recently undertaken other hostile actions. For example, 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

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condemned North Korea for the attack and vowed stern retaliation should there be further provocation. In March 2013, North Korea declared the 1953 armistice invalid, stated that it had entered a state of war with Korea, 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.

On April 3, 2013, North Korea blocked South Koreans from entering the Kaesong Industrial Complex, an economic cooperation zone within North Korea and on April 26, 2013 South Korea decided to withdraw its workers from the complex. In September 2013, however, Korea and North Korea reached an agreement and resumed operation of the Kaesong Industrial Complex, and have since made efforts to improve the business environment of the complex, including by building radio frequency identification data transfer systems and launching internet service, among others. In February 2014, the U.S. Congressional Research Service reported that the Government's approach towards the expansion and internationalization of the Kaesong Industrial Complex could conflict with U.S. legislative efforts to expand its sanctions on North Korea, and there is no assurance that the Government will not reverse or reduce its such efforts at detente.

There can be no assurance that the level of tension on the Korean peninsula will not escalate in the future. Furthermore, North Korea's economy also faces severe challenges, including severe inflation and food shortages, which may further aggravate social and political tensions within North Korea. In addition, reunification of Korea and North Korea could occur in the future, which would entail significant economic expenditure and commitment by Korea. Any further increase in economic or political difficulties within North Korea or escalation of military tension between Korea and North Korea could have a material adverse effect on the Company's business, financial condition and results of operations as well as lead to a decline in the market value of our common shares and our American depository shares.

***We are generally subject to Korean corporate governance and disclosure standards, which differ in significant respects from those in other countries.***

Companies in Korea, including us, are subject to corporate governance standards applicable to Korean public companies which differ in many respects from standards applicable in other countries, including the United States. As a reporting company registered with the Securities and Exchange Commission and listed on the New York Stock Exchange, we are, and will continue to be, subject to certain corporate governance standards as mandated by the Sarbanes-Oxley Act of 2002, as amended. However, foreign private issuers, including us, are exempt from certain corporate governance standards required under the Sarbanes-Oxley Act or the rules of the New York Stock Exchange. For a description of significant differences in corporate governance standards, see Item 16G. Corporate Governance. There may also be less publicly available information about Korean companies, such as us, than is regularly made available by public or non-public companies in other countries. Such differences in corporate governance standards and less public information could result in less than satisfactory corporate governance practices or disclosure to investors in certain countries.

***You may not be able to enforce a judgment of a foreign court against us.***

We are a corporation with limited liability organized under the laws of Korea. Substantially all of our directors and officers and other persons named in this annual report reside in Korea, and all or a significant portion of the assets of our directors and officers and other persons named in this annual report and substantially all of our assets are located in Korea. As a result, it may not be possible for holders of the American depository shares to affect service of process within the United States, or to enforce against them or us in the United States judgments obtained in United States courts based on 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 United States courts, of civil liabilities predicated on the United States federal securities laws.

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**Risks Relating to Our American Depositary Shares**

*There are restrictions on withdrawal and deposit of common shares under the depositary facility.*

Under the deposit agreement, holders of shares of our common stock may deposit those shares with the depositary bank's custodian in Korea and obtain American depositary shares, and holders of American depositary shares may surrender American depositary shares to the depositary bank and receive shares of our common stock. However, under current Korean laws and regulations, the depositary bank is required to obtain our prior consent for the number of shares to be deposited in any given proposed deposit which exceeds the difference between (1) the aggregate number of shares deposited by us for the issuance of American depositary shares (including deposits in connection with the initial and all subsequent offerings of American depositary shares and stock dividends or other distributions related to these American depositary shares) and (2) the number of shares on deposit with the depositary bank at the time of such proposed deposit. We have consented to the deposit of outstanding shares of common stock as long as the number of American depositary shares outstanding at any time does not exceed 80,153,810 shares. As a result, if you surrender American depositary shares and withdraw shares of common stock, you may not be able to deposit the shares again to obtain American depositary shares.

*Ownership of our shares is restricted under Korean law.*

Under the Financial Investment Services and Capital Markets Act, with certain exceptions, a foreign investor may acquire shares of a Korean company without being subject to any single or aggregate foreign investment ceiling. As one such exception, certain designated public corporations, such as us, are subject to a 40% ceiling on acquisitions of shares by foreigners in the aggregate. The Financial Services Commission may impose other restrictions as it deems necessary for the protection of investors and the stabilization of the Korean securities and derivatives market.

In addition to the aggregate foreign investment ceiling, the Financial Investment Services and Capital Markets Act and our Articles of Incorporation set a 3% ceiling on acquisition by a single investor (whether domestic or foreign) of the shares of our common stock. Any person (with certain exceptions) who holds our issued and outstanding shares in excess of such 3% ceiling cannot exercise voting rights with respect to our shares exceeding such limit.

The ceiling on aggregate investment by foreigners applicable to us may be exceeded in certain limited circumstances, including as a result of acquisition of:

shares by a depositary issuing depositary receipts representing such shares (whether newly issued shares or outstanding shares);

shares by exercise of warrant, conversion right under convertible bonds, exchange right under exchangeable bonds or withdrawal right under depositary receipts issued outside of Korea;

shares from the exercise of shareholders' rights; or

shares by gift, inheritance or bequest.

A foreigner who has acquired our shares in excess of any ceiling described above may not exercise his voting rights with respect to our shares exceeding such limit and the Financial Services Commission may take necessary corrective action against him.

*Holders of our ADSs will not have preemptive rights in certain circumstances.*

The Korean Commercial Code and our Articles of Incorporation require us, with some exceptions, to offer shareholders the right to subscribe for new shares in proportion to their existing ownership percentage whenever new shares are issued. If we offer any rights to subscribe for additional shares of our common stock or any rights of any other nature, the depositary bank, after consultation with us, may make the rights available to you or use



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reasonable efforts to dispose of the rights on your behalf and make the net proceeds available to you. The depositary bank, however, is not required to make available to you any rights to purchase any additional shares unless it deems that doing so is lawful and feasible and:

a registration statement filed by us under the U.S. Securities Act of 1933, as amended, is in effect with respect to those shares; or

the offering and sale of those shares is exempt from or is not subject to the registration requirements of the U.S. Securities Act. We are under no obligation to file any registration statement with the U.S. Securities and Exchange Commission in relation to the registration rights. If a registration statement is required for you to exercise preemptive rights but is not filed by us, you will not be able to exercise your preemptive rights for additional shares and you will suffer dilution of your equity interest in us.

***The market value of your investment in our ADSs may fluctuate due to the volatility of the Korean securities market.***

Our common stock is listed on the KRX KOSPI Division of the Korea Exchange, which has a smaller market capitalization and is more volatile than the securities markets in the United States and many European countries. The market value of ADSs may fluctuate in response to the fluctuation of the trading price of shares of our common stock on the Stock Market Division of the Korea Exchange. The Stock Market Division of the Korea Exchange has experienced substantial fluctuations in the prices and volumes of sales of listed securities and the Stock Market Division of the Korea Exchange has prescribed a fixed range in which share prices are permitted to move on a daily basis. Like other securities markets, including those in developed markets, the Korean securities market has experienced problems including market manipulation, insider trading and settlement failures. The recurrence of these or similar problems could have a material adverse effect on the market price and liquidity of the securities of Korean companies, including our common stock and ADSs, in both the domestic and the international markets.

The Korean government has the ability to exert substantial influence over many aspects of the private sector business community, and in the past has exerted that influence from time to time. For example, the Korean government has promoted mergers to reduce what it considers excess capacity in a particular industry and has also encouraged private companies to publicly offer their securities. Similar actions in the future could have the effect of depressing or boosting the Korean securities market, whether or not intended to do so. Accordingly, actual or perceived actions or inactions by the government may cause sudden movements in the market prices of the securities of Korean companies in the future, which may affect the market price and liquidity of our common stock and ADSs.

***Your dividend payments and the amount you may realize in connection with a sale of your ADSs will be affected by fluctuations in the exchange rate between the U.S. dollar and the Won.***

Investors who purchase the American depositary shares will be required to pay for them in U.S. dollars. Our outstanding shares are listed on the Korea Exchange and are quoted and traded in Won. Cash dividends, if any, in respect of the shares represented by the American depositary shares will be paid to the depositary bank in Won and then converted by the depositary bank into U.S. dollars, subject to certain conditions. Accordingly, fluctuations in the exchange rate between the Won and the U.S. dollar will affect, among other things, the amounts a registered holder or beneficial owner of the American depositary shares will receive from the depositary bank in respect of dividends, the U.S. dollar value of the proceeds which a holder or owner would receive upon sale in Korea of the shares obtained upon surrender of American depositary shares and the secondary market price of the American depositary shares.



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*If the Government deems that certain emergency circumstances are likely to occur, it may restrict the depositary bank from converting and remitting dividends in U.S. dollars.*

If the Government deems that certain emergency circumstances are likely to occur, it may impose restrictions such as requiring foreign investors to obtain prior Government approval for the acquisition of Korean securities or for the repatriation of interest or dividends arising from Korean securities or sales proceeds from disposition of such securities. These emergency circumstances include any or all of the following:

sudden fluctuations in interest rates or exchange rates;

extreme difficulty in stabilizing the balance of payments; and

a substantial disturbance in the Korean financial and capital markets.

The depositary bank may not be able to secure such prior approval from the Government for the payment of dividends to foreign investors when the Government deems that there are emergency circumstances in the Korean financial markets.

**ITEM 4. INFORMATION ON THE COMPANY**

**Item 4A. History and Development of the Company**

**General Information**

Our legal and corporate name is Korea Electric Power Corporation. We were established by the Government on December 31, 1981 as a statutory juridical corporation in Korea under the Korea Electric Power Corporation ( KEPCO ) Act as the successor to Korea Electric Company. Our registered office is located at 512 Yeongdongdaero, Gangnam-gu, Seoul, Korea, and our telephone number is 82-2-3456-4217. Our website address is [www.kepco.co.kr](http://www.kepco.co.kr). Our agent in the United States is Korea Electric Power Corporation, New York Office, located at 7th Floor, Parker Plaza, 400 Kelby Street, Fort Lee, NJ 07024.

The Korean electric utility industry traces its origin to the establishment of the first electric utility company in Korea in 1898. On July 1, 1961, the industry was reorganized by the merger of Korea Electric Power Company, Seoul Electric Company and South Korea Electric Company, which resulted in the formation of Korea Electric Company. From 1976 to 1981, the Government acquired the private minority shareholdings in Korea Electric Company. After the Government acquired all the remaining shares of Korea Electric Company, Korea Electric Company was dissolved, and we were incorporated in 1981 and assumed the assets and liabilities of Korea Electric Company. We ceased to be wholly owned by the Government in 1989 when the Government sold 21% of our common stock. As of February 17, 2014, the last day on which our shareholder registry was closed, the Government maintained 51.1% ownership in aggregate of our common shares by direct holdings by the Government and indirect holdings through Korea Finance Corporation, a statutory banking institution wholly owned by the Government.

Under relevant laws of Korea, the Government is required to own, directly or indirectly, at least 51% of our capital. Direct or indirect ownership of more than 50% of our outstanding common stock enables the Government to control the approval of certain corporate matters relating to us that require a shareholders' resolution, including approval of dividends. The rights of the Government and Korea Finance Corporation as holders of our common stock are exercised by the Ministry of Trade, Industry and Energy, based on the Government's ownership of our common stock and a proxy received from Korea Finance Corporation, in consultation with the Ministry of Strategy and Finance.

We operate under the general supervision of the Ministry of Trade, Industry and Energy. The Ministry of Trade, Industry and Energy, in consultation with the Ministry of Strategy and Finance, is responsible for approving, subject to review by the Korea Electricity Commission, the electricity rates we charge our customers. See Item 4B. Business Overview Sales and Customers Electricity Rates. We furnish reports to officials of

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the Ministry of Trade, Industry and Energy, the Ministry of Strategy and Finance and other Government agencies and regularly consult with such officials on matters relating to our business and affairs. See Item 4B. **Business Overview** Regulation. Our non-standing directors, who comprise the majority of our board of directors, must be appointed by the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by our director nomination committee and must have ample knowledge and experience in business management, and our President must be appointed by the President of the Republic upon the motion of the minister of the Ministry of Trade, Industry and Energy following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee and an approval at the general meeting of shareholders. See Item 6A. **Directors and Senior Management** **Board of Directors**.

### **Item 4B. Business Overview**

#### **Introduction**

We are an integrated electric utility company engaged in the transmission and distribution of substantially all of the electricity in Korea. Through our six wholly-owned generation subsidiaries, we also generate the substantial majority of electricity produced in Korea. As of December 31, 2013, we and our generation subsidiaries owned approximately 81.5% of the total electricity generation capacity in Korea (excluding plants generating electricity primarily for private or emergency use). In 2013, we sold to our customers approximately 474,849 gigawatt-hours of electricity. We purchase electricity principally from our generation subsidiaries and to a lesser extent from independent power producers. Of the 479,287 gigawatt-hours of electricity we purchased in 2013, 28.8% was generated by KHNP, our wholly-owned nuclear and hydroelectric power generation subsidiary, 60.6% was generated by our wholly-owned five thermal generation subsidiaries and 10.6% was generated by independent power producers. Our five thermal generation subsidiaries are KOSEP, KOMIPO, KOWEPO, KOSPO and EWP, each of which is wholly owned by us and is incorporated in Korea. We derive substantially all of our revenues and profit from Korea, and substantially all of our assets are located in Korea.

In 2013, we had sales of Won 53,713 billion and net profit of Won 174 billion, compared to sales of Won 49,121 billion and net loss of Won 3,078 billion in 2012.

Our revenues are closely tied to demand for electricity in Korea. Demand for electricity in Korea increased at a compounded average growth rate of 4.3% per annum from 2009 to 2013, compared to the real gross domestic product, or GDP, which increased at a compounded average growth rate of 3.2% during the same period, according to the Bank of Korea. The GDP growth rate was 3.0% during 2013 while demand for electricity in Korea increased by 1.8% during 2013.

#### **Strategy**

In October 2013, we announced our corporate strategy titled **Global Top Green & Smart Energy Pioneer**. Under this strategy, we seek to become a leading global energy enterprise through enhanced global competitiveness and strengthening our contribution to the global environmental campaigns through continued development of green and smart power-related technologies. We also aim to adapt to the growing uncertainties in global economy by selectively pursuing new business opportunities and through development of innovative technologies. In addition, we are in the process of integrating a **creating shared value** platform to our business model and operating strategy so as to enhance our social contributions as well as financial profitability in the form of creating new business opportunities while promoting energy welfare for our consumers.

*Strengthen reliability of our domestic operations.* Our primary strategies in this connection are to enhance efficiency of our electricity generation, transmission and distribution networks and acceptability of the construction and operation of our related facilities. Toward this end, we will strategically focus on ensuring stable supply of electricity, making our electricity networks smarter

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and more intelligent, creating customer-oriented marketing solutions, hiring outside agencies to assist with site selection for our facilities and improving the compensation system in relation to our facilities. We also aim to strengthen our marketing capabilities in anticipation of increasing competition, as well as bolster programs designed to encourage efficient energy use. We believe these measures will be instrumental to reinforcing our dominance in the Korean electricity market.

*Expand overseas business.* Our primary strategies in this connection are to develop tailored expansion plans specific to the target region, increase the level of our control over the proposed projects and procure secure supply of fuels. In this connection, we plan to expand our thermal and nuclear power projects as well as selectively explore renewable energy, smart transmission and distribution facilities and fuel procurement projects in the overseas markets.

*Create a platform for new business growth opportunities.* Our primary objectives in this connection are to gain first mover advantages in new businesses through technological development and to create opportunities for synergy through formation of an integrated energy network connecting Northeast Asia. Towards these goals, we plan to focus on development of high value-added electricity-related technology, commercialization of our strategic projects and establishment of super grids in Northeast Asia.

*Fulfill social responsibilities as an electricity provider.* In this connection, we will continue to seek a balance between our public policy mandate and profitability and develop sustainable products, including through leadership in low-carbon clean energy business, development of a sustainable energy business model and actualization of results-oriented social responsibility as a global corporate citizen.

**Recent Developments*****Increase in Electricity Tariff Rates***

Effective November 21, 2013, the Government increased the electricity rates that we charge to the end-users by an average of 5.4% as further set forth in the following table:

Type of Usage	Commercial				Industrial				Street Lighting	Overnight Usage
	Residential	Less than 300 kW or more		Average	Less than 300 kW or more	Less than 300 kW or more		Average		
		Low-voltage	High-voltage			Low-voltage	High-voltage			
% increase	2.7	5.2	6.4	5.8	6.4	6.4	6.4	3.0	5.4	5.4

Effective January 14, 2013, the Government further increased the electricity rates that we charge to the end-users by an average of 4.0% as further set forth in the following table:

Type of Usage	Commercial				Industrial				Street Lighting	Overnight Usage	
	Residential	Less than 300 kW or more		Average	Less than 300 kW or more	Less than 300 kW or more		Average			
		Low-voltage	High-voltage			Low-voltage	High-voltage				
% increase	2.0	2.7	6.3	4.6	3.5	4.4	4.4	3.5	3.0	5.0	5.0

We cannot assure you that such tariff increases will be sufficient to fully offset the adverse impact on our results of operations from the current or future movements in fuel costs.

***Proposed Second Basic National Energy Plan***

On January 13, 2014, the Ministry of Trade, Industry and Energy adopted the Second Basic National Energy Plan following consultations with representatives from civic groups, the power industry and academia. The Second Basic National Energy Plan, which is a comprehensive plan that covers the entire spectrum of energy industries in Korea, will cover the period from 2013 to 2035 (compared to 2008 to 2030 under the First Basic National Energy Plan) and focuses on the following six key tasks: (i) shifting the focus of energy policy to demand management with a

goal of reducing electricity demand by 15% by 2035, (ii) establishing a geographically decentralized electricity generation system so as to reduce transmission losses with a goal of

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supplying at least 15% of total electricity through such system by 2035, (iii) applying latest greenhouse gas emission reduction technologies to newly constructed generation units in order to further promote safety and environmental friendliness, (iv) strengthening exploration and procurement capabilities to enhance Korea's energy security and to ensure stable supply of energy and increasing the portion of electricity supplied from renewable sources to 11% by 2035, (v) reinforcing the system for stable supply of conventional energy, such as oil and gas, and (vi) introducing in 2015 an energy voucher system in lieu of a tariff discount system for the benefit of consumers in the low income group. In addition, the Second Basic National Energy Plan contemplates revising the target level of electricity generated by nuclear sources as a percentage of total electricity generated to 29%, compared to 41% under the First Basic National Energy Plan announced in 2008.

***Additional Entry of Private Enterprises in the Coal-Fired Power Generation Business***

In connection with the Sixth Basic Plan announced in February 2013, the Ministry of Trade, Industry and Energy accepted additional applications from independent power producers for construction of coal-fired power plants. The Fifth Basic Plan announced in December 2010 included for the first time a plan for independent power producers to own and operate coal-fired power plants, namely two such generation units with aggregate capacity of 2,000 megawatts for completion in 2016. Prior to December 2010, private enterprises had not been permitted to own and operate coal-fired power plants in Korea. For the Sixth Basic Plan, 15 independent power producers applied for construction of a total of 40 additional coal-fired generation units with aggregate generation capacity of 37,100 megawatts, of which the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts. The Government also approved applications from independent power producers for construction of two additional generation units with aggregate generation capacity of 2,000 megawatts to prepare for the contingency of failed or delayed construction of the foregoing generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021.

***Coal Consumption Tax***

On January 1, 2014, largely based on policy considerations of tax equity among different fuel types as well as environmental concerns, the Ministry of Strategy and Finance announced that, effective July 1, 2014, consumption tax will apply to bituminous coal, which previously was not subject to consumption tax unlike other fuel types such as LNG or bunker oil. The base tax rate (which is subject to certain adjustments) will be Won 24 per kilogram for bituminous coal; however, due to concerns on the potential adverse effect on industrial activities, the applicable tax rate will be Won 19 per kilogram for bituminous coal with net heat generation of 5,000 kilo calories or more per kilogram, and Won 17 per kilogram for bituminous coal with net heat generation of less than 5,000 kilo calories per kilogram. In contrast, the applicable tax rate for LNG will be reduced from Won 60 per kilogram to Won 42 per kilogram. Since bituminous coal currently represents the largest fuel type for electricity generation, accounting for approximately 43.0% of our entire fuel requirements in 2013 in terms of electricity output, we expect the newly adopted consumption tax thereon will result in an increase of our overall fuel costs, notwithstanding the decrease in the consumption tax rate for LNG, which accounted for approximately 19.7% of our entire fuel requirements in 2013 in terms of electricity output. While we expect that such additional fuel costs will be covered by a corresponding increase in electricity tariff, there is no assurance that the Government will in fact raise electricity tariff to a level sufficient to fully cover such additional costs in a timely manner or at all, and if the Government does not do so, the increase in our overall fuel costs arising from the newly adopted coal consumption tax will adversely affect our results of operation and financial condition.

***Recent Incidents Involving Certain of Our Nuclear Generation Units***

In May 2013, the NSSC announced that it discovered certain control cables used in three of our then-operating nuclear generation units, Shin-Kori #1 and #2, Shin-Wolsung #1, and three units under construction, Shin-Kori #3 and #4 and Shin-Wolsung #2, had been supplied based on forged testing results. These parts were custom-made and have critical functions in the case of emergency for activating certain safety signals. The forgery was made by a testing facility in charge of performance evaluation of the parts before delivery.

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Upon such discovery, KHNP immediately began internal investigation of related certification documents and reported to the Prosecutor's Office all testing facilities and suppliers suspected of forgery for further investigation. Currently, the NSSC, with the full cooperation of KHNP, is conducting a full scale investigation into the appropriateness of all testing results at all of our nuclear generation units. In addition, the Prosecutor's Office has been conducting extensive investigation on all parties suspected of having been involved in the forgery and has brought several criminal and civil charges, including against several of KHNP's former and current officers and employees. In addition, one of KHNP's former CEOs and several former and current officers and employees of KHNP were arrested on separate bribery charges brought by the Prosecutor's Office as part of a wider investigation into the nuclear power industry in general, and in June 2013, KHNP's then CEO was dismissed by the Government for failure of oversight. KHNP has been fully cooperating with the authorities on these investigations and have promptly taken all appropriate disciplinary actions against KHNP's employees allegedly involved in such incidents. KHNP has also immediately suspended all existing relationships with all of the entities alleged to have participated in any related illegal or improper activities. KHNP as an entity has not been subject to any criminal charges or sanctions. The investigations by the NSSC and the Prosecutor's Office are still ongoing.

Immediately following the discovery of the forgery incident, Shin-Kori #1 and #2 and Shin-Wolsung #1 were shut down in May 2013 for further safety inspections. Shin-Kori #3 and #4 and Shin-Wolsung #2, where such parts were also used, currently remain under construction. Shin-Kori #1 and #2 and Shin-Wolsung #1 resumed operations in January 2014 following parts replacement and the NSSC approval. While we expect that the construction of the other units will proceed as originally planned, we cannot assure you that any or all of these units will complete construction as currently scheduled. As a result of the shutdown, we incurred additional operating expenses, including as a result of having had to purchase electricity generated from more expensive fuel sources while the aforementioned nuclear plants were suspended from operation.

In response to the recent scandals, the Ministry of Trade, Industry and Energy has announced a number of measures to enhance the integrity, transparency and overall quality of the procurement, testing and verification processes with respect to parts used at our nuclear generation units, including: (i) encouraging open hiring (including outside experts) to reduce the chances of collusion, (ii) establishing a Government-supervised independent testing verification agency for nuclear generation parts, (iii) requiring KHNP to obtain testing results directly from testing facilities instead of indirectly from suppliers as has been the existing practice, (iv) increasing criminal and civil penalties for wrongdoings related to quality certifications, and (v) enhancing transparency in KHNP's procurement process. We are actively and promptly implementing these measures. In addition, KHNP has filed a lawsuit seeking compensation for damages against the supplier and testing facility that were responsible for the forgery.

These incidents have had a material adverse effect, and may have a further material adverse effect, on our reputation, business, results of operation, financial condition as well as the general acceptance of nuclear power, especially if, as a result of these incidents or otherwise, there are findings of other criminal or other illegal or improper activities or if there are additional shutdowns that lead to greater social and political concerns over nuclear safety to the effect of impeding with our normal operation of nuclear generation units. See Item 3D. Risk Factors Recent findings of falsified testing results and bribery and the subsequent prolonged shutdowns of certain of our nuclear generation units may adversely hurt our reputation, business, results of operations and financial condition.

***Coal-Fired Power Plant Project in Vietnam***

On March 19, 2013, a consortium consisting of us and Marubeni, a Japanese corporation, was selected by the Ministry of Industry and Trade of Vietnam for the construction and operation of a 1,200 megawatt coal-fired power plant in Thanh Hoa province, Vietnam. Construction will begin in December 2014 with target completion

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by December 2018, after which we will operate the plant for 25 years. We have entered into a power purchase agreement with Electricity of Vietnam (EVN). Total project cost is expected to be US\$2.3 billion, of which 25% will be funded by capital contribution and the remaining 75% by debt financing. The share capital of the special purpose entity that will be in charge of this project will be US\$ 575 million, and KEPCO and Marubeni will each hold a 50% equity interest in such entity.

### ***Electricity Storage System and Smart Grid Initiatives***

We have recently been actively participating in the Government's initiative for wider distribution and use of electricity storage systems ( ESS ). An ESS is a facility that stores electricity generated during times of low demand and transmits such electricity during times of high demand. Since our generation units currently set aside part of their capacity for frequency adjustment, replacing such parts with ESSs is expected to result in significant fuel cost savings and efficiency enhancement for the generation process. We plan to establish and operate ESSs with total capacity of 50 megawatts in 2014 and gradually increase the capacity to 500 megawatts by 2017, which we believe will result in fuel cost savings of approximately Won 300 billion per year.

We are also involved in a number of smart-grid related initiatives. For example, we are participating in the Government's Smart Grid Expansion Business along with 47 other corporations and agencies. This initiative involves setting out a realistic business model for commercialization of smart grid technologies for general use and distribution. The consortium is currently working on the details of such model. In addition, after completing the experimentation stage at one of our office buildings, we plan to roll out smart grid stations, which include facilities that integrate renewable energy production, electricity storage, advanced metering and/or building automation, to our office buildings in 210 locations nationwide. We are also in the process of developing micro-grids, for which the experimentation stage was completed, as replacement for long-distance transmission grids. Furthermore, we are also upgrading our current facility management programs and office software to comprehensively integrate smart grid and advanced metering operating systems.

### **Government Ownership and Our Interactions with the Government**

The KEPCO Act requires that the Government own at least 51% of our capital stock. Direct or indirect ownership of more than 50% of our outstanding common stock enables the Government to control the approval of certain corporate matters which require a shareholders' resolution, including approval of dividends. The rights of the Government and Korea Finance Corporation as holders of our common stock are exercised by the Ministry of Trade, Industry and Energy in consultation with the Ministry of Strategy and Finance. We are currently not aware of any plans of the Government to cease to own, directly or indirectly, at least 51% of our outstanding common stock.

We play an important role in the implementation of the Government's national energy policy, which is established in consultation with us, among other parties. As an entity formed to serve public policy goals of the Government, we seek to maintain a fair level of profitability and strengthen our capital base in order to support the growth of our business in the long term.

The Government, through its various policy initiatives for the Korean energy industry as well as direct and indirect supervision of us and our industry, plays an important role in our business and operations. Most importantly, the electricity tariff rates we charge to our customers are regulated by the Government taking into account, among others, our needs to recover the costs of operations, make capital investments and recoup a fair return on capital invested by us, as well as the Government's overall policy considerations, such as inflation. See Item 4B. Business Overview Sales and Customers Electricity Rates.

In addition, pursuant to the Basic Plan determined by the Government, we and our generation subsidiaries have made, and plan to make, substantial expenditures for the construction of generation plants and other facilities to meet demand for electric power. See Item 5B. Liquidity and Capital Resources Capital Requirements.

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### **Restructuring of the Electric Power Industry in Korea**

On January 21, 1999, the Ministry of Trade, Industry and Energy published the Restructuring Plan. The overall objectives of the Restructuring Plan consisted of: (i) introducing competition and thereby increasing efficiency in the Korean electric power industry, (ii) ensuring a long-term, inexpensive and stable electricity supply, and (iii) promoting consumer convenience through the expansion of consumer choice.

The following provides further details relating to the Restructuring Plan.

#### ***Phase I***

During Phase I, which served as a preparatory stage for Phase II and lasted from the announcement of the Restructuring Plan in January 1999 until April 2001, we undertook steps to split our generation business units off into one wholly-owned nuclear generation subsidiary (namely, KHNP) and five wholly-owned thermal generation subsidiaries (namely, KOSEP, KOMIPO, KOWEPO, KOSPO and EWP), each with its own management structure, assets and liabilities. These steps were completed upon the approval of the split-off at our shareholders' meeting in April 2001.

The Government's principal objectives in the split-off of the generation units into separate subsidiaries were to: (i) introduce competition and thereby increase efficiency in the electricity generation industry in Korea, and (ii) ensure a stable supply of electricity in Korea.

Following the implementation of Phase I, we have substantial monopoly with respect to the transmission and distribution of electricity in Korea.

While our ownership percentage of the thermal generation subsidiaries will depend on the further adjustments to the Restructuring Plan to be adopted by the Government, we plan to retain 100% ownership of both KHNP and our transmission and distribution business.

#### ***Phase II***

At the outset of Phase II in April 2001, the Government introduced a cost-based competitive bidding pool system under which we purchase power from our generation subsidiaries and other independent power producers for transmission and distribution to customers. For a further description of this system, see "Purchase of Electricity - Cost-based Pool System" below.

In order to support the logistics of the cost-based pool system, the Government established the Korea Power Exchange in April 2001 pursuant to the Electricity Business Law. The primary function of the Korea Power Exchange is to deal with the sale of electricity and implement regulations governing the electricity market to allow for electricity distribution through a competitive bidding process. The Government also established the Korea Electricity Commission in April 2001 to regulate the Korean electric power industry and ensure fair competition among industry participants. To facilitate this goal, the Korea Power Exchange established the Electricity Market Rules relating to the operation of the bidding pool system. To amend the Electricity Market Rules, the Korea Power Exchange must have the proposed amendment reviewed by the Korea Electricity Commission and then obtain the approval of the Ministry of Trade, Industry and Energy.

The Korea Electricity Commission's main functions include implementation of standards and measures necessary for electricity market operation and review of matters relating to licensing participants in the Korean electric power industry. The Korea Electricity Commission also acts as an arbitrator in tariff-related disputes among participants in the Korean electric power industry and investigates illegal or deceptive activities of the industry participants.



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### ***Privatization of Thermal Generation Subsidiaries***

In April 2002, the Ministry of Trade, Industry and Energy released the basic privatization plan for five of our generation subsidiaries other than KHNP. Pursuant to this plan, we commenced the process of selling our equity interest in KOSEP in 2002. According to the original plan, this process was, in principle, to take the form of a sale of management control, potentially supplemented by an initial public offering as a way of broadening the investor base. In November 2003, KOSEP submitted its application to the Korea Exchange for a preliminary screening review, which was approved in December 2003. However, in June 2004, KOSEP made a request to the Korea Exchange to delay its stock listing due to unfavorable stock market conditions at that time. We may resume the stock listing process for KOSEP in due course, after taking into consideration the overall stock market conditions and other pertinent matters. The aggregate foreign ownership of our generation subsidiaries is limited to 30% of total power generation capacity in Korea. In consultation with us, the Government will determine the size of the ownership interest to be sold and the timing of such sale, with a view to encouraging competition and assuring adequate electricity supply and debt service capability.

We believe the Government currently has no specific plans to resume the public offering of KOSEP or commence the same for any of our other generation subsidiaries in the near future. However, we cannot assure that our generation subsidiaries will not become part of Government-led privatization initiatives in the future for reasons relating to a change in Government policy, economic and market conditions and/or other factors.

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

In 2003, the Government established a Tripartite Commission consisting of representatives of the Government, leading businesses and labor unions in Korea to deliberate on ways to introduce competition in electricity distribution, such as by forming and privatizing new distribution subsidiaries. In 2004, the Tripartite Commission recommended not pursuing such privatization initiatives but instead creating independent business divisions within us to improve operational efficiency through internal competition. Following the adoption of such recommendation by the Government in 2004 and further studies by Korea Development Institute, in 2006 we created nine strategic business units (which, together with our other business units, were subsequently restructured into 14 such units in February 2012) that have a greater degree of autonomy with respect to management, financial accounting and performance evaluation while having a common focus on increasing profitability.

### ***Initiatives to Improve the Structure of Electricity Generation***

In August 2010, based on deliberations with various interested parties, the Ministry of Trade, Industry and Energy announced the Proposal for the Improvement in the Structure of the Electric Power Industry, whose key initiatives include the following: (i) maintain the current structure of having six generation subsidiaries, (ii) designate the six generation subsidiaries as market-oriented public enterprises under the Public Agency Management Act in order to foster competition among them and autonomous and responsible management by them, (iii) create a supervisory unit to act as a control tower in reducing inefficiencies created by arbitrary division of labor among the six generation subsidiaries and fostering economies of scale among them and require the presidents of the generation subsidiaries to hold regular meetings, (iv) create a nuclear power export business unit to systematically enhance our capabilities to win projects involving the construction and operation of nuclear power plants overseas, (v) further rationalize the electricity tariff by adopting a fuel-cost based tariff system in 2011 and a voltage-based tariff system in a subsequent year, and (vi) create separate accounting systems for electricity generation, transmission, distribution and sales with the aim of introducing competition in electricity sales in the intermediate future.

Pursuant to this Proposal, in December 2010 the Ministry of Trade, Industry and Energy announced guidelines for a cooperative framework between us and our generation subsidiaries, and in January 2011 the five thermal generation subsidiaries formed a joint cooperation unit and transferred their pumped-storage hydroelectric

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business units to KHNP. Furthermore, in January 2011 the six generation subsidiaries were officially designated as market-oriented public enterprises, whereupon the President of Korea appoints the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary is subject to approval by the minister of the Ministry of Strategy and Finance; the president of each such subsidiary is required to enter into a management contract directly with the minister of the Ministry of Trade, Industry and Energy; and the Public Enterprise Management Evaluation Commission conducts performance evaluation of such subsidiaries. Previously, our president appointed the president and the statutory auditor of each such subsidiary; the selection of outside directors of each such subsidiary was subject to approval by our president; the president of each such subsidiary entered into a management contract with our president; and our evaluation committee conducted performance evaluation of such subsidiaries.

## **Purchase of Electricity**

### *Cost-based Pool System*

Since April 2001, the purchase and sale of electricity in Korea is required to be made through the Korea Power Exchange, which is a statutory not-for-profit organization established under the Electricity Business Act with responsibilities for setting the price of electricity, handling the trading and collecting relevant data for the electricity market in Korea. The suppliers of electricity in Korea consist of our six generation subsidiaries, which were spun off from us in April 2001, and independent power producers, which numbered 10 (excluding renewable energy producers) as of December 31, 2013. We distribute electricity purchased through the Korea Power Exchange to the end users.

### *Our Relationship with the Korea Power Exchange*

The key features of our relationships with the Korea Power Exchange include the following: (i) we and our six generation subsidiaries are member corporations of the Korea Power Exchange and collectively own 100% of its share capital, (ii) three of the 10 members of the board of directors of the Korea Power Exchange are currently our or our subsidiaries' employees, and (iii) one of our employees is currently a member in three of the key committees of the Korea Power Exchange that are responsible for evaluating the costs of producing electricity, making rules for the Korea Power Exchange and gathering and disclosing information relating to the Korean electricity market.

Notwithstanding the foregoing relationships, however, we do not have control over the Korea Power Exchange or its policies since, among others, (i) the Korea Power Exchange, its personnel, policies, operations and finances are closely supervised and controlled by the Government, namely through the Ministry of Trade, Industry and Energy, and are subject to a host of laws and regulations, including, among others, the Electricity Business Act and the Public Agencies Management Act, as well as the Articles of Incorporation of the Korea Power Exchange, (ii) we are entitled to elect no more than one-third of the Korea Power Exchange directors and our representatives represent only a minority of its board of directors and committees (with the other members being comprised of representatives of the Ministry of Trade, Industry and Energy, employees of the Korea Power Exchange, businesspersons and/or scholars), and (iii) the role of our representatives in the policy making process for the Korea Power Exchange is primarily advisory based on their technical expertise derived from their employment at us or our generation subsidiaries. Consistent with this view, the Finance Supervisory Service issued a ruling in 2005 that stated that we are not deemed to have significant influence or control over the decision-making process of the Korea Power Exchange relating to its business or financial affairs.

### *Pricing Factors*

The price of electricity in the Korean electricity market is determined principally based on the cost of generating electricity using a system known as the cost-based pool system. Under the cost-based pool system, the price of electricity has two principal components, namely the marginal price (representing in principle the variable cost of generating electricity) and the capacity price (representing in principle the fixed cost of generating electricity).

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

### *Marginal Price*

The primary purpose of the marginal price is to compensate the generation companies for fuel costs, which represents the principal component of the variable costs of generating electricity. We currently refer such marginal price as the system marginal price.

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

Under the merit order system, the generation unit with the lowest variable cost of producing electricity among all the generation units that have submitted a bid for a given hour is first awarded a purchase order for electricity up to the available capacity of such unit as indicated in its bid. The generation unit with the next lowest variable cost is then awarded a purchase order up to its available capacity in its bid, and so forth, until the projected demand for electricity for such hour is met. We refer to the variable cost of the generation unit that is the last to receive the purchase order for such hour as the system marginal price, which also represents the highest price at which electricity can be supplied at a given hour based on the demand and supply for such hour. Generation units whose variable costs exceed the system marginal price for a given hour do not receive purchase orders to supply electricity for such hour. The variable cost of each generation unit is determined by the Cost Evaluation Committee (comprised of representatives from the Ministry of Trade, Industry and Energy, the Korea Power Exchange, generation companies, scholars and researchers as well as us) on a monthly basis and reflected in the following month based on the fuel costs two months prior to such determination. The purpose of the merit order system is to encourage generation units to reduce its electricity generation costs by making its generation process more efficient, sourcing fuels from most cost-effective sources or adopting other cost savings programs.

The final allocation of electricity supply is further adjusted on the basis of other factors, including the proximity of a generation unit to the geographical area to which power is being supplied, network and fuel constraints and the amount of power loss. This adjustment mechanism is designed to adjust for transmission losses in order to improve overall cost-efficiency in the transmission of electricity to end-users.

The price of electricity at which our generation subsidiaries sell electricity to us is determined using the following formula:

Variable cost + [System marginal price - Variable cost] \* Adjusted coefficient

The adjusted coefficient is determined based on considerations of, among others, electricity tariff rates, the differential generation costs for different fuel types and the relative fair returns on investment in respect of us compared to our generation subsidiaries. The purpose of the adjusted coefficient is to prevent electricity trading from resulting in undue imbalances as to the relative financial results among generation subsidiaries as well as

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between us (as the purchaser of electricity) and our generation subsidiaries (as sellers of electricity). Such imbalances may arise from excessive profit taking by base load generators (on account of their inherently cheaper fuel cost structure compared to non-base load generators) as well as from fluctuations in fuel prices (it being the case that during times of rapid and substantial rises in fuel costs which are not offset by corresponding rises in electricity tariff rates charged by us to end-users, on a non-consolidated basis our profitability will decline compared to that our generation subsidiaries since our generation subsidiaries are entitled to sell electricity to us at cost plus a guaranteed margin).

The adjusted coefficient applies in principle to all generation units that use the same type of fuel, except for independent power producers that use LNG or oil as fuel. Independent power producers that use coal as fuel will be entitled to the adjusted coefficient upon commencement of commercial operation beginning from 2016. The adjusted coefficient is currently set at the highest level for the marginal price of electricity generated using nuclear fuel, followed by coal, oil and LNG. The differentiated adjusted coefficients reflect the Government's current energy policy objectives and have the effect of setting priorities in the fuel types to be used in electricity generation. The adjusted coefficient is determined by the Cost Evaluation Committee in principle on an annual basis, although in exceptional cases driven by external factors such as material developments in fuel costs and electricity tariff rates, the adjusted coefficient may be adjusted on a quarterly basis.

### *Capacity Price*

In addition to payment in respect of the variable cost of generating electricity, generation units receive payment in the form of capacity price, the purpose of which is to compensate them for the costs of constructing generation facilities and to provide incentives for new construction. The capacity price is determined annually by the Cost Evaluation Committee based on the construction costs and maintenance costs of a standard generation unit and is paid to each generation company for the amount of available capacity indicated in the bids submitted the day before trading, subject to such capacity being actually available on the relevant day of trading. From time to time, the capacity price is adjusted in ways to soften the impact of changes in the marginal price over time based on the expected rate of return for our generational subsidiaries. Currently, the capacity price is Won 7.46/kW-h and is applied equally to all generation units, regardless of fuel types used.

Effective as of January 1, 2007, a regionally differentiated capacity price system was introduced by setting a standard capacity reserve margin in the range of 12.0% to 20.0% in order to prevent excessive capacity build-up as well as induce optimal capacity investment at the regional level. The capacity reserve margin is the ratio of peak demand to the total available capacity. Under this system, generation units in a region where available capacity is insufficient to meet demand for electricity as evidenced by a failure to meet the standard capacity reserve margin receive increased capacity price. Conversely, generation units in a region where available capacity exceeds demand for electricity as evidenced by exceeding the standard capacity reserve margin receive reduced capacity price. Since 2006, the capacity price received by generation units has been subject to hourly and seasonal adjustments in order to incentivize our generation subsidiaries to operate their generation facilities at full capacity during periods of highest demand. For example, the capacity price paid differs depending on whether the relevant hour is a on-peak hour, a mid-peak hour or an off-peak hour (it being highest for the on-peak hours and lowest for the off-peak hours) and the capacity price paid is highest during the months of January, July and August when electricity usage is highest due to weather conditions. Other than subject to the aforementioned variations, the same capacity pricing mechanism applies to all generation units regardless of fuel types used.

**Table of Contents****Power Trading Results**

The results of power trading, as effected through the Korea Power Exchange, for our generation subsidiaries for the year ended December 31, 2013 are as follows:

	Items	Volume (Gigawatt hours)	Percentage of Total Volume (%)	Sales to KEPCO (in billions of Won)	Percentage of Total Sales (%)	Unit Price (Won/kWh)
Generation Companies	KHNP	137,948	28.8	6,289	14.9	45.59
	KOSEP	59,211	12.3	4,040	9.5	68.23
	KOMIPO	55,631	11.6	5,659	13.4	101.72
	KOWEPO	55,954	11.7	5,755	13.6	102.86
	KOSPO	65,685	13.7	7,136	16.9	108.64
	EWP	54,069	11.3	5,301	12.5	98.04
	Others <sup>(1)</sup>	50,788	10.6	8,109	19.2	159.67
	Total	479,287	100.0	42,288	100.0	88.23
Energy Sources	Nuclear	132,396	27.6	5,179	12.2	39.12
	Bituminous coal	186,886	39.0	10,972	26.1	58.71
	Anthracite coal	7,367	1.5	676	1.6	91.73
	Oil	14,750	3.1	3,271	7.8	221.78
	LNG	4,462	0.9	1,040	2.5	215.31
	Combined-cycle	115,420	24.1	18,238	43.4	158.52
	Hydro	3,558	0.7	608	1.4	170.92
	Pumped-storage	4,086	0.9	835	2.0	204.42
	Others	10,361	2.2	1,469	3.0	120.62
Total	479,287	100.0	42,288	100.0	88.23	
Load	Base load	323,099	67.4	16,442	38.9	50.89
	Non-base load	156,188	32.6	25,846	61.1	165.48
	Total	479,287	100.0	42,288	100.0	88.23

Note:

- (1) Others represent independent power producers that trade electricity through the cost-based pool system of power trading (excluding independent power producers that supply electricity under power purchase agreements with us).

**Power Purchased from Independent Power Producers Under Power Purchase Agreements**

In 2013, we purchased an aggregate of 16,892 gigawatt hours of electricity generated by independent power producers under existing power purchase agreements. These independent power producers had an aggregate generation capacity of 4,268 megawatts as of December 31, 2013.

**Power Generation**

As of December 31, 2013, we and our generation subsidiaries had a total of 598 generation units, including nuclear, thermal, hydroelectric and internal combustion units, representing total installed generation capacity of 70,845 megawatts. Our thermal units produce electricity using

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steam turbine generators fired by coal, oil and LNG. Our internal combustion units use oil or diesel-fired gas turbines and our combined-cycle units are primarily LNG-fired. We also purchase power from several generation plants not owned by our generation subsidiaries.

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The table below sets forth as of and for the year ended December 31, 2013 the number of units, installed capacity and the average capacity factor for each type of generating facilities owned by our generation subsidiaries.

	Number of Units	Installed Capacity <sup>(1)</sup> (Megawatts)	Average Capacity Factor <sup>(2)</sup> (Percent)
Nuclear	23	20,716	75.5
Thermal:			
Coal	51	24,534	93.6
Oil	16	3,950	40.3
LNG	4	888	45.4
Total thermal	71	29,372	85.0
Internal combustion	208	330	23.8
Combined-cycle	107	14,886	63.5
Hydro	71	5,334	12.2
Wind	40	94	17.1
Solar	70	70	13.6
Fuel cell	7	14	66.1
Biogas	1	30	45.0
Total	598	70,845	71.0

*Notes:*

- (1) Installed capacity represents the level of output that may be sustained continuously without significant risk of damage to plant and equipment.
- (2) Average capacity factor represents the total number of kilowatt hours of electricity generated in the indicated period divided by the total number of kilowatt hours that would have been generated if the generation units were continuously operated at installed capacity, expressed as a percentage.

The expected useful life of a unit, assuming no substantial renovation, is approximately as follows: nuclear, over 40 years; thermal, over 30 years; internal combustion, over 25 years; and hydroelectric, over 55 years. Substantial renovation can extend the useful life of thermal units by up to 20 years.

We seek to achieve efficient use of fuels and diversification of generation capacity by fuel type. In the past, we relied principally upon oil-fired thermal generation units for electricity generation. Since the oil shock in 1974, however, Korea's power development plans have emphasized the construction of nuclear generation units. While nuclear units are more expensive to construct than thermal generation units of comparable capacity, nuclear fuel is less expensive than fossil fuels in terms of electricity output per unit cost. However, efficient operation of nuclear units requires that such plants be run continuously at relatively constant energy output levels. As it is impractical to store large quantities of electrical energy, we seek to maintain nuclear power production capacity at approximately the level at which demand for electricity is continuously stable. During those times when actual demand exceeds the usual level of electricity supply from nuclear power, we rely on units fired by fossil fuels and hydroelectric units, which can be started and shut down more quickly and efficiently than nuclear units, to meet the excess demand. Bituminous coal is currently the least expensive thermal fuel per kilowatt-hour of electricity produced, and therefore we seek to maximize the use of bituminous coal for generation needs in excess of the stable demand level, except for meeting short-term surges in demand which require rapid start-up and shutdown. Thermal units fired by LNG, hydroelectric units and internal combustion units are the most efficient types of units for rapid start-ups and shutdowns, and therefore we use such units principally to meet short-term surges in demand. Anthracite coal is a less efficient fuel source than bituminous coal in terms of electricity output per unit cost.





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Our generation subsidiaries have constructed and recommissioned thermal and internal combustion units in order to help meet power demand. Subject to market conditions, our generation subsidiaries plan to continue to add additional thermal and internal combustion units. These units generally take less time to complete construction than nuclear units.

The high average age of our oil-fired thermal units is attributable to our reliance on oil-fired thermal units as the primary means of electricity generation until mid-1970s. Since then, we have diversified our fuel sources and constructed relatively few oil-fired thermal units compared to units of other fuel types.

The table below sets forth, for the periods indicated, the amount of electricity generated by facilities linked to our grid system and the amount of power used or lost in connection with transmission and distribution.

	2009	2010	2011	2012	2013	% of 2013 Gross Generation <sup>(1)</sup>
(in gigawatt hours, except percentages)						
<b>Electricity generated by us and our generation subsidiaries:</b>						
Nuclear	147,771	148,596	154,723	150,327	138,784	26.8
Coal	193,803	198,287	199,516	199,329	201,119	38.8
Oil	11,970	10,874	9,456	13,553	13,941	2.7
LNG	762	2,288	2,233	3,453	2,950	0.6
Internal combustion	697	731	821	752	741	0.1
Combined-cycle	47,580	70,081	71,668	75,751	85,703	16.6
Hydro	4,091	4,393	4,815	5,140	5,679	1.1
Wind	82	91	117	127	155	0.03
Solar and fuel cells	24	44	60	83	251	0.05
<b>Total generation by us and our generation subsidiaries</b>	<b>406,780</b>	<b>435,384</b>	<b>443,409</b>	<b>448,516</b>	<b>449,323</b>	<b>86.8</b>
<b>Electricity generated by IPPs:</b>						
Thermal	25,274	37,197	42,240	48,043	54,242	10.5
Hydro and other renewable	1,550	2,079	11,244	13,015	14,149	2.7
<b>Total generation by IPPs</b>	<b>26,824</b>	<b>39,276</b>	<b>53,484</b>	<b>61,058</b>	<b>68,391</b>	<b>13.2</b>
Gross generation	433,604	474,660	496,893	509,574	517,714	100
Auxiliary use <sup>(2)</sup>	18,258	19,372	19,689	20,154	21,303	4.1
Pumped-storage <sup>(3)</sup>	3,713	3,663	4,257	4,789	5,408	1.0
<b>Total net generation<sup>(4)</sup></b>	<b>411,631</b>	<b>451,625</b>	<b>472,947</b>	<b>484,631</b>	<b>491,003</b>	<b>94.8</b>
Transmission and distribution losses <sup>(5)</sup>	16,770	18,034	17,430	17,292	18,311	3.73

IPPs = Independent power producers

Notes:

- (1) Unless otherwise indicated, percentages are based on gross generation.
- (2) Auxiliary use represents electricity consumed by generation units in the course of generation.
- (3) Pumped-storage represents electricity consumed during low demand periods in order to store water which is utilized to generate hydroelectric power during peak demand periods.

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- (4) Total net generation is gross generation minus auxiliary and pumped-storage use.
- (5) Total transmission and distribution losses divided by total net generation.

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The table below sets forth our total capacity at the end of, and peak and average loads during, the indicated periods.

	2009	2010	2011 (Megawatts)	2012	2013
Total capacity	73,470	76,078	76,649	81,806	82,296
Peak load	66,797	71,308	73,137	75,987	76,522
Average load	49,498	54,185	56,723	58,012	58,615

**Korea Hydro & Nuclear Power Co., Ltd.**

We commenced nuclear power generation activities in 1978 when our first nuclear generation unit, Kori-1, began commercial operation. On April 2, 2001, all of nuclear and hydroelectric power generation assets and liabilities of our thermal generation subsidiaries were transferred to KHNP.

KHNP owns and operates 23 nuclear generation units at four power plant complexes in Korea, located in Kori, Wolsong, Yonggwang (Hanbit) and Ulchin (Hanul), 50 hydroelectric generation units including 16 pumped storage hydro generation units as well as five solar generation units and one wind generation unit as of December 31, 2013.

The table below sets forth the number of units and installed capacity as of December 31, 2013 and the average capacity factor by types of generation units in 2013.

	Number of Units	Installed Capacity <sup>(1)</sup> (Megawatts)	Average Capacity Factor <sup>(2)</sup> (Percent)
Nuclear	23	20,716	75.5
Hydroelectric	50	5,307	12.0
Solar	5	16	15.3
Wind	1	0.8	7.1
Total	79	26,040	

*Notes:*

- (1) Installed capacity represents the level of output that may be sustained continuously without significant risk of damage to plant and equipment.
- (2) Average capacity factor represents the total number of kilowatt hours of electricity generated in the indicated period divided by the total number of kilowatt hours that would have been generated if the generation units were continuously operated at installed capacity, expressed as a percentage.

Shin-Kori-2 and Shin-Wolsong-1, each with a 1,000 megawatt capacity, commenced commercial operation in July 2012. We are currently building five additional nuclear generation units, consisting of one unit with a 1,000 megawatt capacity and four units each with a 1,400 megawatt capacity at the Shin-Kori and Shin-Hanul sites, respectively. We expect to complete these units between 2014 and 2018. In addition, we plan to build four additional nuclear units, each with a 1,400 megawatt capacity, and two additional nuclear units, each with a 1,500 megawatt capacity at the Shin-Kori and Shin-Hanul sites between 2019 and 2024.

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*Nuclear*

The table below sets forth certain information with respect to the nuclear generation units of KHNP as of December 31, 2013.

Unit	Reactor Type <sup>(1)</sup> (Megawatts)	Reactor Design <sup>(2)</sup>	Turbine and Generation <sup>(3)</sup>	Commencement of Operations	Installed Capacity
Kori-1	PWR	W	GEC, Hitachi, D	1978	587
Kori-2	PWR	W	GEC	1983	650
Kori-3	PWR	W	GEC, Hitachi	1985	950
Kori-4	PWR	W	GEC, Hitachi	1986	950
Shin-Kori-1	PWR	D, KOPEC, W	D, GE	2011	1,000
Shin-Kori-2	PWR	D, KOPEC, W	D, GE	2012	1,000
Wolsong-1	PHWR	AECL	P	1983	679
Wolsong-2	PHWR	AECL, H, K	H, GE	1997	700
Wolsong-3	PHWR	AECL, H	H, GE	1998	700
Wolsong-4	PHWR	AECL, H	H, GE	1999	700
Shin-Wolsong-1	PWR	D, KOPEC, W	D, GE	2012	1,000
Hanbit-1	PWR	W	W, D	1986	950
Hanbit-2	PWR	W	W, D	1987	950
Hanbit-3	PWR	H, CE, K	H, GE	1995	1,000
Hanbit-4	PWR	H, CE, K	H, GE	1996	1,000
Hanbit-5	PWR	D, CE, W, KOPEC	D, GE	2002	1,000
Hanbit-6	PWR	D, CE, W, KOPEC	D, GE	2002	1,000
Hanul-1	PWR	F	A	1988	950
Hanul-2	PWR	F	A	1989	950
Hanul-3	PWR	H, CE, K	H, GE	1998	1,000
Hanul-4	PWR	H, CE, K	H, GE	1999	1,000
Hanul-5	PWR	D, KOPEC, W	D, GE	2004	1,000
Hanul-6	PWR	D, KOPEC, W	D, GE	2005	1,000
Total nuclear					20,716

*Notes:*

- (1) PWR means pressurized light water reactor; PHWR means pressurized heavy water reactor.
- (2) W means Westinghouse Electric Company (U.S.A.); AECL means Atomic Energy Canada Limited (Canada); F means Framatome (France); H means Hanjung; CE means Combustion Engineering (U.S.A.); D means Doosan Heavy Industries; K means Korea Atomic Energy Research Institute.
- (3) GEC means General Electric Company (U.K.); P means Parsons (Canada and U.K.); W means Westinghouse Electric Company (U.S.A.); A means Alstom (France); H means Hanjung; GE means General Electric (U.S.A.); D means Doosan Heavy Industries; Hitachi means Hitachi Ltd. (Japan).

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The table below sets forth the average capacity factor and average fuel cost per kilowatt for 2013 with respect to each nuclear generation unit of KHNP.

Unit	Average Capacity Factor (Percent)	Average Fuel Cost Per kWh (Won)
Kori-1	49.9	5.9
Kori-2	80.9	6.4
Kori-3	100.1	5.3
Kori-4	75.5	6.7
Shin-Kori-1	26.6	12.8
Shin-Kori-2	40.8	6.5
Wolsong-1		
Wolsong-2	83.7	7.5
Wolsong-3	92.6	7.4
Wolsong-4	90.3	7.6
Shin-Wolsong-1	38.1	8.2
Hanbit-1	82.4	6.5
Hanbit -2	75.2	5.3
Hanbit -3	54.1	6.1
Hanbit -4	86.6	5.7
Hanbit -5	94.1	4.8
Hanbit -6	98.1	5.0
Hanul-1	85.8	5.7
Hanul-2	88.2	5.7
Hanul-3	100.0	5.3
Hanul-4	37.8	6.1
Hanul-5	85.5	5.6
Hanul-6	99.8	5.0
Total nuclear	75.5	6.1

Under extended-cycle operations, nuclear units can be run continuously for periods longer than the conventional 12-month period between scheduled shutdowns for refueling and maintenance. Since 1987, we have adopted the mode of extended-cycle operations for all of our pressurized light water reactor units and plan to use it for our newly constructed units. The duration of shutdown for fuel replacement and maintenance was 117.5 days per unit in 2013, which was higher than that for previous years due to the quality assurance-related incidents which led to a shutdown of a number of KHNP's nuclear units from May 2013 until January 2014 (see Item 3D. Risk Factors Risks Relating to KEPCO Recent findings of falsified testing results and bribery and the subsequent prolonged shutdowns of certain of our nuclear generation units may adversely hurt our reputation, business, results of operations and financial condition. ) as well as scheduled long-term overhauls. In addition, KHNP's nuclear units experienced an average of 0.26 unplanned shutdowns per unit in 2013. In the ordinary course of operations, KHNP's nuclear units routinely experience damage and wear and tear, which are repaired during routine shutdown periods or during unplanned temporary suspensions of operations. No significant damage has occurred in any of KHNP's nuclear reactors, and no significant nuclear exposure or release incidents have occurred at any of KHNP's nuclear facilities since the first nuclear plant commenced operation in 1978.

**Table of Contents***Hydroelectric*

Effective January 1, 2011, pursuant to the Government's Proposal for Improvements in the Structure of the Electric Power Industry announced in August 2010, our five thermal generation subsidiaries transferred all of the assets and liabilities relating to their pumped-storage and hydroelectric business units to KHNP. The table below sets forth certain information, including the installed capacity as of December 31, 2013 and the average capacity factor in 2013.

Location of Unit	Number of Units	Classification	Year Built	Installed Capacity (Megawatts)	Average Capacity Factor (%)
Hwacheon	4	Dam waterway	1944	108.0	23.4
Chuncheon	2	Dam	1965	62.3	23.6
Euiam	2	Dam	1967	48.0	31.8
Cheongpyung	4	Dam	1943	140.1	43.4
Paldang	4	Dam	1973	120.0	44.1
Seomjingang	3	Basin deviation	1945	34.8	51.5
Boseonggang	2	Basin deviation	1937	4.5	58.3
Kwoesan	2	Dam	1957	2.6	58.2
Anheung	3	Dam waterway	1978	0.5	52.0
Kangreung	2	Basin deviation	1991	82.0	
Topyeong	1	Dam	2011	0.05	44.1
Muju <sup>(1)</sup>	1	Dam	2003	0.4	17.5
Sancheong <sup>(1)</sup>	1	Dam	2001	1.0	42.4
Yangyang <sup>(1)</sup>	2	Dam	2005	1.4	25.5
Yecheon <sup>(1)</sup>	1	Dam	2011	1.0	19.4
Cheongpeoung <sup>(1)</sup>	2	Pumped Storage	1980	400.0	6.5
Samrangjin <sup>(1)</sup>	2	Pumped Storage	1985	600.0	9.5
Muju <sup>(1)</sup>	2	Pumped Storage	1995	600.0	10.8
Sancheong <sup>(1)</sup>	2	Pumped Storage	2001	700.0	10.1
Yangyang <sup>(1)</sup>	4	Pumped Storage	2006	1,000.0	9.7
Cheongsong <sup>(1)</sup>	2	Pumped Storage	2006	600.0	11.1
Yecheon <sup>(1)</sup>	2	Pumped Storage	2011	800.0	10.7
<b>Total</b>	<b>50</b>			<b>5,307</b>	<b>12.0</b>

*Note:*

(1) Indicates facilities that have been transferred from our five thermal generation companies to KHNP as of January 1, 2011.

*Solar/Wind*

The table below sets forth certain information, including the installed capacity as of December 31, 2013 and the average capacity factor in 2013, regarding each solar and wind power unit of KHNP. Yecheon-units 1 and 2 began commercial operation in July 2012 and December 2012, respectively. KHNP added a 11-megawatt capacity unit to the Younggwang Solar Park, for which commercial operation began in November 2012.

Location of Unit	Classification	Year Built	Installed Capacity	Average Capacity
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			(Megawatts)	Factor (Percent)
Yonggwang	Solar	2008	13.9	15.3
Yecheon	Solar	2012	2.0	15.9
Kori	Wind	2008	0.8	7.1
Total			16.7	

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K-Water (formerly Korea Water Resources Corporation), which is a Government-owned entity, assumes full control of multi-purpose dams, while KHNP maintains the dams used for power generation. Existing hydroelectric power units have exploited most of the water resources in Korea available for commercially viable hydroelectric power generation. Consequently, we expect that no new major hydroelectric power plants will be built in the foreseeable future. Due to the ease of its start-up and shut-down mechanism, hydroelectric power generation is reserved for peak demand periods.

***Korea South-East Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2013 and the average capacity factor and average fuel cost per kilowatt in 2013 based upon the net amount of electricity generated, of KOSEP.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Samchunpo #1, 2, 3, 4, 5, 6	22.1	3,240	93.9	57.0
Yong Hung #1, 2, 3, 4	7.3	3,340	91.6	57.5
Yosu # 2	36.5	328.6	79.2	95.6
<b>Anthracite:</b>				
Yongdong #1, 2	37.3	325	83.3	99.0
<b>Combined cycle and internal Combustion:</b>				
Bundang gas turbine #1,2,3,4,5,6,7,8; steam turbine #1, 2	20.0	922	52.1	200.3
Hydro, Solar and other renewable energy		70.3		149.5
<b>Total</b>	<b>21.3</b>	<b>8,226</b>	<b>86.8</b>	<b>70.4</b>



**Table of Contents*****Korea Midland Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2013 and the average capacity factor and average fuel cost per kilowatt in 2013 based upon the net amount of electricity generated, of KOMIPO.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Boryeong #1, 2, 3, 4, 5, 6, 7, 8	18.9	4,000	95.0	41.8
<b>Anthracite:</b>				
Seocheon #1, 2	30.5	400	83.4	82.1
<b>Oil-fired:</b>				
Jeju #2, 3	13.5	150	72.4	208.8
<b>LNG-fired:</b>				
Seoul #4, 5	44.1	388	39.5	209.3
Incheon #1, 2	41.4	500	36.8	195.5
<b>Combined-cycle and internal combustion:</b>				
Boryeong gas turbine #1, 2, 3, 4, 5, 6 ; steam turbine #1, 2, 3	14.8	1,350	52.4	143.6
Incheon gas turbine #1, 2, 3, 4, 5, 6 ; steam turbine #1, 2, 3	8.8	1,462.4	84.1	138.2
Sejong gas turbine #1, 2 ; steam turbine #1	0.1	530.4	73.6	78.5
Jeju Gas Turbine #3	36.1	55	0.8	724.3
Jeju Internal Combustion Engine #1, 2	6.6	80	68.7	181.4
<b>Wind-powered:</b>				
Yangyang #1, 2	7.5	3.0	19.9	10.8
<b>Hydroelectric:</b>				
Boryeong	4.8	7.5	28.7	0.5
<b>Photovoltaic ( PV ) power and fuel cell generation:</b>				
Boryeong (PV) site	5.6	0.6	10.8	14.3
Seocheon (PV) site	5.9	1.2	12.6	
Jeju (PV) site	1.8	1.1	13.4	
Seoul (PV) site	2.3	1.3	14.9	2.7
Yeosu (PV) site	1.8	2.2	17.1	
Incheon (PV) site	2.0	0.3	13.8	
Boryeong (fuel cell) site	5.3	0.3	90.6	182.4
<b>Total</b>	<b>18.3</b>	<b>8,933</b>	<b>78.0</b>	<b>85.6</b>

**Table of Contents*****Korea Western Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2013 and the average capacity factor and average fuel cost per kilowatt in 2013 based upon the net amount of electricity generated, of KOWEPO.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Taeon #1, 2, 3, 4, 5, 6, 7, 8	13.4	4,000	96.7	41.3
<b>Oil-fired:</b>				
Pyeongtaek #1, 2, 3, 4	32.1	1,400	30.0	189.1
<b>Combined cycle:</b>				
Pyeongtaek #1, 2	11.0	964	36.2	175.7
Gunsan	3.6	718.4	85.1	133.5
West Incheon	21.5	1,800	80.7	140.9
<b>Hydroelectric:</b>				
Taeon	6.3	2.2	21.7	
<b>Solar:</b>				
Taeon	8.4	0.1	12.7	
Taeon 2	1.9	0.6	14.0	
Gunsan	3.5	0.3	14.8	
Samryangjin	6.1	3.0	14.7	
Sejong City	1.5	4.9	14.8	
Gyeonggi-do	0.7	2.5	13.5	
Yeongam	0.8	13.3	16.4	
<b>Total</b>	<b>16.9</b>	<b>8,909</b>	<b>76.2</b>	<b>87.03</b>

**Table of Contents*****Korea Southern Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2013 and the average capacity factor and average fuel cost per kilowatt in 2013 based upon the net amount of electricity generated, of KOSPO.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
<b>Bituminous:</b>				
Hadong #1, 2, 3, 4, 5, 6, 7, 8	12.3	4,000	95.0	40.0
<b>Oil-fired:</b>				
Youngnam #1, 2	41.9	400	33.2	214.7
Nam Jeju #3, 4	7.0	200	74.9	209.5
<b>Combined cycle:</b>				
Shin Incheon #1, 2, 3, 4	17.2	1,800	83.4	139.3
Busan #1, 2, 3, 4	10.2	1,800	91.4	133.3
Yeongwol #1	3.6	848	60.9	139.0
Hallim	17.5	105	14.9	305.4
<b>Wind power:</b>				
Hankyung	7.2	21	28.7	
Seongsan	4.2	20	29.9	
Solar	3.2	6	13.7	
<b>Total</b>	<b>13.2</b>	<b>9,200</b>	<b>84.5</b>	<b>92.8</b>

**Table of Contents*****Korea East-West Power Co., Ltd.***

The table below sets forth, by fuel type, the weighted average age and installed capacity as of December 31, 2013 and the average capacity factor and average fuel cost per kilowatt in 2013 based upon the net amount of electricity generated, of EWP.

	Weighted Average Age of Units (Years)	Installed Capacity (Megawatts)	Average Capacity Factor (Percent)	Average Fuel Cost per kWh (Won)
Bituminous:				
Dangjin #1, 2, 3, 4, 5, 6,7,8	9.5	4,000	78.3	39.5
Honam #1, 2	40.8	500	87.9	60.2
Anthracite:				
Donghae #1, 2	14.8	400	78.3	61.7
Oil-fired:				
Ulsan #1, 2, 3, 4, 5, 6	46.7	1,800	43.4	194.4
Combined cycle:				
Ulsan gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2, 3	16.9	1,686	49.0	153.4
Ilsan gas turbine #1, 2, 3, 4, 5, 6; steam turbine #1, 2	18.3	900	49.7	175.2
Mini hydro:				
Dangjin	4.0	5.0	62.7	
Photovoltaic:				
Dangjin	3.0	1.0	14.6	
Ulsan	2.0	0.5	13.3	1.8
Kwangyang	2.1	2.3	12.4	3.1
Dangjin Storage Facility	1.0	0.7	14.2	
Dangjin Floating System	0.5	1.0	14.6	
Dangjin Waste Treatment Facility	2.0	1.3	11.6	
Donghae	7.0	1.0	12.6	1.0
Fuel cell:				
Ilsan # 1	4.1	2.4	83.8	171.7
Ilsan # 2	2.1	2.8	73.6	189.7
Ilsan # 3	0.8	2.8	77.1	176.5
Ulsan	0.2	2.8	24.9	115.0
Wind Power:				
YeongGwang Jisan	1.2	3.0	11.6	153.4
Biomass:				
Donghae	0.5	30.0	82.4	175.2
Total	8.0	9,342.6	71.4	2.9

**Table of Contents****Power Plant Remodeling and Recommissioning**

Our generation subsidiaries supplement power generation capacity through remodeling or recommissioning of thermal units. Recommissioning includes installation of anti-pollution devices, modification of control systems and overall rehabilitation of existing equipment. The following table shows recent remodeling and recommissioning initiatives by our generation subsidiaries.

Power Plant	Capacity	Completed (Year)	Extension	Company
Taeon #1-8	4,000 MW	EP <sup>(1)</sup> upgrade (#4, 2011)	Anti-pollution	KOWEPO
	(500 MW×8)	EP <sup>(1)</sup> upgrade (#1, 2012)		
Pyeongtaek #1-4	1,400 MW	Steam turbine upgrade (#1, 4, 2013)	10-year performance-improvement	KOWEPO
	(350 MW ×4)			
Boryeong #1-8	4,000 MW	Control System upgrade	Performance-improvement	KOMIPO
	(500 MW ×8)	(#6, 2011, #3,5, 2012)		
Incheon CC #2	508.9 MW	SCR <sup>(2)</sup> : 2012	Anti-pollution	KOMIPO
	(gas turbines 164 MW ×2)			
	(steam turbines 181 MW ×1)			
Yosu #1	350 MW	2016	30 years	KOSEP
Yosu #2	328.6 MW	2013	30 years	KOSEP
Yonghung #5-6	1,740 MW	2014	30 years	KOSEP
	(870 MW ×2)			

*Notes:*

- (1) EP means an electrostatic precipitation system.  
(2) SCR means a selective catalytic reduction system.

**Transmission and Distribution**

We currently transmit and distribute substantially all of the electricity in Korea.

As of December 31, 2013, our transmission system consisted of 32,249 circuit kilometers of lines of 765 kilovolts and others including high-voltage direct current lines, and we had 790 substations with aggregate installed transformer capacity of 279,520 megavolt-amperes.

As of December 31, 2013, our distribution system consisted of 105,740 megavolt-amperes of transformer capacity and 8,698,776 units of support with a total line length of 449,683 circuit kilometers.

In recent years, we have made substantial investments in our transmission and distribution systems to increase geographic coverage and improve efficiency. Our current projects principally focus on increasing capabilities of the existing lines and reducing our transmission and distribution loss, which was 3.73% of our gross generation in 2013. In light of the increased damage to large-scale transmission and distribution facilities, we plan to reinforce stability of our transmission and distribution facilities through stricter design and material specifications. In addition, we also

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plan to expand underground transmission and distribution facilities to meet customer demand for more environment-friendly facilities. In order to reduce the interruption time in power distribution, which is an indicator of the quality of electricity transmission, we are also continuing to invest in automation of electricity transmission and development of new transmission technologies, among others.

In particular, as part of our overall business strategy, we are currently developing, or seek to develop, an intelligent power transmission and distribution network, or smart grids, based on advanced information technology, in order to promote a more efficient allocation and use of electricity by consumers. We expect that

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such technology will improve efficiency and reduce electricity loss over the course of electricity transmission and distribution. In July 2012, the Government implemented a master plan to build out a smart grid, which includes the Advanced Metering Infrastructure (AMI) roadmap. In accordance with such plan, we will install smart meters and related communication networks and operating systems for 22 million households as part of the smart grid initiative in an effort to enhance efficiency in the power electricity industry and alleviate growing energy shortage concerns. Smart meters refer to digital meters that record, on a real-time basis, electricity consumption within a household and the effective tariff rate at the time of electricity usage so that consumers will have a price-based incentive to enhance efficiency in their electricity usage. On the other hand, the smart grid refers to the next-generation network for electricity distribution that integrates information technology into the existing power grid with the aim of enabling two-way real time exchange of information between electricity suppliers and consumers for optimal efficiency in electricity use. The smart grid project is scheduled to be completed in 2030, and the AMI project is currently scheduled to be completed in 2020. We expect that the smart grid initiative would significantly increase efficient energy consumption by providing real-time data to customers, which would in turn help to reduce greenhouse gas emission and decrease Korea's reliance on foreign energy sources. As of December 31, 2013, we have installed 2.5 million smart meter units, and plan to install an additional 2.3 million units in 2014. The AMI project is expected to cost Won 1.7 trillion by 2020.

Some of the facilities we own and use in our distribution system use rights of way and other concessions granted by municipal and local authorities in areas where our facilities are located. These concessions are generally renewed upon expiration.

**Fuel**

***Nuclear***

Uranium, the principal fuel source for nuclear power, accounted for 34.9%, 33.5% and 30.9% of our fuel requirements for electricity generation in 2011, 2012 and 2013, respectively.

All uranium ore concentrates are imported from, and conversion and enrichment of such concentrates are provided by, sources outside Korea and are paid for with currencies other than Won, primarily U.S. dollars.

In order to ensure stable supply, KHNP enters into long-term and medium-term contracts with various suppliers and supplements such supplies with purchases in spot markets. In 2013, KHNP purchased 100%, or approximately 4,238 tons, of its uranium concentrate requirement under both long-term and spot supply contracts with suppliers in the United Kingdom, Kazakhstan, France, Germany, Niger, Canada, Japan and Australia. Under the long-term supply contracts, the purchase prices of uranium concentrates are adjusted annually based on base prices and spot market prices prevailing at the time of actual delivery. The conversion and enrichment services of uranium concentrates are provided by suppliers in Canada, France, Germany, Japan, China, Russia, the United Kingdom and the United States. A Korean supplier typically provides fabrication of fuel assemblies. Except for certain fixed contract prices, contract prices for processing of uranium are adjusted annually in accordance with the general rate of inflation. KHNP intends to obtain its uranium requirements in the future, in part, through purchases under medium- to long-term contracts and, in part, through spot market purchases.

***Coal***

Bituminous coal accounted for 43.1%, 42.5% and 43.0% of our fuel requirements for electricity generation in 2011, 2012 and 2013, respectively, and anthracite coal accounted for 1.9%, 2.0% and 1.8% of our fuel requirements for electricity generation in 2011, 2012 and 2013, respectively.

In 2013, our generation subsidiaries purchased approximately 79.5 million tons of bituminous coal, of which approximately 41.6%, 38.2%, 9.5%, 9.5% and 1.2% were imported from Indonesia, Australia, the United States, Russia, and others, respectively. Approximately 89.0% of the bituminous coal requirements of our generation

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subsidiaries in 2013 were purchased under long-term contracts with the remaining 11.0% purchased in the spot market. Some of our long-term contracts relate to specific generating plants and extend through the end of the projected useful lives of such plants, subject in some cases to periodic renewal. Pursuant to the terms of our long-term supply contracts, prices are adjusted periodically based on market conditions. The average cost of bituminous coal per ton purchased under such contracts amounted to Won 116,073, Won 113,705 and Won 94,217 in 2011, 2012 and 2013, respectively.

In 2013, our generation subsidiaries purchased approximately 0.8 million tons of anthracite coal. The prices for anthracite coal under such contracts are set by the Government. The average cost of anthracite coal per ton purchased under such contracts was Won 136,471, Won 141,669 and Won 126,425 in 2011, 2012 and 2013, respectively.

### ***Oil***

Oil accounted for 2.4%, 3.2% and 3.3% of our fuel requirements for electricity generation in 2011, 2012 and 2013, respectively.

In 2013, our generation subsidiaries purchased approximately 21.7 million barrels of fuel oil, substantially all of which was purchased from domestic refiners through competitive open bidding. Purchase prices are based on the spot market price in Singapore. The average cost per barrel was Won 128,395, Won 139,204 and Won 123,402 in 2011, 2012 and 2013, respectively.

### ***LNG***

LNG accounted for 16.7%, 17.7% and 19.7% of our fuel requirements for electricity generation in 2011, 2012 and 2013, respectively. In 2013, for use in electricity generation we purchased approximately 12.3 million tons of LNG from Korea Gas Corporation, a Government-controlled entity in which we currently own a 24.5% equity interest. In 2013, we purchased all of our LNG requirements for use in power generation from Korea Gas Corporation. Under the terms of the LNG contract with Korea Gas Corporation, all of our five thermal generation subsidiaries jointly and severally agreed to purchase a total of 11.4 million tons of LNG in 2013, subject to an automatic price adjustment annually based on a pre-determined formula if the actual purchased amount exceeds or falls short of the contracted amount. We believe the quantities of LNG provided under such contract will be adequate to meet the needs of our generation subsidiaries for LNG for the next several years. The LNG supply contracts between our generation subsidiaries and Korea Gas Corporation generally have a term of 20 years and provide for minimum purchase requirements for our generation subsidiaries, the specific terms of which are subject to negotiation between Korea Gas Corporation and our generation subsidiaries and approval by the Government. The average cost per ton of LNG under our contract with Korea Gas Corporation was Won 888,808, Won 1,020,528 and Won 1,002,323 in 2011, 2012 and 2013, respectively.

### ***Hydroelectric***

Hydroelectric power generation accounted for 1.1%, 1.1% and 1.3% of our fuel requirements for electricity generation in 2011, 2012 and 2013, respectively. The availability of water for hydroelectric power depends on rainfall and competing uses for available water supplies, including residential, commercial, industrial and agricultural consumption. Pumped storage enables us to increase the available supply of water for use during periods of peak electricity demand.

As of January 1, 2011, assets and liabilities relating to the pumped storage units of the five thermal generation subsidiaries were transferred to KHNP pursuant to the Government's Proposal for Improvements in the Korean Electric Power Industry.



**Table of Contents****Sales and Customers**

Our sales depend principally on the level of demand for electricity in Korea and the rates we charge for the electricity we sell to the end-users.

Demand for electricity in Korea grew at a compounded average rate of 4.3% per annum for the five years ended December 31, 2013. According to the Bank of Korea, the compounded growth rate for real gross domestic product, or GDP, was approximately 3.2% for the same period. The GDP growth rate was approximately 3.7%, 2.3% and 3.0% during 2011, 2012 and 2013, respectively.

The table below sets forth, for the periods indicated, the annual rate of growth in Korea's gross domestic product, or GDP, and the annual rate of growth in electricity demand (measured by total annual electricity consumption) on a year-on-year basis.

	2009	2010	2011	2012	2013
Growth in GDP	0.7%	6.5%	3.7%	2.3%	3.0%
Growth in electricity consumption	2.4%	10.1%	4.8%	2.5%	1.8%

Electricity demand in Korea varies within each year for a variety of reasons other than the general growth in GDP demand. Electricity demand tends to be higher during daylight hours due to heightened commercial and industrial activities and electronic appliance use. Due to the use of air conditioning during the summer and heating during the winter, electricity demand is higher during these two seasons than the spring or the fall. Variation in weather conditions may also cause significant variation in electricity demand.

We do not use any marketing channels, including any special sales methods, to sell electricity to our customers, other than to install electricity meters on-site and take monthly readings of such meters, based upon which invoices are sent to our customers.

***Demand by the Type of Usage***

The table below sets forth consumption of electric power, and growth of such consumption on a year-on-year basis, by the type of usage (in gigawatt hours) for the periods indicated.

	2009 (GWh)	YoY growth (%)	2010 (GWh)	YoY growth (%)	2011 (GWh)	YoY growth (%)	2012 (GWh)	YoY growth (%)	2013 (GWh)	YoY growth (%)	% of Total 2013
Residential	59,426	2.7	63,200	6.3	63,524	0.5	65,484	3.1	65,815	0.5	13.9
Commercial	89,619	3.2	97,410	8.7	99,504	2.1	101,593	2.1	102,196	0.6	21.5
Educational	6,465	11.8	7,453	15.3	7,568	1.5	7,860	3.9	7,947	1.1	1.7
Industrial	207,216	1.8	232,672	12.3	251,491	8.1	258,102	2.6	265,373	2.8	55.9
Agricultural	9,671	9.0	10,654	10.2	11,232	5.4	12,776	13.8	13,866	8.5	2.9
Street lighting	2,954	3.8	3,081	4.3	3,145	2.1	3,158	0.4	3,156	(0.1)	0.7
Overnight Power	19,122	(1.4)	19,690	3.0	18,606	(5.5)	17,620	(5.3)	16,496	(6.4)	3.4
Total	394,475	2.4	434,160	10.1	455,070	4.8	466,593	2.5	474,849	1.8	100.0

The industrial sector represents the largest segment of electricity consumption in Korea. Demand for electricity from the industrial sector was 265,373 gigawatt hours in 2013, representing a 2.8% increase from 2012, largely due to continued export-led growth of the Korean economy. Demand for electricity from the commercial sector has increased in recent years, largely due to increased commercial activities in Korea and the rapid expansion of the service sector of the Korean economy, which has resulted in increased office building construction, office automation and use of air conditioners. Demand for electricity from the commercial sector, however, remained largely stable at 102,196 gigawatt hours in 2013, representing a 0.6% increase from 2012.

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In 2013, we distributed electricity to approximately 22 million households, which represent substantially all of the households in Korea. Demand for electricity from the residential sector is largely dependent on population growth and use of heaters, air conditioners and other electronic appliances. Demand for electricity from the residential sector remained relatively stable at 65,815 gigawatt hours in 2013, representing a 0.5% increase compared to 2012.

***Demand Management***

Our ability to provide adequate supply of electricity is principally measured by the facility capacity reserve margin and the supply reserve margin. The facility capacity reserve margin represents the difference between the peak usage during a year and the installed capacity at the time of such peak usage, expressed as a percentage of such installed capacity. The supply reserve margin represents the difference between the peak usage in a year and the average available capacity at the time of such peak usage, expressed as a percentage of such peak usage. The following table sets forth our facility reserve margin and supply reserve margin for the periods indicated.

	2009	2010	2011	2012	2013
Facility reserve margin	10.0%	6.7%	4.8%	7.7%	7.5%
Supply reserve margin	7.9%	6.2%	5.5%	5.2%	5.5%

While we seek to meet the growing demand for electricity in Korea primarily by continuing to expand our generation capacity, we also implement several measures to curtail electricity consumption, especially during peak periods. We apply time-of-use and seasonality tariff, which are structured so that higher tariffs are charged at the time and months of peak demand to select types of customers, and we also apply a progressive rate structure for the residential use of electricity. We have several demand management programs to control demand and induce power conservation during peak hours and peak seasons such as providing incentives for reducing power consumption during peak hours.

***Electricity Rates***

The Electricity Business Law and the Price Stabilization Act of 1975, each as amended from time to time, prescribe the procedures for the approval and establishment of rates charged for the electricity we sell. We submit our proposals for revisions of rates or changes in the rate structure to the Ministry of Trade, Industry and Energy. The Ministry of Trade, Industry and Energy then reviews these proposals and, following consultation with the Electricity Rates Expert Committee of the Ministry of Trade, Industry and Energy and the Ministry of Strategy and Finance, makes the final decision. Under the Electricity Business Law, the Korea Electricity Commission must review our proposals prior to the Ministry of Trade, Industry and Energy's final decision.

Under the Electricity Business Law and the Price Stabilization Act, electricity rates are established at levels that would enable us to recover our operating costs attributable to our basic electricity generation, transmission and distribution operations as well as receive a fair investment return on capital used in those operations. For the purposes of rate approval, operating costs are defined as the sum of our operating expenses (which principally consists of cost of sales and selling and administrative expenses) and our adjusted income taxes.

Fair investment return represents an amount equal to the rate base multiplied by the rate of return. The rate base is equal to the sum of:

net utility plant in service (which is equal to utility plant minus accumulated depreciation minus revaluation reserve);

working capital for two months (equal to one-sixth of our annual operating expenses other than depreciation expenses and any other non-cash expenses);

our equity interests in generation subsidiaries; and

the portion of construction-in-progress which is charged from our retained earnings.



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The amounts used for the variables in the rates are those projected by us for the periods to be covered by the rate approval. There is no provision for prior period adjustments to compensate us.

For the purpose of determining the fair rate of return, the rate base is divided into two components in proportion to our total shareholders' equity and our total debt. The rate of return permitted in relation to the debt component of the rate base is set at a level designed to approximate the weighted average interest cost on all types of borrowing for the periods covered by the rate approval. The rate of return permitted in relation to the equity component of the rate base is set by applying the capital asset pricing model which takes account of the risk-free rate, the return on the Korea Stock Price Index, KOSPI, a Korean equity market index, and the correlation of the stock price of our company with KOSPI. In 2012, the approved rate of return on the debt component of the rate base was 3.2% while the approved rate of return on the equity component of the rate base was 6.6%. As a result of such approved rates of returns, the fair rate of return in 2012 was determined to be 4.8%. The fair rate of return for 2013 has not yet been determined.

The Electricity Business Law and the Price Stabilization Act do not specify a basis for determining the reasonableness of our operating expenses or any other items (other than the level of the fair investment return) for the purposes of the rate calculation. However, the Government exercises substantial control over our budgeting and other financial and operating decisions.

In addition to the calculations described above, a variety of other factors are considered in setting overall tariff levels. These other factors include consumer welfare, our projected capital requirements, the effect of electricity tariff on inflation in Korea and the effect of tariff on demand for electricity.

From time to time, our actual rate of return on invested capital may differ significantly from the fair rate of return on invested capital assumed for the purposes of electricity tariff approvals, for reasons, among others, related to movements in fuel prices, exchange rates and demand for electricity that differ from what is assumed for determining our fair rate of return. For example, between 1987 and 1990, the actual rate of return was above the fair rate of return due to declining fuel costs and rising demand for electricity at a rate not anticipated for purposes of determining our fair rate of return. Similarly, depreciation of the Won against the U.S. dollar accounted for our actual rates of return being lower than the fair rate of return for the period from 1996 to 2000. For the period since 2006, our actual rates of return have been lower than the fair rate of return largely due to a general increase in fuel costs and additional facility investment costs incurred, the effects of which were not offset by timely increases in our tariff rates. Partly in response to the variance between our actual rates of return and the fair rates of return, the Government from time to time increases the electricity tariff rates, but there typically is a significant time lag for the tariff increases as such increases requires a series of deliberative processes and administrative procedures and the Government also has to consider other policy considerations, such as the inflationary effect of overall tariff increases and the efficiency of energy use from sector-specific tariff increases.

Recent increases to the electricity tariff rates by the Government involve the following, which were made principally in response to the rising fuel prices which hurt our profitability as well as to encourage a more efficient use of electricity by the different sectors:

effective August 1, 2011, a 4.9% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, residential, educational, street lighting and overnight power usage tariff rates by 6.1%, 4.4%, 2.0%, 6.3%, 6.3% and 8.0%, while making no changes to the agricultural tariff.

effective December 5, 2011, a 4.5% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, educational and street lighting tariff rates by 6.5%, 4.5%, 4.5% and 6.5%, while making no changes to the residential, agricultural and overnight power usage tariff.

effective August 6, 2012, a 4.9% overall increase in our average tariff rate, consisting of increases in the residential, commercial, educational, industrial, street lighting, agricultural and overnight power usage tariff rates by 2.7%, 4.4%, 3.0%, 6.0%, 4.9%, 3.0% and 4.9%, respectively.

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effective January 14, 2013, a 4.0% overall increase in our average tariff rate, consisting of increases in the residential, commercial, industrial, educational, agricultural, street lighting and overnight power usage tariff rates by 2.0%, 4.6%, 4.4%, 3.5%, 3.0%, 5.0% and 5.0%, respectively.

effective November 21, 2013, a 5.4% overall increase in our average tariff rate, consisting of increases in the residential, commercial, industrial, agricultural, street lighting and overnight power usage tariff rates by 2.7%, 5.8%, 6.4%, 3.0%, 5.4% and 5.4%, respectively, while making no change to the educational tariff.

The tariff rates we charge for electricity vary among the different classes of consumers, which principally consist of industrial, commercial, residential, educational and agricultural consumers. The tariff also varies depending upon the voltage used, the season, the time of usage, the rate option selected by the user and, in the residential sector, the amount of electricity used per household, as well as other factors. For example, we adjust for seasonal tariff variations by applying higher rates when demand tends to rise such as during the months of June, July and August (when the demand tends to rise due to increased use of air conditioning) and November, December, January and February (when demand tends to rise due to increased use of heating), which reflects the policy of the Korean government to cope with the rise in electricity demand during peak seasons by encouraging a more efficient use of electricity by customers.

Our current tariff schedule, which became effective as of November 21, 2013, is summarized below by the type of usage:

*Industrial.* The basic charge varies from Won 5,550 per kilowatt to Won 9,810 per kilowatt depending on the type of contract, the voltage used and the rate option. The energy usage charge varies from Won 53.7 per kilowatt hour to Won 196.6 per kilowatt hour depending on the type of contract, the voltage used, the season, the time of day and the rate option.

*Commercial.* The basic charge varies from Won 6,160 per kilowatt to Won 9,810 per kilowatt depending on the type of contract, the voltage used and the rate option. The energy usage charge varies from Won 53.7 per kilowatt hour to Won 196.6 per kilowatt hour depending on the type of contract, the voltage used, the season, the time of day and the rate option.

*Residential.* Residential tariff includes a basic charge ranging from Won 410 for electricity usage of less than 100 kilowatt hours to Won 12,940 for electricity usage in excess of 500 kilowatt hours. Residential tariff also includes an energy usage charge ranging from Won 60.7 to Won 709.5 per kilowatt hour for electricity usage depending on the amount of usage and voltage.

*Educational.* The basic charge varies from Won 5,230 per kilowatt to Won 6,980 per kilowatt depending on the voltage used and the rate option. The energy usage charge varies from Won 43.8 per kilowatt hour to Won 160.4 per kilowatt hour depending on the voltage used, the season and the rate option.

*Agricultural.* The basic charge varies from Won 360 per kilowatt to Won 1,210 per kilowatt depending on the type of usage. The energy usage charge varies from Won 21.6 per kilowatt-hour to Won 41.9 per kilowatt hour depending on the type of contract, the voltage used and the season.

*Street-lighting.* The basic charge is Won 6,290 per kilowatt and the energy usage charge is Won 85.9 per kilowatt hour. For electricity capacity of less than 1 kilowatt or for places where the installation of the electricity meter is difficult, a fixed rate of Won 37.5 per watt applies, with the minimum charge per month of Won 1,220.

In 2001, as part of implementing the Restructuring Plan, the Ministry of Trade, Industry and Energy established the Electric Power Industry Basis Fund to enable the Government to take over certain public services previously performed by us. In 2013, 3.7% of the tariff we collected from our customers was transferred to this fund prior to recognizing our sales revenue.

**Table of Contents*****Fuel Cost Pass-through Adjustment to the Tariff System***

Further to the announcement by the Ministry of Trade, Industry and Energy in February 2010, a new electricity tariff system went into effect on July 1, 2011. This system is designed to overhaul the prior system for determining electricity tariff chargeable to customers by more closely aligning the tariff levels to the movements in fuel prices, with the aim of providing more timely pricing signals to the market regarding the expected changes in electricity tariff levels and encouraging more efficient use of electricity by customers. Previously, the electricity tariff consisted of two components: (i) base rate and (ii) usage rate based on the cost of electricity and the amount of electricity consumed by the end-users. Under the new tariff system, the electricity tariff is also to have a third component of FCPTA rate, which is to be added to or subtracted from the sum of the base rate and the usage rate on a monthly basis based on the three-month average movements of coal, LNG and oil prices. The new tariff system is intended to provide greater financial stability and ensure a minimum return on investment to electricity suppliers, such as us. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Trade, Industry and Energy issued a hold order on July 29, 2011 suspending our billing and collecting of the FCPTA amount. The hold order remains in effect to-date. In addition, on January 11, 2013, we were informed by the Ministry of Trade, Industry and Energy that the fuel cost pass-through adjustment system would need to be reassessed in light of the prolonged unbilled period after the announcement of such system. There is no assurance as to when the Government will lift the hold order and allow us to bill and collect the accumulated FCPTA amount or whether the new tariff system will undergo other amendments to the effect that it will not fully cover our fuel and other costs on a timely basis or at all, or will not have unintended consequences that we are not presently aware of. Any such development may have a material adverse effect on our business, financial condition, results of operations and cash flows. See Item 5B.

Operating and Financial Review and Prospects Critical Accounting Policy Fuel Cost Pass-through Adjustment.

**Power Development Strategy**

We and our generation subsidiaries make plans for expanding or upgrading our generation capacity based on the Basic Plan Relating to the Long-Term Supply and Demand of Electricity, or the Basic Plan, which is generally revised and announced every two years by the Government. In February 2013, the Government announced the Sixth Basic Plan relating to the future supply and demand of electricity. The Sixth Basic Plan, which is effective for the period from 2013 to 2027, focuses on, among other things, (i) minimizing the need to construct new generation facilities through active consumer demand management, (ii) ensuring that we maintain adequate electricity reserve appropriate to the size of the national economy and (iii) expanding our generation capacity to promote efficient supply of electricity in consideration of the stability of the national electricity grid network and the specific needs of localities. In addition, while the Sixth Basic Plan did not contemplate the construction of additional nuclear plants in light of the heightened public concern over nuclear safety following the nuclear power plant meltdown in Japan in March 2011, there is no assurance that the Government will not implement a supplemental plan for the construction of additional nuclear plants in the future, which may increase the amount of our required capital expenditure.

In addition, on January 13, 2014, the Ministry of Trade, Industry and Energy adopted the Second Basic National Energy Plan following consultations with representatives from civic groups, the power industry and academia. The Second Basic National Energy Plan, which is a comprehensive plan that covers the entire spectrum of energy industries in Korea, will cover the period from 2013 to 2035 (compared to 2008 to 2030 under the First Basic National Energy Plan) and focuses on the following six key tasks: (i) shifting the focus of energy policy to demand management with a goal of reducing electricity demand by 15% by 2035, (ii) establishing a geographically decentralized electricity generation system so as to reduce transmission losses with a goal of supplying at least 15% of total electricity through such system by 2035, (iii) applying latest greenhouse gas emission reduction technologies to newly constructed generation units in order to further promote safety and environmental friendliness, (iv) strengthening exploration and procurement capabilities to enhance Korea's energy security and to ensure stable supply of energy and increasing the portion of electricity supplied

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from renewable sources to 11% by 2035, (v) reinforcing the system for stable supply of conventional energy, such as oil and gas, and (vi) introducing in 2015 an energy voucher system in lieu of a tariff discount system for the benefit of consumers in the low income group. In addition, the Second Basic National Energy Plan contemplates revising the target level of electricity generated by nuclear sources as a percentage of total electricity generated to 29%, compared to 41% under the First Basic National Energy Plan.

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

**Capital Investment Program**

The table below sets forth, for each of the years ended December 31, 2011, 2012 and 2013, the amounts of capital expenditures for the construction of generation, transmission and distribution facilities.

2011	2012 (In billions of Won)	2013
11,984	12,751	15,831

The table below sets forth the currently estimated installed capacity for new or expanded generation units to be completed by our generation subsidiaries in each year from 2014 to 2017.

Year	Number of Units	Type of Units	Total Installed Capacity <sup>(1)</sup> (Megawatts)
2014	1	Nuclear power	1,400
	2	Coal-fired	1,740
	3	LNG-combined	1,007
2015	2	Coal-fired	2,020
2016	6	Coal-fired	5,470
	3	LNG-combined	1,200
2017	1	Nuclear power	1,400
	1	Coal-fired	1,000
	1	LNG-combined	900

*Note:*

(1) Does not include installed capacity for two nuclear units with an aggregate installed capacity of 2,400 megawatts that were expected to be completed in 2013 but for which construction has been delayed.

For the period from 2018 to 2027, our generation subsidiaries currently plan to complete seven additional nuclear units with an aggregate installed capacity of 10,000 megawatts (subject to any further plan to be announced by the Government in relation to the construction of additional nuclear generation capacity which was not included in the Sixth Basic Plan) and four additional coal-fired units with an aggregate installed capacity of 2,740 megawatts.

As part of our capital investment program, we also intend to add new transmission lines and substations, continue to replace overhead lines with underground cables and improve the existing transmission and distribution systems.





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The actual number and capacity of generation units and transmission and distribution facilities we construct and the timing of such construction are subject to change depending upon a variety of factors, including, among others, changes in the Basic Plan, demand growth projections, availability and cost of financing, changes in fuel prices and availability of fuel, ability to acquire necessary plant sites, environmental considerations and community opposition.

The table below sets forth, for the period from 2014 to 2017, the budgeted amounts of capital expenditures for the construction of generation, transmission and distribution facilities pursuant to our capital investment program. The budgeted amounts may vary from the actual amounts of capital expenditures for a variety of reasons, including, among others, the implementation of the Sixth Basic Plan, changes in the number of units to be constructed, the actual timing of such construction, changes in rates of exchange between the Won and foreign currencies and changes in interest rates.

	2014	2015	2016	2017	Total
	(in billions of Won)				
<b>Generation<sup>(1)</sup>:</b>					
Nuclear	4,844	5,231	6,137	6,423	22,634
Thermal	7,963	5,673	2,895	3,009	19,539
Sub-total	12,807	10,903	9,032	9,431	42,173
<b>Transmission and Distribution:</b>					
Transmission	2,492	2,441	2,982	2,324	10,240
Distribution	2,509	2,773	2,553	2,414	10,249
Sub-total	5,001	5,214	5,535	4,739	20,489
Others <sup>(2)</sup>	2,090	2,361	1,772	1,422	7,646
Total	19,898	18,479	16,339	15,592	70,307

*Notes:*

(1) The budgeted amounts for our generation facilities are based on the Sixth Basic Plan.

(2) Principally consists of investments in renewable energy generation, among others.

We have financed, and plan to finance in the future, our capital investment programs primarily through net cash provided by our operating activities and financing in the form of debt securities and loans from domestic financial institutions, and to a lesser extent, borrowings from overseas financial institutions. In addition, in order to prepare for potential liquidity shortage, we and our generation subsidiaries maintain several credit facilities with domestic financial institutions in the aggregate amounts of Won 2,550 billion and US\$4,549 million, the full amount of which was available as of December 31, 2013. We, KHNP and KOWEPO also maintain global medium-term note programs in the aggregate amount of US\$10 billion, of which approximately US\$4 billion remains currently available for future drawdown. See also Item 5B. Liquidity and Capital Resources Capital Resources.

**Environmental Programs**

The Environmental Policy Basic Act, the Air Quality Preservation Act, the Water Quality Preservation Act, the Marine Pollution Prevention Act and the Waste Management Act, collectively referred in this annual report as the Environmental Acts, are the major laws of Korea that regulate atmospheric emissions, waste water, noise and other emissions from our facilities, including power generators and transmission and distribution units. Our existing facilities are currently in material compliance with the requirements of these environmental laws and international agreements, such as the United Nations Framework Convention on Climate Change, the Montreal Protocol on Substances that Deplete the Ozone Layer, the Stockholm Convention on Persistent Organic Pollutants and the Basel Convention on the Control of Transboundary

Movements of Hazardous Wastes and

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Their Disposal. In order to foster coordination among us and our generation subsidiaries in respect of climate change and development of renewable energy sources, we formed the Committee on Climate Change and the Committee on Renewable Energy in 2005. In 2011 the Ministry of Security and Public Administration issued guidelines for the reduction of nationwide greenhouse gas emissions and energy conservation, pursuant to which we are intensifying our efforts to reduce the levels of carbon emission in order to help meet the national target for greenhouse gas emission reduction.

In 2005, we became the first public company in Korea to join the United Nations Global Compact, an international voluntary initiative designed to hold a forum for corporations, United Nations agencies, labor and civic groups to promote reforms in economic, environmental and social policies. As part of our involvement with such initiative, since September 2005, we have issued an annual report named the Sustainability Report to disclose our activities from the perspectives of economy, environment and society, in accordance with the reporting guidelines of the Global Reporting Initiative, the official collaborating center of the United Nations Environment Program that works in cooperation with United Nations Secretary General. In November 2010, our report on the Communication on Progress was reviewed favorably by the United Nations Global Compact and was subsequently posted on its website in recognition of our strong commitment to compliance with the principles of United Nations Global Compact. In May 2013, we obtained the Carbon Trust Standard, a certificate issued by Carbon Trust, an agency of the British government for excellence in demonstrated efforts to reduce carbon footprint. We are also a participant of the Carbon Disclosure Project, an international organization that promotes transparency in informational disclosure of carbon management process. We aim to become a global leader in carbon management and reduction.

Atmospheric emissions from generating plants burning fossil fuels include, among others, sulfur dioxide, nitrogen oxide and particulates. The Environmental Acts establish emissions standards relating to, among other things, sulfur dioxide, nitrogen oxide and particulates. Such standards have become more stringent from January 1999 to reduce the amount of permitted emissions.

The table below sets forth the number of emission control equipment installed at coal-fired power plants by our generation subsidiaries as of December 31, 2013.

	KOSEP	KOMIPO	KOWEPO	KOSPO	EWP
Flue Gas Desulphurization System	11	12	12	12	13
Selective Non-catalytic Reduction System		2			3
Selective Catalytic Reduction System	9	18	12	12	13
Electrostatic Precipitation System	13	20	12	12	18
Low NO2 Combustion System	16	28	26	29	30
Total	49	80	62	65	77

The table below sets forth the amount of annual emission from all generating facilities of our generation subsidiaries for the periods indicated. The amount of CO2 emissions may increase in the near future due to the construction of additional coal thermal power plants but is expected to decrease in the long-term, principally due to an increased use of nuclear power and renewable energy.

Year	Sox (g/MWh)	NOx (g/MWh)	Dust (g/MWh)	CO2 (kg/MWh)
2011	148	284	8	464
2012	165	297	8	471
2013	155	283	7	487

In order to comply with the current and expected environmental standards and address related legal and social concerns, we intend to continue to install additional equipment, make related capital expenditures and

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undertake several environment-friendly measures to foster community goodwill. For example, in October 2004, we and our generation subsidiaries reached an agreement with the Ministry of Environment and civic organizations to completely remove polychlorinated biphenyl, or PCB, a toxin, from the insulating oil of our transformers by 2015. In addition, when constructing certain large new transmission and distribution facilities, we assess and disclose their environmental impact at the planning stage of such construction, as well as consult with local residents, environmental groups and technical experts to generate community support for such projects. We exercise additional caution in cases where such facilities are constructed near ecologically sensitive areas such as wetlands or preservation areas. We also make reasonable efforts to minimize any negative environmental impact, for example, by using more environment-friendly technology and hardware. In addition, we also undertake measures to minimize losses during the transmission and distribution process by making our power distribution network more energy-efficient in terms of loss of power, as well as to lower consumption of energy, water and other natural resources. In addition, we and our subsidiaries have acquired the ISO 14000 certification which is an environmental management system widely adopted internationally and have made it a high priority to make our electricity generation and distribution more environmentally friendly. In 2013, we further reinforced our environmental management system by acquiring the ISO 14001 certification as well as a domestic certification of the green management system that relates to the management of resources, energy, green house effects and social responsibilities.

Our environmental measures, including the use of environment-friendly but more expensive parts and equipment and allocation of capital expenditures for the installation of such facilities, may result in increased operating costs and liquidity requirement. The actual cost of installation and operation of such equipment and related liquidity requirement will depend on a variety of factors which may be beyond our control. There is no assurance that we will continue to be in material compliance with legal or social standards or requirements in the future in relation to the environment.

As part of our long-term strategic initiatives, we plan to take other measures designed to promote the generation and use of environmentally friendly, or green, energy. See Item 4B. Business Overview Strategy.

Some of our generation facilities are powered by renewable energy sources, such as solar energy, wind power and hydraulic power. While such facilities are currently insignificant as a proportion of our total generation capacity or generation volume of our generation subsidiaries, we expect that the portion will increase in the future, especially since we are required to comply with the Renewable Portfolio Standard policy as described below.

The following table sets forth the generation capacity and generation volume in 2013 of our generation facilities that are powered by renewable energy sources.

	Generation Capacity (megawatts)	Generation Volume (gigawatt-hours)
Hydraulic Power	5,334	5,679
Wind Power	94	155
Solar Energy, Fuel Cells and Biogas	114	251
Subtotal	5,542	6,086
As percentage of total <sup>(1)</sup>	7.8%	1.4%

*Note:*

(1) As a percentage of the total generation capacity or total generation volume, as applicable, of us and our generation subsidiaries. In order to deal with shortage of fuel and other resources and also to comply with various environmental standards, in 2012 the Government adopted the Renewable Portfolio Standard ( RPS ) program, which replaced the Renewable Portfolio Agreement which had been in effect from 2006 to 2011. Under the RPS program, each generation subsidiary is required to generate a specified percentage of total electricity to be generated by such



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generation subsidiary in a given year in the form of renewable energy, with the target percentage being 2.0% in 2012, 2.5% in 2013 and incrementally increasing to 10.0% by 2022. Fines are to be levied on any subsidiary that fails to do so in the prescribed timeline. In 2012, while one of our generation subsidiaries met 100% of its target, five others were unsuccessful to do so. Our six generation subsidiaries met, on average, 90.8% of the target for 2012 and accordingly were fined an aggregate amount of Won 23.7 billion. Compliance by our generation subsidiaries of the 2013 target is currently under evaluation, and if our generation subsidiaries are found to have failed to meet the target for 2013 or for subsequent years, our generation subsidiaries may become subject to additional fines or other penalties. The budgeted amount of capital expenditure for implementation of the RPS as currently planned for the period from 2013 to 2022 is approximately Won 13.7 trillion. We expect that such additional capital expenditure to be covered by a corresponding increase in electricity tariff. However, there is no assurance that the Government will in fact raise the electricity tariff to a level sufficient to fully cover such additional capital expenditures or at all.

As to how we plan to finance our capital expenditures related to our environmental programs, see [Capital Investment Program](#).

## **Community Programs**

Building goodwill with local communities is important to us in light of concerns among the local residents and civic groups in Korea regarding construction and operation of generation units, particularly nuclear generation units. The Act for Supporting the Communities Surrounding Power Plants requires that the generation companies and the affected local governments carry out various activities up to a certain amount annually to address neighboring community concerns. Pursuant to this Act, we and our generation subsidiaries, in conjunction with the affected local and municipal governments, undertake various programs, including scholarships and financial assistance to low-income residents.

Under the Act for Supporting the Communities Surrounding Power Plants, activities required to be undertaken under the Act are funded partly by the Electric Power Industry Basis Fund (see [Sales and Customers Electricity Rates](#) ) and partly by KHNP as part of its budget. KHNP is required to make annual contributions to the affected local communities in an amount equal to Won 0.25 per kilowatt hour of electricity generated by its nuclear generation units during the one-year period before the immediately preceding fiscal year and Won 5 million per thousand kilowatts of hydroelectric generation capacity. In addition, under Korean tax law, KHNP is required to pay local tax levied on its nuclear generation units in an amount equal to Won 0.50 per kilowatt hour of their generation volume in the affected areas and Won 2 per 10 cubic meters of water used for hydroelectric generation.

Prior to the construction of a generation unit, our generation subsidiaries perform an environmental impact assessment which is designed to evaluate public hazards, damage to the environment and concerns of local residents. A report reflecting this evaluation and proposing measures to address the problems identified must be submitted to and approved by the Ministry of Trade, Industry and Energy following agreement with related administrative bodies, including the Ministry of Environment prior to the construction of the unit. Our generation subsidiaries are then required to implement the measures reflected in the approved report. Despite these activities, civic community groups may still oppose the construction and operation of generation units (including nuclear units), and such opposition could adversely impact our construction plans for generation units (including nuclear units) and have a material adverse effect on our business, results of operations and cash flow.

## **Nuclear Safety**

KHNP takes nuclear safety as its top priority and continues to focus on ensuring the safe and reliable operation of nuclear power plants. KHNP also focuses on enhancing corporate ethics and transparency in the operation of its plants.

KHNP has a corporate code of ethics and is firmly committed to enhancing nuclear safety, developing new technologies and improving transparency. KHNP has also established the [Statement of Safety Policy](#) for

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Nuclear Power Plants to ensure the highest level of nuclear safety. Furthermore, KHNP invests approximately 5% of its total annual sales into research and development for the enhancement of nuclear safety and operational performance.

KHNP implements comprehensive programs to monitor, ensure and improve safety of nuclear power plants. In order to enhance nuclear safety through risk-informed assessment, KHNP conducts probabilistic safety assessments, including for low power-shutdown states, for all its nuclear power plants. In order to systematically verify nuclear safety and identify the potential areas for safety improvements, KHNP performs periodic safety reviews on a 10-year frequency basis for all its operating units. These reviews have been completed for Kori units 1, 2, 3 and 4, Hanbit units 1, 2, 3 and 4, Hanul units 1, 2, 3 and 4 and Wolsong units 1, 2, 3 and 4. Reviews for Hanbit units 5 and 6 and Hanul units 5 and 6 are in progress. In order to enhance nuclear safety and plant performance, KHNP has established a maintenance effectiveness monitoring program based on the maintenance rules issued by the United States Nuclear Regulatory Commission, which covers all of KHNP's nuclear power plants in commercial operation.

KHNP has developed the Risk Monitoring System for operating nuclear power plants, which it implements in all of its nuclear power plants. The Risk Monitoring System is intended to help ensure nuclear plant safety. In addition, KHNP has developed and implemented the Severe Accident Management Guidelines and is developing the Severe Accident Management Guidelines for Low Power-Shutdown States in order to manage severe accidents for all of its nuclear power plants.

KHNP conducts various activities to enhance nuclear safety such as quality assurance audits and reviews by the KHNP Nuclear Review. KHNP maintains a close relationship with international nuclear organizations in order to enhance nuclear safety. In particular, KHNP invites international safety review teams such as the World Association of Nuclear Operators ( WANO ) Peer Review Team and the Expert Mission Team to its nuclear plants for purposes of meeting international standards for independent review of its facilities. KHNP actively exchanges relevant operational information and technical expertise with its peers in other countries. For example, in November 2013, Wolsung 2 hosted the WANO Peer Review and Hanul 3 conducted the WANO Follow-up Peer Review in February 2014. KHNP also invited the WANO Corporate Peer Review Team for the first time in November 2013. The recommendations and findings from this event were shared with KHNP's other nuclear plants to implement improvements at such plants.

The average level of radiation dose per unit amounted to a relatively low level of 0.46 man-Sv in 2012, which was substantially lower than the global average in 2012 of 0.76 man-Sv/year as reported in the WANO performance indicator report.

In response to the damage to the nuclear facilities in Japan as a result of the tsunami and earthquake in March 2011, the Government conducted additional safety inspections on nuclear power plants by a group of experts from governmental authorities, civic groups and academia. As a result of such inspections, the Government required KHNP to perform 46 comprehensive safety improvement measures. The Government also established the Nuclear Safety & Security Commission in October 2011 for neutral and independent safety appraisals. KHNP developed 10 additional measures through benchmarking overseas cases and the internal analysis of current operations. KHNP plans to implement these measures, which are expected to be completed by 2015, at total expected cost of approximately Won 1.1 trillion. As of December 31, 2013, KHNP had completed 32 of such measures.

Low and intermediate level waste, or LILW, and spent fuels are stored in temporary storage facilities at each nuclear site of KHNP. The temporary LILW storage facilities at the nuclear sites will be sufficient to accommodate all LILWs produced up to 2014. We expect that Korea Radioactive Waste Agency ( KORAD ) will complete the construction of a LILW disposal facility in the city of Gyeongju by June 2014, and starting from December 2010, LILW stored in temporary storage facilities at Hanul and Wolsong was transferred to a disposal facility in the city of Gyeongju.

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In order to increase the storage capacity of temporary storage facilities for spent fuels, KHNP has been pursuing various projects, such as installing high-density racks in spent fuel pools and building dry storage facilities. Through these activities, we expect that the storage capacity for spent fuels in all nuclear sites will be sufficient to accommodate all the spent fuels produced by 2016. The policy for spent fuel management options is currently under development.

In 2009, the Radioactive Waste Management Act ( RWMA ) was enacted in an effort to centralize management of the disposal of spent fuel and LILW and enhance the security and efficiency of related management processes. The RWMA designates KORAD to manage the disposal of spent fuels and LILW. Pursuant to the RWMA, the Government has established the Radioactive Waste Management Fund. The management expense for LILW is paid when LILW is transferred to KORAD, and the charge for spent fuel is paid based on the quantity generated every quarter. LILW-related management costs and charges for spent fuel are reviewed by the Ministry of Trade, Industry and Energy every two years. In December 2012, such costs and charges were increased by a committee composed of Government officials, KHNP, Korea Radioactive Waste Management Corporation and experts in finance and accounting. This may result in an increase in future expenses that KHNP may incur in relation to radioactive waste.

All of KHNP's nuclear plants are currently in compliance with Korean law and regulations and the safety standards of the IAEA in all material respects. For a description of certain past incidents relating to quality assurance in respect of KHNP, see Item 3D. Risk Factors Recent findings of falsified testing results and bribery and the subsequent prolonged shutdowns of certain of our nuclear generation units may adversely hurt our reputation, business, results of operations and financial condition.

## **Decommissioning**

Decommissioning of a nuclear power unit is the process whereby the unit is shut down at the end of its life, the fuel is removed and the unit is eventually dismantled. KHNP implements a dismantling policy under which dismantling would take place five to ten years after the unit's closure. KHNP renewed the operation license of Kori-1, the first nuclear power plant constructed in Korea, which commenced operation in 1978, for an additional 10 years in 2007. KHNP is also in the process of renewing the operation license of Wolsung-1 to extend its life cycle, whose original operation license expired in November 2012. If the Wolsung-1 license is extended, decommissioning of a nuclear power generation unit is not expected to commence before 2017. While it does not carry a cash reserve for its decommissioning liability, KHNP retains full financial and operational responsibility for decommissioning its units.

KHNP has accumulated the decommissioning cost as a liability since 1983. The decommissioning costs of nuclear facilities are defined by the Radioactive-Waste Management Act, which requires KHNP to credit annual appropriations separately. These costs are estimated based on studies conducted by the relevant committees, and are reviewed by the Ministry of Trade, Industry and Energy every two years. In December 2012, estimated decommissioning costs were increased in consideration of overseas cases of decommissioning, inflation rate assumptions, changes in the operating environment and other criteria. As a result, KHNP was required to accrue additional provisions due to increased future decommissioning costs, and as of December 31, 2013, KHNP accrued Won 15,427 billion for the cost of dismantling and decontaminating existing nuclear power plants, which consisted of dismantling costs of nuclear plants of Won 9,888 billion and dismantling costs of spent fuel and radioactive waste of Won 5,539 billion. For accounting treatment of decommissioning costs, see Item 5A. Operating and Financial Review and Prospects Critical Accounting Policies Decommissioning Costs.

## **Overseas Activities**

We are engaged in a number of overseas activities. We believe that such activities help us diversify our revenue streams by leveraging the operational experience of us and our subsidiaries gathered from providing a



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full range of services, such as power plant construction and specialized engineering and maintenance services in Korea, as well as to establish strategic relationships with countries that are or may become providers of fuels.

The table set below summarizes our overseas projects.

<b>Country</b>	<b>Project Period</b>	<b>Project Description</b>
<b>Generation Projects:</b> United Arab Emirates	December 2009 to May 2020	Construction, operation and support for four 1,400 megawatt nuclear power generation units
United Arab Emirates	March 2011 to August 2039	1,600 megawatt combined-cycle gas power plant project (BOO) <sup>(4)</sup>
Jordan	October 2009 to December 2035	373 megawatt combined-cycle power plant in Al Qatrana (BOO) <sup>(4)</sup>
Jordan	September 2012 to June 2039	573 megawatt diesel engine power plant in Almanakher (BOO) <sup>(4)</sup>
Jordan	January 2013 to January 2035	Construction and operation of a wind farm in Fujiej (BOO) <sup>(4)</sup>
Rabigh, Saudi Arabia	July 2009 to April 2033	1,204 megawatt oil-fired power plant (BOO) <sup>(4)</sup>
Shanxi, China	April 2007 to April 2056	6,887 megawatt coal-fired power plants (BOO) <sup>(4)</sup> and coal mine projects
Gansu, China	September 2005 to April 2029	99 megawatt wind power plants (BOO) <sup>(4)</sup>
Inner Mongolia, China	December 2006 to December 2032	991 megawatt wind power plants (BOO) <sup>(4)</sup>
Liaoning, China	July 2012 to July 2032	226 megawatt wind power plant (BOO) <sup>(4)</sup>
Vietnam	December 2014 to December 2043	1,200 megawatt coal-fired power plants project (BOT) <sup>(1)</sup>
Thailand	2011 to 2037	111 megawatt combined-cycle power plant (BOO) <sup>(4)</sup>
Thailand	2012 to 2033	8 megawatt solar power plant (BOO) <sup>(4)</sup>
Ilijan, Philippines	November 1997 to May 2022	1,200 megawatt combined-cycle power plant project (BOT) <sup>(1)</sup>
Naga, Philippines	Since February 2006	200.8 megawatt power plant (O&M) <sup>(2)</sup>
Cebu, Philippines	February 2008 to May 2036	200 megawatt CFBC <sup>(3)</sup> coal-fired power plant (BOO) <sup>(4)</sup>
India	February 2012 to December 2039	Construction, O&M of a 388 megawatt combined-cycle power plant
United States	2013 to 2065	300 megawatt solar power plant in Nevada (BOO) <sup>(4)</sup>
United States	Since September 2012	Construction and operation of a 80 megawatt Novus 1 wind farm project

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<b>Country</b>	<b>Project Period</b>	<b>Project Description</b>
United States	Since December 2012	Construction and operation of a 40 megawatt Novus 2 wind farm project
Mexico	September 2010 to May 2038	433 megawatt combined-cycle power plant project (BOO) <sup>(4)</sup>
Chile	June 2014 to October 2031	517 megawatt combined cycle gas turbine power plant (BOO)
Nigeria	Since 2007	Acquisition of an equity interest in Egbin Power Plc for operation and maintenance of a 1,320 megawatt gas-fired power plant in Nigeria
<b>Exploration and Production Projects:</b>		
Indonesia	Since July 2009	Purchase of equity interest of PT Adaro Energy Tbk
Indonesia	Since August 2010	Purchase of equity interest of PT Bayan Resources Tbk
Indonesia	Since August 2011	Purchase of equity interest of LongDaliq mines
Australia	Since January 2008	Moolarben thermal coal mine development
Australia	Since November 2007	Share subscription of Cockatoo Coal Limited, a coal development company
Australia	Since July 2010	Bylong thermal coal mine development
Australia	Since June 2012	Acquisition of equity interest of Amber Energy Company, an operator of Decker and Black Cutte mines
Canada	Since June 2009	Share subscription of Denison Mines, a uranium development company
Canada	From December 2007	Uranium exploration project in the Cree East
Canada	January 2008 to May 2013	Uranium exploration project in the Waterbury Lake
United States	Since July 2012	Acquisition of minority interest in Energy Fuel Inc., a Denver-based uranium producer, in exchange for equity interest in Strathmore Minerals Corp.
Niger	Since December 2009	Share subscription of ANCE, a uranium development company
Nigeria	Since March 2006	Exploration of oil and gas for two offshore blocks
Nigeria	Since October 2008	Development of downstream projects in Nigeria
France	June 2009 to 2015	Construction and operation of a uranium enrichment plant

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<b>Country</b>	<b>Project Period</b>	<b>Project Description</b>
<b>Transmission and Distribution projects:</b>		
India	September 2011 to 2014	11kV feeder separation program for separation of non-agricultural and agricultural consumers, replacement of bare low tension line with aerial bunched cable and meterization of unmetered consumers in rural areas
Kazakhstan	February 2011 to December 2014	Modernization of 17 substations in Actub, Kazakhstan
Dominican Republic	May 2011 to May 2014	Rehabilitation of electricity distribution networks

*Notes:*

- (1) Represents build, operate and transfer projects.
- (2) Represents rehabilitation, operation, maintenance and management projects
- (3) Represents circulating fluidized bed combustion projects.
- (4) Represents build, own and operate projects.

While strategically important, we believe that our overseas activities, as currently being conducted, are not in the aggregate significant in terms of scope or amount compared to our domestic activities. In addition, a number of the overseas contracts currently being pursued are based on non-binding memoranda of understanding and the details of such projects may significantly change during the course of negotiating the definitive agreements.

A further description of the material overseas activities by us and our subsidiaries is provided below.

**Generation projects***United Arab Emirates*

In December 2009, following an international open bidding process, we entered into a prime contract with the Emirates Nuclear Energy Corporation (the ENEC), a state-owned nuclear energy provider of the United Arab Emirates (UAE), to design, build and help operate four civil nuclear power generation units to be located in Barakah, a region approximately 270 kilometers from Abu Dhabi, for the UAE's peaceful nuclear energy program. The contract amount for the project is US\$18.6 billion, with the term of the contract to last from December 27, 2009 to May 1, 2020. Under the contract, we and the subcontractors, some of which are our subsidiaries, are to perform various duties in connection with the project, including, among others, (i) designing and constructing four nuclear power generation units (each with a capacity of 1,400 megawatts), (ii) supplying nuclear fuel for three fuel cycles including initial loading (with each cycle currently projected to last for approximately 18 months), and (iii) providing technical support, training and education to the plant operation personnel. The target completion dates for the four units are set for May 2017, May 2018, May 2019 and May 2020.

In addition, in order to foster a long-term strategic partnership and stable management of the units post-construction, we currently plan to make an equity investment in a project company established by ENEC. Details of such investment, including its size and structure, remain subject to further negotiation at this time, and we plan to make further disclosures regarding such investment in due course and as appropriate.

In October 2010, a consortium, which included us, was selected by Abu Dhabi Water & Electricity Authority (ADWEA), a state-run utilities provider in the United Arab Emirates, as the preferred bidder in an

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international bidding for the construction and operation of the combined-cycle natural gas-fired electricity generation facilities in Shuweihat, UAE with an expected aggregate generation capacity of 1,600 megawatts. In February 2011, the consortium entered into a formal contract with ADWEA for the construction and operation of the generation facilities. This project involves three years of construction starting from March 2011, and 25 years of operation by us following its completion in August 2014. The total project cost is estimated to be US\$1.5 billion, of which approximately 20% will be financed through equity investments by the consortium members and the remaining 80% through project financing. Equity interests in the consortium are owned by ADWEA (60.0%), Sumitomo (20.4%) and us (19.6%). The total amount of our equity investment in the project is expected to be approximately US\$56 million, and we are participating in this project through a special purpose vehicle.

*Jordan*

In July 2008, a consortium consisting of us and Xenel was selected as the preferred bidder to build, own and operate a gas-fired power plant with installed capacity of 373 megawatts in Al Qatrana, near Amman, Jordan. After entering into definitive agreements in October 2009, construction of the power plant began in March 2010 and was completed in December 2011. The total cost of construction was approximately US\$460 million. Operation of the power plant will be for a period of 25 years until 2035. We and Xenel established a joint venture to oversee the project, with us and Xenel holding an 80:20 equity interest, respectively. We expect our total investment in the project to be approximately US\$96 million. We believe that this project will help us expand our business in the Middle East and position us as a competitive power producer in the global market.

In January 2012, a consortium consisting of us, Mitsubishi Corporation and Wartsila Development & Financial Services was selected by National Electric Power Corporation, a state-run electricity provider in Jordan, to construct and operate a diesel engine power project in Almanakher with an expected total generation capacity of 573 megawatts. In August 2012, we established a special-purpose vehicle for the purpose of carrying out the project and on September 24, 2012, the consortium entered into a power purchase agreement with the National Electric Power Company. This project is comprised of three phases and is scheduled for completion by September 2014. The project is expected to require a construction period of two years followed by an operational period of 25 years. The total project cost will be funded primarily through debt financing and the remaining will be financed through equity investments by the consortium members. We hold a 60% equity interest in the consortium.

In January 2013, we were selected by Ministry of Energy and Mineral Resources of Jordan as an independent power producer to build, own and operate a wind farm with installed capacity of 99 megawatts in Fujeij, which is located on plateau 150 kilometers south of Amman, Jordan. This is the first of a series of projects to take place in Jordan, and we expect to build wind turbines with total capacity amounting up to 1,800 megawatts by 2020. The project involves 20 months of construction and 20 years of operation. Under the contract with Jordan's Ministry of Energy and Mineral Resources, construction is scheduled to begin in 2014 for completion by the end of 2016. The total project cost is approximately US\$200 million, of which approximately 42% will be financed through equity investments solely from us, and we will be the 100% equity holder of the project and the remaining 58% through debt financing. With this project, we expect to diversify our business portfolio in the Middle East from the existing nuclear and thermal power plants to renewable energy.

*Saudi Arabia*

In December 2008, we formed a consortium with ACWA Power International of Saudi Arabia and submitted a bid for the 1,204 megawatt oil-fired power project in Rabigh, Saudi Arabia. In March 2009, we were selected as the preferred bidder, and in July 2009, we entered into a power purchase agreement with Saudi Electricity Company. Construction of the project was completed in April 2013, and we will participate in the operation of the plant for 20 years. This project has an estimated project cost of US\$2.5 billion. We currently hold a 40.0% equity interest in the joint venture entity, Rabigh Electricity Company, which will oversee the project.

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*China*

In April 2007, we formed a limited partnership with Shanxi International Electricity Group and Deutsche Bank in China to develop and operate power projects and coal mines in Shanxi province, China, which was approved by the Chinese government. As of December 31, 2013, total capital investment in these projects amounted to US\$1.3 billion. We are expected to participate in the operation of the project for a period of 50 years ending 2056. As of December 31, 2013, the total installed capacity was 6,887 megawatts and our equity interest in the partnership was 34%.

In September 2005 and April 2006, we and China Datang Corporation of the People's Republic of China formed joint ventures to build four wind-powered generation projects in China, consisting of one project in Gansu province with total capacity of 49.3 megawatts and three projects in Inner Mongolia with total capacity of 139.4 megawatts. Since then, one project with capacity of 49.5 megawatts has been added in Gansu and 15 projects with total capacity with 851.4 megawatts have been added in Inner Mongolia. In Liaoning province, we are developing five projects with total capacity of 226 megawatts under an understanding with the government of Chaoyang City. As of December 2013, 642.5 megawatts and 178.0 megawatts of the aforementioned projects had been developed in Inner Mongolia and Liaoning province, respectively. The joint ventures were capitalized with RMB 271 million for the Gansu projects, RMB 3,297 million for the Inner Mongolia projects and RMB 678 million for the Liaoning projects. One-third of the investment was funded with equity contribution and the remaining two-thirds with debt. We and China Datang Corporation hold 40% and 60% of equity interests, respectively, in each of the aforementioned joint ventures and we are participating in the projects through our wholly-owned subsidiaries. Of the 25 wind power generation projects in the aforementioned areas in China, 20 projects with a total capacity of 919 megawatts are currently in operation. The other five projects are still in the preparation stage.

*Vietnam*

In March 2013, a consortium consisting of us and Marubeni, a Japanese corporation, was selected by the Ministry of Industry and Trade of Vietnam for the construction and operation of a 1,200 megawatt coal-fired power plant in Thanh Hoa province, Vietnam. Construction will begin in December 2014 with target completion by December 2018, following which we will handle operation for 25 years. We have entered into a power purchase agreement with Electricity of Vietnam. Total project cost is expected to be US\$2.3 billion, of which 25% will be funded by capital contribution and the remaining 75% by debt financing. The share capital of the special purpose entity that will be in charge of this project will be US\$ 575 million, and KEPCO and Marubeni will each hold 50% equity interest in such entity.

*Thailand*

In December 2011, KOMIPO agreed to purchase a 29% equity interest in Navanakorn Electric Co., a Thailand power company, to jointly develop a combined-cycle power plant project in Thailand with generation capacity of 111 megawatts. The total project cost is currently estimated to be US\$187 million, and KOMIPO expects to invest approximately US\$15.6 million into this project. Following the completion of construction in 2013, this project commenced commercial operation on October 31, 2013 for a period of 25 years.

In September 2012, KOMIPO entered into an agreement with Toyo-Thai Corp. PCL to build and operate a 8 megawatt solar power plant in Ang Thong. The total project cost is currently estimated to be US\$26 million, and KOMIPO invested approximately US\$0.9 million into this project and acquired a 10% equity interest. Following the completion of construction in 2013, this project commenced commercial operation in March 2013 for a period of 20 years.

*Philippines*

We are currently engaged in three major power projects in the Philippines: (i) a build, operate and transfer of a 1,200-megawatt combined-cycle power plant project in Ilijan, construction of which began in November 1997 and

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was completed in June 2002, and operation by us until 2022 (the project cost of the Ilijan project was US\$721 million, for which project finance on a limited recourse basis was provided), and (ii) ownership of a 39.6% equity interest in SPC Power Corporation, an independent power producer operating a 200.8-megawatt Naga power complex in Cebu, in which we initially acquired a 40.0% equity interest in February 2006 pursuant to a rehabilitation, operation, maintenance and management (ROMM) agreement, which was completed in March 25, 2012 followed by an approximately two-year operation and maintenance period thereafter and (iii) a build, operate and own of a 200-megawatt CFBC coal power plant in Cebu for which construction began in February 2008 and was completed in May 2011, followed by operation thereof until 2036. The project cost of the Cebu project was US\$451 million, for which project finance on a limited recourse basis was provided.

*India*

In 2012, KOWEPO purchased a 40% equity interest in Pioneer Gas Power for a purchase price of approximately US\$35 million to construct a 388-megawatt combined-cycle power plant in Maharashtra, India. The total size of the project, which commenced in February 2012, is expected to be approximately US\$274 million and we expect the power facility to begin commercial operation in 2014. KOWEPO will be responsible for operation and maintenance of the project until December 2039.

*United States*

In October 2011, a consortium consisting of our wholly-owned generation subsidiary, KOMIPO, and POSCO Engineering Co., was selected by the City of Boulder as the winning bidder in an auction for the construction and operation of a US\$1 billion solar power plant project in Nevada, the United States with generation capacity of 300-megawatts. The total size of the project is expected to be approximately US\$300 million, and KOMIPO expects to invest approximately US\$90 million and hold a 30% equity interest in the project. Construction of the project commenced in September 2013 and is expected to be completed by December 2014, to be followed by 50 years of operation from 2015 to 2065.

In 2012, KOSEP completed construction of wind farm projects in Oklahoma, KODE Novus 1 LLC and KODE Novus 2 LLC. The two wind farm projects have generation capacities of 80 megawatts and 40 megawatts, respectively, and KOSEP commenced operation of these projects in December 2012 for a term of 20 years. The total project cost is expected to be US\$27.8 million, and KOSEP will hold a 50% and 49% equity interest in these wind farm projects, respectively.

*Mexico*

In August 2010, a consortium led by us was selected as the preferred bidder in an international auction for the construction and operation of the Norte II gas-fueled combined-cycle electricity generation facility in Chihuahua, Mexico, as ordered by the Commission Federal de Electricidad (CFE) of Mexico. The consortium established a special purpose vehicle, KST Electric Power Company (KST), to act as the operating entity, and in September 2010, KST entered into a power purchase agreement with CFE in relation to the construction and operation of a 433-megawatt combined-cycle power plant at Chihuahua in Mexico. In October 2010, KST was licensed by the Mexican government as an independent power producer, which allows it to produce and sell electricity to CFE during the specified contract period. The project will be undertaken on a build, own and operate basis. The total cost of the project is approximately US\$430 million. We hold a 56% equity interest in the consortium, with the remaining equity interests held by Samsung C&T (with a 34% equity interest) and Techint, a Mexico company (with a 10% equity interest). Approximately 22.5% of the total project costs will be financed through equity investments by the consortium and the remaining 77.5% through project financing. Commercial operation commenced in December 2013 following completion of the construction, and the operation period will run for 25 years until 2038. Our wholly-owned subsidiary, KEPCO Energy Service Company, currently manages the operation of the project.

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*Chile*

In November 2013, following an international competitive bidding process, KOSPO and Samsung C&T Corporation were awarded a 517 megawatt combined cycle gas turbine power plant project by BHP Billiton and entered into a long-term contract to build, own, operate and maintain the power plant to supply electric power to a copper mines in Chile. The term of the contract is 15 years from the commercial operation date, with an option to extend the term three times by five years each. In order to facilitate project management, KOSPO established a wholly-owned subsidiary, KOSPO Chile SpA, which made an investment into a special purpose company, Kelar S.A. As of December 31, 2013, KOSPO Chile SpA's equity interest in the project was 65%. Construction for the project is scheduled to begin in June 2014 with commercial operation expected to begin in October 2016.

*Nigeria*

In October 2007, we invested US\$9.1 million in KEPCO Energy Resource Nigeria Ltd. ( KERNL ), a joint venture with Energy Resource Ltd., a Nigerian company. We currently own 30.0% of KERNL's equity capital. In May 2007, KERNL entered into a share purchase agreement with the Nigerian government for the purchase of 70% of the equity capital of Egbin Power Plc in Nigeria, which owns and operates the Egbin power plant, a 1,320-megawatt gas-fired power plant in Lagos, Nigeria for a consideration of approximately US\$407 million. The acquisition was completed in October 2013, and in June 2013, we entered into a contract with Egbin Power Plc for the operation and maintenance of the Egbin power plant. The contract price was US\$315 million. In November 2013, we commenced operation and maintenance services for a term of five years and will expire in October 2018.

***Exploration and Production Projects***

*Indonesia*

In July 2009, we, together with KOSEP, purchased a 1.5% equity interest in PT Adaro Energy Tbk ( Adaro ) for an aggregate purchase price of US\$47 million. Adaro is the second largest coal producer in Indonesia and the fifth largest coal exporter in the world, and has produced a total of 52 million tons of coal in 2013. As part of this investment, we are entitled to an annual coal procurement of 3 million tons per year. In August 2010, we purchased a 20% equity interest in PT Bayan Resources Tbk ( Bayan ), an Indonesian mining company, for a purchase price of US\$518 million. Bayan is engaged in open cut mining of various coal qualities from mines located primarily in East and South Kalimantan, and has produced approximately 13 million tons of coal in 2013. In addition, because Bayan owns the largest coal terminal and the only floating transfer-station in Indonesia, we believe that the acquisition will improve our access to much-needed transportation infrastructure within Indonesia. As part of this investment, we are entitled to an annual coal procurement of 2 million tons per year between 2012 and 2014 and 7 million tons per year beginning in 2015. We expect that both of our investments in Indonesia will help us secure more stable supply of coal for power generation and help us hedge against fluctuations in fuel prices.

In August 2011, KOSPO entered into an agreement with PT. Kedap Sayaaq to acquire a 10% equity interest in LongDaliq mines located in western Kalimantan, Indonesia. KOSPO acquired such equity interest in 2013, and will secure up to three million tons of coal per year through a coal off-take agreement.

*Australia*

In January 2008, a consortium consisting of Korea Resources Corporation, a Government-controlled enterprise, Hanwha Corporation, us and four of our wholly owned generation subsidiaries, namely, KOSEP, KOMIPO, KOWEPO and KOSPO, entered into an agreement with Felix Resources Limited, an Australian coal mining company, to develop the Moolarben coal mine located in Western Coal Fields, New South Wales, Australia. Under the terms of agreement, the consortium purchased a 10% equity interest in the Moolarben

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project from Felix, of which we and our four generation subsidiaries own an aggregate of 5% and 80% equity interests, respectively of the project is held by Felix which was acquired by Yancoal Australia in December 2009. In 2013 Moolarben produced 6.4 million tons of coal, of which we and our four generation subsidiaries imported 2.5 million tons in 2013. We and our four generation subsidiaries have a coal off-take agreement for a total of 2.5 million tons of coal per annum.

In November 2007, we and EWP entered into a share subscription agreement with Cockatoo Coal Limited ( Cockatoo ), a coal exploration and mining company located in Australia. We and EWP currently hold a 1.1% equity interest, in aggregate, in Cockatoo after having made a total investment of A\$21.8 million. Cockatoo has several coal exploration projects in Queensland and New South Wales and one production project in Bowen Basin, Queensland, Australia.

In July 2010, Kepco Australia Pty Ltd., our wholly-owned subsidiary, entered into an agreement with Anglo American Metallurgical Coal Pty Ltd. to acquire 100% of the equity interest in Anglo Coal (Bylong) Pty Ltd., a wholly-owned subsidiary of Anglo, for a purchase price of A\$403 million. Bylong owns a bituminous coal mine in New South Wales, Australia. From this acquisition, we expect to secure an average of 5.1 million tons of bituminous coal per year from this mine during the period from 2017 to 2052. We and Cockatoo are currently undergoing a feasibility study for this project to explore and develop coal that is of export quality.

In June 2012, KOSPO entered into an agreement with Amber Energy Company, which is the operator of Decker and Black Cutte mines located in Brisbane, Australia. In the event of the initial public offering, which has not yet taken place, KOSPO is entitled to convert convertible bonds to an equity interest within one year period from the initial public offering. KOSPO is also entitled to secure up to two million tons of coal per year through a coal off-take agreement.

*Canada*

In June 2009, we, together with KHNP, entered into a definitive agreement with Denison Mines Corporation ( Denison ) under which we currently hold a 9.05% equity interest in Denison Mines. Under the terms of the agreement, we are entitled to procure up to approximately 20.0% of Denison s current annual uranium production, during the period from 2010 to 2015.

In December 2007, a consortium consisting of four Korean companies, namely us, Korea Resources Corporation, Hanwha Corporation and SK Innovation Co., Ltd., entered into an agreement with CanAlaska Uranium, Ltd., a uranium exploration company located in Canada ( CanAlaska ), to carry out a joint uranium exploration project to search for uranium deposits across mines in the Cree East area, Saskatchewan, Canada. Under the terms of the agreement, the consortium and CanAlaska each hold a 50.0% equity interest in the four-year project. The estimated capital expenditure for the project is C\$19 million, all of which is to be paid by the consortium through cash contributions over the term of the project. We have invested C\$4.75 million for which we have received a 12.5% equity interest in the project at the end of 2010. If additional capital expenditure is required, the amount in excess of C\$19 million is to be shared equally between CanAlaska and the consortium.

In January 2008, a consortium consisting of us, KHNP, KEPCO Nuclear Fuel Co., Ltd., Hanwha Corporation and Gravis Capital Corp., a Canadian company, entered into an agreement with Fission Energy Corp., a uranium exploration company located in Canada, to carry out a joint uranium exploration project in Waterbury Lake, Saskatchewan, Canada. Under the terms of the agreement, each of the consortium and Fission Energy Corp. holds a 50% equity interest in the three-year project. The estimated capital expenditure for the project is C\$15 million, all of which is to be paid by the consortium through cash contributions over the term of the project. Under the terms of the agreement, the consortium is required to purchase a 50% equity interest in the project held by Fission Energy Corp. upon the final payment of cash contributions by the consortium during the term of the project. We have a 20% equity interest in the project and are expected to make estimated cash contributions of C\$6 million. During the three-year exploration period, which ended in April 2010, we



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discovered a high grade uranium mineralization after drilling 20 out of 97 sites. In August 2010, the consortium entered into additional agreements consisting of a limited partnership agreement, a shareholders agreement and an operating service agreement with Fission Energy Corp. and extended the exploration period to May 2013 in order to enlarge known mineralization and to produce a resource estimate. In April 2011, Fission Energy Corp. exercised a Back-In Option under the limited partnership agreement and provided to the consortium consideration of C\$6 million. As a result of the exercise of the Back-In Option, the Fission Energy Corp. 's equity interest increased by 10% and the consortium 's equity interest was reduced by 10%. Currently, Fission Energy Corp. and the consortium hold a 60% and 40% equity interest, respectively, in the special purpose entity established to operate this project, of which we hold a 16% equity interest. Subsequent to the exercise of the Back-In Option, the consortium and Fission Energy Corp. are required to make estimated cash contributions for the project on the basis of their respective equity interest.

### *United States*

On July 2, 2012, we and KHNP acquired a 9.4% equity interest in Energy Fuel Inc. ( EFI ), a Denver-based uranium producer, from Denison in exchange for the equity interest we held in Strathmore Minerals Corp. in connection with Denison 's restructuring of its assets based in the United States, including the sale of Strathmore to EFI. EFI will assume the off-take contract between us and Denison. Following the off-take contract, we and KHNP will secure 160 tons of uranium per year until 2015, and will renegotiate on the procurement amounts in 2016.

### *Niger*

In December 2009, we and KHNP, our wholly-owned nuclear generation subsidiary, entered into a definitive agreement with Areva NC Expansion ( ANCE ) to purchase 1.0 million shares, or 15.0%, of the share capital of ANCE at an aggregate purchase price of EUR 170 million. We are entitled to procure up to approximately 9.0% of Imouraren SA 's annual uranium production in Niger, which is estimated to be 626 metric tons based on ANCE 's annual production plan during the period between 2017 and 2052. Imouraren SA is an ANCE-invested mine operating company. We and KHNP currently hold a 13.5% equity interest in aggregate in ANCE.

### *Nigeria*

In August 2005, a consortium consisting of us, Korea National Oil Corporation ( KNOC ), a Government-owned entity, and Daewoo Shipbuilding & Marine Engineering won a bid from the federal government of Nigeria for exploration and production of oil in two off-shore blocks. The consortium, of which we hold a 8.8% equity interest, holds 60.0% of the equity interest in the special purpose vehicle established to carry out the project regarding these two blocks. In March 2006, the consortium entered into production sharing contracts with Nigerian National Petroleum Corporation in connection with this project. However, in January 2009, the government of Nigeria unilaterally decided to void allocation of the two blocks granted to the consortium based on a claim that the consortium failed to pay full amount of the consideration. KNOC filed a suit in the Nigerian court challenging this decision in August 2009, the final outcome of which is currently pending. In the meanwhile, our projects in Nigeria remain on hold.

### *France*

In June 2009, KHNP acquired a 2.5% equity interest in Societe D. Enrichissement Du Tricastin ( SET Holding ), which was established by Areva for the purpose of constructing and operating a uranium enrichment plant in Tricastin, France. KHNP has invested approximately 129 million Euros for a 2.5% equity interest, and COGAC SAS and a group led by Japan France Enrichment Investing and Kansai Electric Power Co. have

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acquired a 5% and 4.5% equity interest, respectively, in SET Holding. The maximum production capability of the uranium enrichment plant is 7,500 ton Separative Work Unit or, SWU. We believe that this investment will help us secure a more stable and economical supply of enriched uranium.

### ***Transmission and Distribution Projects***

#### ***India***

In September 2011, a joint venture company established by us and Megha Engineering & Infrastructures Ltd. ( Megha ) entered into an agreement with M.P. Paschim Kshetra Vidyut Vitaran Co. Ltd., Indore ( Paschim ) and M.P. Poorv Kshetra Vidyut Vitaran Co. Ltd., Jabalpur ( Poorv ), each a state-controlled electricity provider in India, to improve the overall power distribution network in Madhya Pradesh, India through a feeder separation program, including improvements of transmission lines and installation of power meters in seven rural areas. The joint venture company will be responsible for five of the projects in conjunction with Megha. In addition, we will be separately responsible for the remaining two projects. The total project cost is estimated to be US\$100 million, of which US\$32 million will be invested in the projects conducted by us and the remaining US\$68 million in the projects conducted in conjunction with Megha. Construction for the project began in September 2011 and is expected to be completed in 2014.

#### ***Kazakhstan***

On February 23, 2011, a consortium led by us, Hyundai Engineering and Hyundai Corporation won a power transmission project from Kazakhstan Electricity Grid Operating Company ( KEGOC ), a Kazakhstan state-run company. This US\$100 million project will be conducted on an engineering, procurement and construction (EPC) basis, in connection with which are modernizing 17 substations in Actub, Kazakhstan. The project is expected to be completed by the end of 2014.

#### ***Dominican Republic***

In May 2011, we entered into an agreement with Corporación Dominicana de Empresas Eléctricas Estatales ( CDEEE ) to improve power distribution networks in three local districts in Dominican Republic. We will construct 1,294 kilometers of distribution lines and 12,644 electricity poles as part of the rehabilitation project. Total project cost is expected to be US\$51 million, and we will be in charge of design, procurement and construction. We expect to complete construction of such lines and poles by May 2014.

#### ***North Korea***

##### ***Kaesong Complex***

Since 2005, we have provided electricity to the industrial complex located in Kaesong, North Korea, which was established pursuant to an agreement made during the summit meeting of the two Koreas in June 2000. The Kaesong complex is the largest economic project between the two Koreas and is designed to combine the Republic's capital and entrepreneurial expertise with the availability of land and labor of North Korea. In March 2005, we built a 22.9 kilovolt distribution line from Munsan substation in Paju, Gyeonggi Province to the Kaesong complex and became the first to supply electricity to pilot zones such as ShinWon Ebenezer. In April 2006, we started to construct a 154 kilovolt, 16 kilometer transmission line connecting Munsan substation to the Kaesong complex as well as Pyunghwa substation in the complex and began operations in May 2007.

As of December 31, 2013, we supplied electricity to 245 units, including administrative agencies, support facilities and resident corporations, using a tariff structure identical to that of South Korea. No assurance can be given that we will not experience any material losses from this project as a result of, among other things, a project suspension or failure of the project as a result of a breakdown or escalation of hostilities in the relationship between the Republic and North Korea. See Item 3D. Risk Factors Risks Relating to Korea and the Global Economy Tensions with North Korea could have an adverse effect on us and the market value of our shares.

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### *The Light Water Reactor Project*

The Korean Peninsula Development Organization, or KEDO, was chartered in March 1995 as an international consortium stipulated by the Agreed Framework, which was signed by the United States and North Korea in October 1994. KEDO signed an agreement with North Korea in December 1995 to construct two light water reactors in North Korea in return for certain nuclear nonproliferation steps to be taken by North Korea. KEDO designated us as its prime contractor to build two units of pressurized light water reactors with total capacity of 2,000 megawatts. We entered into a fixed price turnkey contract with KEDO in 2000. However, when North Korea did not meet the conditions required for the continuation of the project, KEDO suspended the project in December 2003. Following the suspension, KEDO notified us of the termination of the project and the related turnkey contract between KEDO and us. In 2006, we entered into a transfer agreement with KEDO. According to the transfer agreement, we assumed substantially all of KEDO's rights and obligations related to the light water reactor outside of North Korea. In exchange, we waived the right to claim any expenses incurred and any potential claims by subcontractors to KEDO. Pursuant to the terms of the transfer agreement, we are required to report to KEDO the disposal or reuse of the transferred equipment. The gains from the transfer agreement will be shared with KEDO through further negotiations between the two parties.

We decided to dispose of transferred equipment in 2010, the majority of which we sold through an international open bidding process and negotiated agreements in 2011. In January 2012, we disposed of the remaining transferred equipment through a sales contract with KHNP for the remaining Nuclear Steam Supply System equipment. In March 2012, we submitted to KEDO the Final Report on Resale for the transferred equipment under the terms of the transfer agreement. In January 2013, KEDO gave us a final notice that all related terms and conditions of the transfer agreement were terminated.

### **Insurance**

We and our generation subsidiaries carry insurance covering against certain risks, including fire, in respect of key assets, including buildings, equipment, machinery, construction-in-progress and procurement in transit, as well as, in the case of KEPCO, directors' and officers' liability insurance. We and our generation subsidiaries maintain casualty and liability insurance against risks related to our business to the extent we consider appropriate. Other than KHNP, neither we nor our generation subsidiaries separately insure against terrorist attacks. These insurance and indemnity policies, however, cover only a portion of the assets that we own and operate and do not cover all types or amounts of loss that could arise in connection with the ownership and operation of these assets.

Substantial liability may result from the operations of our nuclear generation units, the use and handling of nuclear fuel and possible radioactive emissions associated with such nuclear fuel. KHNP maintains property and liability insurance against risks of its business to the extent required by the related law and regulations or considered as appropriate and otherwise self-insures against such risks. KHNP carries insurance for its generation units against certain risks, including property damage, nuclear fuel transportation and liability insurance for personal injury and property damage. KHNP carries property damage insurance covering up to US\$1 billion per accident for all properties within its plant complexes, which includes property insurance coverage for acts of terrorism up to US\$300 million and for breakdown of machinery up to US\$300 million. KHNP maintains nuclear liability insurance for personal injury and third-party property damage for coverage of up to Won 50 billion per accident per plant complex, for a total coverage of Won 250 billion. Under the terms of an agreement between KHNP and the Korean Atomic Insurance Pool, this coverage can be extended from Won 50 billion to Won 100 to 120 billion (Won 100 billion for a plant complex with under four units, and additional Won 10 billion added per unit for a plant complex with more than four units). KHNP is also the beneficiary of a Government indemnity with respect to such risks for damage claims of up to Won 50 billion per nuclear plant complex, for a total coverage of Won 250 billion. Under the Nuclear Damage Compensation Act of 1969, as amended, KHNP is liable only up to 300 million Special Drawing Rights, or SDRs, which amounts to approximately US\$463 million, at the rate of 1 SDR = US\$1.54171 as posted on the Internet homepage of the

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International Monetary Fund on April 7, 2014, per single accident; provided that such limitation will not apply where KHNP intentionally causes harm or knowingly fails to prevent the harm from occurring. KHNP will receive the Government's support, subject to the approval of the National Assembly, if (i) the damages exceed the insurance coverage amount of Won 50 billion and (ii) the Government deems such support to be necessary for the purposes of protecting damaged persons and supporting the development of nuclear energy business. The amount of Government's support to KHNP for such qualifying nuclear incident would be 300 million SDRs, or the limit of KHNP's liability, minus the coverage amount of up to Won 50 billion as determined by the National Assembly. While KHNP carries insurance for its generation units and nuclear fuel transportation, the level of insurance is generally adequate and is in compliance with relevant laws and regulations, and KHNP is the beneficiary of a certain Government indemnity which covers a portion of liability in excess of the insurance. Such insurance is limited in terms of amount and scope of coverage and does not cover all types or amounts of losses which could arise in connection with the ownership and operation of nuclear plants. Accordingly, material adverse financial consequences could result from a serious accident to the extent it is neither insured nor covered by the government indemnity.

See Item 3D. Risk Factors Risks Relating to KEPCO The amount and scope of coverage of our insurance are limited.

**Competition**

As of December 31, 2013, we and our generation subsidiaries owned approximately 81.5% of the total electricity generation capacity in Korea (excluding plants generating electricity for private or emergency use). New entrants to the electricity business will erode our market share and create significant competition, which could have a material adverse impact on our financial conditions and results of operation.

In particular, we compete with independent power producers with respect to electricity generation. The independent power generators accounted for 13.2% of total power generation in 2013 and 18.5% of total generation capacity as of December 31, 2013. As of December 31, 2013, there were 10 independent power generators in Korea, excluding renewable energy producers. Prior to December 2010, private enterprises had not been permitted to own and operate coal-fired power plants in Korea. However, the Fifth Basic Plan announced in December 2010 included for the first time a plan for independent power producers to own and operate coal-fired power plants, namely four generation units with aggregate capacity of 2,290 megawatts for completion in 2016. In addition, in connection with the Sixth Basic Plan announced in February 2013, the Ministry of Trade, Industry and Energy accepted additional applications from independent power producers for construction of coal-fired power plants. 15 independent power producers applied for construction of a total of 40 additional coal-fired generation units with aggregate generation capacity of 37,100 megawatts, of which the Government approved applications for the construction of six generation units with aggregate generation capacity of 6,000 megawatts. The Government also approved applications for construction of two additional generation units with aggregate generation capacity of 2,000 megawatts to prepare for the contingency of failed or delayed construction of the foregoing generation units. Construction for the six generation units is scheduled to be completed between 2018 and 2021. While it remains to be seen whether construction of these generation units will be completed as scheduled, if it were to be completed as scheduled or independent power producers are permitted to build additional generation capacity (whether coal-fired or not), our market share in Korea may decrease, which may have a material adverse effect on our results of operations and financial condition.

In addition, under the Community Energy System adopted by the Government in 2004, a minimal amount of electricity is supplied directly to consumers on a localized basis by independent power producers without having to undergo the cost-based pool system used by our generation subsidiaries and most independent power producers to distribute electricity nationwide. A supplier of electricity under the Community Energy System must be authorized by Korea Electricity Commission and be approved by the minister of the Ministry of Trade, Industry and Energy in accordance with the Electricity Business Act. The purpose of this system is to geographically decentralize electricity supply and thereby reduce transmission losses and improve the efficiency

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of energy use. These entities do not supply electricity on a national level but are licensed to supply electricity to limited geographic areas. As of March 31, 2014, the aggregate generation capacity of suppliers participating in the Community Energy System represented less than 1% of that of our generation subsidiaries in the aggregate. Accordingly, we currently do not expect the Community Energy System to be widely adopted, especially in light of the significant level of capital expenditure required for such direct supply. However, if the Community Energy System is widely adopted, it may erode our currently dominant market position in the generation and distribution of electricity in Korea, and may have a material adverse effect on our business, results of operations and financial condition.

The electric power industry, which began its liberalization process with the establishment of our power generation subsidiaries in April 2001, may become further liberalized in accordance with the Restructuring Plan. See Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea.

In the residential sector, consumers may use natural gas, oil and coal for space and water heating and cooking. However, currently there is no practical substitute for electricity for lighting and other household appliances, which is available on commercially affordable terms.

In the commercial sector, electricity is the dominant energy source for lighting, office equipment and air conditioning. For its other uses, such as space and water heating, natural gas and, to a lesser extent, oil, provide competitive alternatives to electricity.

In the industrial sector, electricity is the dominant energy source for a number of industrial applications, including lighting and power for many types of industrial machinery and processes that are available on commercially affordable terms. For other uses, such as heating, electricity competes with oil and natural gas and potentially with gas-fired combined heating and power plants.

## **Regulation**

We are a statutory juridical corporation established under the KEPCO Act for the purpose of ensuring a stable supply of electric power and further contributing toward the sound development of the national economy through facilitating development of electric power resources and carrying out proper and effective operation of the electricity business. The KEPCO Act (including the amendment thereto) prescribes that we engage in the following activities:

1. development of electric power resources;
2. generation, transmission, transformation and distribution of electricity and other related business activities;
3. research and development of technology related to the businesses mentioned in items 1 and 2;
4. overseas businesses related to the businesses mentioned in items 1 through 3;
5. investments or contributions related to the businesses mentioned in items 1 through 4;
6. businesses incidental to items 1 through 5;
7. Development and operation of certain real estate held by us to the extent that:
  - a. it is necessary to develop certain real estate held by us due to external factors, such as relocation, consolidation, conversion to indoor or underground facilities or deterioration of our substation or office; or

- b. it is necessary to develop certain real estate held by us to accommodate development of relevant real estate due to such real estate being incorporated into or being adjacent to an area under planned urban development; and

- 8. other activities entrusted by the Government.

The KEPCO Act currently requires that our profits be applied in the following order of priority:

first, to make up any accumulated deficit;

second, to set aside 20.0% or more of profits as a legal reserve until the accumulated reserve reaches one-half of our capital;

third, to pay dividends to shareholders;

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fourth, to set aside a reserve for expansion of our business;

fifth, to set aside a voluntary reserve for the equalization of dividends; and

sixth, to carry forward surplus profit.

As of December 31, 2013, the legal reserve was Won 1,604 billion and the voluntary reserve was Won 22,753 billion, which consisted of reserve for business expansion of Won 16,936 billion, reserve for investment in social overhead capital of Won 5,277 billion, research for research and human development of Won 330 billion and reserve for equalizing dividends of Won 210 billion.

We are under the supervision of the Ministry of Trade, Industry and Energy, which has principal responsibility with respect to director and management appointments and rate approval.

Because the Government owns part of our capital stock, the Government's Board of Audit and Inspection may audit our books.

The Electricity Business Act requires that licenses be obtained in relation to generation, transmission, distribution and sales of electricity, with limited exceptions. We hold the license to generate, transmit, distribute and sell electricity. Each of our six generation subsidiaries holds an electricity generation license. The Electricity Business Act governs the formulation and approval of electricity rates in Korea. See [Sales and Customers](#) [Electricity Rates](#) above.

Our operations are subject to various laws and regulations relating to environmental protection and safety. See [Community Programs](#) above.

**Proposed Sale of Certain Power Plants and Equity Interests**

The following table summarizes our current plans for sale of certain of our assets. The consummation of these plans, however, is subject to, among others, related Government policies and market conditions.

<b>Equity Holdings</b>	<b>Primary Business</b>	<b>Fair Value as of December 31, 2013 (in billions of Won)</b>	<b>Ownership Percentage as of December 31, 2013</b>	<b>Ownership Percentage to be Sold</b>
KEPCO Plant Service & Engineering Co., Ltd.	Utility plant maintenance	1,554	63.0%	12.0%
KEPCO Engineering & Construction Co., Inc.	Architectural engineering for utility plants	1,639	70.9%	19.9%
LG Uplus Corp.	Telecommunications and Internet access services	413	8.8%	8.8%
Korea Electric Power Industrial Development Co., Ltd. <i>KEPCO Plant Service &amp; Engineering Co., Ltd.</i>	Electricity metering	39	29.0%	29.0%

In December 2007, we completed the initial public offering of KEPCO Plant Service & Engineering Co., Ltd., or KPS, formerly our wholly-owned subsidiary, by listing approximately 20.0% of its equity interest on the Korea Stock Exchange for gross proceeds of Won 120 billion. Pursuant to the Third Phase of the Public Institution Reform Plan, we sold through block sales to third party investors 5.0% of KPS shares in December 2012, 5.0% in September 2012 and another 7.0% of KPS shares in December 2013. We currently hold a 63.0% equity interest in KPS.

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### *KEPCO Engineering & Construction Co., Inc.*

Pursuant to the Third Phase of the Public Institution Reform Plan announced by the Government in August 2008, we conducted the initial public offering of Korea Engineering and Construction Co., Ltd., or KEPCO E&C formerly known as Korea Power Engineering Co., Ltd., in December 2009 for gross proceeds to us of Won 165 billion, following which we owned 77.9% of KEPCO E&C's shares. In furtherance of the Third Phase of the Public Institution Reform Plan, we sold 3.08% of our shares in KEPCO E&C in November 2011 to third party investors for gross proceeds of approximately Won 101 billion. In December 2013, we further sold a 4.0% equity interest in KEPCO E&C to third party investors for gross proceeds of approximately Won 85 billion. We currently hold a 70.9% equity interest in KEPCO E&C.

### *LG Uplus Corp.*

We currently own a 8.8% equity interest in LG Uplus Corp., a telecommunications and Internet access service provider in Korea which is the surviving entity after the consolidation of LG Dacom, LG Telecom and LG Powercom in January 2010. Pursuant to the Fifth Phase of the Public Institution Reform Plan, we currently plan to sell our remaining equity interest in LG Uplus Corp. subject to prevailing economic and market conditions.

### *Korea Electric Power Industrial Development Co., Ltd.*

In 2003, we privatized Korea Electric Power Industrial Development, or KEPID, formerly our wholly-owned subsidiary, by selling 51.0% of its equity interest to Korea Freedom Federation. Pursuant to the Fifth Phase of the Public Institution Reform Plan announced by the Government in 2009, we sold 20% of the KEPID shares through additional listing. We currently plan to sell the remaining 29.0% of KEPID's equity interest based on, among others, considerations of economic and market conditions.

## **Item 4C. Organizational Structure**

As of December 31, 2013, we had 80 subsidiaries, 58 associates and 36 joint ventures (not including any special purpose entities).

### **Subsidiaries**

Our wholly-owned six generation subsidiaries are KHNP, KOSEP, KOMIPO, KOWEPO, KOSPO and EWP. Our non-generation subsidiaries include KEPCO E&C, KEPCO KPS, KEPCO NF, and KEPCO KDN. For a full list of our subsidiaries, including foreign subsidiaries, and their respective jurisdiction of incorporation, please see Exhibit 8.1 attached to this annual report.

### **Associates and Joint Ventures**

An associate is an entity over which we have significant influence and that is neither a subsidiary nor a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but does not have control or joint control over those policies. According to IFRS 11, joint arrangements are classified as joint operations or joint ventures, depending on the rights and obligations of the parties to the arrangements. As a result of IFRS 11, we have changed our accounting policy for our interests in joint arrangements. Under IFRS 11, we have classified our interests in joint arrangements as either joint operations (if we have rights to the assets, and obligations for the liabilities, relating to an arrangement) or joint ventures (if we have rights only to the net assets of an arrangement). When making this assessment, we considered the structure of the arrangements, the legal form of any separate vehicles, the contractual terms of the arrangements and other facts and circumstances. Previously, the structure of the arrangement was the sole focus of classification. We have re-evaluated our involvement in our only joint arrangement and have reclassified the investment from a jointly controlled entity to a joint venture. See Note 17 of the notes to our financial statements.



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The table below sets forth for each of our principal associates and joint ventures the name and our percentage shareholdings and their principal activities as of December 31, 2013.

	Ownership (Percent)	Principal Activities
<b>Associates:</b>		
Daegu Green Power Co., Ltd.	48	Power generation
Korea Gas Corporation	20	Importing and wholesaling LNG
Korea Electric Power Industrial Development Co., Ltd.	29	Electricity metering
YTN Co., Ltd.	21	Broadcasting
Cheongna Energy Co., Ltd.	44	Generating and distributing
		vapor and hot/cold water
Gangwon Wind Power Co., Ltd. <sup>(1)</sup>	15	Wind power generation
Hyundai Green Power Co., Ltd.	29	Power generation
Korea Power Exchange <sup>(2)</sup>	100	Management of power market
AMEC Partners Korea <sup>(3)</sup>	19	Resources development
Hyundai Energy Co., Ltd. <sup>(4)</sup>	29	Power generation
Ecollite Co., Ltd.	36	Artificial light-weight aggregate
Taebaek Wind Power Co., Ltd.	25	Power generation
Alternergy Philippine Investments Corporation	50	Power generation
Muju Wind Power Co., Ltd.	25	Power generation
Pyeongchang Wind Power Co., Ltd.	25	Power generation
Daeryun Power Co., Ltd.	20	Power generation
JinanJangsu Wind Power Co., Ltd.	25	Power generation
Changjuk Wind Power Co., Ltd.	30	Power generation
KNH Solar Co., Ltd.	27	Power generation
SPC Power Corporation	38	Power generation
Gemeng International Energy Co., Ltd.	34	Power generation
PT. Cirebon Electric Power	28	Power generation
KNOC Nigerian East Oil Co., Ltd. <sup>(5)</sup>	15	Resources development
KNOC Nigerian West Oil Co., Ltd. <sup>(5)</sup>	15	Resources development
Dolphin Property Limited <sup>(5)</sup>	15	Rental company
E-Power S.A.	30	Operation of utility plant
		and sales of electricity
PT Wampu Electric Power	46	Power generation
PT. Bayan Resources TBK	20	Resources development
S-Power Co., Ltd.	40	Power generation
Pioneer Gas Power Limited <sup>(6)</sup>	40	Power generation
Eurasia Energy Holdings	40	Power generation and
		resources development
Xe-Pian Xe-Namnoy Power Co., Ltd.	25	Power generation
Busan Solar Co., Ltd. <sup>(3)</sup>	20	Power generation
Hadong Mineral Fiber Co., Ltd.	25	Recycling fly ashes
Green Biomass Co., Ltd.	34	Power generation
Gumi-Ochang Photovoltaic Power Co., Ltd. <sup>(1)</sup>	10	Power generation
Chungbuk Photovoltaic Power Co., Ltd. <sup>(1)</sup>	10	Power generation
Cheonan Photovoltaic Power Co., Ltd. <sup>(1)</sup>	10	Power generation
PT. Mutiara Jawa	29	Manufacturing and operating
		floating coal terminal
Hyundai Asan Solar Power Co., Ltd.	10	Power generation



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	Ownership (Percent)	Principal Activities
Heang Bok Do Si Photovoltaic Power Co., Ltd.	28	Power generation
Jeonnam Solar Co., Ltd.	10	Power generation
DS POWER Co., Ltd.	11	Power generation
D Solarenergy Co., Ltd. <sup>(1)</sup>	10	Power generation
Dongducheon Dream Power Co., Ltd.	44	Power generation
KS Solar Corp. Ltd. <sup>(3)</sup>	19	Power generation
KOSCON Photovoltaic Co., Ltd. <sup>(1)</sup>	19	Power generation
Yeongwol Energy Station Co., Ltd. <sup>(1)</sup>	13	Power generation
Yeonan Photovoltaic Co., Ltd. <sup>(1)</sup>	19	Power generation
Q1 Solar Co., Ltd.	28	Power generation
Jimbhuvish Power Generation <sup>(1)</sup>	5	Power generation
Best Solar Energy Co., Ltd.	23	Power generation
Seokcheon Solar Power Co., Ltd. <sup>(1)</sup>	10	Power generation
SE Green Energy Co., Ltd.	48	Power generation support
Daegu Photovoltaic Co., Ltd.	29	Power generation
Jeongam Wind Power Co., Ltd.	40	Power generation
Korea Power Engineering Service Co., Ltd.	29	Construction and service
Golden Route J Solar Power Co., Ltd. <sup>(1)</sup>	10	Photovoltaic power generation
<b>Joint Ventures:</b>		
KEPCO-Uhde Inc. <sup>(7)</sup>	66	Power generation
Eco Biomass Energy Sdn. Bhd. <sup>(7)</sup>	62	Power generation
Datang Chaoyang Renewable Power Co., Ltd.	40	Power generation
Shuweiht Asia Power Investment B.V.	49	Holding company
Shuweiht Asia Operation & Maintenance Company <sup>(7)</sup>	55	Maintenance of utility plant
Waterbury Lake Uranium L.P.	40	Power generation
ASM-BG Investicii AD	50	Power generation
RES Technology AD	50	Power generation
KV Holdings, Inc.	40	Power generation
KEPCO SPC Power Corporation <sup>(7)</sup>	75	Construction and operation of utility plant
Canada Korea Uranium Limited Partnership <sup>(8)</sup>	13	Resources development
KEPCO Energy Resource Nigeria Limited	30	Holding company
Gansu Datang Yumen Wind Power Co., Ltd.	40	Power generation
Datang Chifeng Renewable Power Co., Ltd.	40	Power generation
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	40	Power generation
Rabigh Electricity Company	40	Sales of electricity
Rabigh Operation & Maintenance Company	40	Maintenance of utility plant
Jamaica Public Service Company Limited	40	Power generation
KW Nuclear Components Co., Ltd.	45	Research and development
Busan Shinho Solar power Co., Ltd.	25	Power generation
STX Electric Power Co., Ltd.	49	Power generation
YEONGAM Wind Power Co., Ltd.	49	Power generation
Global Trade of Power System Co., Ltd.	29	Exporting products and technology of small or medium business by proxy
Expressway Solar-light Power Generation Co., Ltd	29	Power generation
KODE NOVUS 1 LLC.	50	Power generation
KODE NOVUS 2 LLC.	49	Power generation

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	Ownership (Percent)	Principal Activities
Daejung Offshore Wind Power Co., Ltd.	50	Power generation
Arman Asia Electric Power Company <sup>(7)</sup>	60	Power generation
KEPCO-ALSTOM Power Electronics Systems, Inc. <sup>(7)</sup>	51	Research and development
Dongbu Power Dangjin Corporation	40	Power generation
Honam Wind Power Co., Ltd.	46	Power generation
Nepal Water & Energy Development Company Pty Ltd.	44	Power generation
Kelar S.A. <sup>(7)</sup>	65	Power generation
PT. Tanjung Power Indonesia	35	Power generation
Incheon New Power Co., Ltd.	29	Power generation
Seokmun Energy Co., Ltd.	34	Integrated energy business

*Notes:*

- (1) We can exercise significant influence by virtue of our contractual right to appoint directors to the board of directors of the entity, and by special decision criteria of our financial and operating policy of the board of directors.
- (2) The Government regulates our ability to make operating and financial decisions over the entity, as the Government requires maintaining arms-length transactions between KPX and our other subsidiaries. We can exercise significant influence by its right to nominate directors to the board of directors of the entity.
- (3) We can exercise significant influence by virtue of our contractual right to appoint a director to the board of directors of the entity.
- (4) As of December 31, 2013, NH Power II Co., Ltd. and NH Bank collectively held a 16% equity interest in Hyundai Energy Co., Ltd. According to the shareholders' agreement in March 2011, we have a call option to acquire the equity interest in Hyundai Energy Co., Ltd. held by NH Power II Co., Ltd. and NH Bank provided that we pay them a certain rate of return thereon, and NH Power II Co., Ltd. and NH Bank have put options to dispose of their equity interests to us. In connection with this agreement, we applied the equity method of investment in Hyundai Energy Co., Ltd. based on a deemed ownership of an 45% equity interest therein.
- (5) We can exercise significant influence by virtue of our contractual right to appoint one out of four members of the steering committee of the entity. Moreover, we have significant financial transactions with the associate, through which we can exercise significant influence on the entity.
- (6) As of the reporting date, the reporting periods of all associates and joint ventures end on December 31, except for Pioneer Gas Power Limited whose reporting period ends on March 31.
- (7) According to the shareholder agreement, all critical financial and operating decisions must be agreed by all parties with ownership interests. For these reasons, the entities are classified as joint ventures.
- (8) We have joint control on the associates by virtue of our contractual right to appoint directors to the board of directors of the entity, and by special decision criteria of our financial and operating policy of the board of directors.

**Item 4D. Property, Plant and Equipment**

Our property consists mainly of power generation, transmission and distribution equipment and facilities in Korea. See Item 4B. Business Overview Power Generation, Transmission and Distribution and Capital Investment Program. In addition, we own our corporate headquarters building complex at 512 Yeongdongdaero, Gangnam-gu, Seoul 135-791, Korea. In June 2005, the Government announced its policy to relocate the headquarters of government-invested enterprises, including us and certain of our subsidiaries, out of the Seoul metropolitan area to other provinces in Korea. As of December 31, 2013, the net book value of our property, plant and equipment was Won 129,638 billion. As of December 31, 2013, investment property, which

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is accounted for separately from our property, plant and equipment, amounted to Won 538 billion. No significant amount of our properties is leased. There are no material encumbrances on our properties, including power generation, transmission and distribution equipment and facilities.

**ITEM 4A. UNRESOLVED STAFF COMMENTS**

We do not have any unresolved comments from the SEC staff regarding our periodic reports under the Securities Exchange Act of 1934, as amended (the Exchange Act ).

**ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS**

*You should read the following discussion on our operating and financial review and prospects together with our consolidated financial statements and the related notes which appear elsewhere in this annual report. Our results of operations, financial condition and cash flows may materially change from time to time, for reasons including various policy initiatives (including changes to the Restructuring Plan) by the Government in relation to the Korean electric power industry, and accordingly our historical performance may not be indicative of our future performance. See Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea and Item 3D. Risk Factors The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.*

**Item 5A. Operating Results**

**Overview**

We are a predominant market participant in the Korean electric power industry, and our business is heavily regulated by the Government, including with respect to the rates we charge to customers for the electricity we sell. In addition, our business requires a high level of capital expenditures for the construction of electricity generation, transmission and distribution facilities and is subject to a number of variable factors, including demand for electricity in Korea and fluctuations in fuel costs, which are in turn impacted by the movements in the exchange rates between the Won and other currencies.

Under the Electricity Business Law and the Price Stabilization Act, the Government generally establishes electricity rates at levels that are expected to permit us to recover our operating costs attributable to our basic electricity generation, transmission and distribution operations in addition to receiving a fair investment return on capital used in those operations. For a detailed description of the fair investment return, see Item 4B. Business Overview Sales and Customers Electricity Rates. From 2008 to 2012, we had consecutive net losses and, from time to time, operating losses, due to substantial increases in fuel prices which have more than offset the effect from the increases in the electricity tariff rates we charge to our customers. In 2013, largely due to increases in electricity tariff rates and the general decline of fuel prices, we had an operating profit and a net profit.

If fuel prices were to rise substantially and rapidly in the future, such rise may have a material adverse effect on our results of operations and profitability. In part to address these concerns, the Government from time to time increases the electricity tariff rates (most recently in January and November 2013). However, such increases may be insufficient to fully offset the adverse impact from the rise in fuel costs, and since such increases typically require lengthy public deliberations in order to be implemented, the tariff increases often occur with a significant time lag and as a result our results of operations and cash flows may suffer.

Further to the announcement by the Ministry of Trade, Industry and Energy in February 2010, a new electricity tariff system went into effect on July 1, 2011. This system is designed to overhaul the prior system for determining electricity tariff chargeable to customers by more closely aligning the tariff levels to movements in

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fuel prices, with the aim of providing more timely pricing signals to the market regarding the expected changes in electricity tariff levels and encouraging more efficient use of electricity by customers. Previously, the electricity tariff consisted of two components: (i) base rate and (ii) usage rate based on the cost of electricity and the amount of electricity consumed by the end-users. Under the new tariff system, the electricity tariff also has a third component of fuel cost pass-through adjustment ( FCPTA ) rate, which is to be added to or subtracted from the sum of the base rate and the usage rate on a monthly basis based on the three-month average movements of coal, LNG and oil prices. The new tariff system is intended to provide greater financial stability and ensure a minimum return on investment to electricity suppliers, such as us. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Trade, Industry and Energy issued a hold order on July 29, 2011 suspending our billing and collecting of the FCPTA amount. The hold order remains in effect to-date. Furthermore, on January 11, 2013, the Ministry of Trade, Industry and Energy informed us that the FCPTA system needed to be reassessed in light of the other factors such as the prolonged unbilled period since the announcement of the FCPTA system. There is no assurance as to when the Government will lift the hold order and allow us to bill and collect the accumulated FCPTA amount or whether the new tariff system will undergo other amendments to the effect that it will not fully cover our fuel and other costs on a timely basis or at all, or will not have unintended consequences that we are not presently aware of. Any such development may have a material adverse effect on our business, financial condition, results of operations and cash flows. For further discussion, including in relation to accounting, see Item 5A. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment.

The results of our operations are largely affected by the following factors:

demand for electricity;

electricity rates we charge to our customers;

fuel costs; and

the exchange rates of Won against other foreign currencies, in particular the U.S. dollar.

***Demand for Electricity***

Our sales are largely dependent on the level of demand for electricity in Korea and the rates we charge for the electricity we sell.

Demand for electricity in Korea grew at a compounded average rate of 4.3% per annum for the five years ended December 31, 2013. According to the Bank of Korea, the compounded growth rate for real gross domestic product, or GDP, was approximately 3.2% during the same period. The GDP increased, on a year-on-year basis, by 3.7% in 2011, by 2.3% in 2012 and by 3.0% in 2013.

The table below sets forth, for the periods indicated, the annual rate of growth in Korea's gross domestic product, or GDP, and the annual rate of growth in electricity demand (measured by total annual electricity consumption).

	2009	2010	2011	2012	2013
Growth in GDP	0.7%	6.5%	3.7%	2.3%	3.0%
Growth in electricity consumption	2.4%	10.1%	4.8%	2.5%	1.8%

Demand for electricity may be categorized either by the type of its usage or by the type of customers. The following describes the demand for electricity by the type of its usage, namely, industrial, commercial and residential:

The industrial sector represents the largest segment of electricity consumption in Korea. Demand for electricity from the industrial sector was 265,373 gigawatt hours in 2013, representing a 2.8% increase from 2012, largely due to continued export-led growth of

the Korean economy.

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Demand for electricity from the commercial sector has increased in recent years, largely due to increased commercial activities in Korea and the rapid expansion of the service sector of the Korean economy, which has resulted in increased office building construction, office automation and use of air conditioners. Demand for electricity from the commercial sector remained largely stable at 102,196 gigawatt hours in 2013, representing a 0.6% increase from 2012.

In 2013, we distributed electricity to approximately 22 million households, which represent substantially all of the households in Korea. Demand for electricity from the residential sector is largely dependent on population growth and use of heaters, air conditioners and other electronic appliances. Demand for electricity from the residential sector remained relatively stable at 65,815 gigawatt hours in 2013, representing a 0.5% increase compared to 2012.

For a discussion on demand by the type of customers, see Item 4B. [Business Overview](#) [Sales and Customers](#) [Demand by the Type of Usage](#).

Since our inception, we have had the predominant market share in terms of electricity generated in Korea. As for electricity we purchase from the market for transmission and distribution to our end-users, our generation subsidiaries accounted for 88.9%, 90.9% and 89.4% in 2011, 2012 and 2013, respectively, while the remainder was accounted for by independent power producers. As for transmission and distribution of electricity, we have historically handled, expect to continue to handle, substantially all of such activities in Korea.

We expect that we will continue to have a dominant market share in the generation, transmission and distribution of electricity in Korea for the foreseeable future, absent any substantial changes to the Restructuring Plan or other policy initiatives by the Government in relation to the Korean electric power industry, or an unexpected level of market penetration by independent power producers or localized electricity suppliers under the Community Energy System. See Item 4B. [Business Overview](#) [Competition](#).

### ***Electricity Rates***

Under the Electricity Business Law and the Price Stabilization Act, electricity rates are established at levels that will permit us to recover our operating costs attributable to our basic electricity generation, transmission and distribution operations in addition to receiving a fair investment return on capital used in those operations. For further discussion of fair investment return, see Item 4B. [Business Overview](#) [Sales and Customers](#) [Electricity Rates](#).

From time to time, our actual rate of return on invested capital may differ significantly from the fair rate of return on invested capital assumed for the purposes of electricity tariff approvals, for reasons, among others, related to movements in fuel prices, exchange rates and demand for electricity that differs from what is assumed for determining our fair rate of return. For example, between 1987 and 1990, the actual rate of return was above the fair rate of return due to declining fuel costs and rising demand for electricity. In contrast, depreciation of the Won against the U.S. dollar accounted for our actual rates of return being lower than the fair rate of return for the period from 1996 to 2000. Partly in response to the variance between our actual rates of return and the fair rate of return, the Government from time to time increases the electricity tariff rates, but there typically is a significant time lag for the tariff increase as such increase requires a series of deliberative processes and administrative procedures and the Government also has to consider other policy considerations, such as the inflationary effect of overall tariff increases and the efficiency of energy use through sector-specific tariff increases. For the period since 2006, our actual rate of return has been lower than the fair rate of return largely due to increases in fuel costs and additional facility investment costs, the effects of which were not offset by timely increases in the electricity tariff rates.



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Recent increases to the electricity tariff rates by the Government involve the following, which were made principally in response to the rising fuel prices which hurt our profitability as well as to encourage a more efficient use of electricity by the different sectors:

effective August 1, 2011, a 4.9% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, residential, educational, street lighting and overnight power usage tariff rates by 6.1%, 4.4%, 2.0%, 6.3%, 6.3% and 8.0%, while making no changes to the agricultural tariff.

effective December 5, 2011, a 4.5% overall increase in our average tariff rate, consisting of increases in the industrial, commercial, educational and street lighting tariff rates by 6.5%, 4.5%, 4.5% and 6.5%, while making no changes to the residential, agricultural and overnight power usage tariff.

effective August 6, 2012, a 4.9% overall increase in our average tariff rate, consisting of increases in the residential, commercial, educational, industrial, street lighting, agricultural and overnight power usage tariff rates by 2.7%, 4.4%, 3.0%, 6.0%, 4.9%, 3.0% and 4.9%, respectively.

effective January 14, 2013, a 4.0% overall increase in our average tariff rate, consisting of increases in the residential, commercial, industrial, educational, agricultural, street lighting and overnight power usage tariff rates by 2.0%, 4.6%, 4.4%, 3.5%, 3.0%, 5.0% and 5.0%, respectively.

effective November 21, 2013, a 5.4% overall increase in our average tariff rate, consisting of increases in the residential, commercial, industrial, agricultural, street lighting and overnight power usage tariff rates by 2.7%, 5.8%, 6.4%, 3.0%, 5.4% and 5.4%, respectively, while making no change to the educational tariff.

### ***Fuel Costs***

Our results of operations are also significantly affected by the cost of producing electricity, which is subject to a variety of factors, including, in particular, the cost of fuel.

Cost of fuel in any given year is a function of the volume of fuels consumed and the unit fuel cost for the various types of fuel used for generation of electricity which affects the cost structure for both our generation subsidiaries and independent power producers from whom we purchase electric power. A significant change in the unit fuel costs materially impacts the costs of electricity generated by our generation subsidiaries, which mainly comprise our fuel costs under the cost of sales, as well as, to our knowledge, the costs of electricity generated by the independent power producers that sell their electricity to us (see Item 4A. Purchase of Electricity Cost-based Pool System ), which mainly comprise our purchased power costs under the cost of sales. We are however unable to provide a comparative analysis since the unit fuel cost information for independent power producers and their cost structures are proprietary information.

Fuel costs accounted for 49.7%, 48.5% and 45.1% of our sales and 50.2%, 49.2% and 47.8% of our cost of sales in 2011, 2012 and 2013, respectively. Substantially all of the fuel (except for anthracite coal) used by our generation subsidiaries is imported from outside of Korea at prices determined in part by prevailing market prices in currencies other than Won. In addition, our generation subsidiaries purchase a significant portion of their fuel requirements under contracts with limited quantity and duration. Pursuant to the terms of our long-term supply contracts, prices are adjusted from time to time subject to prevailing market conditions. See Item 4B. Business Overview Fuel.

Uranium accounted for 34.9%, 33.5% and 30.9% of our fuel requirements in 2011, 2012 and 2013, respectively. Coal accounted for 43.1%, 42.5% and 43.0% of our fuel requirements in 2011, 2012 and 2013, respectively. LNG accounted for 16.7%, 17.7% and 19.7% of our fuel requirements in 2011, 2012 and 2013, respectively. Oil accounted for 2.4%, 3.2% and 3.3% of our fuel requirements in 2011, 2012 and 2013, respectively. In each case, the fuel requirements are measured by the amount of electricity generated by us and our generation subsidiaries and do not include electricity purchased from independent power producers. In order to ensure stable supplies of fuel materials, our generation subsidiaries enter into long-term and medium-term contracts with various suppliers and supplement such supplies with fuel materials purchased on spot markets.



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The price of bituminous coal fluctuates significantly from time to time. See Item 4B. Business Overview Fuel. In 2013, approximately 89.0% of the bituminous coal requirements of our generation subsidiaries were purchased under long-term contracts and 11.0% purchased on the spot market. The average free on board Newcastle coal 6300 GAR spot price index published by Platts declined from US\$96.2 per ton in 2012 to US\$85.1 per ton in 2013 and US\$73.8 per ton as of April 11, 2014. If the price of bituminous coal were to sharply rise, our generation subsidiaries may not be able to secure their respective bituminous coal supplies at prices commercially acceptable to them. In addition, any significant interruption or delay in the supply of fuel, bituminous coal in particular, from any of their suppliers could cause our generation subsidiaries to purchase fuel on the spot market at prices higher than contracted, resulting in an increase in fuel cost.

Nuclear power has a stable and relatively low-cost structure and forms a significant portion of electricity supplied in Korea. Due to significantly lower unit fuel costs compared to those for thermal power plants, our nuclear power plants are generally operated at full capacity with only routine shutdowns for fuel replacement and maintenance, with limited exceptions. In case of shortage in electricity generation resulting from stoppages of the nuclear power plants, we seek to make up for such shortage with power generated by our thermal power plants.

Because the Government heavily regulates the rates we charge for the electricity we sell (see Item 4B. Business Overview Sales and Customers Electricity Rates ), our ability to pass on such cost increases to our customers is limited. For example, from 2008 to 2012 we had consecutive net losses and, from time to time, operating losses, largely due to sustained rises in fuel costs that were neither timely nor sufficiently offset by a corresponding rise in electricity tariff rates. If fuel prices substantially increase and the Government, out of concern for inflation or for other reasons, maintains the current level of electricity tariff and does not increase it to a level to sufficiently offset the impact of rising fuel prices or prolongs the hold-order on the fuel cost pass-through adjustment system or amend or modify it to the effect that we are prevented from billing and collection of the fuel cost pass-through adjustment amount on a timely basis or at all, the price increases will negatively affect our profit margins or even cause us to suffer net losses and our business, financial condition, results of operations and cash flows would suffer.

***Movements of the Won against the U.S. Dollar and Other Foreign Currencies***

Korean Won fluctuates significantly against major currencies from time to time. For fluctuations in exchange rates, see Item 3A. Selected Financial Data Currency Translations and Exchange Rates. In particular, Korean Won underwent substantial fluctuations during the recent global financial crisis, and remains subject to significant volatility. The Noon Buying Rate per one U.S. dollar decreased from Won 1,158.5 on December 31, 2011 to Won 1,063.2 on December 31, 2012 and to Won 1,055.3 on December 31, 2013 and was Won 1,035.4 on April 11, 2014. While the Won generally appreciated against U.S. dollar and other foreign currencies in 2013, Won also depreciates from time to time, and such depreciation may result in a significant increase in the cost of fuel materials and equipment purchased from overseas as well as the cost of servicing our foreign currency debt. As of December 31, 2013, approximately 20.9% of our long-term debt (including the current portion but excluding issue discounts and premium) before accounting for swap transactions was denominated in foreign currencies, principally U.S. dollars. The prices for substantially all of the fuel materials and a significant portion of the equipment we purchase are stated in currencies other than Won, generally in U.S. dollars. Since a substantial portion of our revenues is denominated in Won, we must generally obtain foreign currencies through foreign currency-denominated financings or from foreign currency exchange markets to make such purchases or service such debt, fulfill our obligations under existing overseas investments and make new overseas investments. As a result, any significant depreciation of Won against U.S. dollar or other foreign currencies will have a material adverse effect on our profitability and results of operations. See Item 3D. Risk Factors Risks Relating to KEPCO The movement of Won against the U.S. dollar and other currencies may have a material adverse effect on us.

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### **Recent Accounting Changes**

#### ***New Amendments Adopted***

New amendments to IFRS and other accounting standards are set forth below. These amendments had no impact on our consolidated financial statements included in this annual report.

Amendments to IFRS 10 Consolidated Financial Statements

Amendments to IFRS 11 Joint Arrangement

Amendments to IFRS 12 Disclosure of Interests in Other Entities

Amendments to IFRS 13 Fair Value Measurement

Amendments to IAS 19 Employee Benefits

Amendments to IFRIC 20 Stripping Costs in the Production Phase of a Surface Mine

See Note 2 of the notes to our consolidated financial statements included in this annual report for further related information.

#### ***New Amendments Not Yet Adopted***

The following new amendments to existing IFRS and other standards have been published for mandatory application for annual periods beginning after January 1, 2014. We have not early adopted them. We are in the process of evaluating the impact on our consolidated financial statements upon the adoption of these amendments.

Amendments to IFRS 7 Financial Instruments: Disclosures

Amendments to IFRIC 21 Levies

See Note 2 of the notes to our consolidated financial statements included in this annual report for further related information.

### **Critical Accounting Policies**

The following discussion and analysis are based on our consolidated financial statements included in this annual report. The fundamental objective of financial reporting is to provide useful information that allows a reader to comprehend our business activities. To aid in that understanding, our management has identified critical accounting policies.

We make a number of estimates and judgments in preparing our consolidated financial statements. These estimates may differ from actual results and have a significant impact on our recorded assets, liabilities, revenues and expenses and related disclosure of contingent assets and liabilities. We consider an estimate to be a critical accounting estimate if it requires a high level of subjectivity or judgment, and a significant change in the estimate would have a material impact on our financial condition or results of operations. Further discussion of these critical accounting estimates and policies is included in the notes to our consolidated financial statements included in this annual report.

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The accounting policies set out below have been applied consistently by us and our subsidiaries to all periods presented in the consolidated annual financial statements, unless otherwise indicated.

### *Sale and Purchase of Electricity*

The Government approves the rates we charge to customers. Our utility rates are designed to recover our reasonable costs plus a fair investment return. We purchase electricity principally from our generation subsidiaries based on a competitive bidding process through the Korea Power Exchange.

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We recognize electricity sales revenue based on power sold (transferred to the customer) up to the reporting date. To determine the amount of power sold, we make reasonable estimates on daily power volumes for residential, commercial, industrial and other uses. The differences between the current month's estimated amounts and actual (meter-read) amounts are adjusted (trued-up) during the next month period.

***Correction of Accounting for Fuel Cost Pass-through Adjustment***

As of July 1, 2011, a new electricity tariff system approved by the Government took effect featuring a fuel cost pass-through adjustment (FCPTA). This system is intended to allow us to pass through fluctuations in fuel costs ultimately to customers. The FCPTA amount is determined based on a prior three-month period moving average of international fuel prices and other factors, and such amount is reflected two months later. On July 29, 2011, out of inflationary and other policy considerations, the Government issued a hold-order suspending us from billing or collecting the FCPTA amount from customers.

Our accounting policy was to recognize unbilled fuel cost adjustments as assets under the IFRS Conceptual Framework when we concluded that it is probable that future economic benefits would flow to us. We had concluded that we controlled a resource as a result of past events from which future economic benefits were expected to flow to us. The Regulation for Electricity Service, which regulates the FCPTA system, provides a legal resource or right to bill where the costs we incur will result in future cash flows. The operation of the FCPTA system creates a right to charge rates in amounts that would permit us to recover the related costs, such amounts being subject to government approval. In addition, we relied on the authority of the Ministry of Trade, Industry and Energy, which regulates and approves the electricity tariff we charge to our customers, including the FCPTA system. As of December 31, 2011, we determined that it was probable that economic benefits associated with the unbilled fuel cost adjustments would be realizable based on the authority of the Ministry of Trade, Industry and Energy in setting and enforcing electricity rates for customers. Therefore, we concluded that as of December 31, 2011 it was probable that our unbilled FCPTA amount would be collected.

We previously recognized revenue and a receivable for the FCPTA amounts subject to the hold order in the amount of Won 357,085 million at December 31, 2011. However, we came to realize that our FCPTA rate regulatory scheme closely resembles a cost-of service scheme, and have therefore determined that the appropriate accounting for the unbilled FCPTA amounts is to reduce cost of sales by the unbilled FCPTA amounts and recognize a related non-financial asset by the same amount, which is more consistent with accounting policies for rate regulated assets of other standard-setting bodies. In accordance with IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors, we used judgment in developing and applying an accounting policy that results in information that is relevant and reliable. In making that judgment, management considered pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices. We have concluded that the aforementioned error is immaterial, and corrected the accounting for our unbilled FCPTA amounts in our consolidated financial statements as of and for the year ended December 31, 2011 included in Item 18. Financial Statements.

During the fourth quarter of 2012, we had further consultations with the Ministry of Trade, Industry and Energy as to the outlook for the lifting the hold-order. Furthermore, on January 11, 2013, the Ministry of Trade, Industry and Energy informed us that the FCPTA system needed to be reassessed in light of other factors such as the prolonged unbilled period since the announcement of the FCPTA system. We have therefore concluded that, in consideration of the prolonged unbilled period and recent consultations with, and information from, the Ministry, we would not be able to bill and collect the unbilled FCPTA amounts for the foreseeable future. As a result, we wrote off the entire unbilled FCPTA amounts of Won 1,877 billion recognized through December 31, 2012, including the unbilled FCPTA amounts as of December 31, 2011. As a result, there were no FCPTA amounts remaining in the consolidated statement of financial position as of December 31, 2012 and 2013.

Furthermore, we will cease recording a regulatory asset prospectively related to the FCPTA amounts unless and until the likelihood of recovery once again satisfies the probable threshold contained in the IFRS Conceptual Framework or enacted IFRS at such time.

**Table of Contents*****Derivative Instruments***

We recognize rights and obligations arising from derivative instruments as assets and liabilities, which are stated at fair value. The gains and losses that result from the change in the fair value of derivative instruments are reported in current earnings. However, for derivative instruments designated as hedging the exposure of variable cash flows, the effective portions of the gains or losses on the hedging instruments are recorded as accumulated other comprehensive income (loss) and credited or charged to operations at the time the hedged transactions affect earnings, and the ineffective portions of the gains or losses are credited or charged immediately to operations.

Significant management judgment is involved in determining the fair value of estimated derivative instruments. The estimates and assumptions used by our management to determine fair value can be impacted by many factors, such as the estimated discount factor derived from observable market data, credit risk of the counterparty and the estimated cash flow based on settlement period, interest convention, and other contract information of the derivative instruments.

As of December 31, 2011, we had Won 244 billion of net amounts as assets, and as of December 31, 2012, we had Won 376 billion of net amounts as liabilities. As of December 31, 2013, we had Won 614 billion of net amounts as liabilities. Changes in the estimated discount factor or cash flow, or changes in the assumptions and judgments by management underlying these estimates, may cause material revisions to the estimated total gain or loss effect of derivative instruments, which could have a material effect on the recorded asset or liability.

***Decommissioning Costs***

We recognize the fair value of estimated decommissioning costs as a liability in the period in which we incur a legal obligation associated with retirement of long-lived assets that result from acquisition, construction, development and/or normal use of the assets. We also recognize a corresponding asset that is depreciated over the life of the asset. Accretion expense consists of period-to-period changes in the liability for decommissioning costs resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flows. Depreciation and accretion expenses are included in the cost of electric power in the accompanying consolidated statements of comprehensive income.

Significant management judgment is involved in determining the fair value of estimated decommissioning costs. The estimates and assumptions used by our management to determine fair value can be impacted by many factors, such as the estimated decommissioning costs based on engineering studies commissioned and approved by the Korean government, and changes in assumed dates of decommissioning, inflation rate, discount rate, decommissioning technology, regulation and the general economy.

As of December 31, 2011, 2012 and 2013, we had a liability for decommissioning costs in the amounts of Won 6,727 billion, Won 11,913 billion and Won 12,348 billion, respectively. Changes in the estimated costs or timing of decommissioning, or changes in the assumptions and judgments by management underlying these estimates, may cause material revisions to the estimated total cost to decommission these facilities, which could have a material effect on the recorded liability. We used discount rates of 4.36%, 4.49% and 4.49% and inflation rates of 2.30%, 2.93% and 2.93% when calculating the decommissioning cost liability recorded as of December 31, 2011, 2012 and 2013, respectively. In addition, the following is a sensitivity analysis of the potential impact on decommissioning costs from a 0.1% increase or decrease in each of the inflation rate and the discount rate, assuming that all other aforementioned assumptions remain constant:

	Sensitivity to inflation rate		Sensitivity to discount rate	
	+0.10%	-0.10%	+0.10%	-0.10%
	(in billions of Won)			
Increase (decrease) of liability for decommissioning costs	289	(281)	(268)	276

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See Notes 26 and 43 of the notes to our consolidated financial statements included in this annual report for further related information.

### ***Provision for Decontamination of Transformer***

Under the Persistent Organic Pollutants Management Act which was enacted in 2007, we are required to remove the toxin polychlorinated biphenyls (PCBs) from our transformers' insulating oil by 2015. We are also required to inspect the PCB levels in our transformers and dispose of any PCBs in excess of established safety standards.

As of December 31, 2011, 2012 and 2013, we had liabilities of Won 215 billion, Won 220 billion and Won 220 billion, respectively, for inspection and disposal costs related to the decontamination of existing transformers.

The estimates and assumptions used by our management to determine fair value can be affected by many factors, such as the estimated costs of inspection and disposal, inflation rate, discount rate, regulations and the general economy.

Changes in the estimated costs or changes in the assumptions and judgments underlying these estimates may cause material revisions to the estimated total costs, which could have a material effect on our recorded liability. When calculating the provision for the decontamination of our transformers, we used a discount rate of 5.84% and an inflation rate of 3.34% as of December 31, 2011, a discount rate of 4.92% and an inflation rate of 3.10% as of December 31, 2012 and a discount rate of 4.92% and an inflation rate of 3.10% as of December 31, 2013.

### ***Deferred Tax Assets***

In assessing the realizability of the deferred tax assets, our management considers whether it is probable that a portion or all of the deferred tax assets will not be realized. The ultimate realization of our deferred tax assets is dependent on whether we are able to generate future taxable income in specific tax jurisdictions during the periods in which temporary differences become deductible. Our management has scheduled the expected future reversals of the temporary differences and projected future taxable income in making this assessment. Based on these factors, our management believes that it is probable that we will realize the benefits of these temporary differences as of December 31, 2013. However, the amount of deferred tax assets that is realized may be different if we do not realize estimated future taxable income during the carry forward periods as originally expected.

In relation to the deferred tax assets recognized for tax loss, future taxable income is estimated considering the followings: (i) five-year mid- to long-term financial forecasts of earnings before tax approved by management and submitted to the Ministry of Strategy and Finance, and (ii) average amount of tax adjustments for the recent three years. Based on the estimated amount and timing of future taxable profit, our management determined that all tax losses for the year ended December 31, 2013 could be recognized as an asset.

For tax credits carried forward, similar to deferred tax assets recognized for tax loss, our management estimates the probability timing of future taxable profits in determining the probability of utilization of tax credits carried forward. In addition, our management considers the possible carry forward period and available tax credit or deductible temporary differences within the tax laws of each country in which the tax credits originated.

Similarly, our management also estimates the probability of utilization of temporary differences considering the probability of generating future taxable profits in the periods that the deductible temporary differences reverse. We do not recognize deferred tax assets for certain temporary differences associated with investments in subsidiaries, associates, and interests in joint ventures considering future dividends or disposals.



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We recognize deferred tax assets and liabilities based on the differences between the financial statement carrying amounts and the tax bases of assets and liabilities at each separate taxpaying entity. Under IFRS, a deferred tax asset is recognized for temporary difference that will result in deductible amounts in future years and for carry forwards. If, based on the weight of available evidence, it is more likely that some or the entire portion of the deferred tax asset will not be realized, that portion is deducted directly from the deferred tax asset.

We believe that the accounting estimate related to the realizability of deferred tax asset is a critical accounting estimate because: (i) it requires management to make assessments about the timing of future events, including the probability of expected future taxable income and available tax planning opportunities, and (ii) the difference between these assessments and the actual performance could have a material impact on the realization of tax benefits as reported in our results of operations. Management's assumptions require significant judgment because actual performance has fluctuated in the past and may continue to do so.

### ***Useful Lives of 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.

Economic useful life is the duration of time the asset is expected to be productively employed by us, which may be less than its physical life. Management's assumptions on the following factors, among others, affect the determination of estimated economic useful life: wear and tear, obsolescence, technical standards, changes in market demand and technological changes.

The estimated useful lives of our property, plant and equipment are as follows:

	<b>Useful lives (years)</b>
Buildings	8 ~ 40
Structures	8 ~ 50
Machinery	6 ~ 32
Vehicles	4
Loaded heavy water	30
Asset retirement costs	18, 30, 40
Finance lease assets	20
Ships	9
Others	4 ~ 9

A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life. Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate. In 2012, we changed the estimated useful lives of certain buildings. As a result of the change in accounting estimate, depreciation expenses decreased by Won 85,388 million and Won 57,378 million in 2012 and 2013, respectively. In addition, we estimate that depreciation expense will decrease by Won 31,979 million and Won 22,158 million in 2014 and 2015, respectively.

### ***Impairment of Long-lived Assets***

At the end of each reporting period, we review the carrying amounts of tangible and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, we estimate the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and

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consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired. Recoverable amount is the higher of fair value less costs to sell or value in use. In assessing value in use, the estimated future cash flows are discounted to their present values using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

In the event that an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, ensuring that such carrying amount increase does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or the cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

The assessment of impairment is a critical accounting estimate, because significant management judgment is required to determine: (i) whether an indicator of impairment has occurred, (ii) how assets should be grouped, and (iii) the recoverable amount of the asset or asset group in the case of an impairment. If management's assumptions about these assets change as a result of events or circumstances, and management believes the assets may have declined in value, we may record impairment charges, resulting in lower profits. Our management uses its best estimate in making these evaluations and considers various factors, including the future prices of energy, fuel costs and other operating costs. However, actual market prices and operating costs could vary from those used in the impairment evaluations, and the impact of such variations could be material. There was no impairment for the past three years and no cash-generating units were at risk of impairment as of December 31, 2013.

### ***Accrual for Loss Contingencies for Legal Claims***

We are involved in legal proceedings regarding matters arising in the ordinary course of business. In relation to these matters, as of December 31, 2013, we were engaged in 597 lawsuits as a defendant and 119 lawsuits as a plaintiff. The total amount claimed against us was Won 402 billion and the total amount claimed by us was Won 109 billion as of December 31, 2013. As of December 31, 2013, our provisions for these legal claims amounted to Won 24 billion. These provisions are adjusted when events or circumstances cause these judgments or estimates to change.

Actual amounts of our liabilities as determined upon settlement of legal claims or by final decisions of the courts in relation thereto may be substantially different from the amounts of provisions recognized or contingent liabilities disclosed. If the actual amounts are higher than the amounts of related provisions, the resulting additional liabilities would adversely impact our results of operations, financial condition and cash flows.

### **Consolidated Results of Operations**

#### ***2013 Compared to 2012***

In 2013, our consolidated sales, which is principally derived from the sale of electric power, increased by 9.3% to Won 53,713 billion from Won 49,121 billion in 2012, reflecting primarily a 7.3% overall increase in our

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average electricity tariff rates in 2013 (as a result of a 4.0% increase effective January 14, 2013 and a 5.4% increase effective November 21, 2013) and a 1.8% increase in the volume of electricity sold from 466,593 gigawatt hours in 2012 to 474,849 gigawatt hours in 2013. The overall increase in the volume of electricity sold was primarily attributable to a 2.8% increase in the volume of electricity sold to the industrial sector, which represents the largest segment of electricity consumption in Korea, from 258,102 gigawatt hours in 2012 to 265,373 gigawatt hours in 2013, and, to a lesser extent, a 0.6% increase in the volume of electricity sold to the commercial sector from 101,593 gigawatt hours in 2012 to 102,196 gigawatt hours in 2013 and a 0.5% increase in the volume of electricity sold to the residential sector, from 65,484 gigawatt hours in 2012 to 65,815 gigawatt hours in 2013. The increase in the volume of electricity sold to the industrial sector was primarily due to the general increase in demand for electricity in this sector in Korea largely as a result of continued export-led growth of the Korean economy, which involved an increased industrial output and greater capacity utilization in industrial plants. For a discussion of the increase in our electricity tariff rates, see Item 4B. Business Overview Sales and Customers Electricity Rates.

Our consolidated cost of sales, which is principally derived from the costs related to the purchase of fuels for generation of electricity and to a lesser extent, from the purchase of power from independent power producers, depreciation and salaries, increased by 4.4% to Won 50,596 billion in 2013 from Won 48,459 billion in 2012, primarily due to a 1.6% increase in fuel costs, a 15.6% increase in purchased power and a 5.6% increase in depreciation, which were partially offset by a 3.0% decrease in salaries and a 1.4% decrease in other cost of sales.

Fuel costs, which accounted for 47.8% and 49.2% of our consolidated cost of sales in 2013 and 2012, respectively, increased to Won 24,200 billion in 2013 from Won 23,823 billion in 2012 largely due to an increased use of more expensive fuel sources such as LNG due to the extended suspension of three of our nuclear units related to quality assurance issues, which was partially offset by a 2.6% decrease in unit fuel cost mainly resulting from the general decline in international market prices for our main fuel types. Purchased power, which accounted for 22.4% and 20.2% of our cost of sales in 2013 and 2012, respectively, increased by 15.6% to Won 11,329 billion in 2013 from Won 9,801 billion in 2012, primarily due to a 12.1% increase in the volume of power purchased from independent power producers (who generate electricity primarily through LNG-fired power plants), from 60,392 gigawatt hours in 2012 to 67,676 gigawatt hours in 2013, primarily to compensate for the shortfall in the supply of electricity due to the higher than anticipated rise in demand for electricity in 2013 as well as extended suspension of three of our nuclear units related to quality assurance issues. Depreciation expense increased by 5.6% to Won 7,228 billion in 2013 from Won 6,846 billion in 2012 primarily due to an increase of additional property, plant and equipment related to the construction of new generation facilities pursuant to our capital investment program.

Salaries decreased by 3.0% to Won 2,583 billion in 2013 from Won 2,662 billion in 2012 primarily due to a decrease in performance pay. Other remaining items of our cost of sales decreased to Won 5,255 billion in 2013 from Won 5,327 billion in 2012 primarily due to a decrease in provision for decommissioning costs of our nuclear facilities.

As a cumulative result of the foregoing factors, our consolidated gross profit increased significantly to Won 3,117 billion in 2013 from Won 661 billion in 2012, and our consolidated gross profit margin increased significantly to 5.8% in 2013 from 1.3% in 2012. The increases in our consolidated gross profit and consolidated gross profit margin were largely attributable to the 9.3% increase in our consolidated sales (which were due to the 7.3% overall increase in the average electricity tariff rates and, to a lesser extent, the 1.8% increase in the volume of electricity sold), which was partially offset by the 4.4% increase in our consolidated cost of sales (which was mainly due to the 15.6% increase in purchased power and, to a lesser extent, the 1.6% increase in fuel costs and the 5.6% increase in depreciation expense).

Our consolidated selling and administrative expenses increased by 8.0% to Won 1,923 billion in 2013 from Won 1,780 billion in 2012, primarily as a result of increases in depreciation and commissions, which increased by Won 22 billion and Won 67 billion, respectively.

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Our consolidated other income, net of expenses, increased by 4.2% to Won 626 billion in 2013 from Won 600 billion in 2012, mainly as a result of an increase in insurance compensations and an increase in contributions from the Electric Power Industry Basis Fund, which was partially offset by an increase in donations for educational and other purposes.

We had consolidated other gains, net, of Won 129 billion in 2013 compared to consolidated other losses, net, of Won 1,782 billion in 2012, primarily as a result of a write-off in 2012 of our accumulated but unbilled fuel cost-based adjustment amounts. (See Item 5B. Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment ). Other profit is mainly composed of gain or loss from disposal of assets and inventories, among others.

As a cumulative result of the foregoing factors, we had consolidated operating income of Won 1,948 billion in 2013 compared to consolidated operating loss of Won 2,300 billion in 2012, and our consolidated operating income margin was 3.6% in 2013 compared to an operating loss margin of 4.7% in 2012. These turnarounds were mainly due to the 9.3% increase in our consolidated sales, which was partially offset by the 4.4% increase in our consolidated cost of sales.

Our consolidated finance expenses, net of income, increased by 18.7% to Won 2,302 billion in 2013 from Won 1,940 billion in 2012, primarily as a result of a decrease in net gains on foreign currency translation, and an increase in net interest expense, which was partially offset by a decrease in net losses on valuation of derivatives.

We had consolidated loss of affiliates or joint ventures using equity method of Won 42 billion in 2013, compared to consolidated profit of affiliates or joint ventures using equity method of Won 177 billion in 2012, primarily as a result of decreased profits from Korea Gas Corporation mainly due to an impairment loss on intangible assets.

As a cumulative result of the foregoing factors, our consolidated loss before income taxes significantly decreased to Won 396 billion in 2013 from Won 4,063 billion in 2012.

Our income tax benefit decreased by 42.1% to Won 571 billion in 2013 from Won 985 billion in 2012, largely as a result of a decrease in our loss before income taxes, which was partially offset by an increase in adjustments related to unrealized deferred tax assets. See Note 41 to our financial statements included in this annual report. Our effective tax benefit rate, which represents tax benefit as a percentage of loss before income taxes, increased from 24.3% in 2012 to 144.0% in 2013 primarily due to the effect of recognition of deferred tax assets in relation to amounts received from customers regarding installation and use of facilities required for electricity supply.

As a cumulative result of the above factors, we had consolidated profit of Won 174 billion in 2013, compared to consolidated loss of Won 3,078 billion in 2012. Our consolidated net profit margin was 0.3% in 2013 compared to consolidated net loss margin of 6.3% in 2012. Our profit attributable to the owners of the company was Won 60 billion in 2013, compared to loss of Won 3,167 billion attributable to the owners of the company in 2012.

We had consolidated other comprehensive income of Won 186 billion in 2013 compared to consolidated other comprehensive loss of Won 322 billion in 2012, largely as a result of positive changes in actuarial gains or losses on retirement benefit obligations, net of tax (related to changes in future salary increases), gains on valuation of derivatives using cash flow hedge accounting, share in other comprehensive income of associates and joint ventures, net of tax. Furthermore, there were valuation gains on available-for-sale securities of LG Uplus Corp. and Korea District Heating Corp. in 2013.

As a cumulative result of the above factors, we had consolidated total comprehensive income of Won 360 billion in 2013, compared to consolidated total comprehensive loss of Won 3,400 billion in 2012.

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In 2012, our consolidated sales, which is principally derived from the sale of electric power, increased by 13.8% to Won 49,121 billion from Won 43,175 billion in 2011, reflecting primarily a 2.5% increase in the volume of electricity sold from 455,070 gigawatt hours in 2011 to 466,593 gigawatt hours in 2012 and a 4.9% increase in our overall average electricity tariff rates effective August 6, 2012. The overall increase in the volume of electricity sold was primarily attributable to a 2.6% increase in the volume of electricity sold to the industrial sector, which represents the largest segment of electricity consumption in Korea, from 251,491 gigawatt hours in 2011 to 258,102 gigawatt hours in 2012, and, to a lesser extent, a 2.1% increase in the volume of electricity sold to the commercial sector from 99,504 gigawatt hours in 2011 to 101,593 gigawatt hours in 2012 and a 1.2% increase in the volume of electricity sold to the residential sector, including overnight power usage, from 82,130 gigawatt hours in 2011 to 83,104 gigawatt hours in 2012. The increase in the volume of electricity sold to the industrial sector was primarily due to the general increase in demand for electricity in this sector in Korea largely as a result of continued export-led growth of the Korean economy, which involved an increased industrial output and greater capacity utilization in industrial plants. The increase in the volume of electricity sold to the commercial sector was primarily due to increased commercial activities in Korea, which was partially offset by weakened consumer sentiment in light of the ongoing uncertainties in the global economy. The increase in the volume of electricity sold to the residential sector was primarily due to increased usage of heating and air conditioning in 2012. For a discussion of the increase in our electricity tariff rates, see Item 4B. **Business Overview** **Sales and Customers** **Electricity Rates**.

Our consolidated cost of sales, which is principally derived from the costs related to the purchase of fuels for generation of electricity and to a lesser extent, from the purchase of power from independent power producers, depreciation and salaries, increased by 13.4% to Won 48,459 billion in 2012 from Won 42,725 billion in 2011, primarily due to a 11.0% increase in fuel costs, a 32.4% increase in purchased power, a 6.0% increase in salaries, a 1.7% increase in depreciation and a 7.0% increase in other cost of sales. Fuel costs, which accounted for 49.2% and 50.2% of our consolidated cost of sales in 2012 and 2011, respectively, increased by 11.0% to Won 23,823 billion in 2012 from Won 21,456 billion in 2011. Such increase in fuel costs was primarily due to an increase in energy consumption as a result of the general economic recovery and extreme weather conditions in 2012 and a 9.8% increase in unit cost of fuel mainly due to a 14.8% increase in unit cost of LNG. Purchased power, which accounted for 20.2% and 17.3% of our cost of sales in 2012 and 2011, respectively, increased by 32.4% to Won 9,801 billion in 2012 from Won 7,404 billion in 2011, primarily due to a 13.9% increase in the volume of power purchased from independent power producers (who generate electricity primarily through LNG-fired power plants), from 53,024 gigawatt hours in 2011 to 60,392 gigawatt hours in 2012, primarily to compensate for the shortfall in the supply of electricity due to the higher than anticipated rise in demand for electricity in 2012. Salaries increased by 6.0% to Won 2,662 billion in 2012 from Won 2,510 billion in 2011 primarily due to an increase in the number of our and our generation subsidiaries' employees. Depreciation expense increased by 1.7% to Won 6,846 billion in 2012 from Won 6,733 billion in 2011 primarily due to an increase of additional property, plant and equipment related to the construction of new generation facilities pursuant to our capital investment program. Other remaining items of our cost of sales increased to Won 5,327 billion in 2012 from Won 4,622 in 2011 primarily due to an increase in costs related to our nuclear complex construction projects in the United Arab Emirates, an increase in provision for decommissioning costs of our nuclear facilities and provision for potential fines and penalties under the Renewable Portfolio Standard.

As a cumulative result of the foregoing factors, our consolidated gross profit increased by 46.8% to Won 661 billion in 2012 from Won 450 billion in 2011, while our consolidated gross profit margin increased to 1.3% in 2012 from 1.0% in 2011. The increases in our consolidated gross profit and consolidated gross profit margin were largely attributable to the 13.8% increase in our consolidated sales (which were due to the 4.9% increase in the overall average electricity tariff rates and the 2.5% increase in the volume of electricity sold), which was partially offset by the 13.4% increase in our consolidated cost of sales (which was mainly due to the 11.0% increase in fuel costs and the 32.4% increase in purchased power).

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Our consolidated selling and administrative expenses increased by 1.6% to Won 1,780 billion in 2012 from Won 1,752 billion in 2011, primarily as a result of increases in salaries, research and development expenses and rent expenses.

Our consolidated net other operating income increased by 33.2% to Won 600 billion in 2012 from Won 451 billion in 2011, mainly as a result of an increase in compensation for damages received from a lawsuit in which we were the plaintiff, which more than offset the return to normal levels of donations related to renewable energy initiatives.

We had consolidated other losses, net, of Won 1,782 billion in 2012 compared to consolidated other gains, net, of Won 166 billion in 2011, primarily as a result of a write-off of our accumulated but unbilled fuel cost-based adjustment amounts as further described in Item 5A.

Operating and Financial Review and Prospects Critical Accounting Policy Correction of Accounting for Fuel Cost Pass-through Adjustment.

As a cumulative result of the foregoing factors, our consolidated operating loss increased significantly to Won 2,300 billion in 2012 from Won 685 billion in 2011. Our operating loss margin increased to 4.7% in 2012 from 1.6% in 2011, largely due to a 11.0% increase in fuel costs and a 32.4% increase in purchased power which more than offset the 13.8% increase in our revenue from the sale of electricity.

Our consolidated net financial expense increased by 1.5% to Won 1,940 billion in 2012 from Won 1,911 billion in 2011, primarily as a result of increases in net interest expense and net losses on valuation of derivatives, which were substantially offset by an increase in net gains on foreign currency translation.

Our consolidated profits of affiliates or joint ventures using equity method increased by 43.7% to Won 177 billion in 2012 from Won 123 billion in 2011, primarily as a result of an increase in profits from Korea Gas Corporation and our overseas affiliates primarily as a result of the expansion of our overseas business.

As a cumulative result of the foregoing factors, we had consolidated loss before income taxes of Won 4,063 billion in 2012 compared to consolidated income before income taxes of Won 2,473 billion in 2011. We had consolidated income tax income of Won 985 billion in 2012 compared to consolidated income tax expense of Won 820 billion in 2011, primarily due to the absence of a one-time write-off in 2011 of deferred tax assets in relation to net loss from the previous year due to the low probability of recovery.

As a cumulative result of the above factors, our consolidated loss for the year decreased to Won 3,078 billion in 2012 from Won 3,293 billion in 2011, and our consolidated net loss margin decreased to 6.3% in 2012 from 7.6% in 2011. We also had net loss attributable to our shareholders of Won 3,167 billion in 2012, compared to net loss of Won 3,370 billion attributable to our shareholders in 2011.

Our consolidated other comprehensive loss increased by 22.9% to Won 322 billion in 2012 from Won 262 billion in 2011 largely as a result of negative changes in foreign currency translation of foreign operations, net of tax, and share in other comprehensive income (loss) of associates and joint ventures, net of tax, which were partially offset by a positive net change in fair value of available-for-sale financial assets, net of tax, and a decrease in defined benefit actuarial losses, net of tax.

As a cumulative result of the above factors, our consolidated total comprehensive loss for the period decreased by 4.4% to Won 3,400 billion in 2012 from Won 3,555 billion in 2011.

**Inflation**

The effects of inflation in Korea on our financial condition and results of operations are reflected primarily in construction costs as well as in labor expenses. Inflation in Korea has not had a significant impact on our results of operations in recent years. It is possible that inflation in the future may have an adverse effect on our financial condition or results of operations.

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### **Segment Results**

We operate the following business segments: transmission and distribution, nuclear power generation and thermal power generation and all others. The transmission and distribution segment, which is operated by KEPCO, the parent company, consists of operations related to the transmission, distribution and sale to end-users of electricity purchased from our generation subsidiaries as well as from independent power producers. The power generation segment, which is operated by KEPCO's one nuclear generation subsidiary and five thermal generation subsidiaries, consists of operations related to the generation of electricity sold to KEPCO through the Korea Power Exchange. The transmission and distribution segment and the power generation segment together represent our electricity business. The remainder of our operation is categorized as all others. The all other segment consists primarily of operations related to the plant maintenance and engineering service, information services, and sales of nuclear fuel, communication line leasing, overseas businesses and others. In 2011, 2012 and 2013, the unaffiliated revenues of the power generation segment (representing the six generation subsidiaries) and all our other revenues in the aggregate amounted to only 2.4%, 2.5% and 2.6% of our consolidated revenues, respectively, and the results of operations for our business segments substantially mirror our consolidated results of operations. For further information, see Note 4 of the notes to our consolidated financial statements included in this annual report.

### **Item 5B. Liquidity and Capital Resources**

*We expect that our capital requirements, capital resources and liquidity position may change in the course of implementing the Restructuring Plan. See Item 4B. Business Overview Restructuring of the Electric Power Industry in Korea and Item 3D. Risk Factors Risks Relating to KEPCO The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.*

#### **Capital Requirements**

We anticipate that the following represent the major sources of our capital requirements in the short-term to intermediate future:

capital expenditures pursuant to our capital investment program;

working capital requirements, the largest component of which is fuel purchases;

payment of principal and interest on our existing debt;

headquarters relocation expenses pursuant to Government policy; and

overseas investments.

In addition, if there were to occur unanticipated material changes to the Restructuring Plan, the Basic Plan or other major policy initiatives of the Government relating to the electric power industry, or natural disasters, such developments may require a significant amount of additional capital requirements.

#### **Capital Expenditures**

We anticipate that capital expenditures will be the most significant use of our funds for the next several years. Our capital expenditures relate primarily to the construction of new generation units, maintenance of existing generation units and expansion of our transmission and distribution systems. Our capital expenditures generally follow budgets established under the Basic Plan Relating to the Long-Term Supply and Demand of Electricity, which contains projections relating to the supply and demand of electricity of Korea based on which we plan the construction of additional generation units and transmission systems. See Item 4B. Business Overview Capital Investment Program for a further description of our capital investment program.





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Our total capital expenditures for the construction of generation, transmission and distribution facilities were Won 11,984 billion, Won 12,751 billion and Won 15,831 billion in 2011, 2012 and 2013, respectively, and under our current budgets, are estimated to be approximately Won 19,898 billion, Won 18,479 and Won 16,339 billion in 2014, 2015 and 2016, respectively. We plan to finance our capital expenditures primarily through issuance of securities in the capital markets, borrowings from financial institutions and construction grants.

In order to deal with shortage of fuel and other resources and also to comply with various environmental standards, in 2012 the Government has adopted the Renewable Portfolio Standard ( RPS ) program, which replaces the Renewable Portfolio Agreement which was in effect from 2006 to 2011. Under the RPS program, each generation subsidiary is required to generate a specified percentage of total electricity to be generated by such generation subsidiary in a given year in the form of renewable energy, with the target percentage being 2.0% in 2012, 2.5% in 2013 and incrementally increasing to 10.0% by 2022. The current budgeted amount of capital expenditure for implementation of the RPS as currently planned for the period from 2013 to 2022 is approximately Won 13.7 trillion. We expect that such additional capital expenditure will be covered by a corresponding increase in electricity tariff. However, there is no assurance that the Government will in fact raise the electricity tariff to a level sufficient to fully cover such additional capital expenditures or at all. See Item 4B. Business Overview Renewable Energy for a further description of the Renewable Portfolio Standard and our related past capital expenditures.

**Fuel Purchases**

We require significant funds to finance our operations, principally in relation to the purchase of fuels by our generation subsidiaries for generation of electricity. In 2011, 2012 and 2013, fuel costs accounted for 49.7%, 48.5% and 45.1% of our sales and 50.2%, 49.2% and 47.8% of our cost of sales, respectively. We plan to fund our fuel purchases primarily with net operating cash, although in cases of rapid increases in fuel prices as is the case from time to time, we may also rely on borrowings from financial institutions and issuance of debt securities in the capital markets.

**Repayment of Existing Debt**

Payments of principal and interest on indebtedness will require considerable resources. The table below sets forth the scheduled maturities of the outstanding interest-paying debt (excluding issue discounts and premium) before accounting for swap transactions of us and our six wholly-owned generation subsidiaries as of December 31, 2013 for each year from 2014 to 2018 and thereafter. As of December 31, 2013, such debt represented 97.7% of our outstanding debt on a consolidated basis.

Year ended December 31	Local Currency Borrowings	Foreign Currency Borrowings	Domestic Debentures (in millions of Won)	Foreign Debentures	Total
2014	910,408	477,154	4,250,000	2,375,008	8,012,570
2015	424,425		4,400,000	1,213,946	6,038,371
2016	757,133		5,920,000	686,020	7,363,153
2017	836,232		4,630,000	1,371,890	6,838,122
2018	849,201		5,051,060	2,522,592	8,422,853
Thereafter	391,284	9,270	19,560,000	3,011,631	22,972,185
<b>Total</b>	<b>4,168,683</b>	<b>486,424</b>	<b>43,811,060</b>	<b>11,181,087</b>	<b>59,647,254</b>

We and our six wholly-owned generation subsidiaries have incurred interest charges (including capitalized interest) in relation to our interest-paying debt of Won 2,721 billion, Won 2,927 billion and Won 3,084 billion in 2011, 2012 and 2013, respectively. We anticipate that interest charges will increase in future years because of, among other factors, anticipated increases in our long-term debt. See Capital Resources below. The weighted average rates of interest on our and our six wholly-owned generation subsidiaries debt were 4.91%, 4.65% and 4.11% in 2011, 2012 and 2013, respectively.

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**Table of Contents*****Relocation Expenses***

In June 2005, the Government announced its policy to relocate the headquarters of government-invested enterprises, including us and certain of our subsidiaries, including six generation subsidiaries, from the Seoul metropolitan area to other provinces in Korea. Pursuant to this policy, our headquarters are scheduled to be relocated to Naju in Jeolla Province, which is approximately 300 kilometers south of Seoul. Although the relocation was initially scheduled to occur by the end of 2012, due to construction delays, we currently expect that the relocation will occur by the end of 2014. In addition, the headquarters of certain of our subsidiaries are scheduled to be relocated to various other cities in Korea. Under the current relocation plan as approved by the Government in 2007 and in accordance with the relevant statute and related guidelines, the total relocation cost for us and our generation subsidiaries is estimated to be Won 1,522 billion, which will be paid out over the construction period. Under a special act enacted for this purpose, we are required to sell the property in our current headquarters within one year after the relocation.

We plan to finance our relocation costs primarily through net cash flows from our operation, proceeds from the sale of the existing headquarters and investing activities, as well as borrowings from financial institutions and issuance of securities in the capital markets, among others.

***Overseas Investments***

As part of our revenue diversification and fuel procurement strategy, we plan to continue to make overseas investments on a selective basis, which will be funded primarily through foreign currency-denominated borrowings and debt securities issuances as well as net operating cash from such projects.

***Capital Resources***

We have traditionally met our working capital and other capital requirements primarily from net cash provided by operating activities, issuance of debt securities and borrowings from financial institutions. Net cash provided by operating activities is primarily a function of electricity sales and fuel purchases and is also affected by increases and decreases in trade receivables, trade payables and inventory related to electricity sales and fuel purchases. Net cash provided by operating activities was Won 4,145 billion, Won 3,917 billion and Won 6,884 billion in 2011, 2012 and 2013, respectively.

As of December 31, 2011, 2012 and 2013, our long-term debt (excluding the current portion but including issue discounts and premium), before accounting for swap transactions, amounted to Won 39,198 billion, Won 45,525 billion and Won 52,801 billion, respectively, representing 72.9%, 89.1% and 102.6% of shareholders' equity, respectively, as of such dates. As of December 31, 2011, 2012 and 2013, the current portions of our long-term debt were Won 5,832 billion, Won 7,005 billion and Won 7,508 billion, respectively. As of December 31, 2011, 2012 and 2013, our short-term borrowings amounted to Won 1,174 billion, Won 689 billion and Won 579 billion, respectively. See Note 23 of the notes to our consolidated financial statements included in this annual report. Total long-term debt (including the current portion but excluding issue discounts and premium), before accounting for swap transactions, as of December 31, 2013 was Won 60,441 billion, of which Won 47,793 billion was denominated in Won and an equivalent of Won 12,648 billion was denominated in foreign currencies, primarily U.S. dollars. In addition, we, KHNP and KOWEPO also maintain U.S. dollar-denominated global medium-term note programs in the aggregate amount of US\$10 billion, of which approximately US\$4 billion remains currently available for future drawdown.

Subject to the implementation of our capital expenditure plan and the sale of our interests in our generation subsidiaries and other subsidiaries, our long-term debt may increase or decrease in future years. Until recently, a substantial portion of our long-term debt was raised through foreign currency-denominated borrowings. However, we have been adjusting the proportion of foreign currency-denominated debt in order to reduce the

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impact of foreign exchange rate fluctuations on our results of operations. Our foreign currency-denominated long-term debt (including the current portion but excluding issue discounts and premium), before accounting for swap transactions, increased from Won 11,291 billion as of December 31, 2012 to Won 12,648 billion as of December 31, 2013.

Our ability to incur long-term debt in the future is subject to a variety of factors, many of which are beyond our control, including, the implementation of the Restructuring Plan and the amount of capital that other Korean entities may seek to raise in capital markets. Economic, political and other conditions in Korea may also affect investor demand for our securities and those of other Korean entities. In addition, our ability to incur debt will also be affected by the Government's policies relating to foreign currency borrowings, the liquidity of the Korean capital markets and our operating results and financial condition. In case of adverse developments in Korea, the price at which such financing may be available may not be acceptable to us.

We incur our short-term borrowings primarily through commercial papers sold to domestic financial institutions. We have not had, and we do not expect to have, any material difficulties in obtaining short-term borrowings. In addition, in order to prepare for potential liquidity shortage, we maintain several credit facilities with domestic financial institutions amounting to Won 2,550 billion and US\$4,549 million, the full amount of which was available as of December 31, 2013.

We may raise capital from time to time through the issuance of equity securities. However, there are certain restrictions on our ability to issue equity, including limitations on shareholdings by foreigners. In addition, without changes in the existing KEPCO Act which requires that the Government, directly or pursuant to the Korea Finance Corporation Act, through Korea Finance Corporation, own at least 51% of our capital stock, it may be difficult or impossible for us to undertake any equity financing other than sales of treasury stock without the participation of the Government. Even if we are able to conduct equity financing with the participation of the Government, prevailing market conditions may be such that we may not be able to conduct equity financing on terms that are commercially acceptable to us. See Item 3D. Risk Factors Risks Relating to Korea and the Global Economy.

Our total shareholders' equity slightly increased from Won 51,064 billion as of December 31, 2012 to Won 51,451 billion as of December 31, 2013.

## **Liquidity**

Our liquidity is substantially affected by our construction expenditures and fuel purchases. Construction in progress increased by 29.0% from Won 21,184 billion as of December 31, 2012 to Won 27,334 billion as of December 31, 2013. Fuel costs increased by 1.6% to Won 24,200 billion in 2013 from Won 23,823 billion in 2012.

Our cash flows are also impacted by several other factors. Our net cash provided by operating activities amounted to Won 3,917 billion in 2012 and Won 6,884 billion in 2013. The increase in net cash provided by operating activities in 2013 compared to 2012 was mainly due to an increase in cash collected from our customers in tandem with increases in the sales volume and electricity tariff rates in 2013 compared to 2012 and the decrease in the unit cost of coal, LNG and oil in 2013 compared to 2012, which in turn led to a decrease in cash paid for fuel cost. Our cash flows from investing activities are affected by acquisitions of property, plant and equipment. Our cash flows from financing activities are mainly affected by borrowings and issuance of debt securities and repayment thereof, as well as dividends paid.

Due to the capital-intensive nature of our business as well as significant volatility in fuel prices, from time to time we operate with working capital deficits, and we may have substantial working capital deficits in the

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future. As of December 31, 2011, 2012 and 2013, we had a working capital deficit of Won 3,974 billion, Won 4,884 billion and Won 4,945 billion, respectively. We have traditionally met our working capital and other capital requirements primarily with net cash provided by operating activities, issuance of debt securities, borrowings from financial institutions and construction grants. We also incur short-term borrowings primarily through commercial papers sold to domestic financial institutions. We have not had, and we do not expect to have, any material difficulties in obtaining short-term borrowings. See Capital Resources.

We may face liquidity concerns in the case of significant depreciation of the Won against major foreign currencies over a short period of time. While substantially all of our revenues are denominated in Won, we pay for substantially all of our fuel purchases in foreign currencies and a substantial portion of our long-term debt is denominated in foreign currencies, and payment of principal and interest thereon is made in foreign currencies. In the past, we have incurred foreign currency debt principally due to the limited availability and the high cost of Won-denominated financing in Korea. However, in light of the increasing sophistication of the Korean capital markets and the recent increase in liquidity in the Korean financial markets, we plan to reduce the portion of our debt which is denominated in foreign currencies although we intend to continue to raise certain amounts of capital through long-term foreign currency debt for purposes of maintaining diversity in our funding sources as well as paying for overseas investments in foreign currencies. As of December 31, 2013, approximately 20.9% of our long-term debt (including the current portion but excluding issue discounts and premium) before accounting for swap transactions was denominated in currencies other than Won.

We enter into currency swaps and other hedging arrangements with respect to our debt denominated in foreign currencies only to a limited extent due primarily to the limited size of the Korean market for such derivative arrangements. Such instruments include combined currency and interest rate swap agreements, interest rate swaps and foreign exchange agreements. We do not enter into derivative financial instruments in order to hedge market risk resulting from fluctuations in fuel costs. Our policy is to hold or issue derivative financial instruments for hedging purposes only. Our derivative financial instruments are entered into with major financial institutions, thereby minimizing the risk of credit loss. See Note 11 of the notes to our consolidated financial statements.

We did not pay any dividends in 2012 and 2013 in respect of fiscal years 2011 and 2012, due to our incurring net losses for such fiscal years; however, we paid dividends of Won 90 per share on April 25, 2014 as we had net income in fiscal year 2013.

## **Other**

Our operations are materially affected by the policies and actions of the Government. See Item 4B. Business Overview Regulation.

## **Item 5C. Research and Development, Patents and Licenses, etc.**

### **Research and Development**

Our research and development program is focused on developing advanced electric power, renewable energy, smart grid and customer-friendly electricity service technologies that will enable us to become a global leader in the energy industry. In order to achieve our corporate vision of becoming a Global Top Green & Smart Energy Pioneer, in 2013 we adopted the KEPCO Technology Strategy which emphasizes enhanced technological convergence and customer service. As part of such strategy, we seek to develop (i) clean and smart energy technology, including in relation to low carbon emission in power generation, (ii) an efficient and intelligent power transmission and distribution grid system, (iii) technology that will enhance efficiency and responsiveness to consumer's electricity consumption patterns, and (iv) improvements in information, communication and technology ( ICT ) for enhanced customer service.

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In 2014, consistent with the Government guidelines, we plan to invest approximately 0.5% of our annual revenue in the research and development of green and smart technologies, particularly with a focus on the following 12 areas: integrated gasification combined cycle for synthetic natural gas production, carbon capture and storage, offshore wind power, offshore energy development, high voltage direct currents, super conductor, smart grid, micro grid, demand responsive and energy efficiency applications, power ICT solutions, intelligent plant management system and energy storage systems.

Our high-priority green and smart energy projects currently include the following:

acquiring integrated gasified process technology;

establishing high-tech smart grid and micro grid test beds in Jeju Island;

developing highly efficient absorbents for carbon capture;

commercializing offshore wind power plants;

obtaining high-voltage direct currents technology suitable for domestic operation; and

experimental testing of large-scale electricity storage systems with capacities ranging from four to eight megawatts.

Our research and development activities also focus on the following:

in the thermal power generation sector, enhancing efficiency and reducing cost in power plant construction and operation as well as in our plant maintenance, including through improvements in damage analysis and environment-friendly inspections;

in the renewable energy sector, enhancing efficiency, lowering costs of power generation, identifying new energy sources and exploring new business opportunities;

in the electric power system sector, enhancing the stability and reliability in the operation of our electric power grid as well as enhancing efficiency in electricity distribution, including through introducing preventive maintenance measures for substations and developing technologies related to system automation, power utilization and power line communication;

in the customer service sector, developing technologies enabling a greater range of business opportunities and heightened customer service in anticipation of the upcoming rollout of the smart grid system; and

in the technological convergence sector, identifying new business opportunities through convergence among technologies and businesses and maximizing synergy from such convergence in tandem with the promotion of creative economy in Korea as well as globally.

In addition, we cooperate closely with several other electric utility companies and research institutes, both foreign and domestic, on various projects to diversify the scope and scale of our research and development activities.

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We invested approximately Won 640 billion in 2013, and currently plan to invest Won 924 billion in 2014, on research and development. We had 888 employees engaged in research and development activities as of December 31, 2013. As a result of our research, 6,222 patent applications were submitted in Korea and abroad, and 2,794 applications were approved, in each case, in 2013. In addition, we plan to establish a management infrastructure that will facilitate the development of high value-added intellectual properties. We also seek opportunities to market our technologies overseas.

**Table of Contents****Item 5D. Trend Information**

Trends, uncertainties and events which could have a material impact on our sales, liquidity and capital resources are discussed above in Item 5A. Operating Results and Item 5B. Liquidity and Capital Resources.

**Item 5E. Off-Balance Sheet Arrangements**

We had no significant off-balance sheet arrangements as of December 31, 2013.

**Item 5F. Tabular Disclosure of Contractual Obligations**

The following summarizes certain of the contractual obligations of us and our six wholly-owned generation subsidiaries as of December 31, 2013 and the effect such obligations are expected to have on liquidity and cash flow in future periods.

Contractual Obligations <sup>(1)</sup>	Total	Payments Due by Period			
		Less than 1 year	1 3 years (in billions of Won)	3 5 years	After 5 years
Long-term debt <sup>(2)</sup>	54,366	2,731	13,402	15,261	22,972
Short-term borrowings	5,281	5,281			
Interest payments <sup>(3)</sup>	12,774	1,801	3,605	2,264	5,104
Total	72,421	9,813	17,007	17,525	28,076

*Notes:*

- (1) We have several other contractual obligations, including finance lease agreements. We believe the remaining annual payments under capital and operating lease agreements as of December 31, 2013 were immaterial. Contractual obligations related to payment of debt of us and our six wholly-owned generation subsidiaries represented 97.7% of our outstanding debt as of December 31, 2013 on a consolidated basis.
- (2) Includes the current portion.
- (3) A portion of our debt carried a variable rate of interest. We used the interest rate in effect as of December 31, 2013 for the variable rate of interest in calculating the interest payments on debt for the periods indicated.

For a description of our commercial commitments and contingent liabilities, see Note 49 of the notes to our consolidated financial statements included in this annual report.

We entered into a power purchase agreement with GS EPS Co., Ltd. and three other independent power producers, under which we are required to purchase all electricity generated by these companies to the extent such electricity is traded through the KPX. The purchase prices for such electricity are predetermined under the power purchase agreements, subject to annual adjustments. We purchased power from these companies in the amounts of Won 2,529 billion, Won 3,249 billion and Won 3,161 billion in 2011, 2012 and 2013, respectively.

We have entered into contracts with domestic and foreign suppliers to purchase bituminous coal and anthracite coal. Although we meet our coal requirements primarily through purchases in spot markets, substantial amounts of such requirements are also met through purchases under long-term supply contracts. Under our long-term supply contracts, purchase prices are adjusted periodically based on prevailing market conditions. We currently purchase all our LNG requirements from Korea Gas Corporation, a related party. We have also entered into long-term transportation contracts with Hanjin Shipping Co., Ltd. and others.

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We import all uranium ore concentrates from sources outside Korea (including the United Kingdom, Kazakhstan, France, Germany, Niger, Canada, Japan and Australia) through medium- to long-term contracts and pay for such concentrates with currencies other than Won, primarily U.S. dollars. Contract prices for processing of uranium are generally based on market prices. See Note 48 of the notes to our consolidated financial statements for further details of these contracts.



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Under the Long-term Transmission and Substation Plan approved by the Ministry of Trade, Industry and Energy, we are liable for the construction of all of our power transmission facilities and the maintenance and repair expenses for such facilities.

Payment guarantee and short-term credit facilities from financial institutions as of December 31, 2013 were as follows:

**Payment guarantee**

Description	Financial Institutions	Credit Lines (In millions of Won or thousands of USD, GBP, EUR, AED, JPY, NPR and INR)
Payment of import letter of credits	Korea Exchange Bank and others	USD 2,053,328
	Korea Exchange Bank	GBP 61,169
	Korea Exchange Bank	EUR 3,100
	Nonghyup Bank and others	JPY 18,914,670
Inclusive credits	Korea Exchange Bank and others	KRW 1,176,600
	HSBC and others	USD 545,512
Performance guarantees on guarantees	Seoul Guarantee Insurance and others	KRW 159,426
	Korea Exchange Bank	AED 54,880
	Standard Chartered Bank and others	USD 843,811
	Kookmin Bank	EUR 37,082
Guarantees for bid	HSBC and others	INR 236,443
	SMBC and others	USD 11,470
Warranty bond and others	Shinhan Bank	EUR 54,880
	HSBC	USD 252,140
	Katumandu Bank and others	NPR 85,289
Other guarantees	Korea Exchange Bank and others	KRW 9,503
	BNP Paribas and others	USD 1,409,500
	HSBC	INR 157,830

**Overdraft and Others**

Description	Financial Institutions	Credit Lines (In millions of Won or thousands of US\$)
Overdraft	Nonghyup Bank and others	KRW 2,125,000
Commercial paper	Korea Exchange Bank and others	KRW 1,129,000
Limit amount available for card	Hana Bank and others	KRW 71,500
Loan limit	Hana Bank and others	KRW 195,996
	BNP Paribas and others	USD 2,646,059
Repayment guarantees for foreign currency debentures	Korea Development Bank	USD 420,009

We have provided a repayment guarantee of US\$58 million to Sumitomo Mitsui Banking Corporation and other financial institutions and a guarantee on interest swap agreement of US\$1.5 million to Sumitomo Mitsui Banking Corporation in relation to the UAE Shuweihat S3 project.

We provided a performance guarantee to Kookmin Bank related to a construction contract. Such guarantee is not recognized as a provision for financial guarantee because such performance guarantee does not meet the definition of a financial guarantee contract under IFRS.

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Existing guarantees provided by us to our associates and joint ventures as of December 31, 2013 are as follows:

Primary Guarantor (Providing Company)	Secondary Guarantor (Provided Company)	Type of Guarantees	Foreign Currency	Credit Limit	Guarantee (Final Provided Company)
KEPCO	KEPCO SPC Power Corporation	Debt guarantees	USD	189,565	SMBC and others
KEPCO	Shuwei hat Asia Power Investment B.V.	Performance guarantees	USD	17,900	ADWEA
KEPCO	Shuwei hat Asia O&M Co, Ltd.	Performance guarantees	USD	11,000	ADWEA
KEPCO	KNOC Nigerian East Oil Co., Ltd. and KNOC Nigerian West Oil Co., Ltd.	Performance guarantees	USD	34,650	Korea National Oil Corporation (Nigerian government)
KEPCO	Amman Asia Electric Power Company	Performance guarantees	USD	19,800	Standard Chartered Bank
KOWEPO	Cheongna Energy Co., Ltd.	Collateralized money invested	KRW	42,646	Hana Bank, Korea Exchange Bank
		Guarantees for supplemental funding			
KOWEPO	Xe-Pian Xe-Namnoy Power Co., Ltd.	Performance guarantees	USD	2,310	Krung Thai Bank
		Collateralized money invested	USD	16,934	
KOWEPO	Rabigh O&M Co., Ltd.	Performance guarantees	SAR	4,800	Saudi Arabia British Bank
KOWEPO	Deagu Photovoltaic Co., Ltd.	Collateralized money invested	KRW	1,229	Shinhan Capital Co., Ltd.
KOWEPO	Dongducheon Dream Power Co., Ltd.	Collateralized money invested	KRW	144,200	Kookmin Bank and others
KOWEPO	PT Mutiara Jawa	Collateralized money invested	USD	2,610	Shinhan Bank Singapore
EWP	Busan shinho Solar power Co., Ltd.	Collateralized money invested	KRW	2,100	KT Capital Co., Ltd.
EWP	STX Electric Power Co., Ltd.	Collateralized money invested	KRW	176,400	Korea Development Bank
EWP	Honam Wind Power Co., Ltd.	Collateralized money invested	KRW	3,600	Shinhan Bank and others
KOSPO	KNH Solar Co., Ltd.	Collateralized money invested	KRW	1,296	Shinhan Bank, Kyobo Life Insurance Co., Ltd.
		Performance guarantees and guarantees for supplemental funding <sup>(1)</sup>			

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Primary Guarantor (Providing Company)	Secondary Guarantor (Provided Company)	Type of Guarantees	Foreign Currency	Credit Limit	Guarantee (Final Provided Company)
KOSPO	Daeryun Power Co., Ltd.	Collateralized money invested	KRW	25,477	Korea Development Bank, Dongbu Insurance Co., Ltd. and others
		Guarantees for supplemental funding <sup>(1)</sup>			
KOSPO	Changjuk Wind Power Co., Ltd.	Collateralized money invested	KRW	3,801	Shinhan Bank, Woori Bank
		Guarantees for supplemental funding <sup>(1)</sup>			
KOSPO	Busan Solar Co., Ltd.	Collateralized money invested	KRW	793	NH Bank
KOSPO	Taebaek Wind Power Co., Ltd.	Guarantees for supplemental funding <sup>(1)</sup>			Shinhan Bank, Bank of Cheju
KOSPO	Daegu Green Power Co., Ltd.	Collateralized money invested	KRW	76,193	Korea Exchange Bank and others
		Performance guarantees and guarantees for supplemental funding <sup>(1)</sup>			
KOSPO	KS Solar Corp. Ltd.	Collateralized money invested	KRW	637	Shinhan Capital Co., Ltd.
KOSPO	Jeonnam Solar Co., Ltd.	Collateralized money invested	KRW	700	Shinhan Capital Co., Ltd.
KOSPO	Kelar S.A.	Performance guarantees	USD	13,000	Korea Exchange Bank
KEPCO E&C	DS Power Co., Ltd.	Collateralized money invested	KRW	2,900	Korea Exchange Bank
KOSPO			KRW	15,000	and Daewoo Securities Co., Ltd.
KEPCO E&C		Performance guarantees and guarantees for supplemental funding <sup>(1)</sup>			
KOSPO					
KOMIPO	Hyundai Green Power Co., Ltd.	Collateralized money invested	KRW	87,003	Korea Development Bank and others
		Guarantees for supplemental funding <sup>(1)</sup>			
KOMIPO	Gangwon Wind Power Co., Ltd.	Collateralized money invested	KRW	7,410	Industrial Bank of Korea

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Primary Guarantor (Providing Company)	Secondary Guarantor (Provided Company)	Type of Guarantees	Foreign Currency	Credit Limit	Guarantee (Final Provided Company)
KOMIPO	Cheonan Photovoltaic Power Co., Ltd.	Collateralized money invested	KRW	122	KT Capital Corporation
KOMIPO	Gumi-ochang Photovoltaic Power Co., Ltd.	Collateralized money invested	KRW	288	Shinhan Capital Co., Ltd.
KOMIPO	Chungbuk Photovoltaic Power Co., Ltd.	Collateralized money invested	KRW	166	KT Capital Corporation
KOMIPO	Golden Route J Solar Power Co., Ltd.	Collateralized money invested	KRW	82	Shinhan Capital Co., Ltd.
KOMIPO	PT. Cirebon Electric Power	Debt guarantees	USD	8,091	Hana Bank
KOMIPO	D Solarenergy Co., Ltd.	Collateralized money invested	KRW	400	Shinhan Capital Co., Ltd.
KOMIPO	Hyundai Asan Solar Power Co., Ltd.	Collateralized money invested	KRW	471	Shinhan Capital Co., Ltd.
KOSEP	Hyundai Energy Co., Ltd.	Collateralized money invested	KRW	71,070	Korea Development Bank and others
		Performance guarantees and guarantees for supplemental funding <sup>(1)</sup>			
KOSEP	RES Technology AD	Collateralized money invested	KRW	15,595	Korea Development Bank and others
		Debt guarantees	EUR	4,271	
KOSEP	ASM-BG investicii AD	Collateralized money invested	KRW	16,101	Korea Development Bank and others
		Debt guarantees	EUR	4,175	
KOSEP	Express solar-light Power Generation Co., Ltd.	Collateralized money invested	KRW	3,132	Woori Bank and others
		Guarantees for supplemental funding <sup>(1)</sup>			
KOSEP	S-Power Co., Ltd.	Collateralized money invested	KRW	108,000	Korea Development Bank and others
		Performance guarantees and guarantees for supplemental funding <sup>(1)</sup>			

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Primary Guarantor (Providing Company)	Secondary Guarantor (Provided Company)	Type of Guarantees	Foreign Currency	Credit Limit	Guarantee (Final Provided Company)
KOSEP	YEONGAM Wind Power Co., Ltd.	Collateralized money invested	KRW	11,584	Kookmin Bank and others
		Guarantees for supplemental funding <sup>(1)</sup>			
KOSEP	Coscon Photovoltaic Co., Ltd.	Collateralized money invested	KRW	245	Shinhan Capital Co., Ltd.
KOSEP	Yeonan Solar Co., Ltd.	Collateralized money invested	KRW	157	Shinhan Capital Co., Ltd.
KOSEP	Q1 Solar Energy Co., Ltd.	Collateralized money invested	KRW	1,005	Shinhan Bank and others
KOSEP	Best Solar Energy Co., Ltd.	Collateralized money invested	KRW	1,242	Shinhan Bank and others
KOSEP USA, INC.	KODE NOVUS II LLC	Guarantees for supplemental funding <sup>(1)</sup>			Korea Development Bank and others
KOSEP USA, INC.	KODE NOVUS I LLC	Guarantees for supplemental funding <sup>(1)</sup>			Daewoo Shipbuilding & Marine Engineering Co., Ltd.
KOSEP	Yeong Wol Energy Station Co., Ltd.	Collateralized money invested	KRW	462	Daewoo Securities Co., Ltd. and others
KHNP			KRW	1,400	
KEPCO KPS	Incheon New Power Co., Ltd.	Collateralized money invested	KRW	461	Shinhan Bank
		Guarantees for supplemental funding <sup>(1)</sup>			

Note:

(1) We guarantee to provide supplemental funding for businesses in cases of excessive business expenses or insufficient repayment of borrowings. Other than as described in this annual report and also in Notes 46 and 49 of the notes to our consolidated financial statements included in this annual report, we did not have any other material credit lines and guarantee commitments provided to any third parties as of December 31, 2013.

We are subject to legal proceedings. For a description of our legal proceedings, see Item 8A. Consolidated Statements and Other Financial Information Legal Proceedings.

## ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES

### Item 6A. Directors and Senior Management

#### Board of Directors

Under the KEPCO Act, the Public Agencies Management Act and our Articles of Incorporation, our board of directors, which is required to consist of not more than 15 directors, including the president, is vested with the authority over our management.

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Pursuant to our Articles of Incorporation and the Public Agencies Management Act, we have two types of directors: standing directors (sangim-isa in Korean) and non-standing directors (bisangim-isa in Korean). The standing directors refer to our directors who serve their positions in full-time capacity. Many of our standing directors concurrently hold executive positions with us or our subsidiaries. The non-standing directors refer to our directors who do not serve their positions in full-time capacity. The non-standing directors currently do not hold any executive positions with us or our subsidiaries.

Under our Articles of Incorporation, there may not be more than seven standing directors, including our president, and more than eight non-standing directors. The number of standing directors, including our president, may not exceed the number of non-standing directors. A senior non-standing director appointed by the Ministry of Strategy and Finance becomes our chairman of the board following the review and resolution of the Public Agencies Operating Committee.

Our president is appointed by the President of the Republic upon the motion of the Ministry of Trade, Industry and Energy following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee pursuant to the Public Agencies Management Act and an approval at the general meeting of our shareholders. Our controller & auditor general is appointed by the President of the Republic upon the motion of the Ministry of Strategy and Finance following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee pursuant to the Public Agencies Management Act and an approval at the general meeting of our shareholders. Standing directors (other than our president and controller & auditor general) are appointed by our president with the approval at the general meeting of our shareholders.

On January 24, 2011, the Ministry of Trade, Industry and Energy changed the designation of our generation subsidiaries from other public institutions to market-oriented public enterprises. As other public institutions under the provisions of the Public Agencies Management Act, our generation subsidiaries were not subject to the same regulations applicable to us with regards to corporate governance matters such as the appointment and dismissal of directors and the composition of the boards of directors. However, as market-oriented public enterprises, our generation subsidiaries are currently subject to the same corporate governance rules applicable to us. All of our generation subsidiaries accordingly amended their respective articles of incorporation in 2011 and are currently generally subject to the same system of regulations applicable to us.

The non-standing directors must be appointed by the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by the director nomination committee and must have ample knowledge and experience in business management. Government officials that are not part of the teaching staff in national and public schools are ineligible to become our non-standing directors. Our president serves as our chief executive officer and represents us and administers our day-to-day business in all matters and bears the responsibility for the management's performance. The term of our president is three years, while that of our directors is two years. According to the Public Agencies Management Act, our president's term cannot be terminated unless done so by the President of the Republic pursuant to the Public Agencies Management Act or upon an event as specified in our Articles of Incorporation.

Attendance by a majority of the board members constitutes a voting quorum for our board meetings, and resolutions can be passed by a majority of the board members. In the event the president acts in violation of law or the Articles of Incorporation, is negligent in his duties, or otherwise is deemed to be significantly impeded in performing his official duties as chief executive officer, the board of directors may by resolution request the minister of the Ministry of Trade, Industry and Energy to dismiss or recommend the dismissal of the president.

Non-standing directors may request any information necessary to fulfill their duties from the chief executive officer, and except in special circumstances, the chief executive officer must comply with such request.

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The names, titles and outside occupations, if any, of the directors as of April 17, 2014 and the respective years in which they took office are set forth below.

<b>Name</b>	<b>Age</b>	<b>Title</b>	<b>Outside Occupation</b>	<b>Position Held Since</b>
Cho, Hwan-Eik	(64)	President, Chief Executive Officer and Standing Director	None	December 17, 2012
Ahn, Hong-Ryoul	(55)	Standing Director and Member of the Audit Committee	Auditor at Korea Hemophilia Foundation	December 27, 2013
Park, Kyu-Ho	(56)	Standing Director and Executive Vice President of Domestic Operations	None	June 18, 2013
Park, Jung-Keun	(57)	Standing Director and Executive Vice President of Overseas Operations	None	October 29, 2013
Baek, Seung-Jung	(58)	Standing Director and Executive Vice President & Chief Financial Officer	None	June 18, 2013
Kim, Byung-Sook	(56)	Standing Director and Executive Vice President & Chief Technology Officer	None	June 18, 2013
Koo, Bon-Woo	(58)	Standing Director and Executive Vice President & Chief Power Grid Officer	None	February 20, 2012
Chung, Hae-Joo	(71)	Non-Standing Director	Chairman of the Board, Korea Testing & Research Institute	June 30, 2011
Kim, Jung-Hyun	(58)	Non-Standing Director	Professor, Yonsei University	June 13, 2012
Yim, Chu-Hwan	(65)	Non-Standing Director	Visiting Professor, Korea University	October 19, 2012
Shin, Il-Soon	(66)	Non-Standing Director	Policy advisor of New Frontier Party	April 11, 2011
Nam, Dong-Kyoon	(61)	Non-Standing Director	Standing Auditor, BC Card	October 24, 2011
Lee, Kang-Hee	(72)	Non-Standing Director	Member of the Incheon City Advisory Committee	March 14, 2014
Cho, Jeon-Hyeok	(54)	Non-Standing Director and member of the Audit Committee	Professor of economics, Myungji University	March 14, 2014
Choi, Gyo-II	(52)	Non-Standing Director and member of the Audit Committee	Attorney, Choi, Gyo-II Law Firm	March 14, 2014

*Cho, Hwan-Eik* has been our President, Chief Executive Officer and Standing Director since December 17, 2012. Prior to his current position, he served as Chair-professor at Hanyang University, President of the Korea Trade-Investment Promotion Agency, CEO of Korea Export Insurance Corporation and Vice Minister of the Ministry of Commerce. Mr. Cho received a Ph.D. in business administration from Hanyang University.

*Ahn, Hong-Ryoul* has been our Standing Director and member of the Audit Committee since December 27, 2013. Mr. Ahn currently serves as auditor of Korea Hemophilia Foundation. Prior to his current position, he served as attorney at Ahn, Hong-Ryoul Law Firm and public prosecutor at Busan District Public Prosecutor's Office. Mr. Ahn received a B.A. in law from Seoul National University.

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*Park, Kyu-Ho* has been our Standing Director since June 18, 2013. Mr. Park also currently serves as our Executive Vice President of Domestic Operations and previously served as our Chief Financial Officer, Vice President of Busan District Division and Head of our Beijing office. Mr. Park received an M.B.A. from Korea University.

*Park, Jung-Keun* has been our Standing Director since October 29, 2013. Mr. Park also currently serves as our Executive Vice President of Overseas Operations and previously served as our Vice President of Personnel & General Affairs Department, Vice President of International Strategy Office and Vice President of Procurement & Contract Department. Mr. Park received a B.A. in economics from Chung-Ang University.

*Baek, Seung-Jung* has been our Standing Director since June 18, 2013. Mr. Baek also currently serves as our Executive Vice President and Chief Financial Officer and previously served as Chief Human Resources Officer, Vice President of Audit & Inspection Office and Vice President of Daegu-Gyeongbuk District Division. Mr. Baek received an M.A. in economics from Kyungpook National University.

*Kim, Byung-Sook* has been our Standing Director since June 18, 2013. Mr. Kim also currently serves as our Executive Vice President and Chief Technology Officer and previously served as the Vice President of KEPCO Research Institute, Vice President of Technology Policy & Planning Department and Vice President of Distribution Construction Department. Mr. Kim received a Ph.D in electrical engineering from Chonbuk National University.

*Koo, Bon-Woo* has been our Standing Director since February 20, 2012. Mr. Koo also currently serves as our Executive Vice President and Chief Power Grid Officer and previously served as our Executive Vice President and Chief Operating Officer and Vice President of Transmission Operation Department. Mr. Koo received a B.S. in electrical engineering from Chung-Ang University.

*Chung, Hae-Joo* has been our Non-Standing Director since June 30, 2011. Mr. Chung is currently the chairman of the board of Korea Testing & Research Institute. Mr. Chung received a B.A. in law from Seoul National University and completed a public policy course at Seoul National University Graduate School of Public Administration.

*Kim, Jung-Hyun* has been our Non-Standing Director since June 13, 2012. Mr. Kim previously served as a professor of chemical and biomolecular engineering at Yonsei University. Mr. Kim received an M.A. in chemical and biomolecular engineering from Yonsei University and a Ph.D in polymer engineering from Lehigh University.

*Yim, Chu-Hwan* has been our Non-Standing Director since October 19, 2012. Mr. Yim previously served as a visiting professor of electronics and information engineering at Korea University. Mr. Yim received an M.A. in industrial education from Seoul National University and a Ph.D in telecommunication system from Braunschweig University.

*Shin, Il-Soon* has been our Non-Standing Director since April 11, 2011. Mr. Shin is currently a policy advisor to the New Frontier Party. Mr. Shin received a B.S. in electrical engineering from U.S. Military Academy (West Point), an M.A. in military art and science from the United States Army Command and General Staff College and an M.A. in business administration from Kyungnam University.

*Nam, Dong-Kyoon* has been our Non-Standing Director since October 24, 2011. Mr. Nam is currently a standing auditor of BC Card. Mr. Nam previously served as the Vice Mayor for Political Affairs, Daegu Metropolitan City. Mr. Nam received an M.A. in economics from Vanderbilt University.

*Lee, Kang-Hee* has been our Non-Standing Director since February 14, 2014. Mr. Lee is currently a member of the Incheon City Advisory Committee. Mr. Lee previously served as a member of the National Assembly for two terms and a member of the Advisory Board on Democratic Peaceful Unification.



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*Cho, Jeon-Hyeok* has been our Non-Standing Director since February 14, 2014. Mr. Choi is currently Professor of economics at College of Liberal Arts, Myungji University. Mr. Choi previously served as a Professor of the Department of Economics at National University of Incheon and Chief Executive Officer of Naeil Venture Capital. Mr. Cho received a Ph.D in economic theory and financial economics from University of Wisconsin at Madison.

*Choi, Gyo-Il* has been our Non-Standing Director since February 14, 2014. Mr. Choi is currently an attorney-at-law at Choi, Gyo-Il law Firm. Mr. Choi previously served as Chief Public Prosecutor at the Seoul Prosecutor's Office and Deputy Minister at the Ministry of Justice. Mr. Lee received an LL.B in law from Korea University.

The business address of our directors is 512 Yeongdongdaero, Gangnam-Gu, Seoul, Korea.

## **Audit Committee**

Under the Public Agencies Management Act, which took effect as of April 1, 2007, we are designated as a market-oriented public enterprises and, as such, are required to establish an audit committee in lieu of the pre-existing board of auditors upon expiration of the term of the last remaining member of the board of auditors. In September 2007, we amended our Articles of Incorporation to establish, in lieu of the pre-existing board of auditors, an audit committee meeting the requirements under the Sarbanes-Oxley Act. Under the Public Agencies Management Act, the Korean Commercial Code and the amended Articles of Incorporation, we are required to maintain an audit committee consisting of three members, of which not less than two members are required to be the non-standing directors. The roles and responsibilities of our audit committee members are to perform the functions of an audit committee meeting the requirements under the Sarbanes-Oxley Act. Our audit committee was established on December 8, 2008.

Our audit committee currently consists of Ahn, Hong-Ryoul, a standing director, and Cho, Jeon-Hyeok and Choi, Gyo-Il, both non-standing directors. All such members of the audit committee are independent within the meaning of the Korea Stock Exchange listing standards, the regulations promulgated under the Korean Commercial Code and the New York Stock Exchange listing standards.

## **Item 6B. Compensation**

In 2013, the aggregate amount of remuneration paid and accrued to our directors and executive officers in the aggregate was Won 5,951 million. The aggregate amount accrued in 2013 to provide retirement and severance benefits for our directors and executive officers was Won 396 million.

## **Item 6C. Board Practices**

Under the Public Agencies Management Act and our Articles of Incorporation, the term of office for our directors and executive officers appointed after April 1, 2007 is three years for the president and two years for other executive officers. The officers and the directors may be reappointed for an additional term of one year. In order to be reappointed, the president must be evaluated on the basis of his management performance; a standing director, on the basis of the performance of the duties for which he was elected to perform, or if the standing director has executed an incentive bonus contract, on the basis of his performance under the contract; and a non-standing director, on the basis of his performance of the duties for which he was elected to perform.

Our board currently does not maintain a compensation committee. See Item 16G. Corporate Governance. However, we currently maintain an audit committee meeting the requirements of the Sarbanes-Oxley Act to perform the roles and responsibilities of the compensation committee. Prior to the establishment of the audit committee on December 8, 2008 pursuant to the Public Agencies Management Act, we maintained a board of auditors, which performed the roles and responsibilities required of an audit committee under the Sarbanes-Oxley Act, including the supervision of the financial and accounting audit by the independent registered public accountants.

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The president's management contract includes benefits upon termination of his employment. The amount for termination benefits payable equals the average value of compensation for one month times the number of years the president is employed by us, provided that the president is only eligible for termination benefits after more than one year of continuous service.

The termination benefits for standing directors are determined in accordance with our internal regulations for executive compensation. Standing directors are only eligible for benefits upon termination of employment or death following one year of continuous service.

See also Item 16G. Corporate Governance for a further description of our board practices.

**Item 6D. Employees**

As of December 31, 2013, we and our generation subsidiaries had a total of 39,566 regular employees and 1,997 non-regular employees, almost all of whom are employed within Korea. Approximately 10.4% of our regular employees (including employees of our generation subsidiaries) are located at our head office in Seoul.

The following table sets forth the number of and other information relating to our regular employees, not including directors or senior management, as of December 31, 2013.

	KEPCO	KHNP	KOSEP	KOMIPO	KOWEPO	KOSPO	EWP	Total
Regular Employees								
Administrative	4,577	862	270	254	267	252	254	6,736
Engineers	9,435	7,727	1,582	1,772	1,611	1,573	1,856	25,556
Others	5,632	960	166	174	126	126	90	7,274
Total	19,644	9,549	2,018	2,200	2,004	1,951	2,200	39,566
Head Office Employees	1,567	1,109	351	234	293	272	293	4,119
% of total	8%	11.6%	17.4%	10.6%	14.6%	13.9%	13.3%	10.4%
Members of Labor Union	14,672	6,013	1,395	1,433	1,305	1,277	1,501	27,596
% of total	75%	63.0%	69.1%	65.1%	65.1%	65.5%	68.2%	69.7%

We and each of our generation subsidiaries have separate labor unions. Approximately 69.7% of our and our generation subsidiaries' employees in the aggregate are members of these labor unions, each of which negotiates a collective bargaining agreement for its members each year.

Under applicable Korean law, an employee-employer cooperation committee, which is composed of eight representatives of management and eight representatives of labor, is required to be, and has been, established at the holding company and at each of our generation subsidiaries. The committee meets periodically to discuss various labor issues.

Since our formation in 1981, our businesses had not been interrupted by any work stoppages or strikes except in early 2002, when employees belonging to our five thermal generation subsidiaries went on strike for six weeks to protest the Government's decision to privatize such thermal generation subsidiaries according to the Restructuring Plan, which privatization plan has since been suspended indefinitely. See Item 3D. Risk Factors - Risks Relating to KEPCO The Government may adopt policy measures to substantially restructure the Korean electric power industry or our operational structure, which may have a material adverse effect on our business, operations and profitability.

We believe our relations with our employees are generally good.

**Item 6E. Share Ownership**

None of our directors and members of our administrative, supervisory or management bodies own more than 0.1% of our common stock.

**Table of Contents****ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS****Item 7A. Major Shareholders**

The following table sets forth certain information relating to certain owners of our capital stock as of February 17, 2014, the date we last closed our shareholders registry:

Title of Class	Identity of Person or Group	Shares Owned	Percentage of Class <sup>(1)</sup> (%)
Common stock	Government	135,917,118	21.2
	Korea Finance Corporation <sup>(2)</sup>	192,159,940	29.9
	Subtotal	328,077,058	51.1
	National Pension Corporation	41,775,649	6.5
	KEPCO (held in the form of treasury stock)	18,929,995	2.9
	Employee Stock Ownership Association		
	Directors and executive officers as a group		
	Public (non-Koreans)	150,612,232	23.5
	Common shares	118,634,815	18.5
	American depositary shares	31,977,417	5.0
	Public (Koreans)	102,569,143	16.0
	Total	641,964,077	100.00

*Notes:*

(1) Percentages are based on issued shares of common stock (including treasury stock).

(2) Korea Finance Corporation is a Government-controlled entity.

All of our shareholders have equal voting rights. See Item 10B. Memorandum and Articles of Incorporation Description of Capital Stock Voting Rights.

**Item 7B. Related Party Transactions**

We are engaged in a variety of transactions with our affiliates. We have related party transactions with Government-controlled entities such as Korea Gas Corporation, our consolidated subsidiaries and our equity investees. In addition, we engage in related party transactions with Korea Finance Corporation, one of our major shareholders. See Note 46 of the Notes to our consolidated financial statements included in this annual report for a description of transaction and balances with our related parties.

In the past three years, our related party transactions principally consisted of purchases of LNG from Korea Gas Corporation, sales of electricity to Korea District Heating Co., Ltd., and long-term borrowings from Korea Finance Corporation. In 2011, 2012 and 2013, we and our generation subsidiaries purchased LNG from Korea Gas Corporation in the aggregate amount of Won 9,377 billion, Won 11,645 billion and Won 12,937 billion, respectively. As of December 31, 2013, we had long-term borrowings from Korea Finance Corporation in the aggregate amount of Won 2,300 billion.

We also engage in extensive transactions with our consolidated generation subsidiaries, including the purchase of electricity from them through Korea Power Exchange, sales of electricity to them, payment and receipt of commissions for services and receivables and payables transactions. These are eliminated in the consolidation process. We also provide guarantees for certain of our affiliates. See Item 5F. Tabular Disclosure of Contractual Obligations Overdraft and Others. We also have certain relationships with the Korea Power Exchange. See Item 4B. Business Overview Purchase of Electricity Cost-based Pool System.

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For a further description of our transactions with our affiliates, see Note 46 of the Notes to our consolidated financial statements included in this annual report.

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**Item 7C. Interests of Experts and Counsel**

Not Applicable

**ITEM 8. FINANCIAL INFORMATION**

**Item 8A. Consolidated Statements and Other Financial Information**

We prepare our consolidated financial statements in compliance with requirements under Item 18. Financial Statements.

**Legal Proceedings**

As of December 31, 2013, we, including our generation subsidiaries, were engaged in 597 lawsuits as the defendant and 119 lawsuits as the plaintiff. As of the same date, the total amount of damages claimed against us was Won 402 billion, for which we have made a provision of Won 24 billion as of December 31, 2013, and the total amount claimed by us was Won 109 billion as of December 31, 2013. While the outcome of any of these lawsuits cannot presently be determined with certainty, our management currently believes that the final results from these lawsuits will not have a material adverse effect on our liquidity, financial position or results of operation.

The following are potentially significant claims pertaining to us and our subsidiaries.

In 2009, we entered into a contract with LS Cable & System Ltd. ( LS Cable ) under which LS Cable agreed to install submarine cables in an area between Jindo and Jeju Island. LS Cable & System Ltd. notified us of the completion of construction and requested the issuance of a certificate of completion. We however disagreed that LS Cable had completed construction in accordance with the conditions of the contract, rejected the goods delivered and refused to pay LS Cable the contracted amount. In April 2013, LS Cable filed for arbitration with the Korean Commercial Arbitration Board seeking Won 194 billion in total from us in relation to unpaid invoices under the contract and extra payments relating to claims of rejecting the test on completion and the goods delivered. Our management currently believes that we are not presently obligated to make any payments in relation to this matter and we accordingly had not made any provision in relation thereto as of December 31, 2013 based on the view that LS Cable did not fully perform its obligations according to the contract terms and further that it is not possible to reasonably estimate the amount of potential loss since the Korean Commercial Arbitration Board is in the early stages of examining the facts of the case, including by hiring third-party experts.

In January 2013, Korea Nuclear Technology Co., Ltd. ( KNT ) initiated litigation against KHNP based on the claim that KNT had a right to supply KHNP with passive autocatalytic recombiners ( PARs ), which had been developed under a cooperative research and development agreement between KNT and KHNP through a contract to be negotiated between the two parties without being required to undergo an open bidding process for a period of three years, but that KHNP selected a third party to supply the PARs following an open bidding process. The claimed amount of damages and compensation was Won 6.9 billion. In October 2013, the lower court ruled against KNT based on the principles of freedom of contract and the preference for competitive bidding. In December 2013, KNT filed for an appeal. Our management currently believes that we are not presently obligated to make any payments in relation to this matter and we accordingly had not made any provision in relation thereto as of December 31, 2013, based on the view that KHNP was not legally obligated to enter into a contract with KNT for the supply of PARs, which view has been supported by the lower court ruling.

In December 2013, the Supreme Court of Korea ruled that regular bonuses fall under the category of ordinary wages on the condition that those bonuses are paid regularly and uniformly, and that any agreement which excludes such regular bonuses from ordinary wage is invalid. The Supreme Court further ruled that in

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spite of invalidity of such agreements, employees shall not retroactively claim additional wages incurred due to such court decision, in case that such claims bring to employees unexpected benefits which substantially exceeds the wage level agreed by employers and employees and cause an unpredicted increase in expenditures for their company, which would lead the company to material managerial difficulty or would threaten the existence of the company. In that case, the claim is not acceptable since it is unjust and is in breach of the principle of good faith. Prior to such Supreme Court ruling, we determined wages in accordance with budget instructions from the Ministry of Strategy and Finance, which excluded bonuses from ordinary wages and which was determined with the consent of the relevant labor unions. Following the Supreme Court decision, the Korea Power Plant Industry Union and others filed lawsuits in an aggregate amount of Won 44.6 billion against our six generation subsidiaries, based on claims that ordinary wage was paid without including certain items that should have been included as ordinary wage. Our management currently believes that we are not presently obligated to make any payments in relation to this matter and we accordingly had not made any provision in relation thereto as of December 31, 2013 since it is unclear how the Supreme Court ruling should be applied and it is not possible to reasonably estimate the amount of potential loss since such amount will depend on the nature of the future agreement between management and relevant labor unions and/or the outcome of the foregoing or related lawsuits.

In addition, our generation subsidiaries, currently and from time to time, are involved in lawsuits incidental to the conduct of their business. A significant number of such lawsuits are based on the claim that the construction and operation of the electricity generation units owned by our generation subsidiaries have impaired neighboring fish farms. Our generation subsidiaries normally pay compensation to the members of fishery associations near our power plant complex for expected losses and damages arising from the construction and operation of their power plants in advance. Despite such compensation paid by us, a claim may still be filed against our generation subsidiaries challenging the compensation paid by us. We do not believe such claims or proceedings, individually or in the aggregate, have had or will have a material adverse effect on us and our generation subsidiaries. However, we cannot assure you that this will be the case in the future, given the possibility that we may become subject to more litigation and lawsuits arising from changes in the environmental laws and regulations applicable to us and our generation subsidiaries and people's growing demand for more compensation.

**Dividend Policy**

For our dividend policy, see Item 10B. Memorandum and Articles of Incorporation Description of Capital Stock Dividend Rights. For a description of the tax consequences of dividends paid to our shareholders, see Item 10E. Taxation Korean Taxes Shares or ADSs Dividends on the Shares of Common Stock or ADSs and Item 10E. Taxation U.S. Federal Income and Estate Tax Consideration for U.S. Persons Tax Consequences with Respect to Common Stock and ADSs Distributions on Common Stock or ADSs.

**Item 8B. Significant Changes**

Not Applicable

**ITEM 9. THE OFFER AND LISTING****Item 9A. Offer and Listing Details****Notes**

We have issued the following registered notes and debentures, which are traded principally in the over-the-counter market:

7.40% Amortizing Debentures, due April 1, 2016 (the 7.40% Debentures );

7.95% Zero-To-Full Debentures, due April 1, 2096 (the 7.95% Debentures );

6% Debentures due December 1, 2026, (the 6% Debentures );

7% Debentures due February 1, 2027 (the 7% Debentures ); and

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6-3/4% Debentures due August 1, 2027 (the 6-3/4% Debentures, and together with the 7.40% Debentures, the 7.95% Debentures, the 6% Debentures and the 7% Debentures, the Registered Debt Securities ).

Sales prices for the Registered Debt Securities are not regularly reported on any United States securities exchange or other United States securities quotation service.

**Share Capital**

The principal trading market for our common stock is the Korea Exchange. Our common stock is also listed on the New York Stock Exchange in the form of ADSs. The ADSs have been issued by JPMorgan Chase Bank as depositary and are listed on the New York Stock Exchange under the symbol KEP. One ADS represents one-half of one share of our common stock. As of February 17, 2014, the date we last closed our shareholders registry, 63,954,834 ADSs representing 5.0% shares of our common stock were outstanding.

**Common Stock**

Shares of our common stock are listed on the KRX KOSPI Market of the Korea Exchange. The table below shows the high and low closing prices on the KRX KOSPI Market of the Korea Exchange for our common stock since 2009.

Period	Price	
	High	Low
	(In Won)	
2009		
First Quarter	32,500	23,000
Second Quarter	30,600	25,700
Third Quarter	35,800	28,000
Fourth Quarter	35,700	31,550
2010		
First Quarter	41,600	33,800
Second Quarter	36,600	30,700
Third Quarter	33,600	28,800
Fourth Quarter	32,700	27,700
2011		
First Quarter	30,050	25,800
Second Quarter	30,000	25,600
Third Quarter	28,400	20,450
Fourth Quarter	27,150	20,650
2012		
First Quarter	27,900	22,250
Second Quarter	25,850	21,450
Third Quarter	27,900	23,750
Fourth Quarter	30,450	26,200
2013		
First Quarter	34,850	29,000
Second Quarter	32,600	24,850
Third Quarter	30,700	26,350
Fourth Quarter	34,750	27,250
2014		
First Quarter (through April 11)		
January	36,400	33,400
February	37,600	34,900
March	37,800	36,250
April (through April 11)	39,700	37,100



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The table below shows the high and low trading prices on the New York Stock Exchange for the outstanding ADSs since 2009. Each ADS represents one-half of one share of our common stock.

Period	Price (In US\$)	
	High	Low
2009		
First Quarter	12.38	6.90
Second Quarter	12.37	9.34
Third Quarter	15.24	10.99
Fourth Quarter	15.25	13.52
2010		
First Quarter	17.89	14.86
Second Quarter	16.55	12.70
Third Quarter	14.19	12.28
Fourth Quarter	14.54	11.91
2011		
First Quarter	13.48	11.39
Second Quarter	13.74	11.86
Third Quarter	13.35	8.50
Fourth Quarter	11.55	8.25
2012		
First Quarter	12.45	9.73
Second Quarter	11.18	9.36
Third Quarter	12.42	10.37
Fourth Quarter	13.97	11.65
2013		
First Quarter	16.35	13.04
Second Quarter	14.70	10.70
Third Quarter	14.59	11.45
Fourth Quarter	16.61	12.77
2014		
First Quarter (through April 11)		
January	17.30	15.51
February	17.63	16.08
March	17.75	16.81
April (through April 11)	19.07	17.66

**Item 9B. Plan of Distribution**

Not Applicable

**Item 9C. Markets****The Korea Exchange**

The Korea Exchange began its operations in 1956, originally under the name of the Korea Stock Exchange. On January 27, 2005, pursuant to the Korea Securities and Futures Exchange Act, the Korea Exchange was officially created through the consolidation of the Korea Stock Exchange, the Korea Futures Exchange, the KOSDAQ Stock Market, Inc., or KOSDAQ, and the KOSDAQ Committee within the Korea Securities Dealers Association, which was in charge of the management of the KOSDAQ. The KRX KOSPI Market of the Korea Exchange, formerly the Korea Stock Exchange, has a single trading floor located in Seoul. The Korea Exchange



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is a limited liability company, the shares of which are held by (i) securities companies and futures companies that were the members of the Korea Stock Exchange or the Korea Futures Exchange and (ii) the shareholders of the KOSDAQ.

As of March 31, 2014 the aggregate market value of equity securities listed on the KOSPI of the Korea Exchange was approximately Won 1,182,488 billion. The average daily trading volume of equity securities for the first quarter of 2014 was approximately 238 million shares with an average transaction value of Won 3,752 billion.

The Korea Exchange has the power in some circumstances to suspend trading of shares of a given company or to de-list a security. The Korea Exchange also restricts share price movements. All listed companies are required to file accounting reports annually, semi-annually and quarterly and to release immediately all information that may affect trading in a security.

The Government has in the past exerted, and continues to exert, substantial influence over many aspects of the private sector business community which can have the intention or effect of depressing or boosting the market. In the past, the Government has informally both encouraged and restricted the declaration and payment of dividends, induced mergers to reduce what it considers excess capacity in a particular industry and induced private companies to publicly offer their securities.

The Korea Exchange publishes the Korea Composite Stock Price Index, or KOSPI, every thirty seconds, which is an index of all equity securities listed on the KRX KOSPI Market of the Korea Exchange. On January 1, 1983, the method of computing KOSPI was changed from the Dow Jones method to the aggregate value method. In the new method, the market capitalizations of all listed companies are aggregated, subject to certain adjustments, and this aggregate is expressed as a percentage of the aggregate market capitalization of all listed companies as of the base date, January 4, 1980.

Movements in KOSPI in the past five years are set out in the following table:

	Opening	High	Low	Closing
2009	1,157.4	1,718.9	1,018.8	1,682.8
2010	1,696.1	2,043.5	1,552.8	2,043.5
2011	2,070.1	2,228.9	1,706.2	1,825.7
2012	1,826.4	2,049.3	1,769.3	1,982.3
2013	2,031.1	2,059.6	1,780.6	2,011.3
2014 (through April 11)	1,967.2	2,008.6	1,886.9	1,997.4

Source: The Korea Exchange

Shares are quoted ex-dividend on the first trading day of the relevant company's accounting period; since the calendar year is the accounting period for the majority of listed companies, this may account for the drop in KOSPI between its closing level at the end of one calendar year and its opening level at the beginning of the following calendar year.

With certain exceptions, principally to take account of a share being quoted ex-dividend and ex-rights, upward and downward movements in share prices of any category of shares on any day are limited under the rules of the Korea Exchange to 15% of the previous day's closing price of the shares, rounded down as set out below:

Previous Day's Closing Price (Won)	Rounded Down to (Won)
less than 5,000	5
5,000 to less than 10,000	10
10,000 to less than 50,000	50
50,000 to less than 100,000	100
100,000 to less than 500,000	500
500,000 or more	1,000



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As a consequence, if a particular closing price is the same as the price set by the fluctuation limit, the closing price may not reflect the price at which persons would have been prepared, or would be prepared to continue, if so permitted, to buy and sell shares. Orders are executed on an auction system with priority rules to deal with competing bids and offers.

Due to deregulation of restrictions on brokerage commission rates, the brokerage commission rate on equity securities transactions may be determined by the parties, subject to commission schedules being filed with the Korea Exchange by the securities companies. In addition, a securities transaction tax will generally be imposed on the transfer of shares or certain securities representing rights to subscribe for shares. A special agricultural and fishery tax of 0.15% of the sales prices will also be imposed on transfer of these shares and securities on the Korea Exchange. See Item 10E. **Taxation Korean Taxes.**

The number of companies listed on the KRX KOSPI Market of the Korea Exchange since 2009, the corresponding total market capitalization at the end of the periods indicated and the average daily trading volume for those periods are set forth in the following table:

Year	Number of Listed Companies	Total Market Capitalization on the Last Day for Each Period		Average Daily Trading Volume, Value		
		(Millions of Won)	(Thousands of U.S. dollars) <sup>(1)</sup>	(Thousands of Shares)	(Millions of Won)	(Thousands of U.S. dollars) <sup>(1)</sup>
2009	770	887,935,183	760,478,917	485,657	5,795,552	4,963,645
2010	777	1,141,885,458	1,002,621,352	380,859	5,619,768	4,934,382
2011	791	1,041,999,162	903,493,594	353,759	6,883,146	5,968,218
2012	784	1,154,294,166	1,077,671,708	486,480	4,823,643	4,503,448
2013	777	1,185,973,724	1,123,826,138	328,325	3,993,422	3,784,158
2014 (through March 31)	775	1,182,487,723	1,106,369,501	238,476	3,752,227	3,510,691

Source: The Korea Exchange

Note:

(1) Converted at the Concentration Base Rate of the Bank of Korea or the market average exchange rate as announced by Seoul Money Brokerage Services, Ltd. in Seoul, as the case may be, at the end of the periods indicated.

The Korean securities markets are principally regulated by the Financial Services Commission and the Financial Investment Services and Capital Markets Act. The law imposes restrictions on insider trading and price manipulation, requires specified information to be made available by listed companies to investors and establishes rules regarding margin trading, proxy solicitation, takeover bids, acquisition of treasury shares and reporting requirements for shareholders holding substantial interests.

**Protection of Customer's Interest in Case of Insolvency of Financial Investment Companies with a Brokerage License**

Under Korean law, the relationship between a customer and a financial investment company with a brokerage license in connection with a securities sell or buy order is deemed to be consignment, and the securities acquired by a consignment agent (i.e., the financial investment company with a brokerage license) through such sell or buy order are regarded as belonging to the customer insofar as the customer and the consignment agent's creditors are concerned. Therefore, in the event of bankruptcy or reorganization procedures involving a financial investment company with a brokerage license, the customer of such financial investment company is entitled to the proceeds of the securities sold by such financial investment company.

When a customer places a sell order with a financial investment company with a brokerage license which is not a member of the Korea Exchange and this financial investment company places a sell order with another

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financial investment company with a brokerage license which is a member of the Korea Exchange, the customer is still entitled to the proceeds of the securities sold received by the non-member company from the member company regardless of the bankruptcy or reorganization of the non-member company.

Likewise, when a customer places a buy order with a non-member company and the non-member company places a buy order with a member company, the customer has the legal right to the securities received by the non-member company from the member company, because the purchased securities are regarded as belonging to the customer insofar as the customer and the non-member company's creditors are concerned.

Under the Financial Investment Services and Capital Markets Act, the Korea Exchange is obliged to indemnify any loss or damage incurred by counterparty as a result of a breach by its members. If a financial investment company with a brokerage license which is a member of the Korea Exchange breaches its obligation in connection with a buy order, the Korea Exchange is obliged to pay the purchase price on behalf of the breaching member.

As the cash deposited with a financial investment company with a brokerage license is regarded as belonging to such financial investment company, which is liable to return the same at the request of its customer, the customer cannot take back deposited cash from the financial investment company with a brokerage license if a bankruptcy or reorganization procedure is instituted against such financial investment company and, therefore, can suffer from loss or damage as a result. However, the Depositor Protection Act provides that Korean Deposit Insurance Corporation will, upon the request of the investors, pay investors up to Won 50 million per depositor per financial institution in case of the such financial investment company's bankruptcy, liquidation, cancellation of securities business license or other insolvency events (collectively, the Insolvency Events). Pursuant to the Financial Investment Services and Capital Markets Act, subject to certain exceptions, financial investment companies with a brokerage license are required to deposit the cash received from their customers with the Korea Securities Finance Corporation, a special entity established pursuant to the Financial Investment Services and Capital Markets Act. Set-off or attachment of cash deposits by financial investment companies with a brokerage license is prohibited. The premiums related to this insurance under the Depositor Protection Act are paid by financial investment companies with a brokerage license.

### **Item 9D. Selling Shareholders**

Not Applicable

### **Item 9E. Dilution**

Not Applicable

### **Item 9F. Expenses of the Issue**

Not Applicable

## **ITEM 10. ADDITIONAL INFORMATION**

### **Item 10A. Share Capital**

Not Applicable

### **Item 10B. Memorandum and Articles of Incorporation**

Set forth below is information relating to our capital stock, including brief summaries of material provisions of our Articles of Incorporation, the KEPCO Act, the Financial Investment Services and Capital Markets Act, the

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Korean Commercial Code and certain related laws of Korea, all currently in effect. The following summaries are qualified in their entirety by reference to our Articles of Incorporation and the applicable provisions of the KEPCO Act, Financial Investment Services and Capital Markets Act, the Korean Commercial Code, the Public Agencies Management Act and certain related laws of Korea. In November 2013 we most recently amended our Articles of Incorporation to reflect the amendments to a regulation promulgated under the Public Agencies Management Act.

### **Objects and Purposes**

We are a statutory juridical corporation established under the KEPCO Act for the purpose of ensuring stabilization of the supply and demand of electric power, and further contributing toward the sound development of the national economy through expediting development of electric power resources and carrying out proper and effective operation of the electricity business. The KEPCO Act and our Articles of Incorporation contemplate that we engage in the following activities:

1. development of electric power resources;
2. generation, transmission, transformation and distribution of electricity and other related business activities;
3. research and development of technology related to the businesses mentioned in items 1 and 2;
4. overseas businesses related to the businesses mentioned in items 1 through 3;
5. investments or contributions related to the businesses mentioned in items 1 through 4;
6. businesses incidental to items 1 through 5;
7. Development and operation of certain real estate held by us to the extent that:
  - a. it is necessary to develop certain real estate held by us due to external factors, such as relocation, consolidation, conversion to indoor or underground facilities or deterioration of our substation or office; or
  - b. it is necessary to develop certain real estate held by us to accommodate development of relevant real estate due to such real estate being incorporated into or being adjacent to an area under planned urban development; and
8. other activities entrusted by the Government.

Our registered name is Hankook Chollryuk Kongsae in Korean and Korea Electric Power Corporation in English. Our registration number in the commercial registry office is 114671-0001456.

### **Directors**

Under the KEPCO Act and our Articles of Incorporation, our board of directors consists of our president, standing directors and non-standing directors. A majority of the board members constitutes a voting quorum, and resolutions will be passed by a majority of the board members. Directors who have an interest in certain agenda proposed to the board may not vote on such issues.

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The standards of remuneration for our officers, including directors, shall be determined by a resolution of the board of directors, provided that the maximum amount of remuneration to be paid to our officers shall be determined by shareholder resolution and provided that the remuneration standards for the president and standing directors shall be determined by board resolution in accordance with the guideline thereon established by the minister of the Ministry of Strategy and Finance through review and resolution of our management committee. Directors who have an interest may not participate in the meeting of the board of directors for determining the remuneration for officers.

Neither the KEPCO Act nor our Articles of Incorporation have provisions relating to (i) borrowing powers exercisable by the directors and how such borrowing powers can be varied, (ii) retirement or non-retirement of directors under an age limit requirement, or (iii) the number of shares required for a director's qualification.

### **Share Capital**

Currently, our authorized share capital is 1,200,000,000 shares, which consists of shares of common stock and shares of non-voting preferred stock, par value Won 5,000 per share. Under our Articles of Incorporation, we are authorized to issue up to 150,000,000 non-voting preferred shares. As of February 17, 2014, the last day on



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which the shareholder registry was closed for purposes of identifying shareholders of record, 641,964,077 common shares were issued and no non-voting preferred shares have been issued. As of December 31, 2013, we held 18,929,995 shares of our common stock as treasury stock. All of the issued and outstanding common shares are fully-paid and non-assessable and are in registered form. Share certificates are issued in denominations of 1, 5, 10, 50, 100, 500, 1,000 and 10,000 shares.

### **Description of Capital Stock**

#### ***Dividend Rights***

Under the KEPCO Act, we are authorized to pay preferential dividends on our shares held by public shareholders as opposed to those held by the Government. Dividends to public shareholders are distributed in proportion to the number of shares of the relevant class of capital stock owned by each public shareholder following approval by the shareholders at a general meeting of shareholders. Korea Finance Corporation may receive dividends in proportion to the numbers of our shares held by them. Under the Korean Commercial Code and our Articles of Incorporation, we will pay full annual dividends on newly issued shares.

Under our Articles of Incorporation, holders of non-voting preferred shares (of which there are currently none) are entitled to receive an amount not less than 8% of their par value as determined by a resolution of the board of directors at the time of their issuance. However, if the dividends on our common shares exceed the dividends on our non-voting preferred shares, the holders of non-voting preferred shares will be entitled to participate in the distribution of such excess amount with the holders of the common shares at an equal rate.

We declare our dividend annually at the annual general meeting of shareholders which is held within three months after the end of the fiscal year. The annual dividend is paid to the shareholders on record as of the end of the fiscal year preceding the annual shareholders meeting. Annual dividends may be distributed either in cash or in our shares. However, a dividend of shares must be distributed at par value, and dividends in shares may not exceed one-half of the annual dividend.

Under the Korean Commercial Code and our Articles of Incorporation, we do not have an obligation to pay any annual dividend unclaimed for five years from the payment date.

The KEPCO Act provides that we shall not pay an annual dividend unless we have made up any accumulated deficit and set aside as a legal reserve an amount equal to 20.0% or more of our net profit until our accumulated reserve reaches one-half of our stated capital.

#### ***Distribution of Free Shares***

In addition to dividends in the form of shares to be paid out of retained or current earnings, the Korean Commercial Code permits us to distribute to our shareholders an amount transferred from our capital surplus or legal reserve to stated capital in the form of free shares.

#### ***Voting Rights***

Holders of our common shares are entitled to one vote for each common share, except that voting rights with respect to any common shares held by us or by a corporate shareholder, more than one-tenth of whose outstanding capital stock is directly or indirectly owned by us, may not be exercised. Any person (with certain exceptions) who holds more than 3% of our issued and outstanding shares cannot exercise voting rights with respect to the shares in excess of this 3% limit. See *Limitation on Shareholdings*. Pursuant to the Korean Commercial Code, cumulative voting is permissible in relation to the appointment of directors. Under the Korean Commercial Code, a cumulative vote can be requested by the shareholders of a corporation representing at least 1% of the total voting shares of such corporation if the relevant shareholders meeting is intended to elect more than two seats of the board of directors and the request for cumulative voting is made to the management of the

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corporation in writing at least six weeks in advance of the shareholders' meeting. Under this new voting method, each shareholder will have multiple voting rights corresponding to the number of directors to be appointed in such voting and may exercise all such voting rights to elect one director. Shareholders are entitled to vote cumulatively unless the Articles of Incorporation expressly prohibit cumulative voting. Our current Articles of Incorporation do not prohibit cumulative voting. Except as otherwise provided by law or our Articles of Incorporation, a resolution can be adopted at a general meeting of shareholders by affirmative majority vote of the voting shares of the shareholders present or represented at a meeting, which must also represent at least one-fourth of the voting shares then issued and outstanding. The holders of our non-voting preferred shares (other than enfranchised preferred shares (as described below)) are not entitled to vote on any resolution or to receive notice of any general meeting of shareholders unless the agenda of the meeting includes consideration of a resolution on which such holders are entitled to vote. If we are unable to pay any dividend to holders of non-voting preferred shares as provided in our Articles of Incorporation, the holders of non-voting preferred shares will become enfranchised and will be entitled to exercise voting rights until such dividends are paid. The holders of these enfranchised preferred shares have the same rights as holders of our common shares to request, receive notice of, attend and vote at a general meeting of shareholders. Pursuant to the KEPCO Act and our Articles of Incorporation, the appointment of standing directors, the president and standing statutory auditor are subject to shareholder approval.

Under the Korean Commercial Code, for the purpose of electing our statutory auditor, a shareholder (together with certain related persons) holding more than 3% of the total shares having voting rights may not exercise voting rights with respect to shares in excess of such 3% limit.

The Korean Commercial Code provides that the approval by holders of at least two-thirds of those shares having voting rights present or represented at a meeting, where such shares also represent at least one-third of the total issued and outstanding shares having voting rights, is required in order to, among other things:

amend our Articles of Incorporation;

remove a director or statutory auditor;

effect any dissolution, merger, consolidation or spin-off of us;

transfer the whole or any significant part of our business;

effect the acquisition by us of all of the business of any other company;

effect the acquisition by us of the business of another company that may have a material effect on our business;

reduce capital; or

issue any new shares at a price lower than their par value.

Under our Articles of Incorporation, an approval by the Ministry of Trade, Industry and Energy is required in order to amend the Articles of Incorporation. Any change to our authorized share capital requires an amendment to our Articles of Incorporation.

In addition, in the case of amendments to our Articles of Incorporation or any merger or consolidation of us or in certain other cases which affect the rights or interests of the non-voting preferred shares a resolution must be adopted by a meeting of the holders of non-voting preferred shares approving such event. This resolution may be adopted if approval is obtained from holders of at least two-thirds of those non-voting preferred shares present or represented at such meeting and such non-voting preferred shares also represent at least one-third of our total issued and outstanding non-voting preferred shares.

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A shareholder may exercise his voting rights by proxy. The proxy shall present the power of attorney prior to the start of the general meeting of shareholders. Under the Financial Investment Services and Capital Markets Act and our Articles of Incorporation, no one other than us may solicit a proxy from shareholders.

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Subject to the provisions of the deposit agreement, holders of our American Depositary Shares ( ADSs ) are entitled to instruct the depository, whose agent is the record holder of the underlying common shares, how to exercise voting rights relating to those underlying common shares.

### ***Preemptive Rights and Issuance of Additional Shares***

Authorized but unissued shares may be issued at such times and, unless otherwise provided in the Korean Commercial Code, upon such terms as our board of directors may determine. The new shares must be offered on uniform terms to all our shareholders who have preemptive rights and who are listed on the shareholders register as of the record date. Subject to the limitations described under Limitation on Shareholdings below and with certain other exceptions, all our shareholders are entitled to subscribe for any newly issued shares in proportion to their existing shareholdings. Under the Korean Commercial Code, we may vary, without shareholder approval, the terms of such preemptive rights for different classes of shares. Public notice of the preemptive rights to new shares and their transferability must be given not less than two weeks (excluding the period during which the shareholders register is closed) prior to the record date. Our board of directors may determine how to distribute shares for which preemptive rights have not been exercised or where fractions of shares occur.

Our Articles of Incorporation provide that new shares that are (1) publicly offered pursuant to the Financial Investment Services and Capital Markets Act, (2) issued to members of our employee stock ownership association, (3) represented by depositary receipts, (4) issued through offering to public investors, or (5) issued to investors in kind under the State Property Act may be issued pursuant to a resolution of the board of directors to persons other than existing shareholders, who in such circumstances will not have preemptive rights.

Under our Articles of Incorporation, we may issue convertible bonds or bonds with warrants each up to an aggregate principal amount of Won 2,000 billion and Won 1,000 billion, respectively, to persons other than existing shareholders. However, the aggregate principal amount of convertible bonds and bonds with warrants so issued to persons other than existing shareholders may not exceed Won 2,000 billion.

Under the Financial Investment Services and Capital Markets Act and our Articles of Incorporation, members of our employee stock ownership association, whether or not they are our shareholders, have a preemptive right, subject to certain exceptions, to subscribe for up to 20.0% of any shares publicly offered pursuant to the Financial Investment Services and Capital Markets Act. This right is exercisable only to the extent that the total number of shares so acquired and held by members of our employee stock ownership association does not exceed 20.0% of the total number of shares then outstanding.

### ***Liquidation Rights***

In the event of our liquidation, the assets remaining after payment of all debts, liquidation expenses and taxes will be distributed among shareholders in proportion to the number of shares held. Holders of our non-voting preferred shares have no preference in liquidation.

### ***Rights of Dissenting Shareholders***

In certain limited circumstances (including, without limitation, the transfer of the whole or any significant part of our business or the merger, or consolidation upon a split-off of us with another company), dissenting holders of shares have the right to require us to purchase their shares. To exercise such right, shareholders must submit a written notice of their intention to dissent to us prior to the general meeting of shareholders or the class meeting of holders of non-voting preferred shares, as the case may be. Within 20 days after the date on which the relevant resolution is passed at such meeting, such dissenting shareholders must request us in writing to purchase their shares. We are obligated to purchase the shares of dissenting shareholders within one month after the expiration of such 20-day period. The purchase price for such shares must be determined through negotiation

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between the dissenting shareholders and us. Under the Financial Investment Services and Capital Markets Act, if we cannot agree on a price through negotiation, the purchase price will be the average of (1) the weighted average of the daily share price on the Korea Exchange for a two-month period before the date of adoption of the relevant board resolution, (2) the weighted average of the daily share price on the Korea Exchange for the one month period before such date and (3) the weighted average of the daily share price on the Korea Exchange for the one week period before such date. However, if we or dissenting shareholders who requested us to purchase their shares oppose such purchase price, the determination of a purchase price may be filed with a court. Holders of ADSs will not be able to exercise dissenters' rights unless they have withdrawn the underlying Common Stock and become our direct shareholders.

## **Transfer of Shares**

Under the Korean Commercial Code, the transfer of shares is effected by delivery of share certificates, but in order to assert shareholders' rights against us, the transferee must have his name and address registered on our register of shareholders. For this purpose, shareholders are required to file one's name, address and seal with our transfer agent. Under our Articles of Incorporation, non-resident shareholders must appoint an agent authorized to receive notices on their behalf in Korea and file a mailing address in Korea. These requirements do not apply to the holders of ADSs. Under current Korean regulations, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and internationally recognized foreign custodians are authorized to act as agents and provide related services for foreign shareholders. Our transfer agent is Kookmin Bank, located at 9-1, Namdaemun-ro, 2-ga, Chung-ku, Seoul, Korea. Certain foreign exchange controls and securities regulations apply to the transfer of our shares by non-residents of Korea or non-Koreans. See Item 9. The Offer and Listing.

## **Acquisition of Our Own Shares**

We generally may not acquire our own shares except in certain limited circumstances, including, without limitation, a reduction in capital. Under the Korean Commercial Code, except in case of a reduction in capital, any of our shares acquired by us must be sold or otherwise transferred to a third party within a reasonable time. In general, our 50.0% or more owned-subsiidiaries are not permitted to acquire our shares.

In addition, we may acquire our shares through purchase on the Korea Exchange or through a tender-offer. We may also acquire interests in our own shares through trust agreements with financial investment companies with a trust license. The aggregate purchase price for our shares may not exceed the total amount available for dividends at the end of the preceding fiscal year, less the amount of dividends and mandatory reserves required to be set aside for that fiscal year, subject to certain procedural requirements.

## **General Meeting of Shareholders**

The ordinary general meeting of our shareholders is held within three months after the end of each fiscal year, and subject to board resolution or court approval, an extraordinary general meeting of our shareholders may be held as necessary or at the request of shareholders holding an aggregate of 1.5% or more of our outstanding common shares for at least six consecutive months. Under the Korean Commercial Code, an extraordinary general meeting of shareholders may be convened at the request of our audit committee, subject to a board resolution or court approval. Holders of non-voting preferred shares may only request a general meeting of shareholders once the non-voting preferred shares have become enfranchised as described under Description of Capital Stock Voting Rights above. Written notices setting forth the date, place and agenda of the meeting must be given to shareholders at least two weeks prior to the date of the general meeting of shareholders. However, pursuant to the Korean Commercial Code and our Articles of Incorporation, with respect to holders of less than 1% of the total number of our issued and outstanding shares which are entitled to vote, notice may be given by placing at least two public notices at least two weeks in advance of the meeting in at least two daily

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newspapers published in Seoul or by placing a public notice in the electrical disclosure system of the Financial Supervisory Service or the Korea Exchange, at least two weeks in advance of the meeting. Currently, for giving such notice, we use two daily newspapers published in Seoul as well as an electronic disclosure system available for access at a website maintained by the FSS (known as the Data Analysis, Retrieval and Transfer System, or DART). Shareholders not on the shareholders' register as of the record date are not entitled to receive notice of the general meeting of shareholders or attend or vote at such meeting. Holders of the enfranchised preferred shares on the shareholders' register as of the record date are entitled to receive notice of, and to attend and vote at, the general meetings. Otherwise, holders of non-voting preferred shares are not entitled to receive notice of general meetings of shareholders or vote at such meetings but may attend such meetings.

The general meeting of shareholders is held in Seoul.

## **Register of Shareholders and Record Dates**

Our transfer agent, Kookmin Bank, maintains the register of our shareholders at its office in Seoul, Korea. It registers transfers of our shares on the register of shareholders upon presentation of the share certificates.

The record date for annual dividends is December 31. For the purpose of determining the holders of shares entitled to annual dividends, the register of shareholders may be closed from January 1 to January 31 of each year. Further, the Korean Commercial Code and our Articles of Incorporation permit us at least two weeks' public notice to set a record date and/or close the register of shareholders for not more than three months for the purpose of determining the shareholders entitled to certain rights pertaining to our shares. The trading of our shares and the delivery of certificates in respect of them may continue while the register of shareholders is closed.

## **Annual Report**

At least one week prior to the annual general meeting of shareholders, our annual report and audited consolidated financial statements must be made available for inspection at our principal office and at all branch offices. Copies of annual reports, the audited non-consolidated financial statements and any resolutions adopted at the general meeting of shareholders will be available to our shareholders.

Under the Financial Investment Services and Capital Markets Act, we must file with the Financial Services Commission and the Korea Exchange an annual report within 90 days after the end of our fiscal year, a half-year report within 45 days after the end of the first six months of our fiscal year and quarterly reports within 45 days after the end of the first three months and nine months of our fiscal year. Following our adoption of IFRS starting in January 1, 2011 pursuant to regulatory requirements for listed companies in Korea, we are required to file half-year and quarterly reports containing interim financial statements and notes thereto on a consolidated basis as well as on a separate basis.

## **Limitation on Shareholdings**

No person other than the Government, our employee stock ownership association and persons who obtain an approval from the Financial Services Commission may hold for its account more than 3% of our total issued and outstanding shares. In calculating shareholdings for this purpose, shares held by your spouse and your certain relatives or by your certain affiliates (such spouses, relatives and affiliates are together referred to as "Affiliated Holders") are deemed to be held by you. If you hold our shares in violation of this 3% limit, you are not entitled to exercise the voting rights or preemptive rights of our shares in excess of such 3% limit and the Financial Services Commission may order you to take necessary corrective action. In addition, the KEPCO Act currently requires that the Government, directly or through Korea Finance Corporation, own not less than 51% of our capital. For other restrictions on shareholdings, see Item 9. The Offer and Listing.

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### **Change of Control**

The KEPCO Act requires that the Government, directly or pursuant to the Korea Finance Corporation Act, through Korea Finance Corporation, own not less than 51% of our capital.

### **Disclosure of Share Ownership**

Under the Financial Investment Services and Capital Markets Act, any person whose direct or beneficial ownership of a listed company's shares with voting rights, equity-related debt securities including convertible bonds, bonds with warrants, exchangeable bonds, certificates representing the rights to subscribe for common shares, derivatives-linked securities and depository receipts of the aforementioned securities (collectively referred to as Equity Securities), together with the Equity Securities directly or beneficially owned by certain related persons or by any person acting in concert with the person, accounts for 5% or more of our total outstanding Equity Securities is required to report the status and purpose (in terms of whether the purpose of shareholding is to participate in the management of the issuer) of the holdings and the material contents of the agreements relating to the Equity Securities and other matters prescribed by the Presidential Decree under the Financial Investment Services and Capital Markets Act to the Financial Services Commission of Korea and the Korea Exchange within five business days after reaching the 5% ownership interest threshold.

In addition, any change (i) in the purpose of the shareholding or in the ownership, (ii) the major terms and conditions of agreements relating to Equity Securities owned (such as trust agreements and collateral agreements) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, or (iii) the type of ownership (direct ownership or holding) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, must be reported to the Financial Services Commission of Korea and the Korea Exchange within five business days from the date of such change (or by the tenth day of the month following the month in which the change occurs, in the case of a person with no intent to seek management control). Notwithstanding the foregoing, certain professional investors designated by the Financial Services Commission may report such matters to the Financial Services Commission and the Korea Exchange by the tenth day of the month immediately following the end of the quarter in which such 5.0% ownership interest is reached or the change occurs.

When filing a report to the Financial Services Commission and the Korea Exchange in accordance with the reporting requirements described above, a copy of such report must be sent to the relevant listed company. Violation of these reporting requirements may subject a person to sanctions such as prohibition on the exercise of voting rights with respect to the Equity Securities for which the reporting requirement was violated or fines or imprisonment. Furthermore, the Financial Services Commission may order the disposal of the Equity Securities for which the reporting requirement was violated or may impose administrative fine.

A person reporting to the Financial Services Commission and the Korea Exchange that his purpose of holding the Equity Securities is to participate in the management of the listed company is prohibited from acquiring additional Equity Securities of the listed company and exercising voting rights during the period commencing from the date on which the event triggering the reporting requirements occurs to the fifth day from the date on which the report is made.

### **Item 10C. Material Contracts**

Not applicable.

### **Item 10D. Exchange Controls**

#### **General**

The Foreign Exchange Transaction Act and the Presidential Decree and regulations under that Act and Decree, or collectively the Foreign Exchange Transaction Laws, regulate investment in Korean securities by non-residents and issuance of securities outside Korea by Korean companies. Non-residents may invest in Korean

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securities pursuant to the Foreign Exchange Transaction Laws. The Financial Services Commission has also adopted, pursuant to its authority under the Financial Investment Services and Capital Markets Act, regulations that regulate investment by foreigners in Korean securities and issuance of securities outside Korea by Korean companies.

Subject to certain limitations, the Ministry of Strategy and Finance has the authority to take the following actions under the Foreign Exchange Transaction Laws: (i) if the Government deems it necessary on account of war, armed conflict, natural disaster or grave, sudden and significant changes in domestic or foreign economic circumstances or similar events or circumstances, the Ministry 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, safe-keep or sell any instruments of payment to the Bank of Korea or certain other governmental agencies or financial institutions, and (ii) if the Government concludes that the international balance of payments and international financial markets are experiencing or are likely to experience significant disruption or that the movement of capital between Korea and other countries are likely to adversely affect the Korean Won, exchange rates or other macroeconomic policies, the Ministry of Strategy and Finance may take action to require any person who intends to effect or effects a capital transaction to deposit all or a portion of the instruments of payment acquired in such transactions with the Bank of Korea or certain other governmental agencies or financial institutions.

### **Government Review of Issuances of Debt Securities and ADSs and Report for Payments**

In order for us to issue debt securities of any series outside of the Republic, we are required to file a report with our designated foreign exchange bank or the Ministry of Strategy and Finance on the issuance of such debt securities, depending on the issuance amount. The Ministry of Strategy and Finance may at its discretion direct us to take measures as necessary to avoid undue exchange rate fluctuations before it accepts such report. Furthermore, in order for us to make payments of principal of or interest on the debt securities of any series and other amounts as provided in an indenture and such debt securities, we are required to present relevant documents to the designated foreign exchange bank at the time of each actual payment. The purpose of such presentation is to ensure that the actual remittance is consistent with the terms of the transaction reported to our designated foreign exchange bank or the Ministry of Strategy and Finance.

In order for us to offer for purchase shares of our common stock held in treasury in the form of ADSs or issue shares of our common stock represented by the ADSs, we are required to file a prior report of such offer or issuance with our designated foreign exchange bank or the Ministry of Strategy and Finance, depending on the offering amount. The Ministry of Strategy and Finance may at its discretion direct us to take measures as necessary to avoid undue exchange rate fluctuations before it accepts such report. No further Governmental approval is necessary for the initial offering and issuance of the ADSs.

In order for a depository to acquire any existing shares of our common stock from holders of these shares of common stock (other than from us) for the purpose of issuance of depository receipts representing these shares of common stock, the depository would be required to obtain our consent for the number of shares to be deposited in any given proposed deposit which exceeds the difference between (1) the aggregate number of shares deposited by us or with our consent for the issuance of ADSs (including deposits in connection with the initial and all subsequent offerings of ADSs and stock dividends or other distributions related to these ADSs) and (2) the number of shares on deposit with the depository at the time of such proposed deposit. We may not grant this consent for the deposit of shares of our common stock in the future, if our consent is required. Therefore, a holder of ADSs who surrenders ADSs and withdraws shares of our common stock may not be permitted subsequently to deposit such shares and obtain ADSs.

In addition, we are also required to notify the Ministry of Strategy and Finance upon receipt of the full proceeds from the offering of ADSs. No additional Governmental approval is necessary for the offering and issuance of ADSs.



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### **Reporting Requirements for Holders of Substantial Interests**

Under the Financial Investment Services and Capital Markets Act, any person whose direct beneficial ownership of a listed company's Equity Securities, together with the Equity Securities beneficially owned by certain related persons or by any person acting in concert with such person, accounts for 5% or more of our total outstanding Equity Securities is required to report the status and purpose (namely, whether the purposes of the share ownership is to participate in the management of the issuer) of the holdings and the material contents of the agreements relating to the Equity Securities and other matters prescribed by the Presidential Decree under the Financial Investment Services and Capital Markets Act to the Financial Services Commission and the Korea Exchange within five business days after reaching the 5% ownership interest and any change in ownership interest subsequent to the report which equals or exceeds 1.0% of the total outstanding Equity Securities is required to be reported to the Financial Services Commission and the Korea Exchange within five business days from the date of the change.

In addition, any change (i) in the purpose of the shareholding or in the ownership, (ii) the major terms and conditions of agreements relating to Equity Securities owned (such as trust agreements and collateral agreements) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, or (iii) the type of ownership (direct ownership or holding) to the extent the number of relevant Equity Securities is 1% or more of the total outstanding Equity Securities, must be reported to the Financial Services Commission of Korea and the Korea Exchange within five business days from the date of such change (or by the tenth day of the month following the month in which the change occurs, in the case of a person with no intent to seek management control). Notwithstanding the foregoing, certain professional investors designated by the Financial Services Commission may report such matters to the Financial Services Commission and the Korea Exchange by the tenth day of the month immediately following the end of the quarter in which such 5.0% ownership interest is reached or the change occurs.

When filing a report to the Financial Services Commission and the Korea Exchange in accordance with the reporting requirements described above, a copy of such report must be sent to the relevant listed company. Violation of these reporting requirements may subject a person to sanctions such as prohibition on the exercise of voting rights with respect to the Equity Securities for which the reporting requirement was violated or fines or imprisonment. Furthermore, the Financial Services Commission may order the disposal of the Equity Securities for which the reporting requirement was violated or may impose administrative fine.

A person reporting to the Financial Services Commission and the Korea Exchange that his purpose of holding the Equity Securities is to participate in the management of the listed company is prohibited from acquiring additional Equity Securities of the listed company and exercising voting rights during the period commencing from the date on which the event triggering the reporting requirements occurs to the fifth day from the date on which the report is made.

In addition to the reporting requirements described above, any person whose direct or beneficial ownership of our voting stock and/or depository receipts for our voting stock accounts for 10.0% or more of the total issued and outstanding voting stock, whom we refer to as a major shareholder, must file a report to the Securities and Futures Commission and to the Korea Exchange within five business days after the date on which the person reached such shareholding limit. In addition, such person must file a report to the Securities and Futures Commission and to the Korea Exchange regarding any subsequent change in his/her shareholding. Such report on subsequent change in shareholding must be filed within five business days of the occurrence of any such change. Violation of these reporting requirements may subject a person to criminal sanctions such as fines and imprisonment.

### **Restrictions Applicable to ADSs**

No Governmental approval is necessary for the sale and purchase of ADSs in the secondary market outside Korea or for the withdrawal of shares of our common stock underlying ADSs and the delivery inside Korea of

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the withdrawn shares. However, a foreigner who intends to acquire shares must obtain an Investment Registration Card from the Financial Supervisory Service as described below. The acquisition of shares by a foreigner must be reported by the foreigner or his standing proxy in Korea immediately to the Governor of the Financial Supervisory Service.

### **Special Reporting Requirement for Companies Whose Securities Are Listed on Foreign Exchanges**

Under the regulations of the Financial Services Commission amended on December 24, 2009, (i) if a company listed on the Korea Exchange has submitted a public disclosure of material matters to a foreign financial investment supervisory authority pursuant to the laws of the foreign jurisdiction, then it must submit a copy of the public disclosure and a Korean translation thereof to the Financial Services Commission of Korea and the Korea Exchange, and (ii) if a company listed on the Korea Exchange is approved for listing on a foreign stock market or determined to be de-listed from the foreign stock market or actually listed on, or de-listed from, a foreign stock market, then it must submit a copy of any document, which it submitted to or received from the relevant foreign government, foreign financial investment supervisory authority or the foreign stock market, and a Korean translation thereof to the Financial Services Commission of Korea and the Korea Exchange.

Persons who have acquired shares of our common stock as a result of the withdrawal of shares of common stock underlying ADSs may exercise their preemptive rights for new shares, participate in free distributions and receive dividends on shares of our common stock without any further governmental approval.

### **Restrictions Applicable to Common Stock**

Under the Foreign Exchange Transaction Laws and the Regulations on Financial Investment Business (together, the Investment Rules ), foreigners are permitted to invest, subject to certain exceptions and procedural requirements, in all shares of Korean companies unless prohibited by specific laws. Foreign investors may trade shares listed on the Korea Exchange only through the Korea Exchange except for certain limited circumstances. These circumstances include, among others, (1) odd-lot trading of shares, (2) acquisition of shares by a foreign company as a result of a merger, (3) acquisition or disposal of shares in connection with a tender offer, (4) acquisition of shares by exercise of warrant, conversion right under convertible bonds, exchange right under exchangeable bonds or withdrawal right under depositary receipts issued outside of Korea by a Korean company, such shares being Converted Shares, (5) acquisition of shares through exercise of rights under securities issued outside of Korea, (6) acquisition of shares as a result of inheritance, donation, bequest or exercise of shareholders rights (including preemptive rights or rights to participate in free distributions and receive dividends), (7) over-the-counter transactions between foreigners of a class of shares for which a ceiling on aggregate acquisition by foreigners (as explained below) exists and has been reached or exceeded, (8) acquisition of shares by direct investment under the Foreign Investment Promotion Law, (9) acquisition and disposal of shares on an overseas stock exchange market, if such shares are simultaneously listed on the KRX KOSPI Market or the KRX KOSDAQ Market of the Korea Exchange and such overseas stock exchange, and (10) arm s length transactions between foreigners in the event all such foreigners belong to an investment group managed by the same person. For over-the-counter transactions of shares listed on the Korea Exchange outside the Korea Exchange between foreigners of a class of shares for which a ceiling on aggregate acquisition by foreigners exists and has been reached or exceeded, a financial investment company with a brokerage license in Korea must act as an intermediary. Odd-lot trading of shares listed on the Korea Exchange outside the Korea Exchange must involve a financial investment company with a dealing license in Korea as the other party. Foreign investors are prohibited from engaging in margin transactions with respect to shares subject to a ceiling on acquisition by foreigners.

The Investment Rules require a foreign investor who wishes to invest in or dispose of shares on the Korea Exchange (including Converted Shares) to register his/her identity with the Financial Supervisory Service prior to making any such investment or disposal unless he/she had previously registered. However, such registration requirement does not apply to foreign investors who acquire Converted Shares with the intention of selling them

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within three months from the date they were acquired. Upon registration, the Financial Supervisory Service will issue to the foreign investor an Investment Registration Card which must be presented each time the foreign investor opens a brokerage account with a financial investment company or financial institution in Korea. Foreigners eligible to obtain an Investment Registration Card include any foreign nationals who are individuals (with residence abroad for six months or more), foreign governments, foreign municipal authorities, foreign public institutions, international financial institutions or similar international organizations, corporations incorporated under foreign laws and any person in any additional category designated by the Decree of the Financial Services and Capital Markets Act. All Korean branches of a foreign corporation as a group are treated as a separate foreigner from the head office of the foreign corporation. However, a foreign branch of a Korean securities company, a foreign corporation or a depository issuing depository receipts may obtain one or more Investment Registration Cards in its name in certain circumstances as described in the relevant regulations.

Upon a foreign investor's purchase of shares through the Korea Exchange, no separate report by the investor is required because the Investment Registration Card system is designed to control and oversee foreign investment through a computer system. However, a foreign investor's acquisition or sale of shares outside the Korea Exchange (as discussed above) must be reported by the foreign investor or his standing proxy to the Governor of the Financial Supervisory Service at the time of each acquisition or sale. However, a foreign investor must ensure that any acquisition or sale by it of shares outside the Korea Exchange in the case of trades in connection with a tender offer, odd-lot trading of shares or trades of a class of shares for which the aggregate foreign ownership limit has been reached or exceeded, is reported to the Governor of the Financial Supervisory Service by the Korea Securities Depository, financial investment companies with a dealing or brokerage license or securities finance companies engaged to facilitate such transactions. In the event a foreign investor desires to acquire or sell shares outside the Korea Exchange and the circumstances in connection with such sale or acquisition do not fall within the exceptions made for certain limited circumstances described above, then the foreign investor must obtain the prior approval of the Governor. In addition, in the event a foreign investor acquires or sells shares outside the Korea Exchange, a prior report to the Bank of Korea may also be required in certain circumstances. A foreign investor may appoint one or more standing proxies from among the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and certain eligible foreign custodians which will exercise shareholders' rights or perform any matters related to the foregoing activities if the foreign investor does not perform these activities himself. However, a foreign investor may be exempted from complying with these standing proxy rules with the approval of the Governor of the Financial Supervisory Service in cases deemed inevitable by reason of conflict between the laws of Korea and those of the home country of the foreign investor.

Certificates evidencing shares of Korean companies must be kept in custody with an eligible custodian in Korea, the Korea Securities Depository, foreign exchange banks (including domestic branches of foreign banks), financial investment companies with a dealing, brokerage or collective investment license and certain eligible foreign custodians are eligible to be a custodian of shares for a non-resident or foreign investor. A foreign investor must ensure that his custodian deposits his shares with the Korea Securities Depository. Generally, a foreign investor may not permit any person, other than his/her standing proxy, to exercise rights relating to his shares or perform any tasks related thereto on his behalf. However, a foreign investor may be exempted from complying with this deposit requirement with the approval of the Governor of the Financial Supervisory Service in circumstances where compliance is made impracticable, including cases where such compliance would contravene the laws of the home country of the foreign investor.

Under the Investment Rules, with certain exceptions, a foreign investor may acquire shares of a Korean company without being subject to any single or aggregate foreign investment ceiling. However, certain designated public corporations are subject to a 40.0% ceiling on acquisitions of shares by foreigners in the aggregate and a ceiling on acquisitions of shares by a single foreign investor provided in the Articles of Incorporation of such corporations. Of the Korean companies listed on the Korea Exchange, we are so designated. The Financial Services Commission may impose other restrictions as it deems necessary for the

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protection of investors and the stabilization of the Korean securities and derivatives market. Generally, the ownership of Converted Shares constitutes foreign ownership for purposes of such aggregate foreign ownership limit. However, the acquisition of Converted Shares is one of the exceptions under which foreign investors may acquire shares of designated corporations in excess of the 40.0% ceiling.

In addition to the aggregate foreign investment ceiling set by the Financial Services Commission under authority of the Financial Investment Services and Capital Markets Act, our Articles of Incorporation set a 3% ceiling on acquisition by a single investor (whether domestic or foreign) of the shares of our common stock. Any person (with certain exceptions) who holds more than 3% of our issued and outstanding shares cannot exercise voting rights with respect to our shares in excess of this 3% limit.

The ceiling on aggregate investment by foreigners applicable to us may be exceeded in certain limited circumstances, including as a result of acquisition of:

shares by a depository issuing depository receipts representing such shares (whether newly issued shares or outstanding shares);

Converted Shares;

shares from the exercise of shareholders' rights; or

shares by gift, inheritance or bequest.

A foreigner who has acquired shares in excess of any ceiling described above may not exercise his voting rights with respect to the shares exceeding such limit and the Financial Services Commission may take necessary corrective action against him.

Under the Foreign Exchange Transaction Laws, a foreign investor who intends to acquire shares must designate a foreign exchange bank at which he must open a foreign currency account and a Won account exclusively for stock investments. No approval is required for remittance into Korea and deposit of foreign currency funds in the foreign currency account. Foreign currency funds may be transferred from the foreign currency account at the time required to place a deposit for, or settle the purchase price of, a stock purchase transaction to a Won account opened at a securities company. Funds in the foreign currency account may be remitted abroad without any governmental approval.

Dividends on shares of our common stock are paid in Won. No governmental approval is required for foreign investors to receive dividends on, or the Won proceeds of the sale of, any shares to be paid, received and retained in Korea. Dividends paid on, and the Won proceeds of the sale of, any shares held by a non-resident of Korea must be deposited either in a Won account with the investor's securities company or the investor's Won account. Funds in the investor's Won account may be transferred to his foreign currency account or withdrawn for local living expenses, provided that any withdrawal of local living expenses in excess of a certain amount is reported to the tax authorities by the foreign exchange bank at which Won account is maintained. Funds in the investor's Won account may also be used for future investment in shares or for payment of the subscription price of new shares obtained through the exercise of preemptive rights.

Financial investment companies with a securities dealing, brokerage or collective investment license are allowed to open foreign currency accounts with foreign exchange banks exclusively for accommodating foreign investors' stock investments in Korea. Through these accounts, these securities companies and asset management companies may enter into foreign exchange transactions on a limited basis, such as conversion of foreign currency funds and Won funds, either as a counterparty to or on behalf of foreign investors without the foreign investors having to open their own accounts with foreign exchange banks.

**Table of Contents****Item 10E. Taxation****Korean Taxes**

The following summary describes the material Korean tax consequences of ownership of the Registered Debt Securities and ADSs. Persons considering the purchase of the Registered Debt Securities or ADSs should consult their own tax advisors with regard to the application of the Korean income tax laws to their particular situations as well as any tax consequences arising under the laws of any other taxing jurisdiction. Reference is also made to a tax treaty between the Republic and the United States entitled Convention Between the Government of the Republic of Korea and the Government of the United States of America for the Avoidance of Double Taxation and the Prevention of Fiscal Evasion with Respect to Taxes on Income and the Encouragement of International Trade and Investment, signed on June 4, 1976 and entered into force on October 20, 1979.

The following summary of Korean tax considerations applies to you so long as you are not:

a resident of Korea;

a corporation having its head office, principal place of business or place of effective management in Korea; or

engaged in a trade or business in Korea through a permanent establishment or a fixed base to which the relevant income is attributable or with which the relevant income is effectively connected.

***Registered Debt Securities******Taxation of Interest***

Pursuant to the Special Tax Treatment Control Law ( STTCL ), when we make payments of interest to you on the Registered Debt Securities, no amount will be withheld from such payments for, or on account of, any income taxes of any kind imposed, levied, withheld or assessed by Korea or any political subdivision or taxing authority thereof or therein, provided that Registered Debt Securities are deemed to be foreign currency-denominated bonds issued outside of Korea for the purpose of 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 the interest on the Registered Debt Securities would be 14% of income for a non-resident without a permanent establishment in Korea. In addition, a tax surcharge called a local income surtax would be imposed at the rate of 10.0% of the income tax or corporation tax (which would increase the total tax rate to 15.4%), unless reduction is available under an applicable income tax treaty. If you are a qualified resident in a country that has entered into a tax treaty with Korea, you may qualify for an exemption or a reduced rate of Korean withholding tax. See the discussion under Shares or ADSs Tax Treaties below for an additional explanation on treaty benefits.

In order to obtain the benefits of an exemption or a reduced withholding tax rate under a tax treaty, you must submit to us, prior to the interest payment date, such evidence of tax residence as may be required by the Korean tax authorities in order to establish your entitlement to the benefits of the applicable tax treaty.

Furthermore, Korean tax laws require the beneficial owner to submit an application for entitlement to a preferential tax rate together with evidence of tax residence (including a certificate of tax residence of the beneficial owner issued by a competent authority of the country of tax residence of the beneficial owner) to a withholding obligor paying Korean source income in order to benefit from the available reduced tax rate pursuant to the relevant tax treaty. Under Korean tax laws and subject to certain exceptions, an overseas investment vehicle (which is defined as an organization established in a foreign jurisdiction that manages funds collected through investment solicitation by acquiring, disposing or otherwise investing in proprietary targets and then distributes the proceeds thereof to investors) (the Overseas Investment Vehicle ) must obtain an application for a preferential tax rate from the beneficial owner and forward it to the withholding obligor along with an overseas investment vehicle report (prepared by the Overseas Investment Vehicle) which includes a detailed statement on the beneficial owner's income.



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*Taxation of Capital Gains*

Korean tax laws currently exclude from Korean taxation gains made by a non-resident without permanent establishment in Korea from the sale of a Registered Debt Security to another non-resident (except where a non-resident sells Registered Debt Securities to another non-resident who has permanent establishments in Korea, if any). In addition, capital gains realized from the transfer of Registered Debt Securities outside Korea by non-residents with or without permanent establishments in Korea are currently exempt from taxation by virtue of the STTCL, provided that the issuance of such Registered Debt Securities is deemed to be an overseas issuance of foreign currency-denominated bonds under the STTCL. If you sell or otherwise dispose of a Registered Debt Security through other ways than those mentioned above, any gain realized on the transaction will be taxable at ordinary Korean withholding tax rates (which is the lesser of 22.0% (including local income surtax) of the net gain or 11.0% (including local income surtax) of the gross sale proceeds, subject to the production of satisfactory evidence of the acquisition cost of such Registered Debt Securities and certain direct transaction costs attributable to the disposal of such Registered Debt Securities), unless an exemption is available under an applicable income tax treaty. See the discussion under *Shares or ADSs Tax Treaties* below for an additional explanation on treaty benefits.

*Inheritance Tax and Gift Tax*

If you die while you are the holder of Registered Debt Securities, the subsequent transfer of the Registered Debt Securities by way of succession will be subject to Korean inheritance tax. Similarly, if you transfer Registered Debt Securities as a gift, the donee will be subject to Korean gift tax and you may be required to pay the gift tax if the donee fails to do so.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

***Shares or ADSs***

*Dividends on the Shares of Common Stock or ADSs*

We will deduct Korean withholding tax from dividends (whether in cash or in shares) paid to you at a rate of 22% (inclusive of local income surtax). If you are a qualified resident in a country that has entered into a tax treaty with Korea, you may qualify for a reduced rate of Korean withholding tax. See the discussion under *Tax Treaties* below for an additional explanation on treaty benefits.

In order to obtain the benefits of a reduced withholding tax rate under a tax treaty, you must submit to us, prior to the dividend payment date, such evidence of tax residence as may be required by the Korean tax authorities in order to establish your entitlement to the benefits of the applicable tax treaty. Evidence of tax residence may be submitted to us through the ADS depository. If we distribute to you free shares representing a transfer of certain capital reserves or asset revaluation reserves into paid-in capital, such distribution may be subject to Korean withholding tax.

Furthermore, Korean tax laws require the beneficial owner to submit an application for entitlement to a preferential tax rate together with evidence of tax residence (including a certificate of tax residence of the beneficial owner issued by a competent authority of the country of tax residence of the beneficial owner) to a withholding obligor paying Korean source income in order to benefit from the available reduced tax rate pursuant to the relevant tax treaty. Under Korean tax laws and subject to certain exceptions, the Overseas Investment Vehicle must obtain an application for entitlement to a preferential tax rate from the beneficial owner and forward it to the withholding obligor along with an overseas investment vehicle report (prepared by the Overseas Investment Vehicle) which includes a detailed statement on the beneficial owner's income.

*Taxation of Capital Gains*

As a general rule, capital gains earned by non-residents upon the transfer of the common shares or ADSs would be subject to Korean income tax at a rate equal to the lesser of (i) 11.0% (including local income surtax) of the gross proceeds realized or (ii) 22.0% (including local income surtax) of the net realized gain (subject to the

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production of satisfactory evidence of the acquisition costs and certain direct transaction costs arising out of the transfer of such common shares or ADSs), unless such non-resident is exempt from Korean income taxation under an applicable Korean tax treaty into which Korea has entered with the non-resident's country of tax residence. Please see the discussion under "Tax Treaties" below for an additional explanation on treaty benefits. Even if you do not qualify for any exemption under a tax treaty, you will not be subject to the foregoing income tax on capital gains if you qualify for the relevant Korean domestic tax law exemptions discussed in the following paragraphs.

You will not be subject to Korean income taxation on capital gains realized upon the transfer of our common stocks or ADSs through the Korea Exchange if you (i) have no permanent establishment in Korea and (ii) did not own or have not owned (together with any shares owned by any entity which you have a certain special relationship with and possibly including the shares represented by the ADSs) 25.0% or more of our total issued and outstanding shares at any time during the calendar year in which the sale occurs and during the five calendar years prior to the calendar year in which the sale occurs.

It should be noted that (i) capital gains earned by you (regardless of whether you have a permanent establishment in Korea) from the transfer of ADSs outside Korea will be exempted from Korean income taxation provided that ADSs are deemed to have been issued overseas under the STTCL, but (ii) if and when an owner of the underlying shares of stock transfers ADSs after conversion of the underlying shares into ADSs, the exemption described in (i) is not applicable.

If you are subject to tax on capital gains with respect to the sale of ADSs, or of shares of common stock which you acquired as a result of a withdrawal, the purchaser or, in the case of the sale of shares of common stock on the Korea Exchange or through an investment dealer or investment broker under the Financial Investment Services and Capital Markets Act, an investment dealer or investment broker is required to withhold Korean tax from the sales price in an amount equal to 11.0% (including local income surtax) of the gross realization proceeds and to make payment of these amounts to the Korean tax authority, unless you establish your entitlement to an exemption under an applicable tax treaty or domestic tax law or produce satisfactory evidence of your acquisition cost and transaction costs for the shares of common stock or the ADSs.

However, if you transfer the ADSs following an exchange of the underlying shares of stock owned by you for ADSs to a purchaser who is a non-resident or a foreign company without permanent establishment in Korea, you are obligated to file an income tax return and pay tax on gain realized from such transfer unless exempt under an applicable tax treaty or domestic law, as discussed above. Further, if you transfer the shares of common stock outside of Korea (excluding a transfer on a foreign exchange) to non-residents or foreign companies without having permanent establishments in Korea, you are obligated to file an income tax return and pay income tax on capital gain realized from such transfer unless exempt under an applicable tax treaty or domestic law. If a purchaser or an investment dealer or investment broker, as the case may be, withholds and remits the tax on capital gains derived from transfer of shares of common stock or ADSs, your obligation to file an income tax return and pay income tax will be exempt.

In order to obtain the benefit of an exemption from tax pursuant to a tax treaty, you must submit to the purchaser or the investment dealer or the investment broker, or through the ADS depository, as the case may be, prior to or at the time of payment, such evidence of your tax residence as the Korean tax authorities may require in support of your claim for treaty benefits. Please see the discussion under "Tax Treaties" below for an additional explanation on claiming treaty benefits. Furthermore, Korean tax laws require the beneficial owner to submit an application for tax exemption together with evidence of tax residence (including a certificate of tax residence of the beneficial owner issued by a competent authority of the country of tax residence of the beneficial owner) to a withholding obligor paying Korean source income in order to benefit from the available exemption pursuant to the relevant tax treaty. Under Korean tax laws and subject to certain exceptions, the Overseas Investment Vehicle must obtain an application for tax exemption from the beneficial owner and forward it to the withholding obligor along with an overseas investment vehicle report (prepared by the Overseas Investment Vehicle) which includes a detailed statement on the beneficial owner's income.



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**Table of Contents***Tax Treaties*

Korea has entered into a number of income tax treaties with other countries (including the United States), which would reduce or exempt Korean withholding tax on dividends on, and capital gains on transfer of, shares of our common stock or ADSs. For example, under the Korea-United States income tax treaty, reduced rates of Korean withholding tax of 16.5% or 11.0% (respectively, including local income surtax, depending on your shareholding ratio) on dividends and an exemption from Korean withholding tax on capital gains are available to residents of the United States that are beneficial owners of the relevant dividend income or capital gains. However, under Article 17 (Investment of Holding Companies) of the Korea-United States income tax treaty, such reduced rates and exemption do not apply if (i) you are a United States corporation, (ii) by reason of any special measures, the tax imposed on you by the United States with respect to such dividends or capital gains is substantially less than the tax generally imposed by the United States on corporate profits, and (iii) 25.0% or more of your capital is held of record or is otherwise determined, after consultation between competent authorities of the United States and Korea, to be owned directly or indirectly by one or more persons who are not individual residents of the United States. Also, under Article 16 (Capital Gains) of the Korea-United States income tax treaty, the exemption on capital gains does not apply if you are an individual, and (a) you maintain a fixed base in Korea for a period or periods aggregating 183 days or more during the taxable year and your ADSs or shares of common stock giving rise to capital gains are effectively connected with such fixed base or (b) you are present in Korea for a period or periods of 183 days or more during the taxable year.

You should inquire for yourself whether you are entitled to the benefit of an income tax treaty with Korea. It is the responsibility of the party claiming the benefits of an income tax treaty in respect of dividend payments or capital gains to submit to us, the purchaser or the investment dealer or the investment broker, as applicable, a certificate as to his tax residence. In the absence of sufficient proof, we, the purchaser or the investment dealer or the investment broker, as applicable, must withhold tax at the normal rates. Further, in order for you to obtain the benefit of a tax exemption on certain Korean source income (e.g., interest, dividends and capital gains) under an applicable tax treaty, Korean tax laws require you (or your agent) to submit an application for tax exemption along with a certificate of your tax residence issued by a competent authority of your country of tax residence, subject to certain exceptions. Under Korean tax laws and subject to certain exceptions, the Overseas Investment Vehicle must obtain an application for tax exemption from the beneficial owner and forward it to the withholding obligor along with an overseas investment vehicle report (prepared by the Overseas Investment Vehicle) which includes a detailed statement on the beneficial owner's income. The withholding obligor must submit the application and the report to the relevant tax office by the ninth day of the month following the date of the first payment of such income.

Furthermore, the Korean tax laws require the beneficial owner to submit an application for entitlement to a preferential tax rate together with evidence of tax residence (including a certificate of tax residence of the beneficial owner issued by a competent authority of the country of tax residence of the beneficial owner) to a withholding obligor paying Korean source income in order to benefit from the available reduced tax rate pursuant to the relevant tax treaty. Under Korean tax laws and subject to certain exceptions, the Overseas Investment Vehicle must obtain an application for a preferential tax rate from the beneficial owner and forward it to the withholding obligor along with an overseas investment vehicle report (prepared by the Overseas Investment Vehicle) which includes a detailed statement on the beneficial owner's income.

*Inheritance Tax and Gift Tax*

If you die while holding an ADS or donate an ADS, it is unclear whether, for Korean inheritance and gift tax purposes, you will be treated as the owner of the shares of common stock underlying the ADSs. If the tax authority interprets depository receipts as the underlying share certificates, you may be treated as the owner of the shares of common stock and your heir or the donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax presently at the rate of 10.0% to 50.0%, depending on the value of the ADSs or shares of common stock.

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If you die while holding a share of common stock or donate a share of common stock, your heir or donee (or in certain circumstances, you as the donor) will be subject to Korean inheritance or gift tax at the same rate as indicated above.

At present, Korea has not entered into any tax treaty relating to inheritance or gift taxes.

### *Securities Transaction Tax*

If you transfer shares of common stock on the Stock Market of the Korea Exchange, you will be subject to securities transaction tax at the rate of 0.15% and an agriculture and fishery special surtax at the rate of 0.15% of the sale price of the shares of common stock. If your transfer of the shares of common stock is not made on the Stock Market of the Korea Exchange, subject to certain exceptions you will be subject to securities transaction tax at the rate of 0.5% and will not be subject to an agriculture and fishery special surtax.

Under the Securities Transaction Tax Law, depositary receipts (such as ADSs) constitute share certificates subject to the securities transaction tax. However, a transfer of depositary receipts listed on the New York Stock Exchange, NASDAQ National Market or other qualified foreign exchanges will be exempt from the securities transaction tax although depositary receipts, including ADSs, constitute share certificates subject to the securities transaction tax.

In principle, the securities transaction tax, if applicable, must be paid by the transferor of the shares or rights. When the transfer is effected through the Korea Securities Depository, the Korea Securities Depository is generally required to withhold and pay the tax to the tax authorities. When such transfer is made through an investment dealer or investment broker under the Financial Investment Services and Capital Markets Act only, such investment dealer or investment broker is required to withhold and pay the tax. Where the transfer is effected by a non-resident without a permanent establishment in Korea, other than through the Korea Securities Depository or an investment dealer or investment broker, the transferee is required to withhold the securities transaction tax for payment to the Korean tax authority.

### **U.S. Federal Income and Estate Tax Considerations for U.S. Persons**

The following is a summary of certain U.S. Federal income and estate tax consequences for beneficial owners of the Registered Debt Securities, common stock and ADSs that are U.S. Persons. For purposes of this summary, you are a U.S. Person if you are any of the following for U.S. Federal income tax purposes:

an individual citizen or resident of the United States;

a corporation, or other entity treated as a corporation for U.S. Federal income tax purposes, created or organized in or under the laws of the United States, any state thereof or the District of Columbia;

an estate the income of which is subject to U.S. Federal income taxation regardless of its source; or

a trust if (1) it is subject to the primary supervision of a court within the United States and one or more United States persons have the authority to control all substantial decisions of the trust or (2) it has a valid election in effect under applicable United States Treasury regulations to be treated as a United States person.

This summary is based on current law, which is subject to change (perhaps retroactively), is for general purposes only and should not be considered tax advice. This summary does not represent a detailed description of the U.S. Federal income and estate tax consequences to you in light of your particular circumstances. The discussion set forth below is applicable to you if (i) you are a resident of the United States for purposes of the current income tax treaty between the United States and Korea (the Treaty), (ii) your Registered Debt Securities, common stock or ADSs are not, for purposes of the Treaty, effectively connected with a permanent establishment in Korea and (iii) you otherwise qualify for the full benefits of the Treaty. Except where noted, it deals only with Registered Debt Securities, common stock or ADSs held as capital assets, and it does not represent a detailed description of the U.S. Federal income and estate tax consequences applicable to you if you



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are subject to special treatment under the U.S. Federal income tax laws (including if you are a dealer in securities or currencies, a financial institution, a regulated investment company, a real estate investment trust, an insurance company, a tax exempt organization, a person holding the Registered Debt Securities, common stock or ADSs as part of a hedging, integrated or conversion transaction, constructive sale or straddle, a person owning 10.0% or more of our voting stock, a trader in securities that elects to use a mark-to-market method of accounting for your securities holdings, a person liable for the alternative minimum tax, an investor in a pass-through entity, or a U.S. Person whose functional currency is not the U.S. dollar). We cannot assure you that a change in law will not alter significantly the tax considerations that we describe in this summary.

If a partnership holds the Registered Debt Securities, common stock or ADSs, the tax treatment of a partner will generally depend upon the status of the partner and the activities of the partnership. If you are a partner of a partnership holding our Registered Debt Securities, common stock, or ADSs, you should consult your tax advisor.

Because of the 100-year maturity of the One Hundred Year 7.95% Zero-to-Full Debentures, due April 1, 2096 (the ZTF Debentures), it is not certain whether the ZTF Debentures will be treated as debt for U.S. Federal income tax purposes. The discussion below assumes that the ZTF Debentures (as well as the other Registered Debt Securities) will be treated as debt, except that a summary of the consequences to you if the ZTF Debentures were not treated as debt is provided under Tax Consequences with Respect to Registered Debt Securities Generally ZTF Debentures Treated as Equity below.

The discussion of the tax consequences of ownership of common stock and ADSs below, is based, in part, upon representations made by the Depository to us and assumes that the deposit agreement, and all other related agreements, will be performed in accordance with their terms.

**You should consult your own tax advisor concerning the particular U.S. Federal income and estate tax consequences to you of the ownership of the Registered Debt Securities, common stock and ADSs, as well as the consequences to you arising under the laws of any other taxing jurisdiction.**

***Tax Consequences with Respect to Registered Debt Securities Generally***

*Payments*

Except as provided below with regard to original issue discount (as defined below) on the ZTF Debentures, interest payments on a Registered Debt Security will generally be taxable to you as ordinary income at the time it is paid or accrued in accordance with your method of accounting for tax purposes. Principal payments on an amortizing Registered Debt Security generally will constitute a tax-free return of capital to you.

Although interest payments to you are currently exempt from Korean taxation, if the Korean law providing for the exemption is repealed, then, in addition to interest payments on the Registered Debt Securities and original issue discount on the ZTF Debentures, you will be required to include in income any additional amounts and any Korean tax withheld from interest payments notwithstanding that you in fact did not receive such withheld tax. You may be entitled to deduct or credit such Korean tax (up to the Treaty rate), subject to applicable limitations in the Internal Revenue Code of 1986, as amended (the Code). Your election to deduct or credit foreign taxes will apply to all of your foreign taxes for a particular taxable year. Interest income on a Registered Debt Security (including additional amounts and any Korean taxes withheld in respect thereof) and original issue discount on a ZTF Debenture generally will constitute foreign source income and generally will be considered passive category income for purposes of computing the foreign tax credit. You will generally be denied a foreign tax credit for Korean taxes imposed with respect to the Registered Debt Securities where you do not meet a minimum holding period requirement during which you are not protected from risk of loss. The rules governing the foreign tax credit are complex. Investors are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances.

**Table of Contents***Original Issue Discount*

The ZTF Debentures were issued with original issue discount, or OID, for U.S. Federal income tax purposes equal to the difference between (i) the sum of all scheduled amounts payable on the ZTF Debentures (including the interest payable on such ZTF Debentures) and (ii) the issue price of the ZTF Debentures. The issue price of each ZTF Debenture is the first price at which a substantial amount of the ZTF Debentures was sold to the public (other than to an underwriter, broker, placement agent or wholesaler). If you hold ZTF Debentures, then you generally must include OID in gross income in advance of the receipt of cash attributable to that income, regardless of your method of accounting. However, you generally will not be required to include separately in income cash payments received on the ZTF Debentures, even if denominated as interest.

The amount of OID includible in income by the initial holder of a ZTF Debenture is the sum of the daily portions of OID with respect to the ZTF Debenture for each day during the taxable year or portion of the taxable year in which such holder held such ZTF Debenture, or accrued OID (for a discussion relevant to subsequent purchasers, see Market Discount and Bond Premium, below). The daily portion is determined by allocating to each day in any accrual period a pro rata portion of the OID allocable to that accrual period. The accrual period for a ZTF Debenture may be of any length and may vary in length over the term of the ZTF Debenture, provided that each accrual period is no longer than one year and each scheduled payment of principal or interest occurs on the first day or the final day of an accrual period. The amount of OID allocable to any accrual period other than the final accrual period is an amount equal to the product of the ZTF Debenture's adjusted issue price at the beginning of such accrual period and its yield to maturity (determined on the basis of compounding at the close of each accrual period and properly adjusted for the length of the accrual period). OID allocable to a final accrual period is the difference between the amount payable at maturity and the adjusted issue price at the beginning of the final accrual period. The adjusted issue price of a ZTF Debenture at the beginning of any accrual period is equal to its issue price increased by the accrued OID for each prior accrual period (for subsequent purchasers, determined without regard to the amortization of any acquisition or bond premium, as described below) and reduced by any payments previously made on such ZTF Debenture. Under these rules, you will have to include in income increasingly greater amounts of OID in successive accrual periods. We are required to provide information returns stating the amount of OID accrued on ZTF Debentures held of record by persons other than corporations and other exempt holders.

As discussed above, although interest payments to you are currently exempt from Korean taxation, if the Korean law providing for the exemption is repealed, then Korean withholding tax may be imposed at times that differ from the times at which you are required to include interest or OID in income for U.S. Federal income tax purposes and this disparity may limit the amount of foreign tax credit available.

*Market Discount*

If you purchase a Registered Debt Security other than a ZTF Debenture for an amount that is less than its stated redemption price at maturity, or, in the case of a ZTF Debenture, its adjusted issue price, the amount of the difference will be treated as market discount for U.S. Federal income tax purposes, unless that difference is less than a specified de minimis amount. Under the market discount rules, you will be required to treat any payment, other than qualified stated interest (as defined in the Code), on, or any gain on the sale, exchange, retirement or other disposition of, a Registered Debt Security as ordinary income to the extent of the market discount that you have not previously included in income and are treated as having accrued on the Registered Debt Security at the time of its payment or disposition. In addition, you may be required to defer, until the maturity of the Registered Debt Security or its earlier disposition in a taxable transaction, the deduction of all or a portion of the interest expense on any indebtedness attributable to the Registered Debt Security.

Any market discount will be considered to accrue ratably during the period from the date of acquisition to the maturity date of the Registered Debt Security, unless you elect to accrue on a constant interest method. Your election to accrue market discount on a constant interest method is to be made for the taxable year in which you acquired the Registered Debt Security, applies only to that Registered Debt Security and cannot be revoked. You

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may elect to include market discount in income currently as it accrues, on either a ratable or constant interest method, in which case the rule described above regarding deferral of interest deductions will not apply. Your election to include market discount in income currently, once made, applies to all market discount obligations acquired by you on or after the first taxable year to which your election applies and may not be revoked without the consent of the Internal Revenue Service ( IRS ). You should consult your own tax advisor before making this election.

*Bond Premium*

If you purchase a ZTF Debenture for an amount that is greater than its adjusted issue price but equal to or less than the sum of all amounts payable on the ZTF Debenture after the purchase date, you will be considered to have purchased that ZTF Debenture at an acquisition premium. Under the acquisition premium rules, the amount of OID that you must include in gross income with respect to a ZTF Debenture for any taxable year will be reduced by the portion of the acquisition premium properly allocable to that year.

If you purchase a Registered Debt Security for an amount in excess of the sum of all amounts payable on the Registered Debt Security after the purchase date other than qualified stated interest, you will be considered to have purchased the Registered Debt Security at a premium and, if such Registered Debt Security is a ZTF Debenture, you will not be required to include any OID in income. You generally may elect to amortize the premium over the remaining term of the Registered Debt Security on a constant yield method as an offset to interest when includible in income under your regular accounting method. In the case of instruments that provide for alternative payment schedules, bond premium is calculated by assuming that (a) you will exercise or not exercise options in a manner that maximizes your yield, and (b) we will exercise or not exercise options in a manner that minimizes your yield (except that we will be assumed to exercise call options in a manner that maximizes your yield). If you do not elect to amortize bond premium, that premium will decrease the gain or increase the loss you would otherwise recognize on disposition of a Registered Debt Security. Your election to amortize premium on a constant yield method will also apply to all debt obligations held or subsequently acquired by you on or after the first day of the first taxable year to which the election applies. You may not revoke the election without the consent of the IRS. You should consult your own tax advisor before making this election.

*Sale, Exchange and Retirement of Registered Debt Securities*

When you sell, exchange or retire a Registered Debt Security, you will recognize gain or loss equal to the difference between the amount you receive (not including an amount equal to any accrued qualified stated interest, which will be taxable as ordinary income to the extent not previously included in income) and your adjusted tax basis in the Registered Debt Security. Your tax basis in a Registered Debt Security other than a ZTF Debenture will generally be your cost of obtaining the Registered Debt Security increased by any market discount included in income and reduced by payments of principal you receive and any bond premium that you elect to amortize. Your adjusted tax basis in a ZTF Debenture will, in general, be your cost therefor, increased by any market discount and OID previously included in income and reduced by any cash payments on the ZTF Debentures and any bond premium that you elect to amortize. Your gain or loss realized on selling, exchanging or retiring a Registered Debt Security will generally be treated as United States source income. Consequently, you may not be able to use the foreign tax credit arising from any Korean tax imposed on the disposition of Registered Debt Securities unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources. Except as described above with respect to market discount, your gain or loss will be capital gain or loss and will be long-term capital gain or loss if, at the time of the sale, exchange or retirement of a Registered Debt Security, you have held the Registered Debt Security for more than one year. If you are an individual and the Registered Debt Security being sold, exchanged or retired is a capital asset that you held for more than one year, you may be eligible for reduced rates of taxation on any capital gain recognized. Your ability to deduct capital losses is subject to limitations.

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*ZTF Debentures Treated as Equity*

If the ZTF Debentures were treated as equity for U.S. Federal income tax purposes, amounts deemed paid with respect to the ZTF Debentures would be deemed dividends for U.S. Federal income tax purposes to the extent paid out of our current or accumulated earnings and profits (as determined for U.S. Federal income tax purposes).

You would include the amounts deemed paid by us on the ZTF Debentures (before reduction for Korean withholding tax, if any) as dividend income when actually or constructively paid by KEPCO. Section 305 of the Code, which would apply to the ZTF Debentures if they were treated as equity for U.S. Federal income tax purposes, requires current accrual of dividends under principles similar to the accrual of OID. Amounts treated as dividends will not be eligible for the dividends received deduction generally allowed to U.S. corporations.

*Tax Consequences with Respect to Common Stock and ADSs*

In general, for U.S. Federal income tax purposes, holders of ADSs will be treated as the owners of the underlying common stock that is represented by such ADSs. Accordingly, deposits or withdrawals of common stock by holders of ADSs will not be subject to U.S. Federal income tax. However, the U.S. Treasury has expressed concerns that intermediaries in the chain of ownership between the holder of an ADS and the issuer of the security underlying the ADS may be taking actions that are inconsistent with the claiming of foreign tax credits by the holders of ADSs. Such actions would also be inconsistent with the claiming of the reduced rate of tax applicable to dividends received by certain non-corporate holders. Accordingly, the analysis of creditability of Korean taxes and the availability of the reduced tax rate for dividends received by certain non-corporate holders, each described below, could be affected by future actions that may be taken by such intermediaries.

*Distributions on Common Stock or ADSs*

The gross amount of distributions (other than certain distributions of common stock or rights to subscribe for common stock) to holders of common stock or ADSs (including amounts withheld in respect of Korean withholding taxes) will be treated as dividend income to such holders, to the extent paid out of our current or accumulated earnings and profits, as determined under U.S. Federal income tax principles. Such income (including withheld taxes) will be includable in the gross income of a holder as ordinary income on the day actually or constructively received by the holder, in the case of common stock, or by the Depository, in the case of ADSs. Such dividends will not be eligible for the dividends received deduction allowed to corporations under the Code.

With respect to non-corporate U.S. Persons, certain dividends paid by a qualified foreign corporation and received by such holders may be subject to reduced rates of taxation. A qualified foreign corporation includes a foreign corporation that is eligible for the benefits of an income tax treaty with the United States, if such treaty contains an exchange of information provision and the United States Treasury Department had determined that the treaty is satisfactory for purposes of the legislation. The United States Treasury Department has determined that the Treaty, which contains an exchange of information provision, is (in the absence of additional guidance) satisfactory for these purposes. In addition, we believe we are eligible for the benefits of the United States-Korean income tax treaty. However, a foreign corporation is also treated as a qualified foreign corporation with respect to dividends paid by that corporation on shares (or ADSs backed by such shares) that are readily tradable on an established securities market in the United States. Shares of our common stock will generally not be considered readily tradable for these purposes. However, United States Treasury Department guidance indicates that our ADSs, which are listed on the New York Stock Exchange, are readily tradable on an established securities market in the United States. There can be no assurance that our ADSs will be considered readily tradable on an established securities market in later years. Non-corporate U.S. Persons that do not meet a minimum holding period requirement during which they are not protected from a risk of loss or that elect to treat the dividend income as investment income pursuant to Section 163(d)(4) of the Code will not be eligible for

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the reduced rates of taxation regardless of our status as a qualified foreign corporation. In addition, the rate reduction will not apply to dividends if the recipient of a dividend is obligated to make related payments with respect to positions in substantially similar or related property. This disallowance applies even if the minimum holding period has been met. Holders should consult their own tax advisors regarding the application of the foregoing rules to their particular circumstances.

The amount of any dividend paid in Won will equal the United States dollar value of the Won received calculated by reference to the exchange rate in effect on the date the dividend is received by the holder, in the case of common stock, or by the Depositary, in the case of ADSs, regardless of whether the Won are converted into U.S. dollars. If the Won received as a dividend are not converted into U.S. dollars on the date of receipt, a holder will have a basis in the Won equal to their U.S. dollar value on the date of receipt. Any gain or loss realized on a subsequent conversion or other disposition of the Won will be treated as United States source ordinary income or loss. The amount of any distribution of property other than cash will be the fair market value of such property on the date of distribution.

The maximum rate of withholding tax on dividends paid to you pursuant to the Treaty is 16.5%. You will be required to properly demonstrate to us and the Korean tax authorities your entitlement to the reduced rate of withholding under the Treaty. Subject to certain conditions and limitations, Korean withholding taxes (up to the Treaty rate) will be treated as foreign taxes eligible for credit against your U.S. Federal income tax liability. For purposes of calculating the foreign tax credit, dividends paid on the common stock or ADSs will be treated as foreign source income and will generally constitute passive category income. Further, in certain circumstances, if you have held common stock or ADSs for less than a specified minimum period during which you are not protected from risk of loss, or are obligated to make payments related to the dividends, you will not be allowed a foreign tax credit for foreign taxes imposed on dividends paid on common stock or ADSs. The rules governing the foreign tax credit are complex. Investors are urged to consult their tax advisors regarding the availability of the foreign tax credit under their particular circumstances including the possible adverse impact on creditability to the extent you are entitled to a refund of any Korean tax withheld or a reduced rate of withholding.

To the extent that the amount of any distribution exceeds our current and accumulated earnings and profits for a taxable year, as determined under U.S. Federal income tax principles, the distribution will first be treated as a tax-free return of capital, causing a reduction in the adjusted basis of the common stock or ADSs (thereby increasing the amount of gain, or decreasing the amount of loss, to be recognized by the investor on a subsequent disposition of the common stock or ADSs), and the balance in excess of adjusted basis will be taxed as capital gain recognized on a sale or exchange of property. Consequently, such distributions in excess of our current and accumulated earnings and profits would not give rise to foreign source income and you generally would not be able to use the foreign tax credit arising from any Korean withholding tax imposed on such distributions unless such credit can be applied (subject to applicable limitations) against U.S. tax due on other foreign source income in the appropriate category for foreign tax credit purposes. However, we do not expect to keep earnings and profits in accordance with U.S. Federal income tax principles. Therefore, you should expect that a distribution will generally be treated as a dividend (as discussed above).

Distributions of common stock or rights to subscribe for common stock that are received as part of a pro rata distribution to all of our shareholders generally will not be subject to U.S. Federal income tax. Consequently such distributions will not give rise to foreign source income and you generally will not be able to use the foreign tax credit arising from any Korean withholding tax unless such credit can be applied (subject to applicable limitations) against U.S. tax due on other income derived from foreign sources. The basis of the new common stock or rights so received will be determined by allocating your basis in the old common stock between the old common stock and the new common stock or rights received, based on their relative fair market value on the date of distribution. However, the basis of the rights will be zero if (i) the fair market value of the rights is less than 15% of the fair market value of the old common stock at the time of distribution, unless the taxpayer elects to determine the basis of the old common stock and of the rights by allocating between the old common stock and the rights the adjusted basis of the old common stock or (ii) the rights are not exercised and thus expire.



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*Sale, Exchange or Other Disposition of ADSs or Common Stock*

Upon the sale, exchange or other disposition of ADSs or common stock, you generally will recognize capital gain or loss equal to the difference between the amount realized upon the sale, exchange or other disposition and your adjusted tax basis in the ADSs or common stock. The capital gain or loss will be long-term capital gain or loss if at the time of sale, exchange or other disposition, the ADSs or common stock have been held by you for more than one year. Under current law, long-term capital gains of individuals are, under certain circumstances, taxed at lower rates than items of ordinary income. The deductibility of capital losses is subject to limitations. Any gain or loss recognized by you will generally be treated as U.S. source gain or loss. Consequently, you may not be able to use the foreign tax credit arising from any Korean tax imposed on the disposition of ADSs or common stock unless such credit can be applied (subject to applicable limitations) against tax due on other income treated as derived from foreign sources.

You should note that any Korean securities transaction tax will not be treated as a creditable foreign tax for U.S. Federal income tax purposes, although you may be entitled to deduct such taxes, subject to applicable limitations under the Code.

*Estate and Gift Taxation*

As discussed above in Korean Taxes Registered Debt Securities Inheritance Tax and Gift Tax and Korean Taxes Shares or ADSs Inheritance Tax and Gift Tax, Korea may impose an inheritance tax on your heir who receives ADSs and will impose an inheritance tax on an heir who receives common stock or Registered Debt Securities. The amount of any inheritance tax paid to Korea may be eligible for credit against the amount of U.S. Federal estate tax imposed on your estate. Prospective purchasers should consult their personal tax advisors to determine whether and to what extent they may be entitled to such credit. Korea also imposes a gift tax on the donation of any property located within Korea. The Korean gift tax generally will not be treated as a creditable foreign tax for United States tax purposes.

*Information Reporting and Backup Withholding*

In general, information reporting requirements will apply to principal, interest, OID and premium payments on Registered Debt Securities and dividend payments in respect of the common stock or ADSs or the proceeds received on the sale, exchange or redemption of the Registered Debt Securities, common stock or ADSs paid within the United States (and in certain cases, outside of the United States) to holders other than certain exempt recipients, and a backup withholding may apply to such amounts if you fail to provide an accurate taxpayer identification number or to report interest and dividends required to be shown on your U.S. Federal income tax returns. The amount of any backup withholding from a payment to you will be allowed as a refund or a credit against your U.S. Federal income tax liability, provided the required information is furnished to the IRS.

**Item 10F. Dividends and Paying Agents**

Not Applicable

**Item 10G. Statements by Experts**

Not Applicable

**Item 10H. Documents on Display**

We are subject to the information requirements of the Exchange Act, and, in accordance therewith, are required to file reports, including annual reports on Form 20-F, and other information with the U.S. Securities and Exchange Commission. You may inspect and copy these materials, including this annual report and the

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exhibits thereto, at SEC's Public Reference Room 100 Fifth Street, N.E., Washington, D.C. 20549. Please call the Commission at 1-800-SEC-0330 for further information on the public reference rooms. As a foreign private issuer, we are also required to make filings with the Commission by electronic means. Any filings we make electronically will be available to the public over the Internet at the Commission's web site at <http://www.sec.gov>.

**Item 10I. Subsidiary Information**

Not Applicable

**ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

Our primary market risk exposures are to fluctuations in exchange rates, interest rates and fuel prices. We are exposed to foreign exchange risk related to foreign currency-denominated liabilities. As of December 31, 2013, approximately 20.9% of our long-term debt (including the current portion but excluding issue discounts and premium), before accounting for swap transactions, was denominated in foreign currencies, principally U.S. dollars. However, a substantial portion of our revenues is denominated in Won. As a result, changes in exchange rates, particularly between the Won and the U.S. dollar, significantly affect us due to our significant amounts of foreign currency-denominated debt and the effect of such changes on the amount of funds required by us to make interest and principal payments on such debt. In order to reduce the impact of foreign exchange rate fluctuations on our results of operations, we have recently been reducing and plan to continue to reduce the proportion of our debt which is denominated in foreign currencies.

We are also exposed to foreign exchange risk related to our purchases of fuels since we obtain substantially all of our fuel materials (other than anthracite coal) directly or indirectly from sources outside Korea. Prices for such fuel materials are quoted based on prices stated in, and in many cases are paid for in, currencies other than Won. In 2013, fuel costs represented 45.1% of our sales.

We are exposed to interest rate risk due to significant amounts of debt. Upward fluctuations in interest rates increase the cost of additional debt and the interest cost of outstanding floating rate borrowings. We are also exposed to fluctuations in prices of fuel materials. In 2013, for electricity generation, uranium accounted for 30.9% of our fuel requirements, coal accounted for 44.8%, LNG accounted for 19.7% and oil accounted for 3.3%. In 2012, measured on the same basis, uranium accounted for 33.5% of our fuel requirements, coal accounted for 44.5%, LNG accounted for 17.7% and oil accounted for 3.2%, measured in each case by the amount of electricity we generated.

For additional discussions of our market risks, see Item 3D. Risk Factors and Item 5B. Liquidity and Capital Resources Liquidity.

We have entered into various swap contracts to hedge exchange rate risks arising from foreign currency-denominated debts. Details of currency swap contracts outstanding as of December 31, 2013 are as follows:

Type	Counterparty	Contract Year	Settlement Year	Contract amounts		Contract interest rate		Contract Exchange Rate
				Pay	Receive	Pay	Receive	
				(KRW in millions, USD in thousands)				
Trading	Shinhan Bank	2010	2014	KRW 84,615	USD 75,000	6.83%	5.50%	1,128.20
	RBS	2010	2014	KRW 141,125	USD 125,000	6.78%	5.50%	1,129.00
	Morgan Stanley	2010	2014	KRW 112,320	USD 100,000	6.71%	5.50%	1,123.20
	HSBC	2011	2014	KRW 112,320	USD 100,000	6.71%	5.50%	1,123.20
	Bank of America	2011	2014	KRW 110,310	USD 100,000	6.93%	5.50%	1,103.10
	UBS	2011	2015	KRW 220,356	USD 200,000	3.90%	3.00%	1,101.78
	RBS	2011	2015	KRW 110,110	USD 100,000	3.90%	3.00%	1,101.10

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Type	Counterparty	Contract Year	Settlement Year	Contract amounts		Contract interest rate		Contract Exchange Rate
				Pay	Receive	Pay	Receive	
				(KRW in millions, USD in thousands)				
	Barclays Bank PLC	2011	2015	KRW 108,390	USD 100,000	3.78%	3.00%	1,083.90
	Credit Suisse	2011	2015	KRW 108,390	USD 100,000	3.22%	3.00%	1,083.90
	Morgan Stanley	2011	2015	KRW 63,006	USD 60,000	4.06%	3.00%	1,050.10
	Goldman Sachs	2010	2015	KRW 156,643	USD 140,000	3.92%	3.00%	1,118.88
	Deutsche Bank	2012	2018	KRW 110,412	JPY 10,000,000	6.21%	4.19%	11.04
	IBK	2013	2018	KRW 111,800	USD 100,000	3.16%	2.79%	1,118.00
	Bank of America	2012	2018	KRW 103,580	JPY 10,000,000	7.05%	4.19%	10.36
	Morgan Stanley	2010	2015	KRW 118,800	USD 100,000	4.61%	3M Libor + 1.64%	1,188.00
	M-UFJ	2010	2015	KRW 116,100	USD 100,000	4.00%	3M Libor + 1.00%	1,161.00
	DBS	2011	2014	KRW 56,150	USD 50,000	4.21%	3M Libor + 1.00%	1,123.00
	SMBC	2011	2014	KRW 56,150	USD 50,000	4.21%	3M Libor + 1.00%	1,123.00
	Mizuho Corporate Bank	2011	2014	KRW 112,800	USD 100,000	3.86%	3M Libor + 0.80%	1,128.00
	DBS	2011	2014	KRW 109,500	USD 100,000	3.80%	3M Libor + 0.85%	1,095.00
	Deutsche Bank	2009	2014	KRW 126,610	USD 100,000	5.39%	6.25%	1,266.10
	Nomura	2009	2014	KRW 126,610	USD 100,000	5.35%	6.25%	1,266.10
	Nomura	2009	2014	KRW 126,610	USD 100,000	5.33%	6.25%	1,266.10
	Morgan Stanley	2009	2014	KRW 126,610	USD 100,000	5.32%	6.25%	1,266.10
	Morgan Stanley	2010	2014	KRW 126,610	USD 100,000	5.30%	6.25%	1,266.10
	Barclays Bank PLC	2010	2014	KRW 126,610	USD 100,000	5.29%	6.25%	1,266.10
	Citibank	2010	2014	KRW 126,610	USD 100,000	5.27%	6.25%	1,266.10
	JP Morgan	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
	Deutsche Bank	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
	RBS	2010	2014	KRW 126,610	USD 100,000	4.93%	6.25%	1,266.10
	Citibank	2010	2015	KRW 116,080	USD 100,000	3.97%	3.13%	1,160.80
	Deutsche Bank	2010	2015	KRW 116,080	USD 100,000	3.98%	3.13%	1,160.80
	RBS	2010	2015	KRW 116,080	USD 100,000	3.97%	3.13%	1,160.80
	HSBC	2010	2015	KRW 116,080	USD 100,000	3.23%	3.13%	1,160.80
	UBS	2010	2015	KRW 116,080	USD 100,000	3.23%	3.13%	1,160.80
	Citibank	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	JP Morgan	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	Bank of America	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	Goldman Sachs	2012	2022	KRW 112,930	USD 100,000	2.79%	3.00%	1,129.30
	HSBC	2012	2022	KRW 111,770	USD 100,000	2.89%	3.00%	1,117.70
	Hana Bank	2012	2022	KRW 111,770	USD 100,000	2.87%	3.00%	1,117.70
	Standard Chartered	2012	2022	KRW 111,770	USD 100,000	2.89%	3.00%	1,117.70
	Deutsche Bank	2012	2022	KRW 55,885	USD 50,000	2.79%	3.00%	1,117.70
	DBS						3M Libor	
	DBS	2013	2018	KRW 108,140	USD 100,000	2.63%	+0.84%	1,081.40
	DBS						3M Libor	
	DBS	2013	2018	KRW 108,140	USD 100,000	2.57%	+0.84%	1,081.40
	DBS						3M Libor	
	HSBC	2013	2018	KRW 108,140	USD 100,000	2.57%	+0.84%	1,081.40
	HSBC	2013	2018	KRW 107,450	USD 100,000	3.41%	2.88%	1,074.50

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Standard Chartered	2013	2018	KRW 107,450	USD 100,000	3.44%	2.88%	1,074.50
JP Morgan	2013	2018	KRW 107,450	USD 100,000	3.48%	2.88%	1,074.50

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Type	Counterparty	Contract Year	Settlement Year	Contract amounts		Contract interest rate		Contract Exchange Rate
				Pay (KRW in millions, USD in thousands)	Receive	Pay	Receive	
	HSBC					3M Libor		
		2013	2020	USD 92,940	AUD 100,000	+1.22%	5.75%	0.93
	HSBC					3M Libor		
		2013	2020	USD 93,480	AUD 100,000	+1.18%	5.75%	0.93
	Standard Chartered					3M Libor		
		2013	2020	USD 117,250	AUD 125,000	+1.25%	5.75%	0.94
Cash flow hedge	Citibank	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
	Barclays Bank PLC	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
	Credit Suisse	2006	2016	KRW 113,200	USD 100,000	1.05%	6.00%	1,132.00
	Goldman Sachs	2011	2017	KRW 105,260	USD 100,000	3.99%	3.63%	1,052.60
	Barclays Bank PLC	2011	2017	KRW 105,260	USD 100,000	3.99%	3.63%	1,052.60
	Citibank	2011	2017	KRW 105,260	USD 100,000	3.99%	3.63%	1,052.60
						3M Libor		
	HSBC	2012	2014	KRW 45,264	USD 40,000	3.25%	+1.50%	1,131.60
						3M Libor		
	Citibank	2012	2014	KRW 33,948	USD 30,000	3.25%	+1.50%	1,131.60
						3M Libor		
	RBS	2012	2014	KRW 22,632	USD 20,000	3.25%	+1.50%	1,131.60
						3M Libor		
	UOB	2012	2014	KRW 33,948	USD 30,000	3.25%	+1.50%	1,131.60
						3M Libor		
	DBS	2012	2014	KRW 56,580	USD 50,000	3.20%	+1.50%	1,131.60
						3M Libor		
	ANZ	2012	2014	KRW 22,632	USD 20,000	3.20%	+1.50%	1,131.60
						3M Libor		
	Citibank	2012	2014	KRW 20,369	USD 18,000	3.20%	+1.50%	1,131.60
						3M Libor		
	Credit Suisse	2012	2014	KRW 45,264	USD 40,000	2.77%	+1.50%	1,131.60
						3M Libor		
	RBS	2012	2014	KRW 58,843	USD 52,000	2.77%	+1.50%	1,131.60
						3M Libor		
	Citibank	2013	2018	KRW 54,570	USD 50,000	2.90%	+1.01%	1,091.40
						3M Libor		
	Standard Chartered	2013	2018	KRW 54,570	USD 50,000	2.90%	+1.01%	1,091.40
	Credit Suisse	2013	2018	KRW 111,410	USD 100,000	3.22%	3M Libor	1,114.10

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							+1.50%	
UBS AG	2006	2016	KRW 98,100	USD 100,000	5.48%	5.50%	981	
Credit Suisse	2006	2016	KRW 98,100	USD 100,000	5.48%	5.50%	981	
Barclays Bank PLC	2006	2016	KRW 71,888	USD 75,000	4.81%	5.50%	958.51	
Deutsche Bank AG	2006	2016	KRW 71,888	USD 75,000	4.81%	5.50%	958.51	
Barclays Bank PLC	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00	
Morgan Stanley	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00	
RBS	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00	
JP Morgan	2012	2017	KRW 142,500	USD 125,000	3.83%	3.13%	1,140.00	
RBS	2013	2019	KRW 118,343	CHF 100,000	3.47%	1.63%	1,183.43	

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Type	Counterparty	Contract Year	Settlement Year	Contract amounts		Contract interest rate		Contract Exchange Rate
				Pay	Receive	Pay	Receive	
	Barclays Bank PLC	2013	2019	KRW 59,172	CHF 50,000	3.47%	1.63%	1,183.43
	Nomura	2013	2019	KRW 59,172	CHF 50,000	3.47%	1.63%	1,183.43
	Barclays Bank PLC	2013	2018	KRW 107,360	USD 100,000	3.34%	2.88%	1,073.60
	RBS	2013	2018	KRW 107,360	USD 100,000	3.34%	2.88%	1,073.60
	JP Morgan	2013	2018	KRW 161,040	USD 150,000	3.34%	2.88%	1,073.60
	Standard Chartered	2013	2018	KRW 161,040	USD 150,000	3.34%	2.88%	1,073.60
	Barclays Bank PLC	2004	2014	KRW 172,875	USD 150,000	5.10%	5.75%	1,152.50
	Barclays Bank PLC	2013	2018	KRW 81,188	USD 75,000	2.65%	1.88%	1,082.50
	RBS	2013	2018	KRW 81,188	USD 75,000	2.65%	1.88%	1,082.50
	Deutsche Bank	2013	2018	KRW 81,188	USD 75,000	2.65%	1.88%	1,082.50
	Citibank	2013	2018	KRW 81,188	USD 75,000	2.65%	1.88%	1,082.50
							3M Libor	
	BTMU	2010	2015	KRW 55,900	USD 50,000	4.03%	+1.20%	1,118.00
	RBS	2012	2017	KRW 115,140	USD 100,000	3.38%	2.50%	1,151.40
	BNP Paribas	2012	2017	KRW 115,140	USD 100,000	3.38%	2.50%	1,151.40
	Hana Bank	2012	2017	KRW 115,140	USD 100,000	3.38%	2.50%	1,151.40
	Barclays Bank PLC	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	Standard Chartered	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	Nomura	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	Credit Agricole	2012	2017	KRW 57,570	USD 50,000	3.38%	2.50%	1,151.40
	Societe Generale	2013	2018	KRW 106,190	USD 100,000	3.48%	2.63%	1,061.90
	BNP Paribas	2013	2018	KRW 53,095	USD 50,000	3.48%	2.63%	1,061.90
	Hana Bank	2013	2018	KRW 53,095	USD 50,000	3.48%	2.63%	1,061.90
	Standard Chartered	2013	2018	KRW 106,030	USD 100,000	3.48%	2.63%	1,060.30
	Barclays Bank PLC	2013	2018	KRW 53,015	USD 50,000	3.48%	2.63%	1,060.30
	Hana Bank	2013	2018	KRW 31,809	USD 30,000	3.48%	2.63%	1,060.30
	Societe Generale	2013	2018	KRW 21,206	USD 20,000	3.48%	2.63%	1,060.30
	HSBC	2013	2018	KRW 53,015	USD 50,000	3.47%	2.63%	1,060.30
	Nomura	2013	2018	KRW 53,015	USD 50,000	3.47%	2.63%	1,060.30

Under these currency swap contracts, we recognized a valuation loss of Won 217,361 million in 2013, net.

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Details of interest rate contracts outstanding as of December 31, 2013 are as follows:

Type	Counterparty	Contract Year	Settlement Year	Notional Amount (KRW in millions,  USD in thousands)	Contract Interest Rate Per Annum	
					Pay	Receive
Trading	Nonghyup Bank	2010	2015	KRW 100,000	4.90%	3M CD + 1.05%
	Nonghyup Bank	2010	2015	KRW 100,000	4.83%	3M CD + 0.90%
	Nonghyup Bank	2010	2015	KRW 50,000	4.77%	3M CD + 0.90%
	Korea Development Bank	2012	2016	KRW 200,000	3.57%	3M CD + 0.26%
	Nonghyup Bank	2012	2016	KRW 100,000	3.49%	3M CD + 0.25%
	Korea Development Bank	2012	2016	KRW 50,000	3.49%	3M CD + 0.25%
	HSBC	2012	2016	KRW 50,000	3.49%	3M CD + 0.25%
	Standard Chartered	2012	2016	KRW 200,000	3.55%	3M CD + 0.26%
	Standard Chartered	2012	2017	KRW 160,000	3.57%	3M CD + 0.32%
	JP Morgan	2013	2018	KRW 150,000	3.58%	3M CD + 0.31%
	Korea Exchange Bank	2011	2014	KRW 100,000	4.08%	3M CD + 0.03%
	Korea Exchange Bank	2011	2014	KRW 100,000	3.89%	3M CD + 0.05%
	Shinhan Bank	2011	2014	KRW 100,000	3.63%	3M CD + 0.18%
	Korea Exchange Bank	2011	2014	KRW 200,000	3.66%	3M CD + 0.24%
	Korea Exchange Bank	2012	2015	KRW 100,000	3.58%	3M CD + 0.15%
	Korea Exchange Bank	2012	2015	KRW 200,000	3.65%	3M CD + 0.10%
	Korea Exchange Bank	2012	2015	KRW 100,000	2.86%	3M CD + 0.05%
	Cash flow hedge	Korea Exchange Bank	2013	2016	KRW 100,000	2.82%
Korea Exchange Bank		2013	2016	KRW 200,000	2.57%	3M CD + 0.04%
Korea Exchange Bank		2013	2016	KRW 100,000	2.75%	3M CD + 0.03%
BNP Paribas		2009	2027	USD 108,633	4.16%	6M USD Libor
KFW		2009	2027	USD 108,633	4.16%	6M USD Libor
Credit Agricole					3.98% ~	
SMBC					4.05% ~	
		2012	2033	USD 106,684	4.10%	6M USD Libor
		2012	2033	USD 139,510	4.18%	6M USD Libor



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Under these interest rate swap contracts, we recognized a valuation gain of Won 13,112 million in 2013, net.

We engage in transactions denominated in foreign currencies and consequently, we become exposed to fluctuations in exchange rates. The carrying amounts of our foreign currency-denominated monetary assets and monetary liabilities as of December 31, 2012 and 2013 were as follows:

Type	Assets		Liabilities	
	2012	2013	2012	2013
	(In thousands of USD, EUR, GBP and other foreign currencies)			
AUD	1,188	1,460	152,692	321,444
CAD	2,314	4	4	611
CNY	1	1		
EUR	9,091	27,946	18,792	33,398
IDR	711,304	546,902	1,726	2,973
MXN	703	5,064		426
PHP	1,043,932	248,623	31,675	22,954
SAR	1,309	1,565		
USD	292,256	627,504	9,866,661	11,207,483
INR	417,544	362,996	52,755	500,933
PKR	63,445	116,847	277	650
MGA	240,233	2,124,218	92,979	101,503
JPY	520	176,921	20,006,730	22,521,580
KZT	720,121	164,790		16,517
GBP	6		253	4
CHF		143,120	223	400,012
AED	220	288	1,829	809
SEK			1,105	
JOD		132		1
BDT		34,753		2,977
CLP		93		

The following analysis sets forth the sensitivity of our consolidated net income before income taxes (our pre-tax income) to changes in exchange rates, interest rates, electricity rates and fuel costs. For purposes of this section, we and our related parties will be deemed one entity. The range of changes in such risk categories represents our view of the changes that are reasonably possible over a one-year period, although it is difficult to predict such changes as a result of adverse economic developments in Korea. See Item 3D. Risk Factors Risks Relating to Korea and the Global Economy Unfavorable financial and economic conditions in Korea and globally may have a material adverse impact on us. The following discussion only addresses material market risks faced by us and does not discuss other risks which we face in the normal course of business, including country risk, credit risk and legal risk. Unless otherwise specified, all calculations are made under IFRS.

If Won depreciates against U.S. dollar and all other foreign currencies held by us by 10% and all other variables are held constant from their levels as of December 31, 2013, we estimate that our unrealized foreign exchange translation losses will increase by Won 1,200 billion in 2014. Such sensitivity analysis is conducted for monetary assets and liabilities denominated in foreign currencies other than functional currency as of December 31, 2013 and 2012, before accounting for swap transactions. To manage our foreign currency risk related to foreign currency-denominated receivables and payables, we have a policy of entering into currency forward agreements. In addition, to manage our foreign currency risk related to foreign currency-denominated expected sales transactions and purchase transactions, we enter into cross-currency swap agreements.

We are exposed to interest rate risk due to its borrowing with floating interest rates. If interest rates increase by 1% on all of our borrowings and debentures bearing variable interest and all other variables are held constant

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as of December 31, 2013, we estimate that our income before income taxes will decrease by Won 73.5 billion (not reflecting the fact that a portion of such interest may be capitalized under IFRS) in 2014. Such sensitivity analysis does not take into consideration interest rate swap transactions. To manage our interest rate risks, we, in addition to maintaining an appropriate mix of fixed and floating rate loans, have entered into certain interest rate swap agreements.

We are exposed to electricity rates risk due to the rate regulation by the Government, which considers the effect of electricity rate changes on the national economy. If the electricity rate rises by 1% and all other variables are held constant as of December 31, 2013, we estimate that our income before income taxes will increase by Won 511.1 billion in 2014.

We are exposed to fuel price risks due to the heavy influence of fuel costs on our sales and cost of sales. If the fuel prices of anthracite and bituminous coal, oil, LNG and others used for generation by us and our generation subsidiaries rise by 1% and all other variables are held constant as of December 31, 2013, we estimate that our income before income taxes will decrease by Won 242 billion in 2014.

The above discussion and the estimated amounts generated from the sensitivity analyzes referred to above include forward-looking statements, which assume for analytical purposes that certain market conditions may occur. Accordingly, such forward-looking statements should not be considered projections by us of future events or losses.

See Note 44 of the notes to our consolidated financial statements included in this annual report for further related information.

**ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

**Item 12A. Debt Securities**

Not applicable.

**Item 12B. Warrants and Rights**

Not applicable.

**Item 12C. Other Securities**

Not applicable.

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Under the terms of the Deposit Agreement in respect of our ADSs, the holder and beneficiary owners of ADSs, any party depositing or withdrawing or surrendering ADSs or ADRs, whichever applicable, may be required to pay the following fees and charges to JPMorgan Chase Bank acting as depositary for our ADSs:

Item	Services	Fees
1	Taxes and other governmental charges	As applicable
2	Registration of transfer of common shares generally on our shareholders register, any institution authorized under the applicable law to effect book-entry transfers of securities (including Korea Securities Depository), or any entity that presently carries out the duties of registrar for the common shares, and applicable to transfers of common shares to the name of the Depository or its nominee on the making of deposits or withdrawals	A fee of \$1.50 or less per ADS
3	Cable, telex and facsimile transmission expenses	As applicable
4	Expenses incurred by the Depository in the conversion of foreign currency	As applicable
5	Execution and delivery of ADRs and the surrender of ADRs	Fee of \$0.05 or less per ADS
6	Cash distribution made by the Depository or its agent	Fee of \$0.02 or less per ADS
7	Fee for the distribution of proceeds of sales of securities or rights for distribution other than cash, common shares or rights to subscribe for shares, distribution in shares or distribution in rights to subscribe for shares	Lesser of (i) the fee for the execution and delivery of ADRs referred to above which would have been charged as a result of the deposit by the holders of securities or common shares received in exercise of rights distributed to them, but which securities or rights are instead sold by the Depository and the net proceeds distributed and (ii) the amount of such proceeds
8	Depository services performed in administering the ADRs (which fee shall be assessed against holders of ADSs as of the record date or dates and shall be payable at the sole discretion of the Depository by billing such holders or by deducting such charge from one or more cash dividends or other cash distributions)	Fee of US\$0.02 or less per ADS per calendar year

Depository fees payable upon the issuance and cancellation of ADSs are typically paid to the depositary by the brokers (on behalf of their clients) receiving the newly-issued ADSs from the depositary and by the brokers (on behalf of their clients) delivering the ADSs to the depositary for cancellation. The brokers in turn charge these transaction fees to their clients.

Depository fees payable in connection with distributions of cash or securities to ADS holders and the depositary services fee are charged by the depositary to the holders of record of ADSs as of the applicable ADS record date. The depositary fees payable for cash distributions are generally deducted from the cash being

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distributed. In the case of distributions other than cash (i.e., stock dividends, rights offerings), the depositary charges the applicable fee to the ADS record date holders concurrent with the distribution. In the case of ADSs registered in the name of the investor (whether certificated or un-certificated in direct registration), the depositary sends invoices to the applicable record date ADS holders. In the case of ADSs held in brokerage and custodian accounts via the central clearing and settlement system, the Depository Trust Company ( DTC ), the depositary generally collects its fees through the systems provided by DTC (whose nominee is the registered holder of the ADSs held in DTC) from the brokers and custodians holding ADSs in their DTC accounts. The brokers and custodians who hold their clients' ADSs in DTC accounts in turn charge their clients' accounts the amount of the fees paid to the depositary.

In the event of refusal to pay the depositary fees, the depositary may, under the terms of the Deposit Agreement, refuse the requested service until payment is received or may set-off the amount of the depositary fees from any distribution to be made to the ADS holder.

The fees and charges the ADS holders may be required to pay may vary over time and may be changed by us and by the depositary. The ADS holders will receive prior notice of such changes.

***Depository Payments for the Fiscal Year 2013***

The following table sets forth our expenses incurred in 2013, which were reimbursed by JPMorgan Chase Bank, N.A., acting as depositary for our ADSs:

	<b>(In thousands of U.S. dollars)</b>
Reimbursement of listing fees on the New York Stock Exchange	US\$ 91
Reimbursement of legal fees	491
Reimbursement of accounting fees	178
Contributions towards our investor relations and other financing efforts (including investor conferences, non-deal roadshows and market information services)	1,548
Other	123
Total	US\$ 2,431

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**PART II**

**ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

Not applicable.

**ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

Not applicable.

**ITEM 15. CONTROLS AND PROCEDURES**

**Disclosure Control**

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we have evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Exchange Act) as of December 31, 2013. There are inherent limitations to the effectiveness of any system of disclosure controls and procedures, including the possibility of human error and the circumvention or overriding of the controls and procedures. Accordingly, even effective disclosure controls and procedures can provide only reasonable assurance of achieving their control objectives. Based upon our evaluation, our chief executive officer and chief financial officer concluded that the design and operation of our disclosure controls and procedures as of December 31, 2013 were effective to provide reasonable assurance that information required to be disclosed by us in the reports we file and submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the applicable rules and forms, and that it is accumulated and communicated to our management, including our chief executive officer and chief financial officer, as appropriate to allow timely decision regarding required disclosure.

**Management's Annual Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act, for our company. Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we have evaluated the effectiveness of our internal control over financial reporting as of December 31, 2013 based on the framework established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992). Our internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements in accordance with generally accepted accounting principles and includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of a company's assets, (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of consolidated financial statements in accordance with generally accepted accounting principles, and that a company's receipts and expenditures are being made only in accordance with authorizations of a company's management and directors, and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of a company's assets that could have a material effect on the consolidated financial statements.

Because of its inherent limitations, a system of internal control over financial reporting can provide only reasonable assurance with respect to consolidated financial statement preparation and presentation and may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

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As required by Section 404 of the Sarbanes-Oxley Act of 2002 and related rules as promulgated by the Securities and Exchange Commission, management assessed the effectiveness of our internal control over financial reporting as of December 31, 2013 using criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992). Based on this evaluation, our management concluded that our internal control over financial reporting was effective as of December 31, 2013 based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992).

### **Audit Report of the Independent Registered Public Accounting Firm**

KPMG Samjong Accounting Corp. has issued an audit report on the effectiveness of our internal control over financial reporting, which is included elsewhere in this annual report.

### **Changes in Internal Controls**

There were no changes in our internal control over financial reporting that occurred during the year ended December 31, 2013 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

We operate an integrated ERP system for a transparent and efficient management of the core ERP components, including personnel, accounting, procurement, construction and facilities maintenance. In addition, we also operate a strategic enterprise management system that includes business warehouse, management information and business planning and simulation systems. We continue to upgrade and improve the ERP system, which is being used as our core information infrastructure.

### **ITEM 16. [RESERVED]**

#### **ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

Our board of directors has determined that we have at least one audit committee financial expert as such term is defined by the regulations of the Securities and Exchange Commission issued pursuant to Section 407 of the Sarbanes-Oxley Act of 2002. Our audit committee financial expert is Cho, Jeon-Hyeok. Such member currently remains a member of the audit committee and is independent within the meaning of the Korea Stock Exchange listing standards, the regulations promulgated under the Enforcement Decree of the Korean Commercial Code and the New York Stock Exchange listing standards. For biographic information of our audit committee financial expert, Cho, Jeon-Hyeok, see Item 6A. Directors and Senior Management.

#### **ITEM 16B. CODE OF ETHICS**

We have adopted a code of ethics for our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions as required under Section 406 of the Sarbanes-Oxley Act of 2002, together with an insider reporting system in compliance with Section 301 of the Sarbanes-Oxley Act. The code of ethics is available on our website [www.kepco.co.kr](http://www.kepco.co.kr). We have not granted any waiver, including an implicit waiver, from a provision of the code of ethics to any of the above-mentioned officers during our most recently completed fiscal year.

#### **ITEM 16C. PRINCIPAL AUDITOR FEES AND SERVICES**

The following table sets forth the aggregate fees billed for each of the years ended December 31, 2012 and 2013 for professional services rendered by our principal auditors for such year, for various types of services and a brief description of the nature of such services. Deloitte Anjin LLC, a member firm of Deloitte Touche Tohmatsu Limited, was our principal auditor for the year ended December 31, 2012. KPMG Samjong

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Accounting Corp., a Korean independent registered public accounting firm, was our principal auditor for the year ended December 31, 2013 and we currently expect KPMG Samjong Accounting Corp. to serve as our principal auditor for the year ended December 31, 2014.

Type of Services	Aggregate Fees Billed During		Nature of Services
	2012	2013	
	(In millions of Won)		
Audit Fees	3,109	2,979	Audit service for KEPCO and its subsidiaries.
Audit-Related Fees	355	94	Accounting advisory service.
Tax Fees		35	Tax return and consulting advisory service.
All Other Fees		496	All other services which do not meet the three categories above.
<b>Total</b>	<b>3,464</b>	<b>3,604</b>	

United States law and regulations in effect since May 6, 2003 generally require all service of the principal auditors be pre-approved by an independent audit committee or, if no such committee exists with respect to an issuer, by the entire board of directors. We have adopted the following policies and procedures for consideration and approval of requests to engage our principal auditors to perform audit and non-audit services. If the request relates to services that would impair the independence of our principal auditors, the request must be rejected. If the service request relates to audit and permitted non-audit services for us and our subsidiaries, it must be forwarded to our audit committee and receive pre-approval.

In addition, United States law and regulations permit the pre-approval requirement to be waived with respect to engagements for non-audit services aggregating no more than five percent of the total amount of revenues we paid to our principal auditors, if such engagements were not recognized by us at the time of engagement and were promptly brought to the attention of our audit committee or a designated member thereof and approved prior to the completion of the audit.

**ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEE**

Not applicable.

**ITEM 16E. PURCHASES OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

Neither we nor any affiliated purchaser, as defined in Rule 10b-18(a)(3) of the Exchange Act, purchased any of our equity securities during the period covered by this annual report.

**ITEM 16F. CHANGE IN REGISTRANT'S CERTIFYING ACCOUNTANTS**

Due to the expiration of the term of the appointment of Deloitte Anjin LLC as the independent registered public accounting firm for us and our certain other subsidiaries, including KHNP, as of the fiscal year ended December 31, 2012, we appointed KPMG Samjong Accounting Corp. as the independent registered public accounting firm for us and KHNP for the years ended December 31, 2013, 2014 and 2015, effective from January 1, 2013. The decision to make such appointment was approved at our audit committee meeting on March 27, 2013.

The foregoing decision to change the independent registered public accounting firm was made pursuant to the rules of the Board of Audit and Inspection, a Government agency, relating to audits of public enterprises, under which a public accounting firm may not audit a public enterprise (including us and KHNP) for a term exceeding six consecutive years. The fiscal year 2012 marked the sixth year of audit by Deloitte Anjin LLC of us and KHNP.

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The consolidated financial statements as of and for the years ended December 31, 2011 and 2012, before the effects of the retrospective adjustments to apply the changes in accounting described in Note 2 thereto and the retrospective adjustments to the disclosures for a change in the composition of segments discussed in Note 4 thereto, were audited by Deloitte Anjin LLC. Deloitte Anjin LLC's engagement as our independent registered public accounting firm was terminated after the completion of the audit of our consolidated financial statements as of and for the year ended December 31, 2012. The audit report of Deloitte Anjin LLC on our consolidated financial statements as of and for the years ended December 31, 2011 and 2012, before the effects of the adjustments discussed in Note 2 and Note 4 thereto, prepared in accordance with IFRS did not contain an adverse opinion or a disclaimer of opinion and was not qualified or modified as to uncertainty, audit scope or accounting principles. Furthermore, in connection with the audit of our consolidated financial statements as of and for the years ended December 31, 2011 and 2012, before the effects of the adjustments discussed in Note 2 and Note 4 thereto, there were no disagreements (as described in Item 16F(a)(1)(iv) of Form 20-F) with Deloitte Anjin LLC on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure, which disagreements, if not resolved to the satisfaction of Deloitte Anjin LLC, would have caused Deloitte Anjin LLC to make reference to the subject matter of the disagreement in connection with their reports. In addition, we confirm that between January 1, 2011 and the date of the termination of Deloitte Anjin's engagement as our independent registered public accounting firm, there were no reportable events requiring disclosure pursuant to Item 16F(a)(1)(v) of Form 20-F. The foregoing also applies in the same way to KHNP's consolidated financial statements as of and for the years ended December 31, 2011 and 2012, before the effects of the adjustments discussed in Note 2 thereto, and the audit report of Deloitte Anjin LLC thereon; and KHNP also did not have any disagreements with Deloitte Anjin LLC as to the matters mentioned above and there were similarly no reportable events as applies to KHNP.

Between January 1, 2011 and the date of appointment of KPMG Samjong Accounting Corp. as our independent registered public accounting firm, neither we nor anyone on our behalf consulted with KPMG Samjong Accounting Corp. with respect to either (1) the application of accounting principles to a specified transaction, either completed or proposed, or the type of audit opinion that might be rendered on our consolidated financial statements, and neither a written report nor oral advice was provided to us that KPMG Samjong Accounting Corp. concluded was an important factor considered by us in reaching a decision as to any accounting, auditing or financial reporting issue or (2) any matter that was either the subject of a disagreement, as defined in Item 16F(a)(1)(iv) of Form 20-F and the related instructions to Item 16F, or a reportable event, as described in Item 16F(a)(1)(v) of Form 20-F. Similarly, neither KHNP nor anyone on its behalf consulted with KPMG Samjong Accounting Corp. with respect to the matters mentioned above.

We provided a copy of this disclosure to Deloitte Anjin LLC and requested that Deloitte Anjin LLC furnish us with a letter addressed to the SEC stating whether or not it agrees with the statements made above. A copy of Deloitte Anjin LLC's letter addressed to the SEC dated April 30, 2013 is attached to this annual report as Exhibit 15.5.

**ITEM 16G. CORPORATE GOVERNANCE**

We are committed to high standards of corporate governance. We are in compliance with the corporate governance provisions of the KEPCO Act, the Public Agencies Management Act, the Korean Commercial Code, the Financial Investment Services and Capital Markets Act of Korea and the Listing Rules of the Korea Exchange. We, like all other companies in Korea, must comply with the corporate governance provisions under the Korean Commercial Code, except to the extent the KEPCO Act and the Public Agencies Management Act otherwise require. In addition, as a listed company, we are subject to the Financial Investment Services and Capital Markets Act of Korea, unless the Financial Investment Services and Capital Markets Act of Korea otherwise provides.

**The Public Agencies Management Act**

On April 1, 2007, the Government-invested Enterprise Management Basic Act, which was enacted in 1984, was abolished and the Public Agencies Management Act took effect. Unless stated otherwise, the Public Agencies



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Management Act takes precedence over any other laws and regulations in the event of inconsistency. Under this Act, the minister of the Ministry of Strategy and Finance designated us as a market-oriented public enterprise, as defined under this Act, on April 2, 2007, and we became subject to this Act accordingly.

The Public Agencies Management Act requires a number of changes in the appointment process for our executive officers, which we have incorporated in our amendment to our Articles of Incorporation in September 2007. A senior non-standing director appointed by the minister of the Ministry of Strategy and Finance becomes our chairman of the board following the review and resolution of the Public Agencies Operating Committee. Our president is appointed by the President of the Republic upon the motion of the Ministry of Trade, Industry and Energy following the nomination by our director nomination committee, the review and resolution of the Public Agencies Operating Committee pursuant to the Public Agencies Management Act and an approval at the general meeting of our shareholders. Standing directors other than our president must be appointed by our president with the approval at the general meeting of our shareholders from a pool of candidates recommended by our director nomination committee. Prior to the enactment of the Act, standing directors were appointed directly by the minister of the Ministry of Trade, Industry and Energy. The non-standing directors must be appointed by the minister of the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by the director nomination committee and must have ample knowledge and experience in business management. Government officials that are not part of the teaching staff in national and public schools are ineligible to become our non-standing directors.

Under the Public Agencies Management Act and our Articles of Incorporation, the term of office for directors is three years for the president and two years for other directors. The directors may be reappointed for an additional term of one year. In order to be reappointed, the president must be evaluated on the basis of his management performance; a standing director, on the basis of the performance of the duties for which he was elected to perform, or if the standing director has executed an incentive bonus contract, on the basis of his performance under the contract; and a non-standing director, on the basis of his performance of the duties for which he was elected to perform.

Under the Public Agencies Management Act and our Articles of Incorporation, a recommendation from the director nomination committee is required for the appointment of our executive officers, except in the case of reappointments. The director nomination committee consists of five to fifteen members, including private-sector members appointed by the board of directors. Non-standing directors must comprise at least the majority of the director nomination committee. One of the private-sector members must be able to represent our opinion and must not be currently employed by us. As required under the Public Agencies Management Act, we established an audit committee. At least two-thirds of the audit committee members must be non-standing directors, and at least one committee member must be an expert in finance or accounting. According to the Public Agencies Management Act, our president's term cannot be terminated unless done so by the President of the Republic pursuant to the Public Agencies Management Act or upon an event as specified in our Articles of Incorporation.

As required under Public Agencies Management Act, we submit to the Government by October 31 every year a report on our medium- to long-term management goals. Under the Public Agencies Management Act, we are also required to give separate public notice of important management matters, such as our budget and financial statements, status of directors and annual reports. In addition, for purposes of providing a comparison of the management performances of government agencies, we are required to post on a designated website a notice on a standard form detailing our management performance. Following consultation with the minister of the Ministry of Trade, Industry and Energy and the review and resolution of the operating committee, the Ministry of Strategy and Finance must examine the adequacy and competency of government agencies and establish plans on merger, abolishment, restructuring and privatization of public agencies. In such case, the minister of the Ministry of Trade, Industry and Energy must execute these plans and submit a performance report to the Ministry of Strategy and Finance.

On January 24, 2011, the Ministry of Trade, Industry and Energy changed the designation of our generation subsidiaries from other public institutions to market-oriented public enterprises. As other public institutions under the provisions of the Public Agencies Management Act, our generation subsidiaries were not

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subject to the same regulations applicable to us with regards to corporate governance matters such as the appointment and dismissal of directors and the composition of the boards of directors. However, as market-oriented public enterprises, our generation subsidiaries are currently subject to the same corporate governance rules applicable to us. All of our generation subsidiaries accordingly amended their respective articles of incorporation in 2011 and are subject to the same system of regulations applicable to us.

### **Differences in Korean/New York Stock Exchange Corporate Governance Practices**

We are a foreign private issuer (as such term is defined in Rule 3b-4 under the Exchange Act), and our ADSs are listed on the New York Stock Exchange, or NYSE. Under Section 303A of the NYSE Listed Company Manual, NYSE-listed companies that are foreign private issuers are permitted to follow home country practice in lieu of the corporate governance provisions specified by the NYSE with limited exceptions. Under the NYSE Listed Company Manual, we as a foreign private issuer are required to disclose significant differences between NYSE's corporate governance standards and those we follow under Korean law. The following summarizes some significant ways in which our corporate governance practices differ from those followed by U.S. companies listed on the NYSE under the listing rules of the NYSE:

#### ***Majority of Independent Directors on the Board***

Under the NYSE listing rules, U.S. companies listed on the NYSE must have a board the majority of which is comprised of independent directors satisfying the requirements of independence as set forth in Rule 10A-3 under the Exchange Act. No director qualifies as independent unless the board of directors affirmatively determines that the director has no material relationship with the listed company (either directly or as a partner, shareholder or officer of an organization that has a relationship with us). The NYSE rules include detailed tests for determining director independence. While as a foreign private issuer, we are exempt from this requirement, our board of directors is in compliance with this requirement as it currently consists of 15 directors, of which eight directors satisfy the requirements of independence as set forth in Rule 10A-3 under the Exchange Act. U.S. companies listed on the NYSE are required to adopt and disclose corporate governance guidelines. Under the Public Agencies Management Act, more than one-half of our directors must be non-standing directors. The Financial Investment Services and Capital Markets Act of Korea deems a non-standing director nominated pursuant to other applicable laws (such as the Public Agencies Management Act) as an outside or non-executive director. Under the Public Agencies Management Act, a non-standing director is appointed by the Ministry of Strategy and Finance following the review and resolution of the Public Agencies Operating Committee from a pool of candidates recommended by the director nomination committee and must have ample knowledge and experience in business management. Government officials that are not part of the teaching staff in national and public schools are ineligible to become our non-standing directors.

#### ***Executive Session***

Under the NYSE listing rules, non-management directors of U.S. companies listed on the NYSE are required to meet on a regular basis without management present and independent directors must meet separately at least once per year. While no such requirement currently exists under applicable Korean law, listing standards or our Articles of Incorporation, exclusive sessions were held quarterly in 2013 in order to promote the exchange of diverse opinions by non-standing directors.

#### ***Audit Committee***

Under the NYSE listing rules, listed companies must have an audit committee that has a minimum of three members, and all audit committee members must satisfy the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company Manual and Rule 10A-3 under the Exchange Act. We are in compliance with this requirement as our audit committee is comprised of three outside directors meeting the requirements of independence set forth in Section 303A.02 of the NYSE Listed Company Manual and

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Rule 10A-3 under the Exchange Act. The audit committee must be directly responsible for the appointment, compensation, retention and oversight of the work of the independent registered public accountants. Our board of auditors performs the roles and responsibilities required of an audit committee under the Sarbanes-Oxley Act, including the supervision of the audit by the independent registered public accountants. Under the Korea Exchange listing rules and the Korean Commercial Code, a large listed company must also establish an audit committee of which at least two-thirds of its members must be outside directors and whose chairman must be an outside director. In addition, at least one member of the audit committee who is an outside director must also be an accounting or financial expert. Currently, our audit committee consists of three independent directors, and our audit committee is in compliance with the foregoing requirements under the NYSE listing rules, the Sarbanes-Oxley Act, the Korea Exchange listing rules and the Korean Commercial Code.

### ***Nomination/Corporate Governance Committee***

Under the NYSE listing rules, U.S. companies listed on the NYSE must have a nomination/corporate governance committee composed entirely of independent directors. In addition to identifying individuals qualified to become board members, this committee must develop and recommend to the board a set of corporate governance principles. Under the Public Agencies Management Act, we are required to have a director nomination committee which consists of non-standing directors and ad hoc members appointed by our Board of Directors. Our standing directors and executives as well as governmental officials that are not part of the teaching staff in national and public schools are ineligible to become a member of our director nomination committee. There is no requirement to establish a corporate governance committee under applicable Korean law.

Pursuant to the NYSE listing standards, non-management directors must meet on a regular basis without management present and independent directors must meet separately at least once per year. No such requirement currently exists under applicable Korean law.

### ***Compensation Committee***

Under the NYSE listing rules, U.S. companies listed on the NYSE are required to have a compensation committee which is composed entirely of independent directors. In January 2013, the SEC approved amendments to the listing rules of NYSE and NASDAQ regarding the independence of compensation committee members and the appointment, payment and oversight of compensation consultants. The listing rules were adopted as required by Section 952 of the Dodd-Frank Act and rule 10C-1 of the Securities Exchange Act of 1934, as amended, which direct the national securities exchanges to prohibit the listing of any equity security of a company that is not in compliance with the rule's compensation committee director and advisor independence requirements. Certain elements of the listing rules became effective on July 1, 2013 and companies listed on the NYSE must comply with such listing rules by the earlier of the company's first annual meeting after January 15 or October 31, 2014.

No such requirement currently exists under applicable Korean law or listing standards, and we currently do not have a compensation committee.

### ***Corporate Governance Guidelines and Code of Business Conduct and Ethics***

Under the NYSE listing rules, U.S. companies listed on the NYSE are required to establish corporate governance guidelines and to adopt a code of business conduct and ethics for directors, officers and employees, and promptly disclose any waivers of the code for directors or executive officers. As a foreign private issuer, we are exempt from this requirement. Pursuant to the requirements of the Sarbanes-Oxley Act, we have adopted a code of ethics applicable to our President & Chief Executive Officer and all other directors and executive officers including the Chief Financial Officer and the Chief Accounting Officer, as well as all financial, accounting and other officers that are involved in the preparation and disclosure of our consolidated financial statements and internal control of financial reporting pursuant to Section 404 of the Sarbanes-Oxley Act. We have also adopted

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an insider reporting system in compliance with Section 301 of the Sarbanes-Oxley Act. The code of ethics applicable to our executive officers as well as the financial officers of the holding company and its subsidiaries are available on [www.kepco.co.kr](http://www.kepco.co.kr).

### ***Shareholder Approval of Equity Compensation Plans***

Under the NYSE listing rules, shareholders of U.S. companies listed on the NYSE are required to approve all equity compensation plans. Under Korean law and regulations, stock options can be granted to employees to the extent expressly permitted by the articles of incorporation. We currently do not have any equity compensation plans.

### ***Annual Certification of Compliance***

Under the NYSE listing rules, a chief executive officer of a U.S. company listed on the NYSE must annually certify that he or she is not aware of any violation by the company of NYSE corporate governance standards. As a foreign private issuer, we are not subject to this requirement. However, in accordance with rules applicable to both U.S. companies and foreign private issuers, we are required to promptly notify the NYSE in writing if any executive officer becomes aware of any material noncompliance with the NYSE corporate governance standards applicable to us. In addition, foreign private issuers, including us, are required to submit to the NYSE an annual written affirmation relating to compliance with Sections 303A.06 and 303A.11 of the NYSE listed company manual, which are the NYSE corporate governance standards applicable to foreign private issuers. All written affirmations must be executed in the form provided by the NYSE, without modification. An annual written affirmation is required to be submitted to the NYSE within 30 days of filing with the SEC our annual report on Form 20-F. We have been in compliance with this requirement in all material respects and plan to submit such affirmation within the prescribed time line.

### ***Whistle Blower Protection***

On May 25, 2011, the SEC adopted final rules to implement whistleblower provisions of the Dodd-Frank Act, which are applicable to foreign private issuers with securities registered under the U.S. securities laws. The final rules provide that any eligible whistleblower who voluntarily provides the SEC with original information that leads to the successful enforcement of an action brought by the SEC under U.S. securities laws must receive an award of between 10 and 30 percent of the total monetary sanctions collected if the sanctions exceed \$1,000,000. An eligible whistleblower is defined as someone who provides information about a possible violation of the securities laws that he or she reasonably believes has occurred, is ongoing, or is about to occur. The possible violation does not need to be material, probably or even likely, but the information must have a factually plausible relationship to some securities law violation; frivolous submissions would not qualify. The final rules also prohibit retaliation against the whistleblower. While the final rules do not require employees to first report allegations of wrongdoing through a company's corporate compliance system, they do seek to incentivize whistleblowers to utilize internal corporate compliance first by, among other things, (i) giving employees who first report information internally the benefit of the internal reporting date for purposes of the SEC program so long as the whistleblower submits the same information to the SEC within 120 days of the initial disclosure; (ii) clarifying that the SEC will consider, as part of the criteria for determining the amount of a whistleblower's award, whether the whistleblower effectively utilized the company's corporate compliance program or hindered the function of the program; and (iii) crediting a whistleblower who reports internally first and whose company passes the information along to the SEC, which would mean the whistleblower could receive a potentially higher award for information gathered in an internal investigation initiated as a result of the whistleblower's internal report.

In addition, the final rules address concerns that the whistleblower rules incentivize officers, directors and those with legal, audit, compliance or similar responsibilities to abuse these positions by making whistleblower

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complaints to the SEC with respect to information they obtained in these roles by generally providing that information obtained through a communication subject to attorney-client privilege or as a result of legal representation would not be eligible for a whistleblower award unless disclosure would be permitted by attorney conduct rules. Accordingly, officers and directors, auditors and compliance personnel and other persons in similar roles would not be eligible to receive awards for information received in these positions unless (x) they have a reasonable basis to believe that (1) disclosure of the information is necessary to prevent the entity from engaging in conduct that is likely to cause substantial injury to the financial interests of the entity or investors; or (2) the entity is engaging in conduct that will impede an investigation of the misconduct, for example, destroying documents or improperly influencing witnesses; or (y) 120 days have passed since the whistleblower provided the information to senior responsible persons at the entity or 120 days have passed since the whistleblower received the information at a time when these people were already aware of the information.

In Korea, there is no corresponding law or regulation.

**ITEM 16H. MINE SAFETY DISCLOSURE**

Not applicable.

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**PART III**

**ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

**ITEM 18. FINANCIAL STATEMENTS**

Reference is made to Item 19 Exhibits for a list of all financial statements filed as part of this annual report.

**ITEM 19. EXHIBITS**

**(a) Financial Statements filed as part of this Annual Report**

See Index to Financial Statements on page F-1 of this annual report.

**(b) Exhibits filed as part of this Annual Report**

See Index of Exhibits beginning on page E-1 of this annual report.

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**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

**KOREA ELECTRIC POWER CORPORATION**

By: /s/ Cho, Hwan-Eik  
Name: Cho, Hwan-Eik  
Title: President and Chief Executive Officer  
Date: April 30, 2014

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**REPORT OF INDEPENDENT REGISTERED PUBLIC**

**ACCOUNTING FIRM ON CONSOLIDATED FINANCIAL STATEMENTS**

To the shareholders and Board of Directors of

Korea Electric Power Corporation:

We have audited the accompanying consolidated statement of financial position of Korea Electric Power Corporation (the Company) and subsidiaries as of December 31, 2013, and the related consolidated statements of comprehensive income (loss), changes in equity and cash flows, for the year ended December 31, 2013. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We did not audit the financial statements of Korea East-West Power Co., Ltd., a consolidated subsidiary, whose financial statements comprise 3.93 percent of consolidated total assets (prior to inter-company eliminations) as of December 31, 2013 and 5.90 percent of consolidated total revenue (prior to inter-company eliminations) for the year ended December 31, 2013. Those financial statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts are based solely on the report of the other auditors. The accompanying consolidated financial statements of Korea Electric Power Corporation and subsidiaries as of December 31, 2012, and for the years ended December 31, 2011 and 2012, were audited by other auditors whose report thereon dated April 30, 2013, expressed an unqualified opinion on those financial statements, before the retrospective presentation of the power generation maintenance operating segment as a reportable segment as described in note 4 to the consolidated financial statements and the reclassification adjustments to present accrued incentive compensation as provisions instead of trade accounts payable and other as described in note 2.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit and the report of the other auditors provide a reasonable basis for our opinion.

In our opinion, based on our audit and the report of the other auditors, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Korea Electric Power Corporation and subsidiaries as of December 31, 2013 and the results of their operations and their cash flows for the year then ended, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We have audited the retrospective presentation in 2011 and 2012 of the plant maintenance & engineering service operating segment as a reportable segment as described in note 4 and the reclassification adjustments to present accrued incentive compensation as provisions instead of trade accounts payable and other as described in note 2. In our opinion, such retrospective reportable segment presentation and reclassification adjustments are appropriate and have been properly applied. We were not engaged to audit, review, or apply any procedures to the 2011 and 2012 consolidated financial statements of the Company other than with respect to the retrospective reportable segment presentation and reclassification adjustments and, accordingly, we do not express an opinion or any other form of assurance on the 2011 and 2012 consolidated financial statements of the Company taken as a whole.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the Company's internal control over financial reporting as of December 31, 2013, based on the criteria established in Internal Control - Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated April 30, 2014 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting, based on our audit and the report of other auditors.

/s/ KPMG Samjong Accounting Corp.

Seoul, Korea

April 30, 2014

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON  
INTERNAL CONTROL OVER FINANCIAL REPORTING**

To the Shareholders and Board of Directors of

Korea Electric Power Corporation:

We have audited Korea Electric Power Corporation's (the Company) internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission. The Company's management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We did not audit the internal control over financial reporting of Korea East-West Power Co., Ltd., a consolidated subsidiary, whose financial statements reflect total assets and revenues constituting 3.93 percent and 5.90 percent, respectively, of the related consolidated financial statement amounts as of and for the year ended December 31, 2013. Korea East-West Power Co., Ltd.'s internal control over financial reporting was audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to Korea East-West Power Co., Ltd.'s internal control over financial reporting, is based solely on the report of the other auditors.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit and the report of other auditors provide a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the group's assets that could have a material effect on the financial statements.

Because of the inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, based on our audit and the report of the other auditors, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the criteria established in Internal Control - Integrated Framework (1992) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

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We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated financial statements of the Company as of and for the year ended December 31, 2013, all expressed in Korean won, and our report dated April 30, 2014 expressed an unqualified opinion on those consolidated financial statements, based on our audit and the report of the other auditors.

/s/ KPMG Samjong Accounting Corp.

Seoul, Korea

April 30, 2014

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

To the Board of Directors and Stockholders of

Korea Electric Power Corporation:

We have audited, before the effects of the retrospective adjustments to apply the changes in accounting described in Note 2 to the consolidated financial statements and the retrospective adjustments to the disclosures for a change in the composition of segments discussed in Note 4 to the consolidated financial statements, the consolidated statements of financial position of Korea Electric Power Corporation and subsidiaries (the Company ) as of December 31, 2012, and the related consolidated statements of income, comprehensive income, changes in equity, and cash flows for each of the two years in the period ended December 31, 2011 and 2012 (the 2011 and 2012 consolidated financial statements before the effects of the adjustments discussed in Note 2 and Note 4 to the consolidated financial statements are not presented herein). These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits. We did not audit the financial statements of certain consolidated subsidiaries whose financial statements reflect 4.7 percent of consolidated total assets as of December 31, 2012 and 9.5 and 10.1 percent of consolidated total revenue for each of the two years in the period ended December 31, 2011 and 2012. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Korea South-East Power Co., Ltd., is based solely on the report of the other auditors.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, based on our audits and the report of the other auditors, such consolidated financial statements, before the effects of retrospective adjustment for the change in accounting described in Note 2 and retrospective adjustment for a change in segments discussed in Note 4, present fairly, in all material respects, the financial position of Korea Electric Power Corporation and subsidiaries as of December 31, 2012 and the results of their operations and their cash flows for each of the two years in the period ended December 31, 2011 and 2012, in conformity with the International Financial Reporting Standards ( IFRS ) as issued by the International Accounting Standards Board ( IASB ).

We were not engaged to audit, review, or apply any procedures to the retrospective adjustments for the changes in accounting described in Note 2 to the consolidated financial statements, and the retrospective adjustments to the disclosures for a change in the composition of segments discussed in Note 4 to the consolidated financial statements and, accordingly, we do not express an opinion or any other form of assurance about whether such retrospective adjustments are appropriate and have been properly applied. Those retrospective adjustments were audited by other auditor.

/s/ Deloitte Anjin LLC

Seoul, Korea

April 30, 2013

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholder

Korea East-West Power Co., Ltd.

We have audited the consolidated statement of financial position of Korea East-West Power Co., Ltd. and subsidiaries (the Company), a wholly owned subsidiary of Korea Electric Power Corporation as of December 31, 2013 and the related consolidated statements of comprehensive income, changes in equity and cash flows for the year ended December 31, 2013. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audit provides a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Korea East-West Power Co., Ltd. and subsidiaries as of December 31, 2013 and their consolidated results of operations, and their cash flows for the year ended December 31, 2013, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Korea East-West Power Co., Ltd.'s internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control - Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) and our report dated April 30, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young Han Young

April 30, 2014

Seoul, Republic of Korea

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM ON INTERNAL CONTROL OVER FINANCIAL REPORTING**

The Board of Directors and Stockholder of

Korea East-West Power Co., Ltd.

We have audited Korea East-West Power Co., Ltd. s (the Company ) internal control over financial reporting as of December 31, 2013, based on criteria established in Internal Control Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (1992 framework) (the COSO criteria ). Korea East-West Power Co., Ltd. s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on the company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, Korea East-West Power Co., Ltd. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2013, based on the COSO criteria.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated statement of financial position of Korea East-West Power Co., Ltd. as of December 31, 2013 and the related consolidated statements of comprehensive income, changes in equity and cash flows for the year ended December 31, 2013 and our report dated April 30, 2014 expressed an unqualified opinion thereon.

/s/ Ernst & Young Han Young

April 30, 2014

Seoul, Republic of Korea

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholder

Korea South-East Power Co., Ltd.

We have audited the consolidated statements of financial position of Korea South-East Power Co., Ltd. (the Company ) as of December 31, 2012 and 2011, and the related consolidated statements of comprehensive income, changes in equity and cash flows for each of the two years in the period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the consolidated financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of Korea South-East Power Co., Ltd. as at December 31, 2012 and 2011 and the consolidated results of its financial performance, and its cash flows for each of the two years in the period ended December 31, 2012, in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

/s/ Ernst & Young Han Young

April 29, 2013

Seoul, Republic of Korea

**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Financial Position**

As of December 31, 2012 and 2013

	Note	2012	2013
		In millions of won	
<b>Assets</b>			
Current assets			
Cash and cash equivalents	5,6,7,44	1,954,949	2,232,313
Current financial assets, net	5,10,11,12,44	656,217	436,213
Trade and other receivables, net	5,8,14,20,44,45,46	7,184,625	7,526,311
Inventories, net	13	3,440,341	4,279,593
Income tax receivables		30,476	223,803
Current non-financial assets	15	664,047	570,845
Non-current assets held for sale		2,828	
<b>Total current assets</b>		<b>13,933,483</b>	<b>15,269,078</b>
Non-current assets			
Non-current financial assets, net	5,6,9,10,11,12,44	1,873,676	1,902,953
Non-current trade and other receivables, net	5,8,14,44,45,46	1,254,330	1,644,333
Property, plant and equipment, net	18,27,48	122,376,140	129,637,596
Investment properties, net	19,27	590,223	538,327
Goodwill	16		2,582
Intangible assets other than goodwill, net	21,27	883,814	810,664
Investments in joint ventures	4,17	908,593	1,106,181
Investments in associates	4,17	3,982,340	4,124,574
Deferred tax assets	41	209,783	359,535
Non-current non-financial assets	15	140,438	131,511
<b>Total non-current assets</b>		<b>132,219,337</b>	<b>140,258,256</b>
<b>Total Assets</b>	<b>4</b>	<b>146,152,820</b>	<b>155,527,334</b>
<b>Liabilities</b>			
Current liabilities			
Trade and other payables, net	5,22,24,44,46	5,601,852	5,892,763
Current financial liabilities, net	5,11,23,44,46	7,788,819	8,425,231
Income tax payables		334,053	51,407
Current non-financial liabilities	20,28,29	4,117,440	4,730,631
Current provisions	26,44	974,915	1,113,817
<b>Total current liabilities</b>		<b>18,817,079</b>	<b>20,213,849</b>
Non-current liabilities			
Non-current trade and other payables, net	5,22,24,44,46	4,173,691	3,971,519
Non-current financial liabilities, net	5,11,23,44,46	46,050,766	53,163,394
Non-current non-financial liabilities	28,29	6,298,650	6,985,641
Employee benefits obligations, net	25,44	2,144,334	2,137,296
Deferred tax liabilities	41	5,433,292	5,002,585
Non-current provisions	26,44	12,170,806	12,602,314



<b>Total non-current liabilities</b>		76,271,539	83,862,749
<b>Total Liabilities</b>	4	95,088,618	104,076,598

(Continued)

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**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Financial Position (Continued)**

As of December 31, 2012 and 2013

	Note	2012	2013
		In millions of won	
<b>Equity</b>			
Contributed capital	30,44		
Share capital		3,209,820	3,209,820
Share premium		843,758	843,758
		4,053,578	4,053,578
Retained earnings	31		
Legal reserves		1,603,919	1,603,919
Voluntary reserves		25,961,315	22,753,160
Retained earnings before appropriations	32	4,999,049	8,409,007
		32,564,283	32,766,086
Other components of equity	34		
Other capital surpluses		705,448	830,982
Accumulated other comprehensive income		11,957	55,538
Treasury stock		(741,489)	(741,489)
Other equity		13,294,990	13,294,973
		13,270,906	13,440,004
Equity attributable to owners of the Company		49,888,767	50,259,668
Non-controlling interests	16, 33	1,175,435	1,191,068
<b>Total Equity</b>		<b>51,064,202</b>	<b>51,450,736</b>
<b>Total Liabilities and Equity</b>		<b>146,152,820</b>	<b>155,527,334</b>

See accompanying notes to the consolidated financial statements.

**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Comprehensive Income (Loss)****For the years ended December 31, 2011, 2012 and 2013**

	Note	2011                      2012                      2013 In millions of won, except per share information		
<b>Sales</b>	4,35,44,46			
Sales of goods		41,397,469	46,906,587	51,132,803
Sales of construction services	20	1,455,132	1,856,045	2,253,083
Sales of other services		322,616	357,877	326,619
		43,175,217	49,120,509	53,712,505
<b>Cost of sales</b>	13,25,42,46			
Cost of sales of goods		(40,926,543)	(46,293,591)	(47,983,987)
Cost of sales of construction services		(1,405,302)	(1,695,218)	(2,159,023)
Cost of sales of other services		(393,049)	(470,453)	(452,628)
		(42,724,894)	(48,459,262)	(50,595,638)
<b>Gross profit</b>		450,323	661,247	3,116,867
<b>Selling and administrative expenses</b>	25,36,42,46	(1,751,696)	(1,780,168)	(1,923,192)
<b>Other income</b>	37	598,302	675,000	725,457
<b>Other expenses</b>	37	(147,595)	(74,567)	(99,811)
<b>Other gains (losses), net</b>	38	165,703	(1,781,835)	128,514
<b>Operating profit (loss)</b>	4	(684,963)	(2,300,323)	1,947,835
<b>Finance income</b>	5,11,39	607,592	1,128,357	629,542
<b>Finance expenses</b>	5,11,40	(2,518,850)	(3,068,321)	(2,931,622)
<b>Equity method income (loss) of associates and joint ventures</b>	17			
Share in income of associates and joint ventures		162,513	205,987	170,399
Gains on disposal of investments in associates and joint ventures		3,147		1,725
Share in loss of associates and joint ventures		(42,115)	(20,127)	(140,984)
Losses on disposal of investments in associates and joint ventures		(450)	(162)	(45,291)
Impairment losses on investments in associates and joint ventures			(8,757)	(28,092)
		123,095	176,941	(42,243)
<b>Loss before income taxes</b>		(2,473,126)	(4,063,346)	(396,488)
<b>Income tax (expense) benefit</b>	41	(819,871)	985,377	570,794
<b>Profit (loss) for the period</b>		(3,292,997)	(3,077,969)	174,306

(Continued)



**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Comprehensive Income (Loss) (Continued)****For the years ended December 31, 2011, 2012 and 2013**

	Note	2011	2012	2013
		In millions of won, except per share information		
<b>Other comprehensive income (loss)</b>	5,11,25,34			
Items that will not be reclassified subsequently to profit or loss:				
Defined benefit plan actuarial gains (losses), net of tax	25,31	(152,196)	(41,310)	132,457
Share in other comprehensive income (loss) of associates and joint ventures, net of tax	31	(5,002)	(846)	7,671
Items that may be reclassified subsequently to profit or loss:				
Net change in the unrealized fair value of available-for-sale financial assets, net of tax	34	(174,958)	2,245	86,570
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax	5,11,34	(27,999)	(63,850)	29,332
Foreign currency translation of foreign operations, net of tax	34	47,135	(121,892)	(108,625)
Share in other comprehensive income (loss) of associates and joint ventures, net of tax	34	50,862	(96,060)	38,366
<b>Other comprehensive income (loss), net of tax</b>		(262,158)	(321,713)	185,771
<b>Total comprehensive income (loss) for the period</b>		(3,555,155)	(3,399,682)	360,077
<b>Profit (loss) attributable to:</b>				
Owners of the Company	43	(3,370,464)	(3,166,616)	60,011
Non-controlling interests		77,467	88,647	114,295
		(3,292,997)	(3,077,969)	174,306
<b>Total comprehensive income (loss) attributable to:</b>				
Owners of the Company		(3,627,669)	(3,447,949)	245,384
Non-controlling interests		72,514	48,267	114,693
		(3,555,155)	(3,399,682)	360,077
<b>Earnings (loss) per share</b>	43			
Basic and diluted earnings (loss) per share		(5,411)	(5,083)	96

See accompanying notes to the consolidated financial statements.

**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Changes in Equity**

For the years ended December 31, 2011, 2012 and 2013

	Equity attributable to owners of the Company				Non-controlling interests	Total equity
	Contributed capital	Retained earnings	Other components of equity	Subtotal		
<b>Balance at January 1, 2011</b>	4,042,979	39,296,232	13,478,767	56,817,978	458,559	57,276,537
<b>Total comprehensive income for the period</b>						
Profit (loss) for the period		(3,370,464)		(3,370,464)	77,467	(3,292,997)
Items that will not be reclassified subsequently to profit or loss:						
Defined benefit plan actuarial losses, net of tax		(151,672)		(151,672)	(524)	(152,196)
Share in other comprehensive loss of associates and joint ventures, net of tax		(5,002)		(5,002)		(5,002)
Items that may be reclassified subsequently to profit or loss:						
Net changes in the unrealized fair value of available-for-sale financial assets, net of tax			(174,937)	(174,937)	(21)	(174,958)
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax			(18,648)	(18,648)	(9,351)	(27,999)
Foreign currency translation of foreign operations, net of tax			42,173	42,173	4,962	47,135
Share in other comprehensive income (loss) of associates and joint ventures, net of tax			50,881	50,881	(19)	50,862
<b>Transactions with owners of the Company, recognized directly in equity</b>						
Dividends paid					(44,663)	(44,663)
Issuance of share capital	10,599			10,599	3,187	13,786
Changes in consolidation scope			69,388	69,388	42,991	112,379
Others					1,066	1,066
<b>Balance at December 31, 2011</b>	4,053,578	35,769,094	13,447,624	53,270,296	533,654	53,803,950

(Continued)

**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Changes in Equity (Continued)**

For the years ended December 31, 2011, 2012 and 2013

	Equity attributable to owners of the Company				Non-controlling Interests	Total equity
	Contributed capital	Retained earnings	Other components of equity	Subtotal		
	In millions of won					
<b>Balance at January 1, 2012</b>	4,053,578	35,769,094	13,447,624	53,270,296	533,654	53,803,950
<b>Total comprehensive income (loss) for the period</b>						
Profit (loss) for the period		(3,166,616)		(3,166,616)	88,647	(3,077,969)
Items that will not be reclassified subsequently to profit or loss:						
Defined benefit plan actuarial losses, net of tax		(37,349)		(37,349)	(3,961)	(41,310)
Share in other comprehensive loss of associates and joint ventures, net of tax		(846)		(846)		(846)
Items that may be reclassified subsequently to profit or loss:						
Net changes in the unrealized fair value of available-for-sale financial assets, net of tax			2,255	2,255	(10)	2,245
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax			(44,909)	(44,909)	(18,941)	(63,850)
Foreign currency translation of foreign operations, net of tax			(104,595)	(104,595)	(17,297)	(121,892)
Share in other comprehensive loss of associates and joint ventures, net of tax			(95,889)	(95,889)	(171)	(96,060)
<b>Transactions with owners of the Company, recognized directly in equity</b>						
Dividends paid					(55,254)	(55,254)
Issuance of share capital					115,346	115,346
Changes in consolidation scope			66,420	66,420	31,003	97,423
Issuance of hybrid securities					498,660	498,660
Others					3,759	3,759
<b>Balance at December 31, 2012</b>	4,053,578	32,564,283	13,270,906	49,888,767	1,175,435	51,064,202

(Continued)

**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Changes in Equity (Continued)**

For the years ended December 31, 2011, 2012 and 2013

	Equity attributable to owners of the Company				Non-controlling Interests	Total equity
	Contributed capital	Retained earnings	Other components of equity	Subtotal		
	In millions of won					
<b>Balance at January 1, 2013</b>	4,053,578	32,564,283	13,270,906	49,888,767	1,175,435	51,064,202
<b>Total comprehensive income (loss) for the period</b>						
Profit for the period		60,011		60,011	114,295	174,306
Items that will not be reclassified subsequently to profit or loss:						
Defined benefit plan actuarial income (loss), net of tax		134,121		134,121	(1,664)	132,457
Share in other comprehensive income of associates and joint ventures, net of tax		7,671		7,671		7,671
Items that may be reclassified subsequently to profit or loss:						
Net changes in the unrealized fair value of available-for-sale financial assets, net of tax			86,543	86,543	27	86,570
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax			18,907	18,907	10,425	29,332
Foreign currency translation of foreign operations, net of tax			(100,572)	(100,572)	(8,053)	(108,625)
Share in other comprehensive income (loss) of associates and joint ventures, net of tax			38,703	38,703	(337)	38,366
<b>Transactions with owners of the Company, recognized directly in equity</b>						
Dividends paid					(41,812)	(41,812)
Issuance of share capital			(173)	(173)	31,229	31,056
Equity transaction in consolidated scope other than issuance of share capital			135,914	135,914	43,128	179,042
Changes in consolidation scope			(10,224)	(10,224)	(115,991)	(126,215)
Dividends paid (hybrid securities)					(16,455)	(16,455)
Others					841	841
<b>Balance at December 31, 2013</b>	4,053,578	32,766,086	13,440,004	50,259,668	1,191,068	51,450,736

See accompanying notes to the consolidated financial statements.



**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Cash Flows****For the years ended December 31, 2011, 2012 and 2013**

	2011	2012	2013
	In millions of won		
<b>Cash flows from operating activities</b>			
Profit (loss) for the period	(3,292,997)	(3,077,969)	174,306
Adjustments for:			
Income tax expense (benefit)	819,871	(985,377)	(570,794)
Depreciation	6,782,661	6,903,350	7,303,996
Amortization	94,729	93,360	88,379
Employee benefit expense	341,902	364,913	384,323
Bad debt expense	15,136	41,440	49,110
Interest expense	2,123,579	2,344,328	2,381,900
Loss on sale of financial assets			4,202
Loss on disposal of property, plant and equipment	31,228	39,942	58,852
Loss on abandonment of property, plant, and equipment	296,557	253,985	295,627
Impairment loss on property, plant and equipment		27,968	24,612
Impairment loss on intangible assets	221	459	267
Loss on disposal of intangible assets		44	1
Accretion expense to provisions, net	421,364	843,047	663,621
Gain (loss) on foreign currency translation, net	226,012	(766,863)	(195,571)
Valuation and transaction loss (gain) on derivative instruments, net	(75,307)	597,628	233,484
Share in income of associates and joint ventures, net	(120,398)	(185,860)	(29,414)
Gain on sale of financial assets		(189)	(107)
Gain on sale of property, plant and equipment	(38,776)	(32,797)	(59,345)
Gain on disposal of intangible assets		(15)	(4)
Loss on disposal of other non-current assets		584	
Gain (loss) on disposal of investments in associates and joint ventures	(2,699)	162	43,566
Impairment loss on investments in associates and joint ventures		8,757	28,091
Interest income	(291,625)	(204,123)	(182,161)
Dividends income	(18,894)	(10,452)	(9,870)
Impairment loss on available-for-sale financial assets		40,156	12,592
Impairment loss on other non-current non-financial assets		1,877,371	
Others, net	47,998	(21,434)	(64,089)
	10,653,559	11,230,384	10,461,268
Changes in:			
Increase in trade receivables	(664,696)	(781,099)	(330,494)
Decrease (increase) in non-trade receivables	(45,009)	(103,028)	20,853
Decrease (increase) in accrued income	26,205	(66,504)	563
Decrease (increase) in other receivables		377	(123)
Decrease (increase) in other current assets	(154,062)	(384,765)	98,724
Increase in inventories	(1,411,785)	(672,979)	(1,206,676)
Decrease (increase) in other non-current assets	(335,262)	(1,521,249)	65,087
Increase (decrease) in trade payables	710,831	154,341	(40,416)
Increase (decrease) in non-trade payables	(298,356)	224,567	(195,191)
Increase (decrease) in accrued expenses	308,531	14,197	(240,901)
Increase in other payables			(1)
Increase in other current liabilities	1,204,974	1,865,302	1,500,717

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Increase (decrease) in other non-current liabilities	525,996	(262,590)	48,719
Decrease in investments in associates and joint ventures	62,169	48,429	65,888
Increase (decrease) in provisions	(264,898)	78,581	(386,377)
Payments of employee benefit obligations	(345,774)	(186,274)	(132,179)
Increase in plan assets	(291,339)	(94,763)	(101,720)
	(972,475)	(1,687,457)	(833,527)

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**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Consolidated Statements of Cash Flows (Continued)****For the years ended December 31, 2011, 2012 and 2013**

	2011	2012	2013
	In millions of won		
<b>Cash generated from operating activities</b>			
Dividends received	18,894	10,452	14,114
Interest paid	(2,196,429)	(2,386,125)	(2,460,247)
Interest received	247,711	153,414	160,830
Income taxes paid	(313,534)	(325,866)	(632,837)
<b>Net cash from operating activities</b>	4,144,729	3,916,833	6,883,907
<b>Cash flows investing activities</b>			
Proceeds from disposals of subsidiaries, associates and joint ventures	10,136	8,988	44
Acquisition of subsidiaries, associates and joint ventures	(491,293)	(404,761)	(321,476)
Proceeds from disposals of property, plant and equipment	50,578	100,573	119,464
Acquisition of property, plant and equipment	(10,610,402)	(11,446,834)	(14,259,050)
Proceeds from disposals of intangible assets	467	1,448	39
Acquisition of intangible assets	(42,599)	(67,715)	(69,007)
Disposal of investment properties	523		
Proceeds from disposals of financial assets	856,021	650,757	610,847
Acquisition of financial assets	(840,852)	(637,620)	(545,992)
Increase in loans	(146,227)	(94,133)	(196,607)
Decrease in loans	116,653	141,117	143,935
Increase in deposits	(136,376)	(120,425)	(55,594)
Decrease in deposits	83,334	66,670	51,882
Receipt of government grants	48,807	49,618	92,000
Usage of government grants	(904)	(3,686)	(31,027)
Net cash inflow (outflow) from business acquisitions	(65,147)	10,022	(41,809)
Other cash inflow (outflow) from investing activities, net	(28,412)	26,785	(921)
<b>Net cash used in investing activities</b>	(11,195,693)	(11,719,196)	(14,503,272)
<b>Cash flows from financing activities</b>			
Increase (decrease) in short-term borrowings, net	114,015	(476,192)	(107,748)
Proceeds from long-term borrowings and debt securities	12,100,107	14,202,095	15,233,428
Repayment of long-term borrowings and debt securities	(5,880,330)	(5,895,384)	(7,315,752)
Payment of finance lease liabilities	(136,760)	(122,320)	(125,921)
Settlement of derivative instruments, net	51,916	(247)	38,844
Proceeds on disposal of partial interest in a subsidiary that does not involve loss of control	100,691	109,589	236,244
Change in non-controlling interest	36,142	116,020	47,019
Cash inflow from hybrid bond		498,660	
Dividends paid (hybrid bond)			(16,455)
Dividends paid	(44,663)	(55,254)	(41,812)
Other cash inflow (outflow) from financing activities, net	297	(1,480)	(14,715)
<b>Net cash from financing activities</b>	6,341,415	8,375,487	7,933,132
<b>Net increase (decrease) in cash and cash equivalents before effect of exchange rate fluctuations</b>	(709,549)	573,124	313,767

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Effect of exchange rate fluctuations on cash held	7,419	(6,096)	(36,403)
<b>Net increase (decrease) in cash and cash equivalents</b>	<b>(702,130)</b>	<b>567,028</b>	<b>277,364</b>
<b>Cash and cash equivalents at January 1</b>	<b>2,090,051</b>	<b>1,387,921</b>	<b>1,954,949</b>
<b>Cash and cash equivalents at December 31, 2013</b>	<b>1,387,921</b>	<b>1,954,949</b>	<b>2,232,313</b>

See accompanying notes to the consolidated financial statements.

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**Table of Contents****KOREA ELECTRIC POWER CORPORATION AND SUBSIDIARIES****Notes to the Consolidated Financial Statements****December 31, 2013****1. Reporting Entity (Description of the controlling company)**

Korea Electric Power Corporation (the Company) was incorporated on January 1, 1982 in accordance with the Korea Electric Power Corporation Act (the KEPCO Act) to engage in the generation, transmission and distribution of electricity and development of electric power resources in the Republic of Korea. The Company also provides power plant construction services. The Company's stock was listed on the Korea Stock Exchange on August 10, 1989 and the Company listed its Depository Receipts (DR) on the New York Stock Exchange on October 27, 1994.

As of December 31, 2013, the Company's share capital amounts to 3,209,820 million and the Company's shareholders are as follows:

	Number of shares	Percentage of ownership
Government of the Republic of Korea	135,917,118	21.17%
Korea Finance Corporation	192,159,940	29.93%
Foreign investors	147,623,014	23.00%
Other	166,264,005	25.90%
	641,964,077	100.00%

In accordance with the Restructuring Plan enacted on January 21, 1999 by the Ministry of Trade, Industry and Energy (the MTIE, formerly the Ministry of Knowledge Economy), the Company spun off its power generation divisions on April 2, 2001, resulting in the establishment of six power generation subsidiaries.

**2. Basis of Preparation**

The consolidated financial statements were authorized for issuance by the Board of Directors on February 20, 2014, which were submitted for approval at the shareholders' meeting held on March 28, 2014.

**(1) Statement of compliance**

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standard Board (IASB).

**(2) Basis of measurement**

The consolidated financial statements have been prepared on the historical cost basis, except for the following material items in the consolidated statements of financial position:

derivative financial instruments 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

**(3) Functional and presentation currency**

These consolidated financial statements are presented in Korean won ( Won ), which are the Company's functional currency and the currency of the primary economic environment in which the Company operates.

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### **(4) Use of estimates and judgments**

The preparation of the consolidated financial statements in conformity with 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.

The following are the key assumptions concerning the future, and other key sources of estimation uncertainty at the end of the reporting period, that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year.

#### **(i) Continued operation of Wolseong #1 nuclear power plant**

The Company owns Wolseong #1 nuclear power plant, which started its operation on November 21, 1982, and completed its operation on November 20, 2012, completing the permitted operation period of 30 years. As of December 31, 2013, the Company is in the process of obtaining safety assessments to obtain an approval from the Nuclear Safety and Security Commission to resume the plant's operation for another term. The Company has prepared the consolidated financial statements assuming that the plant will operate for the next 10 years.

#### **(ii) Unbilled revenue**

Energy delivered but not yet metered, and the quantities of energy delivered but not yet measured and not billed are calculated at the reporting date based on consumption statistics and selling price estimates. Determination of the unbilled revenues at the end of the reporting period is sensitive to the estimated assumptions and prices based on statistics. Unbilled revenue recognized as of December 31, 2012 and 2013 is 1,628,732 million and 1,678,327 million, respectively, and is included in sales of goods in the accompanying consolidated statements of financial position.

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 18 Property, plant and equipment

Note 44 Risk Management

Information about assumptions and estimation uncertainties that have a significant risk of resulting in a material adjustment within the next financial year is included in the following notes:

Note 41 Income tax

Note 25 Defined employee liabilities

### **(5) Changes in accounting policies**

#### **(i) IFRS 10, Consolidated Financial Statements**

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The Company adopted IFRS 10, Consolidated Financial Statements since January 1, 2013. As a result, the Company changed its accounting policy with respect to determining whether it has control over and consequently whether it consolidates its investees. IFRS 10 introduces a new control model that is applicable to all investees; among other things, it requires the consolidation of an investee if the Company controls the investee on the basis of de facto circumstances.

The standard includes a new definition of control that contains three elements: (a) power over an investee, (b) exposure, or rights, to variable returns from its involvement with the investee, and (c) the ability to use its power over the investee to affect the amount of the investor's return. The adoption of IFRS 10 had no impact on the Company's consolidated financial statements.

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The following amendments to IFRSs have been applied in the current year and do not have any impact on the amounts reported in these consolidated financial statements.

### (ii) IFRS 11, Joint Arrangements

Under IFRS 11, joint arrangements are classified as joint operations or joint ventures, depending on the rights and obligations of the parties to the arrangements. As a result of IFRS 11, the Company has changed its accounting policy for its interests in joint arrangements. Under IFRS 11, the Company has classified its interests in joint arrangements as either joint operations (if the Company has rights to the assets, and obligations for the liabilities, relating to an arrangement) or joint ventures (if the Company has rights only to the net assets of an arrangement). When making this assessment, the Company considered the structure of the arrangements, the legal form of any separate vehicles, the contractual terms of the arrangements and other facts and circumstances. Previously, the structure of the arrangement was the sole focus of classification. The Company has re-evaluated its involvement in its joint arrangements and has reclassified the investment from a jointly controlled entity to a joint venture. Notwithstanding the reclassification, the investment continues to be recognized by applying the equity method and there has been no impact on the recognized assets, liabilities and comprehensive income of the Company.

### (iii) IFRS 12, Disclosure of Interests in Other Entities

The standard brings together into a single standard all the disclosure requirements about an entity's interests in subsidiaries, joint arrangements, associates and unconsolidated structured entities. The standard requires the disclosure of information about the nature, risks and financial effects of these interests.

### (iv) IFRS 13, Fair Value Measurement

IFRS 13, establishes a single framework for measuring fair value and making disclosures about fair value measurements when such measurements are required or permitted by other IFRSs. It unifies the definition of fair value as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It replaces and expands the disclosure requirements about fair value measurements in other IFRSs.

### (v) IAS 19, Employee Benefits

The Company has applied the amendments to IAS 19 in the current year which requires the Company to recognize gains and losses on the settlement of a defined benefit plan when the settlement occurs.

The Company 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 on the net defined benefit liability (asset) can be viewed as comprising interest income on plan assets, interest cost on the defined benefit obligation and interest on the effect of the asset ceiling. Prior to adopting this amendment, the Company measured the interest on plan assets based on the long-term expected rate of return.

The Company has not applied the amendment retrospectively since management believes the impact of the amendments on the Company's consolidated financial statements is clearly immaterial.

### (vi) IFRIC 20, Stripping Costs in the Production Phase of a Surface Mine

The interpretation provides accounting for the costs from waste removal activity (stripping). To the extent that the benefit from the stripping activity is realized in the form of inventory produced, the



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entity shall account for the costs of that stripping activity in accordance with the principles of IAS 2 Inventories. To the extent the benefit is improved access to ore, the entity shall recognize these costs as a non-current asset, if the criteria in paragraph 9 below are met. This Interpretation refers to the non-current asset as the stripping activity asset .

The Company shall recognize a stripping activity asset if, and only if, all of the following are met:

It is probable that the future economic benefit (improved access to the ore body) associated with the stripping activity will flow to the entity;

the entity can identify the component of the ore body for which access has been improved; and

the costs relating to the stripping activity associated with that component can be measured reliably.

In accordance with the interpretation, the Company has applied it prospectively beginning January 1, 2013. However PT Bayan Resources TBK (PT Bayan), one of the equity method investments of the Company, has retrospectively applied the interpretation and has restated its comparative financial statements to adjust the stripping activity costs that do not meet the criteria for asset recognition in the interpretation. The Company reflected this adjustment of 31,529 million due to the change in accounting policy as a loss on its equity method investment during the year ended December 31, 2013.

### **(6) New standards and interpretations not yet adopted**

The following new standards, interpretations and amendments to existing standards have been published for mandatory application for annual periods beginning after January 1, 2014, and the Company has not early adopted them.

#### **(i) IFRS 7, Financial Instruments: Disclosures**

The amendments to IFRS 7 will require changes to the presentation of offsetting financial assets and financial liabilities. The amendments to IFRS 7 are effective for annual periods beginning on or after January 1, 2014.

#### **(ii) IFRIC 21, Levies**

The interpretation covers the accounting for outflows imposed on entities by governments (including government agencies and similar bodies) in accordance with laws and/or regulations. The amendments to IFRS 7 are effective for annual periods beginning on or after January 1, 2014. The Company is in the process of evaluating the impact on the consolidated financial statements upon the adoption of the amendments.

**Table of Contents****(7) Reclassification of items**

The Company has reclassified certain current trade and other payables to current provisions in the accompanying consolidated financial statements. The provisions represent management's estimated incentive compensation to be paid based on individual performance evaluations or management assessments. The impacts of reclassification of accounts are as below:

	Before	2011 After	Difference	Before	2012 After	Difference
	In millions of won					
<b>Consolidated statement of financial position</b>						
Trade and other payables	6,576,158	5,967,442	(608,716)	6,418,464	5,601,852	(816,612)
Current provisions	92,383	701,099	608,716	158,303	974,915	816,612
<b>Consolidated statement of cash flow</b>						
Accretion expense in provisions, net	433,374	421,364	(12,010)	788,371	843,047	54,676
Change in provisions	(289,237)	(264,898)	24,339	(74,638)	78,581	153,219
Increase (decrease) in non-trade payables	(7,882)	(298,356)	(290,474)	573,517	224,567	(348,949)
Decrease in accrued expenses	30,386	308,531	278,145	(126,857)	14,197	141,054

The above reclassification does not have an impact on the net assets, net profits and losses or loss per share of the prior periods.

**3. Significant Accounting Policies****(1) Basis of consolidation**

The consolidated financial statements incorporate the financial statements of the Company and entities (including special purpose entities) controlled by the Company (or one of its subsidiaries).

Income and expense of a subsidiary acquired or disposed of during the year are included in the consolidated statement of comprehensive income (loss) from the effective date of acquisition and up to the effective date of disposal, as appropriate. Total comprehensive income of subsidiaries is attributed to the owners of the Company and to the non-controlling interests even if this results in the non-controlling interests having a deficit balance.

When necessary, adjustments are made to the financial statements of subsidiaries to bring their accounting policies into line with those of the Company.

Transactions between the Company and its subsidiaries are eliminated during the consolidation.

Changes in the Company's ownership interests in a subsidiary that do not result in the Company losing control over the subsidiary are accounted for as equity transactions. The carrying amounts of the Company's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiary. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognized directly in equity and attributed to owners of the Company.

When the Company loses control of a subsidiary, the income or loss on disposal is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognized in other comprehensive income and accumulated in equity, the amounts previously recognized in other comprehensive income and

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accumulated in equity are accounted for as if the Company had directly disposed of the relevant assets (i.e. reclassified to income or loss or transferred directly to retained earnings). The fair value of any investment retained in the former subsidiary at the date when control is lost is recognized as the fair value on initial recognition for subsequent accounting under IAS 39, *Financial Instruments : Recognition and Measurement* or, when applicable, the cost on initial recognition of an investment in an associate or a jointly controlled entity.

**(2) Business combinations**

A business combination is accounted for by applying the acquisition method, unless it is a combination involving entities or businesses under common control.

The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Company, liabilities incurred by the Company to the former owners of the acquiree and the equity interests issued by the Company in exchange for control of the acquiree. Acquisition-related costs are generally recognized in income or loss as incurred.

At the acquisition date, the identifiable assets acquired and the liabilities assumed are recognized at their fair value at the acquisition date, except that:

deferred tax assets or liabilities and liabilities or assets related to employee benefit arrangements are recognized and measured in accordance with IAS 12, *Income Taxes* and IAS 19, *Employee Benefits* respectively;

Assets (or disposal groups) that are classified as held for sale in accordance with IFRS 5, *Non-current Assets Held for Sale* are measured in accordance with that standard.

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree and the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in income or loss as a bargain purchase gain.

Non-controlling interest that is present on acquisition day and entitles the holder to a proportionate share of the entity's net assets in an event of liquidation, may be initially measured either at fair value or at the non-controlling interest's proportionate share of the recognized amounts of the acquiree's identifiable net assets. The choice of measurement can be elected on a transaction-by-transaction basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in other IFRSs.

When the consideration transferred by the Company in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the measurement period (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as measurement period adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not re-measured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is re-measured at subsequent reporting dates in accordance with IAS 39, *Financial Instruments: Recognition and Measurement*, or with IAS 37, *Provisions, Contingent Liabilities and Contingent Assets*, as appropriate, with the corresponding gain or loss being recognized in income or loss.

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When a business combination is achieved in stages, the Company's previously held equity interest in the acquiree is re-measured to fair value at the acquisition date (i.e. the date when the Company obtains control) and the resulting gain or loss, if any, is recognized in income or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognized in other comprehensive income are reclassified to income or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Company reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognized, to reflect new information obtained about facts and circumstances that existed at the acquisition date that, if known, would have affected the amounts recognized at that date.

### **(3) Investments in associates**

An associate is an entity over which the Company has significant influence and that is neither a subsidiary nor an interest in a joint venture. Significant influence is the power to participate in the financial and operating policy decisions of the investee but does not have control or joint control over those policies.

The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. If the investment is classified as held for sale, in which case it is accounted for in accordance with IFRS 5 Non-current Assets Held for Sale, any retained portion of an investment in associates that has not been classified as held for sale shall be accounted for using the equity method until disposal of the portion that is classified as held for sale takes place. If the Company holds 20% ~ 50% of the voting power of the investee, it is presumed that the Company has significant influence.

After the disposal takes place, the Company shall account for any retained interest in associates in accordance with IAS 39 Financial Instruments: Recognition and Measurement unless the retained interest continues to be an associate, in which case the entity uses the equity method.

Under the equity method, an investment in an associate is initially recognized in the consolidated statement of financial position at cost and adjusted thereafter to recognize the Company's share of the income or loss and other comprehensive income of the associate. When the Company's share of losses of an associate exceeds the Company's interest in that associate (which includes any long-term interests that, in substance, form part of the Company's net investment in the associate), the Company discontinues recognizing its share of further losses. Additional losses are recognized only to the extent that the Company has incurred legal or constructive obligations or made payments on behalf of the associate.

Any excess of the cost of acquisition over the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of an associate recognized at the date of acquisition is recognized as goodwill, which is included within the carrying amount of the investment. Any excess of the Company's share of the net fair value of the identifiable assets, liabilities and contingent liabilities over the cost of acquisition, after reassessment, is recognized immediately in income or loss. The requirements of IAS 39, Financial Instruments: Recognition and Measurement, are applied to determine whether it is necessary to recognize any impairment loss with respect to the Company's investment in an associate. When necessary, the entire carrying amount of the investment (including goodwill) is tested for impairment in accordance with IAS 36 Impairment of Assets as a single asset by comparing its recoverable amount (higher of value in use and fair value less costs to sell) with its carrying amount, any impairment loss recognized forms part of the carrying amount of the investment. Any reversal of that impairment loss is recognized in accordance with IAS 36 to the extent that the recoverable amount of the investment subsequently increases.

Upon disposal of an associate that results in the Company losing significant influence over that associate, any retained investment is measured at fair value at that date and the fair value is regarded as its fair value

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on initial recognition as a financial asset in accordance with IAS 36. The difference between the previous carrying amount of the associate attributable to the retained interest and its fair value is included in the determination of the gain or loss on disposal of the associate. In addition, the Company accounts for all amounts previously recognized in other comprehensive income in relation to that associate on the same basis as would be required if that associate had directly disposed of the related assets or liabilities. Therefore, if a gain or loss previously recognized in other comprehensive income by that associate would be reclassified to income or loss on the disposal of the related assets or liabilities, the Company reclassifies the gain or loss from equity to income or loss (as a reclassification adjustment) when it loses significant influence over that associate.

When a Company entity transacts with its associate, incomes and losses resulting from the transactions with the associate are recognized in the Company's consolidated financial statements only to the extent of interests in the associate that are not related to the Company.

### **(4) Joint arrangements**

A joint arrangement is an arrangement of which two or more parties have joint control. Joint control is the contractually agreed sharing of control of an arrangement, which exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control. Joint arrangements are classified into two types: joint operations and joint ventures. A joint operation is a joint arrangement whereby the parties that have joint control of the arrangement (i.e. joint operators) have rights to the assets, and obligations for the liabilities, relating to the arrangement. A joint venture is a joint arrangement whereby the parties that have joint control of the arrangement (i.e. joint venturers) have rights to the net assets of the arrangement.

If the Company is a joint operator, the Company is to recognize and measure the assets and liabilities (and recognize the related revenues and expenses) in relation to its interest in the arrangement in accordance with relevant IFRSs applicable to the particular assets, liabilities, revenues and expenses. If the joint arrangement is a joint venture, the Company is to account for that investment using the equity method accounting in accordance with IAS 28, *Investment in Associates and Joint Ventures* (see note 3 (3)), except when the Company is applicable to the IFRS 5, *Non-current Assets Held for Sale*.

### **(5) Non-current assets held for sale**

Non-current assets and disposal groups are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable and the non-current asset (or disposal group) is available for immediate sale in its present condition. Management must be committed to the sale, which should be expected to qualify for recognition as a completed sale within one year from the date of classification.

When the Company is committed to a sale plan involving loss of control of a subsidiary, all of the assets and liabilities of that subsidiary are classified as held for sale when the criteria described above are met, regardless of whether the Company will retain a non-controlling interest in its former subsidiary after the sale.

Non-current assets (and disposal groups) classified as held for sale are measured at the lower of their previous carrying amount and fair value less costs to sell.

### **(6) Goodwill**

The Company measures goodwill which acquired in a business combination at the amount recognized at the date on which it obtains control of the acquiree (acquisition date) less any accumulated impairment losses. Goodwill acquired in a business combination is allocated to each CGU that is expected to benefit from the synergies arising from the goodwill acquired.

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The Company assesses at the end of each reporting period whether there is any indication that an asset may be impaired. An impairment loss is recognized if the carrying amount of an asset or a CGU exceeds its recoverable amount. Impairment losses are recognized in profit or loss.

Any impairment identified at the CGU level will first reduce the carrying value of goodwill and then be used to reduce the carrying amount of the other assets in the CGU on a pro rata basis. Except for impairment losses in respect of goodwill which are never reversed, an impairment loss is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortization, if no impairment loss had been recognized.

### **(7) Revenue recognition**

Revenue from the sale of goods, rendering of services or use of the Company assets is measured at the fair value of the consideration received or receivable, net of returns, trade discounts and volume rebates, and are recognized as a reduction of revenue. Revenue is recognized when the amount of revenue can be measured reliably and it is probable that the economic benefits associated with the transaction will flow to the Company.

#### **(i) Sales of goods**

The Korean government approves the rates charged to customers by the Company's power transmission and distribution division. The Company's utility rates are designed to recover the Company's reasonable costs plus a fair investment return. The Company's power generation rates are determined in the market.

The Company recognizes electricity sales revenue based on power sold (transferred to the customer) up to the reporting date. To determine the amount of power sold, the Company estimates daily power volumes of electricity for residential, commercial, general and etc. The differences between the current month's estimated amount and actual (meter-read) amount, is adjusted for (trued-up) during the next month period.

#### **(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.

#### **(iii) Dividend income and interest income**

Dividend income is recognized in profit or loss on the date that the Company's right to receive payment is established, which in the case of quoted securities is the ex-dividend date.

Interest income is recognized as it accrues in profit or loss, using the effective interest method. Interest income is accrued on a time basis, by reference to the principal outstanding and at the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount on initial recognition.

#### **(iv) Rental income**

The Company's policy for recognition of revenue from operating leases is described in note 3 (9) below.



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### **(v) Deferral of revenue Transfer of Assets from Customers**

The Company recovers a substantial amount of the cost related to its electric power distribution facilities from customers through the transfer of assets, while the remaining portion is recovered through electricity sales from such customers in the future. As such, the Company believes there exists a continued service obligation to the customers in accordance with IFRIC 18, Transfer of Assets from Customers when the Company receives an item of property, equipment, or cash for constructing or acquiring an item of property or equipment, in exchange for supplying electricity to customers. The Company defers the amounts received, which are then recognized as revenue over the estimated service period which does not exceed the transferred asset's useful life.

### **(8) Construction services revenue**

The Company provides services related to the construction of power plants related to facilities of its customers, mostly in foreign countries.

When the outcome of a construction contract can be estimated reliably, revenue and costs are recognized based on the stage of completion of the contract activity at the end of the reporting period, measured based on the proportion of contract costs incurred for work performed to date relative to the estimated total contract costs, except where this would not be representative of the stage of completion. Variations in contract work, claims and incentive payments are included to the extent that the amount can be measured reliably and its receipt is considered probable.

When the outcome of a construction contract cannot be estimated reliably, contract revenue is recognized to the extent of contract costs incurred when it is probable the revenue will be realized. Contract costs are recognized as expenses in the period in which they are incurred. When it is probable that total contract costs will exceed total contract revenue, the expected loss is recognized as an expense immediately.

When contract costs incurred to date plus recognized income less recognized losses exceed progress billings, the surplus is shown as amounts due from customers for contract work. For contracts where progress billings exceed contract costs incurred to date plus recognized income less recognized losses, the surplus is shown as the amounts due to customers for contract work. Amounts received before the related work is performed are included in the consolidated statements of financial position, as a liability, as advances received. Amounts billed for work performed but not yet paid by the customer are included in the consolidated statements of financial position as accounts and other receivables.

### **(9) Leases**

The Company classifies and accounts for leases as either a finance or operating lease, depending on the terms. Leases where the Company assumes substantially all of the risks and rewards of ownership are classified as finance leases. All other leases are classified as operating leases.

#### **(i) The Company as lessor**

Amounts due from lessees under finance leases are recognized as receivables at the amount of the Company's net investment in the leases. Finance lease income is allocated to accounting periods so as to reflect a constant periodic rate of return on the Company's net investment outstanding in respect of the leases.

Rental income from operating leases is recognized on a straight-line basis over the term of the relevant lease. Initial direct costs incurred in negotiating and arranging an operating lease are added to the carrying amount of the leased asset and recognized on a straight-line basis over the lease term.

#### **(ii) The Company as lessee**

Leases are classified as finance leases whenever the terms of the lease transfer substantially all the risks and rewards of ownership to the lessee. All other leases are classified as operating leases.

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Assets held under finance leases are initially recognized as assets of the Company at their fair value at the inception of the lease or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the statement of financial position as a finance lease obligation.

Lease payments are apportioned between finance expenses and reduction of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability. Finance expenses are recognized immediately in income or loss, unless they are directly attributable to qualifying assets, in which case they are capitalized in accordance with the Company's general policy on borrowing costs. Contingent rentals are recognized as expenses in the periods in which they are incurred.

Operating lease payments are recognized as an expense on a straight-line basis over the lease term, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed. Contingent rentals arising under operating leases are recognized as an expense in the period in which they are incurred.

In the event that lease incentives are received to enter into operating leases, such incentives are recognized as a liability. The aggregate benefit of incentives is recognized as a reduction of rental expense on a straight-line basis, except where another systematic basis is more representative of the time pattern in which economic benefits from the leased asset are consumed.

### **(10) Foreign currencies**

Transactions in foreign currencies are translated to the respective functional currencies of the Company 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.

Exchange differences are recognized in profit or loss in the period in which they arise except for:

Exchange differences on foreign currency borrowings relating to assets under construction for future productive use, which are included in the cost of those assets when they are regarded as an adjustment to interest costs on those foreign currency borrowings;

Exchange differences on transactions entered into in order to hedge certain foreign currency risks; and

Exchange differences on monetary items receivable from or payable to a foreign operation for which settlement is neither planned nor likely to occur (therefore forming part of the net investment in the foreign operation), which are recognized initially in other comprehensive income and reclassified from equity to income or loss on disposal or partial disposal of the net investment.

For the purpose of presenting financial statements, the assets and liabilities of the Company's foreign operations are expressed in Korean won using exchange rates prevailing at the end of the reporting period. Income and expense items are translated at the average exchange rates for the period, unless exchange rates fluctuated significantly during that period, in which case the exchange rates at the dates of the transactions are used. Exchange differences arising, if any, are recognized in other comprehensive income and accumulated in equity.

When a foreign operation is disposed of, the relevant amount in the translation is transferred to profit or loss as part of the profit or loss on disposal.

### **(11) Borrowing costs**

The Company 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.



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Investment income earned on the temporary investment of specific borrowings pending their expenditure on qualifying assets is deducted from the borrowing costs eligible for capitalization.

All other borrowing costs are recognized in income or loss in the period in which they are incurred.

### **(12) Government grants**

Government grants are not recognized unless there is reasonable assurance that the Company will comply with the grant's conditions and that the grant will be received.

Benefit from a government loan at a below-market interest rate is treated as a government grant, measured as the difference between proceeds received and the fair value of the loan based on prevailing market interest rates.

#### **(i) If the Company received grants related to assets**

Government grants whose primary condition is that the Company purchase, construct or otherwise acquire long-term assets are deducted in calculating the carrying amount of the asset. The grant is recognized in profit or loss over the life of a depreciable asset as a reduced depreciation expense.

#### **(ii) If the Company received grants related to income**

Government grants which are intended to compensate the Company for expenses incurred are recognized as other income (government grants) in profit or loss over the periods in which the Company recognizes the related costs as expenses.

### **(13) Employee benefits**

#### **(i) Retirement benefits: defined contribution plans**

When an employee has rendered service to the Company during a period, the Company 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.

#### **(ii) Retirement benefits: defined benefit plans**

For defined benefit pension plans and other post-employment benefits, the net periodic pension expense is actuarially determined by Pension Actuarial System developed by independent actuaries using the projected unit credit method.

The asset or liability recognized in the statement of financial position is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets, together with adjustments for unrecognized past service costs. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid and that have terms to maturity approximating the terms of the related pension liability.

All actuarial gains and losses that arise in calculating the present value of the defined benefit obligation and the fair value of plan assets are recognized immediately in retained earnings and included in the statement of comprehensive income.

For the purpose of calculating the expected return on plan assets, the assets are valued at fair value. Actual results will differ from results which are estimated based on assumptions. Past service cost is recognized as an expense at the earlier of the following dates: (a) when the plan amendment or curtailment occurs; (b) when the company recognizes related restructuring costs or termination benefits.

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The retirement benefit obligation recognized in the consolidated statement of financial position represents the present value of the defined benefit obligation as adjusted for unrecognized actuarial

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gains and losses and unrecognized past service cost, and as reduced by the fair value of plan assets. Any asset resulting from this calculation is limited to unrecognized actuarial losses and past service cost, plus the present value of available refunds and reductions in future contributions to the plan.

**(14) 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

Deferred tax is recognized, using the asset-liability method, in respect of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. A deferred tax liability is recognized for all taxable temporary differences. A deferred tax asset is recognized for all deductible temporary differences to the extent that it is probable that taxable profit will be available against which they can be utilized. However, deferred tax is not recognized for the following temporary differences: taxable temporary differences arising on the initial recognition of goodwill, or the initial recognition of assets or liabilities in a transaction that is not a business combination and that affects neither accounting profit or loss nor taxable income.

The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period, to recover or settle the carrying amount of its assets and liabilities. Deferred tax assets or deferred tax liabilities on investment properties measured at fair value, unless any contrary evidence exists, are measured using the assumption that the carrying amount of the property will be recovered entirely through sale.

The Company 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 Company is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future. The Company recognizes a deferred tax asset for all deductible temporary differences arising from investments in subsidiaries and associates, to the extent that it is probable that the temporary difference will reverse in the foreseeable future and taxable profit will be available against which the temporary difference can be utilized.

The carrying amount of a deferred tax asset is reviewed at the end of each reporting period and reduces the carrying amount to the extent that it is no longer probable that sufficient taxable profit will be available to allow the benefit of part or all of that deferred tax asset to be utilized.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply to the period when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted by the end of the reporting period. The measurement of deferred tax liabilities and deferred tax assets reflects the tax consequences that would follow from the manner in which the Company expects, at the end of the reporting period to recover or settle the carrying amount of its assets and liabilities.

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Deferred tax assets and liabilities are offset only if there is a legally enforceable right to offset the related current tax liabilities and assets, and they relate to income taxes levied by the same tax authority and they intend to settle current tax liabilities and assets on a net basis.

## (iii) Current and deferred tax for the year

Current and deferred tax are recognized in income or loss, except when they relate to items that are recognized in other comprehensive income or directly in equity, in which case, the current and deferred tax are also recognized in other comprehensive income or directly in equity respectively. Where current tax or deferred tax arises from the initial accounting for a business combination, the tax effect is included in the accounting for the business combination.

**(15) Property, plant and equipment**

Property, plant and equipment are initially measured at cost and after initial recognition, are carried at cost less accumulated depreciation and accumulated impairment losses. The cost of property, plant and equipment includes expenditures arising directly from the construction or acquisition of the asset, any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended by management and the initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located.

Subsequent costs are recognized in the carrying amount of property, plant and equipment at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Property, plant and equipment, except for land, are depreciated 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. For loaded nuclear fuel related to long-term raw materials and spent nuclear fuels related to asset retirement costs, the Company uses the production method to measure and recognizes as expense the economic benefits of the assets.

The estimated useful lives of the Company's property, plant and equipment are as follows:

	Useful lives (years)
Buildings	8 ~ 40
Structures	8 ~ 50
Machinery	6 ~ 32
Vehicles	4
Loaded heavy water	30
Asset retirement costs	18, 30, 40
Finance lease assets	20
Ships	9
Others	4 ~ 9

A component that is significant compared to the total cost of property, plant and equipment is depreciated over its separate useful life. Depreciation methods, useful lives and residual values are reviewed at the end of each reporting date and adjusted, if appropriate.

Property, plant and equipment are derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of a property, plant and equipment, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in income or loss when the asset is derecognized.

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### **(16) Investment property**

Property held for the purpose of earning rentals or benefiting from capital appreciation is classified as investment property. Investment property is initially measured at its cost. Transaction costs are included in the initial measurement. Subsequently, investment property is carried at depreciated cost less any accumulated impairment losses.

Subsequent costs are recognized in the carrying amount of investment property at cost or, if appropriate, as separate items if it is probable that future economic benefits associated with the item will flow to the Company and the cost of the item can be measured reliably. The carrying amount of the replaced part is derecognized. The costs of the day-to-day servicing are recognized in profit or loss as incurred.

Investment property except for land, are depreciated on a straight-line basis over 8 ~ 40 years as estimated useful lives.

The estimated useful lives, residual values and depreciation method are reviewed at the end of each reporting period, with the effect of any changes in estimate accounted for on a prospective basis.

An investment property is derecognized upon disposal or when the investment property is permanently withdrawn from use and no future economic benefits are expected from the disposal. Any gain or loss arising on derecognition of the property (calculated as the difference between the net disposal proceeds and the carrying amount of the asset) is included in income or loss in the period in which the property is derecognized.

### **(17) Intangible assets**

#### **(i) Intangible assets acquired separately**

Intangible assets with finite useful lives that are acquired separately are carried at cost less accumulated amortization and accumulated impairment losses. Amortization is recognized on a straight-line basis over their estimated useful lives. The estimated useful life and amortization method are reviewed at the end of each reporting period, with the effect of any changes in estimate being accounted for on a prospective basis. Intangible assets with indefinite useful lives that are acquired separately are carried at cost less accumulated impairment losses.

#### **(ii) Research and development**

Expenditure on research activities is recognized as an expense in the period in which it is incurred.

An internally-generated intangible asset arising from development (or from the development phase of an internal project) is recognized if, and only if, all of the following have been demonstrated:

The technical feasibility of completing the intangible asset so that it will be available for use or sale;

The intention to complete the intangible asset and use or sell it;

The ability to use or sell the intangible asset;

How the intangible asset will generate probable future economic benefits;



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The availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and

The ability to measure reliably the expenditure attributable to the intangible asset during its development.

The amount initially recognized for internally-generated intangible assets is the sum of the expenditure incurred from the date when the intangible asset first meets the recognition criteria listed above. When the development expenditure does not meet the criteria listed above, an internally-generated intangible asset cannot be recognized and the expenditure is recognized in income or loss in the period in which it is incurred.

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Internally-generated intangible assets are reported at cost less accumulated amortization and accumulated impairment losses.

The estimated useful lives and amortization methods of the Company's intangible assets with finite useful lives are as follows:

	Useful lives (years)	Amortization methods
Usage rights for donated assets	4 ~ 30	Straight
Software	4, 5	Straight
Industrial rights	5, 10	Straight
Development expenses	5	Straight
Dam usage right	50	Straight
Mining right		Unit of production
Others	4 ~ 20, 50	Straight

(iii) Intangible assets acquired in a business combination

Intangible assets that are acquired in a business combination are recognized separately from goodwill and 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, on the same basis as intangible assets that are acquired separately.

(iv) Derecognition of intangible assets

An intangible asset is derecognized on disposal, or when no future economic benefits are expected from its use or disposal. Gains or losses arising from derecognition of an intangible asset, measured as the difference between the net disposal proceeds and the carrying amount of the asset, are recognized in income or loss when the asset is derecognized.

**(18) Impairment of non-financial assets other than goodwill**

At the end of each reporting period, the Company reviews the carrying amounts of its tangible and intangible assets with definite useful lives to determine whether there is any indication that those assets have suffered an impairment loss. If any such indication exists, the recoverable amount of the asset is estimated in order to determine the extent of the impairment loss (if any). Where it is not possible to estimate the recoverable amount of an individual asset, the Company estimates the recoverable amount of the cash-generating unit to which the asset belongs. Where a reasonable and consistent basis of allocation can be identified, corporate assets are also allocated to individual cash-generating units, or otherwise they are allocated to the smallest group of cash-generating units for which a reasonable and consistent allocation basis can be identified.

Intangible assets with indefinite useful lives and intangible assets not yet available for use are tested for impairment at least annually, and whenever there is an indication that the asset may be impaired.

Recoverable amount is the higher of fair value less costs to sell and value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset for which the estimates of future cash flows have not been adjusted.

If the recoverable amount of an asset (or a cash-generating unit) is estimated to be less than its carrying amount, the carrying amount of the asset (or the cash-generating unit) is reduced to its recoverable amount. An impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the impairment loss is treated as a revaluation decrease.

When an impairment loss subsequently reverses, the carrying amount of the asset (or a cash-generating unit) is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does



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not exceed the carrying amount that would have been determined had no impairment loss been recognized for the asset (or cash-generating unit) in prior years. A reversal of an impairment loss is recognized immediately in income or loss, unless the relevant asset is carried at a revalued amount, in which case the reversal of the impairment loss is treated as a revaluation increase.

### **(19) Inventories**

Inventories are measured at the lower of cost and net realizable value. Cost of inventories, except for those in transit, are measured under the weighted average method and consists of the purchase price, cost of conversion and other costs incurred in bringing the inventories to their present location and condition.

Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and 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.

### **(20) Provisions**

Provisions are recognized when the Company has a present legal or constructive obligation as a result of a past event, it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The risks and uncertainties that inevitably surround many events and circumstances are taken into account in reaching the best estimate of a provision. Where the effect of the time value of money is material, provisions are determined at the present value of the expected future cash flows.

Where some or all of the expenditures required to settle a provision are expected to be reimbursed by another party, the reimbursement 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.

#### **(i) Provision for Polychlorinated Biphenyls ( PCB )**

Under the regulation of Persistent Organic Pollutants Management Act, enacted in 2007, the Company is required to remove polychlorinated biphenyls (PCBs), a toxin, from the insulating oil of its transformers by 2025. As a result of the enactments, the Company is required to inspect the PCBs contents of transformers and dispose of PCBs in excess of safety standards under the legally settled procedures. The Company's estimates and assumptions used to determine fair value can be affected by many factors, such as the estimated costs of inspection and disposal, inflation rate, discount rate, regulations and the general economy.

#### **(ii) Provision for decommissioning costs of nuclear power plants**

The Company records the fair value of estimated decommissioning costs as a liability in the period in which the Company incurs a legal obligation associated with retirement of long-lived assets that result from acquisition, construction, development and/or normal use of the assets. Accretion expense consists of period-to-period changes in the liability for decommissioning costs resulting from the passage of time and revisions to either the timing or the amount of the original estimate of undiscounted cash flows.

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(iii) Provision for disposal of spent nuclear fuel

Under the Radioactive Waste Management Act, the Company is levied to pay the spent nuclear fuel fund for the management of spent nuclear fuel. The Company recognizes the provision of present value of the payments.

(iv) Provision for low and intermediate radioactive wastes

Under the Radioactive Waste Management Act, the Company recognizes the provision for the disposal of low and intermediate radioactive wastes in best estimate of the expenditure required to settle the present obligation.

(v) Provisions for power plant regional support program

Power plant regional support programs consist of scholarship programs to local students, local economy support programs, local culture support programs, environment development programs, and local welfare programs. The Company recognizes the provision in relation to power plant regional support program.

(vi) Provision for employment benefits

The Company determines the provision for employment benefits as the incentive payments based on the results of the individual performance evaluation or management assessment.

**(21) Non-derivative financial assets**

The Company 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 Company recognizes financial assets in the statement of financial position when the Company 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.

A regular way purchase or sale of financial assets shall be recognized and derecognized, as applicable, using trade date accounting or settlement date accounting. A regular way purchase or sale is a purchase or sale of a financial asset under a contract whose terms require delivery of the asset within the time frame established generally by regulation or convention in the marketplace concerned.

(i) Effective interest method

The effective interest method is a method of calculating the amortized cost of a debt instrument and of allocating interest income over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash receipts (including all fees and points paid or received that form an integral part of the effective interest rate, transaction costs and other premiums or discounts) through the expected life of the debt instrument, or, where appropriate, a shorter period, to the net carrying amount on initial recognition. Income is recognized on an effective interest basis for debt instruments other than those financial assets classified as financial assets at fair value through profit or loss.

(ii) Financial assets at fair value through profit or loss (FVTPL)

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. A financial assets its acquired principally for the purpose of selling it in the near term are classified as a short-term financial assets held for trading and



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also all the derivatives including an embedded derivative that is not designated and effective as a hedging instrument are classified at the short-term trading financial asset as well. Financial assets at fair value through profit or loss are measured at fair value, and changes therein are recognized in profit or loss.

A financial asset is classified as held for trading if:

It has been acquired principally for the purpose of selling it in the near term; or

On initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short term profit taking; or

It is derivative, including an embedded derivative that is not designated and effective as a hedging instrument.  
A financial asset other than a financial asset held for trading may be designated as at financial assets at fair value through profit or loss upon initial recognition if:

Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise;  
or

The financial asset forms part of a group of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

It forms a part of a contract containing one or more embedded derivatives, and with K-IFRS No. 1039, Financial Instruments; Recognition and Measurement permits the entire combined contract (asset or liability) to be designated as at financial assets at fair value through profit or loss.

Financial assets at fair value through profit or loss are stated at fair value, with any gains or losses arising on re-measurement recognized in income or loss. The net gain or loss recognized in income or loss incorporates any dividend or interest earned on the financial asset and is included in the finance income and finance expenses line item in the consolidated statement of comprehensive income.

### (iii) Held-to-maturity investments

A non-derivative financial asset with a fixed or determinable payment and fixed maturity, for which the Company 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.

### (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.

Gains and losses arising from changes in fair value are recognized in other comprehensive income and accumulated in the valuation reserve. However, impairment losses, interest calculated using the effective interest method, and foreign exchange gains and losses on monetary assets are recognized in income or loss. Unquoted equity investments which are not traded in an active market, whose fair value cannot be measured reliably are carried at cost.

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When a financial asset is derecognized or impairment losses are recognized, the cumulative gain or loss previously recognized in other comprehensive income is reclassified from equity to profit or loss.

Dividends on an available-for-sale equity instrument are recognized in profit or loss when the Company's right to receive payment is established.

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The fair value of available-for-sale monetary assets denominated in a foreign currency is determined in that foreign currency and translated at the spot rate at the end of the reporting period. The foreign exchange gains and losses that are recognized in income or loss are determined based on the amortized cost of the monetary asset. Other foreign exchange gains and losses are recognized in other comprehensive income.

### (v) Loans and receivables

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.

### (vi) Impairment of financial assets

Financial assets, other than those at financial assets at fair value through profit or loss, are assessed for indicators of impairment at the end of each reporting period. Financial assets are considered to be impaired when there is objective evidence that, as a result of one or more events that occurred after the initial recognition of the financial asset, the estimated future cash flows of the investment have been affected.

For listed and unlisted equity investments classified as available-for-sale financial asset, a significant or prolonged decline in the fair value of the security below its cost is considered to be objective evidence of impairment in addition to the criteria mentioned below .

For all other financial assets, objective evidence of impairment could include:

Significant financial difficulty of the issuer or counterparty; or

Breach of contract, such as a default or delinquency in interest or principal payments, or

It becoming probable that the borrower will enter bankruptcy or financial re-organization; or

The disappearance of an active market for that financial asset because of financial difficulties.

For certain categories of financial asset, such as trade receivables, assets that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. Objective evidence of impairment for a portfolio of receivables could include the Company's past experience of collecting payments, an increase in the number of delayed payments in the portfolio past the average credit period and, as well as observable changes in national or local economic conditions that correlate with default on receivables.

For financial assets recorded at amortized cost, the amount of the impairment loss recognized is the difference between the asset's carrying amount and the present value of estimated future cash flows, discounted at the financial asset's original effective interest rate.

For financial assets carried at cost, the amount of the impairment loss is measured as the difference between the asset's carrying amount and the present value of the estimated future cash flows discounted at the current market rate of return for a similar financial asset. Such impairment loss will not be reversed in subsequent periods.

The carrying amount of the financial asset is reduced by the impairment loss directly for all financial assets with the exception of trade receivables, where the carrying amount is reduced through the use of an allowance account. When a trade receivable is considered uncollectible, it is written off against the allowance account. Subsequent recoveries of amounts previously written off are credited against the allowance account. Changes in the carrying amount of the allowance account are recognized in income or loss.

When an available-for-sale financial asset is considered to be impaired, cumulative gains or losses previously recognized in other comprehensive income are reclassified to income or loss in the period.



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For financial assets measured at amortized cost, if, in a subsequent period, the amount of the impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognized, the previously recognized impairment loss is reversed through income or loss to the extent that the carrying amount of the investment at the date the impairment is reversed does not exceed what the amortized cost would have been had the impairment not been recognized.

In respect of available-for-sale equity securities, impairment losses previously recognized in income or loss are not reversed through income or loss. Any increase in fair value subsequent to an impairment loss is recognized in other comprehensive income. In respect of available-for-sale debt securities, impairment losses are subsequently reversed through income or loss if an increase in the fair value of the investment can be objectively related to an event occurring after the recognition of the impairment loss.

### **(vii) De-recognition of financial assets**

The Company 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 Company is recognized as a separate asset or liability. If the Company retains substantially all the risks and rewards of ownership of the transferred financial assets, the Company continues to recognize the transferred financial assets and recognizes financial liabilities for the consideration received.

On de-recognition of a financial asset in its entirety, the difference between the asset's carrying amount and the sum of the consideration received and receivable and the cumulative gain or loss that had been recognized in other comprehensive income and accumulated in equity is recognized in income or loss.

On de-recognition of a financial asset other than in its entirety (e.g. when the Company retains an option to repurchase part of a transferred asset), the Company allocates the previous carrying amount of the financial asset between the part it continues to recognize under continuing involvement, and the part it no longer recognizes on the basis of the relative fair values of those parts on the date of the transfer. The difference between the carrying amount allocated to the part that is no longer recognized and the sum of the consideration received for the part no longer recognized and any cumulative gain or loss allocated to it that had been recognized in other comprehensive income is recognized in income or loss. A cumulative gain or loss that had been recognized in other comprehensive income is allocated between the part that continues to be recognized and the part that is no longer recognized on the basis of the relative fair values of those parts.

## **(22) Non-derivative financial liabilities and equity instruments issued by the Company**

### **(i) Classification as debt or equity**

Debt and equity instruments are classified as either financial liabilities or as equity in accordance with the substance of the contractual arrangement.

### **(ii) Equity instruments**

An equity instrument is any contract that evidences a residual interest in the assets of an entity after deducting all of its liabilities. Equity instruments issued by the Company are recognized at the proceeds received, net of direct issue costs.

Repurchase of the Company's own equity instruments is recognized and deducted directly in equity. No gain or loss is recognized in income or loss on the purchase, sale, issue or cancellation of the Company's own equity instruments.

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### (iii) Financial liabilities

Financial liabilities are recognized when the Company becomes a party to the contractual provisions of the instruments. Financial liabilities are initially measured at fair value. Transaction cost that are directly attributable to the issue of financial liabilities are added to or deducted from the fair value of the financial liabilities, as appropriate, on initial recognition. Transaction cost directly attributable to acquisition of financial liabilities at fair value through profit or loss are recognized immediately in profit or loss.

Financial liabilities are classified as either financial liabilities at fair value through profit or loss or other financial liabilities.

### (iv) Financial liabilities at fair value through profit or loss (FVTPL)

Financial liabilities are classified as at financial liabilities at fair value through profit or loss when the financial liability is either held for trading or it is designated as financial liabilities at fair value through profit or loss.

A financial liability is classified as held for trading if:

It has been acquired principally for the purpose of repurchasing it in the near term; or

On initial recognition it is part of a portfolio of identified financial instruments that the Company manages together and has a recent actual pattern of short-term profit-taking; or

It is a derivative that is not designated and effective as a hedging instrument.

A financial liability other than a financial liability held for trading may be designated as at FVTPL upon initial recognition if:

Such designation eliminates or significantly reduces a measurement or recognition inconsistency that would otherwise arise; or

The financial liability forms part of a Company of financial assets or financial liabilities or both, which is managed and its performance is evaluated on a fair value basis, in accordance with the Company's documented risk management or investment strategy, and information about the grouping is provided internally on that basis; or

It forms part of a contract containing one or more embedded derivatives, and IAS 39, *Financial Instruments: Recognition and Measurement*, permits the entire combined contract (asset or liability) to be designated as at FVTPL.

Financial liabilities at fair value through profit or loss are stated at fair value, with any gains or losses arising on re-measurement recognized in income or loss. The net gain or loss recognized in income or loss incorporates any interest paid on the financial liability and is included in finance income and finance expenses.

### (v) Other financial liabilities

Other financial liabilities, including borrowings, are initially measured at fair value, net of transaction costs.

Other financial liabilities are subsequently measured at amortized cost using the effective interest method, with interest expense recognized on an effective yield basis. The effective interest method is a method of calculating the amortized cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the

expected life of the financial liability, or (where appropriate) a shorter period, to the net carrying amount on initial recognition.

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### (vi) Financial guarantee contract liabilities

Financial guarantee contract liabilities are initially measured at their fair values and, if not designated as at FVTPL, are subsequently measured at the higher of: (a) the amount of the obligation under the contract, as determined in accordance with IAS 37, Provisions, Contingent Liabilities and Contingent Assets; or (b) the amount initially recognized less, cumulative amortization recognized in accordance with IAS 18, Revenue.

### (vii) De-recognition of financial liabilities

The Company derecognizes financial liabilities when, and only when, the Company's obligations are discharged, cancelled or they expire. The difference between the carrying amount of the financial liability derecognized and the consideration paid and payable is recognized in income or loss.

## **(23) Derivative financial instruments, including hedge accounting**

The Company enters into a variety of derivative financial instruments to manage its exposure to interest rate and foreign exchange rate risk, including foreign exchange forward contracts, interest rate swaps and cross currency swaps and others.

Derivatives are initially recognized at fair value. Subsequent to initial recognition, derivatives are measured at fair value. The resulting gain or loss is recognized in income or loss immediately unless the derivative is designated and effective as a hedging instrument, in such case the timing of the recognition in income or loss depends on the nature of the hedge relationship.

A derivative with a positive fair value is recognized as a financial asset; a derivative with a negative fair value is recognized as a financial liability. A derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the instrument is more than 12 months and it is not expected to be realized or settled within 12 months. Other derivatives are presented as current assets or current liabilities.

### (i) Separable embedded derivatives

Derivatives embedded in other financial instruments or other host contracts are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contracts and when the host contracts are not measured at FVTPL.

An embedded derivative is presented as a non-current asset or a non-current liability if the remaining maturity of the hybrid instrument to which the embedded derivative is part of, is more than 12 months and it is not expected to be realized or settled within 12 months. All other embedded derivatives are presented as current assets or current liabilities.

### (ii) Hedge accounting

The Company designates certain hedging instruments, which include derivatives, embedded derivatives and non-derivatives in respect of foreign currency risk, as either fair value hedges or cash flow hedges. Hedges of foreign exchange risk on firm commitments are accounted for as cash flow hedges.

At the inception of the hedge relationship, the entity documents the relationship between the hedging instrument and the hedged item, along with its risk management objectives and its strategy for undertaking various hedge transactions. Furthermore, at the inception of the hedge and on an ongoing basis, the Company documents whether the hedging instrument is highly effective in offsetting changes in fair values or cash flows of the hedged item.

### (iii) Fair value hedges

Changes in the fair value of derivatives that are designated and qualify as fair value hedges are recognized in income or loss immediately, together with any changes in the fair value of the hedged



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asset or liability that are attributable to the hedged risk. The changes in the fair value of the hedging instrument and the change in the hedged item attributable to the hedged risk relating to the hedged items are recognized in the consolidated statements of comprehensive income.

Hedge accounting is discontinued when the Company revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or when it no longer qualifies for hedge accounting. The fair value adjustment to the carrying amount of the hedged item arising from the hedged risk is amortized as income or loss as of that date.

(iv) Cash flow hedges

The effective portion of changes in the fair value of derivatives that are designated and qualify as cash flow hedges is recognized in other comprehensive income and accumulated under the heading of reverse for gains (loss) on valuation of derivatives. The gain or loss relating to the ineffective portion is recognized immediately in income or loss, and is included in the finance income and expense .

Amounts previously recognized in other comprehensive income and accumulated in equity are reclassified to income or loss in the periods when the hedged item is recognized in income or loss, in the same line of the consolidated statement of comprehensive income as the recognized hedged item. However, when the forecast transaction that is hedged results in the recognition of a non-financial asset or a non-financial liability, the gains and losses previously accumulated in equity are transferred from equity and included in the initial measurement of the cost of the non-financial asset or non-financial liability.

Hedge accounting is discontinued when the Company revokes the hedging relationship, when the hedging instrument expires or is sold, terminated, or exercised, or it no longer qualifies for hedge accounting. Any gain or loss accumulated in equity at that time remains in equity and is recognized when the forecast transaction is ultimately recognized in income or loss. When a forecast transaction is no longer expected to occur, the gain or loss accumulated in equity is recognized immediately in income or loss.

**4. Segment, Geographic and Other Information**

**(1) Segment determination and explanation of the measurements**

The Company's operating segments are its business components that generates discrete financial information that is reported to and regularly revised by the Company's chief operating decision maker, the Chief Executive Officer, for the purpose of resource allocation and assessment of segment performance. The Company's reportable segments are Transmission and distribution , Electric power generation (Nuclear) , Electric power generation (Non-nuclear) , Plant maintenance & engineering service and Others ; others mainly represent the business unit that manages the Company's foreign operations.

The Power generation maintenance is an operating segment that met the quantitative thresholds to be a reportable segment as of December 31, 2013. Accordingly, the prior period's reportable segment information has been revised to show the Power generation maintenance information.

Segment operating income (loss) is determined the same way that consolidated operating income (loss) is determined under IFRS without any adjustment for corporate allocations. The accounting policies used by each segment are consistent with the accounting policies used in the preparation of the consolidated financial statements. Segment assets and liabilities are determined based on separate financial statements of the entities instead of on a consolidated basis. There are various transactions between the reportable segments, including sales of property, plant and equipment and so on, that are conducted on an arms-length basis at market prices that would be applicable to an independent third-party. For subsidiaries which are in a different segment from that of its immediate parent company, their carrying amount in separate financial statements is eliminated in the consolidating adjustments in the tables below. In addition, consolidation adjustments in the table below include adjustments of the amount of investment in associates and joint ventures from the cost basis amount reflected in segment assets to that determined using an equity method basis in the consolidated financial statements.



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(2) Financial information of the segments for the years ended December 31, 2011, 2012 and 2013, respectively are as follows:

Segment	2011										
	Total segment revenue	Intersegment revenue	Revenue from external customers	Depreciation and amortization	Interest income	Interest expense	Income(loss) of associates and joint ventures	Employee benefit expense	Loss on abandonment of property, plant, and equipment	Accretion expense to provisions, net	Operating income (loss)
	In millions of won										
Transmission and distribution	42,857,773	709,413	42,148,360	2,542,587	73,393	1,409,216	98,558	185,851	299,118	16,903	(2,993,785)
Electric power generation (Nuclear)	6,611,936	6,597,515	14,421	2,422,121	150,165	428,821		24,543		387,209	1,144,714
Electric power generation (Non-nuclear)	25,349,726	25,078,788	270,938	1,858,736	34,641	321,961	22,698	78,327	19,688	(620)	908,773
Plant maintenance & engineering service	2,193,511	1,747,014	446,497	65,385	30,500	50	1,838	60,118		18,392	295,110
Others	297,198	2,197	295,001	4,039	60,459	22,480		417			114,202
Consolidation adjustments	(34,134,927)	(34,134,927)		(15,479)	(57,533)	(58,949)		(7,354)	(22,249)	(520)	(153,977)
	43,175,217		43,175,217	6,877,389	291,625	2,123,579	123,095	341,902	296,557	421,364	(684,963)
Finance income											607,592
Finance costs											(2,518,850)
Equity method Income of associates joint ventures											123,095
Loss before income tax											(2,473,126)

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Segment	2012										
	Total segment revenue	Intersegment revenue	Revenue from external customers	Depreciation and amortization	Interest income	Interest expense	Income(loss) of associates and joint ventures	Employee benefit expense	Loss on abandonment of property, plant, and equipment	Accretion expense to provisions, net	Operating income (loss)
In millions of won											
Transmission and distribution	49,033,869	1,121,920	47,911,949	2,562,128	58,509	1,603,628	169,755	207,332	253,985	50,656	(5,309,607)
Electric power generation (Nuclear)	6,717,341	6,698,326	19,015	2,488,367	20,712	394,288		41,823		733,533	464,506
Electric power generation (Non-nuclear)	28,973,768	28,649,846	323,922	1,887,419	57,209	339,057	4,510	63,334		19,270	2,210,669
Plant maintenance & engineering service	2,369,591	1,798,698	570,893	71,695	30,331	143	2,676	61,583		33,492	342,848
Others	304,971	10,241	294,730	6,589	83,208	51,460		1,950			117,629
Consolidation adjustments	(38,279,031)	(38,279,031)		(19,488)	(45,846)	(44,248)		(11,109)		6,096	(126,368)
	49,120,509		49,120,509	6,996,710	204,123	2,344,328	176,941	364,913	253,985	843,047	(2,300,323)
Finance income											1,128,357
Finance costs											(3,068,321)
Equity method Income of associates joint ventures											176,941
Loss before income tax											(4,063,346)

Segment	2013										
	Total segment revenue	Intersegment revenue	Revenue from external customers	Depreciation and amortization	Interest income	Interest expense	Income(loss) of associates and joint ventures	Employee benefit expense	Loss on abandonment of property, plant, and equipment	Accretion expense to provisions, net	Operating income (loss)
In millions of won											
Transmission and distribution	53,367,116	1,069,699	52,297,417	2,660,444	27,187	1,525,166	(2,521)	206,279	273,785	253,153	549,929
Electric power generation (Nuclear)	6,378,280	6,369,715	8,565	2,724,629	20,994	557,621	(926)	51,394		250,814	325,274
Electric power generation (Non-nuclear)	28,067,093	27,687,112	379,981	1,952,680	50,193	262,076	(40,976)	73,710	21,842	154,285	735,546
Plant maintenance & engineering service	2,483,670	1,774,577	709,093	72,489	23,473	183	2,180	76,395		5,016	248,661

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Others	365,968	48,519	317,449	14,086	75,653	50,266	1,498	32	110,841	
Consolidation adjustments	(36,949,622)	(36,949,622)		(31,953)	(15,339)	(13,412)	(24,953)	321	(22,416)	
	53,712,505	53,712,505	7,392,375	182,161	2,381,900	(42,243)	384,323	295,627	663,621	1,947,835
Finance income										629,542
Finance costs										(2,931,622)
Equity method Income of associates joint ventures										(42,243)
Loss before income tax										(396,488)

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(3) Total assets and liabilities of the segments as of December 31, 2012 and 2013 are as follows:

Segment	Segment assets	2012		Segment liabilities
		Investments in associates and joint ventures	Acquisition of non-current assets	
In millions of won				
Transmission and distribution	96,234,698	3,865,492	4,368,190	54,963,618
Electric power generation (Nuclear)	45,061,851		2,928,345	24,638,944
Electric power generation (Non-nuclear)	31,214,058	986,343	3,735,111	14,640,938
Plant maintenance & engineering service	2,439,700	39,098	175,386	978,695
Others	5,216,110		543,580	1,658,674
Segment totals	180,166,417	4,890,933	11,750,612	96,880,869
Consolidation adjustments:				
Elimination of inter-segment amounts	(34,684,916)		(236,063)	(4,219,896)
Equity method adjustment	671,319			
Deferred taxes				2,427,645
	(34,013,597)		(236,063)	(1,792,251)
Consolidated totals	146,152,820	4,890,933	11,514,549	95,088,618
Segment	Segment assets	2013		Segment liabilities
		Investments in associates and joint ventures	Acquisition of non-current assets	
In millions of won				
Transmission and distribution	98,249,927	3,895,266	4,458,291	56,590,381
Electric power generation (Nuclear)	46,717,706	908	2,412,782	26,482,646
Electric power generation (Non-nuclear)	36,455,090	1,275,330	6,882,630	19,832,122
Plant maintenance & engineering service	2,463,204	59,251	222,547	932,485
Others	5,617,304		429,626	2,008,541
Segment totals	189,503,231	5,230,755	14,405,876	105,846,175
Consolidation adjustments:				
Elimination of inter-segment amounts	(34,834,362)		(75,237)	(4,199,216)
Equity method adjustment	858,465			
Deferred taxes				2,429,639
	(33,975,897)		(75,237)	(1,769,577)
Consolidated totals	155,527,334	5,230,755	14,330,639	104,076,598

**Table of Contents****(4) Geographic information**

The following information on revenue from external customers and non-current assets is determined by the location of the customers and of the assets:

	Revenue from external customers			Non-current assets(*2)		
	2011	2012	2013	2011	2012	2013
	<b>In millions of won</b>					
Domestic	41,493,983	46,981,903	51,314,639	114,481,700	124,433,063	131,876,535
Overseas(*1)	1,681,234	2,138,606	2,397,866	4,362,555	4,448,485	4,474,900
	43,175,217	49,120,509	53,712,505	118,844,255	128,881,548	136,351,435

(\*1) Middle East and Asia make up the majority of overseas revenue and non-current assets.

(\*2) Amount excludes financial assets and deferred tax assets

**(5) Information on significant customers**

There is no individual customer comprising more than 10% of the Company's revenue for the years ended December 31, 2011, 2012 and 2013.

**Table of Contents****5. Classification of Financial Instruments**

(1) Classification of financial assets as of December 31, 2012 and 2013 are as follows:

	2012					Total
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Held-to-maturity investments	Derivative assets (using hedge accounting)	
In millions of won						
<b>Current assets</b>						
Cash and cash equivalents		1,954,949				1,954,949
<b>Current financial assets</b>						
Held-to-maturity investments				196		196
Derivative assets	52,061				63,945	116,006
Other financial assets		540,015				540,015
Trade and other receivables		7,184,625				7,184,625
	52,061	9,679,589		196	63,945	9,795,791
<b>Non-current assets</b>						
<b>Non-current financial assets</b>						
Available-for-sale financial assets			1,141,194			1,141,194
Held-to-maturity investments				2,020		2,020
Derivative assets	3,830				123,866	127,696
Other financial assets		602,766				602,766
Trade and other receivables		1,254,330				1,254,330
	3,830	1,857,096	1,141,194	2,020	123,866	3,128,006
	55,891	11,536,685	1,141,194	2,216	187,811	12,923,797

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	2013					Total
	Financial assets at fair value through profit or loss	Loans and receivables	Available-for-sale financial assets	Held-to-maturity investments	Derivative assets (using hedge accounting)	
	In millions of won					
<b>Current assets</b>						
Cash and cash equivalents		2,232,313				2,232,313
<b>Current financial assets</b>						
Held-to-maturity investments				168		168
Derivative assets	1,437					1,437
Other financial assets		434,608				434,608
Trade and other receivables		7,526,311				7,526,311
	1,437	10,193,232		168		10,194,837
<b>Non-current assets</b>						
<b>Non-current financial assets</b>						
Available-for-sale financial assets			1,256,765			1,256,765
Held-to-maturity investments				2,117		2,117
Derivative assets	2,681				82,376	85,057
Other financial assets		559,013				559,013
Trade and other receivables		1,644,333				1,644,333
	2,681	2,203,346	1,256,765	2,117	82,376	3,547,285
	4,118	12,396,578	1,256,765	2,285	82,376	13,742,122

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(2) Classification of financial liabilities as of December 31, 2012 and 2013 are as follows:

	2012			Total
	Financial liabilities at fair value through profit or loss	Financial liabilities recognized at amortized cost	Derivative liabilities (using hedge accounting)	
	In millions of won			
<b>Current liabilities</b>				
Borrowings		2,215,961		2,215,961
Debt securities		5,478,720		5,478,720
Derivative liabilities	46,939		47,199	94,138
Trade and other payables		5,601,852		5,601,852
	46,939	13,296,533	47,199	13,390,671
<b>Non-current liabilities</b>				
Borrowings		4,674,935		4,674,935
Debt securities		40,849,793		40,849,793
Derivative liabilities	322,199		203,839	526,038
Trade and other payables		4,173,691		4,173,691
	322,199	49,698,419	203,839	50,224,457
	369,138	62,994,952	251,038	63,615,128

	2013			Total
	Financial liabilities at fair value through profit or loss	Financial liabilities recognized at amortized cost	Derivative liabilities (using hedge accounting)	
	In millions of won			
<b>Current liabilities</b>				
Borrowings		1,470,862		1,470,862
Debt securities		6,616,636		6,616,636
Derivative liabilities	304,699		33,034	337,733
Trade and other payables		5,892,763		5,892,763
	304,699	13,980,261	33,034	14,317,994
<b>Non-current liabilities</b>				
Borrowings		4,538,390		4,538,390
Debt securities		48,262,262		48,262,262
Derivative liabilities	186,336		176,406	362,742
Trade and other payables		3,971,519		3,971,519
	186,336	56,772,171	176,406	57,134,913
	491,035	70,752,432	209,440	71,452,907



**Table of Contents****(3) Classification of comprehensive income (loss) from financial instruments for the years ended December 31, 2011, 2012 and 2013 are as follows:**

		2011	2012	2013
		In millions of won		
Cash and cash equivalents	Interest income	43,822	63,456	60,301
Available-for-sale financial assets	Dividends income	18,894	10,452	9,870
	Interest income			1,150
	Impairment loss on available-for-sale financial assets		(40,156)	(12,592)
	Loss on disposal of financial assets			(4,202)
Held-to-maturity investments	Interest income	85	69	64
Loans and receivables	Interest income	188,457	47,028	42,418
Trade and other receivables	Interest income	16,902	70,304	60,237
Other financial assets	Interest income			1,082
Short-term financial instruments	Interest income	42,359	23,250	16,896
Long-term financial instruments	Interest income		16	13
Financial assets at fair value through profit or loss	Gain (loss) on valuation of derivatives	98,006	(42,364)	335
	Gain (loss) on transaction of derivatives	(5,257)	7,500	26,889
	Gain on disposal of financial assets		189	196
Derivative assets (using hedge accounting)	Gain (loss) on valuation of derivatives	52,491	(127,277)	(13,945)
	Gain (loss) on valuation of derivatives (equity, before tax)*	(3,295)	(85)	(27,281)
	Gain on transaction of derivatives	7,378	3,064	29,662
Financial liabilities carried at amortized cost	Interest expense of borrowings and debt securities	(1,668,425)	(1,827,239)	(1,715,373)
	Interest expense of trade and other payables	(147,882)	(118,372)	(102,388)
	Interest expense of others	(307,272)	(398,717)	(564,139)
	Gain (loss) on foreign currency transactions and translations	(175,364)	832,360	133,638
Financial liabilities at fair value through profit or loss	Loss on valuation of derivatives	(27,639)	(275,490)	(167,485)
	Loss on transaction of derivatives	(37,498)	(23,031)	(46,639)
Derivative liabilities (using hedge accounting)	Gain (loss) on valuation of derivatives	2,158	(129,417)	(65,755)
	Gain (loss) on valuation of derivatives (equity, before tax)*	(34,094)	(61,920)	50,197
	Gain (loss) on transaction of derivatives	(14,332)	(10,613)	3,454

Items are included in other comprehensive income. All other income and gain amounts listed above are included in finance income, and all expense and loss amounts listed above are included in finance expenses in the accompanying consolidated statements of comprehensive income (loss).

**Table of Contents****6. Restricted Deposits**

Restricted deposits as of December 31, 2012 and 2013 are as follows:

		2012	2013
		In millions of won	
Cash and cash equivalents	Escrow accounts	72,979	61,873
	Deposits for government project		17,807
	Collateral provided for lawsuit	329	
Long-term financial instruments	Guarantee deposits for checking account	5	5
	Guarantee deposits for banking accounts at oversea branches	303	300
	Collateral provided for lawsuit		330
		73,616	80,315

**7. Cash and Cash Equivalents**

Cash and cash equivalents as of December 31, 2012 and 2013 are as follows:

		2012	2013
		In millions of won	
Cash		264	56
Cash equivalents		734,722	1,141,202
Short-term deposits classified as cash equivalents		1,197,606	1,073,789
Short-term investments classified as cash equivalents		52,098	17,266
Government grants		(29,741)	
		1,954,949	2,232,313

**8. Trade and Other Receivables**

(1) Trade and other receivables as of December 31, 2012 and 2013 are as follows:

	Gross amount	2012		Book value
		Allowance for doubtful accounts	Present value discount	
In millions of won				
<b>Current assets</b>				
Trade receivables	6,776,526	(47,312)	(416)	6,728,798
Other receivables	504,067	(45,791)	(2,449)	455,827
	7,280,593	(93,103)	(2,865)	7,184,625
<b>Non-current assets</b>				

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Trade receivables	451,179		(144)	451,035
Other receivables	989,445	(179,287)	(6,863)	803,295
	1,440,624	(179,287)	(7,007)	1,254,330
	8,721,217	(272,390)	(9,872)	8,438,955

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	Gross amount	2013		Book value
		Allowance for doubtful accounts	Present value discount	
In millions of won				
<b>Current assets</b>				
Trade receivables	7,076,303	(65,024)	(136)	7,011,143
Other receivables	559,958	(42,729)	(2,061)	515,168
	7,636,261	(107,753)	(2,197)	7,526,311
<b>Non-current assets</b>				
Trade receivables	421,949		(8)	421,941
Other receivables	1,255,724	(27,158)	(6,174)	1,222,392
	1,677,673	(27,158)	(6,182)	1,644,333
	9,313,934	(134,911)	(8,379)	9,170,644

(2) Other receivables as of December 31, 2012 and 2013 are as follows:

	Gross amount	2012		Book value
		Allowance for doubtful accounts	Present value discount	
In millions of won				
<b>Current assets</b>				
Non-trade receivables	294,989	(45,791)		249,198
Accrued income	42,067			42,067
Deposits	160,801		(2,449)	158,352
Finance lease receivables	4,134			4,134
Others	2,076			2,076
	504,067	(45,791)	(2,449)	455,827
<b>Non-current assets</b>				
Non-trade receivables	57,386	(1,684)		55,702
Deposits	224,112		(6,863)	217,249
Finance lease receivables	389,326			389,326
Others	318,621	(177,603)		141,018
	989,445	(179,287)	(6,863)	803,295
	1,493,512	(225,078)	(9,312)	1,259,122

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	Gross amount	2013 Allowance for doubtful accounts	Present value discount	Book value
	In millions of won			
<b>Current assets</b>				
Non-trade receivables	233,714	(42,729)		190,985
Accrued income	47,310			47,310
Deposits	162,730		(2,061)	160,669
Finance lease receivables	4,569			4,569
Others	111,635			111,635
	559,958	(42,729)	(2,061)	515,168
<b>Non-current assets</b>				
Non-trade receivables	102,254	(8,608)		93,646
Deposits	230,083		(6,174)	223,909
Finance lease receivables	845,712			845,712
Accrued income	7,052			7,052
Others	70,623	(18,550)		52,073
	1,255,724	(27,158)	(6,174)	1,222,392
	1,815,682	(69,887)	(8,235)	1,737,560

Trade and other receivables are classified as loans and receivables, and are measured using the effective interest method. No interest is accrued for trade receivables for the duration between the billing date and the payment due dates. Once trade receivables are overdue, the Company imposes a 2.0% interest rate on the overdue trade receivables. The Company holds deposits of three-months expected electricity usage for customers requesting temporary usage and customers with past defaulted payments.

**(3) Aging analysis of trade receivables as of December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Trade receivables: (not overdue, not impaired)	7,125,836	7,350,705
Less than 60 days	4	292
Trade receivables: (overdue, impaired)	4	292
60 ~ 90 days	33,124	36,707
90 ~ 120 days	9,853	18,214
120 days ~ 1 year	25,621	38,066
Over 1 year	33,267	54,268
Trade receivables: (impairment reviewed)	101,865	147,255
	7,227,705	7,498,252
Less allowance for doubtful accounts	(47,312)	(65,024)
Less present value discount	(560)	(144)
	7,179,833	7,433,084

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The Company assesses at the end of each reporting period whether there is any objective evidence that trade receivables are impaired, and provides allowances for doubtful accounts which includes impairment for trade receivables that are individually significant.

The Company considers receivables as overdue if the receivables are outstanding 60 days after the maturity and sets allowance based on past experience of collection.

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**Table of Contents****(4) Aging analysis of other receivables as of December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Other receivables: (not overdue, not impaired)	1,252,525	1,667,837
Less than 60 days		24,878
Other receivables: (overdue, not impaired)		24,878
60 ~ 90 days	7,430	17,507
90 ~ 120 days	1,870	1,880
120 days ~ 1 year	5,520	23,996
Over 1 year	226,167	79,584
Other receivables: (impairment reviewed)	240,987	122,967
	1,493,512	1,815,682
Less allowance for doubtful accounts	(225,078)	(69,887)
Less present value discount	(9,312)	(8,235)
	1,259,122	1,737,560

**(5) Changes in the allowance for doubtful accounts for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011		2012		2013	
	Trade receivables	Other receivables	Trade receivables	Other receivables	Trade receivables	Other receivables
	In millions of won					
<b>Beginning balance</b>	29,298	124,622	24,586	203,198	47,312	225,078
Bad debt expense	14,270	867	37,447	3,994	40,446	8,665
Write-offs	(18,522)	(1,780)	(14,721)	(3,331)	(22,734)	(4,227)
Reversals	(460)			(152)		
Others(*)		79,489		21,369		(159,629)
<b>Ending balance</b>	24,586	203,198	47,312	225,078	65,024	69,887

(\*) The amounts in 2011 and 2012 represented allowance against loans to equity method investments which were reversed when the loans were converted to investment in associates during 2013.

**Table of Contents****9. Available-for-sale Financial Assets**

Available-for-sale financial assets as of December 31, 2012 and 2013 are as follows:

	Ownership	2012 In millions of won	2013
<b>Equity securities</b>			
<b>Listed</b>			
Kwanglim Co., Ltd.(*1)	0.44%	168	150
Sungjee Construction Co., Ltd.(*1)	0.01%	5	7
Korea District Heating Corp.(*2)	19.55%	167,541	194,710
Ssangyong Motor Co., Ltd.(*1)	0.03%	205	291
LG Uplus Corporation(*2)	8.80%	299,593	412,901
Fission Uranium Corp.(formerly named Fission)	0.52%	533	848
Denison Mines Corp.	12.62%	76,765	74,498
Energy Fuels INC(*4)	9.06%	12,425	10,307
PT Adaro Energy Tbk	1.50%	84,288	45,204
Cockatoo Coal Limited(*3)	1.20%	6,487	1,875
Namkwang Engineering & Construction Co., Ltd	0.01%		5
Byucksan Engineering & Construction Co., Ltd	0.00%		1
Dongyang Engineering & Construction Corp.	0.01%		5
Pumyang Construction Co., Ltd.	0.00%		3
Strathmore Minerals Corp.(*4)	0.00%	4,132	
		652,142	740,805
<b>Unlisted</b>			
Construction Guarantee	0.02%	784	790
Global Dynasty overseas resource development private equity firm	7.46%	881	1,517
Plant & Mechanical Contractors Financial Cooperative of Korea	0.01%	36	36
Dongnam Co., Ltd.	0.46%	72	72
Mobo Co., Ltd.	0.00%	14	14
Fire Guarantee	0.02%	20	20
Korea Software Financial Cooperative	0.18%	301	301
Woobang ENC Co., Ltd.	0.00%	22	22
Women s venture fund	10.00%	780	780
Engineering Financial Cooperative	0.11%	60	60
Intellectual Discovery, Ltd.	9.13%	5,000	5,000
Electric Contractors Financial Cooperative	0.03%	152	152
Korea Specialty Contractor Financial Cooperative	0.01%	417	417
Information & Communication Financial Cooperative	0.03%	10	10
Troika overseas resource development private equity firm	3.66%	8,573	10,664
POSTECH Venture Capital Corporation	0.00%	240	
POSTECH electric power fund	5.61%	2,800	
Poonglim Industrial Co., Ltd.	0.01%		78
Woori Ascon Co., Ltd.	0.34%		10
HANKOOK Silicon Co., Ltd.	11.82%		7,513
LIG E&C Co., Ltd.	0.00%		5
Miju Steel Mfg Co., Ltd.	0.23%		51
Ginseng K Co., Ltd.	0.08%		8
Dae Kwang Semiconductor Co., Ltd.	0.07%		6
Sanbon Department Store	0.01%		124
SAMBO AUTO. Co., Ltd.	0.02%	38	38





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	Ownership	2012 In millions of won	2013
Korea Bio Fuel Co., Ltd.	15.00%	1,500	1,500
Korea Electric Engineers Association	0.26%	40	61
Korea Electrical Manufacturers Association	0.00%	240	
Korea investment Korea EXIM Bank CERs private special asset Investment Trust	14.18%	6,803	6,803
Hanwha Venture Capital Corporation	0.00%	180	
Hanwha Electric Power Venture fund	16.40%	2,280	1,804
Hwan Young Steel Co., Ltd.	0.14%	97	97
IBK-AUCTUS green growth private equity firm(*2)	6.30%	6,054	6,054
K&C- Gyeongnam youth job Creation investment fund	10.00%	1,420	1,340
Areva Nc Expansion	13.49%	241,472	248,292
Green & Sustainable Energy Investment Corp.	19.58%	14	13
Kanan Hydroelectric Power Corp.	19.58%	19	17
Set Holding	2.50%	169,637	170,514
Siam Solar Power	10.00%		933
3i Powergen Inc.	15.00%	1,630	1,486
PT. Kedap Saayq	10.00%		18,540
Navanakorn Electric Co., Ltd.(*5)	29.00%	14,948	16,163
		466,534	501,305
<b>Debt securities</b>			
Ambre Energy Limited		22,518	14,655
		1,141,194	1,256,765

(\*1) It has been determined that available-for-sale financial assets were impaired because the fair values of the securities of Kwanglim Co., Ltd., Ssangyong Motor Co., Ltd. and Sungjee Construction Co., Ltd. declined below their respective acquisition costs during the current year. As such, cumulative losses of 415 million previously recognized in other comprehensive loss were reclassified to impairment losses on available-for-sale financial assets for the year ended December 31, 2013.

(\*2) The fair values of the securities of Korea District Heating Corp. and LG Uplus Corporation have declined below their respective acquisition costs for more than a year. As such, cumulative losses of 35,619 million previously recognized in other comprehensive loss were reclassified to impairment losses on available-for-sale financial assets for the year ended December 31, 2012. Also, as the estimated fair value of IBK-AUCTUS green growth private equity firm declined below book value, cumulative losses of 1,106 million previously recognized in other comprehensive loss were reclassified to impairment losses on available-for-sale financial assets during the year ended December 31, 2012.

(\*3) The fair value of Cockatoo Coal Limited securities declined significantly below the acquisition cost and the cumulative losses of 12,177 million previously recognized in other comprehensive loss were reclassified to impairment loss on available-for-sale financial assets during the year ended December 31, 2013.

(\*4) Shares of Energy Fuels Inc. were acquired when Strathmore Minerals Corp. was merged into Energy Fuels Inc. during 2013. As a result of the exchange of the shares, a gain on disposal of available-for-sale financial assets amounting to 4,202 million was recognized for the year ended December 31, 2013.

(\*5) Although the Company holds more than 20% of the equity shares of these investments, the Company cannot exercise significant influence.

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Book values of unlisted equity securities held by the Company that were measured at cost as of December 31, 2012 and 2013 are 296,897 million and 330,001 million, respectively, as a quoted market price does not exist in an active market and its fair value cannot be measured reliably.

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**Table of Contents****10. Held-to-maturity Investments**

Held-to-maturity investments as of December 31, 2012 and 2013 are as follows:

	Current	2012 Non-current	Current	2013 Non-current
	In millions of won			
Government and municipal bonds and others	196	2,020	168	2,117

**11. Derivatives**

(1) Derivatives as of December 31, 2012 and 2013 are as follows:

	Current	2012 Non-current	Current	2013 Non-current
	In millions of won			
<b>Derivative assets</b>				
Currency option			963	
Currency forward	245	40	474	206
Currency swap	115,761	127,652		83,003
Interest rate swap		4		1,848
	116,006	127,696	1,437	85,057
<b>Derivative liabilities</b>				
Currency option	9,491		42,144	
Currency forward	10,323	105	2,166	
Currency swap	70,011	389,948	291,476	289,819
Interest rate swap	4,313	135,985	1,947	72,923
	94,138	526,038	337,733	362,742

**Table of Contents****(2) Currency option contracts which are not designated as hedge instruments as of December 31, 2013 are as follows:****(i) Target Redemption Forward**

<b>Financial institution</b>	<b>Contract year</b>	<b>Position</b>	<b>Contract amount</b>		<b>Contract exchange rate</b>	<b>Target profit</b>
			<b>In thousands of U.S. dollars</b>			
Standard Chartered	2013.11.22 ~ 2014.11.20	SELL	USD	6,000	1,101.50	250
Standard Chartered	2013.12.09 ~ 2014.12.15	SELL	USD	5,000	1,093.50	250
Standard Chartered	2013.12.11 ~ 2014.12.15	SELL	USD	5,000	1,092.00	250
Standard Chartered	2013.12.18 ~ 2014.12.16	SELL	USD	5,000	1,090.50	250
Standard Chartered	2013.12.19 ~ 2014.12.17	SELL	USD	8,000	1,097.50	250
Barclays Bank PLC	2013.06.21 ~ 2014.06.24	BUY	USD	2,000	1,113.50	200
Barclays Bank PLC	2013.07.09 ~ 2014.07.16	BUY	USD	3,000	1,109.40	200
Nomura	2013.06.27 ~ 2014.06.30	BUY	USD	3,000	1,102.40	200
Credit Suisse	2013.07.03 ~ 2014.07.02	BUY	USD	5,000	1,105.50	200
Credit Suisse	2013.11.20 ~ 2014.11.26	SELL	USD	5,000	1,099.10	250
Credit Suisse	2013.12.17 ~ 2014.12.15	SELL	USD	3,000	1,092.00	250
Morgan Stanley	2013.07.01 ~ 2014.07.01	BUY	USD	5,000	1,098.20	200
Morgan Stanley	2013.07.19 ~ 2014.07.15	BUY	USD	3,000	1,095.00	200
Morgan Stanley	2013.08.19 ~ 2014.08.18	BUY	USD	3,000	1,089.40	200
Morgan Stanley	2013.09.11 ~ 2014.05.07	BUY	USD	10,000	1,072.90	50
Morgan Stanley	2013.10.21 ~ 2014.12.29	BUY	USD	3,000	1,047.00	50
RBS	2013.06.26 ~ 2014.06.18	BUY	USD	3,000	1,112.00	250
HSBC	2013.07.04 ~ 2014.07.07	BUY	USD	3,000	1,099.80	200

The Company enters into currency option contracts to buy or sell currency at a specified exchange rate during a specified period of time to hedge currency exchange risk from flaming coal purchase payments. Every week, the Company compares the target profit to the accumulated total profit or loss from the difference between the contract exchange rate and average exchange rate. When the target profits are achieved, the contracts will be automatically terminated.

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## (ii) European Knock-Out

Financial institution	Contract year	Contract amount		Contract exchange rate	Barrier(*1)
		Pay	Receive		
In millions of won and thousands of U.S. dollars					
Standard Chartered	2013.10.31 ~ 2014.04.30	162,368	USD 153,670	1,056.60	1,120.00
Barclays Bank PLC	2013.09.16 ~ 2014.01.13	5,747	USD 5,328	1,078.50	1,150.00
Barclays Bank PLC	2013.09.16 ~ 2014.02.12	7,404	USD 6,882	1,075.90	1,150.00
Barclays Bank PLC	2013.09.16 ~ 2014.03.13	13,826	USD 12,879	1,073.50	1,150.00
Barclays Bank PLC	2013.10.11 ~ 2014.04.07	9,884	USD 9,317	1,060.90	1,130.00
Barclays Bank PLC	2013.10.29 ~ 2014.03.26	4,763	USD 4,516	1,054.60	1,100.00
Barclays Bank PLC	2013.10.29 ~ 2014.04.24	11,250	USD 10,689	1,052.50	1,100.00
Barclays Bank PLC	2013.12.13 ~ 2014.05.08	8,472	USD 8,121	1,043.20	1,100.00
Korea Exchange Bank	2013.09.09 ~ 2014.03.05	5,611	USD 5,244	1,070.00	1,150.00
Korea Exchange Bank	2013.09.09 ~ 2014.02.26	9,831	USD 9,217	1,066.70	1,130.00
Korea Exchange Bank	2013.10.22 ~ 2014.04.17	5,816	USD 5,516	1,054.40	1,110.00
Korea Exchange Bank	2013.12.16 ~ 2014.06.11	18,335	USD 17,664	1,038.00	1,100.00
Credit Suisse	2013.10.01 ~ 2014.02.26	9,120	USD 8,558	1,065.70	1,130.00
Credit Suisse	2013.10.01 ~ 2014.03.27	9,531	USD 8,964	1,063.20	1,130.00
Credit Suisse	2013.10.28 ~ 2014.04.24	10,142	USD 9,619	1,054.40	1,110.00
Morgan Stanley	2013.10.31 ~ 2014.04.30	158,610	USD 150,000	1,057.40	1,120.00
RBS	2013.11.23 ~ 2014.01.28	4,261	USD 3,942	1,080.80	1,150.00
RBS	2013.11.23 ~ 2014.04.21	5,853	USD 5,546	1,055.20	1,110.00

(\*1) Contracts are entered to hedge the currency risk arising from foreign short-term borrowings. The contracts will be automatically cancelled if the market average exchange rate at maturity date is above the barrier.

**Table of Contents****(3) Currency forward contracts which are not designated as hedge instruments, as of December 31, 2013 are as follows:**

Counterparty	Contract Date	Maturity Date	Contract amounts		Contract exchange rate
			Pay	Receive	
In millions of won and thousands of foreign currencies					
Korea Exchange Bank	2013-12-18	2014-01-13	10,715	USD 10,168	1,053.81
Korea Exchange Bank	2013-12-18	2014-01-02	2,906	USD 2,760	1,053.21
RBS	2013-12-18	2014-01-03	38,396	USD 36,457	1,053.18
DBS	2013-12-30	2014-01-13	61,974	USD 58,671	1,056.29
RBS	2013-11-19	2014-05-21	7,049	USD 6,603	1,067.50
BNP Paribas	2013-11-19	2014-05-21	21,352	USD 20,000	1,067.60
BNP Paribas	2013-11-28	2014-05-21	USD 4,000	4,270	1,067.60
BNP Paribas	2013-12-20	2014-05-21	USD 7,695	8,215	1,067.60
Korea Exchange Bank	2013-12-26	2014-01-02	3,176	USD 3,000	1,058.67
Korea Exchange Bank	2013-12-27	2014-01-02	3,168	USD 3,000	1,056.08
Korea Exchange Bank	2013-12-27	2014-01-02	8,437	USD 8,000	1,054.68
The Bank of Nova Scotia	2013-09-06	2014-01-10	7,666	USD 7,000	1,095.20
The Bank of Nova Scotia	2013-11-12	2014-02-14	5,380	USD 5,000	1,075.90
Standard Chartered	2013-10-01	2014-01-06	5,398	USD 5,000	1,079.60
Standard Chartered	2013-10-01	2014-01-06	10,801	USD 10,000	1,080.10
Standard Chartered	2013-10-11	2014-01-15	5,379	USD 5,000	1,075.70
RBS	2013-09-09	2014-01-10	4,369	USD 3,979	1,098.00
RBS	2013-09-09	2014-01-10	5,485	USD 5,000	1,097.00
RBS	2013-09-09	2014-01-10	5,480	USD 5,000	1,096.00
RBS	2013-10-11	2014-01-15	2,804	USD 2,607	1,075.70
RBS	2013-11-12	2014-02-14	5,380	USD 5,000	1,075.95
RBS	2013-09-09	2014-01-10	5,475	USD 5,000	1,095.00
BNP Paribas	2013-10-07	2014-01-10	5,377	USD 5,000	1,075.40
BNP Paribas	2013-11-12	2014-02-12	5,379	USD 5,000	1,075.80
Barclays Bank PLC	2013-10-07	2014-01-10	5,376	USD 5,000	1,075.10
The Bank of Nova Scotia	2013-12-10	2014-03-12	1,147	USD 1,085	1,057.05
Standard Chartered	2011-08-08	2014.01.27 ~ 2015.12.28	USD 19,623	21,579	1,093.10 ~ 1,103.20

**Table of Contents****(4) Currency swap contracts which are not designated as hedge instruments as of December 31, 2013 are as follows:**

Counterparty	Contract year	Contract amount		Contract interest rate		Contract exchange rate
		Pay	Receive	Pay (%)	Receive (%)	
In millions of won and thousands of foreign currencies						
Shinhan Bank	2010~2014	84,615	USD 75,000	6.83%	5.50%	1,128.20
RBS	2010~2014	141,125	USD 125,000	6.78%	5.50%	1,129.00
Morgan Stanley	2010~2014	112,320	USD 100,000	6.71%	5.50%	1,123.20
HSBC	2010~2014	112,320	USD 100,000	6.71%	5.50%	1,123.20
Bank of America	2011~2014	110,310	USD 100,000	6.93%	5.50%	1,103.10
UBS	2011~2015	220,356	USD 200,000	3.90%	3.00%	1,101.78
RBS	2011~2015	110,110	USD 100,000	3.90%	3.00%	1,101.10
Barclays Bank PLC	2011~2015	108,390	USD 100,000	3.78%	3.00%	1,083.90
Credit Suisse	2011~2015	108,390	USD 100,000	3.22%	3.00%	1,083.90
Morgan Stanley	2011~2015	63,006	USD 60,000	4.06%	3.00%	1,050.10
Goldman Sachs	2010~2015	156,643	USD 140,000	3.92%	3.00%	1,118.88
Deutsche Bank	2012~2018	110,412	JPY 10,000,000	6.21%	4.19%	11.04
IBK	2013~2018	111,800	USD 100,000	3.16%	2.79%	1,118.00
Bank of America	2012~2018	103,580	JPY 10,000,000	7.05%	4.19%	10.36
Morgan Stanley	2010~2015	118,800	USD 100,000	4.61%	3M Libor + 1.64%	1,188.00
M-UFJ	2010~2015	116,100	USD 100,000	4.00%	3M Libor + 1.00%	1,161.00
DBS	2011~2014	56,150	USD 50,000	4.21%	3M Libor + 1.00%	1,123.00
SMBC	2011~2014	56,150	USD 50,000	4.21%	3M Libor + 1.00%	1,123.00
Mizuho Corporate Bank	2011~2014	112,800	USD 100,000	3.86%	3M Libor + 0.80%	1,128.00
DBS	2011~2014	109,500	USD 100,000	3.80%	3M Libor + 0.85%	1,095.00
Deutsche Bank	2009~2014	126,610	USD 100,000	5.39%	6.25%	1,266.10
Nomura	2009~2014	126,610	USD 100,000	5.35%	6.25%	1,266.10
Nomura	2009~2014	126,610	USD 100,000	5.33%	6.25%	1,266.10
Morgan Stanley	2009~2014	126,610	USD 100,000	5.32%	6.25%	1,266.10
Morgan Stanley	2010~2014	126,610	USD 100,000	5.30%	6.25%	1,266.10
Barclays Bank PLC	2010~2014	126,610	USD 100,000	5.29%	6.25%	1,266.10
Citibank	2010~2014	126,610	USD 100,000	5.27%	6.25%	1,266.10
JP Morgan	2010~2014	126,610	USD 100,000	4.93%	6.25%	1,266.10
Deutsche Bank	2010~2014	126,610	USD 100,000	4.93%	6.25%	1,266.10
RBS	2010~2014	126,610	USD 100,000	4.93%	6.25%	1,266.10
Citibank	2010~2015	116,080	USD 100,000	3.97%	3.13%	1,160.80
Deutsche Bank	2010~2015	116,080	USD 100,000	3.98%	3.13%	1,160.80
RBS	2010~2015	116,080	USD 100,000	3.97%	3.13%	1,160.80
HSBC	2010~2015	116,080	USD 100,000	3.23%	3.13%	1,160.80
UBS	2010~2015	116,080	USD 100,000	3.23%	3.13%	1,160.80
Citibank	2012~2022	112,930	USD 100,000	2.79%	3.00%	1,129.30
JP Morgan	2012~2022	112,930	USD 100,000	2.79%	3.00%	1,129.30
Bank of America	2012~2022	112,930	USD 100,000	2.79%	3.00%	1,129.30
Goldman Sachs	2012~2022	112,930	USD 100,000	2.79%	3.00%	1,129.30
HSBC	2012~2022	111,770	USD 100,000	2.89%	3.00%	1,117.70
Hana Bank	2012~2022	111,770	USD 100,000	2.87%	3.00%	1,117.70
Standard Chartered	2012~2022	111,770	USD 100,000	2.89%	3.00%	1,117.70
Deutsche Bank	2012~2022	55,885	USD 50,000	2.79%	3.00%	1,117.70
DBS	2013~2018	108,140	USD 100,000	2.63%	3M Libor+0.84%	1,081.40
DBS	2013~2018	108,140	USD 100,000	2.57%	3M Libor+0.84%	1,081.40
DBS	2013~2018	108,140	USD 100,000	2.57%	3M Libor+0.84%	1,081.40
HSBC	2013~2018	107,450	USD 100,000	3.41%	2.88%	1,074.50
Standard Chartered	2013~2018	107,450	USD 100,000	3.44%	2.88%	1,074.50
JP Morgan	2013~2018	107,450	USD 100,000	3.48%	2.88%	1,074.50
HSBC	2013~2020	USD 92,940	AUD 100,000	3M Libor+1.22%	5.75%	0.93
HSBC	2013~2020	USD 93,480	AUD 100,000	3M Libor+1.18%	5.75%	0.93
Standard Chartered	2013~2020	USD 117,250	AUD 125,000	3M Libor+1.25%	5.75%	0.94



**Table of Contents****(5) Currency swap contracts which are designated as hedge instruments as of December 31, 2013 are as follows:**

Counterparty	Contract year	Contract amount		Contract interest rate		Contract exchange rate
		Pay	Receive	Pay (%)	Receive (%)	
In millions of won and thousands of foreign currencies						
Citibank	2006~2016	113,200	USD 100,000	1.05%	6.00%	1,132.00
Barclays Bank PLC	2006~2016	113,200	USD 100,000	1.05%	6.00%	1,132.00
Credit Suisse	2006~2016	113,200	USD 100,000	1.05%	6.00%	1,132.00
Goldman Sachs	2011~2017	105,260	USD 100,000	3.99%	3.63%	1,052.60
Barclays Bank PLC	2011~2017	105,260	USD 100,000	3.99%	3.63%	1,052.60
Citibank	2011~2017	105,260	USD 100,000	3.99%	3.63%	1,052.60
HSBC	2012~2014	45,264	USD 40,000	3.25%	3M Libor+1.50%	1,131.60
Citibank	2012~2014	33,948	USD 30,000	3.25%	3M Libor+1.50%	1,131.60
RBS	2012~2014	22,632	USD 20,000	3.25%	3M Libor+1.50%	1,131.60
UOB	2012~2014	33,948	USD 30,000	3.25%	3M Libor+1.50%	1,131.60
DBS	2012~2014	56,580	USD 50,000	3.20%	3M Libor+1.50%	1,131.60
ANZ	2012~2014	22,632	USD 20,000	3.20%	3M Libor+1.50%	1,131.60
Citibank	2012~2014	20,369	USD 18,000	3.20%	3M Libor+1.50%	1,131.60
Credit Suisse	2012~2014	45,264	USD 40,000	2.77%	3M Libor+1.50%	1,131.60
RBS	2012~2014	58,843	USD 52,000	2.77%	3M Libor+1.50%	1,131.60
Citibank	2013~2018	54,570	USD 50,000	2.90%	3M Libor+1.01%	1,091.40
Standard Chartered	2013~2018	54,570	USD 50,000	2.90%	3M Libor+1.01%	1,091.40
Credit Suisse	2013~2018	111,410	USD 100,000	3.22%	3M Libor+1.50%	1,114.10
UBS AG	2006~2016	98,100	USD 100,000	5.48%	5.50%	981
Credit Suisse	2006~2016	98,100	USD 100,000	5.48%	5.50%	981
Barclays Bank PLC	2006~2016	71,888	USD 75,000	4.81%	5.50%	958.51
Deutsche Bank AG	2006~2016	71,888	USD 75,000	4.81%	5.50%	958.51
Barclays Bank PLC	2012~2017	142,500	USD 125,000	3.83%	3.13%	1,140.00
Morgan Stanley	2012~2017	142,500	USD 125,000	3.83%	3.13%	1,140.00
RBS	2012~2017	142,500	USD 125,000	3.83%	3.13%	1,140.00
JP Morgan	2012~2017	142,500	USD 125,000	3.83%	3.13%	1,140.00
RBS	2013~2019	118,343	CHF 100,000	3.47%	1.63%	1,183.43
Barclays Bank PLC	2013~2019	59,172	CHF 50,000	3.47%	1.63%	1,183.43
Nomura	2013~2019	59,172	CHF 50,000	3.47%	1.63%	1,183.43
Barclays Bank PLC	2013~2018	107,360	USD 100,000	3.34%	2.88%	1,073.60
RBS	2013~2018	107,360	USD 100,000	3.34%	2.88%	1,073.60
JP Morgan	2013~2018	161,040	USD 150,000	3.34%	2.88%	1,073.60
Standard Chartered	2013~2018	161,040	USD 150,000	3.34%	2.88%	1,073.60
Barclays Bank PLC	2004~2014	172,875	USD 150,000	5.10%	5.75%	1,152.50
Barclays Bank PLC	2013~2018	81,188	USD 75,000	2.65%	1.88%	1,082.50
RBS	2013~2018	81,188	USD 75,000	2.65%	1.88%	1,082.50
Deutsche Bank	2013~2018	81,188	USD 75,000	2.65%	1.88%	1,082.50
Citibank	2013~2018	81,188	USD 75,000	2.65%	1.88%	1,082.50
BTMU	2010~2015	55,900	USD 50,000	4.03%	3M Libor+1.20%	1,118.00
RBS	2012~2017	115,140	USD 100,000	3.38%	2.50%	1,151.40
BNP Paribas	2012~2017	115,140	USD 100,000	3.38%	2.50%	1,151.40
Hana Bank	2012~2017	115,140	USD 100,000	3.38%	2.50%	1,151.40
Barclays Bank PLC	2012~2017	57,570	USD 50,000	3.38%	2.50%	1,151.40
Standard Chartered	2012~2017	57,570	USD 50,000	3.38%	2.50%	1,151.40
Nomura	2012~2017	57,570	USD 50,000	3.38%	2.50%	1,151.40
Credit Agricole	2012~2017	57,570	USD 50,000	3.38%	2.50%	1,151.40
Societe Generale	2013~2018	106,190	USD 100,000	3.48%	2.63%	1,061.90
BNP Paribas	2013~2018	53,095	USD 50,000	3.48%	2.63%	1,061.90
Hana Bank	2013~2018	53,095	USD 50,000	3.48%	2.63%	1,061.90
Standard Chartered	2013~2018	106,030	USD 100,000	3.48%	2.63%	1,060.30
Barclays Bank PLC	2013~2018	53,015	USD 50,000	3.48%	2.63%	1,060.30
Hana Bank	2013~2018	31,809	USD 30,000	3.48%	2.63%	1,060.30
Societe Generale	2013~2018	21,206	USD 20,000	3.48%	2.63%	1,060.30
HSBC	2013~2018	53,015	USD 50,000	3.47%	2.63%	1,060.30
Nomura	2013~2018	53,015	USD 50,000	3.47%	2.63%	1,060.30

**Table of Contents****(6) Interest rate swap contracts which are not designated as hedge instruments as of December 31, 2013 are as follows:**

Counterparty	Contract year	Contract amount	Contract interest rate per annum	
			Pay (%)	Receive (%)
In millions of won				
Nonghyup Bank	2010~2015	100,000	4.90%	3M CD + 1.05%
Nonghyup Bank	2010~2015	100,000	4.83%	3M CD + 0.90%
Nonghyup Bank	2010~2015	50,000	4.77%	3M CD + 0.90%
Korea Development Bank	2012~2016	200,000	3.57%	3M CD + 0.26%
Nonghyup Bank	2012~2016	100,000	3.49%	3M CD + 0.25%
Korea Development Bank	2012~2016	50,000	3.49%	3M CD + 0.25%
HSBC	2012~2016	50,000	3.49%	3M CD + 0.25%
Standard Chartered	2012~2016	200,000	3.55%	3M CD + 0.26%
Standard Chartered	2012~2017	160,000	3.57%	3M CD + 0.32%
JP Morgan	2013~2018	150,000	3.58%	3M CD + 0.31%
Korea Exchange Bank	2011~2014	100,000	4.08%	3M CD + 0.03%
Korea Exchange Bank	2011~2014	100,000	3.89%	3M CD + 0.05%
Shinhan Bank	2011~2014	100,000	3.63%	3M CD + 0.18%
Korea Exchange Bank	2011~2014	200,000	3.66%	3M CD + 0.24%
Korea Exchange Bank	2012~2015	100,000	3.58%	3M CD + 0.15%
Korea Exchange Bank	2012~2015	200,000	3.65%	3M CD + 0.10%
Korea Exchange Bank	2012~2015	100,000	2.86%	3M CD + 0.05%
Korea Exchange Bank	2013~2016	100,000	2.82%	3M CD + 0.04%
Korea Exchange Bank	2013~2016	200,000	2.57%	3M CD + 0.04%
Korea Exchange Bank	2013~2016	100,000	2.75%	3M CD + 0.03%

**(7) Interest rate swap contracts which are designated as hedge instruments, as of December 31, 2013 are as follows:**

Counterparty	Contract year	Contract amount	Contract interest rate per annum	
			Pay (%)	Receive (%)
In thousands of U.S. dollars				
BNP Paribas	2009~2027	USD 108,633	4.16%	6M USD Libor
KFW	2009~2027	USD 108,633	4.16%	6M USD Libor
CA-CIB (Credit Agricole)	2012~2033	USD 106,684	3.98%~4.10%	6M USD Libor
SMBC	2012~2033	USD 139,510	4.05%~4.18%	6M USD Libor

**(8) Gain and loss on valuation and transaction of derivatives for the years ended December 31, 2012 and 2013 are as follows and included in finance income and costs in the accompanying consolidated statements of comprehensive income (loss):**

	Net income effects of valuation loss		Net income effects of transaction gain (loss)		Accumulated other comprehensive income (loss) (*)	
	2012	2013	2012	2013	2012	2013
In millions of won						
Currency option	(9,492)	(41,181)		13,765		
Currency forward	(3,789)	(1,420)	(964)	(3,952)	(4,004)	4,004
Currency swap	(539,883)	(217,361)	(19,734)	48,685	7,883	(19,086)
Interest rate swap	(21,384)	13,112	(11,000)	(5,806)	(65,884)	37,998
Other derivatives			8,618	(39,326)		
	(574,548)	(246,850)	(23,080)	13,366	(62,005)	22,916

(\*) As of December 31, 2013, the accumulated net gain on valuation of derivatives using cash flow hedge accounting of 29,332 million, net of tax, is included in accumulated other comprehensive income (loss).

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**Table of Contents****12. Other Financial Assets****(1) Other financial assets as of December 31, 2012 and 2013 are as follows:**

	2012		2013	
	Current	Non-current	Current	Non-current
	In millions of won			
Loans and receivables	72,888	668,733	51,503	616,389
Present value discount	(1,224)	(67,009)	(1,094)	(58,559)
Long-term/short-term financial instruments	468,351	1,042	384,199	1,183
	540,015	602,766	434,608	559,013

**(2) Loans and receivables as of December 31, 2012 and 2013 are as follows:**

	Face value	2012	Book value
		Present value discount	
	In millions of won		
<b>Short-term loans and receivables</b>			
Loans for tuition	29,432	(1,224)	28,208
Loans for housing	13,272		13,272
Loans for related parties	676		676
Fisheries loan	7,720		7,720
Other loans	21,788		21,788
	72,888	(1,224)	71,664
<b>Long-term loans and receivables</b>			
Loans for tuition	340,122	(64,435)	275,687
Loans for housing	123,088		123,088
Loans for related parties	185,532		185,532
Fisheries loan	19,760	(2,574)	17,186
Other loans	231		231
	668,733	(67,009)	601,724
	741,621	(68,233)	673,388
	Face value	2013	Book value
		Present value discount	
	In millions of won		
<b>Short-term loans and receivables</b>			
Loans for tuition	25,296	(1,094)	24,202
Loans for housing	12,505		12,505
Loans for related parties	890		890
Fisheries loan	6,000		6,000
Other loans	6,812		6,812

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	51,503	(1,094)	50,409
<b>Long-term loans and receivables</b>			
Loans for tuition	352,554	(56,956)	295,598
Loans for housing	108,564		108,564
Loans for related parties	141,191		141,191
Fisheries loan	13,760	(1,603)	12,157
Other loans	320		320
	616,389	(58,559)	557,830
	667,892	(59,653)	608,239

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(3) Long-term and short-term financial instruments as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Current	Non-current	Current	Non-current
	In millions of won			
Time deposits	398,351	654	256,173	453
Installment deposits		78		93
Deposit for treasury stock in trust	25,000		64,940	
Special money in trust			30,086	
Repurchase agreement			18,000	
CD	40,000		10,000	
MMT	5,000			
Others		310	5,000	637
	468,351	1,042	384,199	1,183

**13. Inventories**

Inventories as of December 31, 2012 and 2013 are as follows:

	2012		Book value
	Acquisition cost	Valuation allowance	
	In millions of won		
Raw materials	2,285,822	(65)	2,285,757
Merchandises	379		379
Work-in-progress	68,127		68,127
Finished goods	53,640		53,640
Supplies	523,397	(4,496)	518,901
Inventories in transit	506,547		506,547
Other inventories	6,990		6,990
	3,444,902	(4,561)	3,440,341

	2013		Book value
	Acquisition cost	Valuation allowance	
	In millions of won		
Raw materials	2,904,722	(46)	2,904,676
Merchandises	373		373
Work-in-progress	89,883		89,883
Finished goods	55,056		55,056
Supplies	683,699	(4,089)	679,610
Inventories in transit	541,154		541,154
Other inventories	8,841		8,841
	4,283,728	(4,135)	4,279,593

The valuation allowances were 3,599 million and 10,129 million as of December 31, 2010 and 2011, respectively. In addition, the reversals of the allowance for loss on inventory valuation due from increases in the net realizable value of inventory and fluctuations in foreign exchange

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rates deducted from cost of sales were 211 million, 5,568 and 687 million, for the years ended December 31, 2011, 2012 and 2013, respectively. The amounts of loss from inventory valuation included in cost of sales for the years ended December 31, 2011, 2012 and 2013 were 6,747 million, 6,920 million and 261 million, respectively.

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**Table of Contents****14. Finance Lease Receivables****(1) Finance lease contracts**

The Company entered into a power purchase agreement ( PPA ) with Jordan Electric Power Company to provide a 373MW level Qatrana gas combined power plant over a 25 year lease term, and accounts for the PPA as a finance lease. Also, the Company has fly-ash pipe conduit finance leases with an average lease term of 7 years. In addition the Company entered into a PPA with the Comisión Federal de Electricidad in Mexico to provide for 25 years of all electricity generated from the power plant after completion of its construction and collect rates consisting of fixed costs (to recover the capital) and variable costs during the contracted period.

**(2) Finance lease receivables as of December 31, 2012 and 2013 are as follows and included in current and non-current trade and other receivables, net, in the accompanying consolidated statements of financial position:**

	2012		2013	
	Minimum lease payments	Present value of minimum lease payments	Minimum lease payments	Present value of minimum lease payments
	In millions of won			
Less than 1 year	46,758	4,134	81,484	4,569
1 ~ 5 years	192,651	27,422	356,874	36,710
More than 5 years	783,314	361,904	1,782,639	809,002
	1,022,723	393,460	2,220,997	850,281

**(3) There are no impaired finance lease receivables as of December 31, 2012 and 2013.****(4) There are no changes in valuation allowance for finance lease receivables for the years ended December 31, 2012 and 2013.****15. Non-Financial Assets**

Non-financial assets as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Current	Non-current	Current	Non-current
	In millions of won			
Advance payment	146,042	4,607	110,541	12,760
Prepaid expenses	230,260	100,804	150,852	102,823
Others(*)	287,745	35,027	309,452	15,928
	664,047	140,438	570,845	131,511

(\*) Details of others as of December 31, 2012 and 2013 are as follows:



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	2012		2013	
	Current	Non-current	Current	Non-current
	<b>In millions of won</b>			
Tax refund receivables	177,930	1,797	228,857	1,349
Other quick assets and others	109,815	33,230	80,595	14,579
	287,745	35,027	309,452	15,928

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**Table of Contents****16. Investments in Subsidiaries**

(1) Investments in subsidiaries as of December 31, 2012 and 2013 are as follows:

Subsidiaries	Key operation activities	Location	Percentage of ownership (%)	
			2012	2013
Korea Hydro & Nuclear Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
Korea South-East Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
Korea Midland Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
Korea Western Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
Korea Southern Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
Korea East-West Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
KEPCO Engineering & Construction Company, Inc.(*1)	Architectural engineering for utility plant and others	KOREA	74.86%	70.86%
KEPCO Plant Service & Engineering Co., Ltd.(*1)	Utility plant maintenance and Others	KOREA	70.00%	63.00%
KEPCO Nuclear Fuel Co., Ltd.	Nuclear fuel	KOREA	96.36%	96.36%
KEPCO KDN Co., Ltd.	Electric Power information technology and others	KOREA	100.00%	100.00%
Garorim Tidal Power Plant Co., Ltd.(*2)	Power generation	KOREA	49.00%	49.00%
Korea Engineering & Power Services Co., Ltd.	Operation and maintenance of utility plant	KOREA	52.43%	52.43%
Dongducheon Dream Power Co., Ltd.(*3)	Power generation	KOREA	49.00%	
KEPCO International Hong Kong Ltd.	Holding company	HONG KONG	100.00%	100.00%
KEPCO International Philippines Inc.	Holding company	PHILIPPINES	100.00%	100.00%
KEPCO Gansu International Ltd.	Holding company	HONG KONG	100.00%	100.00%
KEPCO Philippines Holdings Inc.	Holding company	PHILIPPINES	100.00%	100.00%
KEPCO Philippines Corporation	Construction and operation of utility plant	PHILIPPINES	100.00%	100.00%
KEPCO Iijjan Corporation	Utility plant rehabilitation and operation	PHILIPPINES	51.00%	51.00%
KEPCO Lebanon SARL	Operation of utility plant	LEBANON	100.00%	100.00%
KEPCO Neimenggu International Ltd.	Holding company	HONG KONG	100.00%	100.00%
KEPCO Shanxi International Ltd.	Holding company	HONG KONG	100.00%	100.00%
KOMIPO Global Pte Ltd.	Holding company	SINGAPORE	100.00%	100.00%
KEPCO Canada Energy Ltd.	Resources development	CANADA	100.00%	100.00%
KEPCO Netherlands B.V.	Holding company	NETHERLANDS	100.00%	100.00%
KOREA Imouraren Uranium Investment Corp..	Uranium mine development	FRANCE	100.00%	100.00%
KEPCO Australia Pty., Ltd.	Resources development	AUSTRALIA	100.00%	100.00%
KOSEP Australia Pty., Ltd.	Resources development	AUSTRALIA	100.00%	100.00%
KOMIPO Australia Pty., Ltd.	Resources development	AUSTRALIA	100.00%	100.00%
KOWEPO Australia Pty., Ltd.	Resources development	AUSTRALIA	100.00%	100.00%
KOSPO Australia Pty., Ltd.	Resources development	AUSTRALIA	100.00%	100.00%
KEPCO Middle East Holding Company	Holding company	BAHRAIN	100.00%	100.00%
Qatrana Electric Power Company	Construction and operation of utility plant	JORDAN	80.00%	80.00%
KHNP Canada Energy Ltd.	Resources development	CANADA	100.00%	100.00%
KEPCO Bylong Australia Pty., Ltd.	Resources development	AUSTRALIA	100.00%	100.00%
Korea Waterbury Uranium Limited Partnership	Resources development	CANADA	79.64%	79.64%
KEPCO Canada Uranium Investment Limited Partnership	Resources development	CANADA	100.00%	100.00%
Sylardus Holding B.V.(*4)	Holding company	NETHERLANDS	100.00%	

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Subsidiaries	Key operation activities	Location	Percentage of ownership (%)	
			2012	2013
Akkuyu Finance B.V.(*4)	Construction and operation of utility plant	NETHERLANDS	100.00%	
Akkuyu Fuel B.V.(*4)	Construction and operation of utility plant	NETHERLANDS	100.00%	
Akkuyu Operations B.V.(*4)	Construction and operation of utility plant	NETHERLANDS	100.00%	
Korea Electric Power Nigeria Ltd.	Operation of utility plant	NIGERIA	100.00%	100.00%
KEPCO Holdings de Mexico	Holding company	MEXICO	100.00%	100.00%
KST Electric Power Company	Construction and operation of utility plant	MEXICO	56.00%	56.00%
KEPCO Energy Service Company	Operation of utility plant	MEXICO	100.00%	100.00%
KEPCO Netherlands S3 B.V.	Holding company	NETHERLANDS	100.00%	100.00%
PT. KOMIPO Pembangkitan Jawa Bali	Operation of utility plant	INDONESIA	51.00%	51.00%
PT. Cirebon Power Service(*2)	Operation of utility plant	INDONESIA	27.50%	27.50%
KOWEPO International Corporation	Operation of utility plant	PHILIPPINES	99.99%	99.99%
KOSPO Jordan LLC	Operation of utility plant	JORDAN	100.00%	100.00%
EWP Philippines Corporation (Formerly, EWP Cebu Corporation)	Operation of utility plant	PHILIPPINES	100.00%	100.00%
EWP Philippine Holdings Corporation	Holding company	PHILIPPINES	100.00%	100.00%
EWP America Inc.	Holding company	USA	100.00%	100.00%
EWP Renewable Co.	Holding company	USA	100.00%	100.00%
DG Fairhaven Power, LLC	Power generation	USA	100.00%	100.00%
DG Kings Plaza Holdings, LLC	Holding company	USA	100.00%	100.00%
DG Kings Plaza, LLC	Power generation	USA	100.00%	100.00%
DG Kings Plaza II, LLC	Holding company	USA	100.00%	100.00%
DG Whitefield, LLC	Power generation	USA	100.00%	100.00%
Springfield Power, LLC	Power generation	USA	100.00%	100.00%
KNF Canada Energy Limited	Resources development	CANADA	96.36%	96.36%
PT KEPCO Resource Indonesia	Resources development	INDONESIA	100.00%	100.00%
EWP Barbados 1 SRL	Holding company	BARBADOS	100.00%	100.00%
California Power Holdings, LLC	Power generation	USA	100.00%	100.00%
Gyeonggi Green Energy Co., Ltd.	Power generation	KOREA	49.00%	62.01%
PT. Tanggamus Electric Power	Power generation	INDONESIA	60.00%	60.00%
Gyeongju Wind Power Co., Ltd.	Power generation	KOREA	70.00%	70.00%
KOMIPO America Inc.	Holding company	USA	100.00%	100.00%
Boulder Solar Power, LLC	Solar photovoltaic power generation	USA	75.00%	75.00%
EWPRC Biomass Holdings, LLC	Holding company	USA	100.00%	100.00%
KOSEP USA, INC.	Power generation	USA	100.00%	100.00%
Nepal Water & Energy Development Company Pty Ltd.	Construction and operation of utility plant	NEPAL	50.00%	
PT. EWP Indonesia	Holding company	INDONESIA	100.00%	100.00%
KOWEPO America LLC.	Solar photovoltaic power generation	USA	100.00%	100.00%
KEPCO Netherlands J3 B.V.	Holding company	NETHERLANDS	100.00%	100.00%
Korea Offshore Wind Power Co., Ltd.	Power generation	KOREA	100.00%	100.00%
EWP Barbados 2 SRL	Holding company	BARBADOS	100.00%	
Global One Pioneer B.V.	Holding company	NETHERLANDS	100.00%	100.00%
Global Energy Pioneer B.V.	Holding company	NETHERLANDS	100.00%	100.00%
KOSEP Wind Power, LLC.	Power generation	USA	100.00%	100.00%
Mira Power Limited(*5)	Power generation	PAKISTAN	76.00%	76.00%
KOSEP Material Co., Ltd.	Power generation	KOREA		77.04%

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Subsidiaries	Key operation activities	Location	Percentage of ownership (%)	
			2012	2013
Commerce and Industry Energy Co., Ltd.	Power generation	KOREA	29.51%	59.03%
KEPCO Singapore Holding Pte., Ltd.	Holding company	SINGAPORE		100.00%
KOWEPO India Private Limited	Holding company	INDIA		100.00%
KEPCO KPS Philippines Corp.	Utility plant maintenance and others	PHILIPPINES		100.00%
KOSPO Chile SpA	Holding company	Chile		100.00%

- (\*1) 4% of the shares of KEPCO Engineering & Construction Company, Inc. and 7% of the shares of KEPCO Plant Service & Engineering Co., Ltd. were disposed for the year ended December 31, 2013.
- (\*2) These subsidiaries are included in the consolidated financial statements as the Company obtains the majority of the voting power through the shareholders' agreement.
- (\*3) As the Company lost its control over the entities in the current year, the investments are reclassified to investment in associates and joint ventures and the related disposal gain of 1,056 million is included in gain or loss related to investment in associates and joint ventures.
- (\*4) These entities were liquidated during the year ended December 31, 2013, and disposal losses in the amount of 112 million is recognized in gain or loss related to investment in associates and joint ventures.
- (\*5) As of December 31, 2013, the reporting period end date of all consolidated subsidiaries is December 31, except for Mira Power Limited.

**(2) Subsidiaries newly included in or excluded from consolidation for the year ended December 31, 2013 are as follows:**

## (i) Subsidiaries newly included in consolidation

Subsidiary	Reason
KOSEP Material Co., Ltd.	New investment
Commerce and Industry Energy Co., Ltd.	Step acquisition
KEPCO Singapore Holding Pte., Ltd.	New investment
KOWEPO India Private Limited	New investment
KEPCO KPS Philippines Corp.	New investment
KOSPO Chile SpA	New investment

## (ii) Subsidiaries excluded from consolidation

Subsidiary	Reason
Dongducheon Dream Power Co., Ltd.	Decrease of voting power to appoint directors
Nepal Water & Energy Development Company Pty Ltd.	Decrease of the percentage of ownership
EWP Barbados 2 SRL	Liquidation
Sylardus Holding B.V.	Liquidation
Akkuyu Finance B.V.	Liquidation
Akkuyu Fuel B.V.	Liquidation



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- (3) Summary of financial information of consolidated subsidiaries as of and for the years ended December 31, 2012 and 2013 are as follows:

Subsidiaries	2012	Total	Total	Sales	Profit (loss)
		assets	liabilities		for the period
	In millions of won				
Korea Hydro & Nuclear Power Co., Ltd.	45,061,851	24,638,944	6,717,341	126,181	
Korea South-East Power Co., Ltd.	7,218,552	3,564,786	4,672,289	179,139	
Korea Midland Power Co., Ltd.	5,767,527	2,828,679	5,427,872	132,306	
Korea Western Power Co., Ltd.	5,716,612	2,615,447	5,967,870	118,319	
Korea Southern Power Co., Ltd.	6,441,594	3,038,450	6,955,053	103,368	
Korea East-West Power Co., Ltd.	6,069,774	2,593,576	5,950,683	164,489	
KEPCO Engineering & Construction Company, Inc.	861,882	435,913	785,586	134,310	
KEPCO Plant Service & Engineering Co., Ltd.	756,214	224,674	1,006,609	117,888	
KEPCO Nuclear Fuel Co., Ltd.	500,744	221,196	238,627	30,844	
KEPCO KDN Co., Ltd.	320,860	96,911	338,769	3,714	
Garorim Tidal Power Plant Co., Ltd.	37,476	1,546		(1,404)	
Korea Engineering & Power Services Co., Ltd.	7,093	2,043	10,381	3,206	
Dongducheon Dream Power Co., Ltd.	235,002	856		(4,289)	
KEPCO International Hong Kong Ltd.	246,889	35		25,262	
KEPCO International Philippines Inc.	102,564	728		13,264	
KEPCO Gansu International Ltd.	15,934	493		(8)	
KEPCO Philippines Holdings Inc.	125,971	162		1,650	
KEPCO Philippines Corporation	18,020	826		(573)	
KEPCO Ilijan Corporation	678,488	109,610	146,295	83,647	
KEPCO Lebanon SARL	7,111	8,850		(1,846)	
KEPCO Neimenggu International Ltd.	182,669			22,307	
KEPCO Shanxi International Ltd.	496,410	223,186		(2,960)	
KOMIPO Global Pte Ltd.	111,765	115		(4,780)	
KEPCO Canada Energy Ltd.	81,560	13,602		(43)	
KEPCO Netherlands B.V.	219,828	31		10,345	
KOREA Imouraren Uranium Investment Corp.	241,481	114		(51)	
KEPCO Australia Pty., Ltd.	547,886	168,837	5,446	1,034	
KOSEP Australia Pty., Ltd.	19,878	495	5,301	2,067	
KOMIPO Australia Pty., Ltd.	19,869	957	5,307	1,142	
KOWEPO Australia Pty., Ltd.	20,036	491	5,301	1,636	
KOSPO Australia Pty., Ltd.	20,112	959	5,309	1,146	
KEPCO Middle East Holding Company	105,319	102,250		2,526	
Qatrana Electric Power Company	467,457	432,000	19,172	24,499	
KHNP Canada Energy Ltd.	55,238	705		(20)	
KEPCO Bylong Australia Pty., Ltd.	73,016	252		(4,007)	
Korea Waterbury Uranium Limited Partnership	22,623	701		(39)	
KEPCO Canada Uranium Investment Limited Partnership	89,223			(5)	
Sylardus Holding B.V.	103	178		(52)	
Akkuyu Finance B.V.	6	80		(27)	
Akkuyu Fuel B.V.	7	75		(26)	
Akkuyu Operations B.V.	6	74		(26)	
Korea Electric Power Nigeria Ltd.	6	5	252	(39)	
KEPCO Holdings de Mexico	31	13		(13)	
KST Electric Power Company	345,416	387,121		(8,498)	
KEPCO Energy Service Company	73	53	296	13	
KEPCO Netherlands S3 B.V.	480	10		(88)	
PT. KOMIPO Pembangkitan Jawa Bali	19,175	8,449	21,439	5,714	



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Subsidiaries	2012			
	Total assets	Total liabilities	Sales	Profit (loss) for the period
	In millions of won			
PT. Cirebon Power Service	1,182	277	7,256	541
KOWEPO International Corporation	2,080	34		(182)
KOSPO Jordan, LLC.	6,375	1,108	14,186	2,606
EWP Cebu Corporation	10,329	1,441	9,991	2,744
EWP Philippine Holdings Corporation	241	6		(1)
EWP America Inc. (*)	117,971	87,346	44,618	(6,113)
KNF Canada Energy Limited	2,412	5		(38)
PT KEPCO Resource Indonesia	1,715			1
EWP Barbados 1 SRL	309,581	138	2,817	1,696
Gyeonggi Green Energy Co., Ltd.	103,342	68,991		(465)
PT. Tanggamus Electric Power	12,583	386		(3,199)
Gyeongju Wind Power Co., Ltd.	48,501	34,355	1,605	980
KOMIPO America Inc.	6,427			
Boulder Solar Power, LLC.	8,553	6		(24)
KOSEP USA, INC.	30,734	249		(424)
Nepal Water & Energy Development Company Pty Ltd.	21,114	12,114		(2,901)
PT. EWP Indonesia	882			(289)
KOWEPO America, LLC.	4,517	346		(2,147)
KEPCO Netherlands J3 B.V.	33,138	31		(31)
Korea Offshore Wind Power Co., Ltd.	4,966	76		(37)
EWP Barbados 2 SRL	779			(614)
Global One Pioneer B.V.	71			(1)
Global Energy Pioneer B.V.	71			(1)
KOSEP Wind Power, LLC.	213			(1)
Mira Power Limited	1,841	11		(2)

(\*) Financial information of EWP America Inc. includes that of nine other subsidiaries, EWP Renewable Co., Ltd., DG Fairhaven Power, LLC., DG Kings Plaza Holdings, LLC., DG Kings Plaza, LLC., DG Whitefield, LLC., Springfield Power, LLC., California Power Holdings, LLC., EWPRC Biomass Holdings, LLC. and DG Kings Plaza II, LLC.



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	2013			
Subsidiaries	Total assets	Total liabilities	Sales	Profit (loss) for the period
	In millions of won			
Korea Hydro & Nuclear Power Co., Ltd.	46,717,706	26,482,646	6,378,280	(180,160)
Korea South-East Power Co., Ltd.	8,294,384	4,634,288	4,157,175	116,001
Korea Midland Power Co., Ltd.	6,189,836	3,266,269	5,658,612	40,815
Korea Western Power Co., Ltd.	7,160,956	4,010,759	5,762,386	106,829
Korea Southern Power Co., Ltd.	7,360,191	3,906,329	7,120,621	102,670
Korea East-West Power Co., Ltd.	7,449,723	4,014,477	5,368,299	27,021
KEPCO Engineering & Construction Company, Inc.	760,504	378,454	755,484	34,407
KEPCO Plant Service & Engineering Co., Ltd.	839,067	217,404	1,121,717	151,524
KEPCO Nuclear Fuel Co., Ltd.	509,057	221,023	233,638	15,401
KEPCO KDN Co., Ltd.	354,577	115,604	372,830	8,561
Garorim Tidal Power Plant Co., Ltd.	43,592	3,350		(2,502)
Korea Engineering & Power Services Co., Ltd.	15,555	4,781	29,066	5,764
KEPCO International Hong Kong Ltd.	243,898			12,746
KEPCO International Philippines Inc.	101,832	819		705
KEPCO Gansu International Ltd.	15,689	486		(10)
KEPCO Philippines Holdings Inc.	116,825	13		2,861
KEPCO Philippines Corporation	14,226	150		493
KEPCO Ilijan Corporation	705,425	76,329	140,782	71,194
KEPCO Lebanon SARL	6,836	9,417		(895)
KEPCO Neimenggu International Ltd.	177,649			1,255
KEPCO Shanxi International Ltd.	491,681	226,543		(4,526)
KOMIPO Global Pte Ltd.	131,874	30		14,423
KEPCO Canada Energy Ltd.	75,197	12,358		(164)
KEPCO Netherlands B.V.	209,885	21		2,844
KOREA Imouraren Uranium Investment Corp.	248,300	161		(45)
KEPCO Australia Pty., Ltd.	498,742	2,173	4,979	162,325
KOSEP Australia Pty., Ltd.	18,592	931	4,728	1,578
KOMIPO Australia Pty., Ltd.	18,190	537	4,728	1,574
KOWEPO Australia Pty., Ltd.	18,724	929	4,728	1,577
KOSPO Australia Pty., Ltd.	18,789	929	4,728	1,578
KEPCO Middle East Holding Company	107,802	100,742		4,190
Qatrana Electric Power Company	516,637	436,210	17,471	20,850
KHNP Canada Energy Ltd.	50,314	23		(51)
KEPCO Bylong Australia Pty., Ltd.	145,704	169,014		(136,027)
Korea Waterbury Uranium Limited Partnership	20,380	21		(70)
KEPCO Canada Uranium Investment Limited Partnership	81,945	25		(46)
Korea Electric Power Nigeria Ltd.	1,859	1,449	3,602	427
KEPCO Holdings de Mexico	10	9		(14)
KST Electric Power Company	498,705	483,339	456	4,616
KEPCO Energy Service Company	835	437	3,733	407
KEPCO Netherlands S3 B.V.	514	18		(64)
PT. KOMIPO Pembangkitan Jawa Bali	14,884	5,548	20,162	6,143
PT. Cirebon Power Service	1,646	642	7,143	406
KOWEPO International Corporation	1,897	31		
KOSPO Jordan, LLC.	15,938	9,790	7,817	2,389
EWP Philippines Corporation (Formerly, EWP Cebu Corporation)	7,067	290	212	(914)

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Subsidiaries	2013			
	Total assets	Total liabilities	Sales	Profit (loss) for the period
	In millions of won			
EWP Philippine Holdings Corporation	211	1		(2)
EWP America Inc.(*)	104,186	77,105	53,087	(3,184)
KNF Canada Energy Limited	2,254	19		(71)
PT KEPCO Resource Indonesia	1,609			(84)
EWP Barbados 1 SRL	284,111	145	2,738	(21,771)
Gyeonggi Green Energy Co., Ltd.	338,394	263,608	26,944	(161)
PT. Tanggamus Electric Power	9,784	626		(3,640)
Gyeongju Wind Power Co., Ltd.	49,264	32,580	7,440	2,507
KOMIPO America Inc.	7,604	6		0
Boulder Solar Power, LLC.	7,639	6		(2,131)
KOSEP USA, INC.	31,121	233		(757)
PT. EWP Indonesia	771	14		(334)
KOWEPO America, LLC.	6,057	21		(1,295)
KEPCO Netherlands J3 B.V.	102,295	31		(86)
Korea Offshore Wind Power Co., Ltd.	4,052	1,598		(2,436)
Global One Pioneer B.V.	46	19		(44)
Global Energy Pioneer B.V.	47	19		(42)
KOSEP Wind Power, LLC.	1,219	688	2,053	332
Mira Power Limited	13,607	244		(742)
KOSEP Material Co., Ltd	13,349	280		(431)
Commerce and Industry Energy Co., Ltd.	104,739	87,628	13,450	(2,959)
KEPCO Singapore Holding Pte., Ltd.		11		(11)
KOWEPO India Private Limited	1,370	4		(377)
KEPCO KPS Philippines Corp.	4,396	3,409	5,923	659
KOSPO Chile SpA	4,180	4,180		

(\*) Financial information of EWP America Inc. includes that of nine other subsidiaries, EWP Renewable Co., Ltd., DG Fairhaven Power, LLC., DG Kings Plaza Holdings, LLC., DG Kings Plaza, LLC., DG Whitefield, LLC., Springfield Power, LLC., California Power Holdings, LLC., EWPRC Biomass Holdings, LLC. and DG Kings Plaza II, LLC.

**(4) Significant restrictions on its abilities to subsidiaries are as follows:**

Company	Nature and extent of any significant restrictions
Gyeonggi Green Energy Co., Ltd.	Acquisition or disposal of assets more than 35 billion, change in the capacity of cogeneration units (except for the change due to performance improvement of equipment, maintenance) will require unanimous consent of all directors.

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- (5) Details of non-controlling interest prior to inter-group eliminations as of and for the years ended December 31, 2012 and 2013 are as follows:

Description	2012					Others	Total
	KEPCO Ilijan Corporation	KEPCO Plant Service & Engineering Co., Ltd.	Dongducheon Dream Power Co., Ltd.	KEPCO Engineering & Construction Company, Inc.	Garorim Tidal Power Plant Co., Ltd.		
Percentage of ownership	49.00%	37.00%	51.00%	28.95%	51.00%		
Current assets	198,536	406,454	49,216	637,560	3,702	390,147	1,685,615
Non-current assets	479,951	349,759	185,786	224,322	33,774	1,163,374	2,436,966
Current liabilities	(67,762)	(173,630)	(765)	(394,426)	(1,492)	(235,801)	(873,876)
Non-current liabilities	(41,848)	(51,044)	(92)	(41,488)	(54)	(925,458)	(1,059,984)
Net assets	568,877	531,540	234,146	425,969	35,930	392,262	2,188,724
Book value of non-controlling interest	278,750	159,462	119,414	107,089	18,324	553,472	1,236,511
Sales	146,295	1,006,609		785,586		298,479	2,236,969
Profit (loss) for the period	83,647	117,888	(4,289)	134,310	(1,404)	47,670	377,822
Profit (loss) for the period attributable to non-controlling interest	40,987	35,366	(2,188)	33,766	(716)	4,213	111,428
Cash flows from operating activities	40,173	49,350	(6,639)	23,764	125	50,305	157,078
Cash flows from investing activities	(5,455)	(24,105)	(88,471)	7,417	(310)	(147,804)	(258,728)
Cash flows from financing activities before dividends to non-controlling interest	(25,889)	(3,648)	101,502	40		97,177	169,182
Dividends to non-controlling interest	(12,358)	(18,222)		(20,425)		(4,249)	(55,254)
Effect of exchange rate fluctuation	(4,031)	(137)		(127)		(2,201)	(6,496)
Net increase (decrease) of cash and cash equivalents	(7,560)	3,238	6,392	10,668	(185)	(6,773)	5,780

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Description	2013						Total
	KEPCO Ilijan Corporation	KEPCO Plant Service & Engineering Co., Ltd.	Dongducheon Dream Power Co., Ltd.	KEPCO Engineering & Construction Company, Inc.	Garorim Tidal Power Plant Co., Ltd.	Others	
Percentage of ownership	49.00%	37.00%	51.00%	28.95%	51.00%		
Current assets	251,147	438,272		478,851	7,002	476,286	1,651,558
Non-current assets	454,278	400,794		281,653	36,591	1,644,436	2,817,752
Current liabilities	(44,046)	(182,871)		(336,046)	(3,272)	(243,826)	(810,061)
Non-current liabilities	(32,282)	(34,533)		(42,407)	(78)	(1,296,242)	(1,405,542)
Net assets	629,097	621,662		382,051	40,243	580,654	2,253,707
Book value of non-controlling interest	308,257	230,015		110,603	20,523	599,434	1,268,832
Sales	140,782	1,121,717		755,484		361,692	2,379,675
Profit (loss) for the period	71,194	151,524		34,407	(2,502)	55,763	310,386
Profit (loss) for the period attributable to non-controlling interest	34,885	45,457		8,650	(1,276)	33,989	121,705
Cash flows from operating activities	57,785	40,805		11,367	(665)	(4,871)	104,421
Cash flows from investing activities	(2,524)	(21,412)	(20,006)	4,854	(186)	(126,946)	(166,220)
Cash flows from financing activities before dividends to non-controlling interest	(22,735)	2,657		1,716	3,475	189,313	174,426
Dividends to non-controlling interest		(19,440)		(18,564)		(20,037)	(58,041)
Effect of exchange rate fluctuation	(1,953)	(220)		(33)		(2,529)	(4,735)
Net increase (decrease) of cash and cash equivalents	30,573	2,390	(20,006)	(660)	2,624	34,930	49,851

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**Table of Contents****(6) Business combination**

On April 29, 2013, the Company has obtained control of Commerce and Industry Energy Co., Ltd. which engages in the integrated commerce and industry energy business, by acquiring an additional 29.5% of its equity shares. As a result, the Company's ownership for Commerce and Industry Energy Co., Ltd. has increased from 29.5% to 59.0%. The acquisition was accounted for as follows:

	<b>Amount</b> <b>In millions of won</b>
<b>I. Fair value of consideration transferred</b>	
Carrying value of the equity method investees previously owned	5,829
Fair value adjustment(*1)	(1,022)
Cash and cash equivalents paid	2
Fair value of related commitments(*2)	4,806
	9,615
<b>II. Fair value of non-controlling interest(*3)</b>	
	4,882
	14,497
<b>III. Recognized amounts of identifiable assets acquired and liabilities assumed</b>	
<Assets>	
Cash and cash equivalents	7,292
Trade and other receivables	1,631
Inventories	515
Property people & equipment	82,733
Other assets	3,460
<Liabilities>	
Trade and other payables	(1,777)
Borrowings	(81,752)
Other liabilities	(187)
Fair value of net assets	11,915
<b>IV. Goodwill</b>	
	2,582

(\*1) Prior to business combination, 29.5% of the Company's equity shares re-measured to fair value. As a result, the differences incurred from the re-measurement amounted to 1,022 million is recognized as a loss on the disposal of its interest in associates and joint ventures.

(\*2) The Company guarantees a certain rate of return on investment to Hana Power Co., Ltd. and one other investor, the financial investors of Commerce and Industry Energy Co., Ltd., holding 39.3% of the 2,260,000 shares of equity in Commerce and Industry Energy Co., Ltd. The investors may request the Company to purchase their investment shares after 58 months have elapsed from the date of investment. The Company has included the fair value valuation of the purchase commitment in consideration transferred.

(\*3) Non-controlling interest is measured by proportionate share of non-controlling of the identifiable net assets.

If the Company had acquired the equity shares of Commerce and Industry Energy Co., Ltd. on January 1, 2013, the sales and loss for the period would have been 54,044,024 million and 182,218 million, respectively. From the date of the acquisition, the subsidiary incurred sales and loss

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for the period 13,450 million and 2,959 million, respectively.

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The net cash outflows from the business combination are as follows:

	In millions of won
Consideration paid in cash	2
Less : acquired cash and cash equivalents.	(7,292)
	(7,290)

**(7) Changes in goodwill**

(i) Details of goodwill as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Acquisition cost		2,582
Accumulated impairment		
Carrying book value		2,582

(ii) Changes in goodwill for the year ended December 31, 2013 are as follows:

	2013
	In millions of won
Beginning balance	
Changes	
Newly recognized	2,582
Elimination due to disposal	
Others	
Ending balance	2,582

**(8) Cash dividends received from subsidiaries for the years ended December 31, 2011, 2012 and 2013 respectively are as follows:**

Subsidiaries	2011	2013	
		In millions of won	
Korea Hydro & Nuclear Power Co., Ltd.	249,620	463,308	63,035
Korea South-East Power Co., Ltd.	74,221	98,879	89,569
Korea Midland Power Co., Ltd.	39,056	40,940	66,153
Korea Western Power Co., Ltd.	73,879	31,386	59,160
Korea Southern Power Co., Ltd.	56,428	47,120	51,680
Korea East-West Power Co., Ltd.	72,471	69,400	82,200
KEPCO Engineering & Construction Company, Inc.	55,019	60,831	55,280

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KEPCO Plant Service & Engineering Co., Ltd.	37,127	54,678	45,363
KEPCO Nuclear Fuel Co., Ltd.	12,614	15,891	16,346
KEPCO KDN Co., Ltd.	13,947	6,279	2,043
Korea Engineering & Power Services Co., Ltd.		540	1,458
KEPCO International Hong Kong Ltd.	52,542	42,750	12,132
KEPCO International Philippines Inc.	4,209	25,100	0
KEPCO Philippines Corporation	101,387	14,762	1,986
KEPCO Ilijan Corporation	15,824	12,644	0
KEPCO Gansu International Ltd.	298		0
KEPCO Philippines Holdings Inc.		1,502	6,678
KEPCO Neimenggu International Ltd.	13,357		3,629
KEPCO Netherlands B.V.	10,982	8,453	8,923
KOSPO Jordan LLC	51	358	129
PT. KOMIPO Pembangkitan Jawa Bali	383	2,074	1,663
	883,415	996,895	567,427

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**Table of Contents****17. Investments in Associates and Joint Ventures**

(1) Investments in associates and joint ventures as of December 31, 2012 and 2013 are as follows:

Investees	2012		Percentage of ownership	Acquisition cost	Book value
	Key operation activities	Location			
<b>&lt;Associates&gt;</b>					
Daegu Green Power Co., Ltd.	Power generation	KOREA	48%	57,360	56,007
Korea Gas Corporation	Importing and wholesaling LNG	KOREA	24%	94,500	2,049,340
Korea Electric Power Industrial Development Co., Ltd.	Electricity metering	KOREA	29%	4,727	18,936
YTN Co., Ltd.	Broadcasting	KOREA	21%	59,000	37,876
Cheongna Energy Co., Ltd.	Generating and distributing vapor and hot/cold water	KOREA	30%	43,900	33,379
Gangwon Wind Power Co., Ltd.(*1)	Wind power generation	KOREA	15%	5,725	12,113
Hyundai Green Power Co., Ltd.	Power generation	KOREA	29%	88,885	110,346
Korea Power Exchange(*5)	Management of power market	KOREA	100%	127,839	176,264
AMEC Partners Korea(*2)	Resources development	KOREA	19%	707	141
Hyundai Energy Co., Ltd.(*8)	Power generation	KOREA	29%	57,150	49,463
Ecollite Co., Ltd.	Artificial light-weight aggregate	KOREA	29%	168	1,266
Taebaek Wind Power Co., Ltd.	Power generation	KOREA	25%	3,810	3,728
Alternergy Philippine Investments Corporation	Power generation	PHILIPPINES	50%	3,313	1,600
Muju Wind Power Co., Ltd.	Power generation	KOREA	25%	2,850	2,711
Pyeongchang Wind Power Co., Ltd.	Power generation	KOREA	25%	638	613
Daeryun Power Co., Ltd.	Power generation	KOREA	20%	25,477	25,017
JinanJangsu Wind Power Co., Ltd.	Power generation	KOREA	25%	100	78
Changjuk Wind Power Co., Ltd.	Power generation	KOREA	30%	3,801	3,926
Commerce and industry energy Co., Ltd.	Power generation	KOREA	30%	8,500	7,066
KNH Solar Co., Ltd.	Power generation	KOREA	27%	1,296	1,089
SPC Power Corporation	Power generation	PHILIPPINES	38%	20,635	36,760
Gemeng International Energy Co., Ltd.	Power generation	CHINA	34%	413,153	549,730
PT. Cirebon Electric Power	Power generation	INDONESIA	28%	39,217	17,022
KNOC Nigerian East Oil Co., Ltd.(*3)	Resources development	NIGERIA	15%	12	
KNOC Nigerian West Oil Co., Ltd.(*3)	Resources development	NIGERIA	15%	12	
Dolphin Property Limited(*3)	Rental company	NIGERIA	15%	12	
E-Power S.A.	Operation of utility plant and sales of electricity	HAITI	30%	3,779	5,646
PT Wampu Electric Power	Power generation	INDONESIA	46%	18,935	15,644
PT. Bayan Resources TBK	Resources development	INDONESIA	20%	615,860	642,636
S-Power Co., Ltd.	Power generation	KOREA	40%	82,000	81,679
Pioneer Gas Power Limited(*7)	Power generation	INDIA	40%	39,899	37,875
Eurasia Energy Holdings	Power generation and resources development	RUSSIA	40%	461	
Xe-Pian Xe-Namnoy Power Co., Ltd.	Power generation	LAOS	25%	29	27
Busan Solar Co., Ltd.(*2)	Power generation	KOREA	20%	643	546
Hadong Mineral Fiber Co., Ltd.	Recycling fly ashes	KOREA	25%	50	5
Green Biomass Co., Ltd.	Power generation	KOREA	34%	714	637
Gumi-ochang Photovoltaic Power Co., Ltd.(*1)	Power generation	KOREA	10%	288	282
Chungbuk Photovoltaic Power Co., Ltd.(*1)	Power generation	KOREA	10%	166	159
Cheonan Photovoltaic Power Co., Ltd.(*1)	Power generation	KOREA	10%	122	109
PT. Mutiara Jawa	Manufacturing and operating floating coal terminal	INDONESIA	29%	2,978	2,624

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Investees	2012		Percentage of ownership	Acquisition cost	Book value
	Key operation activities	Location			
<b>&lt;Joint ventures&gt;</b>					
KEPCO-Uhde Inc.(*6)	Power generation	KOREA	66%	11,355	10,269
Eco Biomass Energy Sdn. Bhd.(*6)	Power generation	MALAYSIA	62%	9,661	
Datang Chaoyang Renewable Power Co., Ltd.	Power generation	CHINA	40%	27,660	28,705
Shuweiha Asia Power Investment B.V.	Holding company	NETHERLANDS	49%	398	
Shuweiha Asia Operation & Maintenance Company(*6)	Maintenance of utility plant	CAYMAN	55%	30	29
Waterbury Lake Uranium L.P.	Resources development	CANADA	40%	25,839	24,906
ASM-BG Investicii AD	Power generation	BULGARIA	50%	14,731	16,024
RES Technology AD	Power generation	BULGARIA	50%	14,698	14,637
KV Holdings, Inc.	Power generation	PHILIPPINES	40%	2,103	2,023
KEPCO SPC Power Corporation(*6)	Construction and operation of utility plant	PHILIPPINES	75%	94,579	121,737
Canada Korea Uranium Limited Partnership(*4)	Resources development	CANADA	13%	5,404	5,083
KEPCO Energy Resource Nigeria Limited	Holding company	NIGERIA	30%	8,463	5,663
Gansu Datang Yumen Wind Power Co., Ltd.	Power generation	CHINA	40%	16,621	20,381
Datang Chifeng Renewable Power Co., Ltd.	Power generation	CHINA	40%	121,928	156,449
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	Power generation	CHINA	40%	10,858	10,125
Rabigh Electricity Company	Construction of utility plant and sales of electricity	SAUDI ARABIA	40%	1,357	
Rabigh Operation & Maintenance Company	Maintenance of utility plant	SAUDI ARABIA	40%	70	814
Jamaica Public Service Company Limited	Power generation	JAMAICA	40%	301,910	293,007
KW Nuclear Components Co., Ltd.	R&D	KOREA	43%	833	1,222
Busan shinho Solar power Co., Ltd.	Power generation	KOREA	25%	2,100	2,056
STX Electric Power Co., Ltd.	Power generation	KOREA	49%	98,000	96,698
YEONGAM Wind Power Co., Ltd.	Power generation	KOREA	49%	11,584	11,563
Global Trade Of Power System Co., Ltd.	Exporting products and technology of small or medium sized business by proxy	KOREA	29%	290	213
Expressway Solar-light Power Generation Co., Ltd.	Power generation	KOREA	29%	3,132	3,132
Yeongam F1 Solar Power Plant	Power generation	KOREA	29%	1,740	1,673
KODE NOVUS 1 LLC.	Power generation	USA	50%	19,213	17,691
KODE NOVUS 2 LLC.	Power generation	USA	49%	12,498	11,550
Daejung Offshore Wind Power Co., Ltd.	Power generation	KOREA	50%	4,990	4,844
Arman Asia Electric Power Company(*6)	Power generation	JORDAN	60%	981	687
KEPCO-ALSTOM Power Electronics Systems, Inc.(*6)	R&D	KOREA	51%	5,629	5,629
Dongbu Power Dangjin Corporation	Power generation	KOREA	40%	40,000	40,000
Honam Wind Power Co., Ltd.	Power generation	KOREA	30%	1,783	1,783
				870,438	908,593
				2,699,149	4,890,933

(\*1) The Company can exercise significant influence by virtue of its contractual right to appoint directors to the board of directors of the entity, and by strict decision criteria of the Company's financial and operating policy of the board of directors.

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- (\*2) The Company can exercise significant influence by virtue of its contractual right to appoint a director to the board of directors of the entity.
- (\*3) The Company can exercise significant influence by virtue of its contractual right to appoint one out of four members of the steering committee of the entity. Moreover, the Company has significant financial transactions with the associate which can affect its influence on the entity.
- (\*4) The Company has joint control on the associates by virtue of its contractual right to appoint directors to the board of directors of the entity, and by strict decision criteria of the Company's financial and operating policy of the board of directors.
- (\*5) The Government regulates the Company's ability to make operating and financial decisions over the entity, as the Government requires maintaining arms-length transactions between KPX and the Company's other subsidiaries. The Company can exercise significant influence by its right to nominate directors to the board of directors of the entity.
- (\*6) According to the shareholder agreement, all critical financial and operating decisions must be agreed to by all ownership parties. For these reasons, the entities are classified as joint ventures.
- (\*7) As of reporting date, the reporting period end of all associates and joint ventures ends on December 31, except for Pioneer Gas Power Limited, whose reporting period ends on March 31.
- (\*8) As of December 31, 2012, 21% of ownership of Hyundai Energy Co., Ltd. is held by NH Power II Co., Ltd. and NH Bank. According to the shareholders agreement reached in March 2011, not only does the Company have a call option to acquire the investment in Hyundai Energy Co., Ltd. from NH Power II Co., Ltd. and NH Bank with a certain rate of return, NH Power II Co., Ltd. and NH Bank also have put options to dispose of their investment to the Company. In connection with this agreement, the Company applied the equity method on the investment in Hyundai Energy Co., Ltd. with 50% of ownership.

Investees	2013		Percentage of ownership	Acquisition cost	Book value
	Key operation activities	Location			
In millions of won					
<b>&lt;Associates&gt;</b>					
Daegu Green Power Co., Ltd.	Power generation	KOREA	48%	76,193	74,878
Korea Gas Corporation	Importing and wholesaling LNG	KOREA	20%	94,500	1,926,800
Korea Electric Power Industrial Development Co., Ltd.	Electricity metering	KOREA	29%	4,727	22,450
YTN Co., Ltd.	Broadcasting	KOREA	21%	59,000	38,426
Cheongna Energy Co., Ltd.	Generating and distributing vapor and hot/cold water	KOREA	44%	43,900	28,114
Gangwon Wind Power Co., Ltd.(*1)	Wind power generation	KOREA	15%	5,725	13,185
Hyundai Green Power Co., Ltd.	Power generation	KOREA	29%	88,885	110,157
Korea Power Exchange(*5)	Management of power market	KOREA	100%	127,839	189,544
AMEC Partners Korea(*2)	Resources development	KOREA	19%	707	189
Hyundai Energy Co., Ltd.(*8)	Power generation	KOREA	29%	71,070	43,386
Ecollite Co., Ltd.	Artificial light-weight aggregate	KOREA	36%	1,516	
Taebaek Wind Power Co., Ltd.	Power generation	KOREA	25%	3,810	5,553
Alternergy Philippine Investments Corporation	Power generation	PHILIPPINES	50%	3,881	1,500
Muju Wind Power Co., Ltd.	Power generation	KOREA	25%	2,850	2,707
Pyeongchang Wind Power Co., Ltd.	Power generation	KOREA	25%	638	600

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Daeryun Power Co., Ltd.	Power generation	KOREA	20%	25,477	24,599
JinanJangsu Wind Power Co., Ltd.	Power generation	KOREA	25%	100	77
Changjuk Wind Power Co., Ltd.	Power generation	KOREA	30%	3,801	6,344
KNH Solar Co., Ltd.	Power generation	KOREA	27%	1,296	1,372
SPC Power Corporation	Power generation	PHILIPPINES	38%	20,635	47,661
Gemeng International Energy Co., Ltd.	Power generation	CHINA	34%	413,153	608,674

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Investees	2013				
	Key operation activities	Location	Percentage of ownership	Acquisition cost In millions of won	Book value
PT. Cirebon Electric Power	Power generation	INDONESIA	28%	39,217	32,826
KNOC Nigerian East Oil Co., Ltd.(*3)	Resources development	NIGERIA	15%	12	
KNOC Nigerian West Oil Co., Ltd.(*3)	Resources development	NIGERIA	15%	12	
Dolphin Property Limited(*3)	Rental company	NIGERIA	15%	12	
E-Power S.A.	Operation of utility plant and sales of electricity	HAITI	30%	3,779	5,284
PT Wampu Electric Power	Power generation	INDONESIA	46%	18,935	15,121
PT. Bayan Resources TBK	Resources development	INDONESIA	20%	615,860	579,534
S-Power Co., Ltd.	Power generation	KOREA	40%	108,000	107,264
Pioneer Gas Power Limited(*7)	Power generation	INDIA	40%	48,709	43,666
Eurasia Energy Holdings	Power generation and resources development	RUSSIA	40%	461	
Xe-Pian Xe-Namnoy Power Co., Ltd.	Power generation	LAOS	25%	18,928	18,058
Busan Solar Co., Ltd.(*2)	Power generation	KOREA	20%	793	741
Hadong Mineral Fiber Co., Ltd.	Recycling fly ashes	KOREA	25%	50	3
Green Biomass Co., Ltd.	Power generation	KOREA	34%	714	171
Gumi-ochang Photovoltaic Power Co., Ltd.(*1)	Power generation	KOREA	10%	288	389
Chungbuk Photovoltaic Power Co., Ltd.(*1)	Power generation	KOREA	10%	166	184
Cheonan Photovoltaic Power Co., Ltd.(*1)	Power generation	KOREA	10%	122	148
PT. Mutiara Jawa	Manufacturing and operating floating coal terminal	INDONESIA	29%	2,978	1,666
Hyundai Asan Solar Power Co., Ltd.	Power generation	KOREA	10%	471	462
Heang Bok Do Si Photovoltaic Power Co., Ltd.	Power generation	KOREA	28%	92	91
Jeonnam Solar Co., Ltd.	Power generation	KOREA	10%	700	696
DS POWER Co., Ltd.	Power generation	KOREA	11%	17,900	17,900
D Solarenergy Co., Ltd(*1)	Power generation	KOREA	10%	400	364
Dongducheon Dream Power Co., Ltd.	Power generation	KOREA	44%	140,079	134,398
KS Solar Corp. Ltd.(*2)	Power generation	KOREA	19%	637	537
KOSCON Photovoltaic Co., Ltd(*1)	Power generation	KOREA	19%	245	315
Yeongwol Energy Station Co., Ltd(*1)	Power generation	KOREA	13%	1,862	908
Yeonan Photovoltaic Co., Ltd(*1)	Power generation	KOREA	19%	157	123
Q1 Solar Co., Ltd	Power generation	KOREA	28%	1,005	983
Jimbhuvish Power Generation(*1)	Power generation	INDIA	5%	9,000	8,495
Best Solar Energy Co., Ltd.	Power generation	KOREA	23%	1,242	898
Seokcheon Solar Power Co., Ltd.(*1)	Power generation	KOREA	10%	970	1,046
SE Green Energy Co., Ltd.	Power generation support	KOREA	48%	3,821	3,745
Daegu Photovoltaic Co., Ltd.	Power generation	KOREA	29%	1,230	1,334
Jeongam Wind Power Co., Ltd.	Power generation	KOREA	40%	800	324
Korea Power Engineering Service Co., Ltd.	Construction and service	KOREA	29%	290	585

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Investees	Key operation activities	Location	Percentage of ownership	2013	
				Acquisition cost In millions of won	Book value
Golden Route J Solar Power Co., Ltd.(*1)	Photovoltaic power generation	KOREA	10%	82	99
				2,089,722	4,124,574
<b>&lt;Joint ventures&gt;</b>					
KEPCO-Uhde Inc.(*6)	Power generation	KOREA	66%	11,355	9,537
Eco Biomass Energy Sdn. Bhd.(*6)	Power generation	MALAYSIA	62%	9,661	
Datang Chaoyang Renewable Power Co., Ltd.	Power generation	CHINA	40%	27,660	28,161
Shuweihat Asia Power Investment B.V.	Holding company	NETHERLANDS	49%	507	64
Shuweihat Asia Operation & Maintenance Company(*6)	Maintenance of utility plant	CAYMAN	55%	30	29
Waterbury Lake Uranium L.P.	Power generation	CANADA	40%	25,839	23,042
ASM-BG Investicii AD	Power generation	BULGARIA	50%	16,101	20,088
RES Technology AD	Power generation	BULGARIA	50%	15,595	16,045
KV Holdings, Inc.	Power generation	PHILIPPINES	40%	2,103	1,842
KEPCO SPC Power Corporation(*6)	Construction and operation of utility plant	PHILIPPINES	75%	94,579	143,294
Canada Korea Uranium Limited Partnership(*4)	Resources development	CANADA	13%	5,404	
KEPCO Energy Resource Nigeria Limited	Holding company	NIGERIA	30%	8,463	2,202
Gansu Datang Yumen Wind Power Co., Ltd.	Power generation	CHINA	40%	16,621	19,237
Datang Chifeng Renewable Power Co., Ltd.	Power generation	CHINA	40%	121,928	166,330
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	Power generation	CHINA	40%	10,858	10,604
Rabigh Electricity Company	Sales of electricity	SAUDI ARABIA	40%	109,743	
Rabigh Operation & Maintenance Company	Maintenance of utility plant	SAUDI ARABIA	40%	70	4,082
Jamaica Public Service Company Limited	Power generation	JAMAICA	40%	301,910	268,022
KW Nuclear Components Co., Ltd.	R&D	KOREA	45%	833	2,476
Busan shinho Solar power Co., Ltd.	Power generation	KOREA	25%	2,100	2,871
STX Electric Power Co., Ltd.	Power generation	KOREA	49%	176,400	173,915
YEONGAM Wind Power Co., Ltd.	Power generation	KOREA	49%	11,584	11,424
Global Trade Of Power System Co., Ltd.	Exporting products and technology of small or medium business by proxy	KOREA	29%	290	249
Expressway Solar-light Power Generation Co., Ltd	Power generation	KOREA	29%	3,132	1,863
KODE NOVUS 1 LLC.	Power generation	USA	50%	19,213	14,237
KODE NOVUS 2 LLC.	Power generation	USA	49%	12,498	9,510
Daejung Offshore Wind Power Co., Ltd.	Power generation	KOREA	50%	4,990	4,135
Arman Asia Electric Power Company(*6)	Power generation	JORDAN	60%	104,721	111,315

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Investees	2013		Percentage of ownership	Acquisition cost In millions of won	Book value
	Key operation activities	Location			
KEPCO-ALSTOM Power Electronics Systems, Inc.(*6)	R&D	KOREA	51%	5,629	4,758
Dongbu Power Dangjin Corporation	Power generation	KOREA	40%	40,000	39,102
Honam Wind Power Co., Ltd.	Power generation	KOREA	46%	3,600	1,933
Nepal Water & Energy Development Company Pty Ltd.	Power generation	NEPAL	44%	10,550	10,409
Kelar S.A(*6)	Power generation	CHILE	65%	4,180	4,180
PT. Tanjung Power Indonesia	Power generation	INDONESIA	35%	388	361
Incheon New Power Co., Ltd.	Power generation	KOREA	29%	461	449
Seokmun Energy Co., Ltd.	Integrated energy business	KOREA	34%	680	415
				1,179,676	1,106,181
				3,269,398	5,230,755

- (\*1) The Company can exercise significant influence by virtue of its contractual right to appoint directors to the board of directors of the entity, and by strict decision criteria of the Company's financial and operating policy of the board of directors.
- (\*2) The Company can exercise significant influence by virtue of its contractual right to appoint a director to the board of directors of the entity.
- (\*3) The Company can exercise significant influence by virtue of its contractual right to appoint one out of four members of the steering committee of the entity. Moreover, the Company has significant financial transactions with the associate which can affect its influence on the entity.
- (\*4) The Company has joint control on the associates by virtue of its contractual right to appoint directors to the board of directors of the entity, and by strict decision criteria of the Company's financial and operating policy of the board of directors.
- (\*5) The Government regulates the Company's ability to make operating and financial decisions over the entity, as the Government requires maintaining arms-length transactions between KPX and the Company's other subsidiaries. The Company can exercise significant influence by its right to nominate directors to the board of directors of the entity.
- (\*6) According to the shareholder agreement, all critical financial and operating decisions must be agreed to by all ownership parties. For these reasons, the entities are classified as joint ventures.
- (\*7) As of reporting date, the reporting period end of all associates and joint ventures ends on December 31, except for Pioneer Gas Power Limited, whose reporting period ends on March 31.
- (\*8) As of December 31, 2013, 16% of ownership of Hyundai Energy Co., Ltd. is held by NH Power II Co., Ltd. and NH Bank. According to the shareholders' agreement reached on March 2011, not only does the Company have a call option to acquire the investment in Hyundai Energy Co., Ltd. from NH Power II Co., Ltd. and NH Bank with a certain rate of return, NH Power II Co., Ltd. and NH Bank also have put options to dispose of their investment to the Company. In connection with this agreement, the Company applied the equity method on the



investment in Hyundai Energy Co., Ltd. with 45% of ownership.

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- (2) The fair value of associates which are actively traded on the open market and have a readily available market value as of December 31, 2012 and 2013 are as follows:

Investees	2012	2013
	In millions of won	
<b>&lt;Associates&gt;</b>		
Korea Electric Power Industrial Development Co., Ltd.	49,066	39,423
Korea Gas Corporation(*)	1,419,390	1,258,740
YTN Co., Ltd.	31,770	25,110
PT. Bayan Resources TBK	625,864	489,600

- (\*) The carrying amount of Korea Gas Corporation ( KOGAS ) is 1,926,800 million as of December 31, 2013 and management has determined that there is objective evidence of impairment. As a result of the impairment test, the Company has not recognized any impairment loss as the value in use of 2,867,400 million is greater than the carrying amount. The recoverable amount of KOGAS based on value in use is calculated by considering the long-term natural gas supply and demand programs of future cash flow approved by Ministry of Trade, Industry & Energy and the discount rate of 4.20%.

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(3) Changes in investments in associates and joint ventures for the years ended December 31, 2012 and 2013 are as follows:

Investees	Beginning balance	Acquisition	Disposal	2012			Ending balance
				Dividends received	Share of income (loss)	Other comprehensive income (loss)	
In millions of won							
<b>&lt;Associates&gt;</b>							
Daegu Green Power Co., Ltd.	11,621	45,060			(316)	(343)	56,007
Korea Gas Corporation	1,968,886			(14,364)	89,689	5,697	2,049,340
Korea Electric Power Industrial Development Co., Ltd.	20,968			(2,467)	788	(353)	18,936
YTN Co., Ltd.	36,977			(225)	1,454	(10)	37,876
Cheongna Energy Co., Ltd.	24,576	13,900			(5,097)		33,379
Gang won Wind Power Co., Ltd.	10,112			(852)	2,682	171	12,113
Hyundai Green Power Co., Ltd.	84,109	24,650		(11,014)	12,601	42	110,346
Korea Power Exchange	163,041				13,223		176,264
AMEC Partners Korea	176				(35)		141
Hyundai Energy Co., Ltd.	53,281				(3,758)	(60)	49,463
Ecolite Co., Ltd.	1,219				(283)	330	1,266
Taebaek Wind Power Co., Ltd.	3,680				48		3,728
Alternergy Philippine Investments Corporation	1,078	1,052			(498)	(32)	1,600
Muju Wind Power Co., Ltd.	2,735				(24)		2,711
Pyeongchang Wind Power Co., Ltd.	627				(14)		613
Daeryun Power Co., Ltd.	20,227	4,687			127	(24)	25,017
JinanJangsu Wind Power Co., Ltd.	78						78
Changjuk Wind Power Co., Ltd.	3,749				177		3,926
Commerce and industry energy Co., Ltd.	8,497				(1,431)		7,066
Gyeongju Wind Power Co., Ltd.	1,430					(1,430)	
KNH Solar Co., Ltd.	1,295				(206)		1,089
SPC Power Corporation	37,660			(1,512)	1,035	(617)	36,760
Gemeng International Energy Co., Ltd.	555,104				27,918	(33,292)	549,730
PT. Cirebon Electric Power	15,514				4,252	(1,502)	17,022
KNOC Nigerian East Oil Co., Ltd.					1,286	650	(1,936)
KNOC Nigerian West Oil Co., Ltd.					1,915	565	(2,480)
Dolphin Property Limited					64	17	(81)
E-Power S.A	3,967			(96)	2,083	(308)	5,646
PT Wampu Electric Power	16,453	1,557			(1,173)	(1,193)	15,644
PT. Bayan Resources TBK	671,097			(15,594)	(450)	(11,946)	642,636
S-Power Co., Ltd.		82,000			(57)	(260)	81,679
Pioneer Gas Power Limited		39,899				(2,024)	37,875
Eurasia Energy Holdings		461			(461)		
Xe-Pian Xe-Namnoy Power Co., Ltd.		29				(2)	27
Busan Solar Co., Ltd.		643			(97)		546
Hadong Mineral Fiber Co., Ltd.		50			(45)		5
Green Biomass Co., Ltd.		714			(77)		637
Gumi-ochang Photovoltaic Power Co., Ltd.		288			(6)		282
Chungbuk Photovoltaic Power Co., Ltd		166			(7)		159
Cheonan Photovoltaic Power Co., Ltd		122			(13)		109
PT. Mutiara Jawa		2,978			(110)	(244)	2,624
	3,718,157	218,256		(46,124)	145,186	(43,132)	3,982,340

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Investees	2012							Ending balance
	Beginning balance	Acquisition	Disposal	Dividends received	Share of income (loss)	Other comprehensive income (loss)	Others	
	In millions of won							
<b>&lt;Joint ventures&gt;</b>								
KEPCO-Uhde Inc.	11,172				(894)		(9)	10,269
Eco Biomass Energy Sdn. Bhd.	9,783				(2,064)	1,263	(8,982)	
Datang Chaoyang Renewable Power Co., Ltd.	29,971			(2,479)	1,905	(1,704)	1,012	28,705
Shuweiha Asia Power Investment B.V.		114			(98)	(16)		
Shuweiha Asia Operation & Maintenance Company					30	(1)		29
Waterbury Lake Uranium L.P.	21,691	4,053				(667)	(171)	24,906
ASM-BG Investicii AD	14,921				2,765	(1,662)		16,024
RES Technology AD	14,563				1,298	(1,224)		14,637
KV Holdings, Inc.	2,044			(89)	79	(11)		2,023
Kings Plaza JV, LLC	8,651		(9,150)		499			
KEPCO SPC Power Corporation	98,943				24,591	(1,875)	78	121,737
Canada Korea Uranium Limited Partnership	5,348				(12)		(253)	5,083
KEPCO Energy Resource Nigeria Limited	6,056				(186)	(207)		5,663
Gansu Datang Yumen Wind Power Co., Ltd.	22,368				(715)	(1,272)		20,381
Datang Chifeng Renewable Power Co., Ltd.	183,455			(22,561)	3,077	(10,225)	2,703	156,449
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	6,931				634	(1,488)	4,048	10,125
Rabigh Electricity Company					6,143	(32,009)	25,866	
Rabigh Operation & Maintenance Company	137				722	(45)		814
Jamaica Public Service Company Limited	311,750			(2,216)	3,680	46	(20,253)	293,007
KW Nuclear Components Co., Ltd.					1,222			1,222
Busan shinho Solar power Co., Ltd.	2	2,098			(44)			2,056
STX Electric Power Co., Ltd.	19,415	78,400			(741)	(376)		96,698
YEONGAM Wind Power Co., Ltd.		11,583			(20)			11,563
Global Trade Of Power System Co., Ltd		290			(77)			213
Expressway Solar-light Power Generation Co., Ltd		3,132						3,132
Yeongam F1 Solar Power Plant		1,740			(67)			1,673
KODE NOVUS 1 LLC.		19,213			(485)	(1,037)		17,691
KODE NOVUS 2 LLC.		12,498			(189)	(759)		11,550
Daejung Offshore Wind Power Co., Ltd.		4,990			(146)			4,844
Arman Asia Electric Power Company		981			(232)	(62)		687
KEPCO-ALSTOM Power Electronics Systems, Inc.		5,629						5,629
Dongbu Power Dangjin Corporation		40,000						40,000
Honam Wind Power Co., Ltd.		1,783						1,783
	767,201	186,504	(9,150)	(27,345)	40,675	(53,331)	4,039	908,593
	4,485,358	404,760	(9,150)	(73,469)	185,859	(96,463)	(5,962)	4,890,933

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(3) Changes in investments in associates and joint ventures for the years ended December 31, 2012 and 2013 are as follows:

Investees	Beginning balance	Acquisition	Disposal	2013			Ending balance	
				Dividends received	Share of income (loss)	Other comprehensive income (loss)		
In millions of won								
<b>&lt;Associates&gt;</b>								
Daegu Green Power Co., Ltd.	56,007	18,833			160	(91)	(31)	74,878
Korea Gas Corporation	2,049,340			(30,996)	(26,848)	1,541	(66,237)	1,926,800
Korea Electric Power Industrial Development Co., Ltd.	18,936			(255)	3,477		292	22,450
YTN Co., Ltd.	37,876			(90)	472	40	128	38,426
Cheongna Energy Co., Ltd.	33,379				(5,217)		(48)	28,114
Gangwon Wind Power Co., Ltd.	12,113			(1,988)	3,005	55		13,185
Hyundai Green Power Co., Ltd.	110,346			(8,107)	8,038		(120)	110,157
Korea Power Exchange	176,264				10,283		2,997	189,544
AMEC Partners Korea	141				48			189
Hyundai Energy Co., Ltd.	49,463	13,920			(19,834)		(163)	43,386
Ecolite Co., Ltd.(*1)	1,266	1,349			(896)		(1,719)	
Taebaek Wind Power Co., Ltd.	3,728				1,825			5,553
Alternergy Philippine Investments Corporation	1,600	569			(508)	(161)		1,500
Muju Wind Power Co., Ltd.	2,711				(4)			2,707
Pyeongchang Wind Power Co., Ltd.	613				(13)			600
Daeryun Power Co., Ltd.	25,017				(270)	(19)	(129)	24,599
JinanJangsu Wind Power Co., Ltd.	78				(1)			77
Changjuk Wind Power Co., Ltd.	3,926				2,418			6,344
Commerce and industry energy Co., Ltd	7,066				(1,237)		(5,829)	
KNH Solar Co., Ltd.	1,089				290		(7)	1,372
SPC Power Corporation	36,760				15,599	(4,501)	(197)	47,661
Gemeng International Energy Co., Ltd.	549,730				53,120	5,824		608,674
PT. Cirebon Electric Power	17,022				10,300	6,361	(857)	32,826
KNOC Nigerian East Oil Co., Ltd.					(348)	127	221	
KNOC Nigerian West Oil Co., Ltd.					(933)	113	820	
Dolphin Property Limited					344	(3)	(341)	
E-Power S.A.	5,646			(1,878)	(359)	(28)	1,903	5,284
PT Wampu Electric Power	15,644				(303)		(220)	15,121
PT. Bayan Resources TBK(*2)	642,636				(54,399)	(8,703)		579,534
S-Power Co., Ltd.	81,679	26,000			(158)	(125)	(132)	107,264
Pioneer Gas Power Limited	37,875	8,811			377	(3,316)	(81)	43,666
Eurasia Energy Holdings					(171)	57	114	
Xe-Pian Xe-Namnoy Power Co., Ltd	27	18,898			(363)	(504)		18,058
Busan Solar Co., Ltd.	546	150			45			741
Hadong Mineral Fiber Co., Ltd.	5				(1)		(1)	3
Green Biomass Co., Ltd.	637				(466)			171
Gumi-ochang Photovoltaic Power Co., Ltd.	282				107			389
Chungbuk Photovoltaic Power Co., Ltd.	159				25			184
Cheonan Photovoltaic Power Co., Ltd.	109				39			148
PT. Mutiara Jawai	2,624				(573)	(456)	71	1,666
Hyundai Asan Solar Power Co., Ltd.		471			(9)			462
Heang Bok Do Si Photovoltaic Power Co., Ltd.		92			1	(2)		91
Jeonnam Solar Co., Ltd.		700				(4)		696
DS POWER Co., Ltd.		17,900						17,900
D Solarenergy Co., Ltd.		400			(36)			364
Dongducheon Dream Power Co., Ltd.					(5,677)	52	140,023	134,398

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Investees	2013							Ending balance
	Beginning balance	Acquisition	Disposal	Dividends received	Share of income (loss)	Other comprehensive income (loss)	Others	
					In millions of won			
KS Solar Corp. Ltd.		637			(100)			537
KOSCON Photovoltaic Co., Ltd.		245			70			315
Yeongwol Energy Station Co., Ltd.		1,862			(926)	(28)		908
Yeonan Photovoltaic Co., Ltd.		157			(34)			123
Q1 Solar Co., Ltd.		1,005			(10)		(12)	983
Jinbhuvish Power Generation		9,000			(145)	(360)		8,495
Best Solar Energy Co., Ltd.		1,242			(344)			898
Seokcheon Solar Power Co., Ltd.		970			76			1,046
SE Green Energy Co., Ltd.		3,821			(57)	(19)		3,745
Daegu Photovoltaic Co., Ltd.		1,230			111	(7)		1,334
Jeongam Wind Power Co., Ltd.		800			(476)			324
Korea Power Engineering Service Co., Ltd.		290			295			585
Golden Route J Solar Power Co., Ltd.		82			17			99
	3,982,340	129,434		(43,314)	(10,174)	(4,157)	70,445	4,124,574
<b>&lt;Joint ventures&gt;</b>								
KEPCO-Uhde Inc.	10,269				(751)		19	9,537
Eco Biomass Energy Sdn. Bhd.								
Datang Chaoyang Renewable Power Co., Ltd.	28,705			(1,300)	549	395	(188)	28,161
Shuweiha Asia Power Investment B.V.		109			(42)	(7)	4	64
Shuweiha Asia Operation & Maintenance Company	29							29
Waterbury Lake Uranium L.P.	24,906					(1,374)	(490)	23,042
ASM-BG Investicii AD	16,024	1,371			2,301	392		20,088
RES Technology AD	14,637	897			157	354		16,045
KV Holdings, Inc.	2,023			(319)	307	(169)		1,842
KEPCO SPC Power Corporation	121,737			(2,304)	20,196	3,665		143,294
Canada Korea Uranium Limited Partnership(*3)	5,083						(5,083)	
KEPCO Energy Resource Nigeria Limited	5,663				(3,386)	(75)		2,202
Gansu Datang Yumen Wind Power Co., Ltd.	20,381				(1,365)	221		19,237
Datang Chifeng Renewable Power Co., Ltd.	156,449			(3,545)	11,837	1,838	(249)	166,330
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	10,125			(506)	893	155	(63)	10,604
Rabigh Electricity Company(*4)		108,385			15,539	41,458	(165,382)	
Rabigh Operation & Maintenance Company	814			(1,831)	5,188	(89)		4,082
Jamaica Public Service Company Limited(*5)	293,007				(2,242)	(3,544)	(19,199)	268,022
KW Nuclear Components Co., Ltd.	1,222			(457)	1,711			2,476
Busan shinho Solar power Co., Ltd.	2,056				815			2,871
STX Electric Power Co., Ltd.	96,698	78,400			(806)	(377)		173,915
YEONGAM Wind Power Co., Ltd.	11,563				(76)		(63)	11,424
Global Trade Of Power System Co., Ltd.	213				36			249
Expressway Solar-light Power Generation Co., Ltd.	3,132				(1,257)	(12)		1,863
Yeongam F1 Solar Power Plant	1,673		(2,002)		329			

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Investees	2013						
	Beginning balance	Acquisition	Disposal	Dividends received	Share of income (loss)	Other comprehensive income (loss)	Ending balance
	In millions of won						
KODE NOVUS 1 LLC.	17,691				(3,661)	(64)	14,237
KODE NOVUS 2 LLC.	11,550				(1,940)	(100)	9,510
Daejung Offshore Wind Power Co., Ltd.	4,844				(709)		4,135
Arman Asia Electric Power Company	687	103,740			(1,501)	10,685	111,315
KEPCO-ALSTOM Power Electronics Systems, Inc.	5,629				(871)		4,758
Dongbu Power Dangjin Corporation	40,000				(980)	82	39,102
Honam Wind Power Co., Ltd.	1,783	1,817			(395)	(1,272)	1,933
Nepal Water & Energy Development Company Pty Ltd.					(10)	(131)	10,409
Kelar S.A		4,180					4,180
PT. Tanjung Power Indonesia		388			(9)	(18)	361
Incheon New Power Co., Ltd.		461			(4)	(23)	449
Seokmun Energy Co., Ltd.		680			(265)		415
	908,593	300,428	(2,002)	(10,262)	39,588	51,908	1,106,181
	4,890,933	429,862	(2,002)	(53,576)	29,414	47,751	5,230,755

(\*1) The Company recognized the difference between the carrying amount and the recoverable amount of 1,719 million as impairment losses on investments in associates and joint ventures due to discontinued operation during the year ended December 31, 2013.

(\*2) In accordance with the interpretation, the Company has applied it prospectively beginning January 1, 2013. However PT Bayan Resources TBK (PT Bayan), one of the equity method investments of the Company, has retrospectively applied the interpretation and has restated its comparative financial statements to adjust the stripping activity costs that do not meet the criteria for asset recognition in the interpretation. The Company reflected this adjustment of 31,529 million due to the change in accounting policy as a loss on its equity method investment during the year ended December 31, 2013.

(\*3) Canada Korea Uranium Limited Partnership could not find a mining area in which the economic feasibility was proven and seeks an exit strategy. As a result, the Company recognizes impairment losses on investments in associates and joint ventures of 4,680 million as profit or loss during the year ended December 31, 2013.

(\*4) During the year ended December 31, 2013, partial of the loans to Rabigh Electricity Company was converted to equity, causing the investment to increase by 108,385 million.

(\*5) It has been determined that there is objective evidence of impairment as a result of one or more events that a financial institution granted Jamaica Public Service Company Limited ( JPS ) a concession that the financial institution would not otherwise consider. As of December 31, 2013, as a result of the impairment test, the recoverable amount of JPS is less than its carrying amount and an impairment loss of 19,199 million is recognized as profit or loss. The recoverable amount of JPS is based on value in use calculated based on the most recent financial budget of future cash flow for a period of 9 years approved by management and the discount rate used to calculate the value in use is 10.27%.

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(4) Summary of financial information of associates and joint ventures as of and for the years ended December 31, 2012 and 2013 are as follows:

Investees	2012			Profit (loss) for the period
	Total assets	Total liabilities	Sales	
In millions of won				
<b>&lt;Associates&gt;</b>				
Daegu Green Power Co., Ltd.	148,814	31,645	5	(707)
Korea Gas Corporation	40,631,086	32,252,753	35,714,565	366,675
Korea Electric Power Industrial Development Co., Ltd.	125,614	60,319	250,183	1,822
YTN Co., Ltd.	345,862	169,119	124,276	5,735
Cheongna Energy Co., Ltd.	446,396	376,358	31,125	(11,556)
Gangwon Wind Power Co., Ltd.	145,628	65,203	34,342	18,770
Hyundai Green Power Co., Ltd.	952,240	572,151	283,539	43,555
Korea Power Exchange	189,548	13,284	82,667	14,308
AMEC Partners Korea	1,119	375	1,045	(181)
Hyundai Energy Co., Ltd.	201,781	92,109		
Ecollite Co., Ltd.	5,283	880		(878)
Taebaek Wind Power Co., Ltd.	51,901	36,988	3,849	194
Alternergy Philippine Investments Corporation	3,207	8		(899)
Muju Wind Power Co., Ltd.	10,843			(96)
Pyeongchang Wind Power Co., Ltd.	2,455	1		(53)
Daeryun Power Co., Ltd.	366,059	240,264		(559)
JinanJangsu Wind Power Co., Ltd.	310			
Changjuk Wind Power Co., Ltd.	40,922	27,835	1,749	591
Commerce and industry energy Co., Ltd.	101,001	77,685	14,075	(4,083)
KNH Solar Co., Ltd.	30,665	26,657	1,385	(764)
SPC Power Corporation	104,886	8,150	11,851	6,131
Gemeng International Energy Co., Ltd.	5,234,058	3,617,205	1,575,590	75,650
PT. Cirebon Electric Power	1,009,607	947,711	159,655	15,462
KNOC Nigerian East Oil Co., Ltd.	239,810	291,330		(7,636)
KNOC Nigerian West Oil Co., Ltd.	145,322	187,148		(6,704)
Dolphin Property Limited	6,264	9,415	506	(101)
E-Power S.A.	73,829	58,312	60,416	6,931
PT Wampu Electric Power	80,850	46,842		(2,549)
PT. Bayan Resources TBK(*)	1,789,276	1,233,329	1,645,400	76,426
S-Power Co., Ltd.	205,853	1,985		(142)
Pioneer Gas Power Limited	65,000	16,371		
Eurasia Energy Holdings	3,421	3,562		(1,275)
Xe-Pian Xe-Namnoy Power Co., Ltd.	13,539	13,432		
Busan Solar Co., Ltd.	12,991	10,233	444	(492)
Hadong Mineral Fiber Co., Ltd.	19			(181)
Green Biomass Co., Ltd.	8,034	6,160		(226)
Gumi-ochang Photovoltaic Power Co., Ltd.	20,136	17,316	1,314	(60)
Chungbuk Photovoltaic Power Co., Ltd.	8,599	7,014	302	(77)
Cheonan Photovoltaic Power Co., Ltd.	6,252	5,154	173	(121)
PT. Mutiara Jawa	9,068	16		(380)
<b>&lt;Joint ventures&gt;</b>				
KEPCO-Uhde Inc.	16,063	504		(1,354)
Eco Biomass Energy Sdn. Bhd.	17,494	3,888		
Datang Chaoyang Renewable Power Co., Ltd.	195,746	123,983	19,117	5,179
Shuweiht Asia Power Investment B.V.	65	65		(189)



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Investees	2012			Profit (loss) for the period
	Total assets	Total liabilities	Sales	
	In millions of won			
Shuweiha Asia Operation & Maintenance Company	70	17		(45)
Waterbury Lake Uranium L.P.	62,885	621		
ASM-BG Investicii AD	99,485	67,437	15,453	3,551
RES Technology AD	98,036	68,762	9,428	(704)
KV Holdings, Inc.	5,057			198
KEPCO SPC Power Corporation	527,718	333,972	159,412	33,100
Canada Korea Uranium Limited Partnership	40,866	41		(10)
KEPCO Energy Resource Nigeria Limited	24,732	5,855		(898)
Gansu Datang Yumen Wind Power Co., Ltd.	125,198	74,422	9,619	(1,789)
Datang Chifeng Renewable Power Co., Ltd.	945,001	553,772	103,162	10,445
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	70,554	45,241	4,046	1,586
Rabigh Electricity Company	2,383,131	2,579,352	6,479	44,518
Rabigh Operation & Maintenance Company	4,350	2,315	9,002	1,810
Jamaica Public Service Company Limited	1,167,350	761,650	1,286,441	19,694
KW Nuclear Components Co., Ltd.	25,540	22,824	8,990	3,560
Busan shinho Solar power Co., Ltd.	35,324	27,140		(176)
STX Electric Power Co., Ltd.	203,754	6,411		(1,490)
YEONGAM Wind Power Co., Ltd.	23,470			(58)
Global Trade Of Power System Co., Ltd.	754	20		(266)
Expressway Solar-light Power Generation Co., Ltd.	12,451	1,650		1
Yeongam F1 Solar Power Plant	55,011	49,241		(230)
KODE NOVUS 1 LLC.	122,061	95,603	166	(1,222)
KODE NOVUS 2 LLC.	87,303	63,731		(387)
Daejung Offshore Wind Power Co., Ltd.	9,750	42		(292)
Arman Asia Electric Power Company	55,119	53,973		(386)
KEPCO-ALSTOM Power Electronics Systems, Inc.	11,473	435		
Dongbu Power Dangjin Corporation	94,967	532		(3,942)
Honam Wind Power Co., Ltd.	9,112	3,243		(72)

(\*) The associates have restated the comparative financial statement as the criteria for asset recognition has changed for the current year.

Investees	2013			Profit (loss) for the period
	Total assets	Total liabilities	Sales	
	In millions of won			
<b>&lt;Associates&gt;</b>				
Daegu Green Power Co., Ltd.	461,503	305,157	295	(52)
Korea Gas Corporation	43,666,375	34,733,597	37,458,950	(200,707)
Korea Electric Power Industrial Development Co., Ltd.	139,764	62,350	289,085	12,658
YTN Co., Ltd.	410,384	230,977	120,124	3,090
Cheongna Energy Co., Ltd.	429,095	370,940	44,455	(11,278)
Gangwon Wind Power Co., Ltd.	141,572	54,000	38,973	20,035
Hyundai Green Power Co., Ltd.	1,217,193	837,339	339,567	29,580
Korea Power Exchange	214,012	24,469	84,257	13,592
AMEC Partners Korea	1,594	600	1,650	251
Hyundai Energy Co., Ltd.	548,467	449,949	33,010	(41,604)

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Investees	2013			Profit (loss) for the period
	Total assets	Total liabilities	Sales	
	In millions of won			
Ecollite Co., Ltd.	5,085	2,005		(2,663)
Taebaek Wind Power Co., Ltd.	58,705	36,495	11,595	6,986
Alternergy Philippine Investments Corporation	3,088	89		(664)
Muju Wind Power Co., Ltd.	10,830			(13)
Pyeongchang Wind Power Co., Ltd.	2,400	1		(55)
Daeryun Power Co., Ltd.	608,267	484,032		(1,321)
JinanJangsu Wind Power Co., Ltd.	310			(1)
Changjuk Wind Power Co., Ltd.	51,653	30,506	11,818	7,635
KNH Solar Co., Ltd.	29,530	24,449	4,940	1,073
SPC Power Corporation	140,236	15,138	53,862	29,730
Gemeng International Energy Co., Ltd.	5,758,480	3,968,262	1,642,121	102,631
PT. Cirebon Electric Power	1,004,891	885,522	300,011	37,466
KNOC Nigerian East Oil Co., Ltd.	237,211	290,240		(7,445)
KNOC Nigerian West Oil Co., Ltd.	143,874	191,302		(5,363)
Dolphin Property Limited	6,173	7,053	558	(159)
E-Power S.A.	66,262	51,951	35,601	5,218
PT Wampu Electric Power	122,733	89,862	27,048	(659)
PT. Bayan Resources TBK	1,525,745	1,194,968	1,256,526	(19,401)
S-Power Co., Ltd.	614,591	346,429		(388)
Pioneer Gas Power Limited	199,974	135,845	135	65
Eurasia Energy Holdings	540	963	3,414	(297)
Xe-Pian Xe-Namnoy Power Co., Ltd.	127,858	75,138	70	(1,239)
Busan Solar Co., Ltd.	25,244	21,501	2,666	256
Hadong Mineral Fiber Co., Ltd.	12			(4)
Green Biomass Co., Ltd.	6,962	6,458		(1,298)
Gumi-ochang Photovoltaic Power Co., Ltd.	20,091	16,197	3,885	1,068
Chungbuk Photovoltaic Power Co., Ltd.	7,553	5,709	1,133	20
Cheonan Photovoltaic Power Co., Ltd.	6,032	4,554	1,024	228
PT. Mutiara Jawa	13,939	8,435		(1,987)
Hyundai Asan Solar Power Co., Ltd.	26,298	22,169		(90)
Heang Bok Do Si Photovoltaic Power Co., Ltd.	324			
Jeonnam Solar Co., Ltd.	7,591	632		(2)
DS POWER Co., Ltd.	184,783	61,135	6,831	(352)
D Solarenergy Co., Ltd.	29,537	25,909	29	(361)
Dongducheon Dream Power Co., Ltd.	1,159,917	845,337		(9,713)
KS Solar Corp. Ltd.	22,433	19,756	188	(524)
KOSCON Photovoltaic Co., Ltd.	13,213	11,556	1,411	367
Yeongwol Energy Station Co., Ltd.	89,122	82,292		(6,747)
Yeonan Photovoltaic Co., Ltd.	8,111	7,463	411	(178)
Q1 Solar Co., Ltd.	25,771	22,259	1,906	(36)
Jinbhuvish Power Generation	63,830	4,798		
Best Solar Energy Co., Ltd.	25,490	21,583	86	(1,495)
Seokcheon Solar Power Co., Ltd.	14,602	3,847	1,873	786
SE Green Energy Co., Ltd.	8,148	307		(119)
Daegu Photovoltaic Co., Ltd.	22,580	17,980	1,829	439
Jeongam Wind Power Co., Ltd.	855	44		(1,189)
Korea Power Engineering Service Co., Ltd.	2,123	107	4,658	1,016
Golden Route J Solar Power Co., Ltd.	5,623	4,637	711	171
<b>&lt;Joint ventures&gt;</b>				
KEPCO-Uhde Inc.	16,136	1,686		(1,137)
Eco Biomass Energy Sdn. Bhd.				
Datang Chaoyang Renewable Power Co., Ltd.	168,058	97,656	21,013	2,392



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Investees	2013			Profit (loss) for the period
	Total assets	Total liabilities	Sales	
	In millions of won			
Shuweiha Asia Power Investment B.V.	152	23		(70)
Shuweiha Asia Operation & Maintenance Company	181	128		
Waterbury Lake Uranium L.P.	57,600	131		
ASM-BG Investicii AD	108,869	68,692	15,364	5,249
RES Technology AD	100,140	68,050	10,110	699
KV Holdings, Inc.	4,606			768
KEPCO SPC Power Corporation	499,241	308,691	170,681	26,856
Canada Korea Uranium Limited Partnership	41,636	42		
KEPCO Energy Resource Nigeria Limited	416,632	409,294		(11,328)
Gansu Datang Yumen Wind Power Co., Ltd.	113,565	65,472	10,397	(3,245)
Datang Chifeng Renewable Power Co., Ltd.	932,146	516,236	115,588	26,302
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	71,338	44,827	9,755	2,316
Rabigh Electricity Company	2,684,208	2,486,086	237,775	34,116
Rabigh Operation & Maintenance Company	17,857	7,651	25,636	13,243
Jamaica Public Service Company Limited	1,270,886	762,970	1,194,263	(784)
KW Nuclear Components Co., Ltd.	24,401	18,898	9,785	3,551
Busan shinho Solar power Co., Ltd.	56,191	44,746	8,944	3,025
STX Electric Power Co., Ltd.	367,307	12,378		(1,646)
YEONGAM Wind Power Co., Ltd.	94,823	71,509	939	(144)
Global Trade Of Power System Co., Ltd.	866	6	2,393	148
Expressway Solar-light Power Generation Co., Ltd.	21,435	15,009	2,804	(4,293)
KODE NOVUS 1 LLC.	115,450	96,442	2,819	(7,416)
KODE NOVUS 2 LLC.	57,931	38,523	1,530	(3,959)
Daejung Offshore Wind Power Co., Ltd.	8,299	12		(1,017)
Arman Asia Electric Power Company	669,925	484,400		(1,506)
KEPCO-ALSTOM Power Electronics Systems, Inc.	9,972	643	387	(1,649)
Dongbu Power Dangjin Corporation	94,768	2,578		(3,235)
Honam Wind Power Co., Ltd.	25,887	19,519		(1,310)
Nepal Water & Energy Development Company Pty Ltd.	36,040	14,382		(1,572)
Kelar S.A	1,019			1,573
PT. Tanjung Power Indonesia	1,061	27		22
Incheon New Power Co., Ltd.	4,531	2,984		(13)
Seokmun Energy Co., Ltd.	1,647	426		(779)

**Table of Contents****(5) Financial information of associates and joint ventures converted to the Company's shares in net assets as of December 31, 2012 and 2013 are as follows:**

Investees	Net assets	Percentage of ownership	2012		Intercompany transaction	Others	Book value
			Share in net assets	Investment differential			
In millions of won							
<b>&lt;Associates&gt;</b>							
Daegu Green Power Co., Ltd.	117,169	47.80%	56,007				56,007
Korea Gas Corporation	8,378,333	24.46%	2,049,340				2,049,340
Korea Electric Power Industrial Development Co., Ltd.	65,295	29.00%	18,936				18,936
YTN Co., Ltd.	176,744	21.43%	37,876				37,876
Cheongna Energy Co., Ltd.	70,038	43.90%	30,747	2,584		48	33,379
Gangwon Wind Power Co., Ltd.	80,425	15.00%	12,064			49	12,113
Hyundai Green Power Co., Ltd.	380,089	29.00%	110,226			120	110,346
Korea Power Exchange	176,264	100.00%	176,264				176,264
AMEC Partners Korea	743	19.00%	141				141
Hyundai Energy Co., Ltd.	101,158	50.00%	50,579		(1,116)		49,463
Ecollite Co., Ltd.	4,403	28.76%	1,266				1,266
Taebaek Wind Power Co., Ltd.	14,913	25.00%	3,728				3,728
Alternergy Philippine Investments Corporation	3,199	50.00%	1,600				1,600
Muju Wind Power Co., Ltd.	10,843	25.00%	2,711				2,711
Pyeongchang Wind Power Co., Ltd.	2,454	25.00%	613				613
Daeryun Power Co., Ltd.	125,795	19.80%	24,907			110	25,017
JinanJangsu Wind Power Co., Ltd.	310	25.00%	78				78
Changjuk Wind Power Co., Ltd.	13,086	30.00%	3,926				3,926
Commerce and industry energy Co., Ltd.	23,316	29.51%	6,881	185			7,066
KNH Solar Co., Ltd.	4,008	27.00%	1,082			7	1,089
SPC Power Corporation	96,736	38.00%	36,760				36,760
Gemeng International Energy Co., Ltd.	1,616,853	34.00%	549,730				549,730
PT. Cirebon Electric Power	61,897	27.50%	17,022				17,022
KNOC Nigerian East Oil Co., Ltd.	(51,520)	15.00%	(7,728)			7,728	
KNOC Nigerian West Oil Co., Ltd.	(41,826)	15.00%	(6,274)			6,274	
Dolphin Property Limited	(3,151)	15.00%	(473)			473	
E-Power S.A.	15,518	30.00%	4,655	991			5,646
PT Wampu Electric Power	34,008	46.00%	15,644				15,644
PT. Bayan Resources TBK	568,850	20.00%	113,770	528,866			642,636
S-Power Co., Ltd.	203,868	40.00%	81,547			132	81,679
Pioneer Gas Power Limited	48,629	40.00%	19,452	18,306		117	37,875
Eurasia Energy Holdings	(141)	40.00%	(56)			56	
Xe-Pian Xe-Namnoy Power Co., Ltd.	107	25.00%	27				27
Busan Solar Co., Ltd.	2,758	19.80%	546				546
Hadong Mineral Fiber Co., Ltd.	19	25.00%	5				5
Green Biomass Co., Ltd.	1,874	34.00%	637				637
Gumi-ochang Photovoltaic Power Co., Ltd.	2,820	10.00%	282				282
Chungbuk Photovoltaic Power Co., Ltd.	1,585	10.00%	159				159
Cheonan Photovoltaic Power Co., Ltd.	1,098	10.00%	110				110
PT. Mutiara Jawa	9,052	29.00%	2,625				2,625

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Investees	Net assets	Percentage of ownership	Share in net assets	2012		Others	Book value
				Investment differential	Intercompany transaction		
In millions of won							
<b>&lt;Joint ventures&gt;</b>							
KEPCO-Uhde Inc.	15,559	66.00%	10,269				10,269
Eco Biomass Energy Sdn. Bhd.	13,606	62.00%	8,435			(8,435)	
Datang Chaoyang Renewable Power Co., Ltd.	71,763	40.00%	28,705				28,705
Shuweiha Asia Power Investment B.V.	1	49.00%					
Shuweiha Asia Operation & Maintenance Company	53	55.00%	29				29
Waterbury Lake Uranium L.P.	62,264	40.00%	24,906				24,906
ASM-BG Investicii AD	32,048	50.00%	16,024				16,024
RES Technology AD	29,275	50.00%	14,637				14,637
KV Holdings, Inc.	5,057	40.00%	2,023				2,023
KEPCO SPC Power Corporation	193,745	75.20%	145,697			(23,960)	121,737
Canada Korea Uranium Limited Partnership	40,826	12.50%	5,103			(20)	5,083
KEPCO Energy Resource Nigeria Limited	18,877	30.00%	5,663				5,663
Gansu Datang Yumen Wind Power Co., Ltd.	50,776	40.00%	20,311			70	20,381
Datang Chifeng Renewable Power Co., Ltd.	391,229	40.00%	156,492			(43)	156,449
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	25,313	40.00%	10,125				10,125
Rabigh Electricity Company	(196,221)	40.00%	(78,488)			78,488	
Rabigh Operation & Maintenance Company	2,035	40.00%	814				814
Jamaica Public Service Company Limited	405,701	40.00%	162,280	130,727			293,007
KW Nuclear Components Co., Ltd.	2,715	45.00%	1,222				1,222
Busan shinho Solar power Co., Ltd.	8,184	25.00%	2,046			10	2,056
STX Electric Power Co., Ltd.	197,343	49.00%	96,698				96,698
YEONGAM Wind Power Co., Ltd.	23,470	49.00%	11,500			63	11,563
Global Trade Of Power System Co., Ltd.	734	29.00%	213				213
Expressway Solar-light Power Generation Co., Ltd.	10,801	29.00%	3,132				3,132
Yeongam F1 Solar Power Plant	5,770	29.00%	1,673				1,673
KODE NOVUS 1 LLC.	26,458	50.00%	13,229	4,732		(270)	17,691
KODE NOVUS 2 LLC.	23,572	49.00%	11,550				11,550
Daejung Offshore Wind Power Co., Ltd.	9,708	49.90%	4,844				4,844
Arman Asia Electric Power Company	1,145	60.00%	687				687
KEPCO-ALSTOM Power Electronics Systems, Inc.	11,038	51.00%	5,629				5,629
Dongbu Power Dangjin Corporation	94,434	40.00%	37,774	2,226			40,000
Honam Wind Power Co., Ltd.	5,869	30.00%	1,761	22			1,783

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Investees	Net assets	Percentage of ownership	Share in net assets	2013			Book value
				Investment differential	Intercompany transaction	Others	
In millions of won							
<b>&lt;Associates&gt;</b>							
Daegu Green Power Co., Ltd.	156,346	47.80%	74,733	145			74,878
Korea Gas Corporation	8,932,779	21.57%	1,926,800				1,926,800
Korea Electric Power Industrial Development Co., Ltd.	77,414	29.00%	22,450				22,450
YTN Co., Ltd.	179,407	21.43%	38,447		(21)		38,426
Cheongna Energy Co., Ltd.	58,155	43.90%	25,530	2,584			28,114
Gangwon Wind Power Co., Ltd.	87,572	15.00%	13,136			49	13,185
Hyundai Green Power Co., Ltd.	379,853	29.00%	110,157				110,157
Korea Power Exchange	189,544	100.00%	189,544				189,544
AMEC Partners Korea	994	19.00%	189				189
Hyundai Energy Co., Ltd.	98,518	45.26%	44,589		(1,203)		43,386
Ecollite Co., Ltd.	3,080	36.10%	1,112			(1,112)	
Taebaek Wind Power Co., Ltd.	22,210	25.00%	5,553				5,553
Alternergy Philippine Investments Corporation	3,000	50.00%	1,500				1,500
Muju Wind Power Co., Ltd.	10,830	25.00%	2,707				2,707
Pyeongchang Wind Power Co., Ltd.	2,399	25.00%	600				600
Daeryun Power Co., Ltd.	124,235	19.80%	24,599				24,599
JinanJangsu Wind Power Co., Ltd.	309	25.00%	77				77
Changjuk Wind Power Co., Ltd.	21,147	30.00%	6,344				6,344
KNH Solar Co., Ltd.	5,081	27.00%	1,372				1,372
SPC Power Corporation	125,098	38.00%	47,537			124	47,661
Gemeng International Energy Co., Ltd.	1,790,218	34.00%	608,674				608,674
PT. Cirebon Electric Power	119,369	27.50%	32,826				32,826
KNOC Nigerian East Oil Co., Ltd.	(53,029)	14.63%	(7,758)			7,758	
KNOC Nigerian West Oil Co., Ltd.	(47,429)	14.63%	(6,939)			6,939	
Dolphin Property Limited	(880)	15.00%	(132)			132	
E-Power S.A.	14,311	30.00%	4,293	991			5,284
PT Wampu Electric Power	32,871	46.00%	15,121				15,121
PT. Bayan Resources TBK	330,776	20.00%	66,155	513,379			579,534
S-Power Co., Ltd.	268,161	40.00%	107,264				107,264
Pioneer Gas Power Limited	64,129	40.00%	25,652	18,014			43,666
Eurasia Energy Holdings	(423)	40.00%	(169)			169	
Xe-Pian Xe-Namnoy Power Co., Ltd.	52,720	25.00%	13,180	4,878			18,058
Busan Solar Co., Ltd.	3,743	19.80%	741				741
Hadong Mineral Fiber Co., Ltd.	12	25.00%	3				3
Green Biomass Co., Ltd.	504	34.00%	171				171
Gumi-ochang Photovoltaic Power Co., Ltd.	3,894	10.00%	389				389
Chungbuk Photovoltaic Power Co., Ltd.	1,844	10.00%	184				184
Cheonan Photovoltaic Power Co., Ltd.	1,478	10.00%	148				148
PT. Mutiara Jawa	5,504	29.00%	1,596	70			1,666
Hyundai Asan Solar Power Co., Ltd.	4,129	10.00%	413	49			462
Heang Bok Do Si Photovoltaic Power Co., Ltd.	324	28.00%	91				91
Jeonnam Solar Co., Ltd.	6,960	10.00%	696				696
DS POWER Co., Ltd.	123,648	10.91%	13,495			4,405	17,900
D Solarenergy Co., Ltd.	3,627	10.00%	363	1			364
Dongducheon Dream Power Co., Ltd.	314,580	43.61%	137,188	(2,790)			134,398
KS Solar Corp. Ltd.	2,677	19.00%	509	28			537
KOSCON Photovoltaic Co., Ltd.	1,657	19.00%	315				315
Yeongwol Energy Station Co., Ltd.	6,829	13.30%	908				908
Yeonan Photovoltaic Co., Ltd.	648	19.00%	123				123
QI Solar Co., Ltd.	3,512	28.00%	983				983
Jinhvish Power Generation	59,032	5.16%	3,046	5,449			8,495
Best Solar Energy Co., Ltd.	3,906	23.00%	898				898
Seokcheon Solar Power Co., Ltd.	10,755	9.73%	1,046				1,046
SE Green Energy Co., Ltd.	7,841	47.76%	3,745				3,745
Daegu Photovoltaic Co., Ltd.	4,600	29.00%	1,334				1,334





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Investees	Net assets	Percentage of ownership	Share in net assets	2013			Book value
				Investment differential	Intercompany transaction	Others	
In millions of won							
Jeongam Wind Power Co., Ltd.	811	40.00%	324				324
Korea Power Engineering Service Co., Ltd.	2,016	29.00%	585				585
Golden Route J Solar Power Co., Ltd.	987	10.00%	99				99
<b>&lt;Joint ventures&gt;</b>							
KEPCO-Uhde Inc.	14,450	66.00%	9,537				9,537
Eco Biomass Energy Sdn. Bhd.		61.53%					
Datang Chaoyang Renewable Power Co., Ltd.	70,402	40.00%	28,161				28,161
Shuweiht Asia Power Investment B.V.	129	49.00%	63				63
Shuweiht Asia Operation & Maintenance Company	53	55.00%	29				29
Waterbury Lake Uranium L.P.	57,469	40.00%	22,988			54	23,042
ASM-BG Investicii AD	40,177	50.00%	20,088				20,088
RES Technology AD	32,090	50.00%	16,045				16,045
KV Holdings, Inc.	4,606	40.00%	1,842				1,842
KEPCO SPC Power Corporation	190,551	75.20%	143,294				143,294
Canada Korea Uranium Limited Partnership	41,594	12.50%	5,199			(5,199)	
KEPCO Energy Resource Nigeria Limited	7,338	30.00%	2,202				2,202
Gansu Datang Yumen Wind Power Co., Ltd.	48,093	40.00%	19,237				19,237
Datang Chifeng Renewable Power Co., Ltd.	415,910	40.00%	166,364			(34)	166,330
Datang KEPCO Chaoyang Renewable Power Co., Ltd.	26,510	40.00%	10,604				10,604
Rabigh Electricity Company	198,123	40.00%	79,249		(79,249)		
Rabigh Operation & Maintenance Company	10,206	40.00%	4,082				4,082
Jamaica Public Service Company Limited	507,916	40.00%	203,166	130,726		(65,870)	268,022
KW Nuclear Components Co., Ltd.	5,503	45.00%	2,476				2,476
Busan shinho Solar power Co., Ltd.	11,445	25.00%	2,861			10	2,871
STX Electric Power Co., Ltd.	354,929	49.00%	173,915				173,915
YEONGAM Wind Power Co., Ltd.	23,315	49.00%	11,424				11,424
Global Trade Of Power System Co., Ltd.	860	29.00%	249				249
Expressway Solar-light Power Generation Co., Ltd.	6,426	29.00%	1,863				1,863
KODE NOVUS 1 LLC.	19,009	50.00%	9,504	4,733			14,237
KODE NOVUS 2 LLC.	19,408	49.00%	9,510				9,510
Daejung Offshore Wind Power Co., Ltd.	8,287	49.90%	4,135				4,135
Arman Asia Electric Power Company	185,525	60.00%	111,315				111,315
KEPCO-ALSTOM Power Electronics Systems, Inc.	9,329	51.00%	4,758				4,758
Dongbu Power Dangjin Corporation	92,190	40.00%	36,876	2,226			39,102
Honam Wind Power Co., Ltd.	6,368	30.00%	1,910	23			1,933
Nepal Water & Energy Development Company Pty Ltd.	21,659	43.57%	9,437	972			10,409
Kelar S.A	1,019	65.00%	663	3,517			4,180
PT. Tanjung Power Indonesia	1,034	35.00%	361				361
Incheon New Power Co., Ltd.	1,548	29.00%	449				449
Seokmun Energy Co., Ltd.	1,221	34.00%	415				415

(6) As of December 31, 2013, there is no unrecognized equity interest in investments in associates and joint ventures whose book value has been reduced to zero due to accumulated losses.

(7) As of December 31, 2013, shareholders' agreements on investments in associates and joint ventures that may cause future economic costs or cash outflows are as follows:

(i) Gemeng International Energy Co., Ltd.

KEPCO Shanxi International Ltd., a consolidated subsidiary of the Company, established a consortium with two other investors, Deutsche Capital Hong Kong Limited and Shanxi International Energy Company Co.,



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Ltd. with the Company's percentage of ownership of the consortium being 34%. This consortium, in order for business in Chinese power generating industry, established Gemeng International Energy Co., Ltd., which is an associate of the Company with the Company's percentage of ownership being 34%. KEPCO Shanxi International Ltd. has entered into an agreement ( Put Option ) that if Gemeng International Co., Ltd. fails to be listed within 5 years after the initial capital paid in, Deutsche Capital Hong Kong Limited can require KEPCO Shanxi International Ltd. to acquire or recommend 3rd party to acquire its own investment in Gemeng International Co., Ltd. at the investment principal of USD 106,861,924 with an interest of 3M Libor-0.25% during the period from July 10, 2012 to July 9, 2014. However, Put Option Extension Agreement has changed this period; June 19, 2014 to July 9, 2014, and as of December 31, 2013, the Company guarantees this Put Option Agreement.

### (ii) Eco Biomass Energy Sdn. Bhd.

Eco Biomass Energy Sdn. Bhd., issued put options on preferred stock to its financial investors. An agreement was made between financial investors and shareholders that if Eco Biomass Energy Sdn. Bhd., the first obligator, fails to accept the put options when exercised, all shareholders of Eco Biomass Energy Sdn. Bhd., should fulfill their obligation as the second obligators and acquire the preferred stock from financial investors in proportion to each shareholder's percentage of ownership up to 4,050 million.

### (iii) Hyundai Energy Co., Ltd.

As of December 31, 2013, Hyundai Energy Co., Ltd., an associate of the Company, which engages in the integrated energy business, carries long-term borrowings for project financing amounting to 450 billion from Korea Development Bank and others.

Related to the above project financing, NH Power II Co., Ltd. and Daewoo Securities Co., Ltd., has entered into an agreement with Yecheon TPL Co., Ltd. to acquire shares in Hyundai Energy Co., Ltd. held by Yecheon TPL Co., Ltd. The Company had placed guarantees for a fixed return on investment to the financial institutions and had obtained the rights to acquire the investment securities in return preferentially.

In addition, NH Power II Co., Ltd. and Daewoo Securities Co., Ltd. have a right, which can be exercised for 30 days starting from 2 months to 1 month prior to 17 years after the termination date of contract to sell their shares to the Company. If dividends to shareholders exceed annual revenue, the exceeding amount shall be evenly distributed to Yecheon TPL Co., Ltd. and the Company.

### (iv) Taebaek Wind Power Co., Ltd.

In case non-controlling shareholders decide to dispose of their shares in Taebaek Wind Power Co., Ltd. after the warrant period of defect repair for wind power generator has expired, the Company is obligated to acquire those shares at fair value. The acquisition is to be made after the conditions of the acquisition are discussed among the parties involved, with the careful consideration of various factors such as financial status and business situation.

### (v) Pyeongchang Wind Power Co., Ltd.

In case non-controlling shareholders decide to dispose of their shares in Pyeongchang Wind Power Co., Ltd. after commercial operation of the power plant has started, the Company is obligated to acquire those shares at fair value. The acquisition is to be made after the conditions of the acquisition are discussed among the parties involved, with the careful consideration of various factors such as financial status and business situation.

### (vi) Daeryun Power Co., Ltd.

All shareholders of Daeryun Power Co., Ltd. except for POSCO Construction Co., Ltd., have agreed to acquire the shares held by POSCO Construction Co., Ltd. This acquisition shall be made at issuance price of the share in proportion to each shareholder's percentage of ownership within two months after



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the completion of EPC construction. In connection with this agreement, the company, one of the shareholders of Daeryun Power Co., Ltd., is obligated to acquire 1,210,772 shares of POSCO Construction Co., Ltd.'s investment, which amounts to 6,054 million. In case of a merger of Daeryun Power Co., Ltd., remaining shareholders are obligated to pay the dissident shareholders' share for their purchased price.

(vii) Jeongam Wind Power Co., Ltd.

In case non-controlling shareholders except for financial investors decide to dispose of their shares in Jeongam Wind Power Co., Ltd. after the construction of the power plant has been completed, the Company is obligated to acquire those shares at fair value.

(viii) Daejung Offshore Wind Power Co., Ltd.

In case Samsung Heavy Industries Co., Ltd., a co-participant of the joint venture agreement, decides to dispose of its shares in Daejung Offshore Wind Power Co., Ltd., the Company is obligated to acquire those shares after evaluating the economic feasibility of the facilities installed by Samsung Heavy Industries Co., Ltd.

(ix) Dongducheon Dream Power Co., Ltd.

In case financial investors decide to dispose of their shares in Dongducheon Dream Power Co., Ltd. 5 years after the commencement of commercial operation of the power plant, the Company is obligated to acquire those shares at fair value.

(x) DS Power Co., Ltd.

The Company has a right to sell all shares and bonds of DS POWER Co., Ltd to Daesung Industrial Co., Ltd and Daesung Industrial Co., Ltd. or an authoritative person appointed by Daesung Industrial Co., Ltd.

**Table of Contents****(8) Significant restrictions on its abilities to associates or joint ventures are as follows:**

<b>Company</b>	<b>Nature and extent of any significant restrictions</b>
KNOC Nigerian East Oil Co., Ltd.	The company has stopped its operation in Nigeria due to an ongoing litigation and payment or retrieval of investments, loans and advances are restricted until the legal dispute is resolved.
KNOC Nigerian West Oil Co., Ltd.	The company has stopped its operation in Nigeria due to an ongoing litigation and payment or retrieval of investments, loans and advances are restricted until the legal dispute is resolved.
Dolphin Property Limited	The company has stopped its operation in Nigeria due to an ongoing litigation and payment or retrieval of investments, loans and advances are restricted until the legal dispute is resolved.
Daeryun Power Co., Ltd.	Principals on subordinated loans or dividends can only be paid to shareholders when all conditions of the loan agreement are satisfied or prior written consent of a financial institution is obtained.
Changjuk Wind Power Co., Ltd.	Principals on subordinated loans or dividends can only be paid to shareholders when all conditions of the loan agreement are satisfied or prior written consent of a financial institution is obtained.
Busan Solar Co., Ltd.	Dividends cannot be declared or paid without the prior written consent of an agency, Consus Asset Management Co., Ltd. based on the loan agreement until the principal of a loan is paid off in full.
Taebaek Wind Power Co., Ltd.	Financial institutions can reject or defer an approval with regard to the request for fund executions on subordinated loans of shareholders in order to pay senior loans based on the loan agreement.
Daegu Green Power Co., Ltd.	Only if the condition is met with the loan agreement signed by financial institutions, the investors of subordinated credit facility loans can receive payments of principal and interest and dividend. Korea Exchange Bank, the deputy, permits the amount of the payments and dividend.
KS Solar Corp. Ltd.	Dividends can only be paid to shareholders when all conditions of a loan agreement are satisfied.
Jeonnam Solar Co., Ltd.	Dividends can only be paid to shareholders when all conditions of a loan agreement are satisfied.

**Table of Contents****18. Property, Plant and Equipment**

(1) Property, plant and equipment as of December 31, 2012 and 2013 are as follows:

	Acquisition cost	Government grants	2012		Book value
			Accumulated depreciation	Accumulated impairment losses(*)	
In millions of won					
Land	13,504,739	(3,106)			13,501,633
Buildings	12,093,805	(44,387)	(3,538,059)	(853)	8,510,506
Structures	49,877,698	(177,173)	(12,462,959)	(1,183)	37,236,383
Machinery	42,782,904	(105,112)	(10,087,349)	(11,229)	32,579,214
Ships	5,011		(3,225)		1,786
Vehicles	173,373	(128)	(136,128)		37,117
Equipment	801,679	(922)	(618,524)		182,233
Tools	659,851	(192)	(537,720)		121,939
Construction-in- progress	21,279,062	(94,676)			21,184,386
Finance lease assets	2,385,238		(1,521,561)		863,677
Asset retirement costs	7,720,913		(1,757,747)		5,963,166
Others	7,286,289		(5,092,189)		2,194,100
	158,570,562	(425,696)	(35,755,461)	(13,265)	122,376,140

	Acquisition cost	Government grants	2013		Book value
			Accumulated depreciation	Accumulated impairment losses(*)	
In millions of won					
Land	13,784,026	(3,137)			13,780,889
Buildings	12,672,055	(45,396)	(4,121,506)	(852)	8,504,301
Structures	52,080,007	(193,189)	(14,259,717)	(1,183)	37,625,918
Machinery	47,073,366	(101,808)	(13,297,596)	(46,231)	33,627,731
Ships	5,014		(3,592)		1,422
Vehicles	195,045	(83)	(149,326)		45,636
Equipment	866,999	(707)	(679,842)		186,450
Tools	716,749	(312)	(577,085)		139,352
Construction-in- progress	27,452,032	(117,728)			27,334,304
Finance lease assets	2,385,231		(1,650,046)		735,185
Asset retirement costs	7,787,832		(2,133,236)		5,654,596
Others	7,679,146		(5,677,334)		2,001,812
	172,697,502	(462,360)	(42,549,280)	(48,266)	129,637,596

(\*) The Company separately recognizes impairment loss on each asset, reflecting various factors such as physical impairment during the replacement.

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(2) Changes in property, plant and equipment for the years ended December 31, 2012 and 2013 are as follows:

	2012					Ending balance
	Beginning balance	Acquisition	Disposal	Depreciation	Others	
	In millions of won					
Land	13,161,848	151,350	(3,580)		195,121	13,504,739
(Government grants)	(3,106)					(3,106)
Buildings	8,198,520	12,350	(7,055)	(563,782)	914,860	8,554,893
(Government grants)	(46,097)			3,713	(2,003)	(44,387)
Structures	36,698,478	712	(299,053)	(1,891,978)	2,905,398	37,413,557
(Government grants)	(170,474)		1,393	8,560	(16,653)	(177,174)
Machinery	30,108,823	352,216	(102,347)	(3,338,006)	5,663,640	32,684,326
(Government grants)	(97,725)		360	9,162	(16,909)	(105,112)
Ships	1,240		(6)	(294)	846	1,786
Vehicles	38,219	3,526	(49)	(16,747)	12,296	37,245
(Government grants)	(2)			46	(172)	(128)
Equipment	172,759	43,291	(760)	(86,574)	54,440	183,156
(Government grants)	(301)			244	(866)	(923)
Tools	116,903	26,159	(78)	(54,910)	34,058	122,132
(Government grants)	(448)			255		(193)
Construction-in-progress	20,001,400	10,846,629			(9,568,970)	21,279,059
(Government grants)	(89,600)	(5,414)			341	(94,673)
Finance lease assets	992,200			(128,451)	(72)	863,677
Asset retirement cost	1,725,446			(291,867)	4,529,587	5,963,166
Others	1,576,798	16,015		(551,747)	1,153,034	2,194,100
	112,384,881	11,446,834	(411,175)	(6,902,376)	5,857,976	122,376,140

	2013					Ending balance
	Beginning balance	Acquisition	Disposal	Depreciation	Others	
	In millions of won					
Land	13,504,739	23,651	(60,971)		316,607	13,784,026
(Government grants)	(3,106)				(31)	(3,137)
Buildings	8,554,893	10,009	(21,296)	(583,106)	589,197	8,549,697
(Government grants)	(44,387)			3,943	(4,952)	(45,396)
Structures	37,413,557	2,645	(194,106)	(1,967,475)	2,564,487	37,819,108
(Government grants)	(177,174)		1,733	8,389	(26,138)	(193,190)
Machinery	32,684,326	343,445	(135,269)	(3,334,480)	4,171,517	33,729,539
(Government grants)	(105,112)		376	9,507	(6,579)	(101,808)
Ships	1,786			(367)	3	1,422
Vehicles	37,245	2,579	(111)	(18,653)	24,659	45,719
(Government grants)	(128)			45		(83)
Equipment	183,156	45,087	(200)	(87,040)	46,155	187,158
(Government grants)	(923)			311	(96)	(708)
Tools	122,132	31,234	(226)	(56,143)	42,668	139,665
(Government grants)	(193)			155	(275)	(313)
Construction-in-progress	21,279,059	13,888,637	(1,515)		(7,714,152)	27,452,029
(Government grants)	(94,673)	(48,721)			25,669	(117,725)
Finance lease assets	863,677		(7,456)	(133,133)	12,097	735,185
Asset retirement cost	5,963,166			(559,624)	251,054	5,654,596
Others	2,194,100	7,531	(128)	(585,418)	385,727	2,001,812
	122,376,140	14,306,097	(419,169)	(7,303,089)	677,617	129,637,596





**Table of Contents****19. Investment Properties****(1) Investment properties as of December 31, 2012 and 2013 are as follows:**

	Acquisition cost	Government grants	2012		Book value
			Accumulated depreciation	Accumulated impairment losses	
In millions of won					
Land	564,195				564,195
Buildings	42,460	(243)	(16,189)		26,028
	606,655	(243)	(16,189)		590,223

	Acquisition cost	Government grants	2013		Book value
			Accumulated depreciation	Accumulated impairment losses	
In millions of won					
Land	516,440				516,440
Buildings	37,120	(13)	(15,220)		21,887
	553,560	(13)	(15,220)		538,327

**(2) Changes in investment properties for the years ended December 31, 2012 and 2013 are as follows:**

	Beginning balance	2012					Ending balance
		Acquisition	Disposal	Depreciation	Impairment	Others	
In millions of won							
Land	498,280					65,915	564,195
Buildings	19,115			(981)		8,136	26,270
(Government grants)	(246)			7		(3)	(242)
	517,149			(974)		74,048	590,223

	Beginning balance	2013					Ending balance
		Acquisition	Disposal	Depreciation	Impairment	Others	
In millions of won							
Land	564,195					(47,755)	516,440
Buildings	26,270			(911)		(3,460)	21,899
(Government grants)	(242)			3		227	(12)
	590,223			(908)		(50,988)	538,327

(3) **Income and expenses related to investment properties for the years ended December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Rental income	10,365	8,517
Operating and maintenance expenses	(974)	(908)
	9,391	7,609

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(4) Fair value of investment properties as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Book value	Fair value	Book value	Fair value
In millions of won				
Land	564,195	596,197	516,440	541,564
Buildings	26,028	26,918	21,887	22,680
	590,223	623,115	538,327	564,244

The fair values of the investment properties as of the reporting date were determined in consideration of the fluctuation on the publicly notified individual land price after the IFRS adoption date.

(5) All of the Company's investment property is held under freehold interests.

## 20. Construction Services Contracts

(1) Changes in balance of construction service contracts for the years ended December 31, 2012 and 2013 are as follows:

	Beginning balance	2012		Ending balance
		Increase and decrease(*)	Recognized revenue	
In millions of won				
Nuclear power plant construction in UAE	22,689,640	(839,900)	(1,490,055)	20,359,685
Kazakhstan EPC and others	864,937	108,283	(365,990)	607,230
	23,554,577	(731,617)	(1,856,045)	20,966,915

(\*) For the year ended December 31, 2012, the increased balance of contracts from new orders and others is 201,823 million and the decreased balance of contracts from modifications of construction contracts and others is 933,440 million.

	Beginning balance	2013		Ending balance
		Increase and decrease(*)	Recognized revenue	
In millions of won				
Nuclear power plant construction in UAE	20,359,685	(135,311)	(1,701,963)	18,522,411
Kazakhstan EPC and others	607,230	754,895	(551,120)	811,005
	20,966,915	619,584	(2,253,083)	19,333,416

(\*) For the year ended December 31, 2013, the increased balance of contracts from new orders and other is 777,955 million and the increased balance of contracts from changes in size of construction is 158,371 million.



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- (2) Accumulated earned revenue, expense and others related to the Company's construction as of December 31, 2012 and 2013 are as follows:

	Accumulated earned revenue	Accumulated expense	2012		Unearned advance receipts
			Accumulated profit		
In millions of won					
Nuclear power plant construction in UAE	3,258,857	3,090,859	167,998		
Kazakhstan EPC and others	629,980	592,340	37,640		541
	3,888,837	3,683,199	205,638		541

	Accumulated earned revenue	Accumulated expense	2013		Unearned advance receipts
			Accumulated profit		
In millions of won					
Nuclear power plant construction in UAE	4,960,820	4,708,008	252,812		
Kazakhstan EPC and others	1,087,779	1,024,156	63,623		
	6,048,599	5,732,164	316,435		

- (3) Gross amount due from customers recognized as assets and due to customers recognized as liabilities for contract work as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Assets(*1)	Liabilities(*2)	Assets(*1)	Liabilities(*2)
In millions of won				
Nuclear power plant construction in UAE		464,489		812,642
Kazakhstan EPC and Others	136,760	11,085	98,726	30,907
	136,760	475,574	98,726	843,549

(\*1) Included in trade and other receivables, net, in the accompanying consolidated statements of financial position.

(\*2) Included in non-financial liabilities in the accompanying consolidated statements of financial position.

**Table of Contents****21. Intangible Assets other than Goodwill**

(1) Intangible assets as of December 31, 2012 and 2013 are as follows:

	Acquisition cost	Government grants	2012		Accumulated impairment losses	Book value
			In millions of won			
			Accumulated amortization			
Software	319,044	(198)	(235,675)			83,171
Licenses and franchises	3,398		(2,554)			844
Copyrights, patents rights and other industrial rights	20,621		(4,140)			16,481
Mining rights	530,169		(4,363)			525,806
Development expenditures	691,918	(12,371)	(611,229)			68,318
Intangible assets under development	44,316	(7,305)				37,011
Usage rights of donated assets and other	372,145	(64)	(299,802)			72,279
Leasehold rights	19,112		(18,265)			847
Others	148,738	(1)	(57,244)	(12,436)		79,057
	2,149,461	(19,939)	(1,233,272)	(12,436)		883,814
	Acquisition cost	Government grants	2013		Accumulated impairment losses	Book value
			In millions of won			
			Accumulated amortization			
Software	335,489	(428)	(269,740)			65,321
Licenses and franchises	3,398		(3,190)			208
Copyrights, patents rights and other industrial rights	31,218		(6,265)			24,953
Mining rights	476,844		(6,286)			470,558
Development expenditures	722,082	(11,705)	(645,928)			64,449
Intangible assets under development	52,050	(7,792)				44,258
Usage rights of donated assets and other	373,376	(53)	(308,666)			64,657
Leasehold rights	19,112		(18,300)			812
Others	152,917	(1)	(64,889)	(12,579)		75,448
	2,166,486	(19,979)	(1,323,264)	(12,579)		810,664

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(2) Changes in intangible assets for as of December 31, 2012 and 2013 are as follows:

	Beginning balance	Acquisition	Disposal	2012			Ending balance
				Amortization	Impairment	Others	
In millions of won							
Software	93,480	7,214	(3)	(38,812)		21,491	83,370
(Government grants)	(409)			264		(54)	(199)
Licenses and franchises	1,487			(643)			844
Copyrights, patents rights and other industrial rights	4,075	2,356	(294)	(634)	(6)	10,984	16,481
Mining rights	470,882	22,510		(4,188)		36,602	525,806
Development expenditures	84,161	2,463		(39,016)		33,081	80,689
(Government grants)	(11,653)			5,395		(6,113)	(12,371)
Intangible assets under development	56,556	31,906			(13)	(44,133)	44,316
(Government grants)	(10,653)	(3,326)				6,674	(7,305)
Usage rights of donated assets and other	80,054			(8,955)		1,244	72,343
(Government grants)	(75)			143		(132)	(64)
Leasehold rights	880			(34)		1	847
Others	79,925	4,592	(2,311)	(6,883)	(440)	4,175	79,058
(Government grants)	(1)			3		(3)	(1)
	848,709	67,715	(2,608)	(93,360)	(459)	63,817	883,814

	Beginning balance	Acquisition	Disposal	2013			Ending balance
				Amortization	Impairment	Others	
In millions of won							
Software	83,370	12,311		(39,419)		9,489	65,751
(Government grants)	(199)			160		(391)	(430)
Licenses and franchises	844			(636)			208
Copyrights, patents rights and other industrial rights	16,481	587	(1)	(2,130)		10,016	24,953
Mining rights	525,806	27,429		(1,698)		(80,979)	470,558
Development expenditures	80,689	651		(34,892)		29,706	76,154
(Government grants)	(12,371)			5,686		(5,020)	(11,705)
Intangible assets under development	44,316	30,608			(4)	(22,870)	52,050
(Government grants)	(7,305)	(5,845)				5,358	(7,792)
Usage rights of donated assets and other	72,343			(8,798)		1,165	64,710
(Government grants)	(64)			11			(53)
Leasehold rights	847			(35)			812
Others	79,058	3,266	(35)	(6,628)	(263)	51	75,449
(Government grants)	(1)						(1)
	883,814	69,007	(36)	(88,379)	(267)	(53,475)	810,664



**Table of Contents****(3) Significant specific intangible assets as of December 31, 2012 and 2013 are as follows:**

Type	2012 Description	Currency	Amount	Remaining useful years
Software	ERP system	KRW	13,417	5 months ~ 3 years and 2 months
Mining rights	Mining right of Bylong mine	AUD	401,225	(*)
Development expenditures	Development of manufacturing technology			
	Zircaloy tube	KRW	2,460	1 year
Development expenditures	WH type improved nuclear fuel	KRW	532	3 months
Development expenditures	KOSPO Evolutionary Efficient & Powerful System (KEEPS)	KRW	11,367	4 years and 6 months
Intangible assets under development	Smart technology verification and standard design project conducting right	KRW	2,816	
Usage rights of donated assets	Songdo international business district (sector 1, 3) Sharing charge	KRW	7,363	4 years and 10 months
Usage rights of donated assets	Dangjin power plant load facility usage right	KRW	51,944	9 years
Others	Shingwangju electricity supply facility usage right	KRW	4,314	6 years and 5 months

(\*) Mining rights are amortized using the production method.

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Type	Description	2013		Remaining useful years
		Currency	Amount	
In millions of won and thousands of Australian dollars				
Software	ERP system and others	KRW	8,163	1 year and 11 months ~ 2 years and 2 months
Copyrights, patents rights and other industrial rights				
	Smart technology verification and standard design project conducting right	KRW	8,750	4 years and 9 months
Mining rights	Mining right of Bylong mine	AUD	401,225	(*)
Development expenditures	KOSPO Evolutionary Efficient & Powerful System (KEEPS)	KRW	8,629	3 years and 6 months
Development expenditures	Development of maintenance system for utility plant	KRW	2,212	3 years and 11 months
Intangible assets under development	Contributions to APR NRC DC	KRW	18,252	
Intangible assets under development				
	CHF testing for best representative of HIPER/X2-Gen Fuel and development of best explanatory CHF correlation	KRW	7,448	
Usage rights of donated assets				
	Songdo international business district (sector 1, 3) sharing charge	KRW	5,840	3 years and 10 months
Usage rights of donated assets				
	Dangjin power plant load facility usage right	KRW	45,648	7 years and 3 months
Others	Shingwangju electricity supply facility usage right	KRW	3,641	5 years and 5 months
Others	Sillim electricity supply facility usage right	KRW	3,536	7 years and 11 months

(\*) Mining rights are amortized using the production method.

(4) For the years ended December 31, 2012 and 2013, the Company recognized research and development expenses of 504,104 million and 577,133 million, respectively.

**22. Trade and Other Payables**

Trade and other payables as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Current	Non-current	Current	Non-current
In millions of won				
Trade payables	3,282,240		3,107,082	
Other trade payables	1,203,830	3,147,010	1,475,048	3,068,631
Accrued expenses	927,612	1,700	1,076,868	2,318
Leasehold deposits received	1,627		1,636	
Other deposits received	63,104	83,376	115,216	90,055
Finance lease liabilities	121,804	885,365	115,308	769,658
Dividends payable	1,605		1,605	
Others(*)	30	56,240		40,857

5,601,852	4,173,691	5,892,763	3,971,519
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(\*) Details of others as of December 31, 2012 and 2013 are as follows:

	Current	2012 Non-current	Current	2013 Non-current
	In millions of won			
Advance received from local governments		56,215		40,834
Others	30	25		23
	30	56,240		40,857

**23. Borrowings and Debt Securities**

(1) Borrowings and debt securities as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
<b>Current liabilities</b>		
Short-term borrowings	689,310	579,327
Current portion of long-term borrowings	1,528,237	893,532
Current portion of debt securities	5,480,331	6,625,007
Less: Current portion of discount on long-term borrowings	(1,586)	(1,997)
Less: Current portion of discount on debt securities	(1,611)	(8,371)
	7,694,681	8,087,498
<b>Non-current liabilities</b>		
Long-term borrowings	4,695,358	4,555,769
Debt securities	40,944,992	48,367,149
Less : Discount on long-term borrowings	(20,423)	(17,379)
Less : Discount on debt securities	(95,199)	(105,240)
Add: Premium on debt securities		353
	45,524,728	52,800,652
	53,219,409	60,888,150

(2) Short-term borrowings as of December 31, 2012 and 2013 are as follows:

Type	Creditor	2012		Local currency
		Interest rate (%)	Foreign currency	
In millions of won				
Local short-term borrowings	Nonghyup Bank	4.15		32,350
Local commercial paper	Shinhan Bank and others	2.95 ~ 3.80		429,000
Foreign short-term borrowings	DBS and Others	0.78 ~ 1.25	USD 212,828	227,960

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2013				
Type	Creditor	Interest rate (%) In millions of won	Foreign currency	Local currency
Local short-term borrowings	Shinhan Bank and others	2.78		70,000
Local commercial paper				
	Korea Exchange Bank and others	2.80 ~ 2.85		297,500
Foreign short-term borrowings	ANZ and others	0.67 ~ 6.50	USD 154,313	162,846
Foreign short-term borrowings	Scotia Bank	TIIE + 1.25	USD 5,447	5,748
Local bank overdraft	Woori Bank	Standard overdraft rate + 1.27		43,233
				579,327

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(3) Long-term borrowings as of December 31, 2012 and 2013 are as follows:

Type	2012		Maturity	Foreign currency	Local currency
	Interest rate (%)				
In millions of won and thousands of foreign currencies					
<b>Local long-term borrowings</b>					
Korea Development Bank	Others	0.5	2013~2044		9,393
	Facility	5.80	2026		21,800
	Facility	3yr KTB	2027		9,000
Korea Exchange Bank		rate - 1.25			
	Commercial Paper	3.63	2013		100,000
	Commercial Paper	3M CD + 0.03~0.58	2013~2015		1,900,000
	Facility	3yr KTB	2013~2021		5,843
		rate - 1.25			
	Facility	3yr KTB	2013~2015		16,000
		rate - 1.25			
	Energy rationalization	3yr KTB	2019		1,250
		rate - 1.25			
	Development of power resources	3yr KTB	2013		6,000
		rate - 1.25			
	Others	3M CD + 0.25	2013		100,000
	Others	2.75	2014		5,200
Korea Industrial Bank	Development of power resources	4.00	2016		18,933
	Development of power resources	3yr KTB	2016		16,000
Kookmin Bank		rate - 1.25			
	Development of power resources	4.00	2015		18,810
Hana Bank	Development of power resources	4.00	2014		16,000
		rate - 1.25			
	Development of power resources	3yr KTB	2014		24,600
		rate - 1.25			
Export-Import Bank of Korea	Project loans	2.00	2026		38,300
Korea Finance Corporation	Facility	1yr KoFC bond rate + 0.08 ~	2017~2019		2,300,000

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0.31

Korea Resources Corporation

Development 3yr KTB 2013~2027 67,651

of power rate - 2.25

resources

Project loans 8,677

Others

Others 3yr KTB 2023~2025 3,754

rate - 2.25

4,687,211

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		2012				
Type		Interest rate (%)	Maturity	Foreign currency	Local currency	
		In millions of won and thousands of foreign currencies				
<b>Foreign long-term borrowings</b>						
Korea National Oil Corporation		3yr KTB rate -				
	Project loans	2.25	2021~2023	USD	8,784	9,409
Korea Finance Corporation	Project loans and others	3M Libor + 1.63	2014	USD	138,240	147,962
Export-Import Bank of US and others	Project loans	4.48~8.28	2014	USD	56,177	60,171
Export-Import Bank of Korea and others		3M Libor + 2.60~				
	Direct loans and others	3.70	2015	USD	299,769	320,857
SMBC and others	Senior loan and others	3M Libor + 1.10~	2013~2033	USD	309,160	331,126
		2.30				
DBS Bank	Facility	3M Libor + 0.25	2013	USD	200,000	214,220
PT PJB	Share holder s loan	12.75	2017	IDR	29,329,121	3,258
Others	Facility and others	5.00~8.00	2013~2031	USD	24,259	25,976
Woori Bank	Syndicated loan	3M Libor + 0.27~1.50	2014~2017	USD	395,299	423,405
						1,536,384
						6,223,595
Less : Discount of long-term borrowings						(22,009)
Less : Current portion of long-term borrowings						(1,528,237)
Add : Current portion of discount of long-term borrowings						1,586
						4,674,935

		2013				
Type		Interest rate (%)	Maturity	Foreign currency	Local currency	
		In millions of won and thousands of foreign currencies				
<b>Local long-term borrowings</b>						
Korea Development Bank	Others	0.50	2014~2044			8,109
	Facility	4.60	2028			43,600
	Facility	3yr KTB	2027			9,000
		rate - 1.25				
Korea Exchange Bank		3M CD +	2014~2016			1,300,000
	Commercial Paper	0.03~0.54				
	Facility	3yr KTB	2021			11,779
		rate - 1.75				
	Facility	4.60	2028			20,000
	Energy rationalization	3yr KTB	2015~2019			1,050
		rate - 1.75				
	Energy rationalization	2.75~3.20	2015~2016			7,381
Korea Industrial Bank	Development of power resources	4.00	2016			14,200

Others	3yr KTB	2016	12,000
	rate - 1.25		

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Type		2013	Maturity	Foreign currency		Local currency
		Interest rate (%)		In millions of won and thousands of foreign currencies		
Kookmin Bank	Development of power resources	4.00	2015			12,540
Hana Bank	Development of power resources	4.00	2014			8,000
	Others	3yr KTB rate - 1.25	2024~2025			12,300
	PF Refinancing	CD+1.7%	2026			21,613
	PF Refinancing	4.80	2026			11,991
Export-Import Bank of Korea	Project loans	2.00	2026			36,827
Korea Finance Corporation	Facility	1yr KoFC bond rate + 0.20~0.31	2018~2019			2,300,000
Korea Resources Corporation	Development of power resources	3yr KTB rate - 2.25	2014~2027			64,202
	Facility	0.75~1.75	2023			5,355
	Project loans					8,677
	Others	3yr KTB rate - 2.25	2024~2025			13,707
Shinhan Bank and others	Facility	3yr AA- CB rate + 1.10	2028			30,000
Woori Bank	PF Refinancing	CD+1.7%	2026			21,613
	PF Refinancing	4.80	2026			11,991
Others	Facility	4.60~5.80	2025~2028			159,200
	PF Refinancing	4.80	2026			17,267
	PF Refinancing	CD+1.7%	2026			524
	Others	3yr KTB rate - 2.25	2023~2028			30,774
						4,193,700

Type		2013	Maturity	Foreign currency		Local currency
		Interest rate (%)		In millions of won and thousands of foreign currencies		
<b>Foreign long-term borrowings</b>						
Korea National Oil Corporation	Project loans	3yr KTB rate - 2.25		USD	8,784	9,270

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Export-Import Bank of US	Project loans	4.48	2014	USD	5,598	5,908
JBIC	Project loans	6M Libor + 0.012	2014	USD	10,301	10,870
Export-Import Bank of Korea and others	Project loans	7.20	2014	USD	2,803	2,958
	Term loan	LIBOR + 2.25	2033	USD	151,921	160,322
	Direct loan and others	LIBOR + 2.6~3.7	2027	JOD	129,975	194,062
Proparco and others	Shareholder s loan	LIBOR + 3.7	2027	USD	106,249	112,125
PT PJB	Shareholder s loan	8.00	2031	JOD	8,498	12,688
	Shareholder s loan	6.50		USD	31,876	33,639
	Shareholder s loan	12.75	2017	IDR	22,446,293	1,939

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Type		2013	Maturity	Foreign currency		Local currency
		Interest rate (%)		In millions of won and thousands of foreign currencies		
SMB and others	Commercial loan and others	LIBOR + 1.5~2.5	2030~2033	USD	131,603	138,881
HSBC and others	Syndicated loan	3M Libor+0.27~1.50	2014~2017	USD	374,124	394,813
Others	Others		2019~2031	USD	11,276	11,900
	Others	LIBOR + 0.95		USD	157,516	166,226
						1,255,601
						5,449,301
Less : Discount of long-term borrowings						(19,376)
Less : Current portion of long-term borrowings						(893,532)
Add : Current portion of discount of long-term borrowings						1,997
						4,538,390

**(4) Local debt securities as of December 31, 2012 and 2013 are as follows:**

	Issue date	Maturity	Interest rate (%)	2012	2013
	In millions of won				
Electricity Bonds	2008.06.05 ~ 2013.06.28	2013.07.31 ~ 2032.08.20	2.77 ~ 7.19	25,590,000	27,290,000
Electricity Bonds	2010.05.28 ~ 2013.06.25	2015.05.28 ~ 2018.06.25	3M CD + 0.25 ~ 1.05	1,010,000	1,160,000
Corporate Bonds	2009.02.26 ~ 2013.11.26	2014.02.26 ~ 2040.12.10	2.60 ~ 7.18	10,080,010	15,150,010
				36,680,010	43,600,010
Less : Discount on local debt securities				(29,436)	(37,675)
Less : Current portion of local debt securities				(3,980,000)	(4,250,000)
Add : Current portion of discount on local debt securities				814	679
				32,671,388	39,313,014

**Table of Contents****(5) Foreign debt securities as of December 31, 2012 and 2013 are as follows:**

Type	Issue date	Maturity	2012		Foreign currency	Local currency
			Interest rate (%)	In millions of won		
FY-93	1993.04.14	2013.04.14	7.75		USD 350,000	374,886
FY-96	1996.04.01	2096.04.01	6.00~8.37		USD 250,760	268,589
FY-97	1997.01.31	2027.08.04	6.75~7.00		USD 314,717	337,093
FY-03	2003.05.25	2013.05.25	4.75~6.00		USD 150,000	160,665
FY-04(*)	2004.04.21	2034.04.21	5.13~5.75		USD 450,000	481,995
FY-06	2006.03.14	2016.09.29	4.81~5.50		USD 650,000	696,215
FY-08	2008.11.27	2018.11.27	4.19		JPY 20,000,000	249,500
	2008.02.11	2013.04.18	5.38		USD 600,000	642,660
FY-09	2009.06.17	2014.07.21	5.5~6.25		USD 1,500,000	1,606,650
FY-10	2010.09.16	2015.10.05	3~3.13		USD 1,200,000	1,285,320
FY-10	2010.04.15	2015.11.18	3M USD		USD 550,000	589,105
			Libor+0.80~1.64			
FY-11	2011.07.13	2021.07.13	3.63~4.75		USD 800,000	856,880
FY-11	2011.02.18	2014.09.17	3M USD		USD 300,000	321,330
FY-12	2012.05.10	2022.09.19	2.5~3.83		USD 1,750,000	1,874,425
			Libor+0.80~1.00			
						9,745,313
Less : Discount on foreign debt securities						(67,374)
Less : Current portion of foreign debt securities						(1,500,331)
Add : Current portion of discount on foreign debt securities						797
						8,178,405

(\*) Global 4 in FY-04 can be redeemed on April 23, 2014 if bond holders claim the redemption from February 7, 2014 (75 days) to February 22, 2014 (60 days).

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Type	Issue date	Maturity	2013		Foreign currency	Local currency
			Interest rate (%)	In millions of won		
FY-96	1996.04.01~1996.12.06	2026.12.06~2096.04.01	6.00~8.37		USD 250,022	263,848
FY-97	1997.01.31~1997.08.04	2027.01.31~2027.08.04	6.75~7.00		USD 314,717	332,121
FY-04(*)	2004.04.21~2004.07.21	2014.07.21~2034.04.21	5.13~5.75		USD 450,000	474,885
FY-06	2006.03.14~2006.09.29	2016.03.14~2016.09.29	5.50~6.00		USD 650,000	685,945
FY-08	2008.11.27	2018.11.27	4.19		JPY 20,000,000	200,932
FY-09	2009.06.17~2009.07.21	2014.06.17~2014.07.21	5.50~6.25		USD 1,500,000	1,582,950
FY-10	2010.09.16~2010.10.05	2015.09.16~2015.10.05	3.00~3.13		USD 1,200,000	1,266,360
FY-10	2010.07.29~2010.11.18	2015.07.29~2015.11.18	3M USD		USD 250,000	263,825
			Libor+1.00~1.64			
FY-11	2011.07.13~2011.07.29	2017.01.29~2021.07.13	3.63~4.75		USD 800,000	844,240
FY-11	2011.02.18~2011.04.15	2014.04.15~2014.09.17	3M USD		USD 300,000	316,590
			Libor+0.80~1.00			
FY-12	2012.05.10~2012.09.19	2017.05.10~2022.09.19	2.50~3.00		USD 1,750,000	1,846,775
FY-13	2013.02.20~2013.07.25	2018.02.20~2018.07.25	3M USD		USD 500,000	527,650
			Libor+0.84~1.5			
FY-13	2013.09.25	2020.09.25	5.75		AUD 325,000	305,487
FY-13	2013.09.26~2013.10.23	2019.03.26~2019.04.23	1.50~1.63		CHF 400,000	475,468
FY-13	2013.02.05~2013.11.27	2018.02.05~2018.11.27	1.88~3.16		USD 1,900,000	2,005,070
						11,392,146
Less : Discount on foreign debt securities						(75,936)
Add : Premium on debt securities						353
Less : Current portion of foreign debt securities						(2,375,007)
Add : Current portion of discount on foreign debt securities						7,692
						8,949,248

(\*) Global 4 in FY-04 can be redeemed on April 23, 2014 if bond holders claim the redemption from February 7, 2014 (75 days) to February 22, 2014 (60 days).

**24. Finance Lease Liabilities****(1) Lease contracts**

The Company enters into a power purchase agreements ( PPA ) under which the Company is committed to purchase an aggregate capacity of 3,770 megawatts for approximately twenty years from independent power producers, such as, GS EPS and three other providers. The Company recognizes these PPAs as finance leases; under the PPAs, there is no transfer of ownership or bargain purchase option of the plants at the end of the agreement, however, the present value of the future minimum power purchase payments equals substantially all of the plants' respective fair values over a twenty-year period which makes up the major part of the respective plants' economic life.

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- (2) Finance lease liabilities as of December 31, 2012 and 2013 are as follows and are included in current and non-current trade and other payables, net, in the accompanying consolidated statements of financial position:

	2012		2013	
	Minimum lease payments	Present value of minimum lease payments	Minimum lease payments	Present value of minimum lease payments
In millions of won				
Less than 1 year	221,381	121,804	202,309	115,308
1 ~ 5 years	744,702	542,688	716,928	521,031
More than 5 years	556,276	342,677	381,742	248,627
	1,522,359	1,007,169	1,300,979	884,966

- (3) Current and non-current portion of financial lease liabilities as of December 31, 2012 and 2013 are as follows:

	2012	2013
In millions of won		
Current finance lease liabilities	121,804	115,308
Non-current finance lease liabilities	885,365	769,658
	1,007,169	884,966

- (4) Lease payments recognized as an expense from a lessee position for the years ended December 31, 2012 and 2013 are as follows:

	2012	2013
In millions of won		
Minimum lease payment	274,309	266,381
Contingent rent payment	(10,028)	(15,033)
	264,281	251,348

- (5) The Company does not have any irrevocable operating lease contracts as of December 31, 2012 and 2013.

## 25. Employment Benefits

- (1) Employment benefit obligations as of December 31, 2012 and 2013 are as follows:

	2012	2013
In millions of won		
Defined benefit obligations	2,069,864	2,064,505



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Other long-term employee benefit obligations	74,470	72,791
	2,144,334	2,137,296

(2) **Principal assumptions on actuarial valuation as of December 31, 2012 and 2013 are as follows:**

	<b>2012</b>	<b>2013</b>
Discount rate	3.51% ~ 3.58%	3.72% ~ 4.12%
Future salary and benefit levels	1.80% ~ 15.30%	1.77% ~ 7.97%
Weighted average duration	14.24 years	12.90 years

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(3) Details of expense relating to defined benefit plans for the years ended December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Current service cost	325,016	348,945
Interest cost	99,473	100,315
Expected return on plan assets	(19,600)	(15,975)
Others		(18)
	404,871	433,285

Expenses as described above are recognized in those items below in the financial statements.

	2012	2013
	In millions of won	
Cost of sales	292,548	308,642
Selling and administrative expenses	72,365	75,681
Others (Construction-in-progress and others)	39,958	48,962
	404,871	433,285

In addition, for the years ended December 31, 2012 and 2013, employee benefit obligations expenses of 41,265 million and 41,289 million, respectively, is recognized as cost of sales, and 5,067 million and 5,370 million, respectively, is recognized as selling and administrative expenses, and 9,994 million and 11,092 million, respectively relates to the Company's defined contribution plans.

(4) Details of defined benefit obligations as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Present value of defined benefit obligation from funded plans	2,540,264	2,629,057
Fair value of plan assets	(472,342)	(564,552)
	2,067,922	2,064,505
Present value of defined benefit obligation from unfunded plans	1,942	
Net liabilities incurred from defined benefit plans	2,069,864	2,064,505

(5) Changes in the present value of defined benefit obligations for the years ended December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Beginning balance	2,328,518	2,542,207
Current service cost	325,016	348,945
Interest cost(*)	99,473	100,315

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Remeasurement component	75,697	(204,478)
Actual payments	(286,501)	(157,711)
Others	4	(221)
Ending balance	2,542,207	2,629,057

(\*) Corporate bond (AAA rated) yield at year-end is applied to the interest cost on employee benefit obligations.

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**Table of Contents****(6) Changes in the fair value of plan assets for the years ended 2012 and 2013 are as follows:**

	<b>2012</b>	<b>2013</b>
	<b>In millions of won</b>	
Beginning balance	459,342	472,342
Expected return	19,600	15,975
Remeasurement component	(1,136)	243
Contributions by the employers	94,763	90,011
Contributions by the employees		11,709
Actual payments	(100,227)	(25,532)
Others		(196)
Ending balance	472,342	564,552

In addition, gain or loss on accumulated remeasurement component amounted to (76,088) million and 39,591 million and has been recognized as other comprehensive income for the years ended December 31, 2012 and 2013, respectively.

**(7) Details of the fair value of plan assets as of December 31, 2012 and 2013 are as follows:**

	<b>2012</b>	<b>2013</b>
	<b>In millions of won</b>	
Equity instruments	58,972	35,463
Debt instruments	93,812	124,056
Bank deposit	109,800	117,626
Others	209,758	287,407
	472,342	564,552

For the years ended December 31, 2012 and 2013, actual returns on plan assets are amounted to 18,464 million and 16,218 million, respectively.

**(8) Remeasurement component recognized in other comprehensive income for the years ended December 31, 2012 and 2013 are as follows:**

	<b>2012</b>	<b>2013</b>
	<b>In millions of won</b>	
Actuarial gain from changes in demographic assumptions		100,715
Actuarial gain (loss) from changes in financial assumptions	152,358	(351,257)
Experience adjustments	(76,661)	46,064
Expected return	1,136	(243)
	76,833	(204,721)

Remeasurement component recognized as other comprehensive income is recorded in retained earnings.

**Table of Contents****26. Provisions****(1) Provisions as of December 31, 2012 and 2013 are as follows:**

	2012		2013	
	Current	Non-current	Current	Non-current
	In millions of won			
Employment benefits	816,612		777,419	
Provision for employment benefits	816,612		777,419	
Litigation		26,697		23,720
Litigation provisions		26,697		23,720
Decommissioning cost		12,133,393		12,568,622
Nuclear plants		9,462,723		9,887,621
Spent fuel		1,207,842		1,211,440
Waste		1,242,396		1,249,062
PCBs		219,669		219,704
Other recovery provisions		763		795
Others	158,303	10,716	336,398	9,972
Power plant regional support program	106,763		112,498	
Provisions for tax	2,644	1,256		649
Provisions for financial guarantee		9,086		8,789
Provisions for RPS	48,795		223,259	
Others	101	374	641	534
	974,915	12,170,806	1,113,817	12,602,314

**(2) Changes in provisions for the years ended December 31, 2012 and 2013 are as follows:**

	Beginning balance	Accretion expenses	2012			Ending balance
			Payment	Reversal	Other	
	In millions of won					
Employment benefits	608,716	859,342	(627,570)	(32,176)	8,300	816,612
Provision for employment benefits	608,716	859,342	(627,570)	(32,176)	8,300	816,612
Litigation	44,409	17,367	(16,784)	(18,295)		26,697
Litigation provisions	44,409	17,367	(16,784)	(18,295)		26,697
Decommissioning cost	6,942,418	4,862,306	(337,991)		2,562	12,133,393
Nuclear plants	5,061,265	4,401,458				9,462,723
Spent fuel	869,549	646,487	(310,458)		2,264	1,207,842
Waste	796,522	460,848	(15,272)		298	1,242,396
PCBs	215,082	16,848	(12,261)			219,669
Other recovery provisions		763				763
Others	105,791	43,845	(99,794)	(2,882)	15,493	169,019
Power plant regional support program	91,987	41,661	(42,386)		15,501	106,763
Provisions for tax	2,013	2,184		(297)		3,900
Provisions for financial guarantee	11,300			(2,214)		9,086
Provisions for RPS		105,857	(57,062)			48,795
Others	491	709	(346)	(371)	(8)	475

7,701,334	6,553,524	(1,082,139)	(53,353)	26,355	13,145,721
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	Beginning balance	Accretion expenses	2013			Ending balance
			Payment	Reversal	Other	
			In millions of won			
Employment benefits	816,612	625,921	(574,900)	(90,214)		777,419
Provision for employment benefits	816,612	625,921	(574,900)	(90,214)		777,419
Litigation	26,697	17,610	(8,874)	(11,713)		23,720
Litigation provisions	26,697	17,610	(8,874)	(11,713)		23,720
Decommissioning cost	12,133,393	872,465	(437,859)		623	12,568,622
Nuclear plants	9,462,723	424,910	(12)			9,887,621
Spent fuel	1,207,842	407,236	(403,638)			1,211,440
Waste	1,242,396	29,490	(23,447)		623	1,249,062
PCBs	219,669	10,797	(10,762)			219,704
Other recovery provisions	763	32				795
Others	169,019	261,076	(97,788)	(3,153)	17,217	346,371
Power plant regional support program	106,763	35,952	(43,325)		13,108	112,498
Provisions for tax	3,900		(3,251)			649
Provisions for financial guarantee	9,086	1,667		(1,964)		8,789
Provisions for RPS	48,795	222,824	(51,451)	(1,130)	4,222	223,260
Others	475	633	239	(59)	(113)	1,175
	13,145,721	1,777,072	(1,119,421)	(105,080)	17,840	13,716,132

**27. Government Grants****(1) Government grants as of December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Cash	(29,741)	
Land	(3,106)	(3,137)
Buildings	(44,387)	(45,396)
Structures	(177,173)	(193,189)
Machinery	(105,112)	(101,808)
Vehicles	(128)	(83)
Equipment	(922)	(707)
Tools	(192)	(312)
Construction-in-progress	(94,676)	(117,728)
Investment properties	(243)	(13)
Software	(198)	(428)
Development expenditures	(12,371)	(11,705)
Intangible assets under development	(7,305)	(7,792)
Usage rights of donated assets and other	(64)	(53)
Others	(1)	(1)
	(475,619)	(482,352)

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(2) Changes in government grants for the years ended December 31, 2012 and 2013 are as follows:

	Beginning balance	Receipt	Acquisition	2012 Offset the items of depreciation expense and others In millions of won	Disposal	Others	Ending balance
Cash	(17,653)	(49,618)				37,530	(29,741)
Land	(3,106)						(3,106)
Buildings	(46,097)			3,713		(2,003)	(44,387)
Structures	(170,474)			8,560	1,394	(16,653)	(177,173)
Machinery	(97,725)			9,162	360	(16,909)	(105,112)
Vehicles	(2)			46		(172)	(128)
Equipment	(301)			245		(866)	(922)
Tools	(448)			256			(192)
Construction-in-progress	(89,600)		338			(5,414)	(94,676)
Investment properties	(246)			7		(4)	(243)
Software	(409)			264		(53)	(198)
Development expenditures	(11,653)			5,395		(6,113)	(12,371)
Intangible assets under development	(10,653)		3,348				(7,305)
Usage rights of donated assets and other	(75)			143		(132)	(64)
Others	(1)			3		(3)	(1)
	(448,443)	(49,618)	3,686	27,794	1,754	(10,792)	(475,619)

	Beginning balance	Receipt	Acquisition	2013 Offset the items of depreciation expense and others In millions of won	Disposal	Others	Ending balance
Cash	(29,741)	(92,000)				121,741	
Land	(3,106)					(31)	(3,137)
Buildings	(44,387)			3,943		(4,952)	(45,396)
Structures	(177,173)			8,389	1,733	(26,138)	(193,189)
Machinery	(105,112)			9,507	376	(6,579)	(101,808)
Vehicles	(128)			45			(83)
Equipment	(922)			311		(96)	(707)
Tools	(192)			155		(275)	(312)
Construction-in-progress	(94,676)		25,669			(48,721)	(117,728)
Investment properties	(243)			3		227	(13)
Software	(198)			160		(390)	(428)
Development expenditures	(12,371)			5,686		(5,020)	(11,705)
Intangible assets under development	(7,305)		5,358			(5,845)	(7,792)
Usage rights of donated assets and other	(64)			11			(53)
Others	(1)						(1)
	(475,619)	(92,000)	31,027	28,210	2,109	23,921	(482,352)





**Table of Contents****28. Deferred Revenues**

Deferred revenue related to the Company's construction contracts as of December 31, 2012 and 2013 are as follows and included in current and non-current non-financial liabilities in the accompanying consolidated statements of financial position:

	2012	2013
	In millions of won	
Beginning balance	5,428,993	6,031,311
Increase during the current year	903,322	800,618
Offset during the current year	(301,004)	(325,290)
Ending balance	6,031,311	6,506,639

**29. Non-financial Liabilities**

Non-financial liabilities as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Current	Non-current	Current	Non-current
	In millions of won			
Advance received	3,095,628	407,819	3,533,965	632,661
Unearned revenue	31,660	130,426	46,546	108,222
Deferred revenue	293,792	5,737,519	323,463	6,183,176
Withholdings	254,700	3,886	257,365	43,280
Others	441,660	19,000	569,292	18,302
	4,117,440	6,298,650	4,730,631	6,985,641

**30. Contributed Capital**

(1) Details of shares issued as of December 31, 2012 and 2013 are as follows:

	2012					
	Shares authorized	Shares issued	Par value per share	Owned by government(*)	Owned by others	Total
	In millions of won except share information					
Common shares	1,200,000,000	641,964,077	5,000	1,640,385	1,569,435	3,209,820

(\*) Korea Finance Corporation ownership of 960,800 million are included.

	2013					
	Shares authorized	Shares issued	Par value per	Owned by government(*)	Owned by others	Total

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	share					
	In millions of won except share information					
Common shares	1,200,000,000	641,964,077	5,000	1,640,385	1,569,435	3,209,820

(2) There were no changes in number of outstanding capital stock for the years ended December 31, 2012 and 2013.

(3) Details of share premium as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Share premium	843,758	843,758

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**Table of Contents****31. Retained Earnings and Dividends Paid****(1) Details of retained earnings as of December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Legal reserve(*)	1,603,919	1,603,919
Voluntary reserves	25,961,315	22,753,160
Retained earnings before appropriations	4,999,049	8,409,007
Retained earnings	32,564,283	32,766,086

(\*) The KEPCO Act requires the Company to appropriate a legal reserve equal to at least 20 percent of net income for each accounting period until the reserve equals 50 percent of the Company's common stock. The legal reserve is not available for cash dividends; however, this reserve may be credited to paid-in capital or offset against accumulated deficit by the resolution of the shareholders.

**(2) Details of voluntary reserves as of December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Reserve for investment on social overhead capital	5,277,449	5,277,449
Reserve for research and human development(*)	330,000	330,000
Reserve for business expansion	20,143,866	16,935,711
Reserve for equalizing dividends	210,000	210,000
	25,961,315	22,753,160

(\*) The reserve for research and human development is appropriated by the Company to use as qualified tax credits to reduce corporate tax liabilities. The reserve is available for cash dividends for a certain period as defined by the Tax Incentive Control Law of Korea.

**(3) Changes in retained earnings for the years ended December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Beginning balance	35,769,094	32,564,283
Net loss for the period attributed to owner of the Company	(3,166,616)	60,011
Changes in equity method retained earnings	(846)	7,671
Actuarial profits (losses)	(37,349)	134,121
Ending balance	32,564,283	32,766,086

(4) Dividends paid for the years ended December 31, 2012 and 2013 are as follows:

	Number of shares issued	Number of treasury stocks	2012 Number of shares eligible for dividends	Dividends Paid	Dividends paid per share
Common shares	641,964,077	18,929,995	623,034,082		

	Number of shares issued	Number of treasury stocks	2013 Number of shares eligible for dividends	Dividends Paid	Dividends paid per share
Common shares	641,964,077	18,929,995	623,034,082		

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(5) Changes in retained earnings of investments in associates and joint ventures for the years ended 2012 and 2013 are as follow:

	2012	2013
	In millions of won	
Beginning balance	(7,058)	(7,904)
Changes	(1,155)	7,671
Income tax effect	309	
Ending balance	(7,904)	(233)

**32. Statement of Appropriation of Retained Earnings**

For the year ended December 31, 2012, the Company's retained earnings were appropriated on March 29, 2013.

For the year ended December 31, 2013, the Company's retained earnings are expected to be appropriate on March 28, 2014. Statements of appropriation of retained earnings of KEPCO, the parent, for the years ended December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won except for dividends per share	
<b>I. Retained Earnings Before Appropriations</b>		
Unappropriated retained earnings carried over from prior years		
Net income (loss)	(3,226,597)	238,307
Remeasurements of the defined benefit plan	18,442	64,956
	(3,208,155)	303,263
<b>II. Transfer from voluntary reserves</b>	3,208,155	
<b>III. Subtotal (I+II)</b>		303,263
<b>IV. Appropriations of retained earnings</b>		(303,263)
Legal reserve		(991)
Dividends (government, individual)		
(Amount of dividends per share (%) : Current year 90 (1.8%)		
Prior year none )		(56,073)
Reserve for business expansion		(246,199)
<b>V. Unappropriated retained earnings to be carried over forward to subsequent year</b>		

**Table of Contents****33. Hybrid Bonds**

Korea Western Power Co., Ltd. and Korea South-East Power Co., Ltd. which are wholly owned subsidiaries of the Company, issued bond-type hybrid bonds for the year ended December 31, 2013. Bond-type hybrid securities classified as equity (non-controlling interest) as of December 31, 2013 are as follows:

Issuer	Hybrid Bond	Issued date	Maturity	Yield (%)	Amount
In millions of won					
Korea Western Power Co., Ltd.	1st bond-type hybrid bond	2012.10.18	2042.10.18	5yr government bond rate + 1.20	100,000
Korea South-East Power Co., Ltd.	1st bond-type hybrid bond	2012.12.07	2042.12.06	4.38	170,000
Korea South-East Power Co., Ltd.	2nd bond-type hybrid bond	2012.12.07	2042.12.06	4.44	230,000
Expense of Issuance					(1,340)
					498,660

Although these instruments have contractual maturity dates, the contractual agreements allow the Company to indefinitely extend the maturity dates and defer the payment of interest without modification to the other terms of the instruments. When the Company decides to not pay dividends on ordinary shares, the Company is not required to pay interest on the hybrid bonds.

Substantially, as these instruments have no contractual obligation to pay principal and interest, these instruments have been classified as equity (non-controlling interest).

**34. Other Components of Equity****(1) Other components of equity of the parent as of December 31, 2012 and 2013 are as follows:**

	2012	2013
In millions of won		
Other capital surpluses	705,448	830,982
Accumulated other comprehensive income	11,957	55,538
Treasury stocks	(741,489)	(741,489)
Other equity	13,294,990	13,294,973
	13,270,906	13,440,004

**(2) Changes in other capital surpluses for the years ended December 31, 2012 and 2013 are as follows:**

	2012			2013		
	Gains on disposal of treasury stocks	Others	Subtotal	Gains on disposal of treasury stocks	Others	Subtotal
In millions of won						
Beginning balance	303,028	336,000	639,028	303,028	402,420	705,448

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Disposal of subsidiary		87,624	87,624		183,522	183,522
Issuance of share						
capital of subsidiary					(155)	(155)
Change in consolidation scope					(10,224)	(10,224)
Income tax effect		(21,204)	(21,204)		(47,609)	(47,609)
Ending balance	303,028	402,420	705,448	303,028	527,954	830,982

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(3) Changes in accumulated other comprehensive income (loss) for the years ended December 31, 2012 and 2013 are as follows:

	2012				Total
	Available-for-sale financial asset valuation reserve	Shares in other comprehensive income of investments in associates and joint ventures	Reserve for overseas operations translation credit In millions of won	Reserve for gain (loss) on valuation of derivatives	
Beginning balance	(26,184)	239,447	34,488	7,344	255,095
Changes in the unrealized fair value of available-for-sale financial assets, net of tax	2,255				2,255
Shares in other comprehensive income of associates and joint ventures, net of tax		(95,889)			(95,889)
Foreign currency translation of foreign operations, net of tax			(104,595)		(104,595)
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax				(44,909)	(44,909)
Ending balance	(23,929)	143,558	(70,107)	(37,565)	11,957

	2013				Total
	Available-for-sale financial asset valuation reserve	Shares in other comprehensive income of investments in associates and joint ventures	Reserve for overseas operations translation credit In millions of won	Reserve for gain (loss) on valuation of derivatives	
Beginning balance	(23,929)	143,558	(70,107)	(37,565)	11,957
Changes in the unrealized fair value of available-for-sale financial assets, net of tax	86,543				86,543
Shares in other comprehensive income of associates and joint ventures, net of tax		38,703			38,703
Foreign currency translation of foreign operations, net of tax			(100,572)		(100,572)
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax				18,907	18,907
Ending balance	62,614	182,261	(170,679)	(18,658)	55,538

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(4) There were no changes in treasury stocks for the years ended December 31, 2012 and 2013.

(5) Changes in other equity for the years ended December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Statutory revaluation reserve	13,295,098	13,295,098
Changes in other equity	(108)	(125)
	13,294,990	13,294,973

**35. Sales**

Details of sales for the years ended December 31, 2011, 2012 and 2013 are as follows:

	2011		2012		2013	
	Domestic	Overseas	Domestic	Overseas	Domestic	Overseas
	In millions of won					
Sales of goods	41,135,735	261,734	46,667,133	239,454	50,876,783	256,020
Electricity	40,502,913		45,979,601		50,170,178	
Heat supply	190,336		216,417		244,455	
Others	442,486	261,734	471,115	239,454	462,150	256,020
Sales of service	186,837	135,779	215,887	141,990	198,932	127,687
Sales of construction services	171,411	1,283,721	98,883	1,757,162	238,924	2,014,159
	41,493,983	1,681,234	46,981,903	2,138,606	51,314,639	2,397,866

**Table of Contents****36. Selling and Administrative Expenses**

(1) Composition of selling and administrative expenses for the years ended December 31, 2011, 2012 and 2013 are as follows:

	2011	2012	2013
	In millions of won		
Salaries	537,137	579,305	566,748
Retirement benefit expense	66,955	77,432	81,051
Welfare and benefit expense	104,588	103,088	107,342
Insurance expense	3,066	4,048	7,408
Depreciation	41,900	46,498	68,222
Amortization of intangible assets	53,525	51,779	50,266
Bad debt expense	14,269	37,447	40,446
Commission	509,846	442,961	510,309
Advertising expense	21,918	23,270	28,127
Training expense	5,125	5,853	5,332
Vehicle maintenance expense	11,690	12,417	12,358
Publishing expense	2,858	2,883	3,190
Business promotion expense	3,171	3,322	3,707
Rent expense	26,550	34,505	39,652
Telecommunication expense	23,722	23,811	24,468
Transportation expense	226	387	347
Taxes and dues	64,707	46,950	43,648
Expendable supplies expense	3,720	4,999	4,453
Water, light and heating expense	8,683	10,384	9,669
Repairs and maintenance expense	12,232	13,199	25,512
Ordinary development expense	134,929	142,264	166,106
Travel expense	11,019	12,984	13,146
Clothing expense	2,356	6,438	4,374
Survey and analysis expense	769	815	623
Membership fee	609	672	774
Sales promotional expense			5
Others	86,126	92,457	105,909
	1,751,696	1,780,168	1,923,192

(2) Other selling and administrative expenses for the years ended December 31, 2011, 2012 and 2013 are as follows:

	2011	2012	2013
	In millions of won		
Sales promotional expenses	21,771	19,929	22,061
Miscellaneous wages	17,971	25,437	34,284
Litigation and filing expenses	9,180	7,931	9,501
Compensation for damages	8,381	1,634	2,289
Outsourcing expenses	2,138	5,081	4,002
Reward expenses	3,014	3,222	2,507
Others	23,672	29,223	31,265
	86,127	92,457	105,909



**Table of Contents****37. Other Income and Expense****(1) Other income for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Reversal of other provisions	110	18,472	11,743
Reversal of allowance for doubtful accounts	460	152	
Gains on assets contributed	4,392	16,486	14,392
Gains on liabilities exempted	4,578	2,329	2,425
Compensation and reparations revenue	30,350	82,021	94,064
Gains on electricity infrastructure development fund	48,154	35,804	50,808
Revenue from research contracts	6,124	8,922	10,815
Revenue related to transfer of assets from customers	280,458	301,004	325,290
Rental income	180,562	185,735	187,351
Others	43,114	24,075	28,569
	598,302	675,000	725,457

**(2) Details of others of other income for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Refund of claim for rectification	19,420	12,417	9,796
Adjustment of research project	1,003	2,492	3,891
Maintenance expenses on lease building	876	1,110	2,320
Training expenses	1,157	934	3,657
Deposit redemption	1,427	2,154	142
Reversal of expenses on litigation			2,340
Compensation for land incorporation	1,001	924	
Revenue on royalty fee			2,471
Harbor facilities dues of DangJin thermal power plant	880	1,002	
Others	17,350	3,042	3,952
	43,114	24,075	28,569

**(3) Other expense for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Compensation and reparations expense	2,000		
Accretion expenses of other provisions	238	498	443
Depreciation expenses on investment properties	927	974	908
Depreciation expenses on idle assets	6,619	9,699	6,661
Other bad debt expense	867	3,994	8,665
Donations	100,352	34,550	57,970
Others	36,592	24,852	25,164

147,595 74,567 99,811

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**Table of Contents****(4) Details of others of other expense for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Operating expenses related to the idle assets	1,230	1,254	1,034
Research grants	4,223	877	551
Supporting expenses on farming and fishing village		11,727	16,162
Operating expenses on fitness center	1,823	2,240	2,382
Expenses on adjustment of research and development grants	625	2,860	1,272
Forfeit of taxes and dues			2,442
Expenses on unauthorized provision payment of decommissioning cost	23,475	1,307	
Others	5,216	4,587	1,321
	36,592	24,852	25,164

**38. Other Gains (Losses)****(1) Composition of other gains (losses) for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Other gains			
Gains on disposal of property plant, and equipment	38,776	32,797	59,345
Gains on disposal of intangible assets		15	4
Gains on disposal of other non-current assets		584	
Reversal of impairment loss on intangible assets		7	121
Gains on foreign currency translation	1,659	5,174	2,835
Gains on foreign currency transaction	100,811	67,006	62,817
Insurance proceeds		5,375	1,700
Others	213,624	168,270	208,554
Other losses			
Losses on disposal of property plant and equipment	(31,228)	(39,942)	(58,852)
Losses on disposal of intangible assets	(5)	(44)	(1)
Impairment loss on property, plant and equipment			(1,161)
Impairment loss on intangible assets	(221)	(459)	(267)
Impairment loss on other non-current non-financial assets(*)		(1,877,371)	
Losses on foreign currency translation	(5,402)	(1,312)	(9,978)
Losses on foreign currency transaction	(98,806)	(65,892)	(59,907)
Others	(53,505)	(76,043)	(76,696)
	165,703	(1,781,835)	128,514

(\*)

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The impairment on other non-current non-financial assets was recognized for the full fuel cost pass-through adjustment (FCPTA) amounts. Although the Regulation for Electricity Service states that recognized FCPTA amounts are to be settled in the following year, the Company recognized full impairment of the FCPTA amounts as it concluded that the collectability of the FCPTA amounts could no longer be certain since the Government had not lifted the hold-order for more than one year. See note 49 (5).

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**Table of Contents****(2) Details of others of other gains for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Gains on disposal of inventories	12,901	13,434	11,387
Gains on valuation of inventories	1	19	903
Gains on proxy collection of TV license fee	35,443	36,036	36,706
Gains on compensation of impaired electric poles	11,323	11,628	5,407
Gains on compensation for infringement on contract	6,910	2,353	4,311
Gains on harbor facilities dues	5,047	4,804	4,745
Technical fees	3,432	1,442	3,940
Reversal of occupation development training fees	1,761	2,465	2,369
Gains on disposal of waste	3,652	2,915	9,979
Gains on insurance	11,764	3,071	12,828
Gains on litigation	2,568	870	5,813
Interests on tax rebate	1,166	1,522	9,258
Gains on other commission	18,154	19,414	14,288
Gains on settlement and others	26,350	2,868	11,205
Others	73,152	65,429	75,415
	213,624	168,270	208,554

**(3) Details of others of other losses for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Losses on valuation of inventories	6,747	6,920	1,604
Losses on disposal of inventories	4,944	2,360	1,778
Losses due to disaster	11,203	29,090	4,456
Losses on rounding adjustment of electric charge surtax	1,129	1,168	1,174
Losses on adjustments of levies	6,075	3,023	41,176
Losses on write-off			3,627
Penalty on taxes and dues	244	2,742	2,116
Commission and others		3,962	821
Others	23,163	26,778	19,944
	53,505	76,043	76,696

**39. Finance Income****(1) Finance income for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Interest income	291,625	204,123	182,161
Dividends income	18,894	10,452	9,870
Gains on disposal of financial assets		189	196

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Gains on valuation of derivatives	171,341	3,289	16,927
Gains on transaction of derivatives	30,660	38,745	120,948
Gains on foreign currency translation	8,172	786,139	263,311
Gains on foreign currency transaction	86,779	85,420	36,129
Other finance income	121		
	607,592	1,128,357	629,542

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**Table of Contents****(2) Interest income included in finance income for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Cash and cash equivalents	43,822	63,456	60,301
Held-to-maturity investments	85	69	64
Available-for-sale financial assets			1,150
Loans and receivables	188,457	47,028	42,418
Trade and other receivables	16,902	70,304	60,237
Other financial assets			1,082
Short-term financial instrument	42,359	23,250	16,896
Long-term financial instrument		16	13
	291,625	204,123	182,161

**40. Finance expenses****(1) Finance expenses for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Interest expense	2,123,579	2,344,328	2,381,900
Losses on sale of financial assets			4,202
Impairment of available-for-sale financial assets		40,156	12,592
Losses on valuation of derivatives	46,325	577,837	263,777
Losses on transaction of derivatives	80,369	61,825	107,582
Losses on foreign currency translation	230,441	23,138	60,597
Losses on foreign currency transaction	38,136	21,037	100,972
	2,518,850	3,068,321	2,931,622

**(2) Interest expense included in finance expenses for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Trade and other payables	147,882	118,372	102,388
Short-term borrowings	101,304	52,025	32,928
Long-term borrowings	201,252	221,917	191,638
Debt securities	1,936,682	2,154,599	2,234,148
Exchangeable bonds	2,533		
Other financial liabilities	307,272	398,717	564,139
	2,696,925	2,945,630	3,125,241
Less: Capitalized borrowing costs	(573,346)	(601,302)	(743,341)

2,123,579	2,344,328	2,381,900
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Capitalization rates for the years ended December 31, 2011, 2012 and 2013 are 3.67% ~ 5.30%, 3.25% ~ 5.31% and 3.71% ~ 4.33%, respectively.

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**Table of Contents****41. Income Taxes****(1) Income tax expense for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
<b>Current income tax expense</b>			
Payment of income tax	569,746	140,969	172,574
Adjustment recognized in the period for current tax of prior period	(44,524)	28,271	(11,833)
Current income tax directly recognized in equity	35,799	36,175	(151,076)
	561,021	205,415	9,665
<b>Deferred income tax expense</b>			
Generation and realization of temporary differences	468,133	(224,069)	(532,604)
Recognition of unrecognized tax losses in the past, tax credit and temporary differences before prior year	(231,527)	245,914	(201,420)
Changes in deferred tax on tax losses incurred in the period	(1,020,378)	(1,212,610)	93,668
Unrecognized deferred tax assets	697,779	(27)	103,555
Tax credit carry forwards	(3,525)		(43,658)
Changes in tax rates or tax laws	348,368		
	258,850	(1,190,792)	(580,459)
Income tax expense (benefit)	819,871	(985,377)	(570,794)

**(2) Reconciliation between actual income tax expense (benefit) and amount computed by applying the statutory tax rate of 24.2% to loss before income taxes for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Loss before income tax (expense) benefits	(2,473,126)	(4,063,346)	(396,488)
Income tax benefit computed at applicable tax rate of 24.2%	598,496	983,330	95,950
<b>Adjustments</b>			
Additional payment of income taxes or receipt of income tax refunds	36,544	(18,530)	36,003
Effect of applying gradual tax rate	101	2,332	2,357
Effect of non-taxable revenue	153,928	159,843	82,810
Effect of non-deductible expenses	(315,536)	(29,744)	(13,698)
Effect of tax losses not recognized as deferred tax assets	(697,779)		
Effects of tax credits and deduction	38,367	82,669	335,710
Recognition of unrecognized tax losses in the past, tax credit, and temporary differences before prior year	237,686	108,511	179,147
Unrecognized deferred tax assets			(123,227)
Consolidated deferred income tax	(567,134)	(321,041)	(93,984)
The effect of changes in tax rates (from 22% to 24.2%)	(320,244)		
Others, net	15,700	18,007	69,726
	(1,418,367)	2,047	474,844

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Income tax (expense) benefit	(819,871)	985,377	570,794
Effective tax rate	(-)33%	24%	144%

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- (3) **Deferred income tax directly adjusted to shareholders' equity (except for accumulated other comprehensive income) for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Dividends of hybrid securities			5,455
Loss on disposal of subsidiaries and associates	(22,143)	(21,204)	(47,609)
	(22,143)	(21,204)	(42,154)

- (4) **Income tax recognized as accumulated other comprehensive income for the years ended December 31, 2011, 2012 and 2013 are as follows:**

	2011	2012	2013
	In millions of won		
Income tax recognized as accumulated other comprehensive income			
Gain (loss) on valuation of available-for-sale financial assets	3,369	22,774	(31,367)
Net change in the unrealized fair value of derivatives using cash flow hedge accounting, net of tax	137	(1,845)	6,416
Actuarial losses on employee benefit obligations	66,873	34,704	(73,647)
Investments in associates	(12,763)	(1,377)	(10,324)
Others	326	3,123	
	57,942	57,379	(108,922)

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- (5) Changes in deferred income tax assets (liabilities) recognized in the statements of financial position for the years ended December 31, 2012 and 2013 are as follows:

	Beginning balance	Amounts recognized in profit or loss	2012 Amount recognized in other comprehensive income	Amounts recognized directly in equity	Ending balance
In millions of won					
<b>Deferred income tax on temporary differences</b>					
Employee benefits	453,084	59,327	34,704		547,115
Cash flow hedge	(71,459)	61,940	(1,845)		(11,364)
Investments in associates or subsidiaries	(5,141,190)	(110,133)	(1,377)	(21,204)	(5,273,904)
Property, plant and equipment	(4,940,423)	(1,385,778)			(6,326,201)
Finance lease	(126,880)	(33,077)			(159,957)
Intangible assets	32,549	(24,015)			8,534
Financial assets at fair value through profit or loss	26,996	3,152			30,148
Available-for-sale financial assets	(119,591)	22,950	22,774		(73,867)
Deferred revenue	46,538	(2,786)			43,752
Provisions	1,742,895	1,260,594			3,003,489
Doubtful receivables	9	50			59
Other finance liabilities	7,066	3,728			10,794
Gain (loss) on foreign exchange translation	97,078	(91,061)			6,017
Allowance for doubtful accounts	(1,646)	1,561			(85)
Accrued income	(2,154)	813			(1,341)
Special deduction	(194,648)	(277)			(194,925)
Reserve for research and human development	(33,563)	(6,922)			(40,485)
Others	286,400	109,347	3,123		398,870
	(7,938,939)	(130,587)	57,379	(21,204)	(8,033,351)
<b>Deferred income tax on unused tax losses and tax credit</b>					
Tax losses	1,489,803	1,206,362			2,696,165
Tax credit	32,480	64,716			97,196
Others	2,355	14,126			16,481
	1,524,638	1,285,204			2,809,842
	(6,414,301)	1,154,617	57,379	(21,204)	(5,223,509)



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	Beginning balance	Amounts recognized in profit or loss	2013 Amount recognized in other comprehensive income  In millions of won	Amounts recognized directly in equity	Ending balance
<b>Deferred income tax on temporary differences</b>					
Employee benefits	547,115	45,213	(73,647)		518,681
Cash flow hedge	(11,364)	56,939	6,416		51,991
Investments in associates or subsidiaries	(5,273,904)	104,803	(10,324)	(47,609)	(5,227,034)
Property, plant and equipment	(6,326,201)	264,588			(6,061,613)
Finance lease	(159,957)	17,876			(142,081)
Intangible assets	8,534	1,708			10,242
Financial assets at fair value through profit or loss	30,148	53,497			83,645
Available-for-sale financial assets	(73,867)	4,146	(31,367)		(101,088)
Deferred revenue	43,752	201,054			244,806
Provisions	3,003,489	147,419			3,150,908
Doubtful receivables	59				59
Other finance liabilities	10,794	9,607		5,455	25,856
Gains (losses) on foreign exchange translation	6,017	(25,181)			(19,164)
Allowance for doubtful accounts	(85)	7,399			7,314
Accrued income	(1,341)	93			(1,248)
Special deduction	(194,925)	140			(194,785)
Impairment of non-current assets		86,720			86,720
Reserve for research and human development	(40,485)	(2,658)			(43,143)
Others	398,870	10,566			409,436
	(8,033,351)	983,929	(108,922)	(42,154)	(7,200,498)
<b>Deferred income tax on unused tax losses and tax credit</b>					
Tax losses	2,696,165	(194,816)			2,501,349
Tax credit	97,196	(41,097)			56,099
Others	16,481	(16,481)			
	2,809,842	(252,394)			2,557,448
	(5,223,509)	731,535	(108,922)	(42,154)	(4,643,050)

- (6) **Deferred income tax assets (liabilities) recognized in the statements of financial position as of December 31, 2012 and 2013 are as follows:**

	2012	2013
	In millions of won	
Deferred income tax assets	209,783	359,535
Deferred income tax liabilities	(5,433,292)	(5,002,585)
	(5,223,509)	(4,643,050)

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- (7) Details of deductible temporary differences, tax losses and unused tax credits not recognized in the deferred income tax assets as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Deductible temporary differences	300,517	441,955
Tax losses and tax credits carryback	2,883,385	29,775
	3,183,902	471,730

- (8) Expiration dates of deductible temporary differences, tax losses and unused tax credits not recognized in the deferred income tax assets as of December 31, 2012 and 2013 are as follows:

	2012		2013	
	Tax losses	Tax credits carryback	Tax losses	Tax credits carryback
	In millions of won			
Less than 1 year	2,883,385			4,484
1 ~ 2 years				5,134
2 ~ 3 years				16,945
More than 3 years				3,212
	2,883,385			29,775

**Table of Contents****42. Expenses Classified by Nature**

Expenses classified by nature for the years ended December 31, 2011, 2012 and 2013 are as follows:

	Selling and administrative expenses	2011	
		Cost of sales In millions of won	Total
Raw materials used		20,959,380	20,959,380
Salaries	537,137	2,510,370	3,047,507
Retirement benefit expense	66,955	308,629	375,584
Welfare and benefit expense	104,588	371,475	476,063
Insurance expense	3,065	42,847	45,912
Depreciation	41,900	6,733,214	6,775,114
Amortization of intangible assets	53,525	41,204	94,729
Bad debt expense	14,270		14,270
Commission	509,846	307,861	817,707
Advertising expense	21,918	6,046	27,964
Training expense	5,125	7,889	13,014
Vehicle maintenance expense	11,690	6,604	18,294
Publishing expense	2,858	5,070	7,928
Business promotion expense	3,171	4,213	7,384
Rent expense	26,550	80,454	107,004
Telecommunication expense	23,722	74,426	98,148
Transportation expense	226	3,791	4,017
Taxes and dues	64,707	183,636	248,343
Expendable supplies expense	3,720	22,506	26,226
Water, light and heating expense	8,683	15,509	24,192
Repairs and maintenance expense	12,232	1,415,673	1,427,905
Ordinary development expense	134,929	388,990	523,919
Travel expense	11,019	33,567	44,586
Clothing expense	2,356	6,736	9,092
Survey and analysis expense	769	3,004	3,773
Membership fee	609	3,936	4,545
Power purchase		7,403,716	7,403,716
Others	86,126	1,784,148	1,870,274
	1,751,696	42,724,894	44,476,590

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	2012		
	Selling and administrative expenses	Cost of sales In millions of won	Total
Raw materials used		23,307,996	23,307,996
Salaries	579,305	2,661,869	3,241,174
Retirement benefit expense	77,432	333,813	411,245
Welfare and benefit expense	103,088	382,098	485,186
Insurance expense	4,048	49,915	53,963
Depreciation	46,498	6,846,179	6,892,677
Amortization of intangible assets	51,779	41,581	93,360
Bad debt expense	37,447		37,447
Commission	442,961	325,152	768,113
Advertising expense	23,270	6,818	30,088
Training expense	5,853	8,499	14,352
Vehicle maintenance expense	12,417	10,045	22,462
Publishing expense	2,883	4,095	6,978
Business promotion expense	3,322	3,973	7,295
Rent expense	34,505	86,648	121,153
Telecommunication expense	23,811	67,819	91,630
Transportation expense	387	3,635	4,022
Taxes and dues	46,950	187,617	234,567
Expendable supplies expense	4,999	22,816	27,815
Water, light and heating expense	10,384	24,620	35,004
Repairs and maintenance expense	13,199	1,409,917	1,423,116
Ordinary development expense	142,264	361,750	504,014
Travel expense	12,984	44,346	57,330
Clothing expense	6,438	3,286	9,724
Survey and analysis expense	815	2,513	3,328
Membership fee	672	4,483	5,155
Power purchase		9,800,760	9,800,760
Others	92,457	2,457,019	2,549,476
	1,780,168	48,459,262	50,239,430

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	Selling and administrative expenses	2013	
		Cost of sales	Total
In millions of won			
Raw materials used		23,778,430	23,778,430
Salaries	566,748	2,583,032	3,149,780
Retirement benefit expense	81,051	349,931	430,982
Welfare and benefit expense	107,342	366,234	473,576
Insurance expense	7,408	63,125	70,533
Depreciation	68,222	7,228,205	7,296,427
Amortization of intangible assets	50,266	38,113	88,379
Bad debt expense	40,446		40,446
Commission	510,309	359,879	870,188
Advertising expense	28,127	7,133	35,260
Training expense	5,332	10,146	15,478
Vehicle maintenance expense	12,358	9,683	22,041
Publishing expense	3,190	4,088	7,278
Business promotion expense	3,707	4,340	8,047
Rent expense	39,652	93,001	132,653
Telecommunication expense	24,468	69,885	94,353
Transportation expense	347	4,139	4,486
Taxes and dues	43,648	195,076	238,724
Expendable supplies expense	4,453	25,554	30,007
Water, light and heating expense	9,669	27,879	37,548
Repairs and maintenance expense	25,512	1,431,441	1,456,953
Ordinary development expense	166,106	411,027	577,133
Travel expense	13,145	45,928	59,073
Clothing expense	4,374	4,207	8,581
Survey and analysis expense	623	3,471	4,094
Membership fee	774	5,478	6,252
Power purchase		11,328,898	11,328,898
Others	105,915	2,147,315	2,253,230
	1,923,192	50,595,638	52,518,830

**43. Earnings (Loss) Per Share**

(1) Basic earnings (loss) per share for the years ended December 31, 2011, 2012 and 2013 are as follows:

Type	2011	2012	2013
In won			
Basic earnings (loss) per share	(5,411)	(5,083)	96

(2) Diluted earnings (loss) per share for the years ended December 31, 2011, 2012 and 2013 are as follows:

Type	2011	2012	2013
In won			
Diluted earnings (loss) per share	(5,411)	(5,083)	96



**Table of Contents****(3) Basic earnings (loss) per share**

Net income (loss) and weighted average number of common shares used in the calculation of basic earnings (loss) per share for the years ended December 31, 2011, 2012 and 2013 are as follows:

Type	2011	2012	2013
	In millions of won except number of shares		
Controlling interest in net income (loss)	(3,370,464)	(3,166,616)	60,011
Profit (loss) used in the calculation of total basic earnings (loss) per share	(3,370,464)	(3,166,616)	60,011
Weighted average number of common shares	622,884,223	623,034,082	623,034,082

**(4) Diluted earnings (loss) per share**

Diluted earnings (loss) per share is calculated by applying adjusted weighted average number of common shares under the assumption that all dilutive potential common shares are converted to common shares.

Earnings used in the calculation of total diluted earnings (loss) per share for the years ended December 31, 2011, 2012 and 2013 are as follows:

Type	2011	2012	2013
	In millions of won except number of shares		
Earnings (loss) used in the calculation of total diluted earnings (loss) per share	(3,370,464)	(3,166,616)	60,011

Weighted average common shares used in calculating diluted earnings (loss) per share are adjusted from weighted average common shares used in calculating basic earnings (loss) per share. Detailed information of the adjustment for the years ended December 31, 2011, 2012 and 2013 are as follows:

Type	2011	2012	2013
	In number of shares		
Weighted average number of common shares	622,884,223	623,034,082	623,034,082
Diluted weighted average number of shares	622,884,223	623,034,082	623,034,082

**(5) There are no potential common shares for the years ended December 31, 2011, 2012 and 2013.**

**44. Risk Management****(1) Capital risk management**

The Company manages its capital to ensure that entities in the Company will be able to continue while maximizing the return to shareholder through the optimization of the debt and equity balance. The capital structure of the Company consists of net debt (offset by cash and cash equivalents) and equity. The Company's overall capital risk management strategy remains unchanged from that of the prior year.

Details of the Company's capital management accounts as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Total borrowings and debt securities	53,219,409	60,888,150

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Cash and cash equivalents	(1,954,949)	(2,232,313)
Net borrowings and debt securities	51,264,460	58,655,837
Total shareholder's equity	51,064,202	51,450,736
Debt to equity ratio	100.39%	114.00%

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**Table of Contents****(2) Financial risk management**

The Company is exposed to various risks related to its financial instruments, such as, market risk (currency risk, interest rate risk, price risk), credit risk. The Company monitors and manages the financial risks relating to the operations of the Company through internal risk reports which analyze exposures by degree and magnitude of risks. The Company uses derivative financial instruments to certain hedge risk exposures. The Company's overall financial risk management strategy remains unchanged from that of the prior year.

**(i) Credit risk**

Credit risk is the risk of finance loss to the Company if a customer or counterparty to a financial instrument fails to meet its contractual obligations, and arises primarily from the sales activities, securities and derivatives. In addition, credit risk exposure may exist within financial guarantees and unused line of credits. As these financial institutions the Company makes transactions with are reputable financial institutions, the credit risk from them are considered limited. The Company decides credit transaction limits based on evaluation of client's credit, through information obtained from the credit bureau and disclosed financial position at committing contracts.

**Credit risk management**

Electricity sales, the main operations of the Company are the necessity for daily life and industrial activities of Korean nationals, and have importance as one of the national key industries. The Company dominates the domestic market supplying electricity to customers. The Company is not exposed to credit risk as customers of the Company are from various industries and areas. The Company uses publicly available information and its own internal data related to trade receivables, to rate its major customers and to measure the credit risk that a counter party will default on a contractual obligation. For the incurred but not recognized loss, it is measured considering overdue period.

**Impairment and allowance account**

In accordance with the Company policies, individual material financial assets are assessed on a regular basis, trade receivables that are assessed not to be impaired individually are, in addition, assessed for impairment on a collective basis. Value of the acquired collateral (including the confirmation of feasibility) and estimated collectable amounts are included in this assessment.

Allowance for bad debts assessed on a collective basis are recognized for (i) the Company of assets which individually are not material and (ii) incurred but not recognized losses that are assessed using statistical methods, judgment and past experience.

Book values of the financial assets represent the maximum exposed amounts of the credit risk. Details of the Company's level of maximum exposure to credit risk as of December 31, 2012 and 2013 are as follows:

	2012	2013
	In millions of won	
Cash and cash equivalents	1,954,949	2,232,313
Derivative assets (trading)	55,891	4,118
Available-for-sale financial assets	1,141,194	1,256,765
Held-to-maturity investments	2,216	2,285
Loans and receivables	673,388	608,239
Long-term/short-term financial instruments	469,393	385,382
Derivative assets (using hedge accounting)	187,811	82,376
Trade and other receivables	8,438,955	9,170,644
Financial guarantee contracts(*)	262,624	261,565

(\*) Maximum exposure associated with the financial guarantee contracts is the maximum amounts of the obligation.



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Financial guarantee contracts as of December 31, 2013 are as follows:

Type	Company	Currency	Amounts
In thousands of U.S. dollars			
Joint ventures	KEPCO SPC Power Corporation	USD	189,565
Other	UAE Shuweihat S3	USD	58,294
			247,859

As of the reporting date, there are no financial assets and non-financial assets that were acquired through the exercise of the right of collateralized assets and reinforcement of credit arrangement.

(ii) Market risk

Market risk is the risk that the Company's fair values of the financial instruments or future cash flows are affected by the changes in the market. Market risk consists of interest rate risk, currency risk and other price risk.

(iii) Sensitivity analysis

Significant assets and liabilities with uncertainties in underlying assumptions

Defined benefit obligation

The following is a sensitivity analysis of defined benefit obligation assuming a 1% increase and decrease movements in the actuarial valuation assumptions as of December 31, 2012 and 2013 are as follows:

Type	Accounts	2012		2013	
		1% Increase	1% Decrease	1% Increase	1% Decrease
In millions of won					
Future salary increases	Defined benefit obligation	309,178	(273,048)	257,512	(316,563)
Discount rate	Defined benefit obligation	(279,062)	332,023	(236,761)	274,619

Changes of employee benefits assuming a 1% increase and decrease movements in discount rate on plan asset for the years ended December 31, 2012 and 2013 are 4,300 million and 4,776 million, respectively.

Provisions

Changes in provisions due to movements in underlying assumptions as of December 31, 2012 and 2013 are as follows:

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Type	Accounts	2012	2013
PCBs	Inflation rate	3.10%	3.10%
	Discount rate	4.92%	4.92%
Nuclear plants	Inflation rate	2.93%	2.93%
	Discount rate	4.49%	4.49%
Spent fuel	Inflation rate	2.93%	2.93%
	Discount rate	4.49%	4.49%

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The following is a sensitivity analysis of provisions assuming a 0.1% increase and decrease movements in the underlying assumptions as of December 31, 2012 and 2013 are as follows:

Type	Accounts	2012		2013	
		0.1% Increase	0.1% Decrease	0.1% Increase	0.1% Decrease
In millions of won					
Discount rate	PCBs	(1,262)	1,273	(1,086)	1,095
	Nuclear plants	(220,842)	227,158	(221,516)	227,667
	Spent fuel	(45,385)	47,128	(46,164)	47,953
Inflation rate	PCBs	1,295	(1,285)	1,113	(1,106)
	Nuclear plants	230,431	(224,364)	240,778	(234,438)
	Spent fuel	48,219	(46,492)	48,646	(46,895)

Management judgment effected by uncertainties in underlying assumptions

## Foreign currency risk

The Company undertakes transactions denominated in foreign currencies; consequently, exposures to exchange rate fluctuations arise. The carrying amounts of the Company's foreign currency denominated monetary assets and monetary liabilities as of December 31, 2012 and 2013 are as follows:

Type	Assets		Liabilities	
	2012	2013	2012	2013
In thousands of foreign currencies				
AUD	1,188	1,460	152,692	321,444
CAD	2,314	4	4	611
CNY	1	1		
EUR	9,091	27,946	18,792	33,398
IDR	711,304	546,902	1,726	2,973
MXN	703	5,064		426
PHP	1,043,932	248,623	31,675	22,954
SAR	1,309	1,565		
USD	292,256	627,504	9,866,661	11,207,483
INR	417,544	362,996	52,755	500,933
PKR	63,445	116,847	277	650
MGA	240,233	2,124,218	92,979	101,503
JPY	520	176,921	20,006,730	22,521,580
KZT	720,121	164,790		16,517
GBP	6		253	4
CHF		143,120	223	400,012
AED	220	288	1,829	809
SEK			1,105	
JOD		132		1
BDT		34,753		2,977
CLP		93		

A sensitivity analysis on the Company's income for the period assuming a 10% increase and decrease in currency exchange rates as of December 31, 2012 and 2013 are as follows:

Type	2012		2013	
	10% Increase	10% Decrease	10% Increase	10% Decrease

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	In millions of won			
Increase (decrease) of income before income tax	(1,064,578)	1,064,578	(1,199,673)	1,199,673
Increase (decrease) of shareholder s equity(*)	(1,064,578)	1,064,578	(1,199,673)	1,199,673

(\*) The effect on the shareholders equity excluding the impact of income taxes.

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Sensitivity analysis above is conducted for monetary assets and liabilities denominated in foreign currencies other than functional currency, without consideration of hedge effect of related derivatives, as of December 31, 2012 and 2013.

To manage its foreign currency risk related to foreign currency denominated receivables and payables, the Company has a policy to enter into currency forward agreements. In addition, to manage its foreign currency risk related to foreign currency denominated expected sales transactions and purchase transactions, the Company enters into cross-currency swap agreements.

**Interest rate risk**

The Company is exposed to interest rate risk due to its borrowing with floating interest rates. A 1% increase or decrease is used when reporting interest rate risk internally to key management personnel and represents management's assessment of the reasonably possible change in interest rates.

The Company's borrowings and debt securities with floating interest rates as of December 31, 2012 and 2013 are as follows:

Type	2012	2013
	In millions of won	
Short-term borrowings		48,981
Long-term borrowings	5,897,076	5,029,163
Debt securities	1,920,435	2,268,065
	7,817,511	7,346,209

A sensitivity analysis on the Company's long-term borrowings and debt securities assuming a 1% increase and decrease in interest rates, without consideration of hedge effect of related derivatives for the years ended December 31, 2012 and 2013 are as follows:

Type	2012		2013	
	1% Increase	1% Decrease	1% Increase	1% Decrease
	In millions of won			
Increase (decrease) of profit before income tax	(78,175)	78,175	(73,462)	73,462
Increase (decrease) of shareholder's equity(*)	(78,175)	78,175	(73,462)	73,462

(\*) The effect on the shareholders' equity excluding the impact of income taxes.

To manage its interest rate risks, the Company enters into certain interest swap agreements or maintains an appropriate mix of fixed and floating rate borrowings.

**Electricity rates risk**

The Company is exposed to electricity rates risk due to the rate regulation of the government which considers the effect of electricity rate on the national economy.

A sensitivity analysis on the Company's income for the period assuming a 1% increase and decrease in price of electricity for the years ended December 31, 2012 and 2013 are as follows:

2012

2013

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Type	1% Increase	1% Decrease	1% Increase	1% Decrease
	In millions of won			
Increase (decrease) of profit before income tax	469,732	(469,732)	511,121	(511,121)
Increase (decrease) of shareholder s equity(*)	469,732	(469,732)	511,121	(511,121)

(\*) The effect on the shareholders equity excluding the impact of income taxes.

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## (iv) Liquidity risk

The Company has established an appropriate liquidity risk management framework for the management of the Company's short, medium and long-term funding and liquidity management requirements. The Company manages liquidity risk by continuously monitoring forecasted and actual cash flows, and by matching the maturity profiles of financial assets and liabilities.

In addition, the Company has established credit lines on its trade financing and bank overdrafts, and through payment guarantees it has received, it maintains an adequate credit (borrowing) line. In addition, The Company has the ability to utilize excess cash or long-term borrowings for major construction investments.

The following table shows the details of maturities of non-derivative financial liabilities as of December 31, 2012 and 2013. This table, based on the undiscounted cash flows of the non-derivative financial liabilities, has been completed based on the respective liabilities' earliest maturity date.

Type	2012				Total
	Less than 1 year	1~2 Years	2-5 Years	More than 5 years	
	In millions of won				
Borrowings and debt securities	7,697,878	7,782,782	18,710,343	19,147,225	53,338,228
Finance lease liabilities	221,381	202,309	542,393	556,276	1,522,359
Trade and other payables	5,480,048	375,567	792,829	2,119,930	8,768,374
Financial guarantee contracts(*)	24,871	87,309	74,614	75,830	262,624
	13,424,178	8,447,967	20,120,179	21,899,261	63,891,585

Type	2013				Total
	Less than 1 year	1~2 Years	2-5 Years	More than 5 years	
	In millions of won				
Borrowings and debt securities	9,676,694	8,052,432	25,845,951	29,021,954	72,597,031
Finance lease liabilities	202,309	184,809	532,119	381,742	1,300,979
Trade and other payables	5,777,455	397,279	751,577	2,053,005	8,979,316
Financial guarantee contracts(*)	88,190	26,673	80,019	66,683	261,565
	15,744,648	8,661,193	27,209,666	31,523,384	83,138,891

(\*) Total guarantee amounts associated with the financial guarantee contracts. Financial guarantee liabilities which are recognized as of December 31, 2012 and 2013 are 9,086 million and 8,789 million, respectively.

The expected maturities for non-derivative financial assets as of December 31, 2012 and 2013 in detail are as follows:

Type	2012				Total
	Less than 1 year	1~5 Years	More than 5 years	Other(*)	
	In millions of won				
Cash and cash equivalents	1,954,949				1,954,949
Available-for-sale financial assets				1,141,194	1,141,194
Held-to-maturity investments	196	1,912		108	2,216
Loans and receivables	72,888	351,320	271,725	45,688	741,621

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Long-term/short-term financial instruments	468,351	734		308	469,393
Trade and other receivables	7,187,490	621,050	640,287		8,448,827
	9,683,874	975,016	912,012	1,187,298	12,758,200

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Type	Less than 1 year	1-5 Years	2013		Total
			More than 5 years	Other(*)	
In millions of won					
Cash and cash equivalents	2,232,313				2,232,313
Available-for-sale financial assets		76		1,256,689	1,256,765
Held-to-maturity investments	168	2,105	12		2,285
Loans and receivables	51,503	242,827	298,397	75,165	667,892
Long-term/short-term financial instruments	384,199		615	568	385,382
Trade and other receivables	7,528,508	731,914	802,752	115,849	9,179,023
	10,196,691	976,922	1,101,776	1,448,271	13,723,660

(\*) Amount represents available-for-sale assets whose maturities cannot be presently determined.

Derivative liabilities classified by maturity periods which from reporting date to maturity date of contract as of December 31, 2012 and 2013 are as follows:

Type	Less than 1 year	1-2 Years	2012		Total
			2-5 Years	More than 5 years	
In millions of won					
Net settlement					
Trading	(449)				(449)
Gross settlement					
Trading	(89,554)	(214,501)	(64,634)		(368,689)
Hedging	(53,091)	(16,246)	(88,147)	(93,554)	(251,038)
	(143,094)	(230,747)	(152,781)	(93,554)	(620,176)

Type	Less than 1 year	1-2 Years	2013		Total
			2-5 Years	More than 5 years	
In millions of won					
Gross settlement					
Trading	(314,891)	(134,050)	(33,831)	(44,343)	(527,115)
Hedging	(64,794)	(26,409)	(187,689)	(49,071)	(327,963)
	(379,685)	(160,459)	(221,520)	(93,414)	(855,078)

**(3) Fair value risk**

The fair value of the Company's actively-traded financial instruments (i.e. short-term financial assets held for trading, available-for-sale financial assets, etc.) is based on the traded market-price as of the reporting period end. The fair value of the Company's financial assets is the amount which the asset could be exchanged for or the amount a liability could be settled for.

The fair values of financial instruments where no active market exists or where quoted prices are not otherwise available are determined by using valuation techniques. Valuation techniques include using recent arm's length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option

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pricing models. If there is a valuation technique commonly used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the Company uses that technique.

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For trade receivables and payables, the Company considers the carrying value net of impairment as fair value. While for disclosure purposes, the fair value of financial liabilities is estimated by discounting a financial instruments with similar contractual cash flows based on the effective interest method.

(i) Fair value and book value of financial assets and liabilities as of December 31, 2012 and 2013 are as follows:

Type	2012		2013	
	Book value	Fair value	Book value	Fair value
<b>Assets recognized at fair value</b>				
Available-for-sale financial assets(*1)	1,141,194	1,141,194	1,256,765	1,256,765
Derivative assets (trading)	55,891	55,891	4,118	4,118
Derivative assets (using hedge accounting)	187,811	187,811	82,376	82,376
Long-term financial instruments	1,042	1,042	1,183	1,183
Short-term financial instruments	468,351	468,351	384,199	384,199
	1,854,289	1,854,289	1,728,641	1,728,641
<b>Assets carried at amortized cost</b>				
Held-to-maturity investments	2,216	2,216	2,285	2,285
Loans and receivables	673,388	673,388	608,239	608,239
Trade and other receivables	8,438,955	8,438,955	9,170,644	9,170,644
Cash and cash equivalents	1,954,949	1,954,949	2,232,313	2,232,313
	11,069,508	11,069,508	12,013,481	12,013,481
<b>Liabilities recognized at fair value</b>				
Derivative liabilities (trading)	369,138	369,138	491,035	491,035
Derivative assets (using hedge accounting)	251,038	251,038	209,440	209,440
	620,176	620,176	700,475	700,475
<b>Liabilities carried at amortized cost</b>				
Secured borrowings			582,053	579,111
Unsecured bond	46,328,513	48,557,218	54,878,897	57,226,079
Finance lease liabilities	1,007,169	1,007,169	884,966	884,966
Unsecured borrowings	6,890,896	6,898,344	5,383,966	5,493,786
Trade and other payables(*2)	9,584,986	9,584,986	8,979,316	8,979,316
Bank overdraft			43,233	43,233
	63,811,564	66,047,717	70,752,431	73,206,491

(\*1) Book values of equity securities held by the Company that were measured at cost as of December 31, 2012 and 2013 are 296,897 million and 330,001 million, respectively, as a quoted market price does not exist in an active market and its fair value cannot be measured reliably.

(\*2) Excludes finance lease liabilities.

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(ii) Interest rates used for determining fair value

The interest rates used to discount estimated cash flows, when applicable, are based on the government yield curve at the reporting date plus an adequate credit spread.

The discount rate used for calculating fair value as of December 31, 2012 and 2013 are as follows:

Type	2012	2013
Derivatives	0.34%~2.64%	0.17%~4.34%
Borrowings and debt securities	2.85%~3.75%	1.40%~4.11%
Finance lease	9.00%~10.80%	9.00%~10.80%

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## (iii) Fair value hierarchy

The following table provides an analysis of financial instruments that are measured subsequent to initial recognition at fair value, classified as Level 1, 2, or 3, based on the degree to which the fair value is observable.

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities;

Level 2: Inputs other than quoted prices that are observable for the asset or liability either directly or indirectly; and

Level 3: Inputs that are not based on observable market data.

Fair values of financial instruments by hierarchy level as of December 31, 2012 and 2013 are as follows:

Type	2012			Total
	Level 1	Level 2	Level 3	
<b>Financial assets at fair value</b>				
Available-for-sale financial assets	652,142		192,155	844,297
Derivative assets		243,702		243,702
	652,142	243,702	192,155	1,087,999
<b>Financial liabilities at fair value</b>				
Derivative liabilities		610,685	9,491	620,176

Type	2013			Total
	Level 1	Level 2	Level 3	
<b>Financial assets at fair value</b>				
Available-for-sale financial assets	740,805		185,959	926,764
Derivative assets		86,494		86,494
	740,805	86,494	185,959	1,013,258
<b>Financial liabilities at fair value</b>				
Derivative liabilities		700,475		700,475

Changes of financial assets and liabilities which are classified as level 3 for the years ended December 31, 2012 and 2013 are as follows:

	Beginning balance	Acquisition	2012		Other(*)	Ending balance
			Valuation	Disposal		
<b>Financial assets at fair value</b>						
Available-for-sale financial assets						
Unlisted securities	238,561		(68,924)			169,637
Debt securities		22,518				22,518
<b>Financial liabilities at fair value</b>						
Derivative liabilities						
Derivative liabilities (trading)	7,779		9,491	(7,779)		9,491

(\*) Amount due to foreign currency translation.

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	Beginning balance	Acquisition	Reclassified category	2013			Ending balance
				Valuation	Disposal	Other(*)	
In millions of won							
<b>Financial assets at fair value</b>							
Available-for-sale financial assets							
Unlisted securities	169,637		784	883			171,304
Debt securities	22,518					(7,863)	14,655
<b>Financial liabilities at fair value</b>							
Derivative liabilities							
Derivative liabilities (trading)	9,491				(9,491)		

**45. Service Concession Arrangements****(1) Significant terms and concession period of the arrangement**

The Company has entered into a contract with National Power Corporation (the NPC), based in the Republic of the Philippines whereby the Company can collect the electricity rates which are composed of fixed costs and variable costs during the concession period after building, rehabilitating, and operating the power plant.

**(2) Rights and classification of the arrangement**

The Company has the rights to use and own the power plant during the concession period from 2002 to 2022. At the end of the concession period, the Company has an obligation to transfer its ownership of the power plant to NPC.

**(3) The Company's expected future collections of service concession arrangements as of December 31, 2013 are as follows:**

Type	Amounts
	In millions of won
Less than 1 year	206,997
1~ 2 years	206,997
2~ 3 years	206,997
Each year thereafter through 2022	250,121

**46. Related Parties****(1) Related parties of the Company as of December 31, 2013 are as follows:**

Type	Related party
Parent	Korean Government
Subsidiaries (80 subsidiaries)	Korea Hydro & Nuclear Power Co., Ltd., Korea South-East Power Co., Ltd., Korea Midland Power Co., Ltd., Korea Western Power Co., Ltd., Korea Southern Power Co., Ltd., Korea East-West Power Co., Ltd., KEPCO Engineering & Construction Company, Inc., KEPCO Plant Service & Engineering Co., Ltd., KEPCO Nuclear Fuel Co., Ltd., KEPCO KDN Co., Ltd., Garorim Tidal Power Plant Co., Ltd., Korea Engineering & Power Services Co., Ltd., KEPCO International Hong Kong Ltd., KEPCO International Philippines Inc., KEPCO Gansu International Ltd., KEPCO Philippines Holdings Inc.,



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Type	Related party
Associates (58 associates)	<p>KEPCO Philippines Corporation, KEPCO Ilijan Corporation, KEPCO Lebanon SARL, KEPCO Neimenggu International Ltd., KEPCO Shanxi International Ltd., KOMIPO Global Pte Ltd., KEPCO Canada Energy Ltd., KEPCO Netherlands B.V., KOREA Imouraren Uranium Investment Corp. KEPCO Australia Pty., Ltd., KOSEP Australia Pty., Ltd., KOMIPO Australia Pty., Ltd., KOWEPO Australia Pty., Ltd., KOSPO Australia Pty., Ltd. KEPCO Middle East Holding Company, Qatrana Electric Power Company, KHNP Canada Energy Ltd., KEPCO Bylong Australia Pty., Ltd., Korea Waterbury Uranium Limited Partnership, KEPCO Canada Uranium Investment Limited Partnership, Korea Electric Power Nigeria Ltd., KEPCO Holdings de Mexico, KST Electric Power Company, KEPCO Energy Service Company, KEPCO Netherlands S3 B.V., PT. KOMIPO Pembangkitan Jawa Bali, PT. Cirebon Power Service, KOWEPO International Corporation, KOSPO Jordan LLC, EWP Philippines Corporation (Formerly, EWP Cebu Corporation), EWP Philippine Holdings Corporation, EWP America Inc., EWP Renewable Co., DG Fairhaven Power, LLC, DG Kings Plaza Holdings, LLC, DG Kings Plaza, LLC, DG Kings Plaza II, LLC, DG Whitefield, LLC, Springfield Power, LLC, KNF Canada Energy Limited, PT KEPCO Resource Indonesia, EWP Barbados 1 SRL, California Power Holdings, LLC, Gyeonggi Green Energy Co., Ltd., PT. Tanggamus Electric Power, Gyeongju Wind Power Co., Ltd., KOMIPO America Inc., Boulder Solar Power, LLC, EWPRC Biomass Holdings, LLC, KOSEP USA, INC., PT. EWP Indonesia, KOWEPO America LLC., KEPCO Netherlands J3 B.V., Korea Offshore Wind Power Co., Ltd., Global One Pioneer B.V., Global Energy Pioneer B.V., KOSEP Wind Power, LLC., Mira Power Limited, KOSEP Material Co., Ltd., Commerce and Industry Energy Co., Ltd., KEPCO Singapore Holding Pte., Ltd., KOWEPO India Private Limited, KEPCO KPS Philippines Corp., KOSPO Chile SpA.</p> <p>Daegu Green Power Co., Ltd., Korea Gas Corporation, Korea Electric Power Industrial Development Co., Ltd., YTN Co., Ltd., Cheongna Energy Co., Ltd., Gangwon Wind Power Co., Ltd., Hyundai Green Power Co., Ltd., Korea Power Exchange, AMEC Partners Korea, Hyundai Energy Co., Ltd., Ecollite Co., Ltd., Taebaek Wind Power Co., Ltd., Alternergy Philippine Investments Corporation, Muju Wind Power Co., Ltd., Pyeongchang Wind Power Co., Ltd., Daeryun Power Co., Ltd., JinanJangsu Wind Power Co., Ltd., Changjuk Wind Power Co., Ltd., KNH Solar Co., Ltd., SPC Power Corporation, Gemeng International Energy Co., Ltd., PT. Cirebon Electric Power, KNOC Nigerian East Oil Co., Ltd., KNOC Nigerian West Oil Co., Ltd., Dolphin Property Limited, E-Power S.A., PT Wampu Electric Power, PT. Bayan Resources TBK, S-Power Co., Ltd., Pioneer Gas Power Limited, Eurasia Energy Holdings, Xe-Pian Xe-Namnoy Power Co., Ltd., Busan Solar Co., Ltd., Hadong Mineral Fiber Co., Ltd., Green Biomass Co., Ltd., Gumi-ochang Photovoltaic Power Co., Ltd., Chungbuk Photovoltaic Power Co., Ltd., Cheonan Photovoltaic Power Co., Ltd., PT. Mutiara Jawa, Hyundai Asan Solar Power Co., Ltd., Heang Bok Do Si Photovoltaic Power Co., Ltd., Jeonnam Solar Co., Ltd., DS POWER Co., Ltd., D Solarenergy Co., Ltd., Dongducheon Dream Power Co., Ltd.,</p>

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Type	Related party
	KS Solar Corp. Ltd., KOSCON Photovoltaic Co., Ltd., Yeongwol Energy Station Co., Ltd., Yeonan Photovoltaic Co., Ltd., Q1 Solar Co., Ltd., Jinbhuvish Power Generation, Best Solar Energy Co., Ltd., Seokcheon Solar Power Co., Ltd., SE Green Energy Co., Ltd., Daegu Photovoltaic Co., Ltd., Jeongam Wind Power Co., Ltd., Korea Power Engineering Service Co., Ltd., Golden Route J Solar Power Co., Ltd.
Joint ventures (36 joint ventures)	KEPCO-Uhde Inc., Eco Biomass Energy Sdn. Bhd., Datang Chaoyang Renewable Power Co., Ltd., Shuweiht Asia Power Investment B.V., Shuweiht Asia Operation & Maintenance Company, Waterbury Lake Uranium L.P., ASM-BG Investicii AD, RES Technology AD, KV Holdings, Inc., KEPCO SPC Power Corporation, Canada Korea Uranium Limited Partnership, KEPCO Energy Resource Nigeria Limited, Gansu Datang Yumen Wind Power Co., Ltd., Datang Chifeng Renewable Power Co., Ltd., Datang KEPCO Chaoyang Renewable Power Co., Ltd., Rabigh Electricity Company, Rabigh Operation & Maintenance Company, Jamaica Public Service Company Limited, KW Nuclear Components Co., Ltd., Busan shinho Solar power Co., Ltd., STX Electric Power Co., Ltd., YEONGAM Wind Power Co., Ltd., Global Trade Of Power System Co., Ltd., Expressway Solar-light Power Generation Co., Ltd, KODE NOVUS 1 LLC., KODE NOVUS 2 LLC., Daejung Offshore Wind Power Co., Ltd., Arman Asia Electric Power Company, KEPCO-ALSTOM Power Electronics Systems, Inc., Dongbu Power Dangjin Corporation, Honam Wind Power Co., Ltd., Nepal Water & Energy Development Company Pty Ltd., Kelar S.A, PT. Tanjung Power Indonesia, Incheon New Power Co., Ltd., Seokmun Energy Co., Ltd.
Others	Korea Finance Corporation

(2) Transactions between the Company and its subsidiaries are eliminated in the consolidation and will not be shown as notes.

(3) Related party transactions for the years ended December 31, 2011, 2012 and 2013 are as follows:

Company name	Transaction type	Sales and others		
		2011	2012	2013
<b>&lt;Associates&gt;</b>				
Daegu Green Power Co., Ltd.	Electricity sales		4	121
Dongducheon Dream Power Co., Ltd.	Rental income and others			11,603
Korea Gas Corporation	Electricity sales	42,138	63,882	124,244
SE Green Energy Co., Ltd.	Service			1
Daegu Photovoltaic Co., Ltd.	Service			5
Jeongam Wind Power Co., Ltd.	Service			3
Yeongwol Energy Station Co., Ltd.	Service			27,900
KOSCON Photovoltaic Co., Ltd.	Service			1
Yeonan Photovoltaic Co., Ltd.	Service			52
Q1 Solar Co., Ltd.	Service			262
Best Solar Energy Co., Ltd.	Service			39
Incheon New Power Co., Ltd.	Construction revenue			1,435
Korea Electric Power Industrial Development Co., Ltd.	Service	5,778	12,417	13,014

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Company name	Transaction type	Sales and others		
		2011	2012	2013
In millions of won				
YTN Co., Ltd.	Electricity sales	978	1,714	4,070
Cheongna Energy Co., Ltd.	Rental income and others	7,940	3,434	13,117
Gangwon Wind Power Co., Ltd.	Dividend income	115	134	2,133
Hyundai Green Power Co., Ltd.	Dividend income	10,190	16,185	15,896
Korea Power Exchange	Service	9,576	29,351	26,710
Hyundai Energy Co., Ltd.	Service	9,079	13,740	21,535
Ecollite Co., Ltd.	Interest income	35	1	866
Taebaek Wind Power Co., Ltd.	Service			626
Pyeongchang Wind Power Co., Ltd.	Architectural engineering	246	356	65
Daeryun Power Co., Ltd.	Electricity sales	68	49	780
Changjuk Wind Power Co., Ltd.	Service		6	751
KNH Solar Co., Ltd.	Electricity sales		7	19
Busan Solar Co., Ltd.	Service			2
SPC Power Corporation	Dividend income	9	194	
PT. Cirebon Electric Power	Service	1,092	442	
Dolphin Property Limited	Service			32
E-POWER S.A.	Dividend income		623	1,902
<b>&lt;Joint ventures&gt;</b>				
KEPCO SPC Power Corporation	Interest income	12,428	20,222	15,921
KEPCO-ALSTOM Power Electronics Systems, Inc	Service			796
Dongbu Power Dangjin Corporation	Technical fee			1,431
Seokmun Energy Co., Ltd.	Technical fee			1,138
KW Nuclear Components Co., Ltd.	Service	87	900	829
STX Electric Power Co., Ltd.	Architectural engineering	4,441	11,201	3,484
YEONGAM Wind Power Co., Ltd.	Service			255
Expressway Solar-light Power Generation Co., Ltd	Service			215
Datang Chifeng Renewable Power Co., Ltd.	Interest income	4,642	3,248	2,460
Rabigh Electricity Company	Service			676
Rabigh Operation & Maintenance				
Company	Rental income and others			2,091
Jamaica Public Service Company Limited	Service	1,189	2,817	2,798
KV Holdings, Inc.	Dividend income			319
Arman Asia Electric Power Company	Service			18,092

Company name	Transaction type	Purchase and others		
		2011	2012	2013
In millions of won				
<b>&lt;Associates&gt;</b>				
Korea Gas Corporation	Purchase of power generation fuel	9,377,458	11,644,660	12,936,962
Gumi-ochang Photovoltaic Power Co., Ltd.	REC Purchase		1,367	6,498
Chungbuk Photovoltaic Power Co., Ltd.	REC Purchase		139	1,214
Cheonan Photovoltaic Power Co., Ltd.	REC Purchase		65	1,039

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Company name	Transaction type	Purchase and others		
		2011	2012	2013
In millions of won				
Daegu Photovoltaic Co., Ltd.	Electricity purchase			1,943
Golden Route J Solar Power Co., Ltd.	Service			983
KOSCON Photovoltaic Co., Ltd.	Electricity purchase			549
Yeonan Photovoltaic Co., Ltd.	Electricity purchase			162
Q1 Solar Co., Ltd.	Electricity purchase			904
Best Solar Energy Co., Ltd.	Electricity purchase			86
Seokcheon Solar Power Co., Ltd.	Service			2,003
D Solarenergy Co., Ltd.	Electricity purchase			29
Korea Electric Power Industrial Development Co., Ltd.	Electricity metering	188,481	175,644	188,551
YTN Co., Ltd.	Service	915	776	785
Gangwon Wind Power Co., Ltd.	Electricity purchase		34,342	38,980
Hyundai Green Power Co., Ltd.	Electricity purchase		269,199	313,164
Korea Power Exchange	Electricity purchase	66,894	77,448	80,279
Hyundai Energy Co., Ltd.	Electricity purchase			1,643
Taebaek Wind Power Co., Ltd.	REC Purchase		3,097	11,680
Changjuk Wind Power Co., Ltd.	Electricity purchase		1,473	11,893
KNH Solar Co., Ltd.	REC Purchase		657	5,406
Busan Solar Co., Ltd.	Electricity purchase			4,433
Green Biomass Co., Ltd.	Woodchip purchase		518	869
<b>&lt;Joint ventures&gt;</b>				
KEPCO-ALSTOM Power Electronics Systems, Inc	Service			143
Busan shinho Solar power Co., Ltd.	Electricity purchase			8,944
Global Trade of Power System Co., Ltd.	Plant facility purchase			574
Expressway Solar-light Power Generation Co., Ltd	Electricity purchase			1,319
Jamaica Public Service Company Limited	Service	392	207	104

**(4) Receivables and payables arising from related party transactions as of December 31, 2012 and 2013 are as follows:**

Company name	Type	Receivables		Payables	
		2012	2013	2012	2013
In millions of won					
Daegu Green Power Co., Ltd.	Trade receivables	3	35		
	Non-trade receivables and others	9,900			
Korea Gas Corporation	Trade receivables	4,585	8,237		
	Non-trade receivables and others	204	1,507		
	Trade payables			1,409,650	1,208,072
	Non-trade payables and others			101	101

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Company name	Type	Receivables		Payables	
		2012	2013	2012	2013
In millions of won					
Chungbuk Photovoltaic Power Co., Ltd.	Non-trade payables and others			22	57
Cheonan Photovoltaic Power Co., Ltd.	Non-trade payables and others			7	
Daegu Photovoltaic Co., Ltd.	Non-trade payables and others				212
Jeongam Wind Power Co., Ltd.	Non-trade payables and others				6
Golden Route J Solar Power Co., Ltd.	Non-trade payables and others				48
Yeongwol Energy Station Co., Ltd.	Trade receivables		11,413		
KOSCON Photovoltaic Co., Ltd.	Non-trade payables and others				45
Yeonan Photovoltaic Co., Ltd.	Trade receivables		23		
	Non-trade payables and others				20
Best Solar Energy Co., Ltd.	Non-trade payables and others				21
Seokcheon Solar Power Co., Ltd.	Non-trade payables and others				154
D Solarenergy Co., Ltd.	Non-trade payables and others				29
Incheon New Power Co., Ltd.	Non-trade payables and others				1,483
Korea Electric Power Industrial Development Co., Ltd.	Trade receivables	40	590		
	Non-trade receivables and others	552	129		
	Non-trade payables and others			15,004	24,357
DS Power Co., Ltd.	Non-trade payables and others				1
YTN Co., Ltd.	Trade receivables	1	51		
	Non-trade payables and others			28	110
Cheongna Energy Co., Ltd.	Trade receivables	158	133		
	Non-trade receivables and others	2,093	1,805		
Gangwon Wind Power Co., Ltd.	Trade receivables	9	7		
	Trade payables			3,679	3,720
Hyundai Green Power Co., Ltd.	Trade receivables	676	1,311		
	Trade payables			23,553	28,427
Korea Power Exchange	Trade receivables	2,296	3,810		
	Non-trade receivables and others	41	147		
	Trade payables			3,910	3,497
	Non-trade payables and others			3,490	6,709

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Company name	Type	Receivables		Payables	
		2012	2013	2012	2013
In millions of won					
Hyundai Energy Co., Ltd.	Trade receivables	150	60		
	Non-trade receivables and others	4,018	17,936		
	Non-trade payables and others				8,823
Taeback Wind Power Co., Ltd.	Trade receivables		129		
	Non-trade payables and others			677	703
Pyeongchang Wind Power Co., Ltd.	Trade receivables		186		
Daeryun Power Co., Ltd.	Trade receivables	9	208		
Changjuk Wind Power Co., Ltd.	Trade receivables		92		
	Non-trade payables and others			509	797
Busan Solar Co., Ltd.	Trade payables			135	
	Non-trade payables and others				3
KNH Solar Co., Ltd.	Trade receivables	1	1		
Green Biomass Co., Ltd.	Non-trade receivables				
	and others		258		
	Non-trade payables and others				45
SPC Power Corporation	Non-trade receivables and others		6		
E-POWER S.A.	Non-trade receivables and others	2	2		
<Joint ventures>					
KEPCO SPC Power Corporation	Trade receivables	3,673	10,237		
	Non-trade receivables and others	9,934			
KEPCO-ALSTOM Power Electronics Systems, Inc	Non-trade receivables and others		473		
Dongbu Power Dangjin Corporation	Non-trade receivables and others		1,575		
Seokmun Energy Co., Ltd.	Non-trade receivables and others		196		
STX Electric Power Co., Ltd.	Trade receivables	8,470	323		
	Non-trade receivables and others	79	100		
Busan Shinho Solar power Co., Ltd.	Non-trade payables and others				1,132
YEONGAM Wind Power Co., Ltd.	Trade receivables		252		
Datang Chifeng Renewable Power Co., Ltd.	Trade receivables		613		
	Non-trade receivables and others	931			
Jamaica Public Service Company Limited	Trade receivables	984	537		
	Non-trade receivables and others		59		



**Table of Contents****(5) Loans and others arising from related party transactions as of December 31, 2012 and 2013 are as follows:**

Type	Company name	Beginning balance	Loans	Collection	Allowance for doubtful accounts	Others	Ending balance
In millions of won							
Joint ventures	KEPCO SPC Power Corporation	89,758		(39,890)		(1,324)	48,544
Joint ventures	Datang Chifeng Renewable Power Co., Ltd.	43,456		(7,136)		(641)	35,679
Joint ventures	Jamaica Public Service Company Limited		2,111				2,111
Associates	KNOC Nigerian East Oil Co., Ltd. KNOC Nigerian West Oil Co., Ltd.	25,208	536		(13,586)	(391)	11,767
Associates	Dolphin Property Limited	952			(354)	2	600
Associates	Rabigh Electricity Company	208,796				(105,375)	103,421
Associates	Xe-Pian Xe-Namnoy Power Co., Ltd.	3,768		(11,695)		7,927	
Associates	PT. Cirebon Electric Power	53,013	3,510			(782)	55,741
		424,951	6,157	(58,721)	(13,940)	(100,584)	257,863

**(6) Borrowings arising from related party transactions as of December 31, 2012 and 2013 are as follows:**

Type	Company name	Transaction type	Beginning balance	Borrowings	Repayment	Others	Ending balance
In millions of won							
Other related parties	Korea Finance Corporation	Facility	2,300,000				2,300,000
		Project Loan	147,735		(147,735)		

**(7) Guarantees provided to an associates or joint ventures as of December 31, 2013 are as follows:**

Primary guarantor	Secondary guarantor	Type of guarantees	Credit limit	Guarantee
In millions of won and thousands of foreign currencies				
Korea Electric Power Corporation	KEPCO SPC Power Corporation	Debt guarantees	USD 189,565	SMBC and others
Korea Electric Power Corporation	Shuweihaat Asia Power Investment B.V.	Performance guarantees	USD 17,900	ADWEA
Korea Electric Power Corporation	Shuweihaat Asia O&M Co, Ltd.	Performance guarantees	USD 11,000	ADWEA
Korea Electric Power Corporation	KNOC Nigerian East Oil Co., Ltd. and KNOC Nigerian West Oil Co., Ltd.	Performance guarantees	USD 34,650	Korea National Oil Corporation (Nigerian government)

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<b>Primary guarantor</b>	<b>Secondary guarantor</b>	<b>Type of guarantees</b>	<b>Credit limit</b>		<b>Guarantee</b>
Korea Electric Power Corporation	Amman Asia Electric Power Company	Performance guarantees	USD	19,800	Standard Chartered Bank
Korea Western Power Co., Ltd.	Cheongna Energy Co., Ltd.	Collateralized money invested Guarantees for supplemental funding(*)	KRW	42,646	Hana Bank, Korea Exchange Bank
Korea Western Power Co., Ltd.	Xe-Pian Xe-Namnoy Power Co., Ltd.	Performance guarantees Collateralized money invested	USD	2,310 16,934	Krung Thai Bank
Korea Western Power Co., Ltd.	Rabigh O&M Co., Ltd.	Performance guarantees	SAR	4,800	Saudi Arabia British Bank
Korea Western Power Co., Ltd.	Deagu Photovoltaic Co., Ltd.	Collateralized money invested	KRW	1,229	Shinhan Capital Co., Ltd.
Korea Western Power Co., Ltd.	Dongducheon Dream Power Co., Ltd.	Collateralized money invested	KRW	144,200	Kookmin Bank and others
Korea Western Power Co., Ltd.	PT Mutiara Jawa	Collateralized money invested	USD	2,610	Shinhan Bank Singapore
Korea East-West Power Co., Ltd.	Busan shinho Solar power Co., Ltd.	Collateralized money invested	KRW	2,100	KT Capital Co., Ltd.
Korea East-West Power Co., Ltd.	STX Electric Power Co., Ltd.	Collateralized money invested	KRW	176,400	Korea Development Bank
Korea East-West Power Co., Ltd.	Honam Wind Power Co., Ltd.	Collateralized money invested	KRW	3,600	Shinhan Bank and others
Korea Southern Power Co., Ltd.	KNH Solar Co., Ltd.	Collateralized money invested Performance guarantees and guarantees for supplemental funding(*)	KRW	1,296	Shinhan Bank, Kyobo Life Insurance Co., Ltd.
Korea Southern Power Co., Ltd.	Daeryun Power Co., Ltd.	Collateralized money invested Guarantees for supplemental funding(*)	KRW	25,477	Korea Development Bank, Dongbu Insurance Co., Ltd. and others
Korea Southern Power Co., Ltd.	Changjuk Wind Power Co., Ltd.	Collateralized money invested Guarantees for supplemental funding(*)	KRW	3,801	Shinhan Bank, Woori Bank

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<b>Primary guarantor</b>	<b>Secondary guarantor</b>	<b>Type of guarantees</b>	<b>Credit limit</b>	<b>Guarantee</b>
Korea Southern Power Co., Ltd.	Busan Solar Co., Ltd.	Collateralized money invested	KRW 793	NH Bank
Korea Southern Power Co., Ltd.	Taebaek Wind Power Co., Ltd.	Guarantees for supplemental funding(*)		Shinhan Bank, Bank of Cheju
Korea Southern Power Co., Ltd.	Daegu Green Power Co., Ltd.	Collateralized money invested Performance guarantees and guarantees for supplemental funding(*)	KRW 76,193	Korea Exchange Bank and others
Korea Southern Power Co., Ltd.	KS Solar Corp. Ltd.	Collateralized money invested	KRW 637	Shinhan Capital Co., Ltd.
Korea Southern Power Co., Ltd.	Jeonnam Solar Co., Ltd.	Collateralized money invested	KRW 700	Shinhan Capital Co., Ltd.
Korea Southern Power Co., Ltd.	Kelar S.A.	Performance guarantees	USD 13,000	Korea Exchange Bank
KEPCO Engineering & Construction Company, Inc.	DS Power Co., Ltd.	Collateralized money invested	KRW 2,900	Korea Exchange Bank and Daewoo Securities Co., Ltd.
Korea Southern Power Co., Ltd. KEPCO Engineering & Construction Company, Inc.		Performance guarantees and guarantees for supplemental funding(*)	KRW 15,000	
Korea Southern Power Co., Ltd. Korea Midland Power Co., Ltd.	Hyundai Green Power Co.	Collateralized money invested Guarantees for supplemental funding(*)	KRW 87,003	Korea Development Bank and others
Korea Midland Power Co., Ltd.	Gangwon Wind Power Co., Ltd.	Collateralized money invested	KRW 7,410	Industrial Bank of Korea
Korea Midland Power Co., Ltd.	Cheonan Photovoltaic Power Co., Ltd.	Collateralized money invested	KRW 122	KT Capital Corporation
Korea Midland Power Co., Ltd.	Gumi-ochang Photovoltaic Power Co., Ltd.	Collateralized money invested	KRW 288	Shinhan Capital Co., Ltd.

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Primary guarantor	Secondary guarantor	Type of guarantees	Credit limit		Guarantee
Korea Midland Power Co., Ltd.	Chungbuk Photovoltaic Power Co., Ltd.	Collateralized money invested	KRW	166	KT Capital Corporation
Korea Midland Power Co., Ltd.	Golden Route J Solar Power Co., Ltd.	Collateralized money invested	KRW	82	Shinhan Capital Co., Ltd.
Korea Midland Power Co., Ltd.	PT. Cirebon Electric Power	Debt guarantees	USD	8,091	Hana Bank
Korea Midland Power Co., Ltd.	D Solarenergy Co., Ltd.	Collateralized money invested	KRW	400	Shinhan Capital Co., Ltd.
Korea Midland Power Co., Ltd.	Hyundai Asan Solar Power Co., Ltd.	Collateralized money invested	KRW	471	Shinhan Capital Co., Ltd.
Korea South-East Power Co., Ltd.	Hyundai Energy Co., Ltd.	Collateralized money invested Performance guarantees and guarantees for supplemental funding(*)	KRW	71,070	Korea Development Bank and others
Korea South-East Power Co., Ltd.	RES Technology AD	Collateralized money invested	KRW	15,595	Korea Development Bank and others
Korea South-East Power Co., Ltd.	ASM-BG investicii AD	Collateralized money invested	KRW	16,101	Korea Development Bank and others
Korea South-East Power Co., Ltd.	Express solar-light Power Generation Co., Ltd.	Debt guarantees	EUR	4,175	
Korea South-East Power Co., Ltd.	Express solar-light Power Generation Co., Ltd.	Collateralized money invested Guarantees for supplemental funding(*)	KRW	3,132	Woori Bank and others
Korea South-East Power Co., Ltd.	S-Power Co., Ltd.	Collateralized money invested Performance guarantees and guarantees for supplemental funding(*)	KRW	108,000	Korea Development Bank and others
Korea South-East Power Co., Ltd.	YEONGAM Wind Power Co., Ltd.	Collateralized money invested Guarantees for supplemental funding(*)	KRW	11,584	Kookmin Bank and others
Korea South-East Power Co., Ltd.	Coscon Photovoltaic Co., Ltd.	Collateralized money invested	KRW	245	Shinhan Capital Co., Ltd.
Korea South-East Power Co., Ltd.	Yeonan Solar Co., Ltd.	Collateralized money invested	KRW	157	Shinhan Capital Co., Ltd.

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Primary guarantor	Secondary guarantor	Type of guarantees	Credit limit	Guarantee
Korea South-East Power Co., Ltd.	Q1 Solar Energy Co., Ltd.	Collateralized money invested	KRW 1,005	Shinhan Bank and others
Korea South-East Power Co., Ltd.	Best Solar Energy Co., Ltd.	Collateralized money invested	KRW 1,242	Shinhan Bank and others
KOSEP USA, INC.	KODE NOVUS II LLC	Guarantees for supplemental funding(*)		Korea Development Bank and others
KOSEP USA, INC.	KODE NOVUS I LLC	Guarantees for supplemental funding(*)		Daewoo Shipbuilding & Marine Engineering Co., Ltd.
Korea South-East Power Co., Ltd.	Yeong Wol Energy	Collateralized money invested	KRW 462	Daewoo Securities Co., Ltd. and others
Korea Hydro & Nuclear Power Co., Ltd.	Station Co., Ltd.		KRW 1,400	
KEPCO Plant Service & Engineering Co., Ltd.	Incheon New Power Co., Ltd.	Collateralized money invested	KRW 461	Shinhan Bank
		Guarantees for supplemental funding(*)		

(\*) The Company guarantees to provide supplemental funding for business with respect to excessive business expenses or insufficient repayment of borrowings.

- (8) As of December 31, 2013, there are no guarantees provided by related parties.
- (9) Salaries and other compensations to the key members of management of the Company for the years ended December 31, 2011, 2012 and 2013 are as follows:

Type	2011	2012	2013
	In millions of won		
Salaries	1,301	1,180	1,114
Retirement and severance benefits	56	51	63
	1,357	1,231	1,177

**47. Non-Cash Transactions**

Significant non-cash investment and finance transactions excluded from statements of cash flows for the years ended December 31, 2011, 2012 and 2013 are as follows:

Transactions	2011	2012	2013
	In millions of won		
Transfer from construction in-progress to other assets	8,905,741	9,568,629	6,507,426
Appropriation asset retirement obligation due to decommissioning cost incurred	353,315	4,537,338	251,054
Transfer from decommissioning cost of spent fuel to accrued expense	73,994	86,436	403,638
Transfer from property, plant and equipment to finance lease receivables			470,867



**Table of Contents****48. Commitments for Expenditure**

(1) The agreements for acquisition of property, plant and equipment as of December 31, 2012 and 2013 are as follows:

Contracts	2012		2013	
	Amounts	Balance	Amounts	Balance
In millions of won				
Construction of New Uljin units	14,559,941	12,671,159	14,559,941	11,756,580
Construction of New Kori units	14,097,914	8,927,535	14,097,914	8,306,938
Construction of New Wolsong units	4,717,241	100,230	5,310,003	449,958
Construction of Dangjin units	1,204,875	1,311,486	952,729	486,809
Construction of New Boryeong units	369,347	326,074	1,801,718	1,613,529
Construction of Samcheok units	2,229,255	2,036,492	2,273,156	1,772,954
Construction of Taean IGCC units	805,222	715,365	688,817	391,330
Construction of Taean units	847,464	810,228	937,954	852,254
Construction of Incheon units	167,566	11,355	167,566	
Construction of office building (KDN)	106,493	102,620	106,493	68,283
Construction of office building (KOPEC)			210,021	167,563
Construction of Sejong city cogeneration units	425,459	293,938	468,153	63,485
Purchase of Wonju cogeneration units	50,400	35,360	50,400	50,241
Purchase of Ulsan combined cycle power units	565,151	539,324	256,760	63,514
Purchase of Pyeongtaek combined cycle power units	434,200	394,864	169,793	31,884
Purchase of Andong main machine	126,946	97,689	685,335	28,194
Purchase of diesel for generation	69,014	69,014	54,177	54,177
Construction of New Yeongheung units	1,654,572	883,331	1,639,047	286,727
Construction of New Yeosu units	401,474	383,228	417,733	337,926
Construction of New Seoul units			586,493	550,493
Purchase of Concrete Poles (10M,350KGF)			77,209	71,111
Other purchase contracts	96,748	77,866	135,761	65,394
	42,929,282	29,787,158	45,647,173	27,469,344

(2) As of December 31, 2013, details of contracts for inventory purchase are as follows:

The Company imports all of its uranium ore concentrates from sources outside Korea (including the United States, United Kingdom, Kazakhstan, France, Russia, South Africa, Canada and Australia) which are paid for with currencies other than Won, primarily in U.S. dollars. In order to ensure stable supply, the Company entered into long-term and medium-term contracts with various suppliers, and supplements such supplies with purchases of fuels on spot markets. The long-term and medium-term contract periods vary among contractors and the stages of fuel manufacturing process. Contract prices for processing of uranium are generally based on market prices. Contract periods for ore concentrates, conversion, enrichment and design and fabrication are as follows:

Type	Periods	Contracted amounts
Concentrate	2014 ~ 2030	36,288 Ton U3O8
Transformed	2014 ~ 2022	19,511 Ton U
Enrichment	2014 ~ 2029	39,058 Ton SWU
Molded	2014	999 Ton U

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**49. Contingencies and Commitments**

**(1) Ongoing litigations related with contingent liabilities and assets as of December 31, 2012 and 2013 are as follows:**

The Company is the defendant against a number of claims. The following are potentially significant claims pertaining to the Company:

Korea Electric Power Corporation (KEPCO) contracted with LS Cable & System Ltd. for 250kv submarine cables installed in the 105km section between Jindo (Mainland) and Jeju Island in September 2009. LS Cable & System Ltd. notified KEPCO of the completion of construction and requested the issuance of a certificate of completion, however KEPCO disagreed that LS Cable & System Ltd. had completed construction in accordance with the conditions of their contract. As a result, KEPCO rejected the goods (submarine cables installed) delivered and refused to pay LS Cable & System Ltd.

LS Cable & System Ltd. filed for arbitration (seeking a total amount of 194 billion from KEPCO) with the Korean Commercial Arbitration Board in April 2013 in order to demand unpaid invoices and extra payments relating to claims of rejection of the test on completion and goods (submarine cables installed) delivered.

At this time, management believes the Company does not have a present obligation for this matter and has not recognized any provision as of December 31, 2013 due to the fact that LS Cable & System did not fully perform its obligations according to the contract terms. It is not possible to estimate an amount of potential loss because the Korean Commercial Arbitration Board is in the early stage of the process of examining the factual accuracy of the claims of each party by hiring third party experts.

Korea Nuclear Technology Co., Ltd. was qualified to supply Korea Hydro & Nuclear Power Co., Ltd., a subsidiary of KEPCO, Passive Autocatalytic Recombiners (PAR) which had been developed under a cooperative research and development agreement and designated as items to be developed over a period of three years through a negotiated contract. Korea Nuclear Technology Co., Ltd. filed a lawsuit for damages and compensation against Korea Hydro & Nuclear Power Co., Ltd. relating to claims of contracting with another company through open bid.

The lower court ruled against the plaintiff based on the principle of freedom of contract and principle of competitive bid preference in October 2013. The plaintiff has filed an appeal as of December 31, 2013.

At this time, management believes the Company does not have a present obligation for this matter and has not recognized any provision as of December 31, 2013 since the Company does not have any legal obligation to have a contract with the plaintiff which is supported by the decision of the lower court.

In December 2013, the Supreme Court of Korea ruled that regular bonuses also fall under the category of ordinary wages on the condition that those bonuses are paid regularly and uniformly. The Supreme Court ruled that, employees shall not retroactively demand the difference in overtime pay as additional wages, in the event that the demand itself causes an unexpected increase in spending for their company, and thus lead the company to financial difficulty. In that case, the request is not acceptable, since it is unjust, and it is in breach of the principle of good faith.

Prior to the ruling of the Supreme Court, the Company determined wages in accordance with budget instructions from the Ministry of Strategy and Finance, which excluded bonuses from ordinary wages and was with the consent of the Company's labor unions. Any request for the retroactive demand for the difference in overtime pay as additional wages may be limited based on the principle of good faith.

At this time, management believes that the Company does not have a present obligation for this matter and has not recognized any provision as of December 31, 2013 because the application of the Supreme Court's ruling is not clear and it is highly unpredictable to estimate the timing of payment and the amount since the Company is required to follow the Korean government's guidance, as a government entity. It is not possible to estimate the amount of potential loss because it will be



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dependant upon the future agreement between the management of the Company and the labor unions or the outcome of any similar lawsuits.

In addition, Korean Power Plant Industry Union and others filed lawsuits (worth 44.6 billion) against six generation subsidiaries of KEPCO, including Korea Western Power Co., Ltd., relating to claims that ordinary wages have been paid without including certain items of wages that should have been included in ordinary wages.

**(2) Guarantees of borrowings provided to other companies as of December 31, 2012 and 2013 are as follows:**

Guarantees	Financial or non-financial institution	Date of contract	Period of contract	2012	2013
				In thousands of U.S. dollars	
Repayment guarantees for UAE Shuweihat S3 borrowings	Mizuho, SMBC, HSBC	2011-05-16	2011-05-16 ~ 2014-02-28	USD 58,294	USD 58,294
Guarantee of UAE Shuweihat S3 interest swap agreement	SMBC	2011-05-16	2011-05-16 ~ 2014-02-28	USD 1,500	USD 1,500

The Company provides performance guarantee related to construction completion to Kookmin Bank. As such performance guarantee does not meet the definition of financial guarantee contract in IAS No. 1039 Financial Instruments; Recognition and Measurement, no related liability is recognized.

**(3) Credit lines provided by financial institutions as of December 31, 2013 are as follows:**

Commitments	Financial institutions	Currency	Guarantee limit	Outstanding amount
			In millions of won and thousands of foreign currencies	
Commitments on Bank-overdraft	Nonghyup Bank and others	KRW	1,845,000	43,233
Commitments on Bank-daylight overdraft	Nonghyup Bank	KRW	280,000	
Limit amount available for CP	Korea Exchange Bank and others	KRW	1,129,000	197,500
Limit amount available for card	Hana Bank and others	KRW	71,500	273
Certification of payment on payables from foreign country	Korea Development Bank	USD	420,009	342,040
Loan limit	Hana Bank and others	KRW	195,996	108,892
	BNP Paribas and others	USD	2,646,059	152,150
Certification of payment on L/C	Korea Exchange Bank and others	USD	2,053,328	252,256
	Korea Exchange Bank	GBP	61,169	15,803
	Korea Exchange Bank	EUR	3,100	2,506
	Nonghyup Bank and others	JPY	18,914,670	14,301,596
Certification of performance guarantee on contract	Seoul Guarantee Insurance and others	KRW	159,426	156,129
	Korea Exchange Bank	AED	54,880	54,880
	Standard Chartered Bank and others	USD	843,811	711,553
	Kookmin Bank	EUR	37,082	37,082
	HSBC and others	INR	236,443	185,077
Certification of bidding	SMBC and others	USD	11,470	10,816

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Commitments	Financial institutions	Currency	Guarantee	Outstanding
			limit	amount
		In millions of won and thousands of foreign currencies		
Advance payment bond, Warranty bond, Retention bond and others	Shinhan Bank	EUR	54,880	5,438
	HSBC	USD	252,140	38,832
	Katumandu Bank and others	NPR	85,289	85,289
Others	Korea Exchange Bank and others	KRW	9,503	4,669
	BNP Paribas and others	USD	1,409,500	6,500
	Hana Bank	INR	157,830	157,830
Inclusive credit	Korea Exchange Bank and others	KRW	1,176,600	340,297
	HSBC and others	USD	545,512	17,079

**(4) As of December 31, 2013, the blank check and assets provided as collaterals or pledges to financial institutions by the Company are follows:**

Guarantor	Guarantee	Type of guarantee	Currency	Amount	Description
		In millions of won and thousands of U.S. dollars			
KEPCO Nuclear Fuel Co., Ltd.	Korea Resources Corporation	Blank check	KRW		Collateral for borrowings
KEPCO International Philippines Inc.	Citibank New York	All shareholdings of KEPCO Ilijan Corporation	USD	90,623	Required pursuant to Pledge Agreement between KIPI, KEILCO and Citibank New York re: KEILCO Project  Financing in Nov. 2000
Korea East-West Power Co., Ltd.	Korea Development Bank and others	All shareholdings of Gyeongju Wind Power Co., Ltd.	KRW	9,240	Collateral for borrowings
Korea Hydro & Nuclear Power Co., Ltd.	Korea Development Bank and others	All shareholdings of Gyeonggi Green Energy Co., Ltd.	KRW	47,000	Collateral for borrowings
Korea Midland Power Co., Ltd.	Hana Bank and others	All shareholdings of Commerce and Industry Energy Co., Ltd.	KRW	13,570	Collateral for borrowings

**(5) Fuel cost adjustment, a new electric tariff system was enacted by the Ministry of Knowledge Economy (newly named the Ministry of Trade Industry and Energy), which went into effect on July 2011. Adjusted unit fuel rate, which is multiplies fuel price variance, which is the deduction of base fuel rate from actual fuel rate with conversion coefficient. However, due to inflationary and other policy considerations relating to protecting the consumers from sudden and substantial rises in electricity tariff, the Ministry of Knowledge Economy issued a hold order on July 29, 2011 to suspending billing and collecting the amounts.**

The accumulated difference as of December 31, 2013 is 728,308 million, which has decreased by 1,149,063 million from 1,877,371 million as of December 31, 2012.

There is no assurance as to when the Government will lift the hold order and allow the Company to bill and collect the FCPTA amounts. The Company concluded that, in consideration of the prolonged unbilled period and consultation with, and information from, the Ministry, the Company would not be able to bill and collect the unbilled FCPTA amounts for the foreseeable future. As a result, there were no FCPTA amounts remaining in the consolidated statement of financial position as of December 31, 2013.



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- (6) The Company has a potential obligation to reimburse approximately 8.3 billion to KEPCO SPC Power Corporation, one of its joint ventures of the Company, for the turbine accident on Philippine Unit 2 power plant. Due to the uncertainties of who is the responsible party for the accident, the Company has not recognized for the expected financial effect in the consolidated statement of financial position as of December 31, 2013.

**50. Subsequent Events**

Subsequent to the reporting date, the subsidiaries of the Company, Korea Hydro & Nuclear Power Co., Ltd., Korea Southern Power Co., Ltd. and Korea Midland Power Co., Ltd., Korea East-West Power Co., Ltd. have issued new debt securities for funds of facilities and operation as follows:

Company name	Type	Interest rate	Issue date	Maturity	Currency	Amounts
In millions of won and thousands of U.S. dollars						
Korea Hydro & Nuclear Power Co., Ltd.	41-1 <sup>st</sup> Unsecured bond	3.12%	2014.01.17	2017.01.17	KRW	170,000
	41-2 <sup>nd</sup> Unsecured bond	3.86%	2014.01.17	2024.01.17	KRW	130,000
Korea Southern Power Co., Ltd.	24-1 <sup>st</sup> Unsecured bond	3.49%	2014.01.21	2019.01.21	KRW	150,000
	24-2 <sup>nd</sup> Unsecured bond	3.80%	2014.01.21	2024.01.21	KRW	50,000
	26-1 <sup>st</sup> Unsecured bond	3.31%	2014.03.06	2019.03.06	KRW	50,000
	26-2 <sup>nd</sup> Unsecured bond	3.71%	2014.03.06	2024.03.06	KRW	160,000
	26-3 <sup>rd</sup> Unsecured bond	3.92%	2014.03.06	2034.03.06	KRW	90,000
Korea Midland Power Co., Ltd.	25 <sup>th</sup> Dollar-denominated corporate bond	Libor + 1.05%	2014.01.28	2017.01.28	USD	100,000
	4 <sup>th</sup> Global bond  (Reg S only)	2.75%	2014.02.10	2019.02.11	KRW	321,570
Korea East-West Power Co., Ltd.	21-1 <sup>st</sup> Unsecured bond	3.04%	2014.01.28	2017.01.28	KRW	200,000
	21-2 <sup>nd</sup> Unsecured bond	3.40%	2014.01.28	2019.01.28	KRW	100,000
	22 Unsecured bond	3.01%	2014.02.24	2017.02.24	KRW	100,000

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**INDEX OF EXHIBITS**

- 1.1 Articles of Incorporation, as last amended on November 6, 2013 (in English)
- 2.1 Form of Deposit Agreement\*
- 8.1 List of Subsidiaries
- 12.1 Certifications of our Chief Executive Officer required by Rule 13a-14(a) of the Exchange Act (Certifications under Section 302 of the Sarbanes-Oxley Act of 2002)
- 12.2 Certifications of our Chief Financial Officer required by Rule 13a-14(a) of the Exchange Act (Certifications under Section 302 of the Sarbanes-Oxley Act of 2002)
- 13.1 Certifications of our Chief Executive Officer required by Rule 13a-14(b) and Section 1350 of Chapter 63 of the United States Code (18 U.S.C. 1350) (Certifications under Section 906 of the Sarbanes-Oxley Act of 2002)
- 13.2 Certifications of our Chief Financial Officer required by Rule 13a-14(b) and Section 1350 of Chapter 63 of the United States Code (18 U.S.C. 1350) (Certifications under Section 906 of the Sarbanes-Oxley Act of 2002)
- 15.1 The Korea Electric Power Corporation Act, as amended on March 23, 2013 (in English)\*\*
- 15.2 Enforcement Decree of the Korea Electric Power Corporation Act, as amended on March 23, 2013 (in English)\*\*
- 15.3 The Public Agencies Management Act, as amended on March 23, 2013 (in English)\*\*
- 15.4 Enforcement Decree of the Public Agencies Management Act, as amended on March 23, 2013 (in English)\*\*
- 15.5 Letter from Deloitte Anjin LLC

\* Incorporated by reference to the Registrant's Registration Statement on Form F-6 with respect to the ADSs, registered under Registration No. 33-84612.

\*\* Incorporated by reference to the Registrant's annual report on Form 20-F (No. 001-13372) previously filed on April 30, 2013.