



About This Report

This sustainability report is the ninth since KEPCO joined the UN Global Compact in August 2005. It describes the company's progress in increasing our financial strength, reducing our environmental footprint and building strong communities.

Guidelines

This report meets the guidelines of Global Reporting Initiative G3.1 and selected parts of G4, which will become mandatory from 2015, and is based on materiality assessment of stakeholders. The financial data in this report are in accordance with the Korean IFRS.

Reporting period

This report discloses quantitative performance data from January 1, 2012 to December 31, 2012 and a part of activities and achievements done in 2013 which are of great importance. No significant change in the corporate size, ownership structure or business occurred in the reporting period.

Scope of report

This report primarily covers KEPCO's sustainability management performance and also includes the performance in the environment section of six generation companies wholly owned by KEPCO (GENCOs: Korea Hydro & Nuclear Power, Korea South-East Power, Korea Midland Power, Korea Western Power, Korea Southern Power and Korea East-West Power). These GENCOs publish their own sustainability reports to ensure streamlined sustainability management of the KEPCO group.

Commitment to credibility

In an effort to ensure the credibility of the report, KEPCO had a third party review. The details of the review are in appendix "Third Party Review."

Distribution and feedback

This report is published both in Korean and English. The feedback from the readers is welcome via postal mail, e-mail or the company website. You can direct your inquiries about this report to:

512, Yeongdong-daero, Gangnam-gu, Seoul 135-791, Korea
Corporate Strategy Team, Future Strategy Department, KEPCO
Tel. +82-2-3456-3524 Fax. +82-2-3456-3598
E-mail : ahnsunmi@kepc.co.kr

Contents

CEO Message	2
2012 Sustainability Management Highlights	4
Power Industry and KEPCO Overview	6
History of KEPCO	8

Sustainability Overview

Power Industry Trend Reports	10
KEPCO Value System	12
Sustainability Management Mechanism	14
Key Performance Indicators for Sustainability Management	15
Governance Structure	16
Risk Management	18
Ethical Management	19

Issue Reporting & Performance

Issue Selection Process	24
Issue 01 Customer Value Solutions	26
Issue 02 Global Growth	31
Issue 03 Future Growth Engine	36
Issue 04 Eco-Friendly Value for the Community	40
Issue 05 Carbon Emissions Reduction	50
Issue 06 Sharing and Mutual Prosperity	55
Issue 07 HR Development for the Future	64
Issue 08 Pleasant and Happy Work Environment	68

Appendices	73
------------	----

CEO Message



Warm-hearted KEPCO

KEPCO is a maker of light and a producer of energy and heat. That means KEPCO should be a warm place.

·
·
·

The emphasis placed on a “warm-hearted” KEPCO is in line with the key trend of this day and age and of the current government. Specifically, I am referring to the economics of sharing, economic democratization and mutual prosperity.

This year, KEPCO will continue fulfilling its corporate social responsibilities which reflect the unique nature of the company.

- Excerpted from the CEO's New Year's address, January 2013

Dear KEPCO Stakeholder!

On behalf of KEPCO, I would like to express my sincere gratitude for your continued support and interest.

Since KEPCO lit Korea's first electric light 115 years ago, the company has provided a reliable supply of high-quality electric power to the country, thus contributing greatly to the development of the national economy and the livelihoods of Korean people.

Today, the concerns of humanity lie in ensuring sustainable energy amid escalating conflicts involving the imbalance of resources, while we cannot escape from environmental issues and climate change which stem from energy consumption. Now is the time to engage in serious discussion about energy use in order to combat these challenges which will have a direct impact on our survival.

KEPCO is committed to making a new start for the future of energy in order to find sustainable alternatives with which to overcome the energy crisis.

First, we will maintain our core value to provide stable and reliable power.

With the whole nation's energy saving efforts, we can overcome the threat of power shortages. In this light, KEPCO will involve the citizens and residents of Korea in the power facility construction process and place highest priority on the safety and interests of our neighbors and communities.

Second, KEPCO will aggressively expand into the global energy market to secure future growth engines.

At present, KEPCO is carrying out 42 projects in 21 countries as of the end of 2012, and we will continue to offer a variety of energy solutions to our stakeholders and raise our global brand value based on the quality and technological expertise we possess.

Third, we will take the lead in allowing easy access to clean and highly efficient energy.

KEPCO plans to aggressively develop new and renewable energy sources, such as wind and photovoltaic, both domestically and abroad. KEPCO will work to improve energy infrastructure in developing countries and enhance the energy welfare of consumers to facilitate their access to energy. Moreover, KEPCO will expand the scope of smart grids and the use of advanced energy saving equipment to raise the level of efficiency in energy supply and demand.

Fourth, we will realize a creative company ecosystem which is based on co-existence and communication.

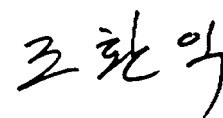
KEPCO will build a paradigm in which we grow together with small and medium-sized enterprises and act on our motto "sharing light with the world, sharing love with the community." We are also committed to sharing value with stakeholders through transparent and open management.

"Make the Earth a better place, make humanity happier."

KEPCO is determined to cultivate a quick-to-react culture of flexibility and openness which will gain us the trust of our stakeholders. We will reinforce management efficiency with creative thinking and ceaseless innovation and create new sources of income through the pursuit of R&D and overseas power projects.

To this end, I kindly ask for your continued support and interest to help KEPCO leap forward as a global energy leader and contribute to building Korea's creative economy.

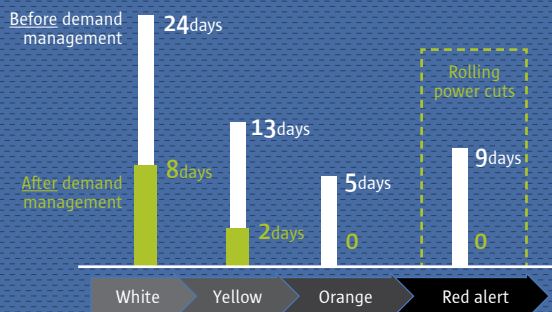
KEPCO CEO and President
Cho Hwan-ik



2012 Sustainability Management Highlights

01 | Demand management

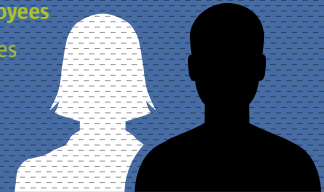
Aggressive demand management reduced a load of 3,704MW which is equivalent to four units of nuclear power plant, and avoided the need to have a rolling power cut.



02 | Job creation

KEPCO hired 1,745 employees of diverse background: high school graduates, interns, local and female talents.

1,745 employees
638 full-time employees
1,062 interns



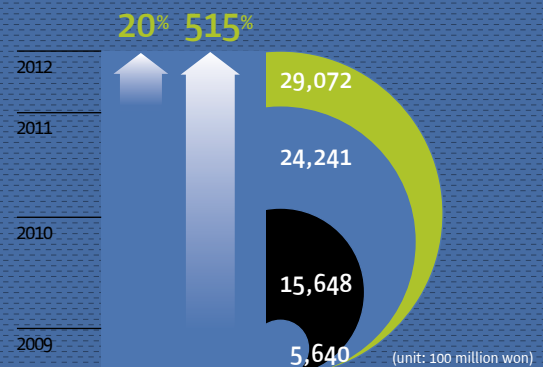
03 | Global top electricity quality

KEPCO ranked first alongside France out of 146 countries in terms of electricity quality in the KPMG Global Energy Competitiveness Index.



04 | Sales amount to 2.9 trillion won in overseas business

KEPCO made the highest sales record from overseas business in 2012, up 20% from the previous year.



05 | Core technology development

KEPCO developed one of the world's most aggressive CO₂ reduction technology and won the Presidential Green Technology Award.



06 | Suppliers' codes of conduct established and implemented first in the public sector

To strengthen ethical management in the power industry, KEPCO established 12 detailed guidelines in ethics, society and environment



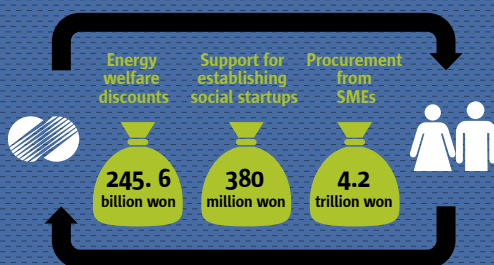
07 | Best customer satisfaction for 14 consecutive years

KEPCO earned the best grade in the government's assessment on public institutions' corporate social responsibility and product and service quality.



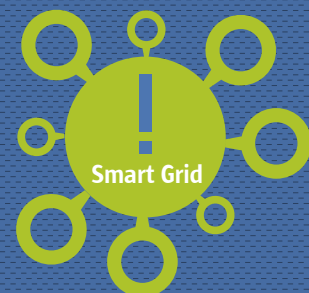
08 | Social contribution

KEPCO practices energy welfare for socially marginalized and share sustainable values with stakeholders by creating social companies and supporting small and medium-sized enterprises.



09 | Successful implementation of the Jeju Smart Grid test project

KEPCO developed technology and commercialization models for sustainable energy consumption based on the conclusion of the Smart Grid test project started since 2009.



Power Industry and KEPCO Overview

Electric power industry

Electricity is generated and consumed instantaneously, and the power grid and generation plants essentially have no storage. For stable power supply, reserve facilities are critical. The national grid is geopolitically isolated, leaving no chance of importing or exporting electric power, and Korea is highly dependent on imported energy resources (about 96%). Power is generated in southern provinces and consumed in the metropolitan areas, which requires a long distance transport of electric power. Demand for power is not easily regulated by the market mechanism, and large investments are necessary to construct electric power facilities in order to secure supply capacity.

Industry structure and responsibilities of KEPCO

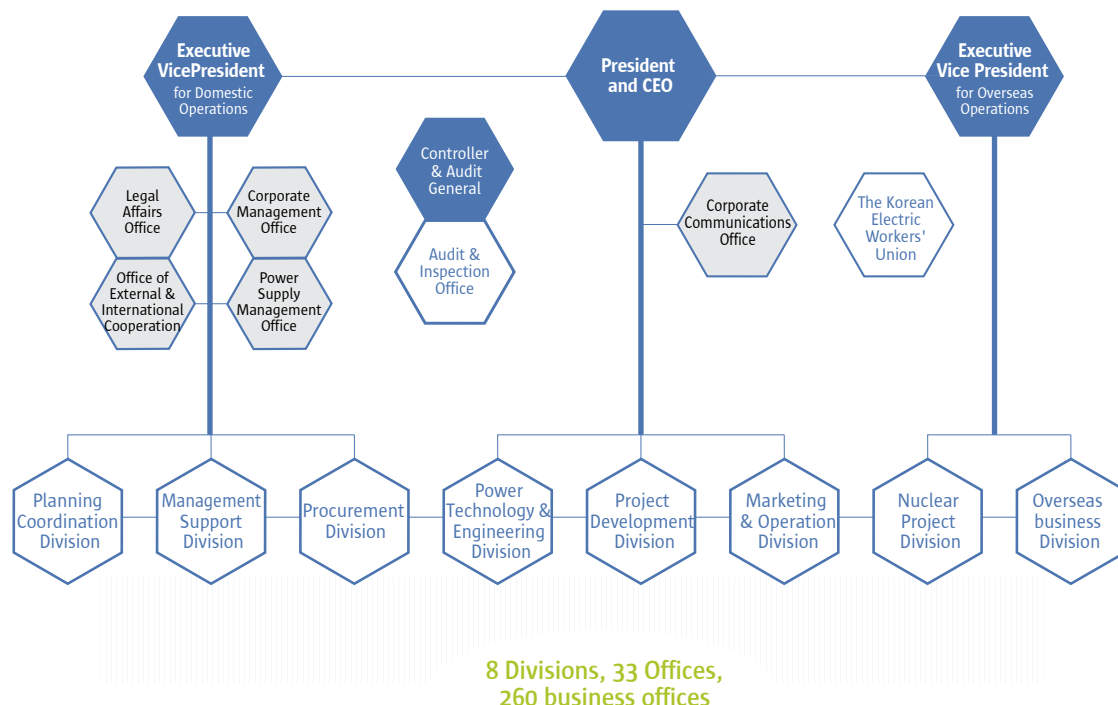
At present, six GENCOs, independent power producers and community energy suppliers generate electric power. KEPCO purchases the electric power via the Korea Power Exchange and sends it through its transmission and distribution grid to end users.

KEPCO is a corporation incorporated under the Korea Electric Power Corporation Act for the purpose of promotion of power development, stabilizing power supply and demand and contribution to the national economy. KEPCO is classified as the market-based public corporation under the Act on the Operation of Public Organizations. KEPCO is carrying out the development, generation, transmission, distribution and sales of power, technology research and development, overseas business, investment or contributions, and the utilization of its real estate assets.

Organization

KEPCO has the two objectives: enhancing public interests through reliable power supply and increasing profitability through efficient resource distribution. We strengthen horizontal cooperation between organizations and departments while focusing capabilities on core and strategic businesses.

:: Organizational structure (as of August 31, 2013) ::




:: Company overview (as of December 31, 2012) ::

Company name	Korea Electric Power Corporation	Headquarters	#512, Yeongdong-daero, Gangnam-gu, Seoul 135-791, Korea
Subsidiaries	Korea: 10 subsidiaries including generation companies and group companies Overseas: 22 subsidiaries including investment KEPCO-invested companies and local offices		
Public listing	Korea Exchange (1989, KRX), New York Stock Exchange (1994, NYSE)		


Assets
145 trillion KRW

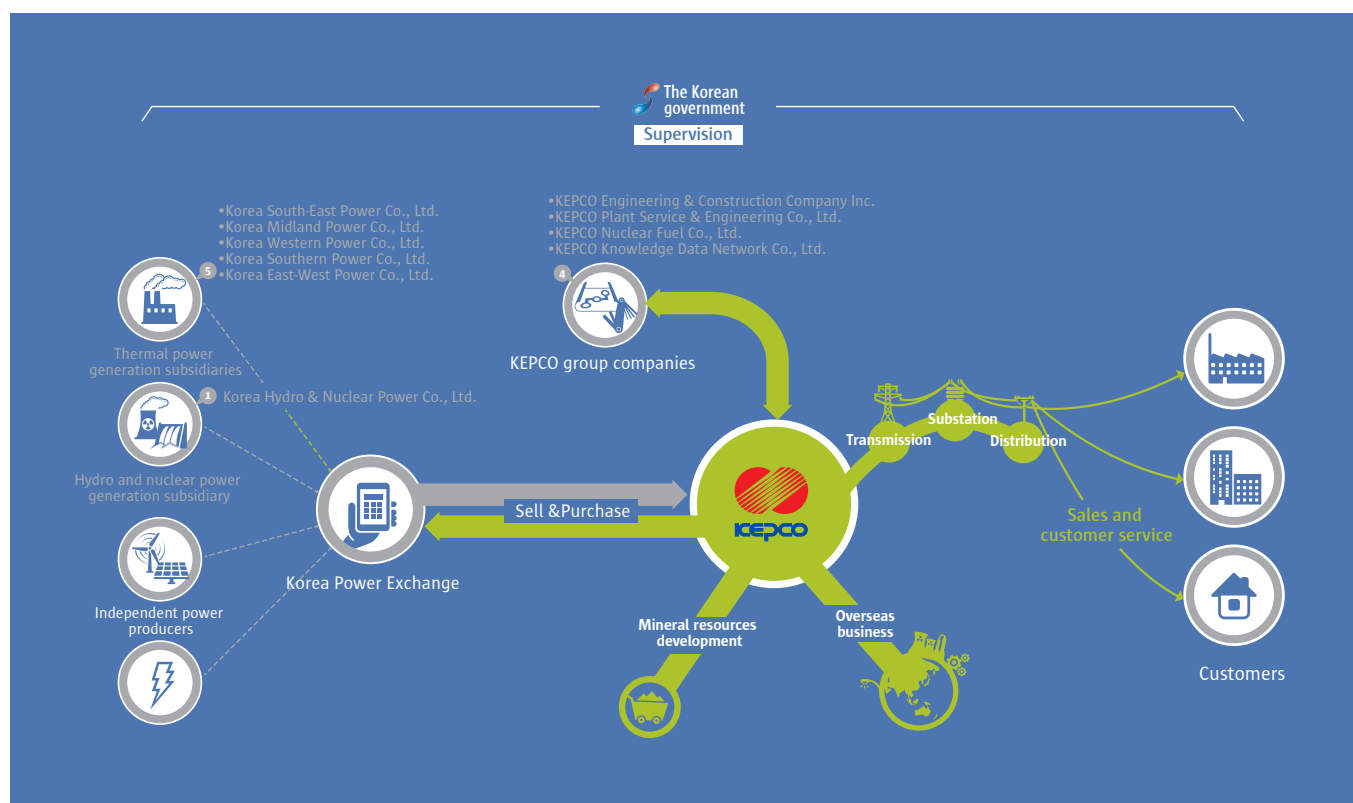

Sales
49.4 trillion KRW


No. of employees
19,278


Volume of electricity sales
4,666 billion kWh

Shareholders	Korea Finance Corporation	the government	foreigners	minority shareholders and others
	29.94%	21.17%	25.18%	23.71%

:: Domestic power industry structure and the role of KEPCO ::





142 times



2012 CEO expressed his commitment to sustainability management

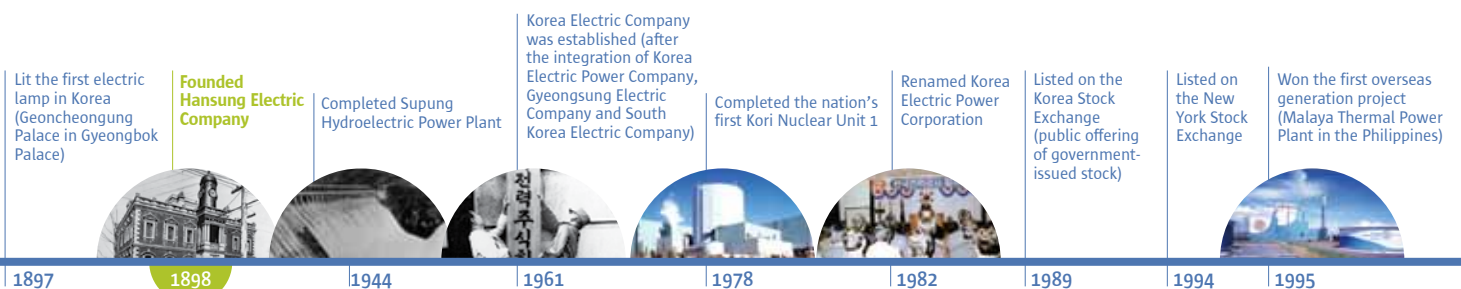
KEPCO expressed its commitment to global corporate social responsibility management by joining the UN Global Compact in 2005 for the first time as a Korean company. The UN Global Compact is a UN organization established in 2000 to encourage companies to participate in the international community's effort for sustainable development. KEPCO sustainability report was selected as exemplary by the UN in 2008.

In February 2013, KEPCO CEO Cho Hwan-ik was selected as an interviewee, the only one among Korean CEOs for CEO Study 2013 of UN Global Compact. CEO Study has been published once every three years since 2007 to hear opinions of the CEOs of global sustainability leaders and formulate strategies for sustainability management.

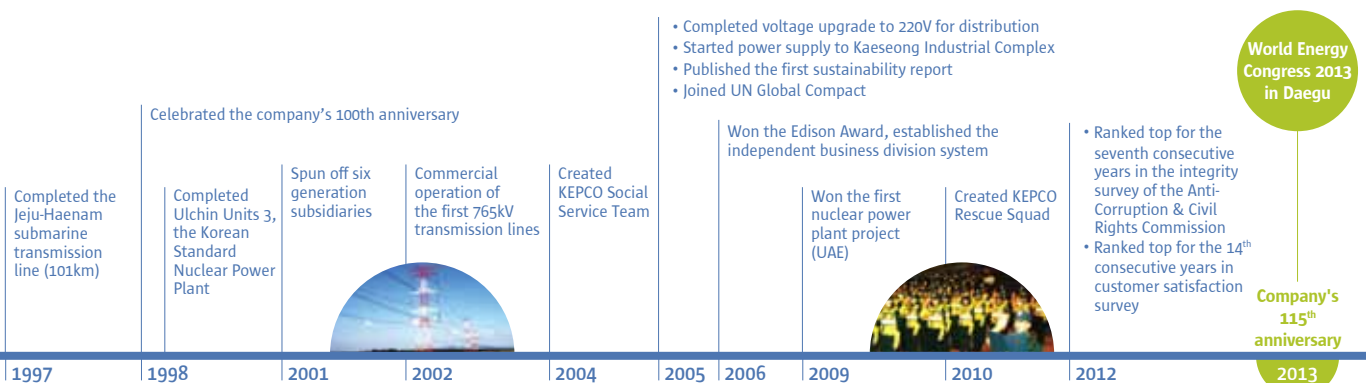
In the interview, Mr. Cho shared the role companies and CEOs have to play to promote sustainable economic development, and KEPCO's challenges and strategies.

KEPCO's efforts to make sustainable energy, a better world will continue.

:: KEPCO History ::



Sustainability Overview



Power Industry Trend Reports

Global Energy Paradigm

Opened a global low growth era

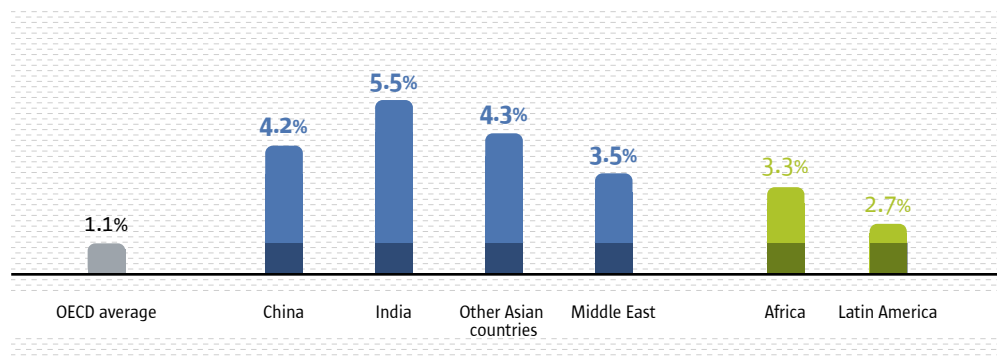
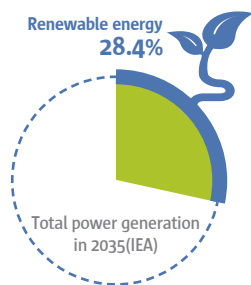
We are now in global financial crisis and low growth. Since we cannot expect rapid quantitative growth, we need to have qualitative growth. The advanced countries have tightened their economy and global energy companies are changing their fundamentals to have a lower-cost, higher-efficiency structure.

In contrast, Asian emerging countries of China and India are rapidly growing, which shows the center of global consumption and investment is moving toward them. The move of an axis is both a crisis and opportunity: The growth of emerging markets provides new business opportunities while global competition to get them will get fierce.

Energy demand from emerging countries, a strong rise of non-conventional resources

According to the annual demand for power estimated by the IEA for 2035, the average demand in OECD is expected to increase by 1.1% while demand in China and India is projected to increase by 4.2% and 5.5%, respectively. This shift in energy is expected not only in terms of demand but supply. To compete with conventional resources such as oil and coal, non-conventional resources such as shale gas and oil sand will rise strong. In the U.S., following a boom in shale gas, its policy expanded the portion of gas. Behind the energy shift lies a heightening interest in clean fuel and a move away from fossil fuel which caused global warming. Recently, the shift toward renewable energy is slowing down due to a stalemate of the Convention on Climate Change, cut in financial support, and emergence of shale gas, but from the long-term perspective, the international community has a strong commitment to moving toward clean energy. IEA expects that renewable energy will account for 28.4% of the total generation in 2035.

:: IEA estimated average growth in energy demand by 2035 ::



Stronger emphasis on carbon reduction

In December 2011, the Durban Platform was adopted at a meeting of the UN Framework Convention on Climate Change held in Durban, South Africa. Under the Platform, international society will complete carbon emissions reduction with legal force no later than 2015. Amid continued interest of the world on environmental regulation, the E.U. is reinvigorating the carbon market to prevent a sharp drop in certified emission reduction (CER) prices, and China established the CER trading market in 7 regions in 2013. The U.S. also put in place a climate change action plan which will expand the portion of renewables up to 20% by 2020.

International energy cooperation policies are worth paying attention. The regional energy cooperation with China, Japan and Russia is expected to create added value.

Eyes open on smart and clean energy

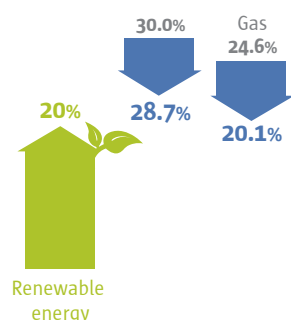
A critical strategy to reduce CO₂ emissions is to heighten the efficiency in energy consumption. More efficient energy use requires efficient energy management and a wider use of high-efficiency equipment. Accordingly, rising issues include precise demand forecast in response to abnormal temperatures and a two-way service with smart grid, and the technology development for higher efficiency. Also, utilizing the low-carbon, clean technology that has been developed, a low-cost, high-efficiency, and low-carbon energy mix is becoming a reality. Companies having technology are entering into the industry, which increases technology-driven competition.

Domestic Power Industry Trend

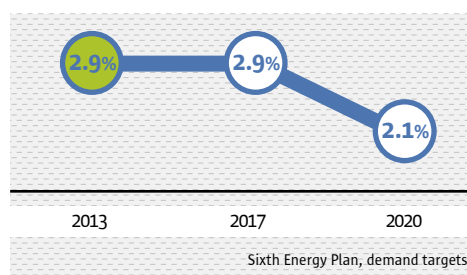
Imbalanced supply and demand(short term) A slowdown in demand(long term)

Recently, demand for electricity skyrocketed due to extremely hot or cold weather and in the long term, the growth in demand will slow down. KEPCO will resolve the imbalance in supply and demand with rigorous demand response management, and we are striving to identify long-term growth engines.

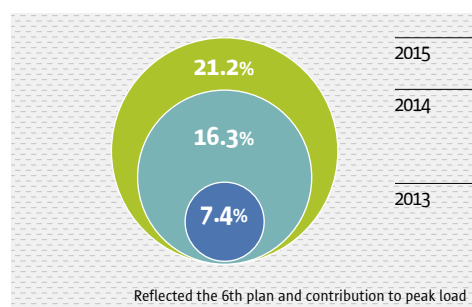
:: Share of energy in 2027 ::



:: Growth in power demand ::



:: Reserves ::



Less thermal power generation, more renewable energy

Power generation requires fuel including coal, gas and renewable sources. Over half of energy mix in 2012 is thermal power, and renewable energy is expected to expand with increasing policy request for low-carbon energy. According to the 2013 Plan for Electric Power Generation, renewable energy will increase to 14% in 2020 and 20% in 2027. Meanwhile, the share of thermal power generation such as coal and gas is expected to shrink.

By resolving challenges involving renewable energy, such as poor economic feasibility and unfavorable location, energy mix should be realigned and the cost of supplying electric power should be stabilized.

Facility construction as a social concern

The Fukushima nuclear accident and nuclear waste treatment are rising as a critical issue in society, which leads to greater demand for social consensus in technological safety and economic feasibility of nuclear power plant. In addition, complaints surrounding the construction of transmission lines and substations got attention, which increases the tangible and intangible costs for resolving social conflicts. KEPCO is coming up with mid- and long-term approaches to earn trust toward the construction of power facilities and electric power itself from the stakeholders.

INTERVIEW

Mr. Kim Jin-tae, Managing Director of Samjong KPMG



What are the current global and domestic trends and issues in the electric power industry?

Global trends in the power industry include the increasing importance of new and renewable energies and energy storage systems (ESS). Conditions such as increasing oil prices and depletion of fossil fuels have necessitated a wider use of renewable energy and the development of ESS for the efficient storage of energy. The main issues emerging domestically include the imbalance of supply and demand for electric power and greater fairness in the tariff system. It seems to be a time for us to build public consensus on the power industry as a whole including power generation and the electricity tariff system.

Will those trends and issues pose crises and opportunities to KEPCO's sustainability management efforts? If so, what will they be?

The greater importance of Asia in terms of global energy dynamics, as well as the rising need for renewable

energy and ESS, will offer a big opportunity to KEPCO if the company makes aggressive investments in technology development. Domestically, the imbalance in supply and demand can be an opportunity to reflect current realities to the tariff, but at the same time, it may also present a threat in terms of a decrease in public trust and an increase in private power generation capacity.

In what direction should KEPCO which has a 115 years of history go forward in the next 100 years?

The world cannot sustain itself without electricity and nobody can live without it. Since everyone is a stakeholder, KEPCO should manage the company more transparently with open communication to earn the respect and trust of the people it serves. In this light, KEPCO should become a global leader in the power industry.

KEPCO Value System

“Global Top Green & Smart Energy Pioneer”

KEPCO is growing as an energy leader in global green growth. We build competitiveness and make the earth cleaner with green and smart technology. We are committed to contributing to the development of the global industry, economy and society by exploring overseas markets. By facilitating challenge and innovation, we are determined to be a global leader in the future energy industry.

MISSION
Reliably supply power and contribute
to the national economic development



VISION

We enhance the quality of life.
We contribute to the advancement of the national and
global industry, economy and society.
We make the earth a better place, and the humanity happier.



Global Excellence

Customer Respect

Performance Driven

Challenge & Innovation

Social Responsibility

CORE VALUE

**KEPCO
WAY**

INTERVIEW

Kim Jae-eun, CEO of the Institute for Industrial Policy Studies



What are the recent trends in sustainability management?

A leader thinks sustainability management begins from the point of contact with the customer. Customers tend not to be aware of corporate strategies or policies, but they have a clear concept of products and services in their mind. Against this backdrop, more companies are focusing on the development of sustainable products and services, and the most important approach toward the sustainable products and services is innovation in the value chain.

In terms of sustainable consumption, what contributions can the electric power industry make toward economic/environment/social development?

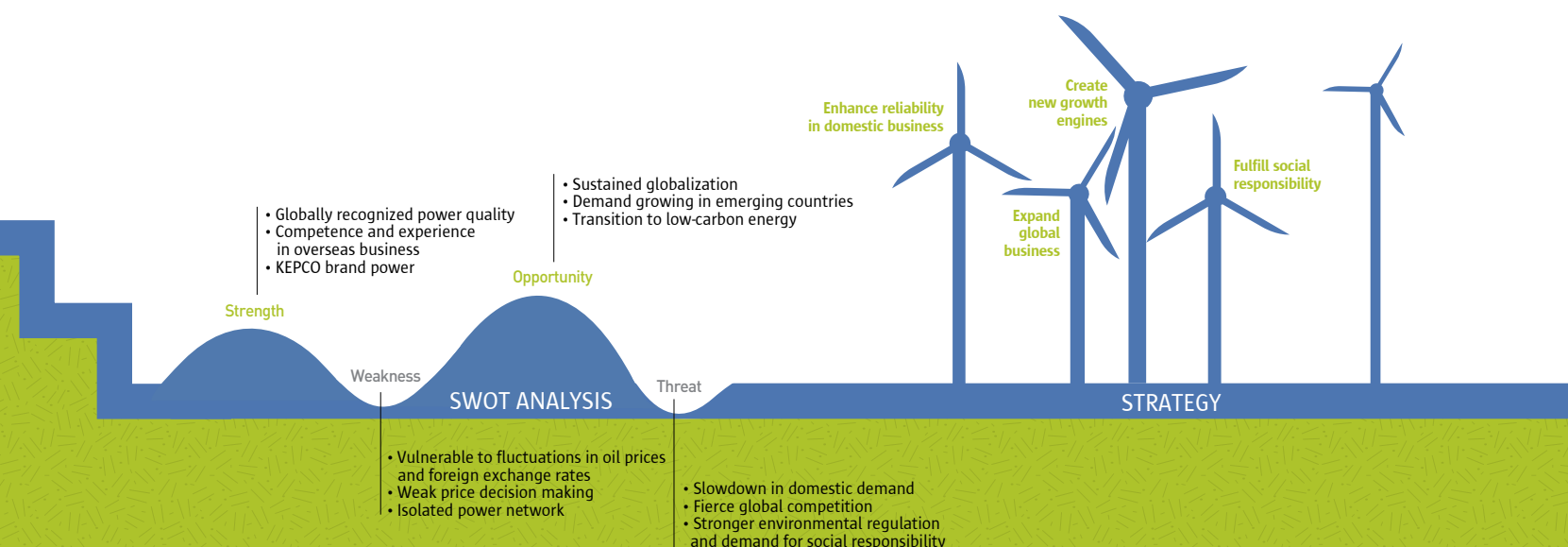
Try to look at sustainability management from the perspective of the overall value chain of the power industry and we will be able to identify new opportunities and roles. Not only stable supply and energy demand, but also sustainable fuel development and the inducement of optimized energy consumption by consumers are the roles

KEPCO should play, which will subsequently have a positive impact on Korean society.

In which way should KEPCO move forward to create shared value?

Shared value begins at the point where we recognize the coexisting interests of society and the company. The power industry has much potential in terms of creating shared value. By supplying eco-friendly energy, it can promote the economic and environmental development of society, and by encouraging efficient energy consumption, it can play a pivotal role in sustainable energy use.

KEPCO can also participate in eco-friendly energy projects in developing countries in areas including hydropower generation and CDM to guarantee people's basic right of access to energy, and at the same time, develop infrastructure in those communities. This will contribute to the economic and social development of those countries. In other words, global projects will lead to building a business model for the power sector and creating meaningful shared value by supplying green energy and building infrastructure.



Sustainability Management Mechanism

:: KEPCO Sustainability Management Mission Statement ::



Economy: sustained growth

Environment: value creation

Society: trust building

Human: respect for human

Basic operational mechanism

KEPCO has 12 action items and key performance indicators in economy, environment and society.

Organization

KEPCO has been operating a Corporate Sustainability Management (CSM) organization since 2005 in order to more systematically carry out sustainability management. Sustainability management activities are supervised by the Strategic Planning Team under the Future Strategy Department for a strategic, systematic approach and carried out by the departments (offices) in the head office and branch offices nationwide.

Development stages

KEPCO selected direction and actions required in the three key areas of economy, environment and society to raise the level of sustainability management. We will make continuous efforts to create higher value to share with stakeholders.

:: Sustainability management system ::

Vision

Global Top Green & Smart Energy Pioneer

Action Plans

Key Action Items

Economy

Strengthen basis for future growth

- Supply high quality electric power in a stable manner
- Provide differentiated customer services
- Diversify overseas business build up capacity
- Facilitate managerial innovation and R&D strategies

Environment

Establish low carbon and green growth management

- Enhance an integrated environmental management system
- Accelerate development of green technology
- Increase eco-friendliness of electric power supply chain
- Respond to the Convention on Climate change

Society

Strengthen partnership with stakeholders

- Reinforce mutual growth with partner companies
- Diversify social contribution activities
- Respect human rights and strengthen a culture of fairness
- Build a labor relationship for communication and harmony

INTERVIEW

Mr. Ryu Young-jae, CEO of Susinvest



What are the key factors regarding KEPCO's strategies for sustainability management amid the global economic downturn?

KEPCO is involved in the power business, which is by nature sensitive to environmental regulations, and thus the company should formulate strategies for sustainability to develop green energy technology and dominate the market. As a public company, KEPCO should ensure sound financials, a stable supply of electric power, shared growth with SMEs and a good relationship with the communities it serves.

How would you assess KEPCO's sustainability management efforts to date?

KEPCO has undertaken diverse endeavors for sustainability management in terms of environment, society and governance. KEPCO also discloses information related to sustainability management to stakeholders through its online portal, business reports and sustainability management reports. One

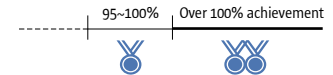
thing that requires improvement, however, is the limited amount of information regarding governance compared to that about the company releases on the environment and society. More efforts should be made to show sustainability management performance and improvements in a transparent manner.

What are the short- and long-term challenges in the course of boosting KEPCO's performance in corporate social responsibility investment?

In the short-term, more transparent disclosure and increased communications with stakeholders should help investors with decision making. In the longer term, non-financial factors should be incorporated into financial factors in order to show how they impacted the company's performance and what financial performance really means in a broader sense. CSR investors place great importance in the company's management and adjustment capabilities by integrating environment, as well as social and governance risks with financial risk.

Key Performance Indicators for Sustainability Management

KEPCO put in place key performance indicators (KPIs) in three major areas of economy, environment and society, in association with mid-to long-term strategies and management goals.



Area	Key performance indicators	Performance		2012 Target	2012 Performance	Achievement rate	2013 Target
		2010	2011				
Economy	Electricity sales (GWh)	4,342	4,551	4,691	4,666		4,805
	Overseas Sales (KRW 100 million)	14,248	24,224	27,540	29,007		31,044
	Overseas Installed Capacity (MW)	3,502	3,406	3,816	3,744		4,367
	Fuel Self-Sufficiency (%)	5.0	7.0	9.4	9.4		13.7
	Outage (minutes)	15.2	12.4	12.1	12.1		11.9
	R&D investment (KRW 100 million)	3,211	2,427	3,113	1,878		3,045
	Development of core strategic technology (items/cumulative total)	-	4	6	6		19
Environment	Green product purchases (%)	91.7	91.2	92.1	94.2		91.8
	Underground T&D lines (%)	14.3	14.7	15.1	15.1		15.6
	T&D loss rate (%)	4.0	3.7	3.7	3.6		3.7
	Load factor (%)	75.9	77.4	75.8	78.2		75.8
	Demand response management (MW)	3,151	3,248	2,886	3,704		3,817
	Domestic renewable energy development (MW)	New indicator					5.0
	CDM project (cases/cumulative total)	13	21	24	24		26
	GHG emissions (CO ₂ -1,000 ton)	2,036	1,249	1,919	1,307		2,211
Society	Integrity as a public enterprise (points)	9.4	Exempted	9.2	8.7		9.0
	Public perception (customer satisfaction)	98.1	98.8	98.9	98.9		99.1
	Support for SMEs (KRW 100 million)	120	134	110	131		104
	Purchase from SMEs (%)	68.5	70.5	66.9	68.1		70.1
	Job creation (persons)	132	155	683	683		818
	Volunteer service (h/person)	5.6	11.3	15.0	15.2		15.5
	Industrial Accident Rate (%)	0.020	0.021	Below 0.032	0.036		0.026
	Welfare satisfaction points)	70.0	70.8	71.0	70.8		71.3
	Education and training hours (per person)	74.6	54.5	59.0	59.7		80.0
	Employees with competence in overseas business (persons)	-		1,044	1,044		1,383
	Female employees (%)	42.0	25.4	20.0	36.5		20.0
	Employees with disabilities (%)	2.9	3.0	3.0	3.4		3.0
	Information disclosure (%)	87.5	90.7	90.5	90.6		90.7

Governance Structure

:: Main resolutions and reports in 2012 ::

2.22 1st meeting

- Establishment and investment in the Jordan IPP 3 project company
- Practices on the internal accounting management system
- 2011 annual audit report

3.15 2nd meeting

- Rearrangement of offices, personnel, companies outside Korea
- Revision of accounting audit regulations
- Establishment and investment in a holding company to manage the Hornsdale wind farm in Australia
- Contributions to WEC sponsorship program

4.12 3rd meeting

- Executive Recommendation Committee for a non-standing member and evaluation criteria
- Revised Electric Power Supply Terms and Conditions and Supplementary Power Supply Terms and Conditions

5.17 4th meeting

- Provision of RPS implementation costs
- Revised salary and welfare regulations
- Audit results of independent organizations and the first quarter report of the Audit and Inspection Office

7.5 5th meeting

- Adjustment of the tariff
- Establishment and investment in a special purpose company for the development of Western South Sea offshore wind power project

7.19 6th meeting

- Commissioned to sell LGU+ equity shares
- Additional capital investment in Bylong coal mine in Australia

8.3 7th meeting

- Revised Electric Power Supply Terms and Conditions and Supplementary Power Supply Terms and Conditions
- Mid- and long-term financial management plan

8.16 8th meeting

- Executive Recommendation Committee for a non-standing member and evaluation criteria
- Establishment of the Baekryeong branch office

10.15 9th meeting

- Equity investment company for HVDC technology
- Audit results of independent organizations and the second quarter report of the Audit and Inspection Office
- The final mid- and long-term financial management plan

11.8 10th meeting

- Establishment of a holding company for equity investment regarding the construction and operation of the UAE NPP project
- Third quarter report of the Audit and Inspection Office
- The establishment of the company for HVDC and the conclusion of a contract

11.9 11th meeting

- Executive Recommendation Committee for a non-standing member and evaluation criteria
- Management Pact of the CEO

12.27 12th meeting

- 2013 R&D project plan
- Revision of Employment regulations
- 2013 budget and operation plan and loans
- Termination of the Hornsdale wind project

Composition of the Board of Directors

For a sustainable, independent decision making of the Board of Directors (BOD), KEPCO appoints a majority of BOD members from those outside the company. The BOD consists of 15 members: seven executive (standing) directors including the CEO and eight non-executive (non-standing) directors. The BOD is chaired by a non-standing director in order to ensure a free, fair discussion about overall business management. The external directors are those experts in the areas of economics, academics and engineering who contribute to sustainability management by providing advice in business management and 119 Rescue Squad.

Appointment and term in office of directors

The appointment procedure and term in office are specified in the Act on the Operation of Public Organizations and the Articles of Association.

When appointing the CEO, KEPCO receives applications for the candidate. The CEO is recommended by the Nomination Committee, consisting of non-standing directors and non-government members, approved by the Public Organizations Operation Committee and a resolution of the shareholders' meeting, requested by the Minister of Trade, Industry and Energy, and finally appointed by the President for the term of three years.

A standing director is appointed by the CEO after a resolution of the shareholders' meeting. Among the standing directors, those who will also act as an audit committee member are recommended by the Nomination Committee, approved by the Steering Committee, requested by the Minister of Strategy and Finance, and appointed by the President. The term is two years.

The appointment of a non-standing director is recommended by the Executive Recommendation Committee, approved by the Public Organizations Operation Committee and a resolution of the shareholders' meeting. The non-standing director is then appointed by the Minister of Strategy and Finance for the term of 2 years.

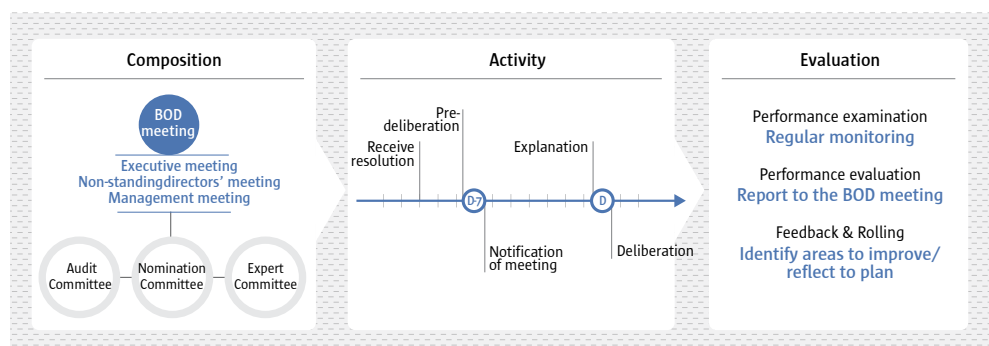
The operation of the BOD and the prevention of conflict of interests

The BOD deliberate and vote on important management issues such as management goals, financial management plan, budgets and electricity tariff in accordance with the Articles of Incorporation and the BOD regulations. The matters regarding economic, environmental and social performance are separately reported to the BOD. Also, if necessary, the BOD invites experts or any person concerned to listen to their opinions.

A director who has special interest with a resolution is not allowed to vote on the resolution under the BOD regulations. Those who do not participate in the meeting due to special interest are not counted as an incumbent director.

A minute is created with the meeting date and time, place, list of participants, resolutions and vote results. The minute is disclosed on the KEPCO website without confidential management issues included.

Also, the executive directors may not carry out for-profit activities in accordance with the article that prohibits the concurrent holding of more than one office under the Act on the Operation of Public Institutions.



Executive directors (Standing members)



CEO

Cho Hwan-ik



Executive Vice President

Park Kyu-ho

Executive Vice President
of Management Support
Division

Paek Seung-jung

Executive Vice President
of Power Technology &
Engineering Division

Kim Byung-sook

Executive Vice President
of Marketing and
Operation Division

Koo Bon-woo

• Two vacant seats

Evaluation and Remuneration

Following consultations with the Nomination Committee, the CEO signs a pact with the Minister of Trade, Industry and Energy with respect to management objectives and key issues to be achieved and addressed during his or her tenure. Every year, the progress made with regard to this pact is reviewed by the Performance Appraisal Board for Public Corporations which is composed of experts from various fields. The standing directors are required to set management objectives and sign a pact with the CEO, and they are evaluated every year for performance-based remuneration. The non-standing directors are assessed for their performance to be considered for reappointment.

The directors' remuneration is decided within the range approved at the BOD meeting, and non-standing directors receive expenses for work.

Effective BOD

In order to invigorate the board operation and realize responsible management, KEPCO strengthened the pre-deliberation process, built a system where non-standing members can regularly offer management advice, expand the real-time management disclosure system, and bought a liability insurance policy. With these systematic mechanism of the BOD governance, KEPCO became the first public corporation to be included in top 5 companies in "2012 East Asia Governance 30" organized by Asia CSR Expert Committee, which assessed 6 criteria including BOD structure.



:: Maximizing the non-executive
directors' competency ::



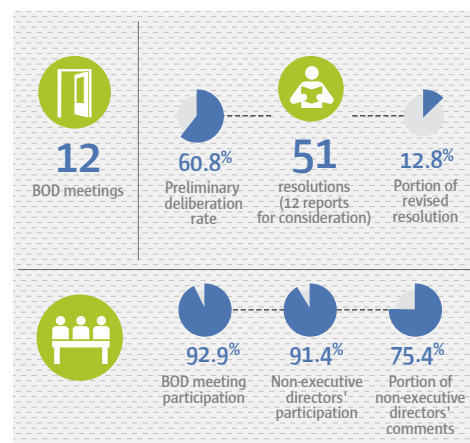
Composition and operation of the Audit Committee

The Audit Committee is charged with oversight of business management and accounting. The Committee oversees and supports the BOD to help management decision making maximize corporate value in a system of checks and balances.

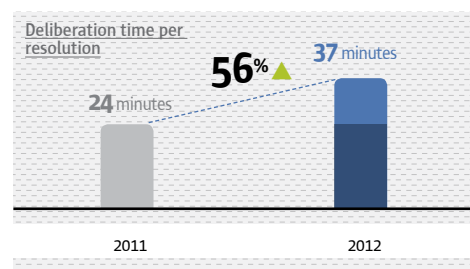
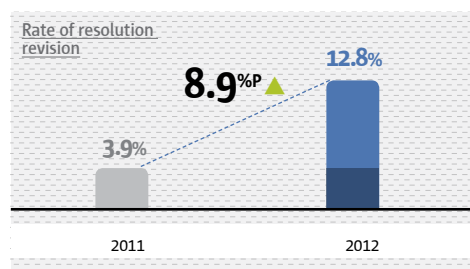
The Committee is composed of and operated by three directors of the BOD: one standing member and two non-standing members with one accounting or financial expert. The Committee is chaired by a non-standing member to ensure a transparent and reasonable oversight system.

In 2012, 12 audit meetings were held where it voted on 11 resolutions including the annual audit plan for 2012 and received 10 reports for consideration. The appropriateness and performance of the auditing activities of the standing auditor are evaluated by the Performance Appraisal Board of Public Enterprises.

:: BOD operation in 2012 ::



:: Increased rate of revised resolutions and deliberation time as a result of more intensive deliberation process ::



Nonexecutive directors (Non-standing members)



Former full-time advisor to SK Energy, BOD Chairman

Mr. Lee Tae-sik



Former advisor to the Saenuri Party for state affairs

Mr. Shin Il-soon



Professor of Politics and Foreign Affairs at Hanyang University

Mr. Kim Kyung-min



Advisor to Korea Institute of Industrial Technology

Mr. Chung Hae-ju



Standing auditor for BC Card

Mr. Nam Dong-kyun



Professor of Chemical Engineering at Yonsei University

Mr. Kim Jung-hyun



Visiting professor at Korea University

Mr. Rim Ju-hwan

• One vacant seat

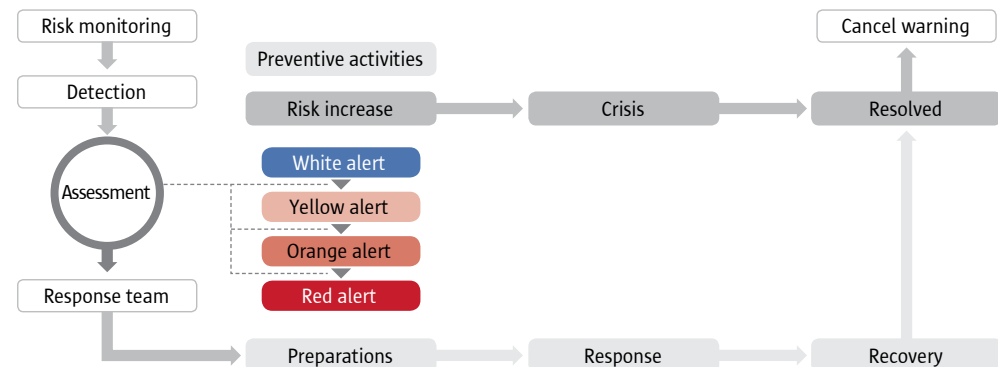
Risk Management

Building the enterprise risk management response system

KEPCO formulates its Risk Management Plan every year to prevent crises that threaten the company such as business management risks, natural disaster, bad publicity and conflicts. The departments in charge of respective types of risk manage manuals to ensure greater responsibility, and assessment on manuals by risk type is done regularly to raise the efficiency of risk management.

Risks are classified into 10 types in four areas including those that occurred in the past, those that are likely to cause a crisis to KEPCO if one occurs, those that are likely to result in a potential risk. In order to eliminate and minimize risk factors and to promptly respond to crises, KEPCO built a risk management portal, based on which the company runs simulation training by risk type on a regular basis and in an effort to efficiently utilize resources and capabilities when an actual crisis comes.

:: Risk alert and response system ::



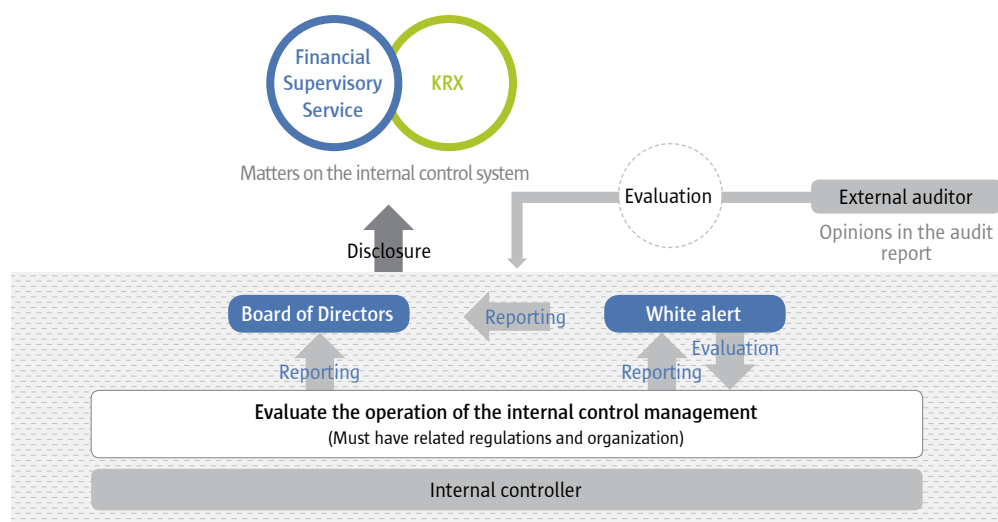
Internal control system

For greater transparency, KEPCO is operating an internal control system to satisfy the requirements of the Korean Act on External Audit of Stock Companies and the Sarbanes-Oxley Act, as the company is listed on the New York Stock Exchange. Every year we disclose the operating status of the internal control system to KRX and the Financial Services Commission, and submit an external auditor's attestation report on internal controls to the US SEC. These compliance efforts allow KEPCO to meet global standards in accounting transparency.

Since the internal control system was first introduced to KEPCO in March 2005, which includes six generation companies, in accordance with Article 2-2 of the Act on External Audit of Stock Companies, the system was redesigned as an internal control system in the ERP environment in November 2006. As the International Financial Reporting Standard (IFRS) was adopted by listed companies in 2011, the control procedure was standardized into a work process centering on consolidated financial information.

KEPCO will continue to discover control points to raise awareness about risks and their prevention in daily activities. We will meet the needs of financial information users by improving these processes and reinforce corporate social responsibility with transparent accounting.

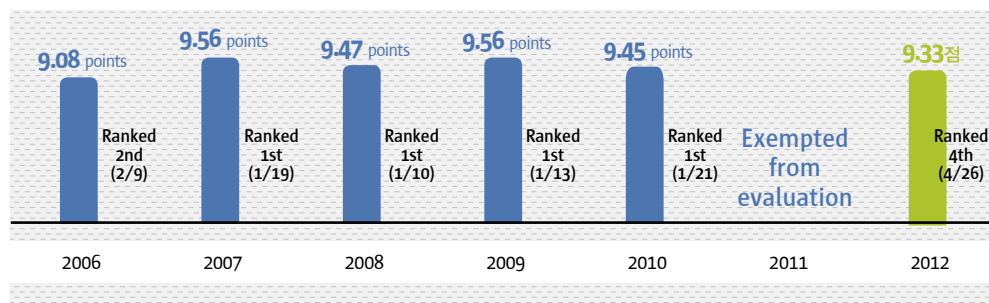
:: Operation of the internal accounting management system ::



Ethical Management

KEPCO is a leading organization in anti-corruption efforts in the public sector. KEPCO earned the highest grade in anti-corruption competitiveness assessment organized by the Anti-Corruption and Civil Rights Commission for 7 consecutive years from 2006, and our anti-corruption plan was introduced on the ACRC website as an exemplary case. In order to become an ethical company that is respected and trusted by the people, we formed a preventive ethical management environment by expanding a culture of integrity, and strengthened corruption control activities.

:: Integrity assessment of public institutions ::



Systematic corruption diagnosis and monitoring

In an effort to diagnose and monitor corruption and to bolster integrity, KEPCO has been carried out internal integrity surveys every year since 2003. We set our integrity target which are used as a criterion in internal management assessment. To improve integrity, we press ahead with system improvement in areas prone to corruption. The headquarters provides integrity consulting services to branch offices with low integrity levels.

INTERVIEW

Mr. Park Byung-il, Managing Director of Gallup Korea



What is the relationship between the sustainability management of a company and corporate ethics and transparency?

Corporate ethics and transparency is a prerequisite to improving the sustainability of a company. If ethics and transparency is omitted, sustainability management cannot be achieved.

In the past, corporate management focused on profit creation, but today, the value of transparent and ethical management has become as significant as profit making. Enhancing corporate ethics and transparency is also a necessity in becoming a global company,

Please assess KEPCO's efforts and performance in achieving a "Clean KEPCO."

In June 2013, Gallup Korea conducted a survey on the integrity of KEPCO. One of the outcomes was that responses stated "it is hard to have dinner with KEPCO employees due to their 'too rigorous' integrity standards." This demonstrates the strict standards and

efforts to build a Clean KEPCO. KEPCO carries out internal integrity surveys twice a year and a survey on the integrity of senior level employees once a year. As a result, bribery rates have shown a constant decrease since 2004 and never exceeded 0.01% in 7 surveys conducted since 2010.

What is your recommendation for KEPCO to become a global energy leader?

Warren Buffet said, "It takes 20 years to build a reputation, but only five minutes to ruin it," emphasizing the importance of integrity and trust. This is what KEPCO, a company trying to become a global energy leader, should remember. Achievements in corporate ethics and transparency are laurels which shouldn't be rested upon, as even the slightest dent in the company's armor can ruin the company's credibility. This should never be forgotten.

Rigorous measures against corruption

KEPCO strengthened the punishment of corruption, and adopted a one-strike out system for those employees who received money and entertainment, and a three-strike out system for those who committed embezzlement, negligence or misappropriation.

To reinforce the information collection of corrupt behaviors, we operate a reporting system under which KEPCO employees, general public and the employees of KEPCO partner companies can report any corruption cases whether under their name or anonymously. We regularly distribute anonymous envelopes to encourage employees to report any irregularities.

With the operation of the report system, 21 corruption cases were identified in 2012, and 45 employees who were found to have committed irregularities after investigation were punished with dismissal and other penalty.

Expansion of ethical management system

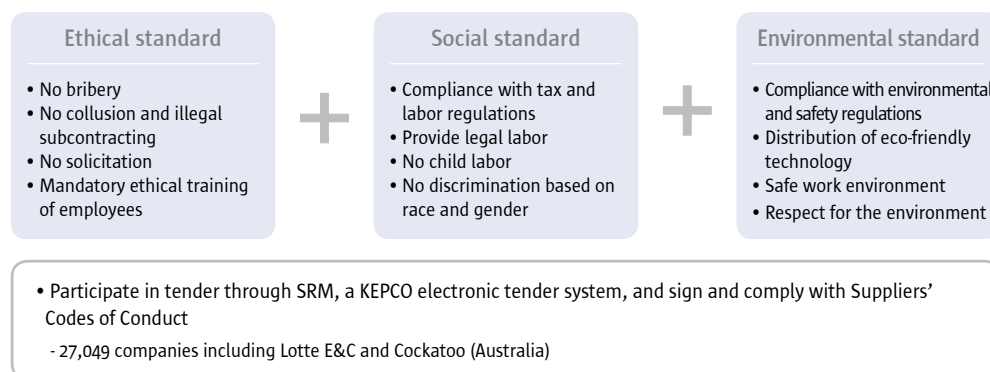
KEPCO established the Codes of Conduct for Suppliers which incorporates the 10 principles of the UN Global Compact, OECD company guidelines and ILO labor and environment guidelines in July 2012 for the first time as a public organization. We ensured practicality of the codes of ethics by integrating with electronic bidding system and including this in the requirements of tender participation and a special condition for contract.

In May 2012, KEPCO signed the KEPCO Group Joint Compact on Integrity and Ethical Practices with 10 subsidiaries in an effort to act on and expand ethical management. The companies share anti-corruption best practices and jointly held an integrity and ethics festival.

:: KEPCO Suppliers' Codes of Conduct ::

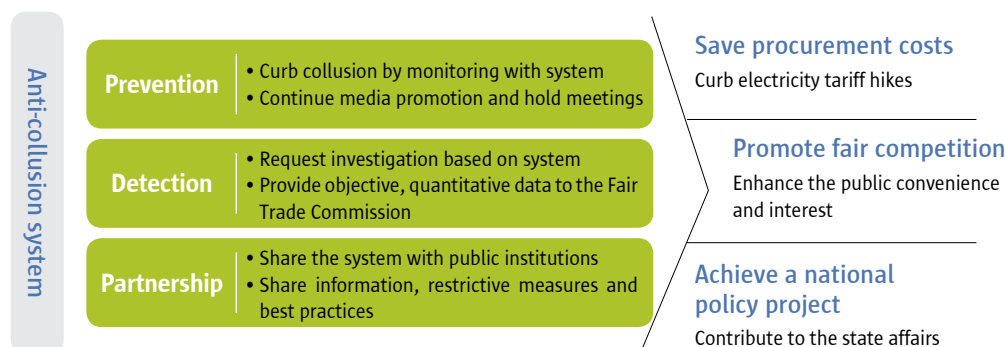


Suppliers' Codes of Conduct guideline



Select a partner with a fair collusion-free system

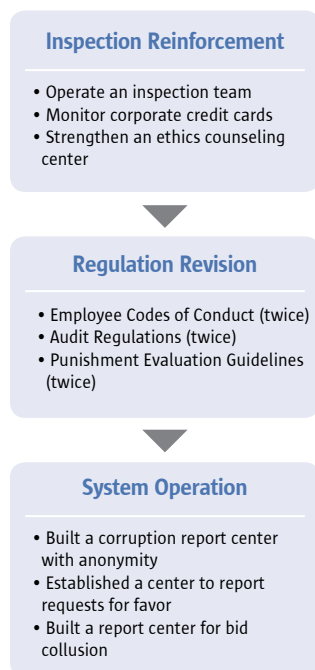
KEPCO has developed and operated a KEPCO collusion-free system since July 2013 designed to prevent collusive bids and encourage fair competition. Currently, the system governs those produced by large companies and will be expanded to all products supplied to KEPCO.



Expanding integrity culture and ethics education

KEPCO runs the ABC Program designed to provide ethics education and programs customized to executives, employees and stakeholders. We also put in place the IRS Process which includes the operation of inspection team and an anonymous report center for a constant control of corruption risks.

:: IRS Process ::



:: ABC Program ::

A ction first by leaders (executive)

Ethics leadership

- Lectures from the CEO and Auditor General (22 sessions with 5,798 participants)
- Leadership integrity assessment (July 2012), voluntary financial status report of general managers (March 2012)

B ottom-up approach (employee)

Bottom-up participation

- Life-cycle ethics pact (11,141 new hires, all employees who are candidates for promotion)
- Integrity lectures (11,387 employees), Integrity & Ethics Festival (September 2012)

C ollaboration (stakeholders)

Cooperative ethics management

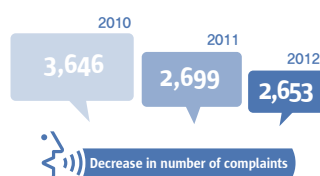
- Meetings with 1,063 partner companies for transparent management
- e-newsletter (8 issues a year). Ethical management lecture for partners (187 companies)

Integrity and ethics education

KEPCO pushes for diverse and creative ethics education programs including cyber integrity training and the development of leaders for anti-corruption, which laid the foundation for executives, employees and stakeholders to make the right decision in an ethical dilemma.

In 2012, integrity training was provided to 762 students of the KEPCO Academy including those newly employed, and 8,668 employees (including 942 who work in corruption-prone areas) took integrity courses. Also, 95 leaders for anti-corruption were nurtured in the integrity leadership courses. Other integrity trainings include the sessions held in branch offices organized by the standing audit director (13 offices/2,672 employees) and the integrity and ethics festival (326 employees).

:: Complaint cases reported to Sinmungo ::



Courses	Number of sessions	Trainee (number)		
		Team leaders	Employees	Total
KEPCO Academy integrity training	20	87	385	472
Cyber integrity training	11	731	8,718	9,449
Integrity leadership course	5	-	95	95
Lectures of the Auditor General	13	385	2,287	2,672
Other inspection organizations' training	3	-	326	326
Total of trainees		1,203	11,811	13,014
Number of current employees		1,481	17,797	19,278
Completion rate		81%	66%	67.5%

Complaint handling system

KEPCO integrated complaint receiving channels, such as the Internet, external organization and calls, into one called "Sinmungo" to systematically handle complaints, their handling process and results. In principle, those who filed a complaint can get response within 7 business days, and KEPCO Ombudsman composed of independent people conducts a quarterly review on complaints and their handling for transparent and sensible operation of our complaint handling system. The Sinmungo system received 2,653 complaints in 2012, and 98.8% of the received cases were handled within 7 business days. As a result of constant efforts to enhance systems and practices, the number of complaints has been down since 2011.



Code of Ethics

Enacted in Feb. 1996
1st Revision in Dec. 2003
2nd Revision in Jan. 2005
3rd Revision in Dec. 2009
4th Revision in Dec. 2010

We are truly proud that KEPCO has contributed to the development of the national economy and society by providing the best quality service and electric power to all customers. That pride and self-confidence is now being leveraged to make KEPCO a global power company that continues to grow and develop together with all stakeholders. To this end we are pursuing core values, which are “Global Excellence,” “Customer Respect,” “Performance Drive,” “Challenge & Innovation” and “Social Responsibility.” We understand that fair and transparent operation, firmly grounded in corporate ethics, is essential for us to achieve that end. Therefore this Code of Ethics has been adopted and all employees are required to follow it as the standard for correct behavior and proper decision making.

- First, we share the company's core values and vision, carry out our duties with the spirit of challenge and entrepreneurship, comply with all laws, and perform tasks in a fair and faithful manner.
- Second, we provide customers with the best quality service and electricity and respect all customers so as to pursue co-prosperity with customers.
- Third, we make a healthy profit through business innovations and take the lead in enhancing corporate values and achieving sustainable growth.
- Fourth, we respect each and every employee, give them equal opportunities, create a pleasant and comfortable working environment and make them proud of our company.
- Fifth, we adhere to Korean and overseas regulations and laws, abide by international agreements, protect the environment, and actively participate in public interest activities as a member of society so as to contribute to the development of the nation and society.

Chapter 1 General Provisions

This Code of Ethics is the standard for correct behavior and proper decision making. It must be complied with by all KEPCO employees in order to create a corporate culture based on fairness, transparency and business ethics.

values through continuous changes and innovations.

3. We disclose corporate information in a transparent manner, provide more opportunities to participate in the company decision-making process and help shareholders and investors exercise their rights.

Chapter 2 Basic Ethics for KEPCO Employees

1. We share company's core values and vision, fulfill our duties and pursue personal and company growth through continuous self-development.
2. We abide by all laws, perform tasks in a fair and faithful manner, make no unfair profit and strive to maintain personal dignity and the company reputation.
3. We recognize that both labor and management are owners of our company and take the lead in pursuing shared growth and co-prosperity built on trust and understanding.

Chapter 5 Ethical Treatment of Employees

1. We respect each and every employee, give equal opportunities to them according to their competence, and neither discriminate nor provide special treatment on the basis of gender, educational background, religion, age, or disabilities.
2. We fully support employees' efforts to develop themselves and grow into the professionals necessary for our company to succeed. We also create a work environment that encourages creative and empowered thinking and behavior.
3. We establish a pleasant and safe work environment and strive to make employees proud of the company based on mutual trust and understanding.

Chapter 3 Ethical Treatment of Customers and Suppliers

1. In the spirit of respecting customers, we always put customer value first and earn customers' trust by providing them with the best quality electricity and services.
2. We respect the order of the market economy based on the principle of free competition and compete with others in good faith on the basis of mutual respect.
3. We provide a fair chance to suppliers, perform tasks in a mutually equal position and seek win-win growth with suppliers by providing them with diverse kinds of support.

Article 6 Ethical Treatment of the Nation and Society

1. We continuously grow and develop through reasonable and responsible management so as to contribute to the development of a nation and society and fulfill social responsibilities as a corporate citizen.
2. We promote safety awareness to protect employees and customers in the spirit of respect for all people. Understanding the importance of protecting the environment, we comply with Korean and foreign environmental laws and regulations and endeavor to protect the environment and prevent pollution.
3. We abide by Korean and foreign laws and regulations and international agreements, and we respect the culture of host countries and contribute to their economic development.

Chapter 4 Ethical Treatment of Shareholders and Investors

1. We make sound profits through efficient management and transparent performance so as to protect the returns of shareholders and investors.
2. We pursue the sound growth and development of our company over the long term by enhancing corporate



Issue Reporting & Performance

Issue Selection Process

Issue 01- Customer Value Solutions

Issue 02- Global Growth

Issue 03- Future Growth Engine

Issue 04- Eco-Friendly Value for the Community

Issue 05- Carbon Emissions Reduction

Issue 06- Sharing and Mutual Prosperity

Issue 07- HR Development for the Future

Issue 08- Pleasant and Happy Work Environment

Issue Selection Process

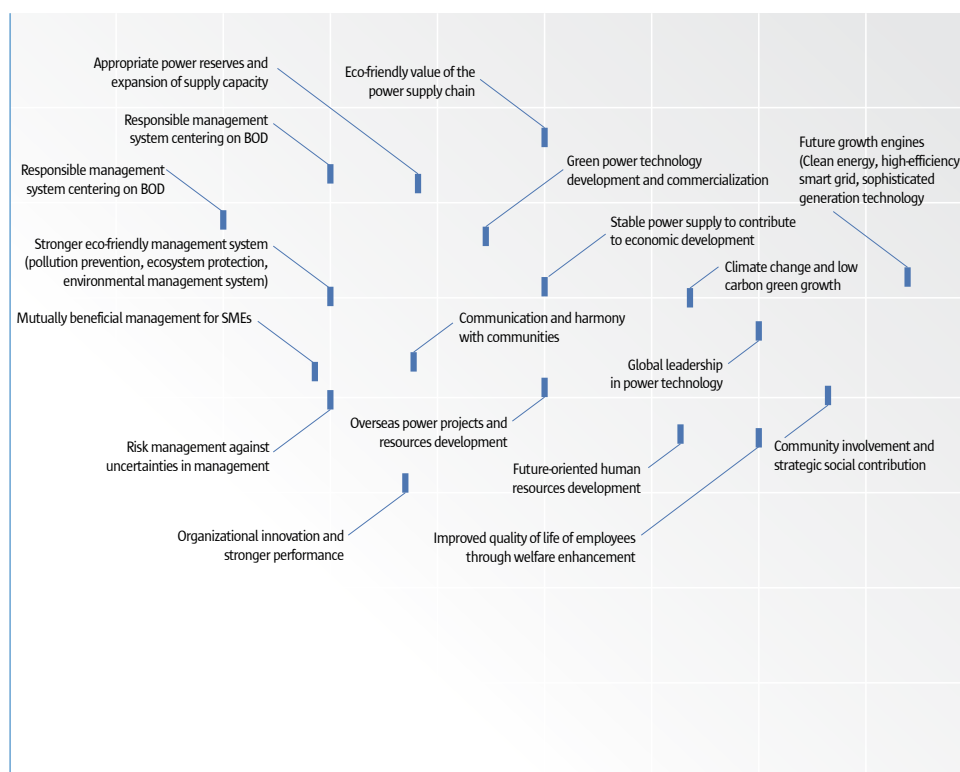
KEPCO carried out a materiality assessment to understand the interests of stakeholders and their impact on the company, as well as to focus our sustainability report on those issues that are important and affect internal decision making. The assessment was composed of four steps: prioritizing, review, confirmation and report of issues from a pool of 30 issues based on an analysis of domestic and international trends, best practices of sustainable management and media research. This assessment has helped KEPCO management establish the level of priority for each issue and take a structured approach to the significant issues among them.



:: Material Assessment Matrix ::

Business impact (A, B)

5.00



5.00

Social interest (C, D, E)

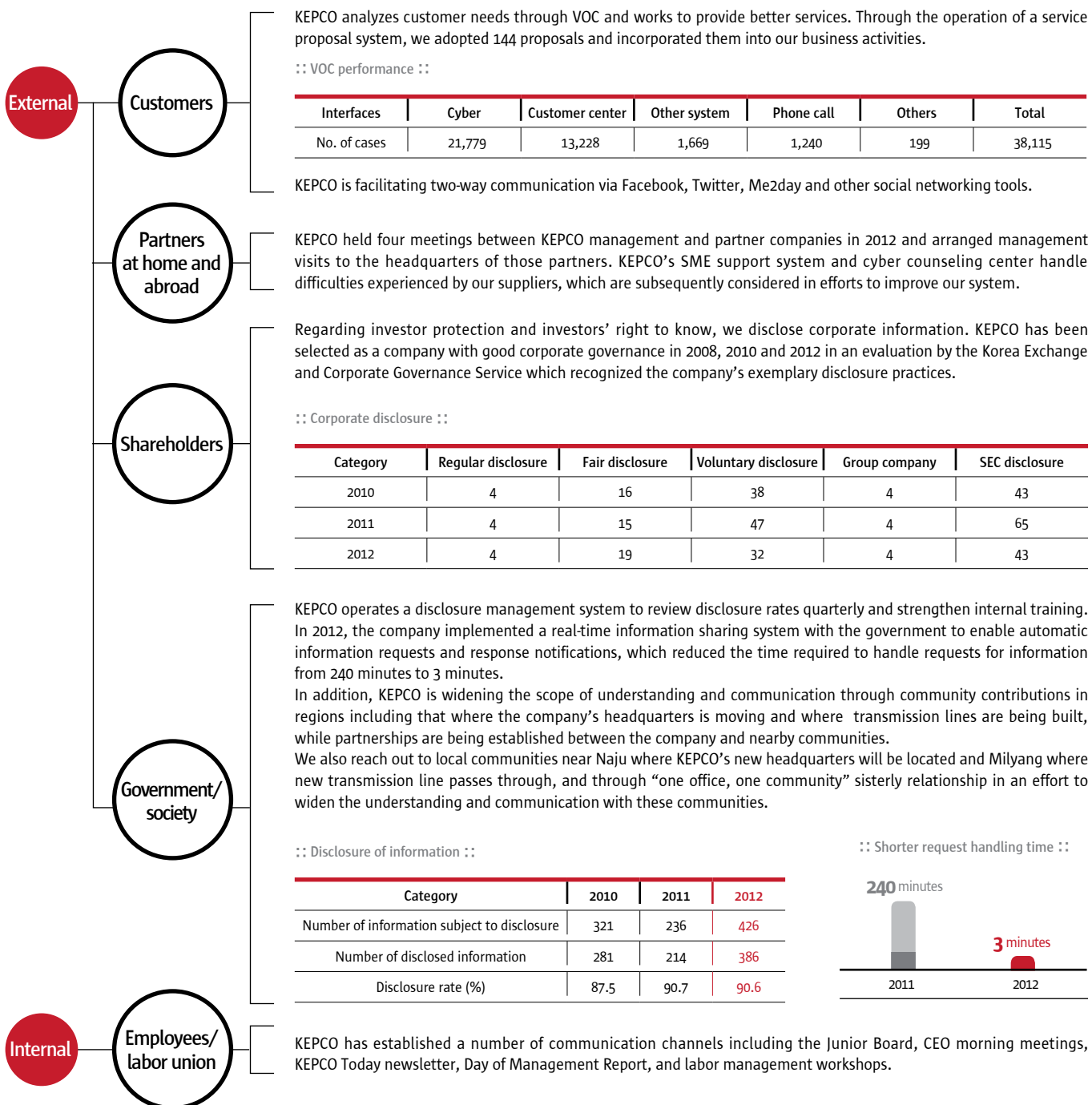
Following the materiality assessment process, KEPCO drew issues. For economy, stable supply of power, expansion of overseas business for creating growth engines, and technology development were selected. For environment, green values in the overall value chain of the power industry and green technology development to tackle climate change were chosen. For society, the virtuous cycle of sustainable values for the participation and development of the communities, future-oriented human resources development and work life balance were selected.

Stakeholder classification



Participation of stakeholders

KEPCO's customers include all residents of Korea who use electricity, the people in countries where KEPCO is undertaking projects, related organizations and corporations. Customers are categorized based on the characteristics of stakeholders into shareholders, creditors, the government, civic groups, suppliers and employees. Our customers participate in decision making and the selection of sustainable management issues through shareholders meetings, investment presentations, the ombudsman system, several committees and the Voice of Customers.



Issue 01

Customer Value Solutions



Highest customer satisfaction
14 years in a row



Outage duration
12.07 min/
household



Voltage maintenance factor
99.93%

Prevented supply-related emergencies for 19 days

Built a smarter power network including digital substations

Expanded the mobile-based billing system

What we've done

WHAT

KEPCO's primary responsibility is to reliably provide high quality electricity to end users. The service with which we provide electric power has been evaluated as being among the best.

HOW

KEPCO develops technology and apply new engineering techniques to prevent loss in the course of transmitting power. We enhance customer satisfaction by improving customer service.

WHY

KEPCO promotes demand-responsive supply and contributes to the nation's economic advancement. This is the objective of the corporation and our reason of existence.

Thorough Demand-side
management saved
3,704MW

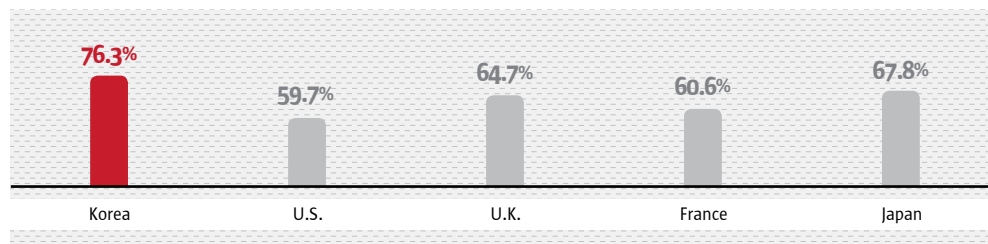
Stable power supply

KEPCO has made an all-out effort to supply reliable power in order to overcome power shortages experienced since 2010 by realigning demand-side management. In 2012, thorough demand-side management saved 3,704MW, equivalent to the output of four nuclear power plant units, and prevented 41 emergency power supply incidents including 9 rolling blackouts. As insufficient reserves are expected until 2014, KEPCO will continue to run demand response projects year-round by identifying new means to induce curtailment in energy consumption, developing energy efficiency programs, and distributing high-efficiency appliances. Based on the outcome of projects, KEPCO maintained one of the world's highest load factors (76.3%) in 2012.

:: Load factor trend ::

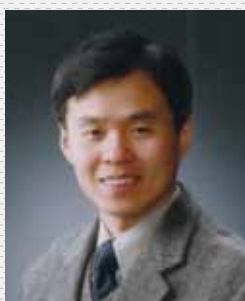
Category	2010	2011	2012
Load factor (%)	75.9	77.6	76.3
Peak demand (MW)	71,308	73,137	75,987
Average power (MW)	54,185	56,723	58,012

:: Load factor by nation (2012) ::



INTERVIEW

Professor **Won Jong-ryul** of Anyang University



What do you think upset the balance recently between power supply and demand?

Power consumption in Korea has increased constantly since the 1970s due to the rise in living standards and greater pursuit of convenience. Despite the continued rise in fuel prices, electricity prices have remained low compared to gas and oil, which has contributed to a surge in heating and cooling with electricity. Accordingly, power demand hits new records every year and the need to build power plants continues. As the construction of power facilities leads to issues regarding environment and social consensus, the vicious cycle continues.

What leadership role should KEPCO play to resolve shortages in the electricity supply?

The paradigm of the power industry has moved from the provider to user. It is necessary to implement demand

management policies designed to let consumers recognize the power supply crisis and encourage their participation in overcoming it. KEPCO should also drive the industry structure away from high energy consumption to low energy consumption.

What words of encouragement would you give to KEPCO as it tries to earn the trust and respect of the public?

With more than a century of history, KEPCO has laid the foundation of industrial development, in return for which the opinions against KEPCO's corporate management are getting stronger. KEPCO needs to face this as it continues to contribute to national and power industry development by sharing fruit and promoting mutual advancement to get rid of negative images.

Electricity sales

As the domestic economy faltered in 2012, electricity sales recorded a 2.5% increase from the previous year, which stood at 466,592GWh. Meanwhile, electricity rates were raised and the sales amount rose 13.8% to 46.23 trillion won. Even with an annual sales increase and the company's efforts to reduce costs, which resulted in a cost reduction of around 700 billion won in 2012 alone, KEPCO recorded a net loss of over 3 trillion won in 2012 due to rising international energy prices, the electricity tariff under production cost, and the account receivables accumulated by the fuel cost pass-through system.

Business conditions in the power industry, including a slowdown in power demand, stronger regulations on greenhouse gas emissions and energy price hikes are not expected to be favorable to KEPCO. Not to be even more negatively affected by these unfavorable conditions, the company will strive to enhance its financial performance by creating new profit engines including overseas power projects, implementing sustained cost reduction measures and operating a reasonable tariff system such as the fuel cost pass-along. With a strong commitment to bolster the company's financial soundness, KEPCO's S&P credit rating was upgraded from A to A+ in September 2012.

KEPCO thoroughly complies with fair trade rules and regulations in an effort to establish a fair, free trade environment in business, and has never been fined or faced a non-monetary sanction. KEPCO has also never donated any money to a political party or received subsidies of any kind from the government.

:: Power Service Charter ::

We are the driving force of the national industry. We will abide by the following in order to reliably provide electricity and quality service so that customers can satisfy.



One, We are the driving force of the national industry. We will abide by the following in order to reliably provide electricity and quality service so that customers can satisfy.



Two, We will maintain affordable and stable electricity tariff based on the cost method.



Three, We will think and act from the perspective of customers and handle the requests promptly, precisely and kindly.

:: Sales trend ::

Category	2010	2011	2012
Volume (GWh)	434,160	455,070	466,592
Amount(KRW trillion)	37.4	40.6	46.2

Customer service

KEPCO continues to improve its customer-oriented operating system to satisfy the diverse needs of customers. In 2012, KEPCO allowed customers who requested electricity use to pay new installation in installments. We provided support funds for the replacement of old transformers that were in use for over 15 years in high-voltage apartment buildings. The supply of 154kV was expanded from 500,000kW to 600,000kW in the interest of national economics. KEPCO also reduced security deposits for small tenants so that customers can actually feel the effects of the efforts we make in customer service.

The customers can make reservation for any customer service on the Internet and get replies in the name of the head of branch offices for their complaint or question. Electricity charges are billed via cell phone and email. For the expansion of paperless billing, the smartphone application service is in greater use and 3.88 million households started to use the application in 2012 alone, with the total number of IT-based billing users standing at 8.16 million. KEPCO plans to expand the mobile cyber branch to accommodate the needs for ubiquitous service based on smartphone. Such service will allow customers to view the information on their electricity use and file complaints regardless of time and place, which boosts the customer's right to knowledge and convenience.

Product liability for customers

KEPCO has implemented the Power Service Charter since May 1999. Based on the service standards, we provide quality customer service and compensate for any inappropriate services.

INTERVIEW

Ms. Joo Kyung-sook (customer)



Excellent customer service for 14 consecutive years

"KEPCO's smart customer service makes life easier!"

"KEPCO offers its own smartphone application. I hope many people can use this application for different purposes and for greater convenience."

KEPCO cyber or mobile branches provide diverse useful information which will make your life a bit easier."



Outage duration
12.07 min/
household

Operation of T&D facilities

KEPCO's SAIDI stood at 12.07 in 2012, among the world's best, a 2.8% year-on-year decrease which was achieved by diagnosing distribution lines with high-tech IT equipment, such as thermographic and ultrasound cameras and optical binoculars, and transmission lines from helicopters. KEPCO plans to decrease its SAIDI to around 7 minutes by 2020 by bolstering the power quality management capacity, for example, working to prevent a blackout initiated by high-voltage customers, strengthening the support for customer facilities, and enhancing the expertise of personnel in charge of T&D facility diagnosis.

In terms of T&D loss rates, KEPCO recorded 3.57% in 2012, one of the lowest among advanced countries. This was achieved with KEPCO's constant effort to reduce power loss: integrating the operation of 154kV light duty transformers, equilibrium operation of distribution lines, using low-loss transformers, removal of idle transformers, and allowing the use of cut-out switches for agricultural transformers during the suspended period of electricity use. Lower T&D loss rates are translated into higher efficiency in energy supply.

:: Power quality comparison ::

Category	KEPCO(2012)	U.S.(2009)	U.K.(2011)	France(2011)	Japan(2008)
SAIDI (min/household, year)	12.07	120	68	73	10
T&D loss rate (%)	3.57	6.1	7.7	7.2	5.0

T&D facility development

For better power supply, KEPCO carried out 33 transmission and 31 substation projects, which expanded facilities in a timely manner. When constructing power facilities, KEPCO utilizes a site construction process where all stakeholders participate in order to protect the environment, property and the health of stakeholders. This process, which respects humans, helps minimize conflicts when constructing facilities.

KEPCO also applies information technology to power facilities to build smart T&D networks like digital substations. The company is reducing construction costs and bolstering the efficiency of power facilities by developing new technology and engineering techniques including reduced connections on underground transmission cables.

KEPCO plans to enhance its network efficiency by developing new technologies including high voltage direct current (HVDC) and energy storage systems (ESS) which take into account trends related to more renewable energy plugged in from an offshore wind power complex to be built off Korea's southwest coast, thus increasing demand for power, and an ever more complicated power system.

:: T&D facilities ::

Year	1990	2000	2010	2011	2012
Transmission line (c-km)	765kV	-	595	835	835
	345kV	4,935	7,281	8,653	8,770
	154kV~	14,497	18,706	21,761	22,017
	Total	19,432	26,582	31,249	31,622
Distribution line (c-km)	231,263	351,264	428,259	435,549	442,640
No. of substations	319	483	731	749	768

- Underground lines: transmission 11%, distribution 15%
- No. of unmanned substations: 633 (82%)

Business infrastructure innovation

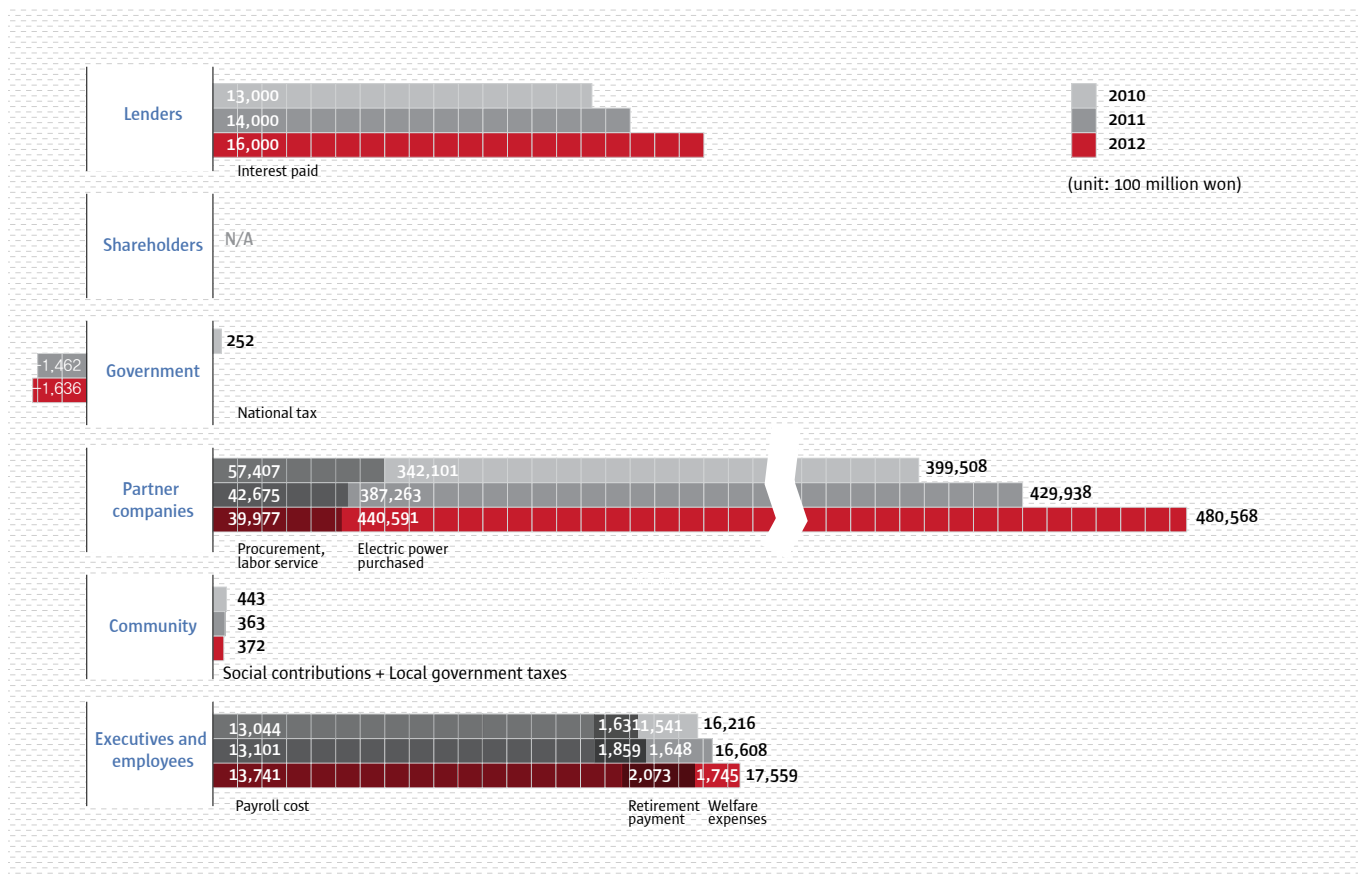
KEPCO strives to ensure financial soundness with profit making measures such as innovating its engineering and procurement system, cost reduction in construction and operation processes, enhancing its power trading system, asset utilization, preventing profit leaks and expansion of overseas business. These efforts resulted in a cost reduction of 690 billion won in 2012; in 2013, KEPCO will ratchet up effort to cut costs and generate profits to offset an expected increase in power supply cost.

:: Standing in the market ::



KEPCO has identified issues and improved across 900 standard operation procedures (SOPs) since November 2011 in order to innovate its work processes. Such actions paid off in the form of strengthening the company's horizontal decision making system, innovating work processes by ensuring that enterprise SOPs meet ISO standards, and clarifying responsibilities and rights with regard to the process at each step.

:: Distribution in financial value ::



Issue 02

Global Growth



21 countries
42 projects



Sales in
overseas business
2.9 trillion won



Generation capacity
from equity investment
6,181 MW

Poured first concrete for
the first NPP unit in the UAE

Won a 1,200MW thermal
power plant project in Vietnam

Awarded the company's first overseas
wind farm project in Jordan

What we've done

WHAT

Utilizing over 110 years of experience in Korea's power sector, KEPCO looks to boost profits while contributing to economic value creation in countries where we do business.

HOW

KEPCO's overseas business began with a power generation project in the Philippines in 1995, while today, we are carrying out 42 projects in renewable, nuclear, thermal energy, T&D and mineral resources development in 21 countries.

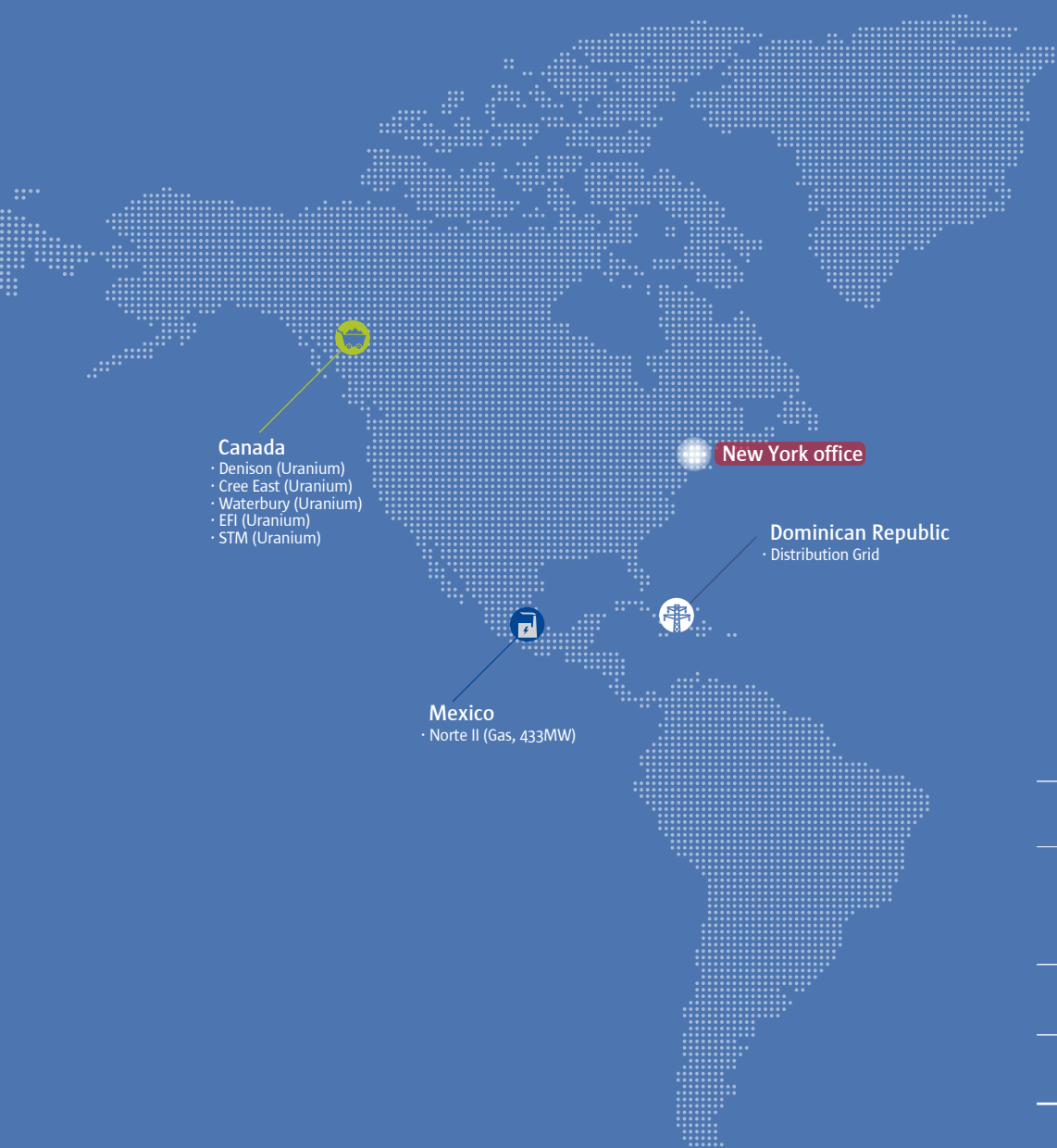
WHY

To overcome slowing growth in demand in Korea and rise as a global energy company, KEPCO is expanding into the global market.

Global Network

As of the end of 2012, KEPCO possesses a generation capacity of 6,181MW in equity investment overseas and recorded KRW 2,908.5 billion in sales outside of Korea. The company will continue to improve profitability and enter into global power markets in partnership with Korean construction companies and equipment manufacturers, which will ultimately create new jobs.





7 overseas offices



Power generation

9 projects in 12 countries

Nuclear power 1 UAE Project
Thermal power 10 projects in 7 countries
Renewable energy 1 Chinese project



Transmission & distribution

17 projects in 12 countries



Mineral resources development

12 projects in 4 countries

:: Sales from overseas projects ::

Classification	2010	2011	2012	Total (100 million won)
Thermal	6,537	7,971	9,661	47,578
Nuclear	6,014	11,674	14,901	32,589
Mineral resources	1,710	4,076	3,826	9,892
T&D	56	404	697	1,521
Total	14,437	24,125	29,085	91,580

Nuclear power

On December 27, 2009, KEPCO was awarded the contract for a US\$18.6 billion nuclear power plant project in the UAE by the Emirates Nuclear Energy Corporation (ENEC). The project will see built four Korean standard 1,400MW reactors (APR1400) totaling 5,600MW, with the first unit to be completed in May 2017, and the subsequent units to be completed one every year until 2020.

After the UAE nuclear deal, KEPCO entered into subcontract agreements with its group companies and private companies to successfully complete the project and build premium nuclear power plants. At present, KEPCO is designing an NPP best suitable for the UAE conditions and manufacturing and purchasing main equipment. The pouring of first concrete was carried out for the first unit in 2012 and the second unit in 2013, evidence of the project remaining on schedule.

KEPCO is actively formulating localization strategies and has held nuclear road show events for Saudi Arabia, South Africa and Vietnam, which are among the countries planning to build their first nuclear power plant.



▲ NPP construction in UAE



▲ Signing of contract for Nghi Son II project in Vietnam



▲ Wind farm in Inner Mongolia

Thermal power

Following the completion of the Philippines Malaya thermal power project in 1995, as of early 2013, KEPCO has since expanded its overseas business activities to China, UAE, Saudi Arabia and Mexico. In early 2013, KEPCO was awarded the right to build the 1,200MW Nghi Son II thermal power plant project by the Ministry of Industry and Trade of Vietnam.

Renewable energy projects

In 2011, KEPCO won an additional 93MW wind power project in Inner Mongolia, China, proving to the world energy market the excellence of KEPCO in wind power, and at the same time earning KEPCO carbon credit worth 1 million tons. In terms of wind power, KEPCO is constructing or operating wind power facilities with a capacity of 1,315KW in Gansusheng, Inner Mongolia and Liaoning in China. In 2013, the company won the 90MW Fujiej wind power construction and operation project, the first wind power plant in Jordan, by the Ministry of Energy and Mineral Resources of Jordan. The Jordanian wind project is the fifth contract awarded in the Middle East, which solidified KEPCO's stance as the second independent power producer in Jordan. In the future, KEPCO will diversify its renewable energy portfolio into photovoltaic and geothermal energy, develop and deploy CCS technology on a commercial scale, and enter into hydropower development in Central and South America and Southeast Asia.

Mineral resources development

Amid the projected depletion of fossil fuel and increasing fluctuations in raw material prices, KEPCO needs to stably procure generation fuel while curbing electricity tariff hikes caused by fuel price increases. Against this backdrop, KEPCO is undertaking overseas resources development projects.

For bituminous coal, as of the end of 2012, KEPCO is operating five projects including the Bylong mine in Australia, which will provide the company with an off-take of 20.46 million tons of coal by 2020. At the same time, KEPCO seeks profits from dividends and sales commission through the equity purchase of coal mining companies, and tries to identify future business opportunities with investment partners. For uranium, KEPCO is implementing six projects including equity investment in Denison, Canada, with an off-take of 1,115 tons as of 2020.

The practical knowledge earned from developing and operating the Bylong mine will lay the foundation for KEPCO to invest in mines for direct operation, and the optimization of the company's portfolio by development stage, such as exploration, development, and production, as well as by geographical region, will enable KEPCO to have a stable supply of natural resources. At the same time, the company plans to enter the into trading business in order to overcome geographical limitations and maximize the value of mineral resources, two areas of future concern which have already developed.

Local staff overseas

KEPCO employs local people in the countries in which it has business activities, a practice which creates quality jobs and contributes to the country's economic value. As of 2012, KEPCO's local staff overseas totals 236 employees in the Philippines, Jordan and Mexico, with over 40% of senior managers being local employees. KEPCO strives to maintain fairness in salary level and promotion opportunities between local and Korean employees, and faithfully assumes our social responsibility in human rights protections considering local laws and regulations.

:: Salary and the proportion of senior managers ::

Classification	Nation	2010	2011	2012
Legal minimum wage/	Philippines	24/32	24/34	25/34
Starting salary	Jordan	26/163	30/163	30/163
(KRW10,000, month)	Mexico	-	16/108	16/108
Proportion of local senior managers (%)	Philippines	50.0	51.1	51.7
	Jordan	11	41.6	50.0
	Mexico	-	41.6	53.5

:: Local employees in overseas offices (unit: people) ::

Classification	2010	2011	2012
Philippines	314	188	186
Jordan	11	9	7
Mexico	-	15	43

• With the completion of the Malaya power plant project in the Philippines (October 2011), the number of Filipino employees decreased.

SPECIAL FEATURE

KEILCO undertakes KEPCO's overseas power project

KEILCO is responsible for operating the 1200MW gas-fired combined-cycle power plant, the second overseas project for KEPCO following the first Malaya project in the Philippines.

Ilijan power plant is the second largest station in the country, accounting for about 10% of the nation's total

generation capacity. Befitting the plant's large scale, its electricity sales stand at US\$1.156 billion per year. As of the end of 2012, the plant's aggregate sales were US\$1.34 billion and aggregate net profit amounted to US\$573 million. These figures represent the valuable achievement made by 13 KEPCO and about 130 Filipino employees.

The secret of high profitability at KEILCO is the trust it garners from Filipino consumers for its high quality electricity. With only 1.16 days of annual unplanned outages recorded last year, KEILCO provides a stable electric supply in Luzon, an area where the power supply is normally precarious.



▲ Ilijan power plant



▲ KEILCO Ilijan power plant staff

Issue 03

Future Growth Engine



R&D investment
187.8 billion won



6 strategic
technologies



640
intellectual
property rights

Highest level globally in CO2
emissions reduction technology

Successfully implemented five pilot
Smart Grid projects in Jeju

Developed a smart distribution operation
system, which is an international standard

What we've done

WHAT

KEPCO is focusing its energy on R&D for 15 strategic technologies in order to become a globally recognized company and to create future growth engines.

HOW

KEPCO is working to turn developed technologies into commercial projects. These include clean energy development, high-efficiency smart grid technology and value-added generation technology.

WHY

KEPCO is aggressively investing in technology development in order to overcome limited growth in domestic demand and fierce competition in the global market.

187.8 billion won
in R&D investment

351 applications
for industrial property rights

289 papers published

Development of green & smart technology

KEPCO selected 15 technologies in 3 groups – clean energy technology, and high-efficiency SG technology and value-added generation technology – in an effort to strengthen its competitiveness in winning and executing overseas power projects. Major strategic technologies include offshore wind power, carbon capture and storage (CCS), HVDC, smart grid, and energy storage system (ESS). We will work hard to develop these strategic technologies and concrete commercialization strategies with the ultimate objective of creating new growth engines.

:: 15 contents in 3 technology groups ::

GROUP PRIORITY	Clean energy technology	High efficiency SG technology	High value-added generation technology	Share in R&D
Export projects (short-term)	Wind power IGCC-SNG	Micro-Grid HVDC	ROMM Smart Plant	40%
New business creation (mid-term)	Photovoltaic energy Bio & geothermal energy	Smart Grid ESS	Resources development	20%
Future market (long-term)	CCS	Superconductivity	Desalinization of sea water	10%
Stronger operation projects (operation)	Enhanced efficiency and facility improvement to secure KEPCO's own value proposition			30%

KEPCO's annual R&D investment strategy involves the development of low carbon, green technology for the creation of future growth engines, and the enhancement of technology competitiveness of power facilities and operational efficiency of power system, which is attained by prompt development of core technology.

In 2012, KEPCO invested 187.8 billion won, or 6.4% of net sales, in R&D for developing strategic technologies and operation technology customized to specific business areas and for expanding the company's research infrastructure. KEPCO published approximately 289 papers in Korean and international journals, while about 351 cases of industrial property rights were applied for in the company's name. KEPCO also established an open innovation system to strengthen its technology-centered management system and developed human resources necessary to create growth engines with the help of educational institutions at home and abroad and KEPCO's in-house HRD center.

15 technologies in three technology groups were selected by the company: clean energy, high-efficiency smart grid and value-added power generation technology. This strategic identification of key technologies will strengthen KEPCO's competitiveness and competency in winning and carrying out power projects abroad. Strategically important technology includes offshore wind power generation, carbon capture and storage, high voltage direct current, and smart grid and energy storage systems. KEPCO is committed to securing a fast track for the development of these core technologies and making a technology-based business strategy with the ultimate aim of creating new growth engines.



:: Major green technology development in 2012 ::



Awarded
**the President's
Commendation
for Green Technology**
(November 2012)

Awarded
**the 10 Green Energy
Technology Award**
by the Ministry of Knowledge
Economy (June 2012)

Completed
**5 smart grid
demonstration projects**
at the Jeju testbed (May 2013)

Category	Main achievement
CCS (Carbon Capture and Storage)	<ul style="list-style-type: none"> One of the world's best technologies related to CO₂ emissions reduction Developed KEP-CO₂P2, CO₂ absorbent, and attained a reduction level of over 85% (June) Won the President's Commendation at the fourth National Green Technology Awards Developed commercial design technology for an oxy-fuel combustion power generation plant Operated a 0.7MW pilot plant (March) and completed 100MWe basic design (September) 
Smart Grid	<ul style="list-style-type: none"> Initiated commercialization through testing and standardization Succeeded in technology verification of five projects at the Jeju Smart Grid testbed Developed a smart distribution network with renewable energy, an international standard Awarded the 10 Green Energy Technology Award by the Ministry of Knowledge Economy (June) 
Superconductivity	<ul style="list-style-type: none"> Built a foundation for business by completing the verification of superconductivity power facilities Successfully operating distribution-level (22.9kV) commercial lines from August 2011 Secured transmission-level superconductivity technology, the world's highest voltage Manufactured direct current 80kV and alternating current 154kV cables and developed evaluation technology
HVDC (direct current power transmission)	<ul style="list-style-type: none"> Established a joint venture (KEPCO-ALSTOM PES) which secured technology and facilitated commercialization (December) Tested 80kV voltage converter system on Jeju power grid Developed design standardization of 250kV direct current transmission lines

INTERVIEW

Mr. **Wi Young-ho**, senior researcher at KEPCO



Pressure from the global community to reduce CO₂ emissions is growing. What are some technological solutions which will enable the electric power industry to respond to this?

Technological responses include increase in energy efficiency, wider use of renewable and nuclear energy, and carbon capture and storage (CCS). The surest solution to cut CO₂ emissions in the power generation stage would be CCS technology.

How would you evaluate KEPCO's CCS technology?

KEPCO's CCS is one of the world's best. Its post-combustion carbon capture with wet scrubbing is being deployed at the Boryong thermal power plant on a 10MW pilot facility, the largest in Korea. KEPCO is building a 10MW pilot plant, the world's first and largest, at the Hwadong thermal power plant to enable environment-friendly and innovative dry scrubbing carbon capture.

How would you describe your mission as a KEPCO researcher to build a world using "clean, smart, sustainable" energy?

I feel a sense of responsibility, burden and pride at the same time. I try to overcome the burden of wondering, "Can I really do that well?" with the sense of responsibility that "I must do it," at which time I assume the responsibility with pride that we can create the clean energy world we dream about.

Smart Grid

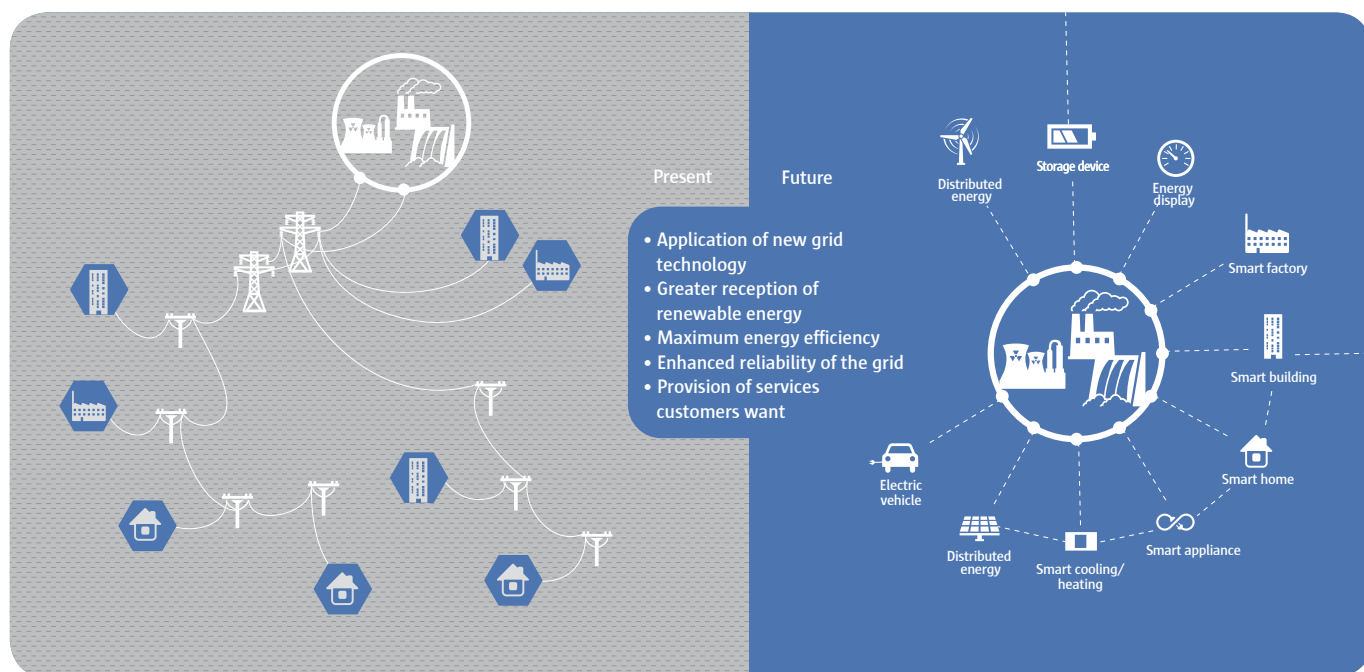
"Smart grid" refers to a next generation power grid that integrates power technology and information technology to make the power grid more intelligent and advanced, and provides high-quality electric power service and maximize the efficiency of energy use. KEPCO focuses on smart grid project to reduce greenhouse gas emissions and expand the use of renewable energy to combat global warming, and increase stability in power supply and energy efficiency.

In accordance with the national roadmap for smart grids announced in January 2010, KEPCO carried out technology testing in Jeju testbed from December 2009 to May 2013, and based on the outcome of the test, we will participate in smart grid expansion project and contribute to creating the first ever nationwide smart grid by 2030.

In Jeju testbed, we installed smart meters, intelligent transmission and distribution system, digital substations and electric vehicle infrastructure, and tested the integrated operation of intelligent power grid, real-time tariff, demand response, energy management system, power facility monitoring and automatic recovery and an electric vehicle charging and payment system. As a result, we developed technology and a commercialization model for peak load shedding, load balancing, reduction in power line loss and outage duration and system integration with renewable energy sources.

By 2020, Advanced Metering Infrastructure (AMI), or smart meters, will be installed in 22 million households, and the AMI operation system will provide services to allow customers to have an efficient energy use. The establishment of energy storage system will disperse peak loads and help use energy efficiently. We will continue developing products and services for sustainable energy consumption including EV charging infrastructure, and contribute to building the national smart grid.

KEPCO will continue to play a leading role in building the national smart grid and promote mutual growth of large and small companies in this area, with the ultimate aim of contributing to the development of the national economy.



Northeast Asian Super Grid

KEPCO is preparing for a mid- and long-term global super grid project to develop power resources within the Northeast Asia region, create mutual benefits by utilizing differences in electricity prices and peak time, and identify new growth engines by exporting electric power.

It is a large-scale project involving Russia, China and Japan, as well as Korea, and is expected to enhance the operational efficiency, promote the development of power sources such as gas and hydroelectric power, and develop renewable energy including wind and photovoltaic power.

In 2012, KEPCO started a government-led project to analyze the feasibility of a Korea-Russia super grid, which will continue until September 2014. Regarding a Korea-Japan super grid, KEPCO signed a cooperation agreement with a power research institutions and will continue evaluating the project until January 2014. These efforts will give birth to a business strategy for Northeast Asian super grid project by 2014.

Issue 04

Eco-friendly Value for the Community



Investment in
environment
2,194.7 billion
won



Underground
distribution network
15.1%



**ISO14001 &
CTS** certification

Adopted the green
management system

Expanded eco-friendly
power facilities

Cut peak load by 3 million kW
using demand response

What we've done

WHAT

KEPCO places importance on protecting the environment throughout the entire supply chain from power generation to transmission and consumption.

HOW

KEPCO is developing and attempting to apply a variety of technology to reduce carbon emissions in power generation, reduce loss in transportation, and increase efficiency in consumption.

WHY

KEPCO assumes its full social responsibilities on a basis of "green" management and is working with the government on a GHG and energy emissions target management system.

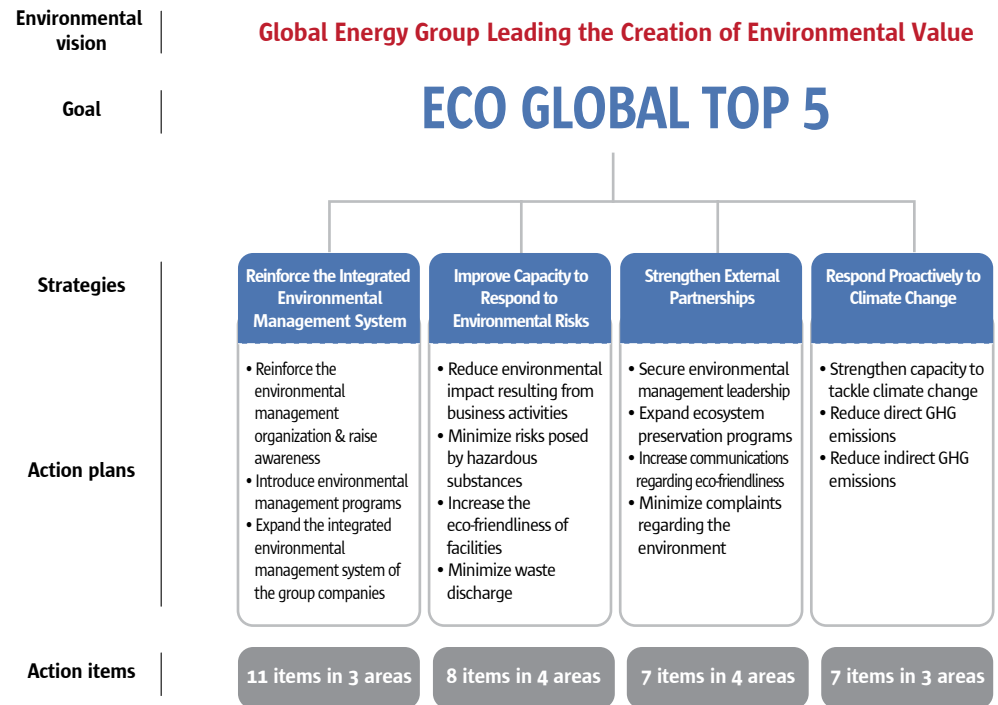
Integrated Green Environment Management System

In 2007, KEPCO established the "Mid- to Long-term Environmental Management Master Plan" to conduct environmental management in a more systematic way in pursuit of sustainable development. The mid- to long-term goal of our environmental management is to enhance environmental management capacity to be included global top 5. To this end, we have prepared strategies and action plans in four areas according to the master plan. In October 2013, we adopted the green management system which is an upgraded version of the master plan. We also rolled out the master plan and will enhance our environment management a step further by getting feedback on the implementation of the plan.

:: Green management policy ::



:: Integrated green environment management system ::



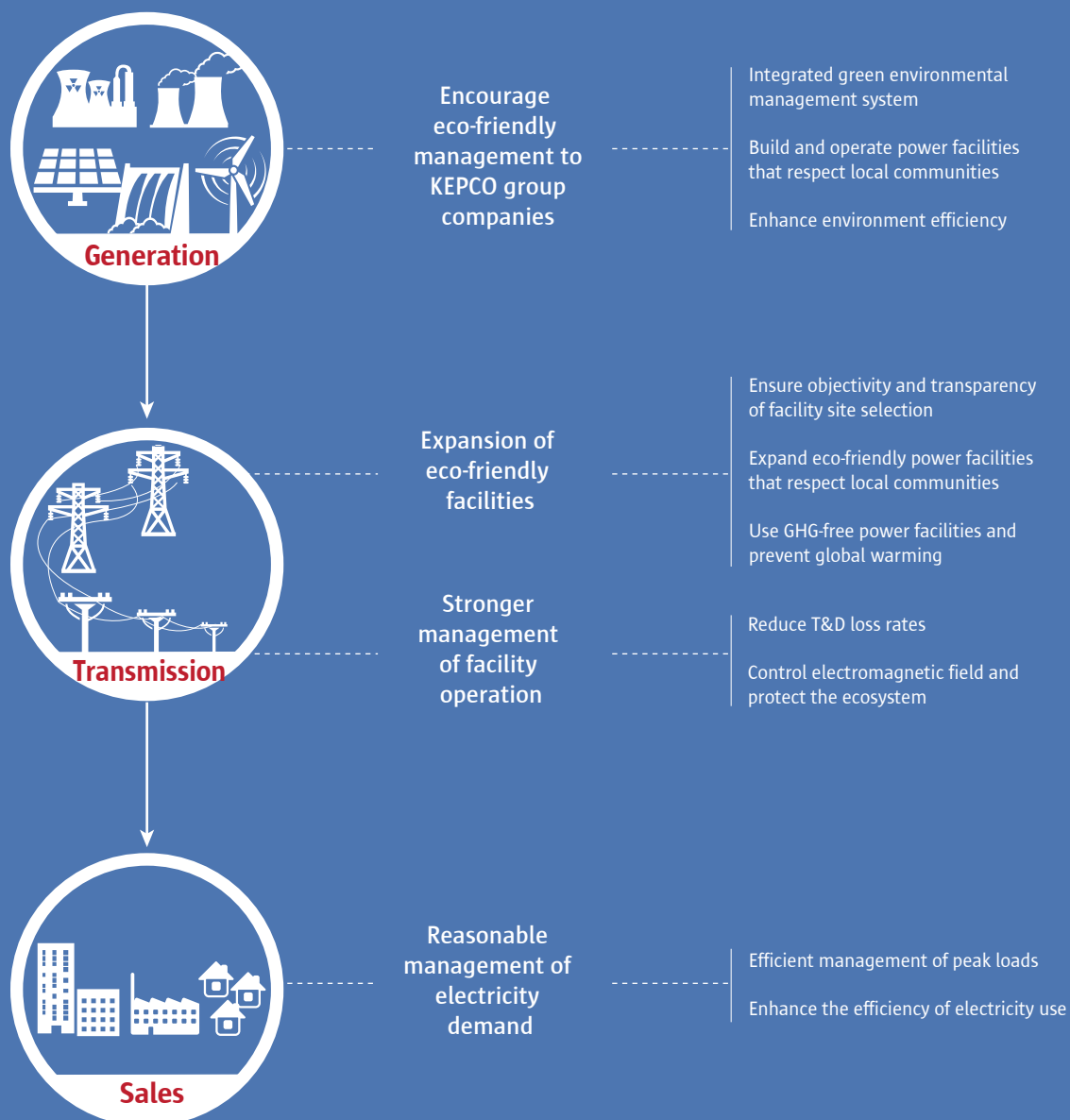
:: Integrated environment management roadmap ::

2009	2010	2011	2012	2013
Lay the foundation for low-carbon green growth <ul style="list-style-type: none"> Establish strategies Set CO₂ reduction target Carbon footprint label 	Establish the environmental management system <ul style="list-style-type: none"> Implement the environmental accounting system Register SF6 CDM with the United Nations Upgrade energy efficiency 	Introduce the green management system <ul style="list-style-type: none"> Establish a mid- to long-term green management strategy Formulate GHG emissions reduction plan Implement energy target management system Standardize and systematize environmental work 	Operate a green management system <ul style="list-style-type: none"> Operate a GHG and energy targets management system Implement an environmental information disclosure system 	Green management system certification <ul style="list-style-type: none"> Continue the environmental management system Manage resources and energy Reduce GHG emissions Assume social responsibility

Certification for the environmental management system

KEPCO obtained ISO14001, the certification for environmental management, for its five sites in 2007, and for all sites in 2008. In 2010, the company also received certification for nuclear power plant construction and operation management. In order to bolster environmental management, KEPCO prepared for the enterprise certification for green management systems in 2012 and plans to obtain certification in 2013. Green management system is a Korean system which adds resources and energy, GHG emission control and environmental social responsibility to the conventional environmental management system. KEPCO will take the lead in green management by constantly upgrading its environmental management system.

Eco-friendly Power Value Chain



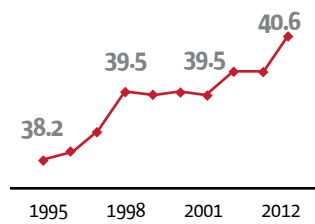
Generation

KEPCO and its power generation subsidiaries strive to build an organic cooperation system in generation, transmission, distribution and sales toward an eco-friendly supply chain for electricity.

Environmental investments and costs

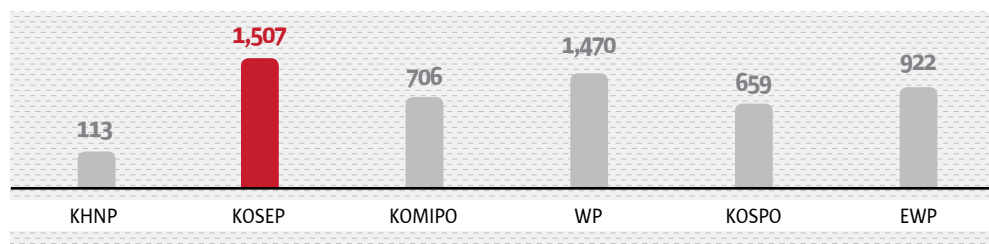
KEPCO's six generation companies have all obtained ISO14001 certification, while three of them obtained KSI 7001 (green management system) in 2011. Overall environmental investments and costs of the generation companies totalled KRW 537.7 billion in 2012.

:: Thermal efficiency of power plants (%) ::

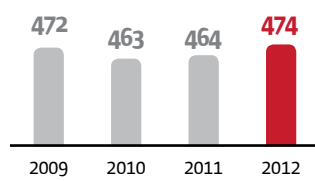


:: GENCOs environment investment and expenses in 2012 ::

(unit: 100 million won)



:: CO₂ emissions (kg/MWh) ::



Construction and operation of power generation facilities in a way which “respects” local communities

KEPCO's GenCos conduct environmental impact assessments with regard to the impact of construction and expansion of their power plants on the natural environment and traffic. The post environmental impact assessments are carried out for five years after the completion of the project, with the result being reported to the government on a yearly basis.

Enhanced environmental efficiency

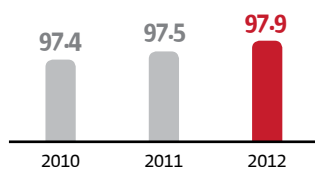
The GenCos have expanded the use of clean energy sources and operating systems such as desulfurization, denitrification and dust collection, to reduce SO_x, NO_x and dust emitted from the power generation process. GenCos also operate comprehensive waste water treatment facilities to physically and chemically treat waste water for reuse or discharge, while desulfurized gypsum generated from coal-fired power plants is reused for cement production. The chemical oxygen demand(COD) and suspended solids(SS) emissions by GenCos are 0.940(g/MWh), 0.296(g/MWh) respectively in 2012. The GenCos focus on minimizing the amount of the emissions in accordance with the law about Preservation of Water Quality and Aquatic Ecosystem.

:: Pollutant emission trend ::

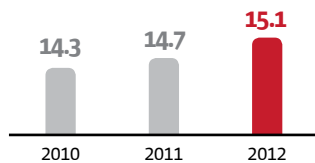
Category	2010	2011	2012
SO _x (g/MWh)	159	148	186
NO _x (g/MWh)	295	284	297
Dust (g/MWh)	8	8	8

Transmission

:: Underground transmission lines in cities (%) ::



:: Underground distribution facilities (%) ::



To guarantee a stable power supply, KEPCO constructs transmission and distribution facilities in a timely manner and operates them efficiently. The company strives to maintain eco-friendly power transmission by ensuring objectivity and transparency in site selection, expanding eco-friendly facilities that respect local communities, reducing T&D loss rates, protecting the ecosystem and controlling electromagnetic fields.

Objective and transparent site selection

In order to increase objectivity and transparency in regard to site selection, KEPCO applies sophisticated scientific techniques. In January 2009, a site selection system based on community participation was expanded to include all construction projects. The Site Selection Committee composed of local residents, local government, local council and experts select a site, which ensures objectivity and transparency. In addition, from 2008, town hall meetings at which presentations are given to residents should be held not only for projects subject to environmental impact assessment, but all projects. KEPCO launched an Open House system in September 2010 where additional meetings are held and presentations given to residents who did not attend the first meeting.

Eco-friendly construction of power facilities

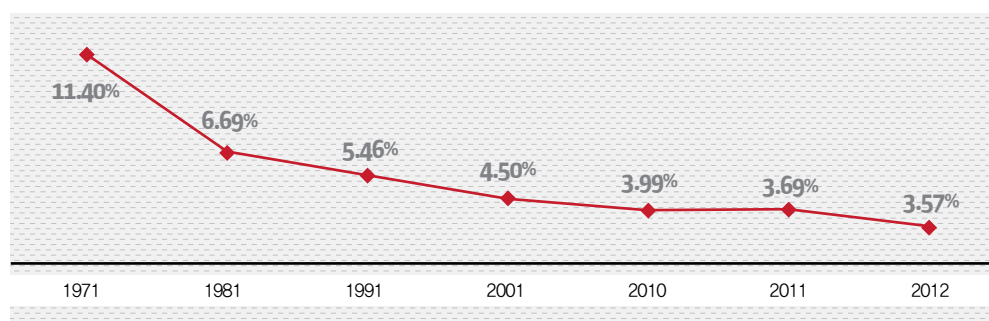
KEPCO is expanding the construction of eco-friendly power facilities for minimum interference with the environment and developing environmentally friendly materials, equipment and construction methods. We use more aesthetically pleasing tubular steel poles and applied spacers, as well as semi-underground engineering which requires minimum space and improves the overall environment. In order to prevent GHG emissions, KEPCO has also developed and applied epoxy mold insulated switches to replace the existing SF6 gas.

KEPCO has promoted the revision of laws and regulations on the installation of power facilities so that the depth for underground tunnels is reduced to minimize the time required for excavation. Furthermore, ensuring space for ground facilities within buildings became required by law in an effort to minimize inconvenience of pedestrians caused by obstruction of ground equipment installed on the street. The company has also laid the foundation for beautifying the urban landscape by requiring overhead communication lines to be buried along with distribution lines by law.

T&D loss reduction

Through the application of load balancing operations on intelligent distribution systems, the development and use of high efficiency equipment including low loss cables and transformers, and loss reduction achieved by enlarging the capacity of T&D lines, T&D loss rates decreased to 3.57% in 2012, one of the lowest rates in the world. KEPCO will maintain the lowest loss rate to curb the additional construction of facilities and indirectly contribute to GHG emission reduction endeavors.

:: T&D loss rates ::



Electromagnetic fields and ecosystem

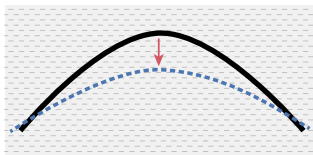
Electromagnetic fields (EMF) generated from power facilities have an extremely low frequency of 60Hz, which do not flow far, while the strength of these fields fades rapidly as the distance grows. For the safe operation of its power facilities, KEPCO operates its power facilities within 1/6 of national EMF standards. The company also operates an informative website on EMF (www.emfsafe.kr) and an experience center in an effort to alleviate groundless concerns and conflicts about the safety of EMF. We provide an EMF measurement service, carry out research projects to scientifically manage EMF and pool different opinions from various channels.

The total area of power facilities in ecosystem protection zones is 48 km² and we do not construct new transmission lines in preservation areas to protect biodiversity.

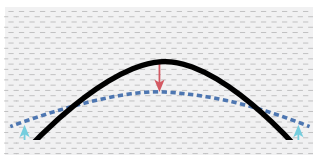
Sales

:: Types of demand side management ::

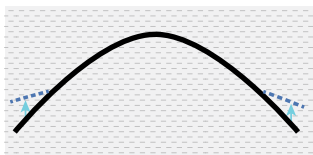
• Peak Clipping



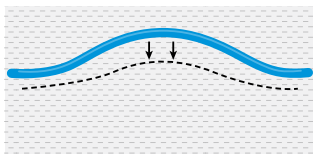
• Peak Shifting



• Valley Filling



• Energy Saving



KEPCO is committed to demand-side management (DSM) and the stable supply of electric power, and has thus enhanced the efficiency of its equipment, which contributes to the nation's energy conservation policies.

In 2012, KEPCO implemented proactive DSM measures amid an unprecedented power shortage and reduced 3 million Kw of peak load, enabling the company to supply electric power without any outages. A new DSM program was also adopted and improved, which secured 3.99 million Kw in load (equivalent to four nuclear power plant units).

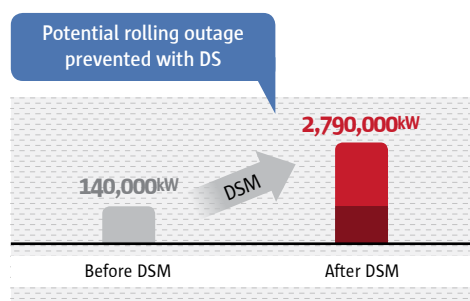
Efficient management of peak demand

The number of DSM days in 2012 was 80, up 122% compared to the previous year. The 3,189 person-strong DSM staff assumed the responsibility of operating the customer energy saving mechanism to encourage participating customers to practice energy saving measures. In regard to daily supply shortages, the mid-day notice system helped enhance KEPCO's capability to respond to emergency supply shortages. The company also adopted a critical peak price (CPP) on a pilot basis to secure demand responsive loads through price signals.

:: Demand management in 2012 ::

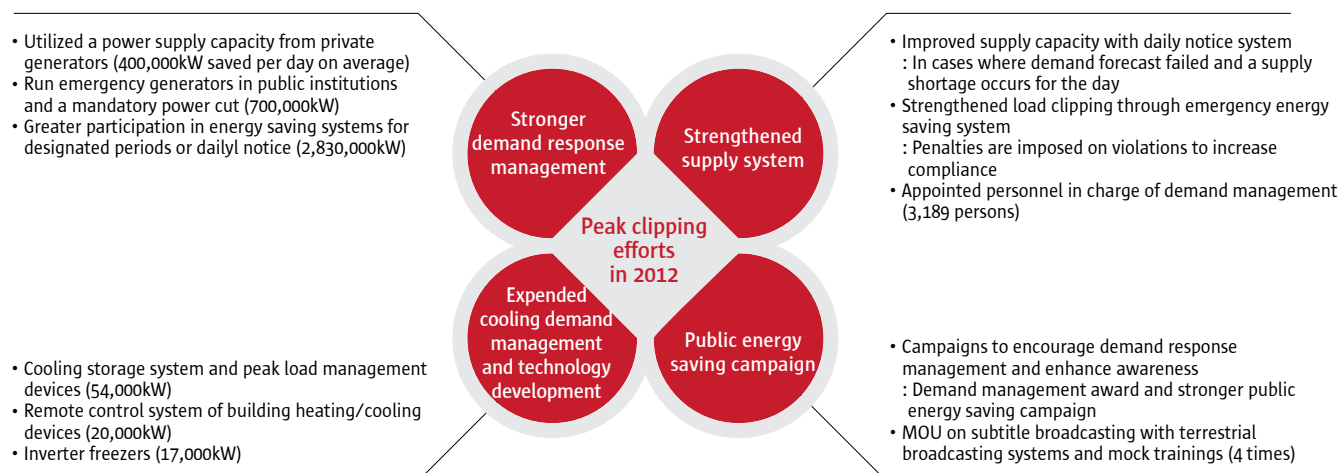
Category (unit: 10,000kw)	Supply capacity	Before DSM		DSM	After DSM	
		Peak load	Reserves		Peak load	Reserves
Winter season (February 2)	7,951	7,725	226(2.9%)	342	7,383	568(7.7%)
Summer season (August 6)	7,708	7,694	14(0.2%)	265	7,429	279(3.8%)

:: Potential rolling outage prevented with DSM ::



:: Reductions by DSM mechanism ::

Category	Details	Average daily reduction (10 thousand Kw))	Total reduction (GWh)
Weekly notice	Provide subsidies to customers who reduce electricity consumption during the load control period as notified by KEPCO	147	360.8
Period designation	Provide subsidies to customers who reduce peak usage by going on vacation or postpone maintenance/repair of electricity facilities during the summer peak period	200	196.1
Direct load control	Install a load control system for customers who sign a contract with KEPCO and directly control the load of customer sites during critical power shortages. The customer receives a subsidy in return.	127	7.2



Higher electricity use efficiency

As part of national efforts to achieve low-carbon green growth, KEPCO has expanded the use of new high-efficiency equipment such as LED lighting. In 2010, the company started to install LED lighting and LED emergency lighting, and worked on the development of new programs such as an intelligent lighting auto-control system. KEPCO has also strengthened its target marketing to integrate eco-friendly high-efficiency devices in design from the early stage of construction by establishing closer relationships with public institutions. The wider use of such high-efficiency devices reduced power consumption as much as 378,613MWh and CO₂ emissions by 160,529 tons.

KEPCO will continue to implement dynamic load management linked with the reserves level and build a web-based demand-side management system. We will also encourage the wider use of high-efficiency devices to boost electricity use efficiency.

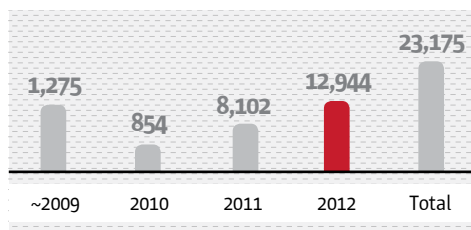
:: Support for low-income families with high-efficiency LED lighting (2012) ::

Category	Low income families	Poultry farms	Traditional markets	LED signs	Total
Number of lights	79,083	112,410	61,177	7,425	250,095
CO ₂ reductions (ton/year)	3,551	13,247	6,044	11,081	33,923
Savings on electricity bills (100 million won/year)	9.0	11.7	10.9	20.0	51.6

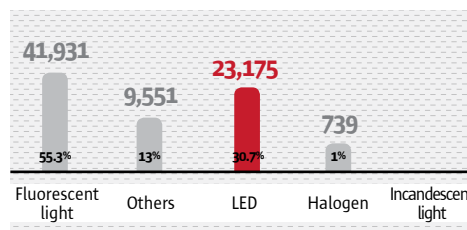
KEPCO will operate a load management system flexibly in link with reserve level and lay the foundation for web-based constant demand management system. Also, we will distribute more eco-friendly high-efficiency devices to enhance the efficiency of power facilities.

:: High-efficiency LED lights in office buildings ::

• LED installations



• Lights in 2012 (75,396 in total)



SPECIAL FEATURE



Dongkuk Steel, a major contributor to the stable supply of power

Energy saving activities at Dongkuk Steel

- Participated in KEPCO DSM program
- Installed Eco-arc electric furnace for the first time in Korea
- Installed high-efficiency inverters
- Replaced lighting in factory and offices with LED lights

On March 27, 2013, KEPCO awarded appreciation plaques to 10 customers who contributed to a stable power supply. One of them, Dongkuk Steel, actively participated in KEPCO's energy saving program by adopting a 30% energy saving electric furnace for the first time in Korea. We met Mr. Lee Hee-kyun who leads the demand management team.

Energy conservation is a life or death issue

Energy conservation is a life or death issue, not only for the company to survive, but for everyone to coexist. Based on this know-how, we will continue carrying out demand side management, contributing to the power supply."

We saw an artisan spirit in the production of premium steel, which is the basis of the company's energy saving efforts.

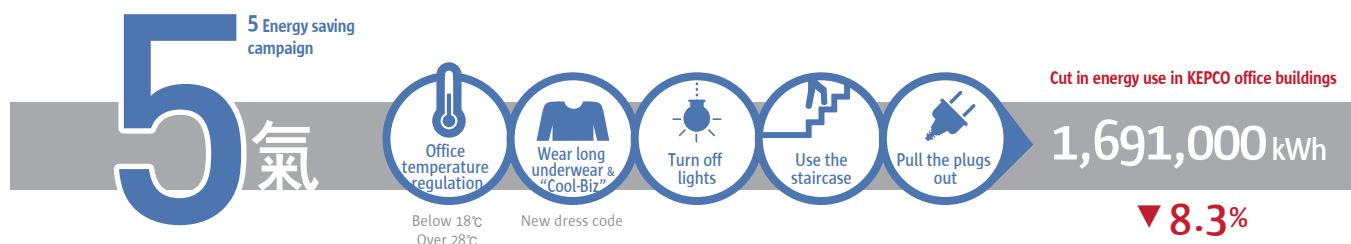
Enhancing environmental efficiency

In 2012, KEPCO implemented strong energy saving measures in response to the government's energy consumption reduction policy.

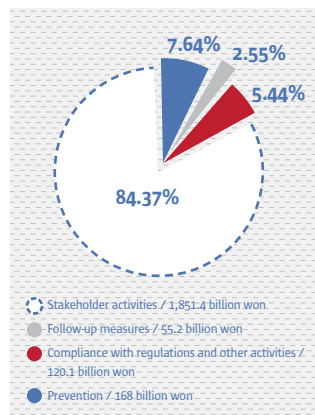
To encourage an energy saving mindset among employees, KEPCO designated a period in summer and winter during which the entire company goes on an energy diet. The company carried out an intensive PR effort for energy saving, encouraged an eco-lifestyle including such measures as complying with room temperature guideline, and laid the foundation for systematic and efficient energy consumption by coming up with improvement measures through energy diagnosis and installing energy saving equipment.

KEPCO plans to replace 64% of lighting with highly efficient LED lights by 2013. Incandescent and halogen lights were replaced in 2011; fluorescent lights installed in most offices are being replaced with LED lighting based on a yearly plan.

:: 2012 energy saving drive ::



Environmental Costs



Environmental expense calculation

In accordance with KEPCO's environment accounting system, environmental expenses in 2012 were 2,194.7 billion won, or 4.45% of total sales. This money has been invested in the construction of eco-friendly power facilities, reduction of TYD loss, distribution of renewable energy facilities and environmental restoration. In future, KEPCO will strategically employ an environmental accounting system to disclose management decisions and environmental expenses to stakeholders in a prompt manner and raise environmental value.

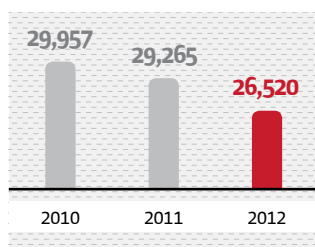
Reduced use of energy and water

In 2012, KEPCO made intensive efforts to cut electricity consumption in order to fulfill the targets as set out under GHG, energy control system and winter/summer seasonal power supply and demand programs implemented by the government. KEPCO used 26,520 TOE of energy and 1,616,000 tons of water. By utilizing high-efficiency equipment and increasing efficiency of facilities, KEPCO's average energy consumption went down by 422,000 TOE between 2009 and 2011. Water usage was reduced by 1,408,000 tons during the same period. This was discharged into the sewage system with no water recycled.

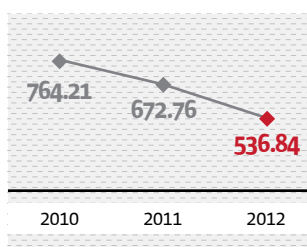
:: 2012 energy and water saving measures ::

System	<ul style="list-style-type: none"> Energy Saving Commission meetings and "energy keepers" Real time power monitoring system and energy portal system Selected and developed 10 employee energy experts
Infrastructure building	<ul style="list-style-type: none"> Replaced 30% of lighting with LED: saved 246MWh per year Substation energy saving idea contest: saved 2,984MWh per year Obtained first grade preliminary energy efficiency for 4 new KEPCO buildings Energy saving certified office appliances: 8,788 Recycling of rain water (900 tons) and flow water (51 tons) applied to the design of new headquarters building being built in Naju.

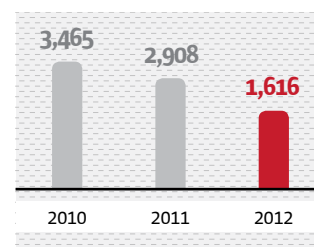
:: Energy use(TOE) ::



:: Degree of energy intensity (TOE/trillion won) ::



:: Water consumption (1,000 tons) ::



▲ Energy intensity = Energy consumption:sales

Eco-friendly company vehicles

KEPCO is committed to reducing pollution from company vehicles. In 2012, KEPCO owned 3,174 company vehicles, an 8-vehicle increase from the previous year. Of these, 1,811 are passenger cars, of which 80.7%, or 1,462, are compact or hybrid cars. At least 80% of newly purchased cars will be compact or hybrid cars. Fuel consumption for company cars in 2012 was 6,399,000 liters with a fuel efficiency of 7.44 km/L.

:: Eco-friendly company car rate ::

Year	2010	2011	2012
Company vehicles	1,738	1,753	1,811
Eco-friendly cars in total	1,422	1,437	1,462
- Compact cars	1,362	1,377	1,402
- Hybrid cars	60	60	60
The proportion of eco-friendly cars (%)	81.8	81.9	80.7

The proportion of eco-Friendly cars
80.7%

Cost Reduction of
1.3 billion won
by recycling waste

Facilitating recycling

To proactively respond to domestic and overseas environmental regulations and to fulfill its corporate social responsibility for environment protection by reducing waste and preventing pollution, KEPCO has been committed to resource recycling. Waste generated in 2012 totaled 56,858 tons, 1% less than the 2011 level. By recycling waste, KEPCO saved 13.1 billion won. The company will continue to identify recyclable resources and promptly reuse equipment that can be repaired and renovated in order to save resources and cut costs.

:: Total materials used ::

Material (ton)	2010	2011	2012
Concrete	432,196	417,324	464,161
Metal	62,907	54,147	56,846
Earthenware	1,816	2,130	2,069
Electric cable	30,811	25,983	27,594
Others	8,804	4,999	4,529
Total	536,534	504,583	555,199

:: Waste generated and recycled by type (2012) ::

Material	Generated (ton)	Recycled (ton)	Recycle (%)
Concrete	92,060	92,060	100
Metal	32,985	32,985	100
Earthenware	7,350	7,350	100
Electric cable	21,992	21,992	100
Others	1,881	1,881	100
Total	156,268	156,268	100

The proportion of
green product
purchases
94.2%

Purchasing green products

In 2012, KEPCO purchased green products worth 7.5 billion won, equivalent to 96.3% of total consumable supplies. The company plans to use more eco-friendly products by sharing related information within the company and giving extra points to certified green products when evaluating products for procurement.

:: Green product purchases (KRW million, %) ::

2010			2011			2012		
Total purchase	Green products	Rate (%)	Total purchase	Green products	Rate (%)	Total purchase	Green products	Rate (%)
7,856,241	7,203,788	91.70	8,078,445	7,365,203	91.17	7,058,782	7,496,144	94.2

Control of PCBs

In response to the National Implementation Plan under the Stockholm Convention, KEPCO operates a systematic control system to eradicate polychlorinated biphenyls (PCBs) completely. Transformers which are no longer used are rigorously controlled in accordance with PCBs manual, and those containing over 2ppm of PCBs are handled by a professional company. Until 2012, the total number of transformers handled was 192,812. KEPCO plans to manage PCBs safely throughout the process of transformer removal, storage, analysis, and disposal, and develop new engineering techniques for economic and stable PCB disposal.

Control of SF6

In order to prevent global warming caused by greenhouse gas emissions, KEPCO operates a recovery and recycling system for SF6, a gas used to insulate power facilities. The company has developed and applied a high-efficiency SF6 recovery system from 2009, and the SF6 recovery level was strengthened to 99% when equipment is removed and 97% when equipment is under regular check. As a result, the SF6 recovery rate, which used to be around 80%, was raised to 97% in 2011. KEPCO remains committed to reducing SF6 emissions by strict management and strengthened worker education.

Issue 05

Carbon Emissions Reduction



CDM profits
23.2 billion won



GHG emissions reduction
49% (compared to the average emissions in 2007-2009)



RPS implementation costs
515.5 billion won

Established the KEPCO Group
GHG management system

Built the Carbon Asset
Management System

Worked to formulate a GHG
reductions master plan

What we've done

WHAT

KEPCO is contributing to sustainable national development by taking the lead in the government's green initiatives while curbing climate change as a public institution in the energy sector.

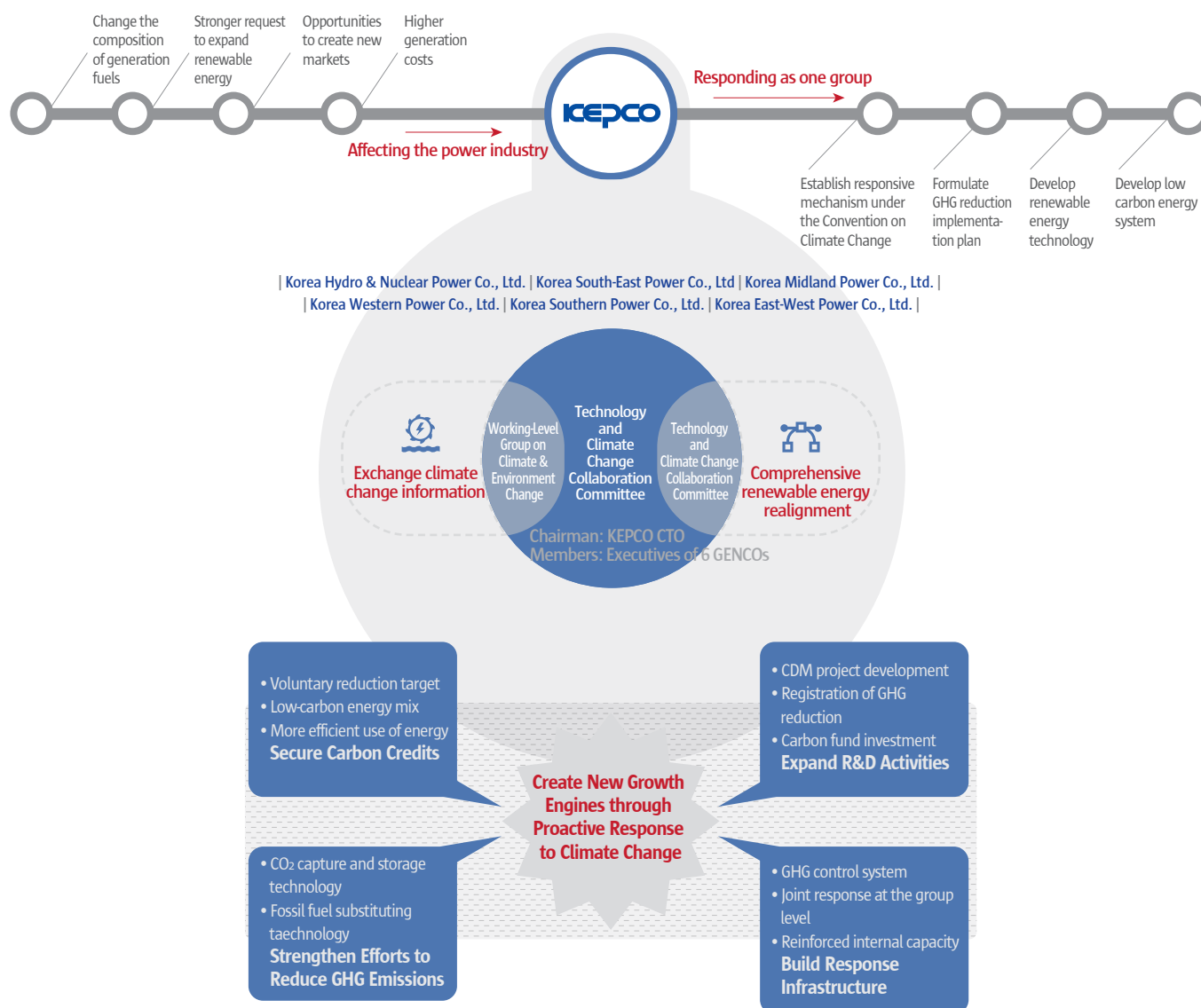
HOW

KEPCO is reinforcing its carbon management system at the enterprise level and focusing its energy on technology development to cut carbon emissions in all steps from power generation to consumption.

WHY

KEPCO has joined in efforts to protect the environment by initiating carbon emissions reduction as a company in the energy sector, a major contributor to GHG emissions.

Joint response of the KEPCO Group toward climate change



Korea is a non-Annex 1 country when the Kyoto Protocol took effect in February 2005, but Korea voluntarily set the goal of reducing GHG emissions by 30% of the expected GHG emissions by 2020. To achieve this, we are running a GHG emissions target monitoring system from 2012. As the power industry is a heavy GHG emitter, KEPCO will be affected by climate change mechanisms including the emissions trading to be implemented from 2015. KEPCO and GENCOs foresee climate change issue as both a crisis and opportunity and come up with effective measures.

In an effort to proactively protect the environment and respond to the changes in energy paradigm, KEPCO and GENCOs expanded the Climate Change Cooperation Committee to the Technology and Climate Change Cooperation Committee in June 2008. The CTO of KEPCO chairs the Committee with GENCO executives participating as members; under the Committee are two working-level consultative bodies for stronger implementation: climate and environment change consultative meeting and renewable energy consultative meeting.

The renewable portfolio standard (RPS) is a system that makes it mandatory for private generation companies with an installed capacity of over 500MW to generate electricity with renewable energy. RPS went into effect in 2012, and this year's mandatory RPS rate is 2.5% with implementation costs of about 515.5 billion won. The rate is expected to go up to 5% by 2017 and 10% by 2022.

:: Joint efforts of the KEPCO Group in a response toward climate change ::

Joint Response

- Completed the validation of GHG inventory
- Built an on-line system to control GHG emissions at group companies
- Provided working-level education on the carbon market and CERs at home and abroad

Future Plans

- Develop technologies related to eco-friendly clean power generation, renewable energy and improvement of transmission and distribution facilities
- Analyze the impact of changes in regulation of the GHG emission trading system

Accumulated GHG emission reductions until 2012
2.65 million ton

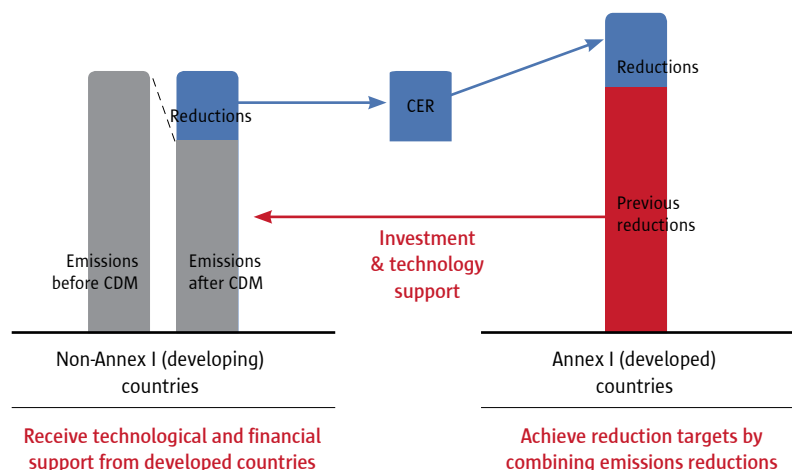
CER trading

KEPCO is implementing domestic and overseas clean development mechanism (CDM) projects in order to play an active role in facilitating the global carbon market and securing certified emissions reductions (CERs). KEPCO earned 2 million tons of CERs in 2012 from wind power projects in China with profits totaling 14.3 billion won. In Korea, the company carried out the first phase (from October 2011 to April 2012) of a CDM reduction project for the distribution SF6 gas reduction started in February 2011 whose performance is being verified by an Designated Operational Entity.

Amid a slowdown in the EU CER market affected by the global financial crisis, KEPCO is bracing against management risks following CER price reductions by selecting and implementing in phases domestic and overseas CDM projects. We plan to analyze the financial impact from the global carbon market and build a Carbon Asset Management System designed to systematically manage carbon costs.

:: Overview on CDM ::

Annex I countries (developed countries) carry out GHG reduction projects by investing in renewable energy development in non-Annex I countries (developing countries).



- CER: Certified Emission Reduction (1CER = 1 ton of CO₂)
- Annex I countries are 38 countries including EU member countries, Australia, and Japan, obliged to reduce GHG emissions under the Kyoto Protocol

:: Carbon Footprint Label ::



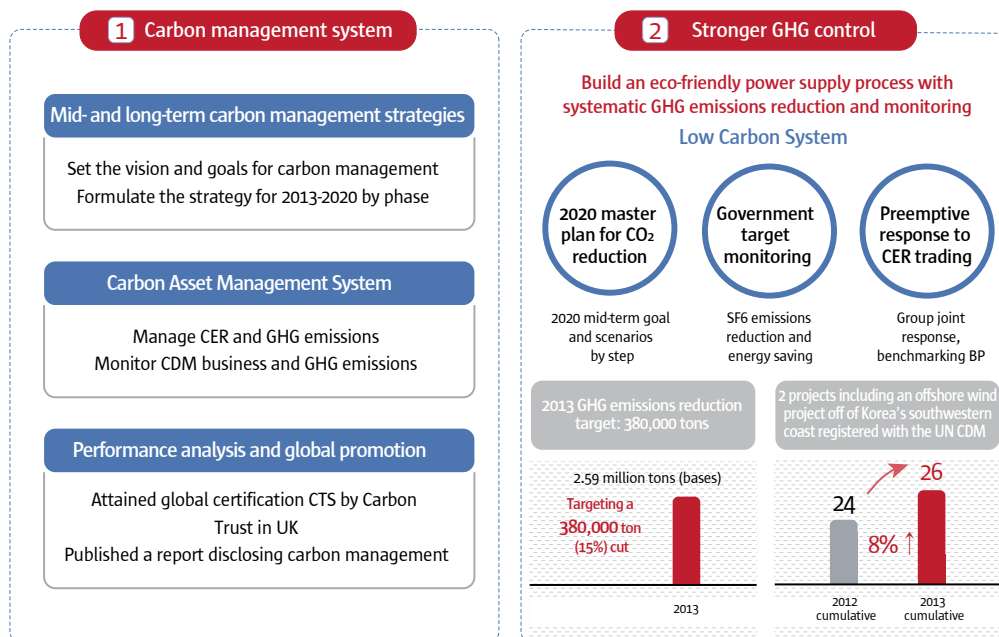
GHG emissions
reduction of
49%
(from the 2007~2009
average)

Efforts to lower GHG emissions

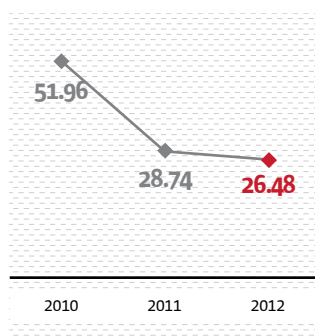
Anticipating the launch of GHG and energy target monitoring system and CER trading system (2015), KEPCO established voluntary reduction plan with 2020 KEPCO GHG Reduction Master Plan. Carbon Asset Management System and global carbon management certificate will strengthen carbon management of the company. Our development and application of GHG lowering technology will help us proactively work on changes in management environment from climate change.

GHG emissions management

KEPCO emitted 1,308 thousand tons of GHG in 2012, a 49% reduction in average emissions from 2007–2009. This reduction was made by the adoption of high-efficiency recovery technology for SF6, which is responsible for 76% of total GHG emissions, in 2011. The technology minimized emissions and increased the recycle rate.



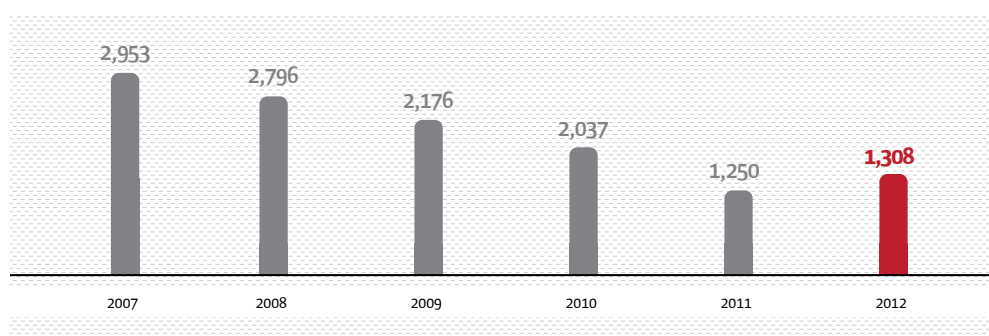
:: Degree of GHG emissions intensity(1,000 tons CO₂-eq/trillion won)::



▲ GHG emission intensity = GHG emission:sales

:: GHG emissions trend ::

(Unit: 1,000 tons CO₂-eq)





From a mid- and long-term perspective, KEPCO has developed and expanded the use of switches made of eco-friendly materials and will soon achieve an SF6-free environment.

As the Act on the Allocation and Trading of Certified Emission Reductions passed the National Assembly in May 2012 and will take effect in 2015, KEPCO is working on the establishment of the Carbon Asset Management System (CAMS) for the comprehensive management of carbon assets including GHG and carbon credits through integration with the real-time GHG emissions monitoring system.

In May 2013, KEPCO obtained CTS, an energy and carbon management certificate granted by Carbon Trust of the UK government. The company also participated in the Carbon Disclosure Project with the goal of making public its carbon management efforts and become a leader in carbon management.



INTERVIEW

Mr. Seo Jung-il, Senior Manager at KEPCO



KEPCO obtained CTS certification in August 2013. Please explain in detail what this means.

The global energy carbon trust standard (CTS) certificate was developed and is issued by Carbon Trust, an international climate change consulting organization established in the United Kingdom in 2011, to certify reductions in greenhouse gas emissions. The CTS certificate and its authority is globally recognized. About 900 companies around the world including 5 Korean companies including Samsung Electronics have obtained the CTS. This certification demonstrates that KEPCO's carbon management meets global standards.

What is the core of KEPCO's climate change strategies and GHG reduction efforts?

KEPCO established the 2020 GHG Reduction Master Plan in preparation for the GHG target monitoring system and emission trading system. In order to minimize SF6 emissions from transmission and distribution facilities,

which account for 70% of total GHG emissions, the company has adopted high efficiency recovery and recycling technology.

Keen interest has been expressed in KEPCO's global leadership role in curbing GHG emissions. Please describe the big picture and direction KEPCO must take to reduce emissions.

KEPCO has set a voluntary goal to cut GHG emissions by 40% (from the 2007-2009 level) by 2020. To this end, we are actively implementing measures such as making a SF6-free environment by expanding eco-friendly facilities, constructing office buildings that minimize energy use, and creating a Carbon Free Island. KEPCO is also striving to maximize the value of carbon assets with our carbon asset management system.

Issue 06

Sharing and Mutual Prosperity



Discounts for
energy welfare
245.6 billion won



10,680
social contribution
activities



Purchase of
SME products
4.2 trillion won

Announced a new vision for socially
responsible management

Create jobs at social enterprises

Open sales channels overseas and
lower entry barriers for SMEs

What we've done

WHAT

KEPCO shares sustainability values with stakeholders by enhance energy welfare for the socially marginalized and promoting co-development with SMEs.

HOW

KEPCO makes public information on electric energy, provides discounts for energy welfare, supports social enterprises and carries out co-prosperity project with SMEs.

WHY

KEPCO believes that electric energy is public goods and people regardless of income and class should have easy access to electricity and enjoy the benefits.

Social Contribution

:: CSR management vision announcement
(Oct. 2012) ::



:: Social contribution system ::

Community service groups
Global volunteer group
Social enterprise support group
119 Rescue Service Team

Social contribution strategy and system

In order to fulfill corporate social responsibilities, 295 community service groups carried out voluntary services tailored to power business. We are also doing social contribution activities in the countries where we have business.

In October 2010, we announced a new vision for CSR management for the first time as a public institution to show our commitment to becoming a global CSR leader who contributes to the happiness of the humanity and society. We will actively identify and carry out CSR programs customized to the recipients' needs, those that create jobs and global CSR activities.



Social contribution activities

KEPCO's social contribution has been implemented in a sustained and systematic manner since 2004 when KEPCO community service groups were created.

Love Fund Matching Grant

Utilizing Love Fund, employees' monthly contributions, and Matching Grant, KEPCO employees reach out to socially vulnerable people including multi-cultural families, North Korean defectors, elderly people living alone, sister communities, social welfare facilities and those recipients of the national basic living support, and we carry out volunteer works such as checkup and repair of old electricity facilities, meal service, wall papering, bathing, cleaning, conversation and mentoring.

Support for children and youth

By forming sisterly relationship with 287 community children's centers nationwide, we had 2,261 rounds of volunteer activities, helping study and experiencing cultural events, and providing meals. Also, we had 1,409 mentoring sessions with 721 children and teenagers from socially marginalized families and opened KEPCO Green School designed to let students realize the value of energy during vacations.

Eye Love Project

As a company that generates light, KEPCO is involved in a project which gives light of hope. The Eye Love Project supports eyesight recovery operations for low-income families. Between 2011 and 2012, KEPCO signed a support agreement with the Korean Foundation for the Prevention of Blindness and financially supported 150 blind people until 2012 and 100 in 2013. We plan to expand the project to give the light of hope to 100 people at home and abroad every year until 2021.

:: Eye Love Project ::



INTERVIEW

Ms. Kim Hyun-mi, KEPCO employee/119 Rescue Service Team member



What was the motivation for you to join the KEPCO 119 Rescue Service Team?

The precious experience I gained through volunteer activities during my college years has guided me to this rescue service team, while the memories of those people I met while working on the team continue to serve as motivation for me.

What are the most memorable experiences you have had while working as a rescue service member?

After a heavy snowfall, I had to clear snow which went up to my waist with a shovel for the first time in my life. Other experiences include hearing the words of those elderly people living alone, whose blood pressure I checked and attached pain relief patches and who were happy to see and talk to me. The moment when they tightly held my hands with their deep wrinkled hands. I

can never forget all of these memories. Reaching out to people in need of help and offering relief and rescue activities is something I really enjoy doing.

It must be tough for KEPCO to execute rescue activities for the first time as a public company. What is the sense of mission and devotion you have as a rescue team member?

In order to provide more help and aid by combining the efforts of my colleagues, I will prepare myself through continued training and education. This team goes to the sites assuming full responsibility with a sense of passion. Please keep a close eye on the activities of KEPCO's 119 Rescue Service Team.



Support for children and youth

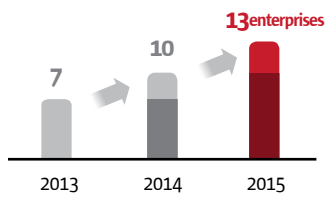
By forming sisterly relationship with 287 community children's centers nationwide, we had 2,261 rounds of volunteer activities, helping study and experiencing cultural events, and providing meals. Also, we had 1,409 mentoring sessions with 721 children and teenagers from socially marginalized families to support them in realizing their dream.

Support for social enterprises

KEPCO promotes value creation and co-prosperity by developing social enterprises. We signed the MOU on the tripartite social responsibility and selected 4 enterprises to whom a total of 380 million won of business startup support was provided. This effort effectively created jobs for the socially vulnerable.

We implement Micro Credit Project, which collects a small portion of payment from employees to create a fund of 180 million won, which then was lent to 5 social enterprises in financial difficulty and 3 low income families without security. In 2013, we plan to engage in pro bono activities and donate talent to help social enterprises continue their growth.

:: Plan for social enterprise development ::



:: KEPCO's support for social enterprises ::

Financial support

Foundation for establishment



Business model

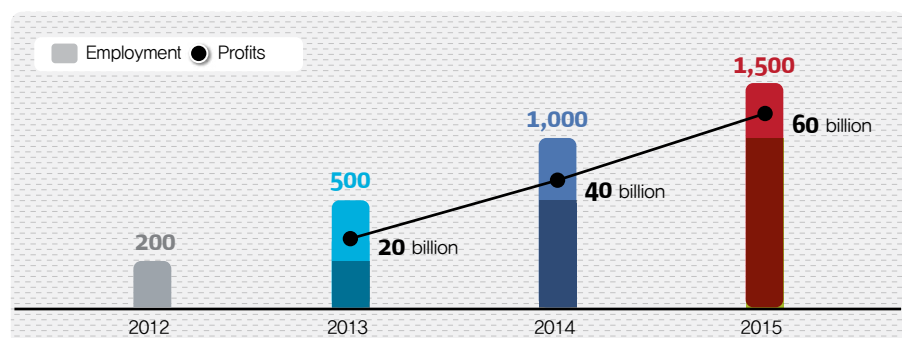
Customized to power business



incubating

Technology/management advice

A total solution of “establishment – incubating – sales channel development” helps social enterprises successfully start business.



SPECIAL FEATURE

Happiness Up Program that gives wings to social enterprises

KEPCO launched the Happiness Up social enterprise support program with a fund of 380 million won in 2012 to create jobs for socially vulnerable people. The program provided support to 4 social enterprises: Bluenet (standby power control system development, 200 million won), 1cmAD/Benefit (media content making on energy saving, 50 million won), Communication Woodi (development of game application that promotes energy saving, 50 million won), Art and Community Network (Educational and experience programs development utilizing KEPCO Museum and Promotion Center, 80 million won).



KEPCO is carrying out projects for identifying cooperative business model and creating Hope Café in 2013. The Cooperative Business Model Identification Project is designed to give growth momentum to social enterprises. In a contest, Cooperative Onli (environment-friendly handicraft

making) and 8 other cooperatives were selected. The KEPCO Hope Café Project is designed to support social enterprises and social venture companies, and in a contest, Jari Inc. (for opening Café and creating jobs for youth from socially vulnerable families) was selected and will open the first KEPCO Hope Café near Hongik University. The total support amounts to 500 million won: 400 million won for 9 cooperatives and 100 million won for Hope Café. By cooperative company, each receives from 10 million to 50 million won. The selected projects will get professional education and business consulting until the cooperatives are firmly established. For a public corporation, KEPCO is the first case to support the establishment and incubation of social enterprises, which expects to create about 60 jobs and vitalize the local economy.

Also, an MOU on one regional office having sponsorship with one social enterprise (14 enterprises) was signed to support the self-reliance and sustained growth of those enterprises. Hope Rainbow Project with Micro Credit (the fund from a small portion of the payment employees get) provided 180 million won to 5 social enterprises for business management improvement. We also donated old office appliances. KEPCO will continue to have innovative contribution activities, rather than one-time donations, to support social enterprises to grow.

INTERVIEW

Mr. Park Myeong-hak, Director of Energy School



Please briefly introduce Energy School.

Energy School is a place where we have active communication about the social and cultural values of energy by going beyond passive energy conservation to experience and learn the various aspects of energy we are exposed to in our lives and through our culture.

What are the most interesting activities and themes for participants?

Of all the Energy School courses, in which people from 13 to over 70 years old participate, the highest level of satisfaction has been toward practical workshops including the repair class which combines utilities and imagination, as well as the course designed to strengthen the capacity for energy self-sufficiency. A life

culture energy class will facilitate communication about energy conservation and its value.

What is the dream of Energy School? What do you think is the best way for KEPCO and social enterprises to build shared value together?

Energy School strives to create a life culture community using energy as a medium and combining social and cultural values of energy with the cultural imagination of humanity. We believe that social enterprises like Energy School and KEPCO can create future-oriented value by identifying and supporting innovative ideas about on-site needs.



Energy for everyone, “Greater Energy Welfare”

KEPCO strives to expand energy welfare with a variety of support measures for low income households. Residential customers are suspended from the limited electricity supply measure during hot (July to September) and cold (December to February) days and guaranteed with minimum access to electricity by installing a current limiter even when they have not paid their bills and become subject to the suspension of electricity.

We also give discounts for social welfare facilities and provide financial support to a group of selected low income families from those who have bills unpaid for at least three months under the Energy Sharing Program.

:: Discounts for electricity bills ::

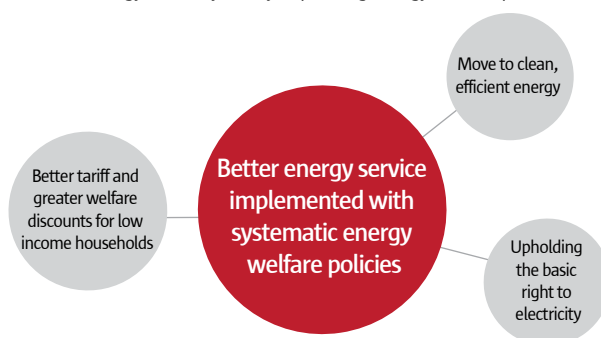
(Unit: 10,000 households, 100 million won)

Category	Beneficiaries	No. of households	2010	2011	2012
Welfare discounts	The disabled, veterans, patriots, low income families, social welfare facilities, families with at least three children	182	1,786	1,912	1,969
Less progressive tariff for residential users	Large families with at least 3 children, customers on life support system	42.8	963	808	487

• As of the end of 2012

Beneficiaries	Discount type	Amount subsidized in 2012 (100 million won)
The disabled, veterans, recipients of national basic livelihood support	Fixed amount (up to 8,000 won)	1,104
Welfare facilities, families with at least 3 children	20% of bill	865
Large families, customers on life support system	Apply a grade lower tariff	487

KEPCO is committed to warm energy for everyone by expanding energy welfare policies in a more systematic way.



Welfare discounts/subsidies	Basic right to energy
<ul style="list-style-type: none"> Expand discounts for the disabled and the recipients of basic livelihood support in line with the rationalization of tariff Continue Energy Sharing Program Participate in the government's energy voucher project 	<ul style="list-style-type: none"> Replace 79,000 nighttime boilers distributed to rural communities, the recipients of basic livelihood support and social welfare facilities with nighttime heat pump boilers by 2017 <div>Power consumption 50% ↓</div>
Enhance energy efficiency	Green energy activities
<ul style="list-style-type: none"> Increase the capacity of current limiters during winter season (November to March) (220W → 660W) <div>Abolish the suspension of current limiter installations</div>	<ul style="list-style-type: none"> Donate carbon points/energy saving points to low income families, when the system is adopted Expand renewable energy in islands

SPECIAL FEATURE

Global social contribution



With the expansion of KEPCO's overseas business, the request for corporate social responsibilities is getting stronger in the countries such as the Philippines, Jordan and Mexico where we are implementing power projects. In those countries, we initiate a variety of CSR activities and volunteer service such as eyesight recovery surgery and scholarship programs. Providing volunteer service such as medical support and scholarship programs in Batangas, the Philippines. Last February, a team of about 20 people including KEPCO employees and doctors are providing volunteer medical support in Batangas, the Philippines, where we operate the Ilijan power plant. We provided 1.57 billion

won for water service, road construction, school foundation and medical service.

In 2013, we are involved in volunteer service for an elementary school near our power plant where we improved the school roof and taught art, music and traditional play.

In partnership with Red Cross in Manila, we have financially supported eyesight recovery operations since 2011 for children who are from poor families and had difficulty learning. (3 children underwent the surgery and one is going through the process.)

:: Social contribution activities in the Philippines ::

Category	2010	2011	2012
Medical service	13 sessions (8,596 people)	11 sessions (6,608 people)	6 sessions (1,875 people)
Scholarship	66 occasions (12,888 people)	43 occasions (3,501 people)	18 occasions (1,292 people)
Community support near power plants	285 sessions (affecting 28,872 people)	187 sessions (affecting 21,197 people)	153 sessions (affecting 16,524 people)

:: Electrification in rural areas in the Philippines ::

Category	Performance
On-grid method (extension)	484 projects completed (Jan 2011)
Off-grid method (photovoltaic power generation)	270 projects completed (Jan 2011)

Consulting for the distribution line construction for Zaatari Camp

From July to September 2013, KEPCO carried out a project to improve distribution lines in a refugee camp in Jordan. At the request of the UNHCR, KEPCO sent a group of consultants to Zaatari Camp for Syrian refugees. Zaatari Camp is located 90km north of Amman, the capital of Jordan, where more than 120,000 Syrian refugees who escaped from civil war stay. KEPCO employees met the manager of the camp and the personnel responsible for electric power and consulted

on the ways to improve distribution facilities and stable operation. We also presented an effective business model and designed the tariff and metering system.

KEPCO will continue its global social contribution in order to earn trust and respect from the local communities and become a public company that fully assumes its social responsibilities.





A story of hope about Maika and Babi

In Batangas, Luzon Island, Philippines, there are children who have special relationship with KEPCO. Maika, an eight year old born cross-eyed, and five year old Babi. With the financial support under KEPCO's Eye Love Hope Angel Project, they went through the first operation last year and are waiting for the second operation.

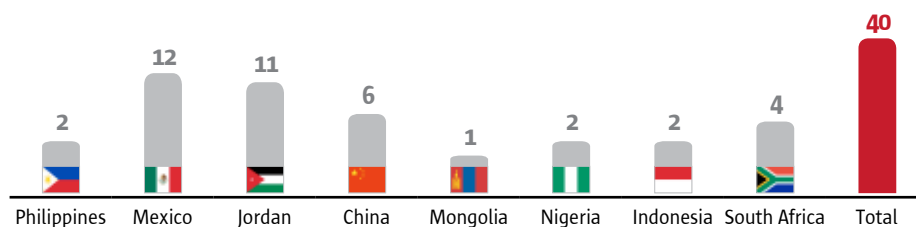
After the first operation, they have recovered a lot. Maika's mom can smile now. "KEPCO gave a big hope to my son and family. I look forward to completing the operation and seeing him be healthy and happy just like other kids."

Walking along the meandering road from Maika's home leads to a very narrow alley where we can find Babi's house.

Babi lives with her father, mother, brother and younger sister in a small room. Babi's recovery is closely monitored before the operation. While Babi was having fun with her sister, her mother sees her with concerned eyes. I hope she can see the bright sky soon. "Thank you, KEPCO. I love you," said Babi shyly. KEPCO and Babi communicate through light.



2012 Eye Love Hope Angel Eyesight Recovery Surgery Project



Shared growth with SMEs

Growth sharing strategies

With the ultimate goal of becoming a "Global Top Green & Smart Energy Pioneer growing together with SMEs," KEPCO strives to promote growth of SMEs along with us with 3 strategies of supporting exports, lowering entry barriers and reinforcing support for SMEs.



▲ Supporting SMEs' exports

Supporting SMEs' exports

KEPCO supported SMEs in 10 countries including Indonesia and Venezuela taking advantage of KEPCO brand power, initiating an export of 36.41 billion dollars in 2012, 39% up from the previous year. We signed the UAE NPP project as a team that includes SMEs, which is 190 million dollars in exports with the effect of creating 3,326 jobs.

From this year, we plan to implement the KEPCO Trusted Partner Project to promote the export of SMEs and open exhibition centers for SME products in KEPCO overseas offices.

Lowering entry barriers

In order to lower the entry barrier to the procurement at KEPCO, we reduced the list of items that require advance registration by more than 25% in 2013 and improved qualification evaluation criteria to widen tendering opportunities. From this year, in order to facilitate cooperative R&D activities, we expanded the portion of cash support to 100% and do not any more impose penalty on projects where members worked hard with sincerity but failed.

Reinforcing the support for SMEs

In April 2013, for the first time in Korea, we held the KEPCO Electric Fair with 230 booths participating, where we gave opportunities to expand the sales channels to 147 SME partners. At the expo, business meetings for purchases worth 95.4 billion won were arranged and contracts worth 9.2 billion won were signed.

In 2012, 68% of our procurement, or a 4.2 trillion won purchase was from SMEs. We provided a cooperation R&D fund of 3.3 billion won and supports for the international certification in quality, environment and safety & health worth 450 million won. These efforts contributed to the enhancement of quality and technological competitiveness of SMEs.



SPECIAL FEATURE

A road we walk together, a road worth walking KEPCO Electric Fair 2013



KEPCO held KEPCO Electric Fair in April, 2013. The fair was organized to promote shared growth, which was the first of its kind in Korea, and ran a variety of programs such as legal counseling, management consulting and R&D support to help SMEs resolve management difficulties and innovate.

147 SMEs and 9 large companies participated in exhibition booths and over 20,000 individuals including employees of electric power SMEs, public organizations, small business owners and general public visited the fair. 429 companies had counselling sessions. All in all, the fair received positive responses.

To upgrade its shared growth strategy, in 2013 KEPCO classified the strategy into three areas—supporting exports, lowering entry barriers and reinforcing support for SMEs—and 15 policies. This fair was organized as one of the policies. It was not just an event to give support for SMEs but a venue to offer new business opportunities and exchange technology to ultimately achieve convergence and creation with SMEs, small business owners, electric power group companies, large companies and foreign buyers. KEPCO is committed to fulfilling

social responsibilities and, beyond that, realizing shared values that contribute to public interests of society.

:: Counselling for startups ::

Partnership registration	Product purchase	System and technology	Total
36 cases	32 cases	31 cases	99 cases

:: Counselling for SMEs ::

R&D	Financial support	Export support	Total
44 cases	5 cases	23 cases	72 cases

:: Expanding sales channels at home and abroad ::
(Counselling worth 95.4 billion won, contract accounting to 9.2 billion won)

•Counselling

Cases	Amount (100 million won)		
	Domestic sales	Export	Total
477	394	560	954

•Contract negotiation

Contracts	Amount (100 million won)		
	Domestic sales	Export	Total
15	30	62	92

INTERVIEW

Mr. Kim Pyung, CEO of EWOOTEC



Please briefly introduce your company.

EWOOTEC possesses the technology to detect the location of underground facilities and maintain them. We have around 30 domestic and international patents and play a role in building the national infrastructure.

How has EWOOTEC's partnership with KEPCO helped your company?

There was a need for ultra-precision location detector technology for the installation and maintenance of underground power facilities. Our technology met these requirements and since 2007, we have partnered with KEPCO. Having been selected as a KEPCO Trusted Partner recently, we are benefiting from KEPCO's overseas network and marketing capabilities and improving our partnership with KEPCO. This has helped us develop technology and enhance the competitiveness of our products. It has also secured an

opportunity to go global based on joint marketing and provided management support through KEPCO's management consulting program. The partnership has showed a significant influence in the growth of EWOOTEC.

What words would you offer to KEPCO as it strives to increase its partnerships with SMEs?

Based on EWOOTEC's experience for mutual growth with KEPCO, we want to demonstrate the importance of partnerships in the global market. It is our wish that the exemplary case of jointly exploring global sales channels and enhancing the national competitiveness would be EWOOTEC. We are grateful of KEPCO's efforts to stick together and never fail.

Growth of the KEPCO group companies

For the shared growth of group companies, win-win competition will be pursued on the basis of the autonomous and responsible management of each group company, but when it comes to overseas business and national projects requiring synergies within the electric power industry, KEPCO and GENCOs form a cooperative system to pursue comprehensive “coopetition”*. Also, to stably supply electric power and enhance the competency of the KEPCO Group, we are trying to procure fuel economically, strengthen cooperation in R&D, jointly expand overseas business, and jointly respond to climate change.

*Coopetition = Cooperation + Competition

Shared growth of KEPCO Group

Reinforce competitiveness and create synergies(Coopetition)

Win-win competition among group companies



Raise corporate value

- Cost Reduction and higher Productivity
- Diversification of revenue sources
- Stable supply of electric power and higher efficiency of facilities

Cooperation for shared growth



Reinforce the cooperative system

- Fuel supply and demand
- Technology cooperation
- Joint projects
- Overseas projects
- Joint response
- Joint research

Improved management efficiency of GENCOs

- Strengthening strategic collaboration to enhance efficiency in power generation - Integrated purchasing of generation fuel, integrated operation of maintenance materials, integrated management of IPRs
- Belt-tightening at the group level: saved 776.4 billion won

Stable supply of electricity

- On-schedule completion of power plants: **1,800MW**
- Maintaining high capacity factor of **78.4% in 2012**

Economic purchasing of generation fuel

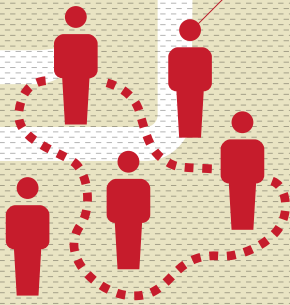
- Integrated purchasing of fuel: **KRW 47.6 billion of savings**

Group CEO meeting

- Joint response to and coordination on management issues, and sharing of best practices
- Management performance analysis to reinforce feedback on management performance

Issue 07

HR Development for the Future



Created
1,745 jobs



Hired high school
graduates for
28.8%



1,044
specialists
for overseas business

Employ the largest number of interns
among public corporations (1,062)

Expand the performance-based
payment system

Build a pool of human resources for
global competitiveness

What we've done

WHAT

KEPCO hires an increasing number of people to stabilize power supply and create growth engine. We assume social responsibility by employing those from different social background in a balanced way.

HOW

KEPCO deploys diverse hiring process such as open recruit and internship. We hire more high school graduates, talented people from provincial areas and female workers while creating growth momentum by developing employees competent to work in overseas business.

WHY

KEPCO takes the lead in resolving the social problem of youth unemployment, improving performance with newly hired talented human resources, and achieving national goals of job creation and balanced hiring.

Establishment of the ideal employee model and the strategic management of human resources

For better business management and the creation of growth engines, KEPCO established the ideal employee model, and we identifies, develops and manages professional human resources in strategic link with the model. The “global pioneer” model was established based on corporate vision, growth strategy and analysis of external environment with systematically formed competency models such as leadership and practical work. We do a fair human resources management based on personality and aptitude tests and reflecting the employee model.

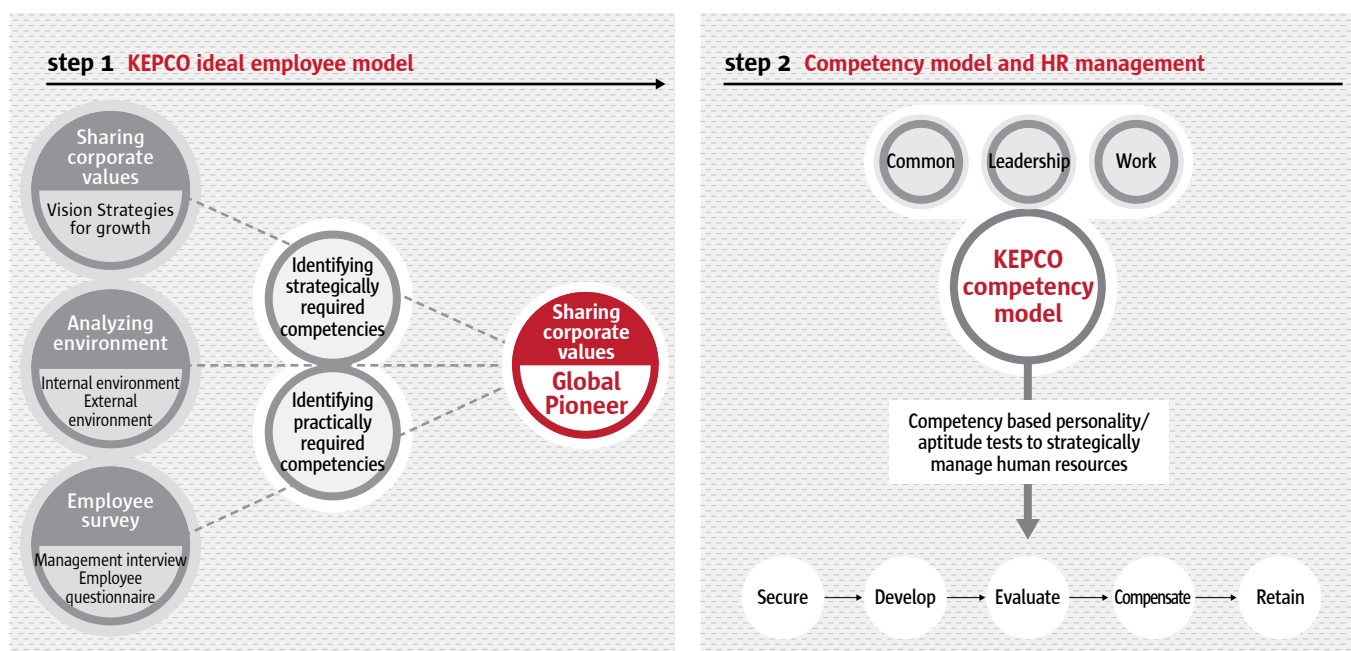
:: KEPCO Employee Model ::



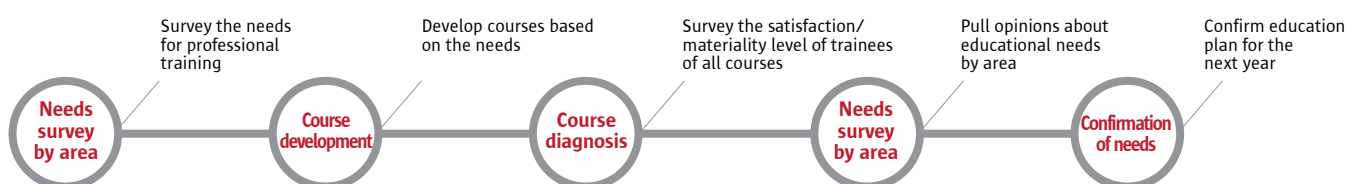
In the global market of unlimited competition, KEPCO global pioneers are armed with the determination to become a global no. 1 energy group and with a persevering pioneering spirit.

| Generalist | Entrepreneur | Value Creator | Passionate Challenger |

:: Strategic relationship between the employee model and competency model ::



:: Demand management system to identify educational needs ::



Personnel management and compensation system

To establish a fair compensation system based on employee performance, we raised the portion of incentives and payment based on ability and performance (23%) and put in place a bonus system within departments and price bonus. We position talented employees who complete special educational courses in areas with growth potential such as overseas business, and an open recommendation system for selecting employees at important departments leads to fair and transparent HR management.

Open employment, good jobs

KEPCO has increased the number of recruits even amid unfavorable business conditions in order to maintain a stable supply of power and meet the government objectives of reducing youth unemployment. New employees are injected to create a young, flexible organization and sustainable growth engines.

We hire people based on capabilities and competencies regardless of educational background, age and gender. We are also employing high school graduates, interns, talented people in provincial areas and female talents.

We also hire more people to explore new business such as overseas business and green growth technology development, and have the largest number of interns in an effort to create jobs and tackle youth unemployment.

:: New employment composition ::

Category	2010	2011	2012
Regular workers	132	155	683
(high school graduates)	(34)	(42)	(197)
(those from provincial areas)	(73)	(55)	(303)
(female)	(24)	(36)	(214)
Interns	1,008	971	1,062

:: Mechanisms to hire people from various backgrounds ::

Category	Details	2012 performance	Adoption
Women	A 20% quota	31.3%	1998
Those from provincial areas	A 30% quota	44.3%	2007
Vocational high school graduates	46 interns with employment opportunities 78 high school graduates in open recruitment * 104 interns separately in the second half of 2012 (hired in February 2013)	152	2011
Men of national merit	5-10% extra points	50	1961
The disabled	10 regular workers, 74 interns	84	2006
Interns	199 interns with employment opportunities 863 interns with employment preference (including those with disabilities)	1,062	2012
Others/balanced hiring	North Korean defectors, island residents	4	2012

INTERVIEW

Mr. Kim Ye-geol, KEPCO employee as of 2012



You were a topic of conversation in 2009 when you set your aptitude and goals and entered Sudo Electric Technical High School at the top of your class instead of advancing to high schools specializing in science or foreign languages. What message would you like to share with students who are considering their aptitudes and goals?

I think what really matters is that they have various experiences and find what they really like. We tend to become interested in something and then try to figure out what we like. As this repeats, students will create their own perspectives and a sense of confidence, which will be a guide in determining their academic and career paths.

What does your dream have in common with the vision of KEPCO?

I want to be a leader in exploring and developing new areas in the power sector, and utilize my strong command of a foreign language in the global market. As KEPCO has contributed to the national development, I want to be an engineer who contributes to the national development, too.

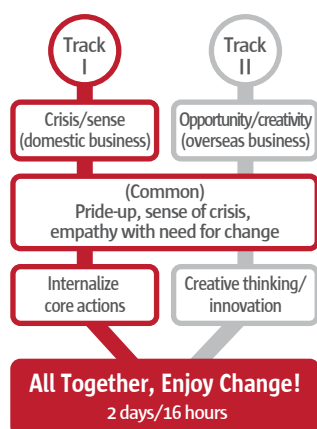
What do you want to say to KEPCO, the company with which you have chosen to share your future?

I hope that KEPCO becomes a company for the people by reliably providing electricity, and a leader in the global energy industry. I will try harder to this end. We may face hardship down the road, but let's overcome any difficulties we meet and move forward to a bright future. Go! Go! KEPCO!

Creative HR development

KEPCO provides educational opportunities to all employees in order to strengthen their capabilities and special education customized to nurture globally competitive employees. In 2012, a shift training for overseas business developed 1,044 specialists by activity area, and the creation of a talent pool (1,387) allows strategic HR management. Also, we promote innovation of corporate culture and communication through mindset innovation training.

:: Mindset innovation training ::



:: Budget and number of trainees ::

•Budget by year (100 million won)

Category		2010	2011	2012
Total budget (business expenses)		22,394	21,209	19,618
Budget for education	Internal	75	78	64
	External	117	92	205
	Total	192 (0.86%)	170 (0.80%)	269 (1.37%)

※ 2013 target: education budget of 28.8 billion won, 44,807 recipients

•Trainees by year (people)

Category		2010	2011	2012
General managers and higher		855 (7.4%)	966 (8.0%)	1,884 (8.2%)
	Senior managers	3,235 (28.2%)	3,030 (25.0%)	6,270 (27.1%)
Employees		7,400 (64.4%)	8,106 (67.0%)	14,954 (64.7%)
Total		11,490	12,102	23,108

※ Average hours of education in 2012: 59.7 hours/person

:: Special education program for overseas business in 2012 ::

Category		Number of trainees	Period	Methodology
Basic	Basic project support course	680	2 weeks	Business basic/EPCM basic courses
Intensive	Generation/renewables/international agreements	300	5-7 months	Intensive courses by overseas business activity
Long-term education at external institutions	Localization for strategic areas	16	1 year	Nurture regional specialists
	IB-MBA	20	10 months	MBA customized for overseas business
	O&M OJT dispatched to the plant	18	2-9 months	O&M OJT dispatched to the plant
	KINGS	10	2 years	Master's degree course in nuclear industry
Total		1,044		

Life long education

KEPCO supports self-development and work performance enhancement through e-learning courses in humanities, leadership, and work-related skills. Prospect retirees receive outplacement education to support their successful retirement life. The blended learning of on-line and off-line courses in 26 subjects in 7 programs including change management, asset management and business startup & employment enhanced access and efficiency of education.



Issue 08

Pleasant and Happy Work Environment



Industrial accident rate

0.036%



Female employees

31.3%



Those with disabilities

3.4%

Established a Happy Workplace

Certified safety health management system in 12 offices

Have 421 employees enjoy maternity protection system

What we've done

WHAT

KEPCO strives to create a pleasant and exciting work environment where creative ideas develop based on organizational culture of trust and open communication.

HOW

KEPCO operates the Happy Workplace Campaign and community service groups, and strives to achieve safety and health management and gender equality.

WHY

Workplace is where we develop ourselves and spend the most hours of a day. Individual happiness is key to sustained growth of the company and a fundamental element of growth momentum.

Low turnover rate

0.6%

(Those who left the company:118)

Long years of service

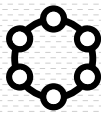
18.7 years

(Average service)

Happy Workplace Campaign

KEPCO is carrying out the Happy Workplace Campaign to create a pleasant and fun work environment where creative ideas develop based on organizational culture of trust and open communication. The main drivers are trust among employees, pride in the company, and fun at workplace, and the campaign involves activities such as improving team get-together practices and having Family Day.

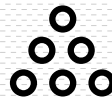
When Happy Workplace is realized, we look forward to the day in the morning.



TRUST

Maintain trust
among employees

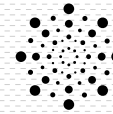
- Digital mentoring
- Healing mind program
- Impromptu talk with the CEO
- Happy Workplace Festival
- Anti-authoritarianism Campaign



PRIDE

Raise pride
in the company

- Family Friendly Program
- Anniversary celebrated together
- Sharing Congratulatory Words Campaign
- Good Morning Sandwich Day
- Happy Workplace Portal



FUN

Create a fun
workplace

- Encourage taking a day off
- Encourage a get-together where organization is facilitated
- Family Day
- Talk Talk Casual Day
- Decorating unique office environment



▲ Happy Workplace Portal



▲ Daddy's play school



▲ Happy Family Day



▲ Family workplace tour

Digital mentoring

To share the latest trends, junior employees become mentors of senior employees or senior management. In March 2013, to maximize work satisfaction level through flexible thinking and open communication, KEPCO had digital mentoring agreements between 307 junior employees and 307 executives and senior managers.

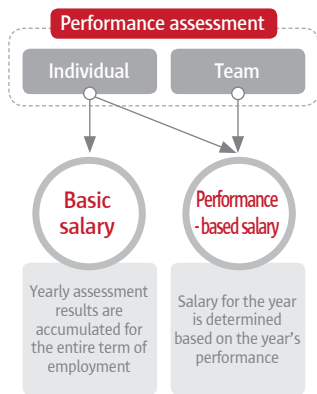


▲ Mentor new employee and mentee CEO

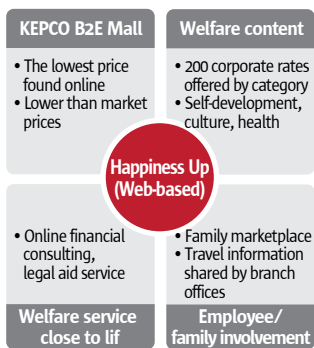


▲ Digital mentoring compact to create a happy workplace

:: Relations of performance and compensation ::



{ Cyber welfare center }



Disaster prevention policies

- Run a hot line with 6 organizations such as National Emergency Management Agency and Korea Power Exchange
- Regularly conduct pilot drills against disasters
- Put in place manuals on how to act on disaster site

Disaster prevention program

- Run the Disaster Action Management System
- Manage personnel and equipment when a disaster occurs
- Minimize recovery time

Cooperative labor management relationship

Reliable labor management relationship is an essential requirement for a company's performance enhancement and sustainable development. KEPCO is committed to pursuing mutual development by strengthening communication and cooperation between labor and management.

To facilitate cooperation and communication, we held 1,004 labor management consultative meetings at headquarters and branch offices and 335 management issue presentations to share important issues. Two-way communications are promoted to share management issues, deliver opinions from workplaces and express fresh management ideas. The Junior Board composed of young employees and senior managers initiates bottom-up management proposals and KEPCO Today, corporate newsletter made by selected employee reporters, is published to promote communications.

:: KEPCO Today & Junior Board Website ::



:: Labor management consultative meeting ::



Performance-oriented compensation scheme

The compensation consists of basic salary and performance-driven salary. By strengthening the link between MBO performance assessment and compensation, we differentiate salaries based on ability and performance.

Welfare programs

KEPCO develops and runs numerous welfare programs to create a healthy corporate culture and raise employee satisfaction levels through a work life balance. The cyber welfare center is in operation which shows welfare programs by category while diverse professional services are offered at corporate rates from shopping malls, accommodations, travel agencies and other companies.

Safety health management

KEPCO announced and is sharing among all executives and employees its health, safety, environment (HSE) policies designed to achieve highest HSE. We wholly revised and is implementing safety health management manuals reflecting K-OHSMS 18001 to meet the international standards. We had the period for industrial safety and health (June-July, 2012), strengthened safety health education and published Safety Zine.

Particularly, to prevent accidents in construction sites, safety patrol teams were formed at the head office level and conducted special diagnosis on 361 construction sites nationwide. Safety and health education is a requirement to complete for all employees of partner companies for their enhanced health and safety.

Also, we are working to get certification for enterprise safety health management system in order to make systematic HSE activities and an autonomous safety culture take root and to boost credibility in overseas business. In 2012, 12 first-level branch offices out of 23 obtained certification, and in 2013, the rest 11 offices and all partner companies plan to get certification.

Category	2009	2010	2011	2012
Average industrial accident rate of all industries (%)	0.70	0.69	0.65	0.59
KEPCO employees in accident (people)	11	4	4	7
KEPCO industrial accident rate (%)	0.055	0.020	0.021	0.036

※ Civilian victim (one death, one injury)

For improved quality of life and learning proper health information, a variety of health management programs and e-learning health education are being provided for all employees.

General medical checkups conducted every year are to enhance health conditions of employees, and special medical checkups are done every two years which include detailed blood test.

With the help of external institutions, no smoking campaign, metabolic syndrome counseling, precision physical checkups are provided and well received among employees. For the employees working overseas or on business trip, we adopted the Safety Guard System in 2012 and expanded health management at branch offices with less than 50 employees in the first half of 2013 by commissioning it to professional institutions.



Expect to sign on the MOU on human rights management with the National Human Rights Commission for the first time as a Korean company (October 2013)

Human Rights Management

KEPCO pledges not to discriminate against its employees on the basis of gender, educational background, religion, age, and disabilities as is explained in Chapter 5 (Employee Ethics) of the Code of Ethics. KEPCO will also faithfully abide by ILO Convention No. 111 Concerning Discrimination in Respect of Employment and Occupation. In order to create an organization with no discrimination and to enhance awareness about human rights through education, it has become mandatory to offer education on sexual harassment and the prevention of prostitution, with counselors receive courses from external organizations. All employees including personnel in charge of security take human rights education periodically.

In addition, personnel management complaint system is in operation to protect the human rights of employees. If an employee files a complaint with the system, a process is run for fact-finding and the complaint is considered during the next personnel reshuffling. The complaint handling results are disclosed to the employee who filed, and any unfavorable treatment following the use of the system is prevented systematically. For the period of this report, no human rights related law suits were raised via the system.

SPECIAL FEATURE

For the human rights protection of workers who do “emotional labor”

KEPCO’s concerns and solutions

Dial 123 minus the area code to be connected to a KEPCO call center. As calls come in relentlessly, call center employees listen to customer inquiries and offer immediate answers. Ms. Jung Mi-young has been working here for about 10 years. Although she is a veteran, she gets stressed out sometimes because she has to always respond to customers kindly regardless of her current state of mood. Ms. Jung is a so-called “emotional laborer.” In 2013, emotional labor has risen as a social issue. Since individuals working in this field have to constantly provide services in a spirit of kindness, their complaints and hardships were considered as personal issues, and thus few measures were implemented to assist them. In light of its importance, KEPCO has attempted to address this issue. The human rights of these call center counselors who work to realize customer satisfaction are as important as the value of customer satisfaction itself.

In July 2013, KEPCO created and began operating manuals on how to respond to ill-willed complaints for the first

time as a public corporation. If a customer calls and lashes out in a violent and abusive manner, the counselor has been trained to give a verbal warning of possible legal recourse as the first step and subsequently relays the call to his or her manager. Then, an automated answering system warns of legal measures and the call is ended automatically.

What are the toughest difficulties counselors undergo as you always have to be kind regardless of your emotional state?

It is hard to act on our emotions. Especially when offensive comments which belittle women or of a sexual nature are directed toward me, it gets even harder.

You must have rewarding moments, but also a fair amount of hardship. Recently, KEPCO adopted a manual system to respond to ill-intended calls. Has the system really made a difference?

Before the system was adopted, we could never end such calls from our side and were forced to stay on the line sometimes for an hour or two. After the system was put in place, we can move on to the next step according to the process, and thus I feel reassured.

Please tell us what social perceptions have to change regarding emotional labor. What additional efforts should companies make?

It is important that society begins to see the difficulties suffered by emotional laborers as a social issue not as an individual problem. I hope all companies adopt measures designed to relieve the types of stress our emotional laborers go through.



Ms. Jung Mi-young, counselor at KEPCO Call Center

- She handles about 130 calls daily. The KEPCO Call Center has 170 counselors who primarily handle notifications that someone is moving in or out of their residence and issues regarding the electricity bill.

Prevention of child and forced labor

KEPCO complies with the Labor Standards Act and ILO Convention No. 105 Concerning Abolition of Forced Labor, and the principle in Labor Standards, one of the United Nations Global Compact’s top 10 Principles. There is no record of child or forced labor at KEPCO.

Privacy protection

KEPCO has implemented technical security measures such as Internet firewalls and system access controls to protect the privacy of customers and prevent illegal data leaks. KEPCO also provides education on the importance of privacy protection on a regular basis.

:: Family-friendly Portal ::



:: Female employee trend ::

Year	Regular workers	Senior managers
2012	214(31%)	31
2011	36(23%)	7
2010	24(18%)	5

:: Flex-time working system ::

Category	2011	2012	2013 (plan)
Hourly work	18	41	100
Flexible work hours	-	21	140
Remote work	-	-	80

:: Company childcare center ::



Selected as
the Best Childcare Center
in terms of character building
education organized by the
Ministry of Education, Science and
Technology and the Ministry of
Health and Welfare (August 2012)

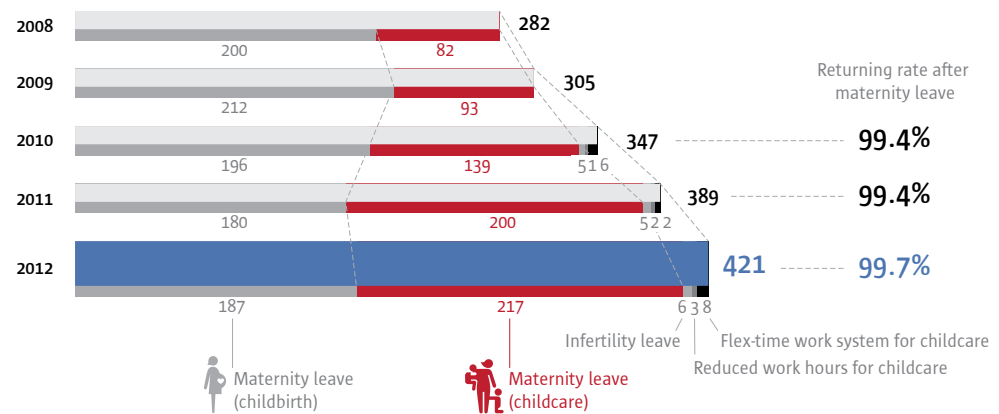
Gender equality and family-friendly company

KEPCO is operating a professional counseling center for establishing a mature and healthy culture for gender equality. We are also family-friendly systems by the stage of life and the Family-Friendly Portal to share relevant information. We have built and operated a maternity leave planning system to relieve the psychological burden of those who are on maternity leave and utilize a pool of replacements to minimize the impact on work.

Also, we have flex-time program to guarantee the time for taking care of a child and the company childcare center to support the employee's work life balance.

We are running a retirement pension system to help employees lead a stable life in an aging society. As of 2012, there were 288 subscribers to the individual retirement pension scheme worth 22.1 billion won.

KEPCO puts in place a fair compensation and promotion mechanism for male and female employees, with the basic starting annual salary for university graduates at 27,170,000 won regardless of gender. As a result of the company's efforts to nurture female leaders, the number of female senior managers has constantly increased from only 7 until 2000 to 147 in August 2013.



INTERVIEW

“Company childcare center makes mothers happy.”



Woo Hyun-kyung
Head of KEPCO
Childcare Center

“We try to give education sticking to the basics of development. We focus on problem solving capabilities rather than study to help children reach their potential. We will try to make happier kids.”



Shim Myung-hee
Employee

“I like being able to respond to the situation my kid is in. That relieved “beginner” moms like me. Company childcare center is an essential facility that makes moms happier”

Employment of those with disabilities

KEPCO gives preference when hiring people with disabilities to help them become economically independent and active members of society, and we strive to improve working environment. We give additional points in open recruitment and run internship for the disabled in an effort to give greater employment and work experience opportunities. As of the end of 2012, 669 people with disabilities are working at KEPCO, which is higher than the legal requirement of 3%.

Category	2010	2011	2012
Regular worker	19,952	19,626	19,969
Disabled employees	583	582	669
Employment rate	2.92%	3.00%	3.40%



Appendices

Independent Assurance Statement	74
GRI Index	76
Financial Information	78
KEPCO Group Companies	79
Awards and Initiatives	81
Associations and International Membership	82
Glossary	83
Additional Information	84

Independent Assurance Statement/ Korea Productivity Center

To the Stakeholders of :

Korea Electric Power Corporation (KEPCO) commissioned the Korea Productivity Center (the “Assurer”) to provide an independent assurance of its 2013 Sustainability Report (the “Report”).

Responsibility and Integrity

Korea Electric Power Corporation (KEPCO) is responsible for the reliability and accuracy of all information and opinions presented in this “Report”. The Assurer holds the responsibility which lies solely in providing a third party verification of the content in the “Report”. As an independent assurance agency, the Assurer was neither involved in the process of preparing this “Report” with Korea Electric Power Corporation (KEPCO), nor in any conflicts of interest that may undermine our independence.

Assurance Standard and Objectives

The independent verification process was planned and performed in accordance with the AA1000AS (2008) Assurance Standard to provide Type 1 moderate level of assurance. This is achieved through the evaluation of the organization’s adherence to the AA1000APS Accountability Principles (2008) of Inclusivity, Materiality and Responsiveness. Additionally, the assurance was performed to ascertain the organization’s adherence to the Global Reporting Initiative (GRI) G3.1 Guidelines in preparing and presenting sustainability performance information.

Assurance Limitations

Based on the aforementioned assurance standards, the Assurer performed verification of the organization’s sustainability performance during 2012, however the assurance did not include the reliability of data financial performance, public domains and information linked with the website. Site inspection was performed at the head office. Therefore, the Assurer clearly states that any additional verification conducted in the future may issue varied results.

Assurance Methodology

The assurance was undertaken following the methodology specified below:

1. Verified the coverage rate and presentation method for economic, environmental and social indicators specified in the GRI G3.1 Guidelines
2. Verified consistency with the principles dictating the content and quality of sustainability reports based on the GRI G3.1 Guidelines and Some additional reporting on the GRI G4 Guideline indicators have been checked for suitability.
3. Verified the appropriateness of identifying key issues and the responsiveness to the content presented in the Report by the material analysis methodology, media research and benchmarking.
4. Verified the appropriateness of the report content with other sources for incorrect information through comparative analysis.
5. On-site verification at the head office and plant has been conducted to confirm evidences for key data and information as well as internal processes.

Findings and Conclusions

It is the Assurer’s opinion that the Report fairly and accurately presents the sustainability efforts and performance of Korea Electric Power Corporation (KEPCO). Followings are results of assurance according to AA1000 Accountability Principles (2008) of Inclusivity, Materiality and Responsiveness.

• Principle of Inclusivity: Stakeholder Engagement

The principle of inclusivity articulates that organizations should include stakeholders in developing and achieving an accountable and strategic response to sustainability. The principle of inclusivity articulates that organizations should include stakeholders in developing and achieving an accountable and strategic response to sustainability. Based on the findings of these assurance efforts, it is evident that Korea Electric Power Corporation (KEPCO) defined major stakeholders and presented communication channels for each stakeholder group to adhere to the principle of inclusivity on management decisions and sustainability issues. Korea Electric Power Corporation (KEPCO) identified 6 key stakeholders as shareholders, creditors, government, NGOs, suppliers and employees. Korea Electric Power Corporation (KEPCO) should further enhance stakeholder engagement initiatives by managing the issues collected through stakeholder communication channels more comprehensively and incorporating them into broader areas of its business operations.

• Principle of Materiality: Selection of and Reporting on Material Issues

The principle of materiality articulates that organizations should focus on issues relevant and material to both the organization and its major stakeholders. The Assurer found that Korea Electric Power Corporation (KEPCO) identified sustainability issues relevant and material to the company and its stakeholder through a wide range of methods through benchmarking, media analysis, and stakeholder engagement through the materiality assessment. Korea Electric Power Corporation (KEPCO) identified 20 issues in the Report and presented these material issues in a fairly balanced manner.

• Principle of Responsiveness: Organizational Response to Issues

The principle of responsiveness articulates that organizations should be responsive to issues that may have impacts on stakeholders' performance. The Assurer found that Korea Electric Power (KEPCO) successfully promotes sustainability placing an emphasis on strengthening future growth, low-carbon green management, strengthening partnerships with stakeholders as 3 key areas. Based on such efforts, the Assurer appreciates Korea Electric Power (KEPCO) to achieve sustainability management across its business and present strategic direction for supplying power and stability for future growth through committed strategic communication.

Recommendations

The Assurer commends Korea Electric Power Corporation for making a variety of efforts to improve sustainability, resulting performances, and presents the following recommendations to enhance future sustainability reports and sustainability management.

1. The Assurer recommends the promotion of the materiality assessment and stakeholder engagement process in the sustainability report publication to determine and develop strategic direction. The results of the stakeholder engagement and materiality assessment process should regulate the standards across the organization in the sustainability assessment.
2. The Assurer recommends Korea Electric Power (KEPCO) to establish and present sustainability issues for review to the Board of Directors in addition to forming a Sustainability Management Committee and Subcommittee to examine, companywide, sustainability issues for decision making in order to avoid crises and maximize opportunities.
3. The Assurer recommends creating a sustainability data management process. to perform a detailed analysis and provide information of how Korea Electric Power Corporation (KEPCO) creates financial and non-financial value while maintaining a consistent management process with formal data collection and management procedures.

September 2013

Hong Jin

Chairman

Korea Productivity Center



Jin Hong

Dong Soo Kim,
Director
Sustainability Management Center

Tae Hoo, Park
Team Leader Senior Fellow
Sustainability Management Center

Seung Tae, Cheong
Expert adviser
Sustainability Management Center

D.S. Kim

T.H. Park

S.T. Cheong

The Sustainability Management Center of the Korea Productivity Center is an assurance agency officially certified by AccountAbility, which established AA1000, the international standards for stakeholder participation and verification, and has qualifications to perform independent assurance engagements. Our Assurance Committee is also comprised of competent experts who have in-depth experience in sustainability management consulting and assurance and completed the relevant professional training.

GRI G4 Index

GRI G4 response mechanism

KEPCO has been building a concrete response process to the GRI G4 guidelines announced in May 2013, which are designed to respond to different sustainability management standards and policies. We reviewed the current status of G4, identified improvements and developed key performance indicators. Based on this, we will develop content and increase the satisfaction level of indicators.

:: KEPCO 3-Year Road Map for GRI G4 ::

Goal	Tasks	2013 Target	2014 Target	2015 Target
GRI G4 Response framework	GRI G4 analysis	■■■■■	■■■■■	■■■■■
	Complement and identify improvements	■□□□	■■■■■	■■■■■
	Establish targets	□□□□	■■■■■	■■■■■
	Develop and manage key performance indicators	□□□□	□□□□	■■■■■
GRI G4 adoption	Develop content applying GRI G4 index	■□□□	■■■■■	■■■■■
	Increase satisfaction of GRI G4 Index	□□□□	■□□□	■■■■■

Reporting level : ● Fully ○ Partially × Not reported N/A

Category	No.	Description	Page	Reporting level	Remarks
Governance	G4-35	The procedure of delegating the authority of the highest decision making organization to the chief executives and the staff regarding the economy, environment and social issues	16	●	
	G4-36	The appointment of executives responsible for the economy, environment, society and their authority to report to the highest decision making organization	16	●	
	G4-42	Roles of the highest decision making organization and chief executives in the course of establishing, approving and revising the strategies, policies and goals regarding the economy, environment and society	16	●	
	G4-43	Measures to strengthen and improve the management capabilities of the highest decision making organization regarding the economy, environment and society issues	17	●	
	G4-50	The nature, number and resolution procedure of material issues reported to the highest decision making organization	16	●	
	G4-52	Procedure and standards of determining payment	70	●	
Environment	G4-56	Codes of conducts or ethics regulating the reporting organization's core values and principles, and actions	22	●	
	G4-EN4	Energy consumption outside the organization (total energy consumption (direct + indirect))	48	●	
	G4-EN5	Energy intensity (total energy consumption (direct + indirect)/sales or the number of employees)	48	●	
	G4-EN18	GHG emissions intensity (total GHG emissions/sales or the number of employees)	53	●	

GRI G3.1 Index

Reporting level : ● Fully ○ Partially × Not reported N/A

Category	No.	Description	Page	Reporting level	Remarks
Strategy and analysis	1.1	Statement from the most senior decision maker of the organization about the relevance of sustainability to the organization and its strategy	2	●	
	1.2	Description of key impacts, risks, and opportunities	12	●	
Organizational profile	2.1	Name of the organization	7	●	
	2.2	Primary brands, products, and/or services	6	●	
	2.3	Operational structure of the organization	7, 79	●	
	2.4	Location of organization's headquarters	7	●	
	2.5	Countries where the organization operates	32, 33	●	
	2.6	Nature of ownership and legal form	7	●	
	2.7	Markets served	6	●	
	2.8	Scale of the reporting organization	7	●	
	2.9	Significant changes regarding size, structure, or ownership	Cover	●	
	2.10	Awards received	81	●	
Report parameters	3.1	Reporting period	Cover	●	
	3.2	Date of most recent previous report	Cover	●	
	3.3	Reporting cycle	Cover	●	
	3.4	Contact point for questions regarding the report or its contents	84	●	
	3.5	Process for defining report content	24	●	
	3.6	Boundary of the report	Cover	●	
	3.7	Limitations on the scope or boundary of the report	Cover	●	
	3.8	Basis for reporting on joint ventures, subsidiaries, and other entities that can significantly affect comparability from period to period	Cover	●	
	3.9	Data measurement techniques and the bases of calculations	Cover	●	
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	Cover	●	
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	Cover	●	
	3.12	Table identifying the location of the Standard Disclosures in the report	76	●	
	3.13	External assurance for the report	74	●	
Governance, commitments and engagement	4.1	Governance structure of the organization	16	●	
	4.2	Indicate whether the Chair of the BOD is also an executive officer	16	●	
	4.3	Number of members of the BOD that are independent and/or non-executive members	16	●	
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the BOD	16	●	
	4.5	Linkage between compensation for members of the BOD and executives and the organization's performance	17	●	
	4.6	Processes in place for the BOD to ensure conflicts of interest are avoided	16	●	
	4.7	Process for determining the qualifications and expertise of the members of the BOD	16	●	
	4.8	Statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance	14	●	
	4.9	Procedures of the BOD for overseeing the organization's identification and management of economic, environmental, and social performance	16	●	
	4.10	Processes for evaluating the BOD's own performance, particularly with respect to economic, environmental, and social performance	16	●	
	4.11	Precautionary approach or principle addressed by the organization	18	●	
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	81	●	
	4.13	Memberships in associations and/or national/international advocacy organizations	82	●	
	4.14	List of stakeholder groups engaged by the organization	25	●	
	4.15	Basis for identification and selection of stakeholders with whom to engage	25	●	
	4.16	Approaches to stakeholder engagement	25	●	
	4.17	Key topics and concerns that have been raised through stakeholder engagement	25	●	
Economic performance	EC1	Direct economic value generated and distributed	30	●	
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	51	●	
	EC3	Coverage of the organization's defined benefit plan obligations	72	N/A	
	EC4	Significant financial assistance received from government	28	N/A	
	EC5	Ratios of standard entry level wage compared to local minimum wage at significant locations of operation	35	●	
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	35	●	
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	35	●	
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit	28, 55	●	
	EC9	Significant indirect economic impacts	55	●	

Reporting level : ● Fully ● Partially × Not reported N/A

Category	No.	Description	Page	Reporting level	Remarks
Environmental performance	EN1	Materials used by weight or volume	48	●	
	EN2	Percentage of materials used that are recycled input materials	48	●	
	EN3	Direct energy consumption by primary energy source	48	●	
	EN4	Indirect energy consumption by primary source	48	●	GENCO performance
	EN5	Energy saved due to conservation and efficiency improvements	48	●	
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	47, 48	●	
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved	47, 48	●	
	EN8	Total water withdrawal by source	48	●	
	EN9	Water sources significantly affected by withdrawal of water	-	N/A	Tap water only
	EN10	Percentage and total volume of water recycled and reused	48	●	
	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	44	●	
	EN12	Significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	44	●	
	EN13	Habitats protected or restored	-	N/A	
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	44	●	
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations	-	N/A	The whole nation is its business district.
	EN16	Total direct and indirect greenhouse gas emissions by weight	53	●	
	EN17	Other relevant indirect greenhouse gas emissions by weight	53	●	
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	52-54	●	
	EN19	Emissions of ozone-depleting substances by weight	43	●	
	EN20	NOx, SOx, and other significant air emissions by type and weight	43	●	
	EN21	Total water discharge by quality and destination	48	●	
	EN22	Total weight of waste by type and disposal method	48	●	
	EN23	Total number and volume of significant spills	43	●	
	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention	43	●	
	EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	44	●	
	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	41, 51	●	
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category	-	N/A	
	EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	-	N/A	
	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	44	●	
	EN30	Total environmental protection expenditures and investments by type	48	●	
Labor performance	LA1	Total environmental protection expenditures and investments by type	7	●	
	LA2	Total number and rate of employee turnover	69	●	
	LA3	Benefits provided to full-time employees	70	●	
	LA4	Percentage of employees covered by collective bargaining agreements	70	●	
	LA5	Minimum notice period(s) regarding operational changes	70	●	
	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees	70	●	
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	70	●	
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	56, 70	●	
	LA9	Health and safety topics covered in formal agreements with trade unions	70	●	
	LA10	Average hours of training per year per employee by employee category	67	●	
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	67	●	
	LA12	Percentage of employees receiving regular performance and career development reviews	65	●	
	LA13	Composition of governance bodies and breakdown of employees per category	16, 72	●	
	LA14	Ratio of basic salary of men to women by employee category	72	●	
	LA15	Return and retention rate after maternity leave by sex	72	●	
Human rights performance	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	71	●	
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	71	●	
	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights	71	●	
	HR4	Total number of incidents of discrimination and actions taken	71	●	
	HR5	Right to exercise freedom of association and collective bargaining	70	●	
	HR6	Measures taken to contribute to the elimination of child labor	71	●	
	HR7	Measures to contribute to the elimination of forced or compulsory labor	71	●	
	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights	71	●	
	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	35	●	
	HR10	Number and rate of assessments of human rights oversight and impact	71	●	
	HR11	Human rights related law suits/responses/resolved cases through official complaint handling system	71	●	
Social performance	SO1	Programs and practices that assess and manage the impacts of operations on communities	43	●	
	SO2	Percentage and total number of business units analyzed for risks related to corruption	21	●	
	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	21	●	
	SO4	Actions taken in response to incidents of corruption	20	●	
	SO5	Public policy positions and participation in public policy development and lobbying	19	●	
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions	-	●	0 won
	SO7	Total number of legal actions for anticompetitive behavior, antitrust, and monopoly practices and their outcomes	20	●	
	SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations	20	●	
	SO9	Businesses having potential, negative impact on the local communities	55-63	●	
	SO10	Prevention and reduction activities of businesses having potential, negative impact on the local communities	55-63	●	
Product responsibility	PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement	44	●	
	PR2	Total number of incidents of non-compliance with regulations concerning health and safety impacts of products and services	-	●	No violations of relevant regulations
	PR3	Type of product and service information required by procedures	28	●	
	PR4	Total number of incidents of non-compliance with regulations concerning product and service information and labeling	-	●	No violations of relevant regulations
	PR5	Practices related to customer satisfaction	28	●	
	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications	25	●	
	PR7	Total number of incidents of non-compliance with regulations concerning marketing communications	-	●	No violations of relevant regulations
	PR8	Total number of substantiated complaints regarding breaches of customer information protection	-	●	No violations of relevant regulations
	PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	-	●	No violations of relevant regulations

Financial information

Financial information
with the adoption of IFRS

Consolidated Statement of Financial Position

(unit: 100 million won)

Account	The 52nd period (As of December 31, 2012)	The 51st period (As of December 31, 2011)
Current assets	139,335	137,676
1. Cash and cash equivalents	19,550	13,879
2. Trade receivables and others	71,846	72,741
3. Inventory	34,403	38,518
4. Other current assets	13,536	12,538
Non-current assets	1,322,193	1,227,003
1. Tangible assets	1,223,762	1,123,849
2. Intangible assets	8,838	8,487
3. Investment interests	48,909	44,854
4. Other non-current assets	40,684	49,813
Total assets	1,461,528	1,364,679
1. Current liabilities	188,171	177,412
2. Non-current liabilities	762,715	649,227
Total liabilities	950,886	826,639
1. Capital stock	40,536	40,536
2. Retained earnings	325,643	357,691
3. Other components of equity	132,709	134,476
4. Non-controlling interests	11,754	5,337
Total shareholders' equity	510,642	538,040
Total liabilities and shareholders' equity	1,461,528	1,364,679

Consolidated Statement of Comprehensive Income

Account	The 52nd period (As of December 31, 2012)	The 51st period (As of December 31, 2011)	The 50th period (As of December 31, 2010)
1. Sales	494,215	434,557	395,066
2. Cost of sales/other sales and management expenses	502,394	444,761	378,320
3. Operating loss/profit	-8,179	-10,204	16,746
4. Other revenues	3,740	3,174	5,369
5. Other expenses	746	1,476	698
6. Other profits (loss)	-17,819	1,657	1,182
7. Financial profits	11,284	6,076	5,914
8. Financial cost	30,683	25,189	25,584
9. Gains/loss on equity method	1,859	1,204	1,041
10. Gains on the disposal of relevant companies	-89	27	-274
11. Income before income tax	-40,633	-24,731	3,696
12. Income tax expenses	-9,854	8,199	4,388
13. Net income	-30,779	-32,930	-692
- Net income from controlling interests	-31,666	-33,705	-1,200
- Net income from non-controlling interests	887	775	508

[Notes]

A part of the financial performance of 2011 became different from the amounts disclosed in 2012 sustainability report. The major reasons for the change are the following two:

1. Change in handling accounts receivable under the fuel cost pass-through system
(Previous) Accounts receivable were considered as sales.
(Current) Accounts receivable are recognized as reduction from the cost of sales. → (Impact) Decrease in current assets/accounts receivable in 2011, increase in non-current assets/non-current financial assets

2. Other revenues, other expenses, other gains under the Public Organization Financial Settlement Guidelines of the Ministry of Strategy and Finance
(Loss) Change in account system
(Previous) Include in operating loss/profit
(Current) Exclude from operating loss/profit (Earnings from public organization contributions are included in revenues.) → (Impact) Increase in revenues in 2011, decrease in operating loss/profit (△ 684.9 billion → △ 1,020.4 billion won)

GENCOs

(As of the end of 2012)

Korea South-East Power Co., Ltd. (KOSEP)

Address: 534 Taeheran St. Gangnam-gu, Seoul
Employees: 1,947
Paid-in capital: 290.1 billion won
www.kosep.co.kr

KOSEP is operating the Samcheonpo Thermal Power Plant and Yeongheung Thermal Power Plant as base load. As of the end of 2012, KOSEP has an installed capacity of 8,199MW, which includes 6,909MW from 11 bituminous coal units (84.3%), 922MW from 10 LNG combined cycle units (11.2%), and 325MW from anthracite units (4.0%). Under the long-term power supply plan, Yeongheung Thermal Power Plant units 5 & 6 are under construction with an installed capacity of 1,740MW. The Yeosu Power Plant unit 1 (350MW), which is shut down, is being replaced with thermal power plant.

Equity share **100%**

Korea Midland Power Co., Ltd. (KOMIPO)

Address: 38 Taeheranro 114 gil. Gangnam-gu, Seoul
Employees: 2,175
Paid-in capital: 137.3 billion won
www.komipo.co.kr

KOMIPO is operating the Boryeong Thermal Power Plant and the Seocheon Thermal Power Plant as base load. As of the end of December 2012, KOMIPO has an installed capacity of 8,402MW, which breaks down as 4,000MW of eight bituminous coal units (47.6%), 3,700MW of 10 LNG combined cycle units (44%), 400MW of two anthracite units (4.3%), and 285MW of four oil units (3.4%). Under the long-term power supply plan, KOMIPO is building Sinboryeong units 1 & 2 (2,000MW) and Seoul combined cycle units 1 & 2 (1,000MW).

Equity share **100%**

Korea Western Power Co., Ltd. (WP)

Address: 534 Taeheran St. Gangnam-gu, Seoul
Employees: 1,844
Paid-in capital: 158.9 billion won
www.westempower.co.kr

WP is operating the Taeon Thermal Power Plant as base load. As of the end of December 2012, WP has an installed capacity of 8,409MW, which includes 4,000MW of eight bituminous coal units (47.6%), 2,998MW of 24 LNG combined cycle units (35.7%), and 1,400MW of four oil units (16.7%). Under the long-term power supply plan, WP is building Pyeongtaek combined cycle unit (900MW).

Equity share **100%**

Korea Southern Power Co., Ltd. (KOSPO)

Address: 512 Taeheran St. Gangnam-gu, Seoul
Employees: 1,935
Paid-in capital: 228.8 billion won
www.kospo.co.kr

KOSPO is operating the Hadong Thermal Power Plant as base load. As of the end of December 2012, KOSPO has an installed capacity of 9,240MW, which breaks down as 4,000MW of eight bituminous coal units (43.3%), 4,553MW of 31 LNG combined cycle units (49.3%), 640MW of 8 oil units (6.9%), and 41MW of 19 wind units (0.4%). Under the long-term power supply plan, KOSPO is building Samcheok Green Power (2,000MW) and Andong combined cycle (400MW).

Equity share **100%**

Korea East-West Power Co., Ltd. (EWP)

Address: 512 Taeheran St. Gangnam-gu, Seoul
Employees: 2,080
Paid-in capital: 282.9 billion won
www.ewp.co.kr

EWP is operating the Dangjin Thermal Power Plant and Honam Thermal Power Plant as base load. As of the end of December 2011, EWP has an installed capacity of 8,816MW, which includes 4,500MW of 10 bituminous coal units (51.0%), 2,100MW for 17 LNG combined cycle units (23.8%), 1,800MW of six oil units (20.4%), and 400MW of two anthracite units (4.5%).

Equity share **100%**

Korea Hydro & Nuclear Power Co., Ltd. (KHNP)

Address: 512 Taeheran St. Gangnam-gu, Seoul
Employees: 9,337
Paid-in capital: 1,212.2 billion won
www.khnp.co.kr

KHNP is operating nuclear power plants as base load and hydroelectric plants as peak load. As of the end of December 2012, KHNP has an installed capacity of 26,035MW, which is composed of 23 nuclear units of 20,716MW (79.6%), 16 pumped storage and power generation units of 4,700MW (18.1%) and 21 hydroelectric units of 592MW (2.3%). Under the long-term power supply plan, KHNP is building five nuclear power plant units (6,600MW), which are Sinwolsung unit 2, Sinkori units 3 & 4, Sinulchin 1 & 2.

Equity share **100%**

KEPCO Group companies and companies with equity investment

KEPCO Engineering & Construction Company, Inc.

Address: 2354 Yonggudaero, Giheung-gu,
Yongin City, Gyeonggi Province
Employees: 2,223
Paid-in capital: 7.6 billion won
www.kepc-enc.com

KEPCO Engineering & Construction (E&C) was founded to achieve self-reliance in design technology of nuclear and thermal power plants. Based on safety and economy, KEPCO E&C developed Korean Standard OPR1000 and APR1400 and became a globally competitive nuclear power plant design company. KEPCO E&C exported 500, 800, 1,000MW standard thermal power plant design technology and has competitiveness in transmission and substation, renewable energy and project/construction project management, contributing to the enhancement of national energy competitiveness.

Equity share **74.86%**

KEPCO Plant Service & Engineering Co., Ltd.

Address: 45 Jungjailro, Bundang-gu,
Seongnam City, Gyeonggi Province
Employees: 4,621
Paid-in capital: 9 billion won
www.kps.co.kr

KEPCO Plant Service & Engineering (KPS) is a comprehensive plant service company and provides high-quality maintenance services for power plants (nuclear, thermal, hydroelectric), transmission and substations, and industrial facilities. KPS is responsible for commissioning maintenance of power plants under construction, and ordinary maintenance, planned outage and other repair & maintenance of power plants in operation, contributing to preventing unplanned shutdowns and improving the capacity factor. KPS also expands its global business in 25 countries including the U.S., Australia and Saudi Arabia.

Equity share **70.0%**

KEPCO Nuclear Fuel Co., Ltd.

Address: 989-242 Daedeokdaero, Yuseong-gu,
Daejeon City
Employees: 922
Paid-in capital: 93.2 billion won
www.knfc.co.kr

KEPCO Nuclear Fuel is the only nuclear fuel design and manufacturing company which was established to localize nuclear fuel and achieve technology self-reliance. KEPCO Nuclear Fuel is providing nuclear fuel for all light and heavy water reactors in Korea and will supply fuel to the UAE nuclear power plant. It is developing and supplying two kinds of high-quality modified nuclear fuel. High performing nuclear fuel for export is under development and expected for commercial supply from 2016.

Equity share **96.4%**

KEPCO Knowledge, Data & Network Co., Ltd. (KDN)

Address: 60 Hyoryeongro 72 gil, Seocho-gu, Seoul
Employees: 1,230
Paid-in capital: 64 billion won
www.kdn.com

Since KEPCO Knowledge, Data & Network (KEPCO KDN) was founded as the IT provider of KEPCO, KDN has offered total IT services, growing into a global electric power IT company. KEPCO KDN has been mainly engaged in development/operation of information systems, electric power IT, and the development and maintenance of IT infrastructure, intelligent distribution system, and information security. KEPCO KDN is now striving to enhance PLC AMI and smart distribution system to realize smart grid.

Equity share **100%**

Equity investment companies

Korea Electric
Power Industrial
Development
Corporation
(KEPID)

29.0%



Korea
Gas
Corporation

24.5%



Korea District
Heating
Corporation

19.6%



LG Uplus

8.8%



Awards and Initiatives

Awards received in 2012

Date	Award details	Organization
January 2012	No. 1 for 7 consecutive years in anti-corruption policy	Anti-Corruption and Civil Rights Commission
March 2012	This Year's Project in South America in 2011	Euromoney
June 2012	2012 Green Energy Award	Ministry of Knowledge Economy
August 2012	2012 Korea SNS Prize in public sector	Korea Blog Business Association
September 2012	The 38th National Quality Team Contest Gold Prize	Ministry of Knowledge Economy
September 2012	Minister's Prize for performance sharing best practice	Ministry of Knowledge Economy
November 2012	The 4th National Green Technology Award President Prize	Government
November 2012	German International Invention Exhibition Gold Prize	Nuremberg Invention Fair
December 2012	Highest customer satisfaction level for 14 consecutive years	Ministry of Strategy and Finance

Major initiatives

Initiative	Period
Transparent Society Pact signed among CEOs of 18 public corporations and Korea Independent Commission Against Corruption	June 2005
Renewable Portfolio Agreement signed with the Ministry of Commerce, Energy and Industry	July 2005
Agreement to comply with UN Global Compact and 10 principles	August 2005
Transparent Society Pact in the Electric Power Sector with 11 KEPCO Group companies and major electric power companies	September 2005
Integrity Pact between KEPCO and partner companies (1,519 companies, 18,135 persons)	January 2006
Agreement with private-sector organizations on business cooperation in the area of the environment (UNEP National Committee for Korea, Korea Green Foundation, Korea Women's Environmental Network)	June 2007
Second Renewable Portfolio Agreement signed with the Ministry of Knowledge Economy	July 2009
Accession to UN Global Compact in Korea	December 2009
Sisterhood partnership with 36 traditional markets	August 2011
Joint Agreement on Integrity and Ethical Practices of KEPCO Group companies (10 companies)	June 2012
Cooperative Shared Growth Pact in the Power Equipment Sector	June 2012
Select 65 power industry SMEs as KEPCO Trusted Partners	July 2012

Association and International Organization Memberships

Name	Objective	Date
Korean Institute of Electrical Engineers	Promotion and development of academics and technology related to electrical engineering	1961
Korea Standard Association	Exchange of information on technological standards, including industrial standardization and quality management	1964
Korea Electric Association	Promotion and development of electric industry	1965
Korean Member Committee of the World Energy Council	Enhancement of international relationship in the energy area	1969
Korea Atomic Industrial Forum	Exchange of nuclear technology at home and abroad	1975
Korea Electrical Engineering & Science Research Institute	Basic research and nurturing of human resources with regard to electric power industry	1989
Korean Society for Quality Management	Exchange of information among quality management organizations to improve quality management activities	1995
Korea Nuclear Society	Technology development and academic exchange with regard to nuclear power	1995
Korean Institute of Electrical & Electronic Material Engineering	Academic exchange and cooperation between industry and academia regarding electrical and electronic material engineering	1996
AESIEAP	Cooperation among electric power companies & experts of East Asia and the Western Pacific	1998
EEL	Protection of the rights of US electric power companies and provision of information on the electric power industry	2004
Korea New & Renewable Energy Association	Promotion of new and renewable energy industry and information sharing	2004
AEIC	Technological exchange among electric power companies in North America	2008
Korea Invention Promotion Association	Exchange of needs and trends of IPR market	2009
Korea Smart Grid Association	Smart grid information sharing and mutual cooperation	2009
Korea Nuclear Association for International Cooperation	Export of Korean standard nuclear power plant, analysis of overseas nuclear trends, mutual cooperation and information sharing in the nuclear industry	2011

1. AESIEAP: Association of the Electricity Supply Industry of East Asia and the Western Pacific
2. EEL: Edison Electric Institute
3. AEIC: Association of Edison Illuminating Companies

Glossary

Gas Insulated Switch Gear (GIS)

A complex switching device which opens or closes an electric circuit which is insulated with sulfur hexafluoride (SF6) gas

Community Energy System (CES)

A type of power business that generates electricity using a small-capacity generator and supplies electricity to users within the designated district directly without going through the power exchange market

Base Load Generator

A generator which keeps running at a constant output due to little output adjustment according to demand control. Currently coal-fired thermal power generators and nuclear power generators are running as base load generators

Emissions Trading System (ETS)

The system that sets the total quantity of greenhouse gas emissions of all advanced nations and imposes a certain amount of emission quotas. Countries exceeding the quota can purchase emission rights and those under the quota can sell emissions

Load Factor

The ratio of average power as compared with the peak power during a given period. Used as the indicator representing the efficiency of power facilities

Demand Control

All the activities to satisfy electricity demand at a minimal cost by changing customers' electricity use patterns. Load control and energy efficiency improvement are major methods for demand control

Transmission & Distribution Loss

Electricity loss incurred while electric power flows from power plant to substation, transmission/distribution lines, and finally point of consumption, mainly due to resistance

Smart Grid

"Smart grid" refers to an electric power grid that incorporates information & communication technologies to maximize efficiency for greater eco-friendliness

Renewable Portfolio Agreement (RPS)

Regulation that requires the increased production of energy from renewable energy sources

Energy Intensity

Energy consumption per US\$ 1,000 of GDP

Electricity Reserve Rate

Electric power in reserve against contingencies or to meet sudden surges in electricity demand

Greenhouse gases

Elements of air generated either naturally or artificially, which may contribute to global warming when there is an excessive increase of their proportion in the atmosphere. Refers to gases like carbon dioxide (CO₂), methane (CH₄), chlorofluorocarbon (CFC), nitrous oxide (N₂O), and sulfur hexafluoride (SF₆)

Electric Quality

The quality of electricity provided is represented as blackout time, voltage & frequency margin and total harmonic distortion (THD)

Electricity Effect Valuation System

A technique to select ideal sites for constructing transmission and substation facilities. Quantifies the effect of electricity on the natural, social and technology environment by using GIS and CAD and analyzes the weighted importance of the effect. Results are rendered in 3D images

Self-Sufficiency Rate

KEPCO defines Self-Sufficiency Rate as the ratio of the amount of a given fuel secured to the amount of a given fuel required

Ice Storage Cooling Facility

An advanced cooling system that stores ice or cold water by using off-peak electricity during the night and uses it for cooling during the day. Distributes the increasing cooling load to the night time zone and helps improve load imbalance between day and night

Certified Emission Reduction (CER)

CERs are carbon credits issued by the CDM Executive Board for emission reductions achieved by CDM projects Carbon Capture and Storage

CCS technology captures carbon dioxide generated from fossil fuel before emitted into the air and apply pressure to liquefy and store.

Clean Development Mechanism (CDM)

An arrangement allowing industrialized countries with a greenhouse gas reduction commitment to invest in projects that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own countries

C-km (Circuit Kilometer)

Length of one cable made up of three lines. One of the most generally used units for the length of transmission line

Energy Storage System (ESS)

Global Compact

UN Secretary-General Kofi Annan presented 10 universal principles in the areas of human rights, labor, the environment and anti-corruption, calling for business leaders to join an initiative called the Global Compact aimed at promoting business transparency and corporate social responsibility. The operational phase of the initiative was launched at UN Headquarters in July

Global Reporting Initiative (GRI)

A body of the United Nations Environmental Programme in charge of developing globally applicable guidelines for sustainability reporting

HVDC

High voltage direct transmission current which converts alternating current to direct current for transmission and converts into alternating current again for use

Additional information

All Sustainability Reports (issued from 2005) including this one and Annual Reports can be downloaded on the website of KEPCO. Additional information of the management of KEPCO is available on the websites below. Expressions such as forecast, expect and estimate are the description of the analysis of future as of today. Therefore, for specific risk or uncertainty, please refer to Form 20-F.

Classification	Website	Address
Business Report	Financial Supervisory Service's DART (data analysis, retrieval and transfersystem)/company overview	dart.fss.or.kr
Form 20-F	US Securities and Exchange Commission	www.sec.gov
Annual Report	KEPCO homepage/Investor relations/management	www.kepco.co.kr
Statistics of Electric Power in Korea	KEPCO homepage/Investor relations/Investor resources/ Statistics of electricity	www.kepco.co.kr
Social contribution	KEPCO homepage/Sustainability	www.kepco.co.kr
Management Information of Public Institutions	Public Institution Information Management System, the Ministry of Strategy and Finance	www.alio.go.kr

 <https://mobile.twitter.com/iamkepco>

 <https://www.facebook.com/iamkepco>

 <http://me2day.net/iamkepco>

Contact information

For more detailed information on this report, please contact us at:
512, Yeongdong-daero, Gangnam-gu, Seoul, Korea (zip code: 135-791)
Strategic Planning Team, Corporate Planning Department, KEPCO
Phone: 02-3456-3523 Fax: 02-3456-3598 E-mail: ahnsunmi@kepco.co.kr

Please direct your other inquiries to:

Financial information: Accounting Office, Treasury Team (sks@kepco.co.kr)

Ethical management: Anti-corruption Team, Audit & Inspection Office (lieutkim@kepco.co.kr)

Environmental management: Green Growth Strategy Team, Technology Division (moonstar@kepco.co.kr)

Social contribution: Social Contribution Team, Corporate Communications Office (kjk9780@kepco.co.kr)

Reader feedback

Your valuable feedback on 2013 KEPCO Sustainability Report is always welcomed to improve the quality of sustainability management and sustainability reports. Please send us your feedback by posting on KEPCO website or by e-mail/postal mail.

