



2012 SUSTAINABILITY REPORT

Message from the CEO



Distinguished stakeholders

Since it was split off from KEPCO as a power generation company, Korea Western Power has strived to produce the best energy while pursuing harmony between humanity, technology and the environment. With the priority of securing a stable supply of power, which is a critical element for life, the company has fulfilled its responsibility as a public corporation while maintaining a balance between national and corporate interests. The company has done its utmost to achieve co-prosperity with diverse stakeholders as a responsible enterprise fulfilling its social responsibilities, while leading the power industry with ceaseless changes and innovations, reinforcing its ethical and transparent management and supporting SMEs, local communities and isolated classes.

To continue such efforts, in May of 2006 the company signed the UN Global Compact, which is a voluntary agreement among global economic organizations to fulfill social responsibilities, and pledged to comply with ten principles in four areas, including labor, human rights, environment and corporate ethics. Since 2007, the company has regularly published sustainable management reports that are fully compliant with the GRI (Global Reporting Initiative), publishing its fourth sustainable management report this year.

Korea Western Power currently faces external factors that threaten the sustainability of the company. The growth of power demand is slowing down as the economic structure and technological development are advanced, and domestic and international environmental regulations are being continuously tightened. Requests for the fulfillment of social responsibilities are ever increasing.

To overcome such challenges and transform itself into a sustainable business, all employees of Korea Western Power shall focus on achieving the management goals with shared efforts, and concentrate all of their resources and capabilities. To this end, I have defined a management policy of "Focus & Align," and have pursued the efficient use of limited management resources since taking office as CEO. In addition, I redefined the mid-to-long term strategic system of KOWEPO Vision 2020 to advance the master plan for the company's sustainable development.

From an economic perspective, the company aims to maintain the world's-highest level of stable power generation businesses and facility reliability, which are the major businesses of the company. With an innovative mindset, it will continuously improve facilities, and expand its highly efficient state-of-the-art power generation facilities for a stable mid-to-long term power supply.

In the environmental aspect, Korea Western Power will prevent potential pollution by monitoring environmental pollution in real time thanks to system advancements, and drive fundamental improvements through the introduction and development of new technologies. In addition, the company will improve its corporate image as an eco-friendly enterprise by leading the practice of recycling by-products such as fly ash, and the mixed firing of organic solid fuels.

In terms of social contributions, the company has made efforts to protect its needy neighbors and the socially isolated by actively operating the Social Service Group of Korea Western Power, which was established in 2004. Relations with SMEs are already being developed beyond partnerships, and the company is pursuing co-prosperity with SMEs. The company has also built ties with the local communities where its business sites are located through activities such as co-prosperity agreements, sisterhood relationship building and continuous social services.

This year marks the 10th anniversary of the establishment of Korea Western Power. The company has upwardly adjusted its corporate vision and goals by redefining its management strategy, and has prepared the foundation for a new take-off by finalizing the construction plans of many power generation facilities including Tae'an Power Generator No. 9 and 10. In addition to such external achievements, the company will focus its efforts and capabilities on bringing about a sustainable future by considering qualitative growth in areas including economic, social and environmental responsibilities. I ask for your continuous interest and participation so that Korea Western Power can continuously pursue co-prosperity through active communication and shared efforts.

Thank you very much.

March 2, 2012

CEO Mun-Deok Kim, Korea Western Power

Corporate Overview

Korea Western Power Co., Ltd. is one of the six power generation companies that separated from KEPCO in 2001 to reinforce the competitiveness of Korea's power industry. We currently hold and operate a power generation capacity of 8,404 MW, or about 10.7 % of the nation's total power generation capacity.

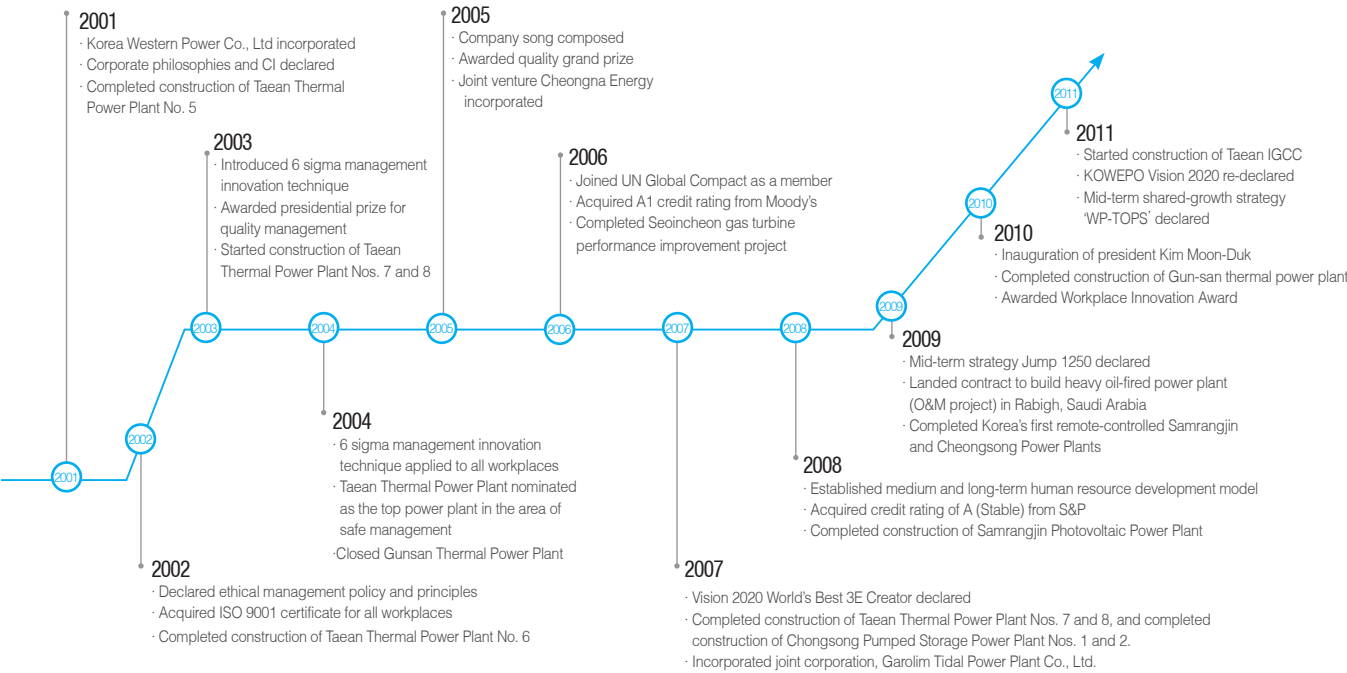
The domestic and international management environment surrounding the power generation industry is rapidly changing, due to factors such as a slowdown in the growth of electricity demand, a rapid rise in the price of oil and bituminous coal, and regulations on carbon emission adopted by the United Nations Framework Convention on Climate Change. However, we take this crisis as an opportunity to move forward and achieve our vision of becoming the "World's Best 3E Creator," focused on the '3 Es' of energy, environment and expertise.

We operate our business with the goal of maximizing energy efficiency and creating additional profits by starting the thermal power generation business and the integrated energy supply business. We have been steadily preparing to diversify our business fields by making inroads into overseas power markets and contributing to the export of products by Korean manufacturers in the power

industry. In addition, we are pursuing diverse strategies to find opportunity in the current crisis, while working to secure our sustainability by taking a leadership role in the renewable energy business field related to carbon emissions. We are striving to further develop our company as a world-renowned leader in the power generation industry by operating our human resource development system (e-HRD), along with other education and training programs designed to foster competent employees.

Beyond our economic achievements, we actively pursue social contribution activities through our corporate volunteer corps, to promote balanced development in the economic, environmental and social sectors and to gain a strong foothold as a company that takes the lead in the power generation industry in terms of sustainable management.

Company History (2001~11)



Organization Profile

CEO	Moon-duk Kim	Capital	KRW 159 billion
Date of Incorporation	April 2, 2001	Total assets	KRW 5,250.6 billion
Number of Employees	1,725	Revenues	KRW 5,204.5 billion
Controlling Shareholder	KEPCO	Equity ratio	100%
Credit Rating	Evaluated as A, A1 and AAA by S&P, Moody's, and Korea credit ranking agencies, respectively.		
Headquarter Location	152 Teheran-ro, Gangnam-gu, Seoul		

(As of Dec 31, 2011)

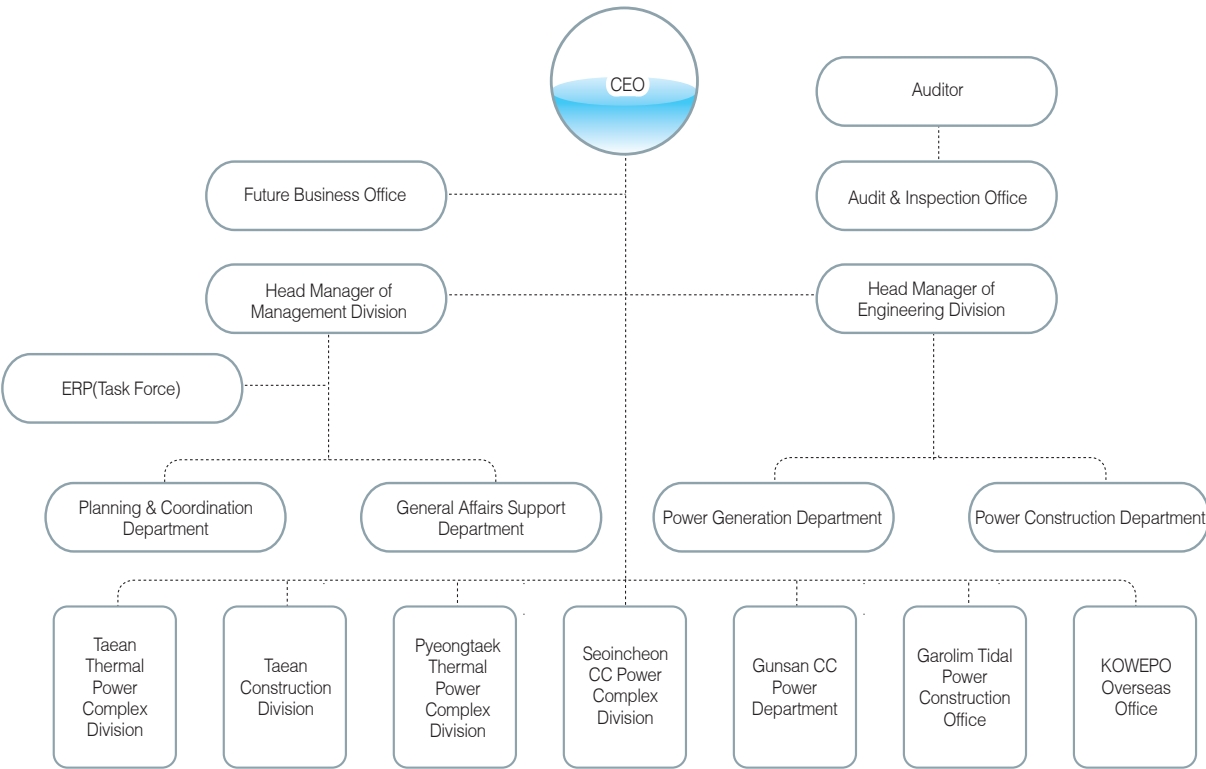
Organization Operation

To actively and flexibly react to the rapidly changing management environment, we expanded our team-based organization operated in our headquarters to all of our workplaces in 2009. Our organization, structured to reinforce the responsible management of each unit, is operated focused on the horizontal structure and work process to ensure the best efficiency.

Our headquarters consists of 2 divisions, 4 departments and 2 offices, and the number of teams was reduced from 33 to 24 to facilitate efficient management and rapid decision-making. Each power plant complex site consists of 67 teams, which has been reduced from the previous 73 departments under 4 divisions and 3 departments.

We are also working to secure the foundation from which to diversify our business by incorporating the joint venture Cheongna Energy and Garolim Tidal Power Plant Co., Ltd. We endeavor to create growth engines for the future by pursuing diverse overseas power generation projects. We are promoting a hydro power plant business and a biomass-fired power generation business in Laos and the Philippines, respectively, as a part of our efforts to secure Clean Development Mechanism status (CDM), along with a specialized project based on our superior commissioning capacity and Operation & Maintenance ability in Saudi Arabia and Nigeria.

Organizational Structure



Employees

Item	Director	1st class (A)	1st class (B)	2nd class	3rd class	4th class (A)	4th class (B,C)	5th class	Non-regular	Total
Number	4	14	26	106	366	37	1026	44	102	1725

Operation Status of Power Generation Facilities

Korea Western Power Co., Ltd. holds 44 power generation facilities in 5 areas, including Tae'an and Pyeongtaek, and has a power generation capacity of 8,404 MW.

We provide stable and affordable electrical power by operating a bituminous coal-fired power generation plant with a capacity of 4,000 MW in Tae'an thermal power plant. We are also making a big contribution to ensuring a stable power supply in the northern area of Gyeonggi-do and Seoul metropolitan area by operating

Pyeongtaek and Seoincheon thermal and combined cycle (CC) power plants, which have a combined power generation capacity of 3,680 MW. The construction project for the Gunsan combined cycle power plant was also completed last May, and has entered operation. In addition, our renewable energy power generation facilities, including a photovoltaic power generation plant and a small hydro power plant, are under construction or being operated in the Tae'an and Samrangjin power plants.

Classification	Plants		Number of Units	Capacity (MW)	Total	Percentage
Thermal	Tae'an		8	500	4,000	
	Pyeongtaek		4	350	1,400	
	Sub total		12		5,400	56.2
Combined Cycle	Pyeongtaek	GT	4	80	320	
		ST	1	160	160	
	Seoincheon	GT	8	150	1,200	
		ST	8	75	600	
	Gunsan	GT	2	233	466	
			1	252	252	
	Sub total		24		2,998	31.2
Renewable Energy	Tae'an Small Hydro		4	0.55	2.2	
	Tae'an Photovoltaic		1	0.12	0.12	
	Samrangjin Photovoltaic		2	2/1	3	
	Gunsan Photovoltaic		1	0.26	0.26	
	Sub total		8		5.58	0.1
Total			44		8,403.58	100

Characteristics of the Power Industry

General characteristics of the Power Industry

Korea's electric power industry is the root of its national development, and 95% of its assets are fixed assets.

Electrical power is impossible to store and is transmitted at the speed of light, so power generation and consumption must be balanced from second to second. Moreover, it is necessary to secure backup power to ensure a stable power supply due to the difficulty of storage.

However, the construction of power facilities requires a large-scale investment over a long period of time, and cannot be achieved promptly to respond to changes in demand.

For this reason, we keep trying to secure an appropriate level of backup power to ensure a stable power supply by establishing a fundamental plan every two years for securing power supply and demand.

Characteristics of Power Plant Construction

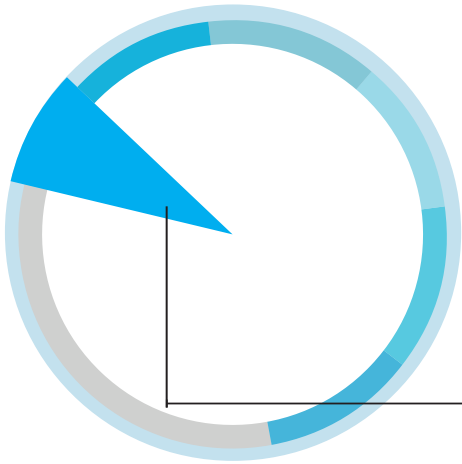
Since Korea occupies a small area of land, and lacks precipitous mountains due to its old topography, it is not suitable for hydroelectric power generation facilities that require large amounts of falling water. In addition, the high coefficients of the river regime, expressed by maximum discharge over minimum discharge for rivers, and the relatively small streams in Korea, are not appropriate for supplying power using hydro power generation. For this reason, Korea has a higher dependence on thermal power generation and nuclear energy development than on hydro power generation.

Thermal power generation generates electricity by using heavy oil, coal and natural gas as materials to spin a steam turbine. This generation method has a number of advantages: its construction cost is lower than that of a hydro power plant, and its construction period can be shortened. Moreover, the location of a thermal power plant does not have to be restricted to remote mountainous areas. 8,398 MW, or 99.9% of our total power generation capacity 8404 MW, is accounted for by thermal power generation plants.

Structure of the Electric Power Industry

For a long period of time, the electric power industry was a monopoly due to its nature as a public utility, and has made a great contribution to the industrial development of the country through economies of scale. With the intention of introducing competition in the power industry to improve the efficiency of management and increase customer choice, the Korean government decided to split the power generation area of KEPCO into 6 power generation companies under the basic power industry restructuring

plan of April 2001. Currently, five power generation companies, which are Korea South-East Power (KOSEP), Korea Midland Power (KOMIPO), Korea Southern Power (KOSPO), Korea East-West Power (EWP) and Korea Hydro and Nuclear Power (KHNP), and other independent power producers such as K-Water, POSCO Power, GS Power, GS Energy, GS EPS and MPC, are competing with us in the power generation market.



Market Shares and Power Generation Capacities

(Unit: 1 Billion Kwh(%))

Titles	Power Generation Capacity for 2011 (1 Billion kWh)	Market Share (%)
KOWEPO	548	11.1
KOSEP	611	12.3
KOMIPO	538	10.9
KOSPO	603	12.2
EWP	536	10.8
KHNP	1,588	32.1
Others	526	10.6



Operation of Power Market

The power trade market is operated according to the applicable laws and acts, such as the Electricity Business Act and the Power Market Operation Regulations. The power trade market is classified into the three aspects of the entire market's profit, stable power supply and fairness of transaction. Clause

31 of the Electricity Business Act forces power generation companies and power providers to transact power only in the power market.

Classification of Market

Business Area	Customers	Value Standard	Requirements for the Customers
Power Generation Business (Power generation and sales)	Operation of market	Profitability	Stable trade of power at the cheapest price
	Operation of system	Reliability	Supply of high-quality power
	Operation of trade business	Fairness	Fair market operation (Comply with regulations)

Regulations Applicable to the Power Industry

The power plant operation and construction sector is governed by the Electricity Business Act, while the power trading area is subject to the Power Market Operation Regulation & Guideline. We strictly comply with the Clean Air Conservation Act and the Water Quality Conservation Act in terms of our emission of environmental pollutants, and do our best to minimize our environmental impact by setting internal regulations that are stricter than our minimum legal

obligations. In addition, we frequently (monthly and annually) check and inspect our power generation facilities, high-pressure gas facilities, fire fighting facilities, and disaster prevention facilities to ensure safe operation and compliance with all applicable laws and regulations, including the Electricity Business Act, the High-pressure Gas Safety Law, the Fire Service Act, and the Toxic Chemicals Control Act.

Designated as a Market-Type Public Corporation

Six power generation corporations, including Korea Western Power, were newly designated as market-type public corporations in January 2011. With the new government policy to promote competition among power generation corporations and reinforce independent and responsible management, several changes have been made in the power industry, especially in the power generation sector. Previously, power generation firms competed upon management evaluation by KEPCO, which owns 100% of the shares in those firms. With the evaluator changed to the Ministry of Strategy and Finance, power generation firms are now

competing with other public corporations rather than other power generators. In addition, the Chairman of the Board of Directors was replaced with a non-executive director appointed by the Minister of Strategy and Finance, in order to reinforce transparency in management. Previously, the Board of Directors was chaired by the CEO of the corporation. The management environment has also seen some changes, as the CEO is no longer appointed at the general shareholders' meeting, but is appointed by the President.



Vision and Management Strategies

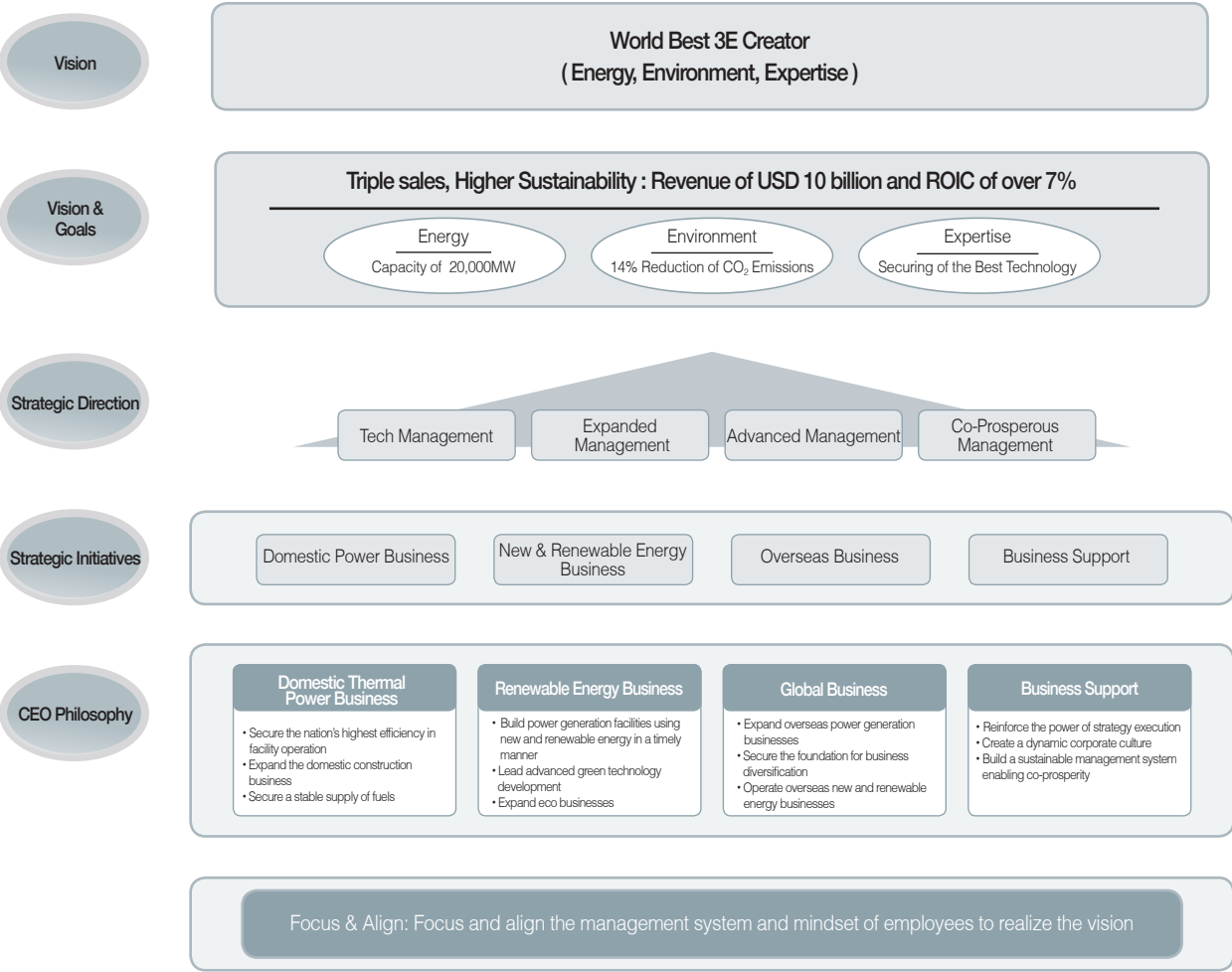
Korea Western Power built a mid-to-long-term strategic system in 2007 for the first time in its history by establishing Vision 2020 (3 Plus 10). The Company also clearly communicated its goal by defining its vision as “World's Best 3E Creator.” At the end of 2011, the Company restructured its existing strategic system into KOWEPO Vision 2020, in order to map out a better future by successfully responding to the changes in the management environment. By making these efforts, the company ultimately aims to become the world's best total energy provider.

KOWEPO Vision 2020 – World's Best 3E Creator

The vision of Korea Western Power, World's Best 3E Creator, refers to the company's goal of creating the world's best value in three sectors: Energy, Environment and Expertise. The vision well illustrates the commitment of the Company to strive to prevent environmental pollution and expand eco programs, considering the high relevance of the environment in its business, and to pursue sustainability by securing expertise, which is the key to sustainable growth engines.

However, after the Company defined its vision and the strategic system, the uncertainties in the external and internal management environment grew, and the Company went through massive internal changes. Raw material costs, including fuel costs, which account for 80% of the corporate costs, are constantly increasing, and there is a rising demand for stable power supply in the Korean market amid the continued occurrence of power interruptions. In addition, there is an urgent need to aggressively operate new and renewable energy businesses and overseas businesses. To respond to such needs, the Company redefined its mid-to-long-term strategic system in July 2011, and the outcomes are as follows:

Vision 2020 – System Structure



Define a Slogan for the Vision and Clear Goals

To provide a detailed picture of the corporate vision, the Company defined a slogan supporting the vision. The new slogan of "Triple Sales, Higher Sustainability" promotes the goal of expanding the revenue of USD 4 billion to over USD 10 billion, while considering the public interest of maintaining the ROIC ratio, which guarantees stable profits, at 7% or higher. In terms of Energy, Environment and Expertise, the Company defined goals by sector of achieving a

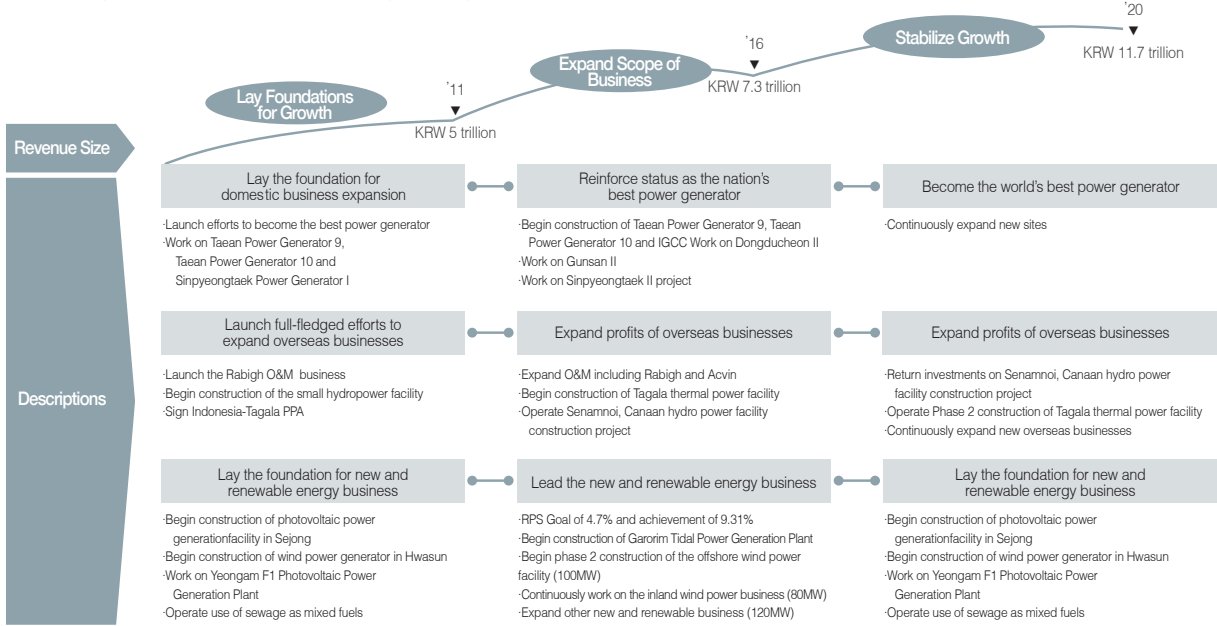
facility capacity of 20,000MW, reducing CO₂ emissions by 14% and securing the world's best technology, in order to clearly define the goals to be pursued with the vision for 3E.

Strategic Initiatives and Strategic Directions

Strategic Directions	Business Areas	Strategic Initiatives	Sustainability	Nine Initiatives for Business Strategies
Tech Management	Domestic Power Generation Business	□ Secure the nation's highest efficiency in facility operation	Economic Sustainability	<div>• Secure the industry's best expertise in terms of operating efficiency, green technology and resources supply</div> <div>• Expand the domestic power generation business</div> <div>• Pursue growth through expansion of overseas business and eco-friendly power generation</div>
		□ Expand the domestic construction business	Economic Sustainability	
		□ Secure stable supply of fuels	Economic Sustainability	
Expanded Management	New & Renewable Energy Business	□ Build power generation facilities using new and renewable energy in a timely manner	Environmental Sustainability	
		□ Lead advanced green technology development	Environmental Sustainability	
		□ Expand eco businesses	Environmental Sustainability	
Advanced Management	Overseas Business	□ Expand overseas power generation businesses	Economic Sustainability	<div>Three Initiatives for Functional Strategies</div> <div>• Advance management by sector by serving as a foundation and support for the successful implementation of business strategies</div> <div>• Organically operate business strategies and functional strategies</div>
		□ Secure the foundation for business diversification	Economic Sustainability	
		□ Operate overseas new and renewable energy businesses	Environmental Sustainability	
Co-Prosperous Management	Business Support	□ Reinforce the power of strategy execution	Economic Sustainability	
		□ Reinforce the power of strategy execution	Social Sustainability	
		□ Build a sustainable management system enabling co-prosperity	Social Sustainability	

Develop the Roadmap to Realize the Vision

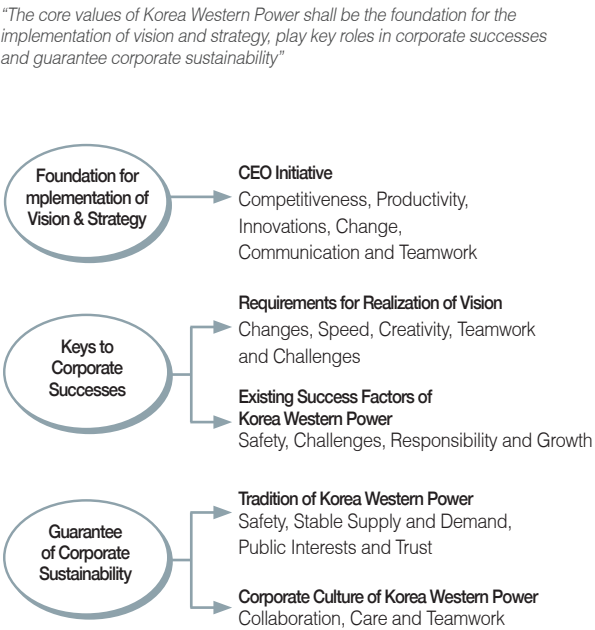
Korea Western Power built a systematic roadmap to achieve the corporate goals for 2020, laying the foundation to establish strategies to implement by stage, and annually monitoring whether or not goals are being achieved.



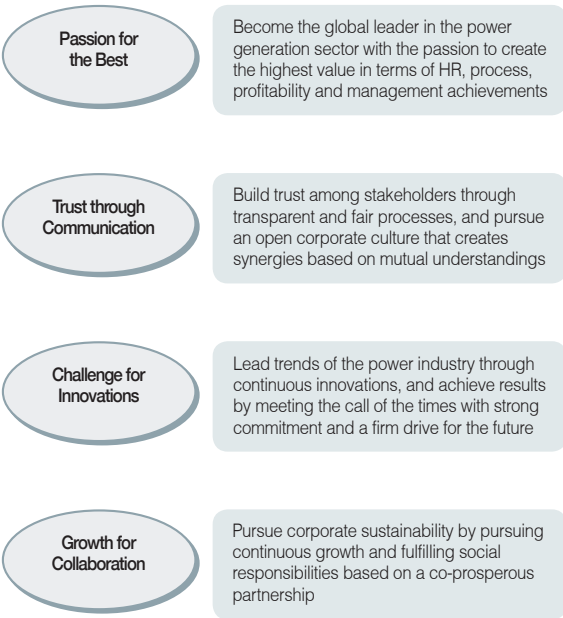
Core Values

Core values are guidelines for employees and the framework for the ideas that aim to realize the visions of Korea Western Power, and the values serve as the foundation for achievement of World Best 3E Creator. Before redefining the vision, in April 2011 Korea Western Power developed "KOWEPO-Way," the core value of Korea Western Power, by collecting the ideas of all employees for about three months.

How to Develop the Core Values of Korea Western Power



Four Core Values of Korea Western Power



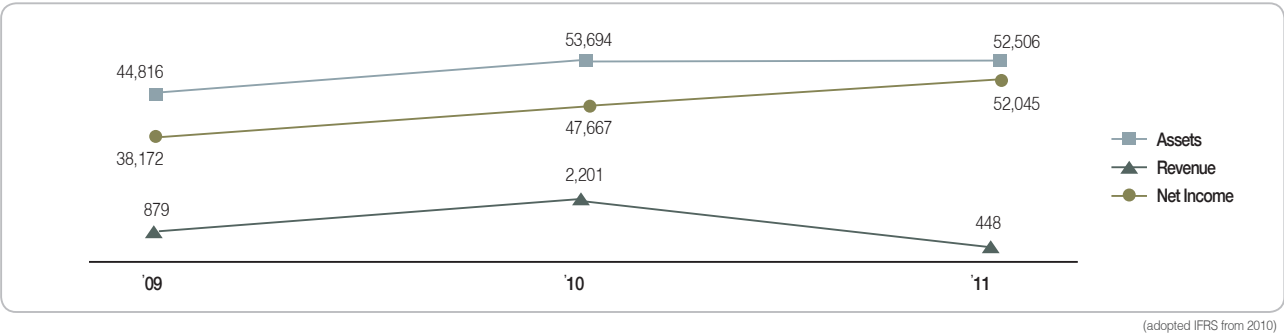
Our core values consist of four items, and two principles of implementation have been established for each core value. In addition, a detailed description is provided for each value to lay the foundation for aligning the vision of employees. Korea Western Power aims to secure sustainability by clearly defining the goals to be pursued in the future and aligning the mindsets of employees.

Core Values	Principles of Implementation	Descriptions
Passion for the Best	Set up an ambitious goal	Put "us" before "me," and pursue a more ambitious goal
	Maximize individual competencies	Develop an industry-leading level of competency, and grow with the company
Trust through Communications	Respect and empathy	Respect individual qualities and diversity with empathy
	Create synergies	Value sites and practices, and create better results through cooperation
Challenge for Innovations	Develop creative alternatives	Pursue creative alternatives by escaping from the existing framework
	Actively lead changes	Do not fear failure, and lead changes with a challenge-loving spirit
Growth for Collaboration	Transparency and fairness	Gain the trust of customers through transparent and fair processes
	Pursue mutual growth	Value cooperation with customers and pursue mutual growth with stakeholders

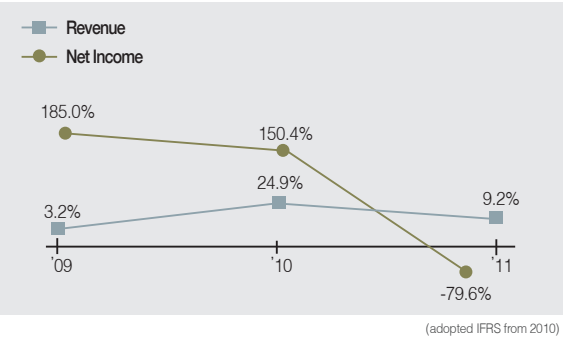
Generation of Economic Value (Economic Results)

Generation of Added Value

Korea Western Power recorded revenue and net income of KRW 5.2045 trillion and KRW 448 billion, respectively, in 2011. Net income showed a decrease of 80% compared with the previous year although revenue showed year-on-year growth of 9%. It's because we often operated combined cycle power plants which need the relatively high material cost in order to meet the growing power demands.



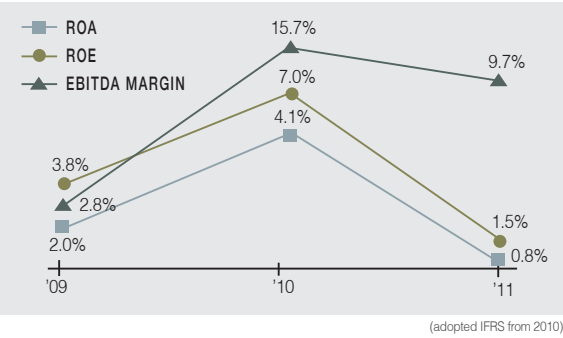
Growth Indicators



Growth

Growth rate of sales decreased to 9.2% compared to the previous year, but it was on an increasing trend due to growing demand. Growth rate of net income fell sharply to -79.6% compared to the previous year and the downward trend in net income also continued because of high price of material.

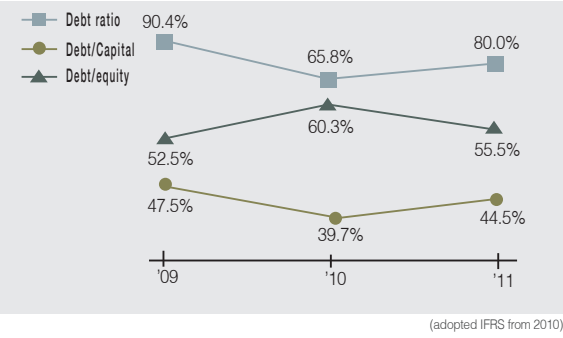
Profitability Indicators



Profitability

Profitability had fallen generally because operating cost of combined cycle power plants were highly pricy in order to contribute to stable power supply to meet the demand. Despite of this circumstances, we kept making aggressive cost-saving efforts to improve profit.

Stability Indicators



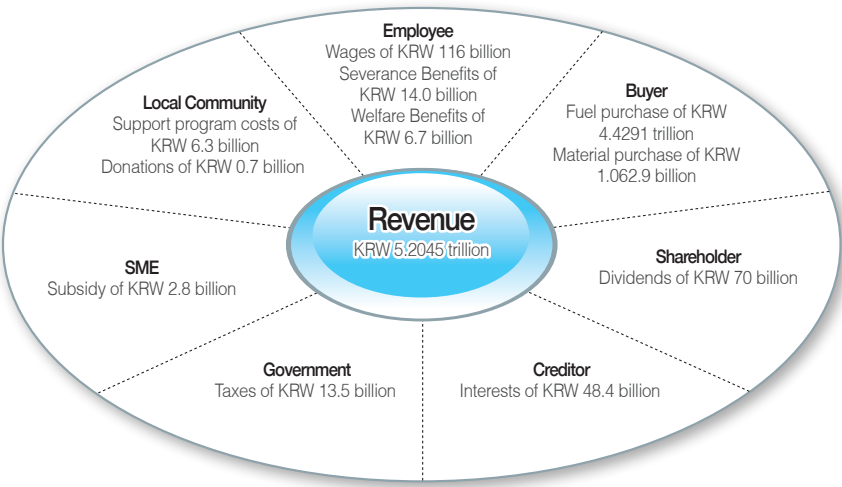
safety

Since we started construction projects such as 'Taeon Thermal Power #9 and #10' and 'IGCC' in 2011, debt ratio recorded 80.0%, an increase of 14.2% over the previous year. It is expected that debt ratio would increase for a while untill each project recovers its investment expenditures, but it is essential for future growth.

Allocation of Economic Value

At Korea Western Power, we are well aware that we could not operate without the interest and support of local communities. We also realize that co-growth with stakeholders through the entire business cycle, from procurement of raw materials to production and sales, is the foundation of sustainable management.

Korea Western Power not only operates business activities that improve economic values, but also focuses on fair and reasonable value allocation to stakeholders.



Wages and Benefits

Items	2009	2010	2011
Wages (Salaries)	1,129	1,200	1,166
Allowance for Severance Liability	86	54	140
Welfare Benefits	47	53	67

Taxes

Items	2009	2010	2011
Corporate Income Taxes	-	611	13
Income Taxes	115	136	120
Comprehensive Real Estate Holding Taxes	2	2	2

Buyers

Items	2009	2010	2011
Fuel Purchase	29,377	35,634	44,291
Raw Material Purchase	5,713	3,154	10,629

- Raw material purchase includes foreign capital, and the year-end basic exchange rate was applied to foreign capital.

Investments in Local Communities

Items	2009	2010	2011
Costs of Local Community Support	82.4	67.8	62.9
SME Support	18.8	29.8	27.6
Social Contributions, Donations and Sponsorships	6.10	6.60	7.23

Cost of Capital (Dividends and Interests)

Items	2009	2010	2011
Fuel Purchase	264	739	314
Raw Material Purchase	491	492	486

Government Subsidy

Items	2009	2010	2011
Energy-Saving Facility Investment	10,905	21,118	49,249

Corporate Governance Structure

Korea Western Power Co., Ltd. is one of the 6 power generation companies created when the power generation part of KEPCO was divided in April 2001. All of our equity is owned by KEPCO. We have worked to establish a clean governance structure and decision-making system.

Composition of the Board of Directors

The board of directors consists of 3 standing directors, 5 non-standing directors and an executive auditor. The board of directors is operated according to the applicable laws, such as commercial laws and regulations. The Dae-young Kim,

non-executive director, is the chair of the board of directors. Information on our directors and the minutes of the board of directors are available at our corporate website (www.iwest.co.kr).

Directors

Position	Name	Profile
CEO	Moon-Duk Kim	<ul style="list-style-type: none">Vice President of KEPCOHead of Transmission Department,KEPCO
		<ul style="list-style-type: none">Term of Services: From April 2, 2010 to April 1, 2013
Auditor	Dong-Woo Nam	<ul style="list-style-type: none">Chairman of Cheongju City CouncilVice Chairman of Woori Credit Union
		<ul style="list-style-type: none">Term of Services: From April 2, 2010 to April 1, 2013
Executive Directors	Seung-Gyun Oh	<ul style="list-style-type: none">President of Seodaegu Branch of KEPCOKEPCO Secretary Manager
		<ul style="list-style-type: none">Term of Services: From January 14, 2009 to January 13, 2012
	Young-Bak Kwon	<ul style="list-style-type: none">Korea Western Power Seoincheon Combined Cycle Power Complex DivisionKorea Western Power Construction Department Manager, Taean Thermal Power Complex Division
		<ul style="list-style-type: none">Term of Services: From January 14, 2009 to January 13, 2012

Position	Name	Profile
Non-Executive Directors	Dae-Young Kim	<ul style="list-style-type: none">Formerly: Manager of the Headquarters for Protection, PSSTerm of Services: From April 2, 2010 to April 1, 2013
		<ul style="list-style-type: none">Currently: Partner of Jeong Se Co., Ltd.
	Dae-Hwa Jeong	<ul style="list-style-type: none">Term of Services: From April 2, 2010 to April 1, 2013
		<ul style="list-style-type: none">Currently: Marketing Director of Korea Investment & SecuritiesFormerly: CEO of TG Biotech Corp
	Jae-Jung Shim	<ul style="list-style-type: none">Term of Services: From June 30, 2010 to June 29, 2013
		<ul style="list-style-type: none">Currently: Professor of Business Administration, Kyungpook National UniversityCurrently: Member of Shared Growth Commission
	Jang-Woo Lee	<ul style="list-style-type: none">Term of Services: From June 10, 2011 to June 9, 2013
		<ul style="list-style-type: none">Currently: Head of Corporate Planning Dept. of KEPCOFormerly: Head of Personnel & General Affairs Dept. of KEPCO
	Chan-Gi Jeong	<ul style="list-style-type: none">Term of Services: From February 24, 2009 to February 23, 2012

Rights and Responsibilities of the Board of Directors

Important issues involving corporate management are implemented through a vote by the board of directors in accordance with the applicable laws, such as commercial laws and regulations. The board of directors deliberates various management affairs and provides checks and balances through rejection and revision of the items for deliberation, offering suggestions and recommendations

to management. Directors are responsible for acting in the corporate interest according to the laws and regulations. The attendance rate of the directors for the past three years is 100%, and we plan to continuously improve the corporate environment to activate our board of directors.

Attendance of BOD Meetings

Items	2009		2010		2011	
	Executive Directors	Non-Executive Directors	Executive Directors	Non-Executive Directors	Executive Directors	Non-Executive Directors
Number of Members	3	4	3	4	4	5
Attendance	100%	100%	100%	100%	100%	100%

A BOD meeting can take place when the majority of board members are in attendance, and resolutions are carried by a majority vote of the attending members. To maintain transparency in BOD operations, directors with an interest in a specific agenda item shall not vote on that item, in accordance with the BOD rules. In 2010, a total of 13 BOD meetings were held and a total of 45 items

were deliberated, including 31 items of resolution and 14 items of reports. In addition, key management issues were discussed in 2010, including decisions on contributions to a mutual investment company, adjustment of the number of employees and signing of the CEO service contract.

BOD Meetings

Items	2009	2010	2011
Number of Meetings Convened	13	13	12
Number of Items (Resolutions, Reports)	40 (26, 14)	45 (31, 14)	63 (49, 14)
Items Reflected to Policy	21	30	50
Items Amended	1	3	4

Major Resolutions Made at 2011 BOD Meetings

Date	Agenda Item	Result
2011.02.18	Taeon Thermal Power #9,10 Construction Project Plan(draft)	Passed
2011.03.04	Amendment of articles of incorporation(draft)	Passed
2011.03.30	Term-end account for 2010(draft)	Passed
2011.05.17	Establishment of and contribution to Senamnoi Hydro Generation Project SPC in Laos(draft)	Passed
2011.6.28	Revision on employee wage(draft)	Passed
2011.6.28	Revision of welfare benefit regulations(draft)	Passed
2011.8.30	Establishment of and contribution to Floating Loading Facility Project in Southkalimantan, Indonesia(draft)	Passed as amended
	Pyeongtaek Combined Cycle Power Construction 2nd Project(draft)	Passed
2011.10.27	Submission of mid- and long term management objective(draft)	Passed
2010.12.29	2012 budget(draft) and budget execution plan(draft)	Passed

Reinforcing the Role of the BOD

BOD meetings are held on a monthly basis and when otherwise required, to discuss management issues and ensure responsible and transparent decision-making. In order to improve the top-down decision making system, working groups report at the BOD meetings when necessary.

In 2011, the BOD rules were amended and the BOD operating procedures were improved, to ensure the BOD's transparent decision-making.

◎ Key Improvements to the BOD for 2011

Items	Descriptions	Remarks
Reorganization of BOD	Modification of rules since being designated as a market-oriented public enterprise	Enhancement of BOD meeting's governance
Use of non-standing directors's professionalism	Operation of an expert committee for reviewing the agenda (the field of business strategy, investment and budget)	Stricter review on the agenda
Assessment of operations by BOD	External evaluation on BOD meeting's governance (same level as KEPCO and KOGAS)	Ensure of transparent decision-making

Activated Operation of Board of Directors

We frequently monitor the operations of the board of directors by checking the number of meetings, the rate of attendance, and the number of suggestions, in order to activate the operation of the board of directors. We guarantee easy access to information by opening a homepage exclusively used by employees to non-standing directors. Also, we do our best to publicize the activities performed by the board of directors by operating a homepage used exclusively by the board of directors.

In addition, we organize an explanatory meeting before opening the board of directors to allow the non-standing directors to actively raise their opinions. All important management issues are shared through reports made to the board of directors. Non-standing directors are invited to our power plants and employee gatherings in order to gain a better understanding of the company. We have also improved management efficiency by appointing board members as the commissioners of various internal committees.

◎ Field Inspection by Non-standing Director



Garolim Tidal Power Plant ('11. 7. 5)



Taean Thermal Power Plant ('11. 7. 5)



Seo-incheon Thermal Power Plant ('11. 10. 21)

Improvement of Management Accomplishments through Evaluation and Compensation

We fairly evaluate the management accomplishments of each executive officer including the CEO, and provide compensation to each executive officer based on the evaluation results. We try to improve management accomplishments by signing a management agreement with our mother firm, KEPCO, and deciding

the management goals to be accomplished by the CEO during his or her service term. We also work to actualize responsible management by each director by signing a management agreement with each standing director.

Risk Management

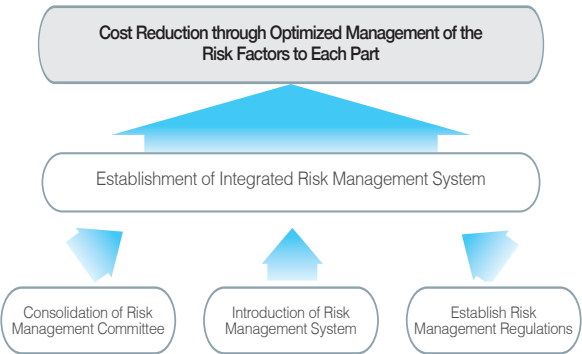
At Korea Western Power Co., Ltd., we are making a continuous effort to respond to the increasing uncertainty of the future and enhance the value of company by eliminating or minimizing the risk factors arising from the rapidly changing management environment.

Establishment of Risk Management System

In this regard, we established our risk management department at the end of 2008 to efficiently manage the overall risks of the company. In this department, working-level experts consisting of related managers detect the risk factors to each part of the company, and then report the countermeasures to the risk

management committee. The committee of department heads and team leaders examines and resolves the reported countermeasures. Risks are managed after being classified as financial risks, fuel risks, power trading risks, power generation (construction) risks, or new business risks.

Risk Management System Structure



Composition of Risk Management Committee



Financial Risk (Maintaining a healthy financial status)

We actively manage financial risk by identifying the three core risk factors of worsening financial stability, failure to respond to fluctuating exchange rate, and inappropriate capital management. In addition, we have developed countermeasures against risk factors requiring timely responses by monitoring

the core risk factors on a regular basis. Through these efforts, we have maintained a sound financial status by minimizing the financial risks arising from fluctuations in the exchange and interest rate. We created 12.9 billion won in new foreign-exchange profit and maintained about 7.4% business profit rate in 2010.



Fuel Risk

The supply of power generation fuel is mainly dependent on the overseas market, so high risk can be expected when the procurement environment changes, and the price of fuel has the potential to change at any time. We guarantee a stable supply of fuel by managing the global coal index change rate and the coal introduction price index and diversifying our suppliers. Also, we reinforce our capacity to forecast the market environment and manage the fuel procurement risk through the consultation provided by the management advisory committee. As a result, the international price of soft coal rose by 22.7% year-on-year, but the price of our introducing soft coal rose by 10.8%. We also promoted

economical fuel use by expanding swaps between power generation companies and ensuring an appropriate coal-mixed firing ratio.

Items	Results in 2011
Increase of soft coal introduction price	10.8
Increase of international price	22.7

Power Trading Risk (Reinforcing the capacity to forecast)

This part works to increase sales by carefully analyzing the effects that can be anticipated when the regulations or rules of the power market are revised. This part operates a power market simulator (Plexos) for the purpose of forecasting and analyzing the fluctuation risk of sales volume and power sales price resulting from external factors. Also, this part forecasts the power sales price and then shares the forecast results with the relevant departments or parts. As a result, the sales amounted to KRW 5.19 trillion, which exceeds 4.6% of the 2011 sales goal, KRW 4.96 trillion.

Items	1st Half	2nd Half
Goals KRW Billion)	25,442	49,598
Results (KRW Billion)	26,167	51,886
Achievement rate (%)	102.7	104.6

Power Generation (Construction) Risk (Organized to prevent accidents)

We develop and operate a system designed to provide online the causes of abnormal operations in the power generation facilities, along with the related countermeasures. We do our best to minimize the effect on the power system by preparing the emergency training program and regulations to prepare for accidents. These programs and regulations contribute to ensuring the stable power supply required to ensure the performance of the national economy and a stable quality of life for the public. We monitor the emission of environmental pollutants by operating a 24-hour monitoring system, and take action when necessary. In addition, we keep our facilities in optimal conditions by preparing the preventive maintenance plans required to ensure a stable power supply, and operate an accident recovery

system by installing a safeguard designed to stop the generator in the event of unstable conditions.

Items	2010	2011
Unplanned capability loss factor	0.30%	0.24%
Use rates	64.6%	74.5%
Deadline meeting ratio of power plant construction	100%	100%

New Business Risk

We operate the new business selection committee with the intention of effectively operating management resources when deciding on the starting a new business, and preventing financial loss or decreased profits due to investment failure. In addition, we systemically manage the risks involved in development projects, such as exchange rate and interest rates. This committee brings important business issues to the integrated risk management committee for deliberation and vote. Based on the results, we try to start new businesses, such

as integrated energy business projects in Cheongna and Kimpo, a combined cycle power plant project in Donducheon, Hwasun wind power plant project, and Yeongam F1 photovoltaic power plant project, as well as overseas projects including the heavy oil-fired power plant (O&M project) in Saudi Arabia, the Senamnoi hydro power plant construction in Laos, and the Canaan hybrid power generation project in the Philippines

Stakeholder Communication

Korea Western Power has diverse stakeholders with interests in corporate management for power generation, and these stakeholders interact with one another. Korea Western Power highly recognizes the importance of mutual trust with its stakeholders for sustainable management. To this end, the Company maintains diverse communication channels to identify and respond to the needs of its stakeholders. The needs identified through these channels are regularly analyzed and managed through sustainable management activities.

Stakeholder Groups

Items	Expected Values	Major Communication Channels
Shareholders (Government and Korea Electric Power Corporation)	Advancement and innovation of management Maximization of business results	General shareholders' meeting (annual), Meetings of the Board of Directors (monthly), CEO meetings of power group by sector (government and KEPCO)
General Public Employees	Cost saving Supply of quality power at fair prices Stable employment Improved welfare Individual achievement	ALIO disclosure (regular/occasional), website, web magazine, VOC PR Center
Partners	Transparent management Fair competition SME support and co-prosperity	CEO Hot-Line, CEO Letters, Town meetings, Labor-Management meetings (quarterly), Labor-Management talks (occasional), complaint system, employee welfare satisfaction survey, Dream Board (Youth BOD), suggestion system, briefings on management issues, corporate newsletters
Partners	Transparent management Fair competition SME support and co-prosperity	Customer satisfaction survey (annual), integrity survey (annual), partner meetings, steering committee, fair competition committee, P-CRM, special support policies for SMEs
Local Communities (Local governments, local residents and civil or environmental organizations)	Stable employment	Environmental monitoring board meeting (quarterly), talks with local governments and residents, committee for deliberation of programs supporting local communities, CEO meetings and social contributions by region



Sustainable Management Implementation System

◎ Korea Power Exchange



Bong-hwan Hwang, Deputy General Manager, Market Operation Team, Korea Power Exchange

Korea Power Exchange is providing various market operation services for the domestic power market, including power generation cost evaluation, technology data about power generators, data to supplement power system operation and the application of coefficient, based on the operation rules of the power market, in partnership with Korea Western Power. The Company has significantly contributed to the efficient operation of the domestic power market and the stable supply of power through the optimized management of its power facilities, the advancement of power facility operation, and the active implementation of green business. I hope that the company will continuously focus on R&D to respond to the problem of climate change in order to pursue sustainable management.

◎ Research Institute



Chang-ho Lee, Electricity Industry Policy Research Center, Korea Electrotechnology Research Institute

Korea Western Power and the Korea Electrotechnology Research Institute have been engaged in a partnership for policy research on the renewable energy business and investment strategies, and the Institute has identified the status of the field and gained feedback about the impact of policies from Korea Western Power. The Company has a challenging spirit. It pioneers the future of the power industry rather than focusing on short-term results. I hope that the company will continue to actively respond to the paradigm shift in the power industry by successfully addressing the issue of climate change and developing renewable energy sources, and lead the sectors of power generation with competitiveness

◎ Financial Organization



Deputy Branch Manager Dong-soo Kim, Nonghyup Samseong-dong Branch

Nonghyup has served as the primary bank of Korea Western Power, providing the company with a system for the stable flow of funds and the related support systems. I expect that the company will sustainably grow into a respected enterprise that contributes to Korea's industrial development and an improved quality of life for its citizens by securing diverse material supply channels and efficient corporate operation. Continuous technology development and improvements in operating efficiency will improve its productivity and save costs, and the financial results will be maximized. When the added value created through this process is invested in stable power production, including renewable energy development, the company will be able to achieve sustainable management targets.

◎ Partner SME



CEO Geon-soo Lee, Korea Air Conditioning Tech

Korea Air Conditioning Tech has worked on an SME partnership R&D project with Korea Western Power, and the related patent is co-owned by Korea Air Conditioning Tech and Korea Western Power. The product that was developed through this partnership can save energy by up to 40% compared to existing products, and was designated as the best SME product, contributing to the revenue growth of Korea Air Conditioning Tech, and enabling stable power facility operation and power generation cost saving by Korea Western Power. I hope that Korea Western Power will continuously support and partner with Korea Air Conditioning Tech in the areas of corporate management, technology development and sales channels development, so that Korea Air Conditioning Tech can overcome the typical challenges faced by SMEs and achieve long-term growth.

◎ Local School



President Young-jin Lee, Samgoe High School, Pyeongtaek

Samgoe High School in Pyeongtaek was designated as Korea's only venture-specialized school in 2009, and has attracted applicants from across the country. The school was able to accomplish this thanks to Korea Western Power. The company has improved educational conditions by donating scholarship funds and equipment since 2000, and even expanded its active support through the sisterhood relationship building since 2006. I hope that Korea Western Power will provide continuous sponsorship and support, and that it will play a pivotal role in the educational development of the local community. I also hope that by hiring many employees who graduated from local schools, Korea Western Power will solve the major social problem of unemployment.

◎ Labor Corporation



Labor Attorney Jeong-hyeon Lee, Donghwa Human Labor

Donghwa Human Labor serves as an advisor to Korea Western Power in relation to HR and labor. While technically we have served as advisors, in fact we have found that the HR and labor system of Korea Western Power is already so reasonable that we have even been benchmarking some aspects of its existing system. Reasonable labor-management relations can be described as the DNA of a sustainable business. If an advanced labor-management practice that pursues the mutual prosperity of both parties is introduced, and a foundation is maintained on which both parties can trust each other, the company can overcome any crisis through its firm labor-management partnership. I hope that the company will lead Korea's labor-management practices through its advanced and reasonable labor-management relations.

Sustainable Management Implementation System

Korea Western Power has organized the business process system to enable integrated and systematic responses to the issues raised by each stakeholder by allocating managers in charge of sustainable management at Business Planning Office, as part of its efforts to efficiently operate a sustainable management

system. In particular, the Company has organized a consulting body that is a network of related team members, which collects and resolves issues by stakeholder. Related activities include sustainable management planning, monitoring progress and performance, and sharing of global CSR trends.

◎ Major Roles of Sustainable Management Consultative Bodies of Korea Western Powe

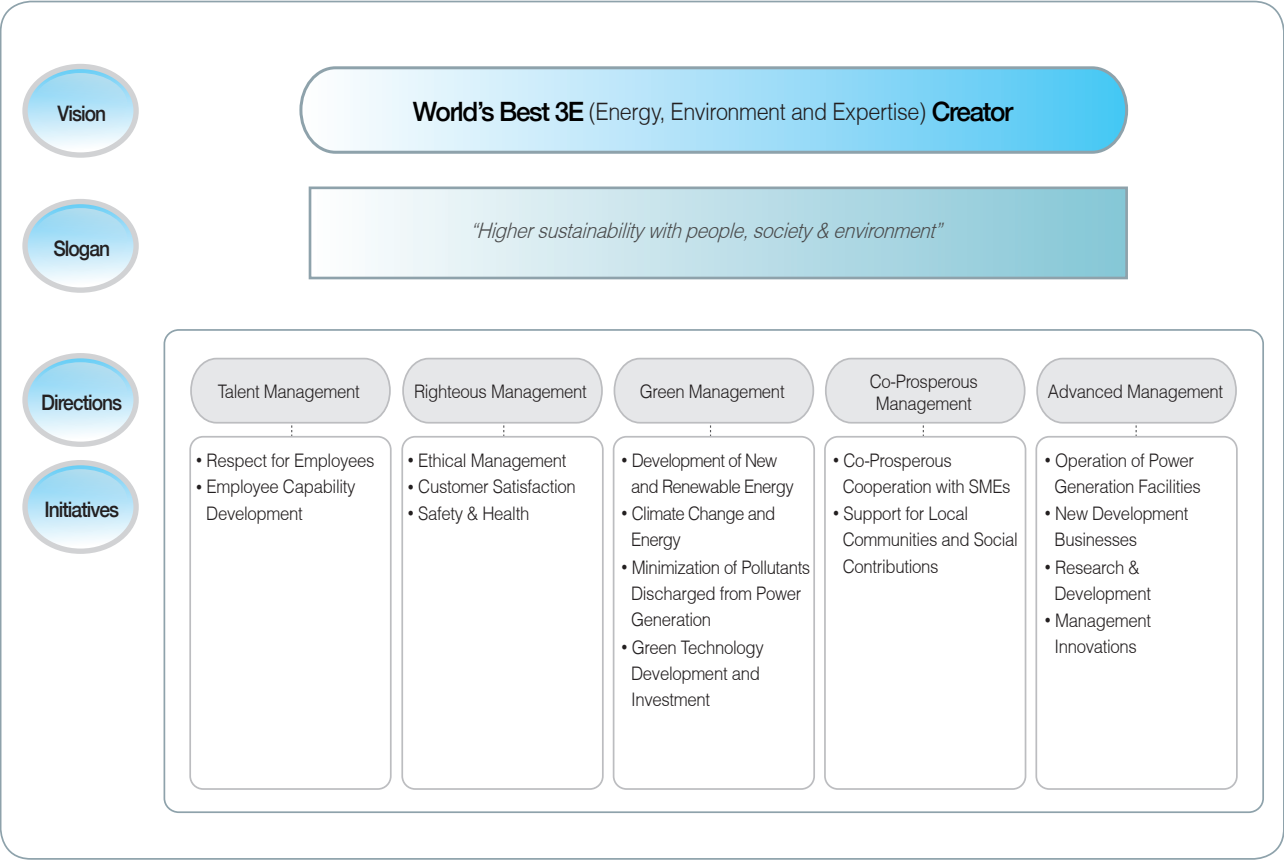
- Develop sustainable management strategy and review directions of implementation at the enterprise level
- Review plans to respond to external and internal CSR issues and participate in international organizations' activities related to sustainable management
- Publish sustainable management reports and make PR activities
- Support partners' development of CSR implementation systems

Vision for the Sustainability of Korea Western Power




The Sustainability slogan for Korea Western Power, under the ultimate corporate vision of "World's Best 3E Creator," is "Higher Sustainability with People, Society and the Environment." This slogan means that Korea Western Power will pursue development by prioritizing harmony among all stakeholders, society and the environment.

In order to realize the Sustainability vision, Korea Western Power has selected five directions for implementation, and made systematic efforts to resolve major issues. The 2011 Sustainability Report of Korea Western Power featured major issues for five directions, and highlighted the content and performance of each issue.

◎ Sustainable Management Implementation System

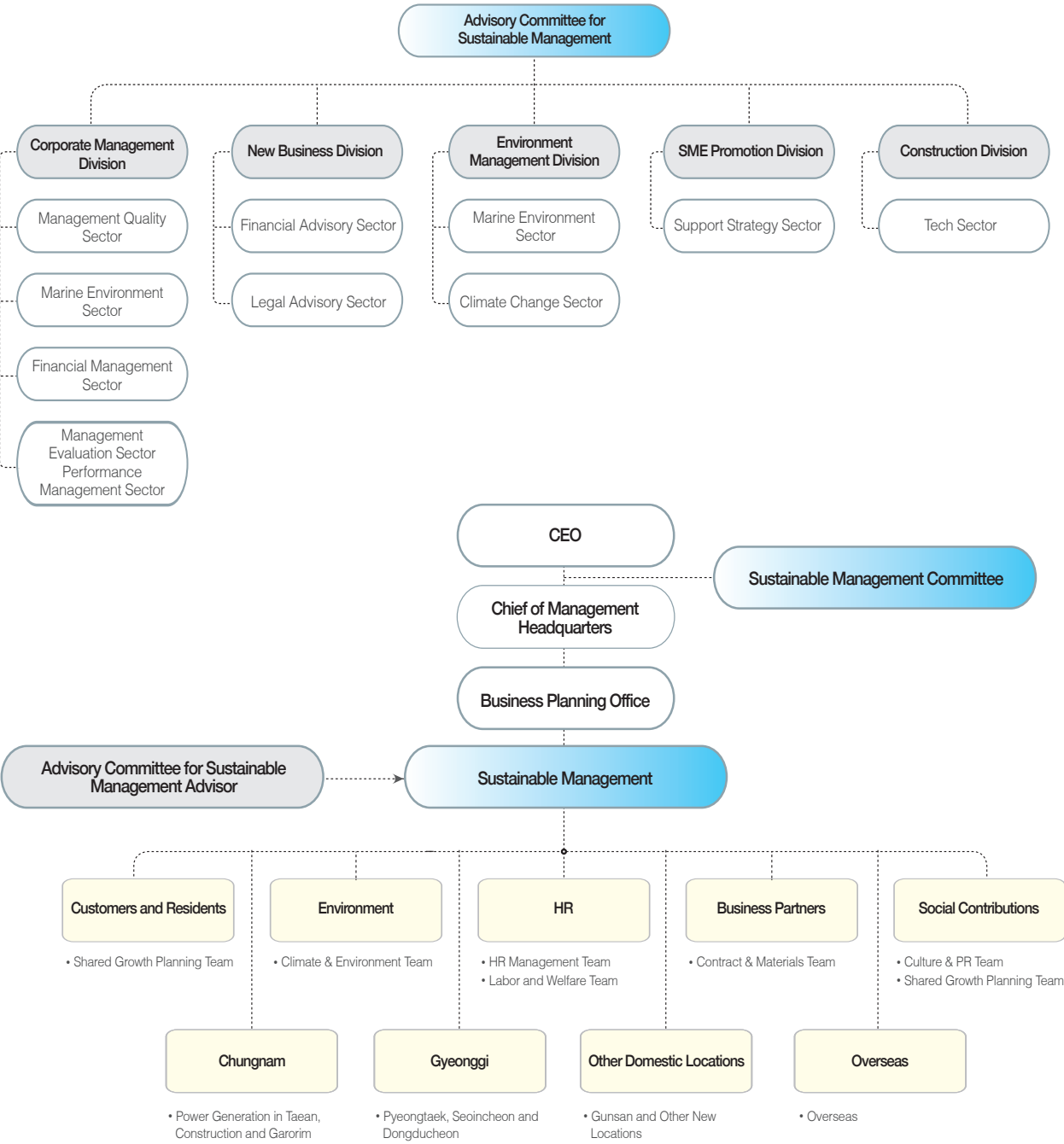


Introduction to members of the Advisory Committee

Field		Name / Date of Birth	Career	Commissioned Team
Business Management	Management Quality	 Shin Wan-seon (61.03)	•Doctor of engineering, University of Oklahoma •Member of USA NASA Advisory Committee •Director of the Korean Society for Quality Management •Professor of the Dept. of Systems Management Engineering, Sungkyunkwan University	Power Plant Office Safety & Quality Team ('04.8)
	Fuel Resources	 Bang Seung-gyu ('55. 7)	•Doctor of Law, The University of Sydney •Vice President of Korea-Australia Businessmen Society •CEO of Korea Electric Power Investment Co., Ltd. •President of AUCTUS Investment Partners	Business Planning Office Fuel Team ('09.8)
	Financial management	 Kim Dae-sik ('55. 01)	•Doctor of Business Administration, The University of Pennsylvania Wharton School •Advisor of Korea Western Power Exchange Control Commission •Professor of the School of Business, Hanyang University •President of Korea Insurance Research Institute	Business Management Office Finance Team ('04.8)
	Performance Management	 Kim Heung-sik ('52. 05)	•Doctor of Accounting, Korea University Graduate School •Member of Government Investment Organization Business Evaluation Commission •Director of The Korean Association for Public Enterprises •Vice Chairman of the Korean Academic Society of Business Administration •Professor of Accounting, College of Economics and Management, Chungnam National University	Business Planning Office Performance Management Team ('11.7)
	Risk Management	 Kim Jong-il ('65. 12)	•Doctor of Business Administration, Korea University Graduate School •Professor of the School of Business, the Catholic University of Korea •Member of KEPCO Disposal Advisory Committee •Advisor of KEPCO KPS Exchange Control Commission	Business Planning Office Organization&Budget Team ('11.12)
Development of New Businesses	Financial Consulting	 Min Yu-seong ('54. 03)	•M.B.A. of New York State Univerty •Co-Representative and Chairman of T-Stone Co., Ltd. •Representative and Chairman of KDB Financial Holding Company •President of the Korea Development Bank	Future Business Office Business Strategy Team ('11.9)
	Legal Affairs	 Lee Won ('63. 07)	•Yale University Law School •Legal Advisor of Overseas Businesses of KEPCO, POSCO, and Samsung •Partner Attorney of Baker & Mckenzie (Hong Kong Office)	Future Business Office Business Strategy Team ('04.8)
Environment Management	Marine Environment	 Kim Jong-man ('47. 09)	•Yale University Law School •Legal Advisor of Overseas Businesses of KEPCO, POSCO, and Samsung •Partner Attorney of Baker & Mckenzie (Hong Kong Office)	Power Plant Office Climate Environment Team ('05.6)
	Climate Change	 Kim Jeong-in ('58. 07)	•Doctor of Environmental Economics, University of Minnesota •Member of Climate Change Task Force, Ministry of Commerce, Industry and Energy •Member of Climate Change Task Force, Korea Energy Management Corporation •Professor of the Dept. of Industrial Economics, Chung-Ang University	Power Plant Office Climate Environment Team ('05.6)
Promotion of Small & Medium Businesses	Support Strategy & Technology	 Kwak Su-geun ('53. 08)	•Master of Geophysical Prospecting, Seoul National University •Doctor of Applied Geophysics, Colorado School of Mines •Former President of the Korea Institute of Geoscience and Mineral Resources •Member of Geumgang Environmental Management Office Commission •Member of Land Policy Committee	Power Plant Office Co-Prosperity Team ('08.8)
Construction	Businesses	 Lee Tae-seop ('48. 07)	•Master of Geophysical Prospecting, Seoul National University •Doctor of Applied Geophysics, Colorado School of Mines •Former President of the Korea Institute of Geoscience and Mineral Resources •Member of Geumgang Environmental Management Office Commission •Member of Land Policy Committee	Construction Office Business Management Team ('09.8)

Advisory Committee for Sustainable Management

Korea Western Power operates the Advisory Committee for Sustainable Management to collect opinions of experts from various circles and advance the system with the aim of sustainable management advancement. The members of the Committee consist of experts in ten sectors and five divisions, and the Committee aims to maintain an organic cooperation system with the CEO and consultative groups in charge of the sustainable management of Korea Western Power. The Company will continuously make efforts to ensure appropriate policy-making by achieving efficient corporate management and maintaining organic partnerships with external experts.

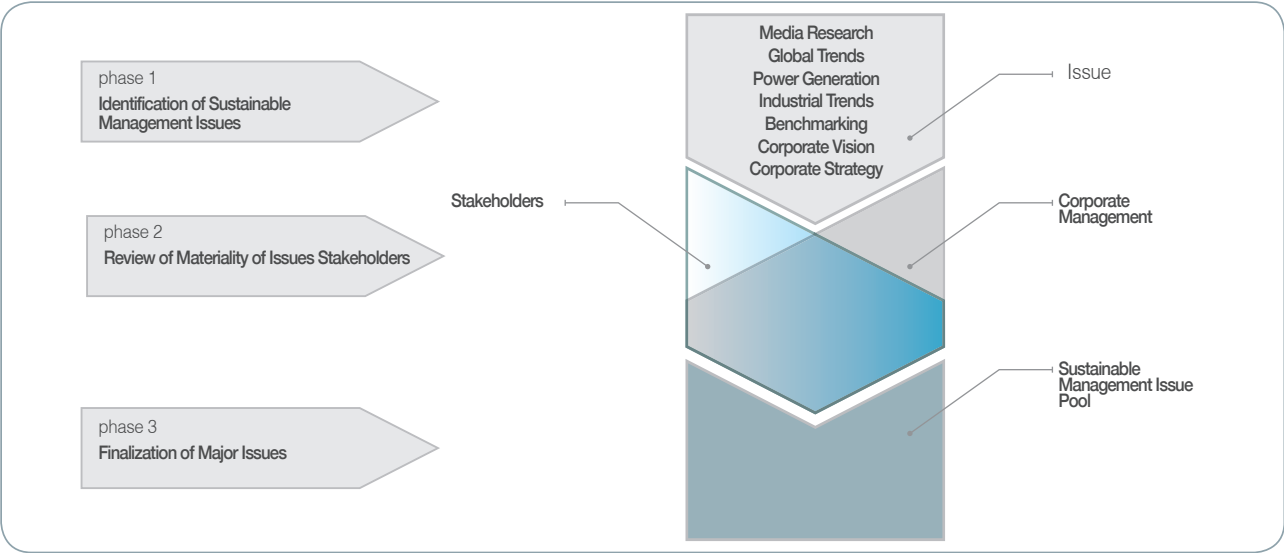


Selection of Major Issues to Be Reported

Process of Selection of Issues

Korea Western Power has selected major sustainable development issues in three phases.

- Phase 1: Select internal and external issues related to sustainable management, including media research, power generation industrial trends and corporate strategy
- Phase 2: Review the interests of stakeholders and the public, and impacts on corporate management activities
- Phase 3: Finalize major issues through Sustainability Report TF and the management review



Basis for Selection of External Issues

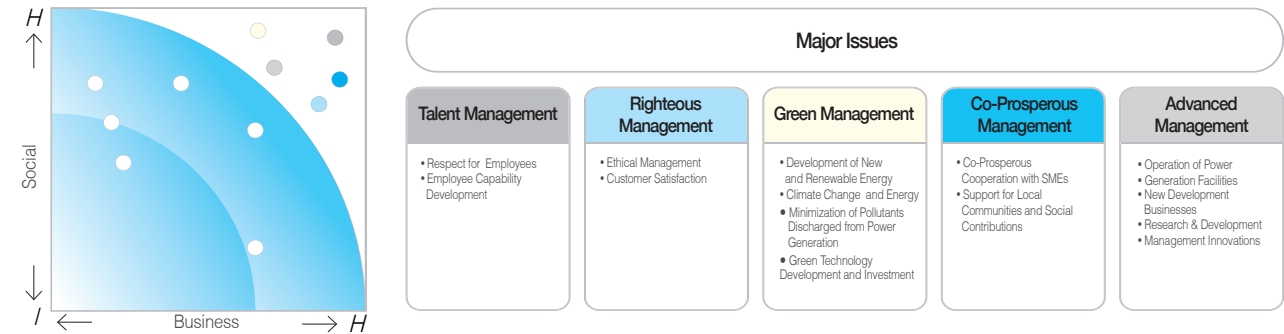
- Media exposures: Analyze coverage of Korea Western Power by domestic and foreign media from 2010 to March 2011
- Industry analysis: Analyze Sustainability reports, major activities and issues of other power generation companies
- Global trend analysis: Analyze guidelines for Global Reporting Initiative (GRI)

Basis for Selection of Internal Issues

- Mid-term business plan of Korea Western Power
- Vision, goal and direction of implementation of CSR of Korea Western Power

Selection of Major Issues

Korea Western Power has assessed the major interests of stakeholders and impacts on corporate management activities through the process to select major issues; selected 15 major issues for five strategic directions, including Talent Management, Management, Righteous Management, Green Management, Co-Prosperous Management and Advanced Management; and described the contents and performances of each issue.



© The table below shows the results of an analysis on the relevance of selected issues by stakeholder.

	Customer	Employee	Shareholder	Local Community	Government	Business Partner
Green Management						
- Development of New and Renewable Energy			□	□	□	
- Climate Change and Energy	□			□	□	
- Minimization of Pollutants Discharged from Power Generation			□	□	□	
- Green Technology Development and Investment	□		□	□	□	
Co-Prosperous Management						
- Co-Prosperous Cooperation with SMEs					□	□
- Support for Local Communities and Social Contributions				□	□	
Talent Management						
- Respect for Employees		□				
- Employee Capability Development		□				
Righteous Management						
- Ethical Management						□
- Customer Satisfaction	□			□		
- Safety & Health		□			□	□
Innovation Management						
- Operation of Power Generation Facilities		□	□			□
- New Development Businesses		□	□	□		□
- Research & Development		□	□			□
- Management Innovations		□	□			□

Comparison of 2010 & 2011 Issues

The 2010 Sustainability Report elaborated on issues for categories such as Economy, Environment, Society and others, while the 2011 Report organized the major issues by strategic direction of the Sustainability Vision, completing a systematic structure that was more accessible to stakeholders.

16 Major Issues for 2010		5 Major Issues for 2011	
Economy	Operation of Power Generation Facilities	Talent Management	Respect for Employees
	Development of New Domestic and Overseas Businesses		Employee Capability Development
	Development of New & Renewable Energy	Righteous Management	Ethical Management
	Technology Development		Customer Satisfaction
	Management Innovations		Safety & Health
	Financial Results	Green Management	Development of New and Renewable Energy
Environment	Climate Change and Countermeasures		Climate Change and Energy
	Management of Pollutants Discharged from Power Generation		Minimization of Pollutants Discharged from Power Generation
Society	Safety and Health	Co-Prosperous Management	Green Technology Development and Investment
	Respect for Employees		Co-Prosperous Cooperation with SMEs
	Employee Capability Development		Support for Local Communities and Social Contributions
	Ethical Management	Advanced Management	Operation of Power Generation Facilities
	Co-Prosperous Cooperation with SMEs		New Development Businesses
Other Issues	Support for Local Communities / Social Contributions		Research & Development
	Fuel Purchase		Management Innovations
	Laying a Foundation for the Expansion of Power Generation Facilities		

- Development of Renewable Energy
- Climate Change and Energy
- Minimization of the Emission of Pollutants
- Green Technology Development & Investment

Green Management

We, Korea Western Power Co.Ltd, will realize our vision of 'World Best 3E Creator' by contribute to the society with the best energy generated in harmony with Human, Technology, Environment.

Development of Renewable Energy

Strategy to Respond to the National RPS

Korea Western Power has built and operated renewable energy facilities with a production capacity of 5.3 MW, and these include Taeon Photovoltaic Energy, Taeon Small Hydro Power and Samrangjin Photovoltaic Energy. The company plans to build an additional wind power facility and photovoltaic energy facility by 2012, when the Renewable Portfolio Standard (RPS) is adopted, but the target is still below the mandated volume of 2%.

As Garorim Tidal Power and Taeon IGCC, which are currently being constructed, will not meet the RPS mandates by 2014 when they are completed, Korea

Western Power plans to meet the standard by purchasing REC from the REC trading organization. The company will be able to meet the RPS mandates in 2015 through the full commercial operation of Garorim Tidal Power and Taeon IGCC, but the mandate will grow by 1% each year, to reach 10% of the total power production volume in 2020. In consideration of the mandate, the Company plans to develop diverse renewable energy facilities including wind power, fuel cells, marine wind power and tidal power.

◎ Yearly Plan on Mandated Volume and Targeted Volumes of RPS

(Unit: %)

Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Mandated Volume	2.0	2.5	3.0	3.5	4.0	5.0	6.0	7.0	8.0	9.0	10.0
Produced Volume	0.13	0.14	0.48	5.52	6.11	6.30	7.59	8.89	8.89	8.89	8.89

Development of Renewable Energy Projects



• Garorim Tidal Power Plant



• Samrangjin Photovoltaic Power Plant



• Bird's-Eye View of Taeon IGCC Plant Power Plant

Tidal Power Plant

The Company has worked on the construction of the world's largest tidal power plant, with a capacity of 520 MW, in Garorim Bay, Seosan and Taeon, Chungcheongnam-do. Since it established Garorim Tidal Power Co., Ltd. in September 2007, it has strived to obtain approvals and complete land compensation plans, with the target of breaking ground on the site in December 2010. The plant is scheduled to be completed in December 2015. Once completed, the plant will significantly help the Company to meet the renewable energy mandates.

Photovoltaic Energy

As the first power business, the Company completed the 120 kWp capacity photovoltaic power plant in the Taeon Power Headquarters in August of 2005, and has commercially operated the plant. In addition, the Company completed the 3,000 kWp capacity Samrangjin Photovoltaic Power Plant using the idle land of the power plant in April 29, 2008, and is operating the plant. As part of the 2nd RPA, Korea Western Power is preparing to construct a new 8.3 MW capacity photovoltaic power facility, and the completion of this facility is scheduled for December 2011.

Taeon IGCC

Korea Western Power has signed an agreement with the government for the construction of the 300 MW capacity Taeon IGCC, and is conducting the comprehensive design & technical program. The construction of the plant will be initiated in November 2011, and completed in November 2015.

Climate Change and Energy

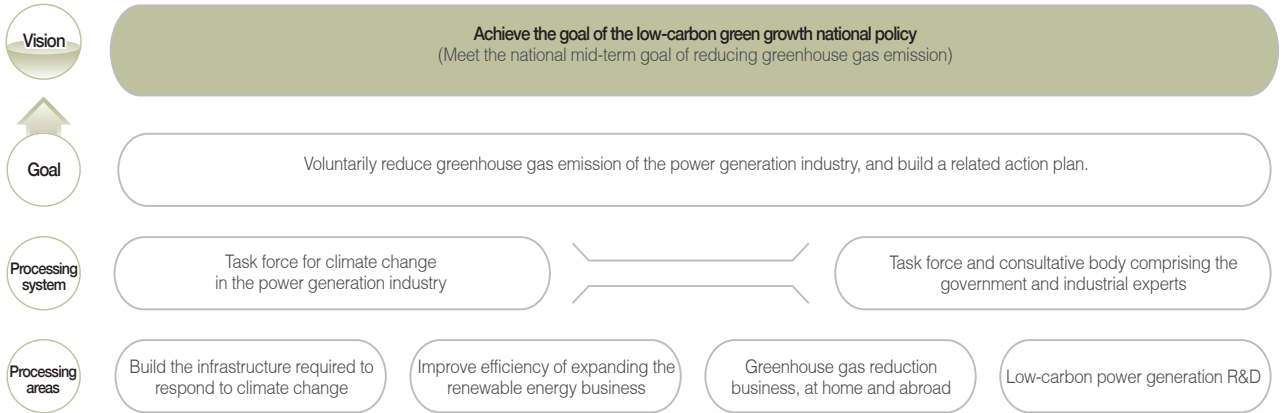
Sustainable Management System

As of the end of 2010, thermal power plants operated by burning fossil fuel account for about 66.5%¹⁾ of Korea's total power generation capacity. In this regard, finding a solution to respond to the climate change associated with burning fossil fuel is emerging as a critical social issue, and each company should actively participate in resolving this issue for the sake of guaranteeing sustainable management.

We currently hold a 10.8% share of the Korean power market. 87% of our power generation facilities are operated by burning fossil fuels, such as coal, oil and

gas. As a company that generates most of its power by operating thermal power plants, we are highly vulnerable to the issue of climate change. We are continuously trying to reduce our emission of greenhouse gases by preparing a strategy to overcome climate change and building the required infrastructure. In addition, we are trying to secure the emission right by signing the emission right trading MOU with Korea Power Exchange in 2008 and 2009, as a part of our efforts to build the foundation for the greenhouse gas trading system that is expected to be used as a means to overcome climate change.

◎ Climate Change Strategy



Building the Greenhouse Gas Inventory System

To reduce the emission of greenhouse gas, the correct greenhouse gas emission volume must be surveyed. We prepare the greenhouse gas emission volume inventory report by installing a greenhouse gas emission volume inventory system that meets international standards.

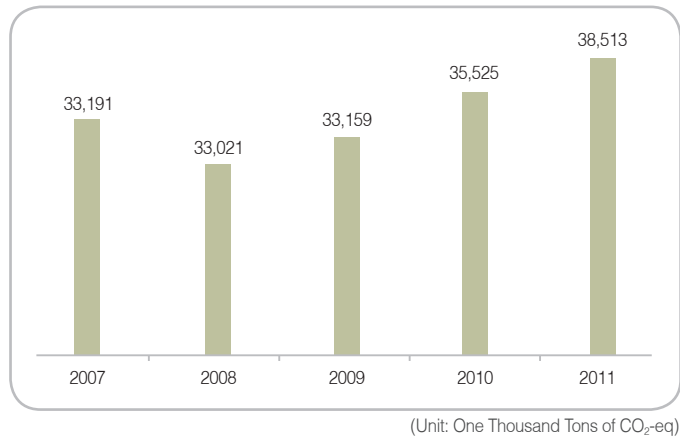
Since the establishment of this system, we have calculated our greenhouse gas emission volume in accordance with the IPCC guideline for Greenhouse Gas Inventories, the calculation standards provided by the World Resource Institute

(WRI) and the World Business Council for Sustainable Development (WBCSD). In 2009, we developed and installed our own greenhouse gas inventory control procedures and guide systems.

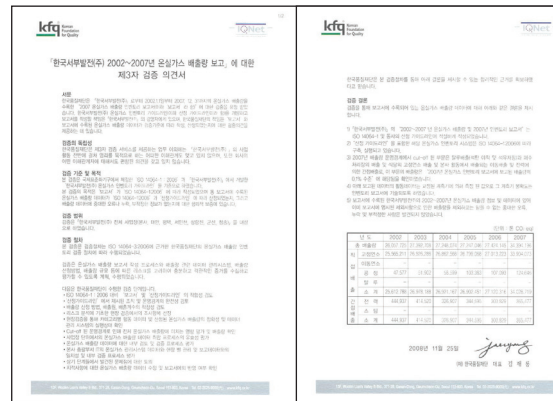
We have secured the objectivity of our greenhouse gas emission volume by acquiring the certification of our greenhouse inventory reports (between 2002 and 2007) by the Korea Foundation for Quality in 2008, and utilize these for our climate change policies.

1) Prepared based on the amount of power generated by the power generation companies, quoted from the statistic data No. 79 of KEPCO (2009).

Greenhouse Gas Emission Volumes of Each Year



Greenhouse Gas Inventory Verification Statement



Efforts to Decrease Greenhouse Gas

Currently, Korea is not classified as a country that is required to decrease its greenhouse gas emissions. However, we are faithfully performing various projects such as improving the efficiency of our power generation facilities and developing technology to decrease greenhouse gas emissions, and in doing so are preparing for the enforced decrease of greenhouse gas emission.

Energy Saving Project

The energy consumption of the power generation industry is more focused on management accomplishments and climate change protocol than cost saving. We operate our business in a manner that is oriented toward decreasing energy consumption by signing voluntary energy saving agreements and reporting our energy saving record.

It is estimated that the replacement of the thyristor transformers operated in the Taeon thermal power plants Nos. 5 and 6 with high-efficiency electric precipitators will reduce our greenhouse gas emissions by 5,549 tons of CO₂ eq each year.

Improving the Efficiency of Power Generation Facilities

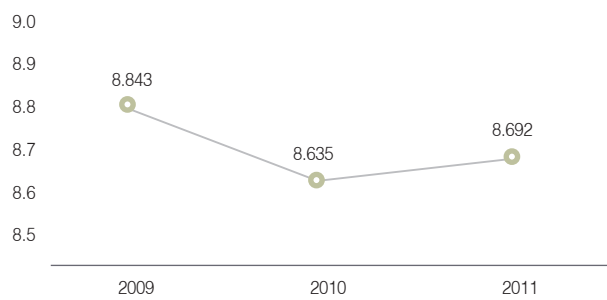
We are working to reduce greenhouse gas emissions by installing state-of-the-art facilities with highly enhanced power generation efficiency when new electric power facilities are installed, and are building an integrated combustion management system and improving our coal blending programs.

Development of CO₂ Treatment Technology

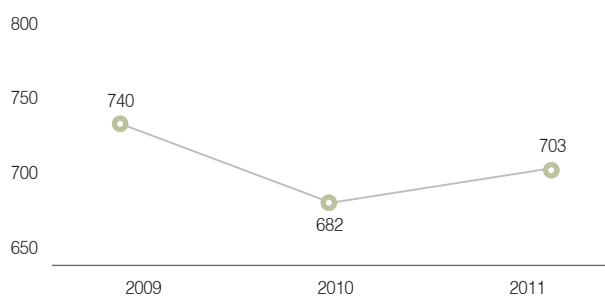
Between 2005 and 2009, we have invested 54.64 billion won in developing CO₂ separation dry recycling absorbent, waste gas CO₂ absorption tower fluidized bed process, mass oxygen particle production technology, IGCC Commercialization technology and CO₂ separation technology using amine-based chemical absorption processes.

Energy Intensity

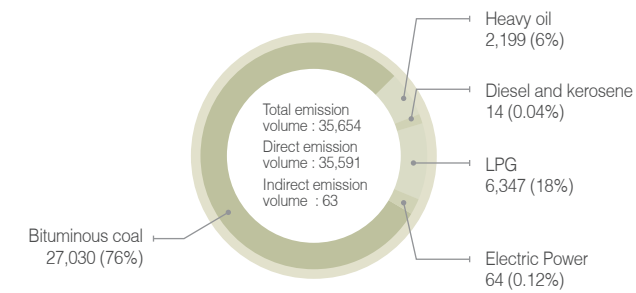
(Unit: GJ/MWh)



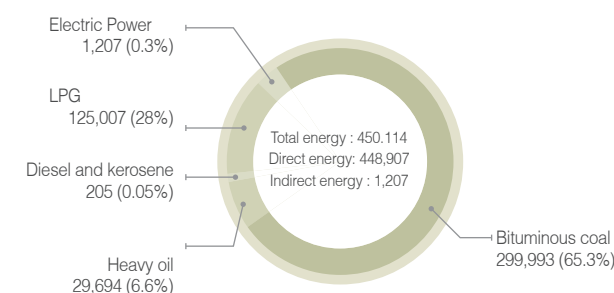
Greenhouse Gas Trends by Intensity

(Unit: g-CO₂/KWh)

Greenhouse Gas Emission Volume by Energy Source

(One thousand tons of CO₂ eq)

Energy Consumption Volume by Fuel



(Unit: GJ)

5th day-No-Driving System

We work to save energy and reduce greenhouse gas by promoting the 5th day-no-driving program, operating a commuting bus for employees, and limiting work-related travel.

Carbon Neutral Program

To support social efforts to reduce greenhouse gas emission, we have been participating in the Carbon Neutral Program since 2008 by providing the solar photovoltaic power generation system for a social welfare institute in Eumseong, Chungcheongbuk-do.

Securing the Carbon Emission Right and Building the Foundation Required for Joining the Carbon Market

We have proactively joined the clean development mechanism project and greenhouse gas emission recording program in order to prepare for the enforcement of global greenhouse gas regulation based on the market mechanism. Through these efforts, we expect to show our strong intention

to reduce greenhouse gas emissions and be ready for the carbon market regulations. Through 2009, we secured the credit for up to 550 thousand tons of CO₂ eq.

Promoting the UN CDM Project

We completed the construction of 120 kW solar photovoltaic power generation facilities in Taeon in Aug. 2005, and promoted the clean development mechanism project on Taeon small hydro power generation facilities and the Samrangjin photovoltaic power generation facilities in Sep. 2007. Through these efforts, we expect to reduce greenhouse gas emissions by up to 6,715 tons of CO₂ eq annually for 10 years. In addition, we expect to reduce emissions by 24,000 tons of CO₂ eq annually by using the organic sludge generated in wastewater treatment facilities as

fuel for coal-fired thermal power plants starting Aug. 2009. This project is expected to contribute to reducing fuel expenses by replacing 80,000 tons of coal imports.

Furthermore, the Garolim tidal power plant, which at 520 MW is the biggest tidal power plant in the world, and the IGCC (300 MW) power generation facilities are under construction. These two projects are planned to be completed in 2012.

Project Name	Expected CERs Amount (CO ₂ eq/year)	Progress Status	Effective Terms of Project
Samrangjin Photovoltaic Power Plant	2,215 tons	Registered to the UN CDM	2009. 1.1 thru 2018. 12. 31 (10 years)
Taeon Small Hydro Power Generation Project	4,500 tons	Applied to the UN CDM EB (national approval completed)	2010. 1.1 thru 2019. 12. 31 (10 years)
Co-firing Biomass Fuel and Coal	24,000 tons	The business plan is complete.	2011. 1. 1 thru 2019. 12. 31 (10 years)

Utilizing the Resources and Minimizing the Generation of Pollutants

Registration and Management of Global Greenhouse Gas Reduction Project

We have actively joined the greenhouse gas reduction project recording and management system operated by the government for the purpose of meeting the requirements of the international CDM Project and reducing the greenhouse gas emitted by industry. We achieved profits of 520 million won by selling the emission right after reducing the greenhouse gas by 117 thousand tons of CO₂

eq in 2011 through these efforts. We created accumulated profits of 3.7 billion won by selling the emission right, and reduced emissions by a total of 774 thousand tons of CO₂ eq until 2011.

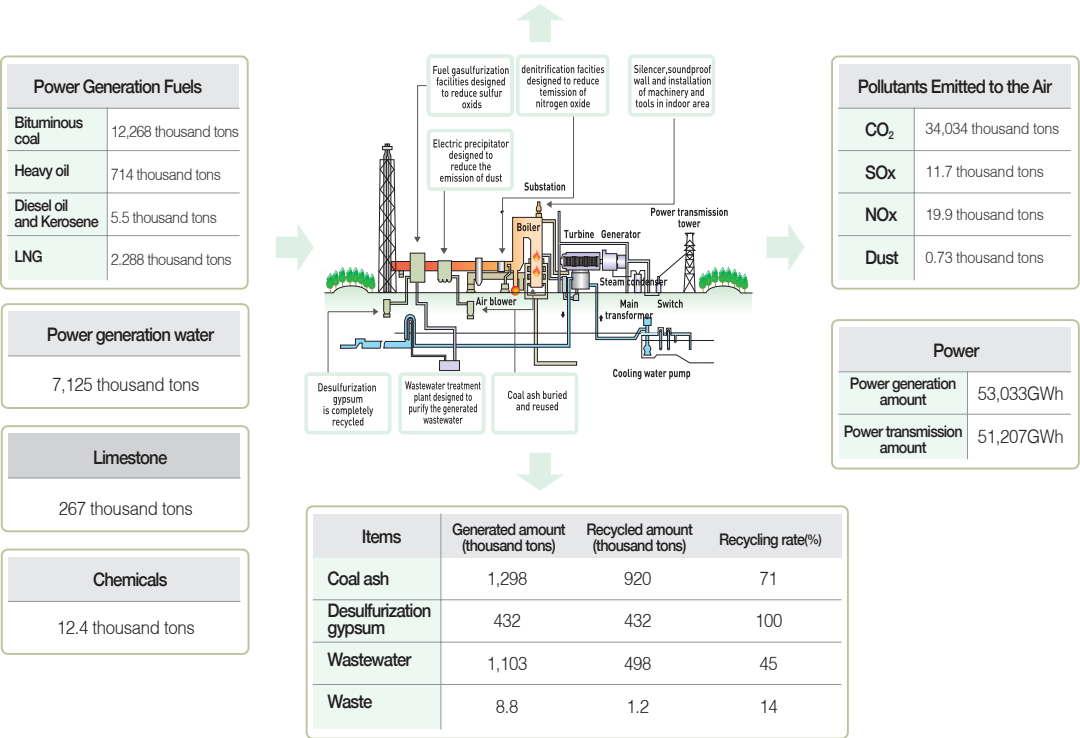
- **Project Name** : Seoincheon Combined Cycle Power Plant Performance Improvement Project through the Adoption of a High-Efficiency Gas Turbine
- **Project registration** : Jun. 2006 (first project in Korea)
- **Expected energy saving amount** : LNG 47,505/year calculated based on the business plans.
- **Reduced amount of greenhouse gas** : 550 thousand tons of CO₂ eq (2007~2009)
- **Profit acquired by selling the emission right** :

2009	2010	2011	Total
0.56 billion won	0.56 billion won	0.5 billion won	1.62 billion won

- Expected additional reduction : about 200 thousand tons of CO₂ eq calculated based on the business plan.



It is a characteristic of the industry that a power generation company inevitably uses a huge amount of resources and generates pollutants. Electrical power is an indispensable element required for quality of life, and is an element that critically influences the environment through the depletion of fossil fuel and environmental disruption. We aim to contribute to the sustainable growth of our society by recycling resources, managing pollutants and operating a resource cycling system.

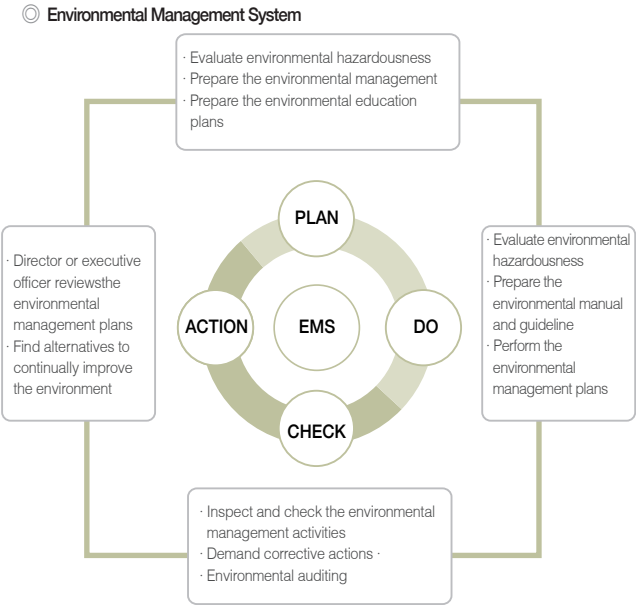


Preserving the Environment Using the Environmental Management System (EMS)

We work with a focus on environment, perform the environment management protocol by processing the PDCA (Plan-Do-Check-Act) cycle and acquire ISO14001 certificates. Also, we annually perform an environmental audit, aiming to minimize the potential environment risk by effectively operating an environmental management system.

Low-Carbon Green Growth through GMS

As an ISO14001-certified company operating green businesses and complying with voluntary environmental management contracts, Korea Western Power is driving continuous environmental improvements by developing the Plan, Do, Check and Act Process. The Company conducts internal audits on an annual basis to minimize potential environmental risks by evaluating the efficient operation and appropriateness of the environmental management system. In 2011, the Company acquired a certificate by participating in a pilot certification project for green management systems for the first time, built the green management system and pursued low-carbon green growth.



Improvement of Trust through Disclosure of Environmental Information

Korea Western Power is making ceaseless efforts to improve trust among stakeholders through transparent environmental management. By building a system for air quality, water quality and surrounding air quality measurement management, the Company is transmitting key measurement data to

environment-related organizations and local governments. For local residents living near the power plants, the data is provided on displays to enable easier access to information.

Minimization of Environmental Pollution through Compliance with Environmental Laws and Regulations

Korea Western Power complies with environmental laws and regulations related to the air environment, water environment and wastes, and has never been subject to penalties or restrictions due to violations of the applicable laws and regulations. Furthermore, Seoincheon Combined Cycle Power Complex Division, Taeon Thermal Power Complex Division and Pyeongtaek Thermal Power

Complex Division have voluntarily signed environmental contracts with local governments, and the Company has defined standards for the management of air and water pollutants (discharge target: 30% of the legal allowance) as well as wastes (recycling target: over 75%) at the enterprise level to minimize environmental pollution.

Minimization of Emission of Air Pollutants

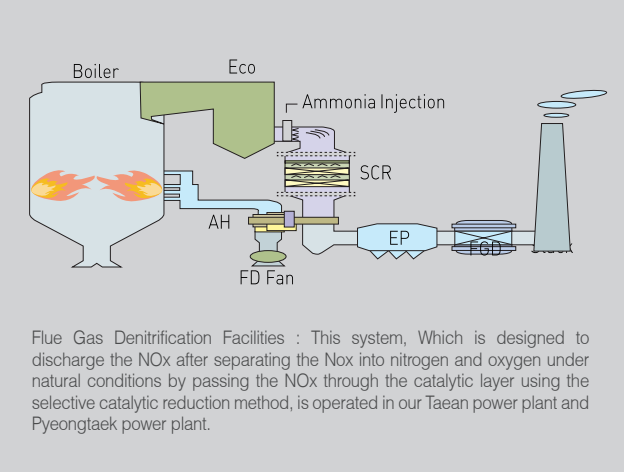
Thermal power plants using coal and oil emit sulfur oxides, nitrogen oxides and dusts, and plants using natural gas emit nitrogen oxides. Korea Western Power has strived to minimize the emission of air pollutants by improving the reliability

of the emission prevention facility through the development and operation of internal management standards that are stricter than various requirements.

◎ Flue Gas Desulfurization Facilities



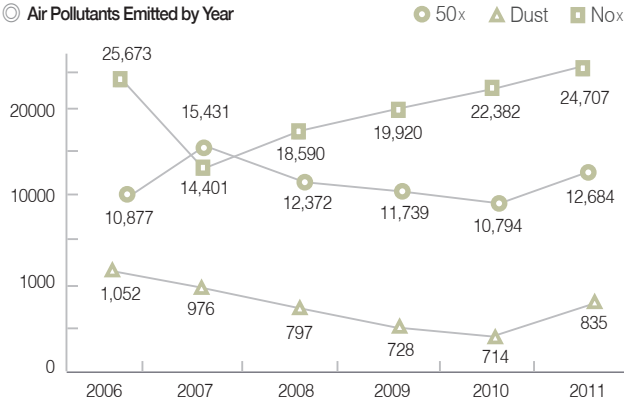
◎ Fuel Gas Denitrification Process



Control of SOx and NOx

Korea Western Power has installed and operated a flue-gas desulfurization system based on the advanced wet limestone method, a flue-gas denitrogenization system based on CSR, which is the most advanced NOx reduction technology, and highly efficient electronic precipitators at Pyeongtaek Thermal Power Complex Division (thermal power plant using oil) and Taeon Thermal Power Complex Division (thermal power plant using coal). The Company installed low-NOx combustors at Seoincheon Combined Cycle Power Complex Division and Gunsan Combined Cycle Power Division, which reduce emissions of NOx, in order to minimize its emissions of air pollutants. In addition, the facility to reduce yellow plume discharged during operation and stoppage was installed at all plants.

◎ Air Pollutants Emitted by Year



Saving of Water Resources

The water consumption by Korea Western Power consists of water consumed for the purpose of power generation, which is directly used for the production of power; water for desulfurization which is supplied to the desulfurization facility; water for the cooling of equipment; and drinking water. Water for the purpose of power generation, which is consumed in a large quantity, is supplied from adjacent dams and lakes, and the consumption volume is controlled at a level that does not affect the water stream of the water sources, considering the supply capacity of the water resources.

Korea Western Power treats all wastewater discharged from the power plants until it is Class 3 Water*or higher-class water for recycling and discharge, in order to reduce the use of water resources, which has continuously grown, and prevent impacts on the water stream. In particular, Taeon Thermal Power Complex Division is recycling most of its wastewater, and Pyeongtaek Thermal

Power Complex Division, Seoincheon Combined Cycle Power Complex Division and Gunsan Combined Cycle Power Division are discharging water environment management class B room temperature water to the ocean, as part of its efforts to minimize impacts on the ecosystem and prevent water pollution.

◎ Water recycling status (Unit: One Thousand Tons / year)

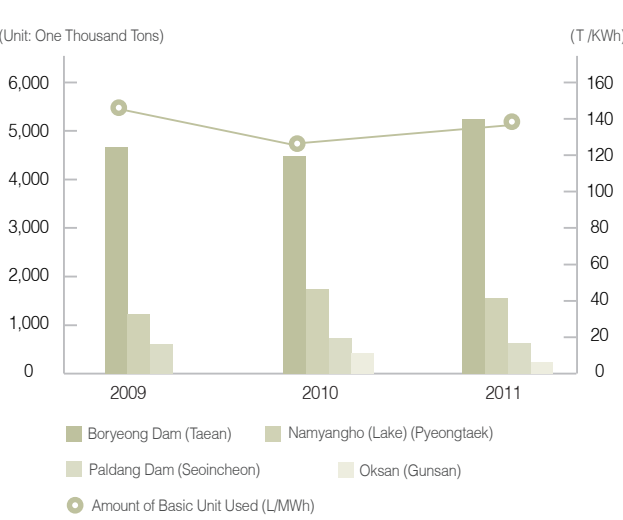
Items	Taeon	Pyeongtaek	Seoincheon	Gunsan
Amount Used	5.3	1.5	0.4	0.2
Fore-bay	Boryeong-dam	Lake Namyang	Paldang-dam	Oksan Reservoir
Supply Capacit	107	180	980,106	430

Reuse of Water

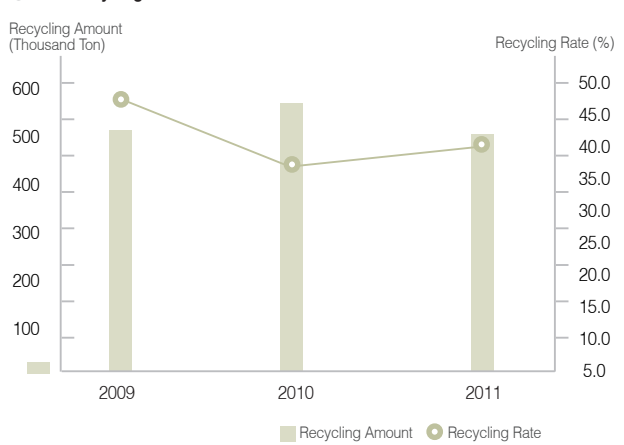
Korea Western Power has operated a water reuse facility at Taeon Thermal Power Complex Division since 2007 to ensure the efficient use of industrial water and the stable supply of necessary water. In addition, the Company has operated a zero leakage campaign, promoting the reuse of wastewater and improving the processes. In 2010, the rate of reuse dropped slightly, as water consumption

and wastewater discharge increased for the normalization of Gunsan Combined Cycle Power Division. Nevertheless, the Company is actively leading the protection of water resources by establishing the Comprehensive Plan for Water Use and developing detailed implementation plans for mid- to long-term water conservation and expansion of wastewater reuse.

◎ Water use status recorded for each fore-bay



◎ Water recycling status



Hot Wastewater Management

Thermal plants produce power using steam at a hot temperature and high pressure, and the used steam is reused by being condensed into water again. During the process, seawater is used for cooling for steam condensation, causing the discharge of hot wastewater. The volume of hot wastewater discharge increases when the

volume of power production increases. Korea Western Power's thermal plants are also discharging hot water, and every year, expert organizations are asked to assess the impacts of hot wastewater. The results have shown that the discharge of hot wastewater only affects the ocean.

* Class 3 Water: water quality with pH 6.5~8.5, COD of 6.0~l or lower, and SS of 25~l or lower

Recycling of Wastes and By-Products

Korea Western Power is recycling fly ash and desulfurized gypsum for use as resources and to ensure proper treatment. Sludge and used slags, the recycling of which is impractical, are being legitimately treated by authorized wastewater treatment service providers. The total volume of wastes discharged in 2011 reached 30,662t, while the volume of recycling reached 7,559t. We Keep making an effort to increase recycling rate. In particular, fly ash discharged during the process of combusting coals is used

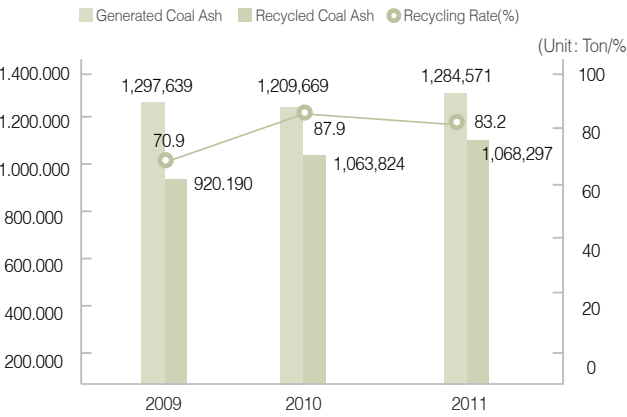
for the mixing of concrete or as raw materials of cement and soil mixture. The recycling rate has increased every year, reaching 83.2% in 2011. The Company aims to further increase the recycling volume by continuously identifying new applications, such as standardized road aggregate and soil mixture. Desulfurized gypsum is being 100% recycled as a raw material for cement and gypsum boards.

Wastewater Generation and Recycling Status



Source : Environmental impact assessment report for the construction project

Coal ash generation and recycling status



Minimizing the Use of Chemicals

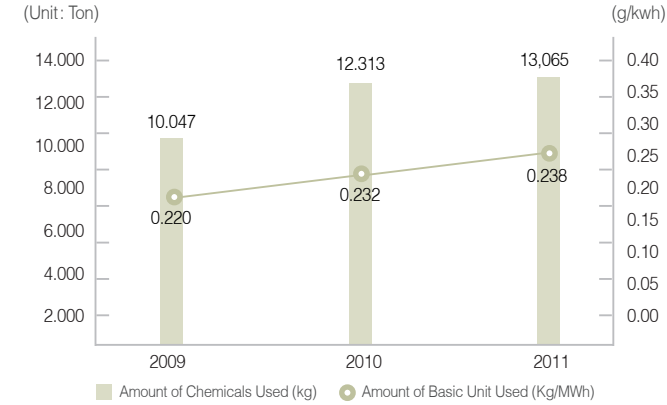
Power plants use about 30 types of chemicals solely for the purpose of production, as well as for other purposes such as the operation of a facility to prevent the discharge of environmental pollutants and the erosion of power facilities. As the volume of reducing agent used increases due to the reinforced operation of the desulfurization facility and the completion of the chrome yellow reduction facility, the volume of use for 2011 was recorded at 13,065t, a year-on-year increase of 9.4%. However, Korea Western Power has strived to minimize

the use of chemicals by continuously making efforts to use chemicals efficiently and minimize environmental pollution, by ensuring that there is no hydrazine injection, using a highly efficient coagulant, improving facility maintenance methods and developing alternative processes. In addition, the Company has thoroughly prepared for harmful materials leakage accidents, while performing preventive activities. Thanks to the efforts of the Company, there has not been one single accident related to the leakage of harmful materials.

Places Where Chemicals Are Used

Chemical	Places Used	Chemical	Places Used
Hydrochloric Acid / Caustic Soda	• Water treatment plant: Used to produce power generation water • Condensate polishing plant: Used for purifying boiler water • Wastewater treatment plant: Used to controls pH	Hydrazine / Ammonia / Phosphoric Acid Soda	• Boiler water treatment: Used to prevent corrosion • Denitrification facilities: Used as a reducing agent
Coagulation Aid / Aluminum Sulfate	• Water treatment plant: Used to produce power generation water • Wastewater treatment plant: Used to remove the turbidity element	Sodium Carbonate / Sodium Sulfite / Hydrochloric Acid Sodium	• Desulfurization wastewater treatment: Used to remove heavy metals and COD
Antifoaming Agent	•Used to remove the foam in drain outlet	Ferrous Sulfuric Acid	• Coolant sea water treatment: Used to prevent corrosion
Chlorine Dioxide	•Used for the disinfection of potable water	Microbe Spawn Material	• Sewage treatment: Used to remove BOD

Chemical Use Status



Long-term Chemicals Reduction Plans

- Plan to introduce the latest water technologies
 - No injection of hydrazine and oxygen treatment
- Plan to develop and apply the process to replace chemicals
 - Changing the cohesive agents
- Plan to change the facilities preservation method
- Plan to improve the process

Prohibiting the Use of Persistent Organic Pollutants

Of all materials used by our company for the power generation, only the insulating oil used for transformers is classified as a persistent organic pollutant. However, we have not introduced or transported a transformer that includes insulating oil containing PCBs since 2002. Since signing an agreement to prohibit the use of PCBs with the Ministry of Environment in October of 2004, we have checked to determine if the insulating oil of transformers contains PCBs and if the density of insulating oil is appropriate through the total inspection. We plan to


prohibit the use of all insulating oil containing PCBs. In addition, we have submitted a voluntary action plan for the prohibition of PCBs specifying the status of transformers containing insulating oil and a nullification plan to the Ministry of Environment in May 2007, and performed the required actions according to the submitted plans. We disposed of 5 of our 10 transformers in 2009, and plan to dispose of the remaining ones by 2012.

Environmental Impact Assessment


We survey and evaluate the environmental and traffic impacts that will result from the construction of a power plant before selecting the project site and preparing the construction plans, and then work to minimize the impact on the surrounding environment. Also, we collect the opinions of all stakeholders, such as local residents and the relevant agencies, and then reflect these in the construction plans.

As a result, all of our power plants are constructed and operated in areas far from protected ecosystems where protected or endangered animals live. In addition, we verify the results of our measures to protect the environment by performing an environmental impact assessment that checks the items reflected for the specific period of the power plant's operation, and then report the results to the relevant agencies.


Environmental impact assessment




Land Survey



Noise Measurement



Marine Ecosystem Research



Air Quality Survey

Development and Investment for Eco-friendly Technology

◎ Places where the Environmental Impact Assessment conducted

Areas	Workplaces	Description	Duration
Construction Area	Garolim Tidal Power	Environmental impact assessment for the construction project	2006. 3 ~ 2010.12
	Taeon IGCC	Environmental impact assessment for the construction project	2007. 5 ~ 2010. 8
Operation Area	Taeon	Marine, land, air and soil environment survey	Biannually, or annually
	Gunsan	Marine, land, air and soil environment survey	Biannually, or annually
	Pyeongtaek	Air, land and soil environment survey	Semi-annually, quarterly and annually
	Cheongsong Pumped Storage	Land, aquatic, air, water, noise, vibration, weather environmental survey	Annually
	Seoincheon	-	N/A
	Samrangjin Pumped Storage	-	N/A

Preventing Soil Pollution

We periodically perform soil inspection annually or biannually in areas where soil pollution is expected due to the operation of a power plant. No incidents of pollution have been reported.

Protecting the Ozone Layer

We strictly control the use of substances that cause damage to the ozone layer. Also, we strictly manage all substances stored or in use. Halon gas, which is currently used by our company for the operation of electrical facilities, is classified as a substance causing damage to the ozone layer. We currently own 10,760 kg of halon gas. The Taeon thermal power plant has charged only 1,050 kg of halon gas from 2002 through 2006. We plan to nullify or replace all fire fighting facilities using halon gas on or before 2012.

Environment Accident Preventative and Corrective System

We classify all possible environmental pollution accidents by type in order to completely prevent environmental accidents, and operate a consolidated emergency organization. This organization performs more than 2 simulation exercise each year to train employees on how to take emergency action in a timely manner. As a result, no accidents have been reported.

Also, we provide our employees with training in the prevention of environmental pollution when an accident occurs involving transportation equipment. We post traffic safety posters on the notice board in our workplaces. We also try to prevent environmental accidents involving our transportation service providers through a system that penalizes service providers through a shutout in the event of an accident resulting from speeding.

◎ Action procedure applied in the event of an emergency

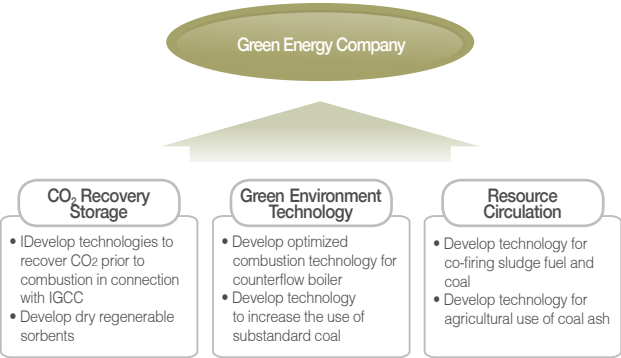
- ☐ Oil leakage accident
- ☐ Toxic substance leakage accident
- ☐ Earthquake and fire
- ☐ Typhoon and surge
- ☐ Heavy snow and flood

◎ Action procedures applied to environmental accidents of each facility

- ☐ Air pollution prevention facilities
- ☐ Water pollution preventive facilities
- ☐ Waste storage facilities
- ☐ Toxic substance storage facilities
- ☐ Oil storage facilities

Development for Eco-friendly Technology

We implement research and development through educational and industrial cooperation, and are growing as a green energy company by recognizing developing technologies to reduce greenhouse gas and environmental pollutants as growth engines.



CO₂ Separation and Recovery Technology Development

We are developing an eco-friendly high-efficient CO₂ recovery technology that will separate and recover the CO₂ generated from power generation activities before releasing it into the air.

Green Environmental Technology Development

To prevent the environmental pollutants generated from burning large amounts of fossil fuels, we are developing a clean combustion technology designed to minimize air pollutant emission, including a technology to optimize combustion of the counterflow boiler.

Resource Management for Natural Circulation

We developed a new technology intended to use biomass fuels produced through processing wastewater sludge as an alternative to coal, and are conducting research to utilize coal ash for agricultural use and to establish a new quality criteria (KS standard) for areas where coal ash is used.

Environmental Facility Investment and Operation

The environmental facility investment for 2010 was KRW 22.7 billion, which accounted for 9.1% of the total facility investment. The Company has invested KRW 66.4 billion in environment improvement projects in the past three years, accounting for 11.5% of the total facility investment. In 2010, the Company spent KRW 126.9 billion on the operation and development of environment facilities.

Thanks to focused investments in air environment facilities to improve the functions of electronic precipitators, the installation of chrome yellow reduction facilities and the minimization of desulfurization facilities, the Company has seen reductions in air pollutant emissions (Sox, NOx and dusts) every year.

◎ Investment and Budget Execution Records in the Environment Area

(Unit: Million won)

Items	2008	2009	2010
Investment in Environmental Facilities	20,359	20,368	22,670
Operation Expenses for Environmental Sector	114,705	119,131	125,860
Development Expenses for Environmental Sector	2,693	4,248	1,061
Total	137,757	143,747	149,591

* Development Expenses: Excludes education and training expenses (These are included in operation expenses).
* 2011 data will be reported at the 2013 sustainability report.



Co-prosperity Management

We, Korea Western Power Co.Ltd, will realize our vision of 'World Best 3E Creator' by contribute to the society with the best energy generated in harmony with Human, Technology, Environment.

Korea Western Power Brings a New Future of Co-Prosperity

Korea Western Power has systematically pursued co-prosperity with SMEs by developing “the Vision and Roadmap for Co-Prosperity of Korea Western Power.” The Company has also established “the Co-Prosperity Strategy of Korea Western Power (WP-TOPS Strategy)” to lead co-prosperous growth, which is one of the major government policies. Under the Strategy, the Company has selected four strategic directions, including reinforcement of technological competitiveness, establishment of the fair transaction system, reinforcement of key competencies, and laying the foundation for co-prosperity; and 20 action plans. The Company also adopted a customized support program that classifies partners by stage of growth into start-ups, promising companies and leading companies.

Vision and Roadmap for Co-Prosperous Cooperation with SMEs

- ◎ Vision: Shared growth through co-prosperous cooperation
- ◎ Roadmap (Step Diagram)

Stages	Stage of Introduction and Settlement (2005~2009)	Stage of Advancement (2010~2015)	Stage of Value Creation (2016~2020)
Roles	Exemplary Support for SMEs	Leading Support for SMEs	Leading Support for SMEs
Goals	Development of direction and strategy of SME support	Generation of visible results for both large enterprises and SMEs	Sustainable growth and development into reliable partnerships

Reinforcement of Technology Competitiveness through R&D Support for SMEs

Korea Western Power spares no efforts to support SMEs, through aggressive investments and R&D support that has enabled many SMEs to secure technology competitiveness. Most notably, the Company does not limit its efforts to R&D financing, but has fostered success models by continuously supporting successful research outputs and creating a virtuous circle of research initiative development, selection of capable partners, support for testing and expansion of sales channels. Representative cases include the “development of 5 kW-class large lithium-ion smart battery control system” of STB and the “development of roll corrugated de-NOx catalyst for thermal power plants” of Daeyoung C&E. Based on the continuous support of Korea Western Power for testing at power plants, certification of new products, selection as pilot programs by the Ministry of

Knowledge Economy and expansion of sales channels, STB recorded remarkable revenue growth, from KRW 60 million in 2006 to KRW 3.9 billion in 2010, with estimated revenue for 2011 of KRW 10 billion. Daeyoung C&E recorded revenue growth from KRW 17 million in 2007 to KRW 3.6 billion in 2010, with estimated revenue for 2011 of KRW 8 billion, well illustrating the significant contribution of Korea Western Power to the growth of its partners

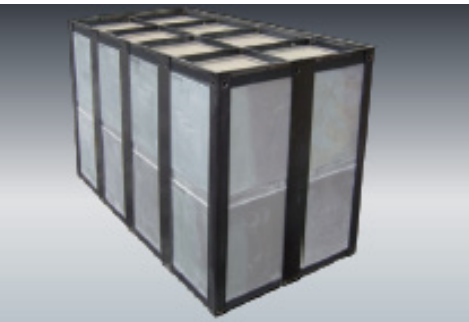
- Won the Industrial Service Model for R&D Support in the Category of Capital Goods (Ministry of Knowledge Economy)
- Won the Beautiful Company Award for Large Enterprises and SMEs for the R&D Category (Small & Medium Business Administration)

◎ Status of R&D Support for SMEs (Unit: case, KRW 0.1 billion)

Items		2009	2010	2011	Total
Cooperation Projects	Joint R&D with SMEs	14	25	20	59
	Procurement Contract-Based New Product Development	3	3	7	13
Financial Support for R&D		32.6	59.4	69.5	161.5



Final Assessment on Joint Research Initiatives with SMEs



Domestic Development of De-NOx Catalysts for Thermal Power Plants

Support for SMEs with Financing Difficulties

Korea Western Power has helped SMEs in financial difficulties by operating various financial support programs for SMEs, including prepayment to SMEs supplying goods to the Company. In addition, the Company has reduced the financial burdens on SMEs by abolishing the note payable system.

◎ Financial Support for SMEs (Unit: KRW 0.1 billion)

Items	Description of Support	2009	2010	2011
Prepayment	Within the ceiling of 70% of the contracted amount	416	511	330
Network Loan	Financial support based on the supply contract	21	21	0
Public Purchase Loan	Financial support based on the supply contract	32	1	0.3
With-Loan	Financial support based on the supply contract	15	0	0
Electronic Order Placement Loan	Financial support based on the supply contract	14	0.5	0
Power Energy Loan	Financial support for Primary and Secondary Partners	5	13	19
Total		503	546.5	216.3

Increased Purchasing of SME Goods

Korea Western Power has consistently exceeded the mandatory purchase standards of SME goods and products with new tech certificates. In addition, the Company has expanded procurement of SME goods by directly purchasing equipment and materials from SMEs in relation to the preferential treatment system for women entrepreneurs and the items designated by the Small and Medium Business Administration.

◎ Purchase of SME Goods (Unit: KRW 0.1 billion, %)

Items	Total Amount of Purchase (A)	SME Goods			Products of Tech Development		Products of New Tech Certification	
		Amount of Purchase (B)	Percentage of Purchase (B/A)	Commodity purchase misfortune (C)	Amount of Purchase (D)	Percentage of Purchase (D/C)	Amount of Purchase (E)	Percentage of Purchase (E/C)
2009	1,181	936	79.2	588	126	21.4	102	17.3
2010	1,624	1,296	79.8	988	208	21.1	195	19.8
2011	1,688	1,140	67.6	613	82	13.3	81	13.2

Global Marketing Support for SMEs

Korea Western Power has expanded exports of SMEs by supporting SMEs' entrance into overseas fairs, dispatch of oversea market research teams and hosting of export meetings for foreign buyers.

◎ Global Marketing Support for SME Goods (Unit: USD 1 million, company)

Items	2009	2010	2011
Amounts of Negotiation	1,187	1,870	2,061
Contracted Amounts	205	204	256
Number of Companies that Received Support	455	526	565

- Won Presidential Commendation for Sales Support of SMEs' New Tech Certified Goods (Ministry of Knowledge Economy)

Support for Local Community and Social Contribution

As a public corporation dedicated to supplying electrical power, Korea Western Power Co., Ltd. has developed by fulfilling our social responsibility to take care of the nation and local communities. In addition, by its very nature a power plant inevitably affects local communities, and thus we have established the infrastructure to minimize the negative impacts and to contribute to the development of the society.

We have supported low-income residents through our volunteer corps that consists of 8 centers and 93 teams under the slogan, "Happy Energy and Friendly Neighbor," as part of our efforts to enable all local residents to enjoy happy lives since 2004, coupled with our project to promote local culture. We try to foster the talented in local areas through a project to foster competent local individuals. We also activate the social services required by the local community through partnerships with local welfare groups.

Emblem



This emblem means that all our employees actualize the "Happy Energy and Friendly Neighbor" by getting together with a positive mindset.

Major Accomplishments

We have systematically proceeded with social contribution activities focused on 3 areas, which are human (social welfare and disaster relief), nature (preservation of nature) and culture (culture art, academic education and promotion of sports) based on our motto, "Contribute to Society by Generating Energy in Harmony with Humanity, Technology and the Environment."

Year	Month	Descriptions
2005	04	•Held blood donation campaign to help patients suffering from leukemia and childhood cancers. •Signed agreement with local communities and performed farming village service activities - Linked with 46 farming villages. •Performed project of building homes for families in need. •Awarded management innovation best practice prize in the area of social responsibility.
	06	
	08	
	10	
2006	02	•Awarded clean management grand prize. •Signed social contribution agreement with the Korean National Red Cross. •Supported 1,004 poor households living near the power plant.
	12	
2007	06	•Signed the national park partnership. •Financially supported the 10 house repair project of Habitat for Humanity Korea. •Supported food relief services of Dail Community and Angel Hospital for harelip patients in the Philippines. •Supported the coal sharing movement and performed voluntary service in Gaeseong, North Korea.
	07	
	10	
	10	
2008	04	•Collected funds to support patients suffering from intractable diseases. •Awarded social contribution grand prize in the area of cooperation with local community. •Sent books to a library located in Indonesia. •Provided commissioned education for fostering social workers.
	05	
	10	
	12	
2009	05	•Supported cultural performances - donation of 150 seats. •Signed partnership agreement with the food aid group, Caritas, and performed regular food distribution activities. •Held a workshop for officers responsible for social contribution duty – lecture from experts and collection of public opinions in the field. •Participated in and supported SBS Hope TV's charity event "Hungry Walking Festival". •Opened a program to support multicultural families – Field Trip to Everland and support
	06	
	09	
	10	
	11	
2010	09	•Held visiting charity concert with the CEO (quarterly) •Provided emergency electrical generators to Taeon-gun (8 units to Eup/Myeon Offices) •Supported Fence of Love, "Community Child Care"
	10	
	12	
2011	02	•Provided support for children's self-reliance(the areas adjacent to power plants) •Established volunteer group of university students and carry out environment cleaning activity •Supported Fence of Love, "Community Child Care"
	05	
	10	

Through Communication with the Local Community

We clearly recognize that the construction of a power plant has diverse effects on the area in which the power plant is constructed. In this regard, we try to guarantee fair compensation to local residents that must relocate to other areas due to the power plant construction by asking the professional survey agency to check the expected damage and rights to loss by signing the agreement with local residents to move out. In addition, we provide diverse benefits such as support for tuition fee and preferential treatment upon recruiting local residents and their children after moving out. Currently, we grant 10% in additional points to residents living around our power plant when applying for employment. The preferential treatment system, starting in 2004, has continually promoted recruiting local residents' children.

We strive to protect the local communities in which we operate by sufficiently compensating the land and rights occupied by the construction and operation of the power plant according to the applicable laws. Furthermore, we secure communication channels with the public, such as work meetings with local government and signing the pledge upon construction so as to be ready for unexpected public petitions. As no new power plants or facilities were constructed on land in 2009, there were no projects that caused damage to local residents and living environments.

Building the Infrastructure Required for Local Development

◎ Society Support Cost Spent to Build Infrastructure for Local Development

(Unit: KRW 1 Billion)

Classification	2009	2010	2011
Basic Support Project Cost	81.9	67.7	62.9
Special Support Project Cost	0	0	0
Total	81.9	67.7	62.9

2.8 billion won was spent for building local infrastructures out of the 6.29 billion won allocated for the year of 2011. We provided financial support of 870 million won for the purchase of agricultural machinery or equipment and the installation of storage

warehouses. We also provided financial support to the residents living around our power plants by performing electrical charges support businesses of about 380 million won.

◎ Amounts Allocated Workplaces in 2011

(Unit: KRW Million)

Classification	Local Governments	Power Plants	Total
Taeon	2,986	1,807	4,793
Pyeongtaek	396	132	528
Seoincheon	525	225	750
Gunsan	145	74	219
Total	4,052	2,238	6,290

Improving the Education Environment and Activating Scholarship project

Nothing is more important than education for the growth of a community. The work of developing the local community by fostering competent individuals is more valuable than building infrastructure.

Each power plant accumulates a certain amount of funds as the scholarship fund out of the allocated educational project cost (3.27 billion won has been accumulated as of end of 2011). We plan to keep building the fund as the scholarship fund. In addition, we provided scholarships amounting to 520 million

won to 927 students living in the vicinity of our power plants in 2010.

Korea Western Power Co., Ltd. is laying the foundation that will enable students to study in an excellent environment by providing financial support of 1 billion for the purchase or replacement of school supplies, organizing the sketch competition and support for various cultural events. In particular, our Taeon power plant has provided financial support to send students to an English camp and specialty programs as a part of high-achiever oriented program.



Implementing Volunteer Activities Suitable for Local Society

We are performing diverse social contribution activities for our local communities through our volunteer activities. Our volunteer corps, consisting of 8 social service centers and 93 teams, provides social service activities that are adapted to the local environments around our plants, through sisterhood relationships with 43 farming villages and 33 social welfare institutes. At each workplace, our volunteer corps comes closer to the local community as a friendly neighbor by giving support and voluntary service to those who are alienated from the community through activities such as supplying electric power service, performing voluntary housing repair service, and sending living

goods for poor families and support for young family heads and seniors who live alone. In addition, we work with the local community to provide Kimchi and coal briquettes for people in need during winter.

In particular, since signing a social contribution partnership agreement with Korea Red Cross in 2006, we have visited 1,004 poor households living around power plant with volunteers from the Red Cross, and provided financial support of about 70 million won each year. This event is highly evaluated and has received a warm response from the local community.



Offering Electric Facilities Check Service



Offering House Repair Service for Residents Living Our Plants



Making Kimchi for Poor Families



Offering Briquet Delivery Service

Ecosystem Protection Activities to Suit the Local Environment

A clean environment is the most valuable asset we can hand down to our descendants. We are continuing to carry out various ecosystem protection projects, such as the river cleaning project and long-term environment cleaning project, to protect the ecosystem around our power plants. In particular, Cheongsong Power Plant has been carrying out an ecosystem protection project

after signing a partnership agreement with the National Park Management Corporation. We also provide education on protecting the ecosystem by organizing our 'environment school,' in consideration of the important role the children of today will play in protecting the environment of the future.

◎ 1 Workplace-1 Stream (Mountain) Designation Status

(Unit: KRW Million)

Workplace	Designated Stream (Mountain)	Workplace	Designated Stream (Mountain)
Taeon	Hakampo (Beach)	Gunsan	Gyeongpocheon (Stream)
Pyeongtaek	Namyangho (Lake)	Garolim	Samsilpohang (Harbor)
Seoincheon	Seunggicheon (Stream)		

◎ Environment Cleaning Activities by Workplace in 2011

Workplace	Name of Environment Cleaning Events	Number of Times	Participated Employees
Taeon	Duwung Wetlands and Sindusagu (sand dune) Cleaning Guryepo Beach Cleaning	60	1,183
Pyeongtaek	Wastes Collection and Environment Protection Campaign	5	91
Seoincheon	Cheolmasan (Mt.) Cleaning Gocheoncheon (Stream) Cleaning	13	177
Gunsan	Keep the Yellow Sea of Life with WP General Cleaning and 1 Company-1 Coast Cleaning Campaign	7	163
Garolim	Gopado and Beolcheonpo Beach Cleaning	2	13

Volunteer Services for Recovery from Typhoon Kompasu

The volunteer service team of Korea Western Power visited Taeon-gun, which had been hit by typhoon Kompasu on September 3, 2010, and worked to help area residents recover from the damages. To support early recovery, Korea Western Power held its "Relay Volunteer Activity for Sharing of Love," and gave helping hands to residents of villages adjacent

to power plants by removing abandoned greenhouse structures and fallen pine trees. The Company also donated emergency generators to resident centers of Taeon-gun, which were having difficulties due to frequent power outages, and reinforced its co-prosperous partnerships with Taeon-gun.

◎ Installation of Emergency Generators in Taeon-gun

Items	Specifications	Quantity	Location of Installation
Emergency Generators	20kW 3-Phase 380V	1	Taeon-eup Resident Center
	20kW 3-Phase 380V	1	Anmyeon-eup Resident Center
	20kW 3-Phase 380V	1	Gonam-myeon Resident Center
	20kW 3-Phase 380V	1	Nam-myeon Resident Center
	20kW 3-Phase 380V	1	Geunheung-myeon Resident Center
	20kW 3-Phase 380V	1	Sowon-myeon Resident Center
	20kW 3-Phase 380V	1	Wonbuk-myeon Resident Center
	20kW 3-Phase 380V	1	Yiwon-myeon Resident Center

Participating in Local Culture Development and Protection Activities

Corporate Mecenat activities contribute to providing cultural benefits for local citizens. The volunteer service team of Korea Western Power operated a "Visiting Charity Concert with the CEO," in order to perform "culture sharing" social contribution activities. The concert has given hope to the culturally isolated and local residents with beautiful melodies. In addition, the Company has contributed to local communities by supporting various local cultural festivals and sponsoring performances and sports promotion activities.



▲ Visiting Charity Concert with the CEO

Residential and Medical Support for Low Income Residents

Each year since 2004, about 100 of our employees have taken part in the house-building project and sponsored the construction cost, performed in cooperation with Habitat for Humanity Korea, and sponsored the construction cost. And we founded Community Corps of University Student in 2011 with 362 participants, started to provide the environment protecting activities. With these programs, we have repaired 26 old houses with Habitat Korea & 12 old houses by our own, participated total of 2,816 hours of energy efficient improvement projects. We helped difficult economic situation of homeless people with these programs.

All our employees have participated in the blood donation campaign, "Blood Donations for Life and Love to Patients Suffering from Leukemia" since 2004. We collected 300 blood donation certificates in 2011, donated to Korean Association of Leukemia & Childhood Cancer. We also provided 20 million won in financial support to energy efficient and environment improvement projects to patients' rest area. And, to spread sharing life culture, we performed "Organ Donations of Love" campaign, then collected 402 organ donation pledge to Korean Organ Donor Program.

Classification	2009	2010	2011
Number of donated blood certificates	302	192	300
Amount of donation	20 Million won	20 Million won	20 Million won
Number of supported children patients suffering from leukemia and childhood cancers	5	2	Improve residential environment for children patients suffering from leukemia

Photo Gallery



Helping a Village

Each workplace has performed the farming village voluntary service during the busy farming season, through agreements with farming villages.



Support for Children Suffering from Intractable Diseases

We have continually performed this program to provide medical cost to children suffering from intractable diseases by signing an agreement with the Korean Organization for Rare Diseases.



Sisterhood Relationship Building with Community Child Centers

Korea Western Power received a plaque of appreciation from Gangdong-gu Association of the Community Child Center by continuously supporting children attending Community Child Centers.



Cartas Restaurant of Love

Korea Western Power has operated regular volunteer activities manly at headquarters on every second Fridays under an agreement with Caritas Bangbae Community Center located in Bangbae-dong, Seoul.



Making the World a Warmer Place

We keep trying to come closer to local residents by providing essential goods to 1,004 poor households near our power plant after signing an agreement with Korea Red Cross.



Support for Multicultural Families

We provide financial support for multicultural families to facilitate their integration into Korean society, in consultation with the Multicultural Family Support Centers.



Mountain Climbing with the Disabled

Volunteer team members of Korea Western Power of Gunsan Service Center of Korea Western Power reached the peak of Nogodan, Mountain Jiri, which is at the end of Baekdudaegan, with the disabled on wheelchairs, in order to deliver the message of hopes that "Yes, we can! We can do anything unless we give up!"

Cooperation through Partnerships with Welfare Agencies

Agencies	Areas of Cooperation
Korea Red Cross	<ul style="list-style-type: none">• Cooperate with blood donation service and provide voluntary service and financial support.• Provide support to 1,004 poor households living near our power plant through cooperation.• Plan to develop new cooperative program.
Leukemia and Childhood Cancers Association	<ul style="list-style-type: none">• Help children suffering from leukemia (Support donation and blood certificates)
Habitat for Humanity Korea	<ul style="list-style-type: none">• Provide support to the homeless (Service areas designated by each volunteer center)
Korea Intractable Disease Association	<ul style="list-style-type: none">• Provide support for children suffering from intractable diseases.
Caritas Social Welfare Agency	<ul style="list-style-type: none">• Participate in voluntary food distribution service, and provide financial support
Korea National Park Service	<ul style="list-style-type: none">• Ecosystem protection activities in Juwangsan (Mt.)
Handicapped Welfare Center	<ul style="list-style-type: none">• Bind books for the blind
Jagwangwon (seniors care center)	<ul style="list-style-type: none">• Provide bathing and cleaning services for the elderly.
Handicapped Lovely House	<ul style="list-style-type: none">• Provide voluntary service and financial support for the handicapped.
Seungnae Social Welfare Center	<ul style="list-style-type: none">• Provide voluntary service and financial support for isolated seniors.
Handicapped Lovely House	<ul style="list-style-type: none">• Support
Hasang Handicapped Welfare Center	<ul style="list-style-type: none">• Support social adaptation programs for handicapped youth.



Description of Three Major Activities

Classification	Activities	Descriptions
Love of Human	Support for children suffering from intractable diseases	Provide support by signing an agreement with the Korean Organization for Rare Diseases.
	Lovely blood donation	Provide blood donation certificates and donation to help children suffering from Leukemia.
	Building homes for people in need	Participate and support Habitat for humanity's house building project
	Making a warmer world	Provide support to poor neighbors living near our power plant through the Red Cross.
	Cultural experience program for multicultural families	Offer multicultural families opportunities to experience culture
Love of Nature	River or mountain voluntary service	Environment cleaning activities
	"World Water Day" environment cleaning activities	Joint cleaning activities in cooperation with business places and contractors
	Daemosan (Mountain) environment cleaning activity	Environment cleaning activity
Love of Culture	Educational project	Provide scholarship and school supplies
	Lovely marathon support	Provide support for sports activities
	Support for cultural events and seat contribution activities	Provide support for various cultural events

Voluntary Service Records

Elements	2009	2010	2011
Hours Spent by Each Person for the Voluntary Service	20.82 hours/year	24.56 hours/year	21.68 hours/year
Amount of Funds Provided	2.559 billion	3 billion	7.013 billion

Scale of Voluntary Service (Manpower and Hours)

Classification	Year	Love of Human		Love of Nature	Love of Culture			Total
		Social Welfare	Disaster Relief	Environmental Preservation	Culture & Art	Academic Education	Promotion of Sports	
Hours (Cumulative)	'11	541	6	94	9	1	3	654
	'09	477	38	56	17	0	4	592
	'11	448	2	76	75	14	11	626
Number of Employees Involved (Cumulative)	'11	3,962	26	1,734	43	0	33	5,798
	'09	3,719	475	1,362	101	0	5	5,662
	'11	4,078	3	1,833	294	25	8	6,241
Service Hours (Cumulative)	'11	17,254	220	4,635	180	0	177	22,466
	'09	19,402	3,163	3479	206	0	0	26,250
	'11	20,099	6	4,932	1,084	0	0	26,121



Talent Management

We, Korea Western Power Co.Ltd, will realize our vision of 'World Best 3E Creator' by contribute to the society with the best energy generated in harmony with Human, Technology, Environment.

Respect for Each Member of Our Company

We recognize that a company that provides a satisfactory working environment for its employees not only will inspire high employee loyalty, but will also become a competitive company in the long run. Based on this belief, we are working to build a sound corporate culture through fair and open recruiting, trust, and communication between employees.

Open Recruitment

We provide an equal opportunity to all job applicants by abolishing the educational background and age limit and paper-screening system. We wait for competent applicants by operating diverse employment programs such as open recruitment, recruitment through academic-industrial cooperation, and honorable treatment and support of distinguished services to the nation.

We have recruited 78 employees and 198 youth interns in the last 3 years, despite management difficulties caused by the government's management advancement policy. We are actively participating in national and social initiatives intended to solve the problem of youth unemployment.

◎ Increase or Decrease of Employees for Last Three Years (Unit: Person)

Classification	2009	2010	2011
Number of current employees as of end of year	1,858	1,811	1,725
New employees	32	0	71
Ratio of New employees	1.7%	0	4.1%
Newly Employed Youth Interns	91	91	106
Ratio of Youth Interns	5.0%	5.0%	6.1%

Building a Workforce Based on Equal Opportunity

We completely prevent discrimination by stipulating the equal treatment of all employees regardless of sex, religion and social position in our employment regulations. In addition, we clarify the legal basis for protecting the human rights of workers (Article 73), personal information (Article 74), gender equality and maternity protection (Article 75), equality in recruitment and employment (Article 76) and equality in education, position and promotion (Article 77) through the collective agreement with our labor union.

We have abolished discrimination against woman in recruitment and promotion by preparing a long-term female human resources utilization plan and strictly observing the principle of gender equality. We provide opportunities to female job applicants when recruiting new employees by operating a female employee recruitment ratio targeting system. As of end of 2011, we have promoted 14female employees to manager level by providing equal chances for promotion.

Currently, 37 handicapped employees, 2.13% of our total workforce, are working in our company as of the end of 2011. This number is less than the government standard applied to public corporations for the recruitment of handicapped employees, which is 3%. However, we plan to provide more opportunities to the handicapped by increasing this ratio.

◎ Female Employees Employed for Last Three Years (Unit: Person)

Classification	Employees Calculated as of End of 2011	Newly Employed Employees		Ratio of Female Employment
2011	1,725	71	13	18%
2010	1,811	0	0	0
2009	1,858	32	11	34.4%

Protection of Human Rights

Anti-Sexual Harassment Education and Maternity Protection

We publish and distribute a guideline to prevent sexual harassment in the workplace to create a safe and sound working environment, and provide anti-sexual harassment education program more than once each year. We provide institutional support to enable female workers to perform their work or duties in a stable environment by increasing the incentive to promote childbirth, appointing a nurse, operating a cooperative hospital and providing a childcare center at work.

Preventing Forced Labor and Child Labor

We operate based on a 8-hour per day, 40-hour five-day work week. If overtime work or duty over the holidays is required, prior agreement should be made between the worker and the head of the relevant department. In addition, we fundamentally prevent child labor by implementing a minimum age policy (18) when recruiting new employees.

Current Status of Labor Union

We currently employ 1,725 employees, and no employees are hired for temporary of part-time work. There are two labor unions in KOWEPO and 64% of all of our employees joined as union members. The Korea Power Generation Industry Labor Union established on July 24, 2001, consist of union members serving in 5 power generation companies and 13% of all of our employees joined as union members. The Korea Western Power Labor Union established on July 5, 2011, consist of union members serving in KOWEPO and 51% of all of our employees joined as union members.

We adopt the open shop system, created under the collective agreement in March 2011, and so our employees freely choose labor union after being hired by our company. Clause 24 of the labor collective agreement, signed between the labor union and the company, requires the company to hold discussion with the labor union before revising any important items related to the employment agreement. If the legal position of union members is changed because of the business closing, dividing, merging, transferring or changing the business item, the company shall inform the labor union of the fact 50days in advance, and faithfully discuss the situation with the labor union according to clause 44 of the labor collective agreement.

Operating a System to Solve Problems

We operate a system to solve problems that arise in the process of work. Experts responsible for solving problems at work are assigned to the headquarters and the 6 local business places nationwide. The experts receive job-related complains from employees, find solutions, and report the results. For example, 30 personnel realignment-related complaints were reported in 2011, of which 30

cases were resolved. In addition, since 2009 we have provided the employee assistance program (EPA) in an effort to resolve personal problems of employees that are difficult to officially bring up, and worked to resolve employee problems through commissioned experts in order to protect privacy.

Communication-based Corporate Culture

In an attempt to promote a sound corporate culture based on open communication, we open diverse top-down channels, such as business management presentations, management news, and letters from the CEO, and bottom-up channels including a hotline to the CEO, a proposal system, and a junior board of directors, enabling employees to raise opinions at any times. We also try to prevent conflict between labor and management by improving labor and management partnership through various programs. Through these efforts, we have created an open and innovative corporate culture that enables each employee to strengthen his or her work capacity, and are providing a safe and sound work environment through transparent and ethical management.



▲ CEO's Management Policy



▲ Corporate Dispute Prevention Program

Development of Performance Evaluation & Rewarding System

In order to achieve management goals and improve management efficiency through sound internal competitions, Korea Western Power has operated the

performance evaluation every year by measuring its members' contributions to the company operation, and granted performance incentives.

Achieving Low Employee Turnover Through High Satisfaction

We provide each employee with the opportunity to develop his or her work capacity in all service periods through systematic education and training. We improve employee satisfaction through fair evaluation of and compensation for the work performed. As a result of these efforts, our turnover rate has remained at a low level.

◎ Reason and Rate of Turnover (Unit: Person/%, Excluding Directors)

Year	Honorary Retirement	Death	Leaving	Total Turnover	Turnover rate	Year
2011	3	1	9	13	1,721	0.76
2010	5	-	11	16	1,807	0.89
2009	14	-	10	24	1,858	1.29
Total (average)	22	1	30	53	5,386	0.94

◎ Number and Rate of Employees Retired by Gender, Age Group and Area (Unit: Person/%, Excluding Directors)

Years		2009		2010		2011	
Total Employees		1,878		1,858		1,807	
Classification		Person	Rate	Person	Rate	Person	Rate
Sex	Male	49	2.64	55	3.04	25	1.37
	Female	2	0.11	2	0.11	-	-
	Sum total	51	2.74	57	3.15	25	1.37
Age Groups	Less than 30 years of age	-	-	2	0.11	3	0.17
	30~50 years old	10	0.54	7	0.39	8	0.46
	Above 51 years old	41	2.21	48	2.66	14	0.81
	Sum total	51	2.74	57	3.15	25	1.45

◎ Number of Employees Expected to Retire within Next 5 Years by Work Catagory (Unit: Person, Excluding Directors)

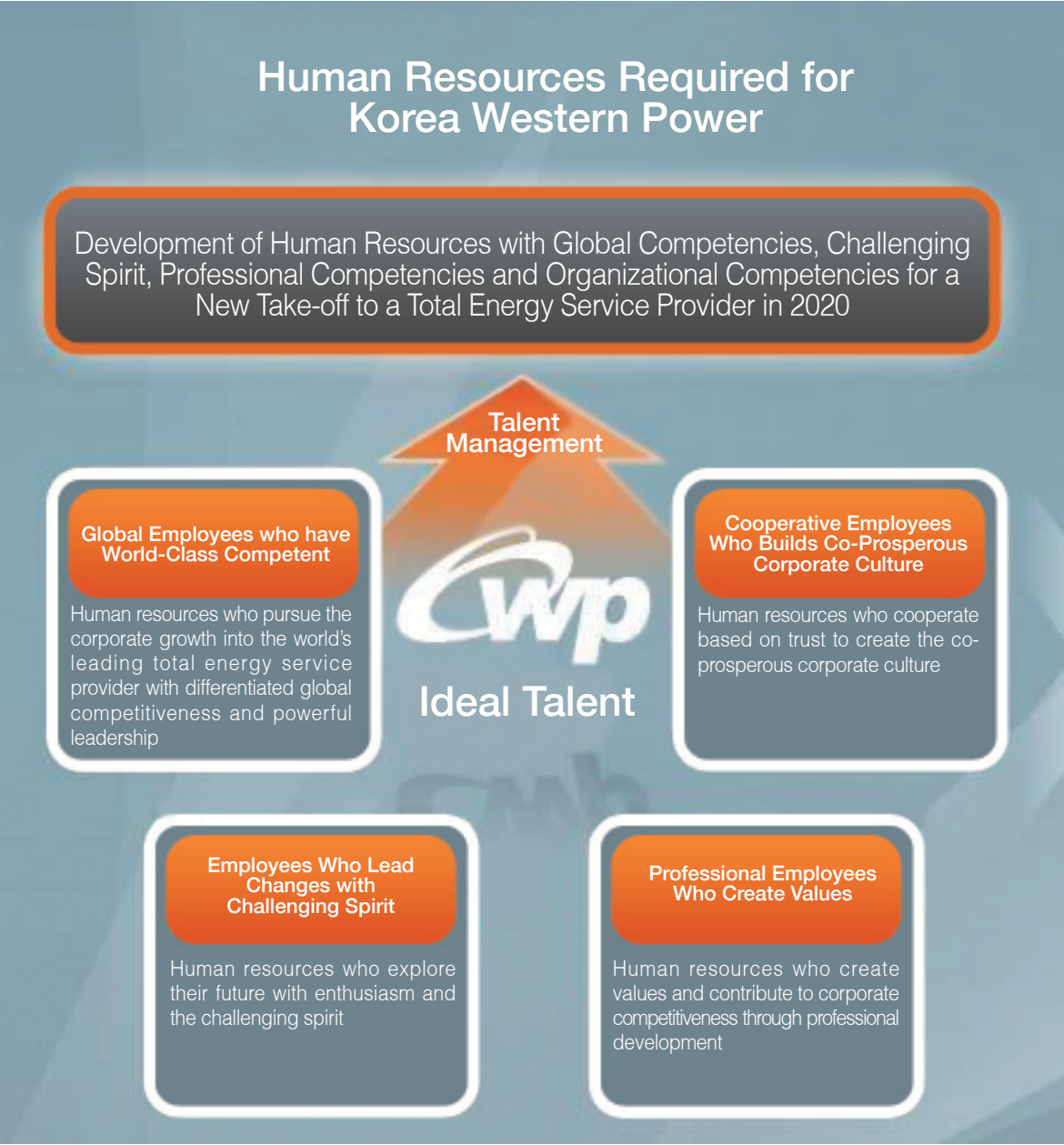
Classification	Office	Engineering	Technical Post	Security	Total
2012	2	18	8	1	29
2013	6	16	11	3	36
2014	5	25	5	4	39
2015	8	28	6	2	44
2016	8	33	9	2	52
Total	29	120	39	12	200

Operation of Capacity Development Program

Recognizing each employee as our most important resource, we have established education and training programs designed to help our employees develop their capacity. We support learning at all times for the continued growth of our employees, according to our competent employee fostering road map.

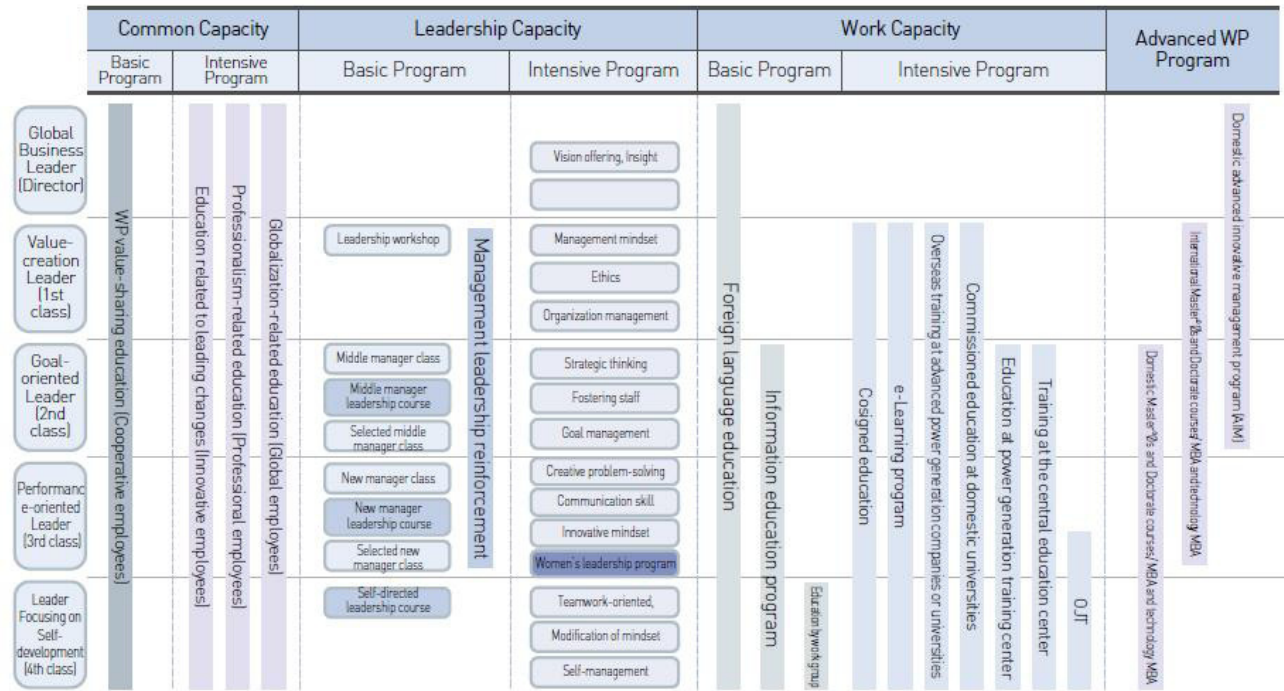
Operating Capacity-Based Education Training System

We have developed capacity-based education and training programs that enable each employee to reinforce his or her work capacity, in an effort to foster the talented human resources that we need to achieve the corporate vision and meet our business goals. We have also introduced and operated a career development program by selecting experts in 27 fields to pursue the sustainable management of the company. Our career development program is designed to evaluate the capacity of each employee, and provide customized education and training programs.



Reinforcement of Education & Training Program

Korea Western Power has operated Do Dream, a system designed for integrated management of the competency-based education and training system for performance-oriented HR development. For development of competency of its employees, Korea Western Power has operated a total of 1,269 training programs at home and abroad in 2011, and the annual average training hours per employee reached 132 hours.



Classification	2009	2010	2011
Total educated employees	8,979	8,096	8,891
Number of education sessions allocated to each employee	4.82	4.47	5.15
Total education expenditure (billion won/year)	44.6	46.4	54.6
Education expense per employee (thousand won/year)	2,395	2,560	3,168

Classification		2009	2010	2011
Average annual education hours allocated to each employee (hours)	1st class	138.3	218.0	98.6
	2nd class	211.4	353.5	166.1
	3rd class	108.5	170.8	196.7
	4th class	60.7	114.7	107.0
	Total	129.7	133.7	131.7

Retirement Preparation Program

We operate a retirement preparation program to support retired employees in planning their life after retirement. This program consists of IT education, health care education, knowledge program, and experience program. Since 2007, 34 employees in diverse positions have participated in this program

Classification	1st class	2nd class	3rd class	4th class and below	Total
2011	3	1	-	-	4
2010	-	3	3	2	8
2009	4	-	1	1	6
2008	1	4	2	-	7
2007	4	3	3	3	13
Total	8	8	6	3	25



- Ethical Management
- Customer Satisfaction
- Safety & Health



Righteous Management

We, Korea Western Power Co.Ltd, will realize our vision of 'World Best 3E Creator' by contribute to the society with the best energy generated in harmony with Human, Technology, Environment.

Ethical Management

Korea Western Power has always strived to comply with standards of ethics and integrity which befit its status as a public corporation performing important duties of supplying power, which is the driving engine of industrial development.

Korea Western Power adopted ethical management in 2002 for the first time among power generation companies, and has developed and implemented the roadmap for development of the ethical management system and adoption of the anti-corruption culture ever since. Beginning with enactment of the Code of Conduct of Korea Western Power, which is the ethical charter of the company, in 2002, the company has enacted the Guidelines for Korea Western Power and the Guidelines for Ethical Management in 2003 to complete its system for implementation of the ethical management.

In May 2006, Korea Western Power signed the UN Global Compact as the fifth domestic company and the first power generation company in Korea, and has complied with ten principles for four areas including human rights, labor, environment and anti-corruption. Since December 2006, it has operated the vocational integrity contract system with executives, and adopted regulations on obligations for vocational integrity and violations of responsibilities.

In order to improve the awareness on anti-corruption and integrity and the stricter requirements for integrity, Korea Western Power completed the integrated ethical management system in 2009, based on the 3C ethical management system, and prevented possible unethical behaviors by point of business operations, enabling stakeholders to reaffirm Korea Western Power's strong commitments to ethical management.

Vision and Roadmap for Ethical Management

Korea Western Power established its goal of joining the ranks of the top 10 most admired domestic companies and the strategies for fulfilling its social responsibility when it adopted its medium and long-term vision Vision 2020 in 2007, in order to reflect its ethical philosophy to the corporate vision. In 2008, it set medium and long-term strategy and roadmap to achieve the vision in 2008.

In particular, it set its new goals for ethical management by reflecting feedbacks about progress under the Vision 2010 when it developed its new Vision 2020 in 2009. The above efforts are part of its moves to closely align its corporate strategy with its ethical management strategy.

◎ Ethical Management Road Map

Stage	Settlement (2008~2010)	Jump (2011~2015)	Achievement (2016~2020)
Goal	< Medium-term > Exemplary domestic company in the area of ethical management - No. 1 Ethical Management among Korean power generation firms	< Long-term 1 > Ethical management leader in Korea - Join the ranks of the 20 most admired companies in Korea	< Long-term 2 > Global ethical management leader - Join the ranks of the 10 most admired companies in Korea
Strategies	<ul style="list-style-type: none">• Advancement of ethical management system• Establishment of autonomous ethical culture• Strengthening capacity for ethical management	<ul style="list-style-type: none">• Realize sustainable transparent management• Enhance ethical culture• Initiate the spread of ethical management	<ul style="list-style-type: none">• Strengthen global ethical trend• Stabilize ethical and transparent culture• Spread ethical brand

Establishing System for the Practice of Ethical Management

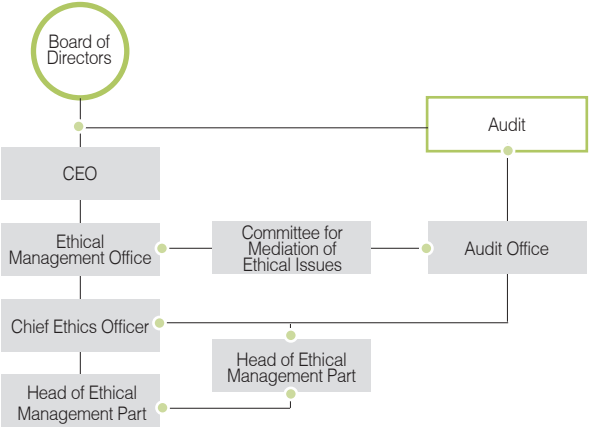
With the belief that to build social trust a company must start with ethical management, we became the first power generation company in Korea to introduce an ethical management system. We also established an institutional basis for the practice of ethical management by clarifying our code of ethics. Our executives and directors have taken the initiative to help ethical management take root in our corporate culture through the Integrity Pact, BEST Forum, CEO's Pledges for Ethical Business, etc.

◎ Codes of Conduct Concerning Ethical Management

Charter of Ethics	Credo of Western Power Employees	Suggest the corporate ethics and values
Action Plans of Corporate Ethics	Practice guideline for employees' credo	Suggest the ethical standard in accordance with the credo
	Ethical action plans for executives	Provide ethical guidelines and standards

◎ Personnel in Charge of Ethical Management, and Organization Chart

Ethical Management Chief	Establishing, operating and supervising the overall corporate ethical management plan and the related action plan.
Ethical Management Supervisor	Establishing, operating and supervising the ethical management system for the corporate bureaus and workplaces
Head of Ethical Management Department	Monitoring ethical management activities in the department, providing education and reporting the activity results.
Officer in Charge of Ethical Management	Operating the action plan according to the ethical management system of the corporate bureaus and workplaces, and reporting the results.



Implementing Anti-Corruption Education Program

To enhance employee awareness of the need to fight corruption, we develop and provide ethical management education programs by step in accordance with the ethical management practice road map, and utilize diverse channels including workshops, education and training sessions provided by commissioned experts, business issues briefing given by the management, and messages from the CEO on ethics to stress the importance of ethical management.

◎ Ethical Management Education Structure

Classification	General Education	Leadership Education	Managerial Education	Online Education
Goal	Stress the importance of ethical management and share the understanding on the related policy.	Leadership program designed to help employees change unethical practices.	Foster managers to play a leading role in the field of ethical management.	Spread corporate ethical management strategies and raise awareness
Subject	All employees (including new employees)	Employees over 3rd class	Officers in charge of ethical management	All employees
Education Type	Itinerant education, Collective education	Commissioned education, collective education	Workshops, Commissioned education	On-line education

Evaluation on Ethical Level and Feedback

We monitor ethical management activities, including the company's compliance with the law, via the ethical management bureau and the audit bureau on an ongoing basis. We also try to enhance ethical reliance and satisfaction with our company by consistently monitoring and improving the ethical management of our stakeholders. In addition, we evaluate our corporate anti-corruption level through the assessment given by KEPCO each year, together with our own evaluation on ethical management activities.

The internal and external assessment results are reflected in the evaluation of each organization or department to influence each employee's incentive scores. If an incident of corruption is found, the relevant workplace is given a penalty, such as being deprived of a reward or an opportunity for overseas training. We share the results of monitoring through workshops for officials responsible for ethical management or itinerant education at workplaces, and find a way to improve the company's ethical management.

◎ Our Own Survey on Anti-Corruption

Classification	Clean Cooperator Monitoring (CCM)	Clean Employee Monitoring (CEM)
Subject	Person in Charge at Partner Companies	Internal Employees
Method	Telephone Survey	Mail Survey
Content	Experience of Corruption, Awareness, Established System, Action Plan	Awareness of Ethics, Observance of Ethical Regulations, Ethical Activities

◎ Anti-Corruption Evaluation Score

Classification	2009	2010	2011
KEPCO Evaluation	9.91	9.45	8.91
Self-Evaluation	9.93	9.95	9.92

Operating Anti-Corruption System

Strengthening Whistle-Blowing System

We opened the "Cyber Ethical Counseling Center" on our corporate website to enhance employee access to the whistle-blowing system, and worked to

strengthen the system by publishing information brochures for employees, and increasing the compensation awarded to those who report an act of corruption.

◎ Operation of the Cyber Ethical Counseling Center

Dialogue with CEO	Employees	Only available to CEO, Not open to the public (Real name only)
Voluntary reporting system	Employees	Voluntary report on bribes received from outsiders (Real name only)
Corruption reporting system	Employees/Outsiders	Report on acts of corruption, Operated by the Audit Bureau (Real name only)
Ethical help-line	Employees/Outsiders	Report on cases of corruption within the company, operated by an outside company (Anonymity guaranteed)

Operating Electronic Bidding and Fair Trading Process

In an effort to promote fair and transparent trades, all of our contracts are processed through the electronic bidding system. However, making a private contract is allowed in some special cases related to quality assurance for power generation equipment, limiting suppliers and incompatibility, to facilitate the stable operation of power generation facilities. We are continuously working to prevent corruption before it occurs by requiring officials responsible for contract-

related work and our contractors to submit a written oath stating their intention to pursue integrity and transparency in the processing of contracts. We also respect the Fair Trading Act and observe the related regulations. Our company has received no legal restrictions in connection with fair trading. In 2009, we received a corrective order from the Fair Trade Commission and immediately rectified the problem.

Customer Satisfaction

Customer Satisfaction Management

◎ Major Activities Related to Customer Satisfaction Management

Customer Response	<ul style="list-style-type: none">Enhancing convenience of using our power plants by visitors and contractorsFriendly response to customers, transparent and fair work process
Implementing Social Responsibility	<ul style="list-style-type: none">Purchase of local products in the areas neighboring the plant, and expand job opportunities for local citizensIncrease efficiency of executing the electric power industry basis fund (increase income, offer educational work, etc)Strengthen social contribution activities in areas around the plant.
Strengthening Cooperative System and Post Management	<ul style="list-style-type: none">Maintain a close relationship with relevant departments at local places of businessMonitor customer contact activities and solve problemsGive local residents a field trip to our facilities

◎ Customer Information Protection Policy

Due to the rapid change and development of the IT industry, the infringement of personal information is emerging as a critical social issue, and severe damage to a corporation's image is caused when such an infringement occurs. To protect the personal information of customers along with the internal information of the company, we establish and operate a system that is designed to protect personal information in accordance with the security policies administered by the National

Intelligence Service and the Ministry of Knowledge Economy.

We recognize the importance of protecting personal information, and effectively block the release of private information by installing an authenticated firewall. No cases of infringement or complaints have been reported in connection with our customer information protection policy and efforts.

Legal Compliance

◎ Observance of the Political Fund Act

We comply with the Political Fund Act, which bans the offering of political funds.

◎ Marketing Communications

We faithfully observe all advertisement-related regulations, and follow our own guideline on marketing and promotion work, which we developed in 2007. No violations concerning the marketing communication regulations and no customer

complaints have been reported in relation with the protection of customer information

◎ Supply of Products and Services

We have received no fines associated with violations of the law or regulations concerning the development of electric power resources and related businesses.

We have never breached any regulations related to customer health and safety in the process of supplying electric power.

Safety and Health

The guarantee of safety and health is one of the most basic elements of employee rights. Korea Western Power clearly understands that every job should be performed based on safety and health. Placing a top priority on preventing accidents at work, we provide all necessary support in terms of budget, human resources, and system, and operate a safety and health management

system. Moreover, we spread awareness of safety and health by monitoring safety management activities, not just of our employees but also of our partner companies. We also provide various health and welfare programs for our workers and their families to ensure a happy life for our employees.

Operation of the Top Safety Global Management System

In 2003, Korea Western Power acquired the certificate for its Occupational Health and Safety Management System (K-OHSMS/KOSHA18001), a first for a public sector utility in Korea, and was awarded the certificate of Safety Zone Management in 2008. We operate an optimized fire prevention system and realize Safety-First Management by applying these advanced systems to all of our workplaces.

In addition, with the aim of creating a safe and healthy corporate culture, we annually establish and implement a safety management plan to effectively control safety management, ensure the safety and health of our employees and our contractors' employees, and increase our corporate value by strengthening safety management. As a result of these efforts, no industrial accidents were reported in our company throughout 2011.

Increasing Safety Awareness and Promoting Zero Accident at Work

Korea Western Power provides safety education to our employees in accordance with the Occupational Safety and Health Act, and strengthens the safety management awareness and capacity of our entire workforce through commissioned education on safety by experts and cyber education of managers. We take all preventive and corrective actions necessary to ensure the safety of all construction works and maintenance works according to our regulations. We also provide safety education and training to all workers employed by our company and all contractors in order to prevent accidents. Between January

of 2007 and December of 2011, we provided safety education and training programs to 468 employees and 1,563 workers at contractor companies, both in our safety training center in Tae'an and at the safety experience center operated by the Korea Occupational Safety & Health Agency.

Our company has achieved excellent safety management, extending the zero-accident period by up to 16 times in Tae'an Thermal Power Complex Division and 8 times in Gunsan Combined Cycle Power Department.

Operating Industrial Safety and Health Committee

The collective agreement of Korea Western Power stipulates our liabilities in the area of safety, health and compensation for accidents, our workers' rights related to health and the conditions agreed with our labor union in accordance with the Occupational Safety and Health Act. Consisting of 10 commissioners representing labor and management, the industrial safety and health committee is held in each workplace on a quarterly basis according to the collective agreement. If any pertinent issues are not resolved by the industrial safety and health committee, they will be addressed by the Joint Consultation Committee, which is held on a quarterly basis. In 2010, the safety and health committee organized in head office came to an agreement as to industrial accident

prevention plans, worker safety and health education or training plans, work environment evaluation plans, health care plans, working uniform provision plans, and settlement of asbestos-related issues.

Also, we appoint a health supervisor for our larger workplaces such as Taeon, Pyeongtaek and Seoincheon in order to promote the health of our employees. To serve the health care needs of employees in our small workplaces, we hire professional health care service providers. We operate our business with a focus on safety by appointing an honorary industrial safety inspector for each of our workplaces.

Building an Emergency Response System to Cope with Disasters

We are continuously working to ensure a stable power supply that is not vulnerable to disasters, and together with KEPCO are striving to improve the service quality. We operate a joint disaster safety response headquarters with the domestic electric power companies to prevent disasters, recover from the damage resulting from disasters and perform safety control, and also operate

our own emergency response system to ensure efficient and swift recovery. In addition, we have prepared a crisis countermeasure system based on the crisis countermeasure manual and action manual, operate a disaster response center, and continuously improve our capacity to manage risk through simulation drills and virtual accident scenarios, followed by performance evaluations.

Industrial Accident Rates for the Recent Three Years

Items	2009	2010	2011
Taeon Headquarters	0%	0%	0%
Pyeongtaek Headquarters			
Seoincheon Headquarters			
Gunsan Office			
Similar Businesses (Electricity, Gas and Water System Businesses)	0.18%	0.06%	0.07%

※ Industrial Accident Rate = Number of Workers who have had accidents / Number of Workers X 100
※ Source: Korea Occupational Safety & Health Agency

Downtime Frequency for the Recent Three Years

Items	2009	2010	2011
Annual Work Hours	4,679,976	4,583,888	5,028,688
Number of Accidents Occurred	0	0	0
Downtime Frequency	0	0	0

※ Industrial Accident Occurrence Rate = Number of employees injured or killed / Number of employees X 100
※ Source : Korea Occupational Safety & Health Agency

Disaster Prevention Activities



Emergency Drills



Safety Check-ups



Safety Training

Operating Comprehensive Health·Welfare Programs

Operating Health Program for Employees and Their Families

We try to guarantee a good quality of life for our workers by taking care of the health of our employees and their families through regular medical checkups. We perform an annual checkup and a blood test every two years for our employees. In addition, we annually perform a special medical checkup, coupled with the general medical checkup, for employees engaged in the power generation, chemical, mechanical, and measuring areas, as well as shift employees, for their health and safety. In addition, we perform the above medical checkups on new employees and employees changing to shift work.

We concluded an agreement with a corporate medical benefit service provider, the first of its kind in Korea, to provide a wide range of medical benefits to employees, including discounts, late payment and installment payment for the medical bills of our employees and their families. We operate the WHP (Worker Health Promotion) program for our employees and their families) according to the labor-management agreement. Also, we operate a crisis control program for our employees and their families by installing the health care room, hiring a nurse for individual workplaces, and making agreements with hospitals.

Operating Employee Welfare Fund and Housing Support Program

Korea Western Power has established an employee welfare fund by donating 2% of its net profits before tax each year to enhance the welfare of its employees. Using this financial resource, our company provides support for family events, childcare expenses and children's university tuition of employees, as well as support for employees suffering from illness or affected by disaster. Also, in this era of a low birth rate and aging population, we operate child-friendly support policies by paying the tuition of up to two children for each employee hired by our company, until the children graduate from high school. We provide financial support to employees for the purchase of the four major insurances (national pension, health insurance, employment insurance and industrial accident

insurance). In the event of a death due to an industrial accident, we provide the family of the employee with financial compensation.

Our main workplaces are located in less-developed regions of Korea near the shore, including Taeon and Pyeongtaek, and as such the working environment of our employees is somewhat poor. To address this, we provide housing for our employees by 80% to ensure housing stability for our employees, and support housing purchase or rent of employees by providing long-term low-interest loans of up to 50 million won and 30 million won, respectively.

Comprehensive Health·Welfare Program

Classification	Contents
Health Check-up	(General Check-up) Eyesight, hearing, blood pressure, cholesterol, chest radiograph
	(Special Check-up) Provide special medical check-up for employees exposed to a hazardous working environment involving noise, chemicals, and organic solvents, together with an annual general check-up.
	(Blood Check-up) General check-up + thyroid examination, gastroscopes, abdominal ultrasound screening
Corporate Medical Benefit Service	Offer medical discount for areas not covered by insurance, including ophthalmology, Dental clinic, dermatology, oriental medical clinic.
Employee Welfare Fund	Support for family events, children's tuition and educational expenses and living expenses for our employees.
Child Education	Support for tuition of children attending middle and high schools
Social Security Insurance	National pension, health insurance, employment insurance, industrial accident insurance, compensation for accidents at work
Housing Stability	Housing, dorms for singles, housing purchase and rent support



- Operation of Power Plants
- New Business Development
- Research & Development
- Management Innovations
- Financial Soundness
- Economic Achievements

Innovation Management

We, Korea Western Power Co.Ltd, will realize our vision of 'World Best 3E Creator' by contribute to the society with the best energy generated in harmony with Human, Technology, Environment.

Operation of Power Facility

Electricity is an essential energy source for modern industry and the everyday lives of all members of society, and cannot be stored or recovered. Power consumption increases as the national income and the national economy grow. Korea Western Power is actively expanding its power facility for energy defense, as the power business is a capital-intensive national backbone industry requiring large-scale facilities and long-term investments. The Company has spared no efforts to stably operate its facilities, improve efficiency and reduce costs.

Operation of Power Facility

Korea Western Power accounts for 10.6% (8,404MW) of the domestic power generation capacity and 11.1% (54,815GWh) of the power generation volume. The power generation facilities of the Company grew from 6,846MW in 2001 to 8,404MW in 2011 (22.8%), while the power generation volume grew from 25,965GWh in 2001 to 54,815GWh in 2011 (111%).

Changes of Power Generation Facilities and Power Generation Volumes

Classification	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Power Generation Facilities	6,846	7,346	7,346	7,280	7,280	7,880	8,884	8,885	8,885	9,604	8,404
Volume of Power Generation	25,965	37,457	38,430	37,783	37,729	38,447	48,728	46,955	45,728	53,033	54,815
Economic Growth Rate	3.8%	7.0%	3.1%	4.7%	4.2%	5.0%	5.0%	2.8%	0.2%	6.1%	3.8%

※ The facility capacity as of June 2011: 8,404MW (10.7%) after transfer of pumped-up facilities (1,200 MW) to KHNP on January 1, 2011

Power Facility Construction Plan

As the global program to reduce greenhouse gases is developed, and decreased dependence on fossil fuel energy becomes inevitable, Korea Western Power plans to increase its power capacity by 2,825 MW by building the highly efficient Taeon Thermal Powers No. 9 and No. 10, Garorim Tidal Power and Integrated Gasification Combined Cycle (IGCC) for the mid-to-long term development of green power sources

Facility in Construction or to Be Constructed

Items	Name of Power Facility	Completion Date (Scheduled)	Fuel	Power Capacity (MW)	Remarks
Scheduled	Garorim Tidal Power	2015.12	-	520	
	Taeon IGCC	2015.12	Soft Coal	300	First in Korea
	Taeon Thermal Power No. 9	2016.6	Soft Coal	1,000	
	Taeon Thermal Power No. 10	2016.12	Soft Coal	1,000	
	Sejong City Photovoltaic Power Plant	2011.12	-	5	
Total				2,825	

※ Based on Letter of Intent of the 5th Basic Plan for Power Supply

Facility Operation System

Korea Western Power has developed and operated a system that provides real-time online support in the event that power facilities experience abnormal operating conditions, in order to stably supply power, which is essential for the national economy and the daily lives of the general public. The company is also working to ensure stable facility operation by adopting contingency training programs and policies according to conditions, in order to respond to facility failures and safety accidents. To prevent problems related to environmental pollution, Korea Western Power has adopted a system that monitors its discharge of environmental pollutants around the clock. To ensure stable operation of the facility, Korea Western Power any has established a preventive maintenance plan, and maintains the best facility conditions. In the event of ripple accidents caused by the electric power system, the company operates a failure recovery system by adopting protection devices so that the power generators can be stably suspended. Furthermore, Korea Western Power has improved its facility operation technology for benchmarking overseas cases, and improved the functions and reliability of its facilities through facility monitoring and technology exchanges with experts from EPRI in the US. By establishing a preventive maintenance system that focuses on fundamental maintenance functions, the Company has maintained its facilities in optimal condition, and strives to stably supply quality power at lower prices.

Operating Results

In 2011, Korea Western Power achieved the thermal efficiency of its power generation facilities of 41.98% through optimal allocation and utilization of management resources, improvement of power generation operation system using six-sigma management innovation techniques and development of combustion technologies. The efficiency of Korea Western Power is 0.88%p higher than the average of domestic power generators for 2010 of 40.83%. It is also higher than the US average for 2008 of 34.1% and the Taiwanese average for 2009 of 37.5%.

Number of Failures and Thermal Efficiency

Year	2006	2007	2008	2009	2010	2011
Number of Failures	1	3	0	4	5	2
Average Failure Time	7:01	3:19	0	3:16	5:10	11:42
Thermal Efficiency	41.12	41.26	41.28	40.73	41.71	41.98

Facility Operation Rate

Year	2006	2007	2008	2009	2010	2011
Taeon Thermal Power	90.12	92.87	93.45	94.41	93.04	93.60
Pyeongtaek Thermal Power	39.68	44.96	15.73	29.71	25.65	27.50
Pyeongtaek IGCC	12.00	21.93	21.71	11.66	35.51	46.92
Seoincheon IGCC	55.99	69.84	65.91	48.12	75.36	80.51
Gunsan Combined Cycle Power Department					71.38	90.12
Samrangjin Pumping up Power	6.37	4.15	6.83	7.26	5.67	-
Cheongsong Pumping up Power	4.90	5.88	9.16	10.13	11.56	-
Taeon Small Hydro Power		16.61	20.30	25.10	22.43	19.57
Taeon Photovoltaic Power	12.11	11.15	12.36	12.15	11.02	14.24
Samrangjin Photovoltaic Power		12.71	14.78	14.52	14.18	15.56
Gunsan Photovoltaic Power Plant					13.86	15.12
Total	59.29	63.69	60.16	58.75	64.62	76.77

* Thermal Efficiency : Ratio of the energy that is changed to power to the thermal energy provided to the thermal cycle

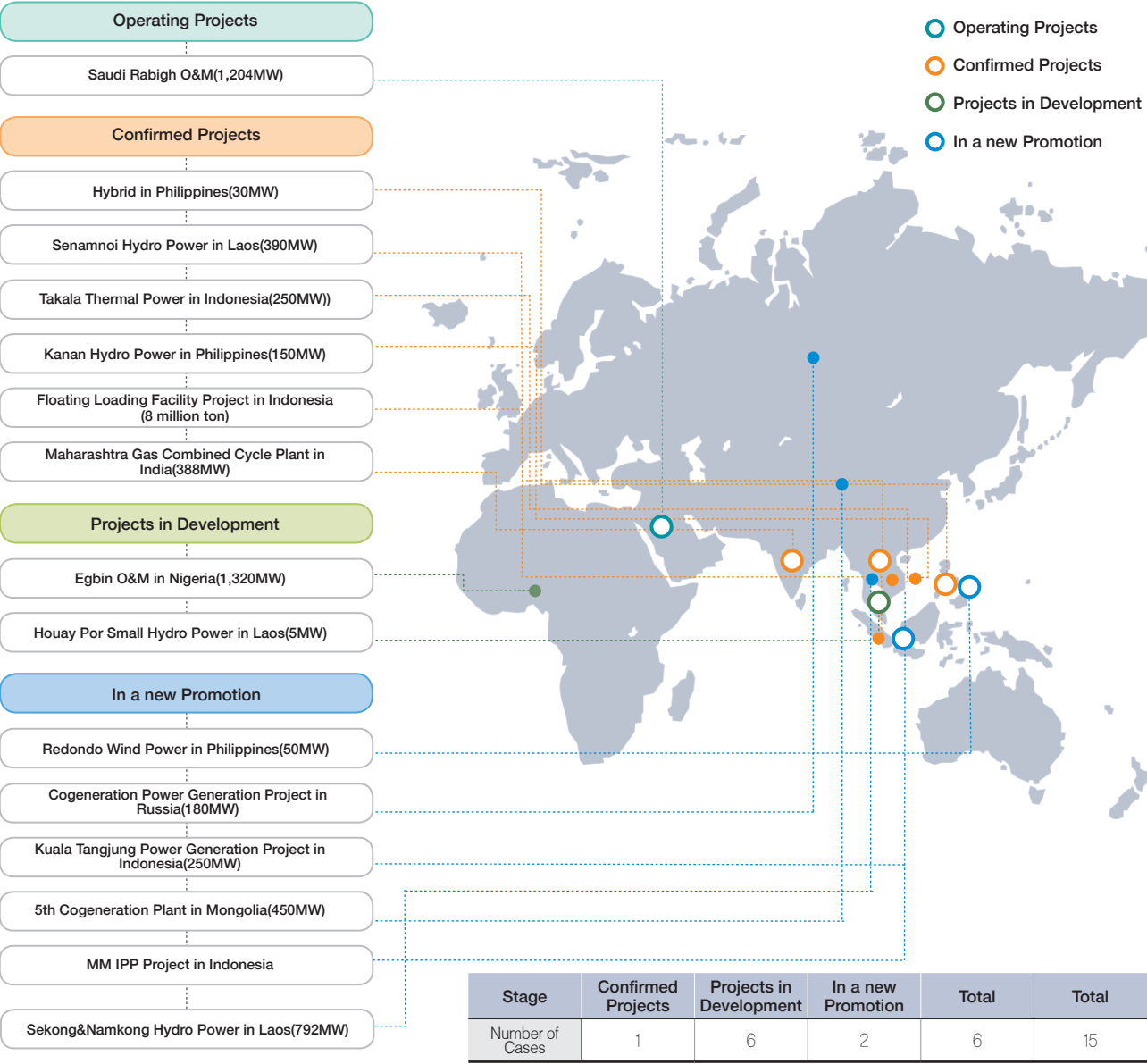
Formula =
$$\frac{\text{Power generation(kWh)} \times 860(\text{kcal/kWh})}{\text{Fuel Usage(kg,l)} \times \text{Calorific Value(Kcal/kg,l)}} \times 100 (\%)$$

** Source : KEPCO In Brief 2010 ('10.12.31 by KEPCO)

Development of New Businesses

Korea Western Power is looking for new business opportunities in overseas markets based on a business development strategy that focuses on selection and concentration, as well as excellent facility operation techniques, in order to create sustainable growth engines for the future and grow into a major IPP business of Asia. As well, the company is increasing its opportunities for profit creation by expanding the business scope, and has overcome the challenge of the slowdown in domestic power demand by developing new business models through the diversification of related businesses in the domestic market.

Development of New Overseas Businesses



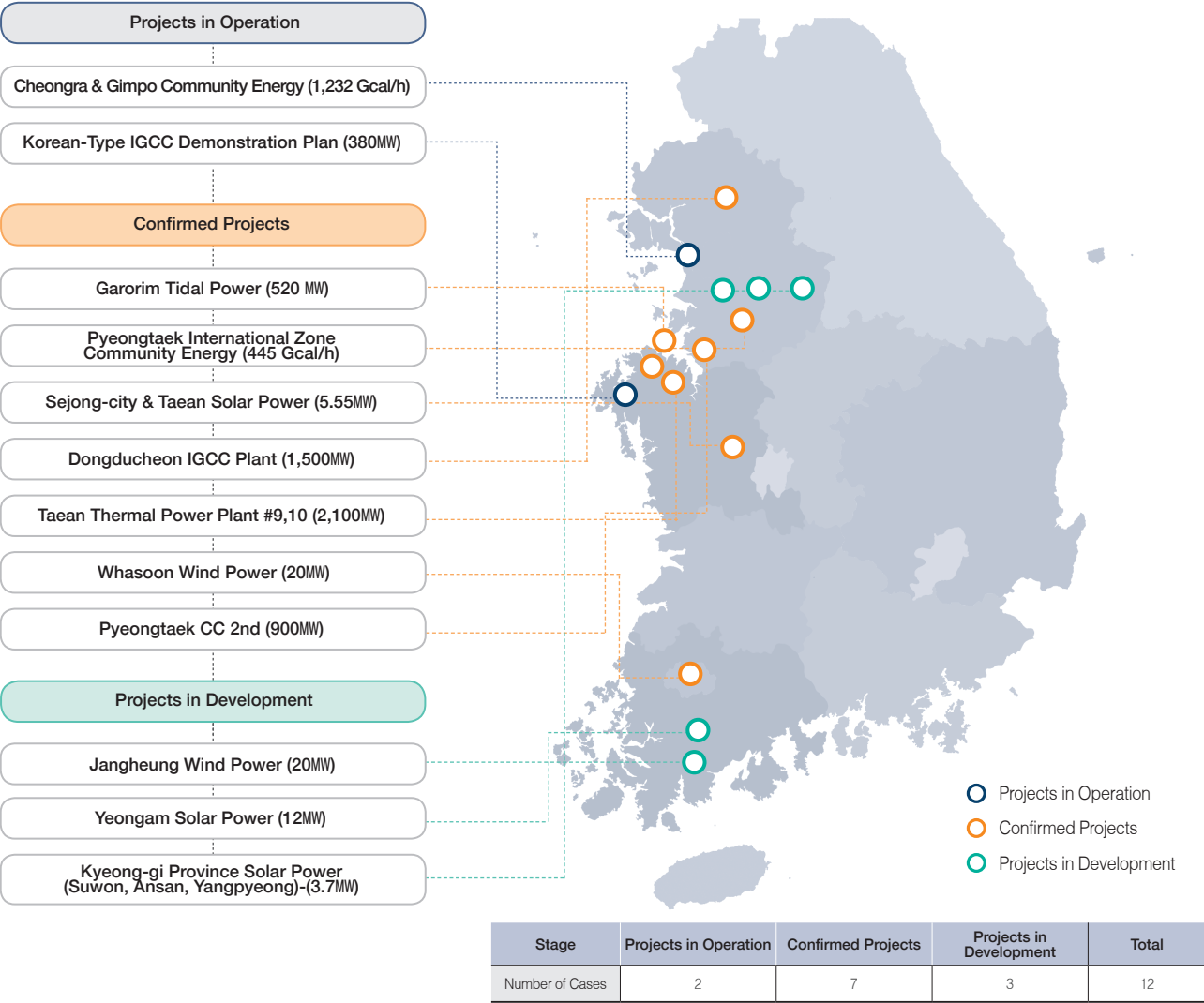
Overseas Business

Since Korea Western Power won the order for the operation of a heavy oil power facility in Rabigh (Saudi Arabia) in March of 2009, it has established the O&M business in Rabigh, produced main devices, and provided the technical support for construction of the power plant. In addition, the Company has focused on the development of future growth engines by building the 390 MW capacity Senamnoi hydro power plant in Laos, the 150 MW capacity Kanan hydro power plant in the Philippines, and the 200 MW capacity thermal power plant in Indonesia.

Resource Development

To ensure a stable supply of soft coal, a primary fuel, Korea Western Power jointly acquired 5% of the shares of Mulaven Mine in Australia with KEPCO and other power businesses. The Company plans to develop mines in Indonesia to develop stable fuel supply and generate profit from new sources.

Development of New Domestic Businesses



Cheongra & Gimpo Community Energy Project

As a community energy supplier to Incheon Cheongra and Gimpo districts, Korea Western Power will improve quality of life for local residents by supplying heat of up to 923 Gcal/h to about 90,000 households using the waste heat of Seoincheon IGCC. The project forms the foundation for the company's launch of its community energy business, and the site is currently under construction, with a completion target of 2012.

Taeon Thermal Power Plant Nos. 9 & 10

The project for construction of Taeon Thermal Power Plant Nos. 9 & 10 aims to build two units of the 1,050MW-class power generation facilities, of which capacity doubles that of eight units of existing 500MW-class soft coal power generation facilities. The units to be newly built are large-scaled facilities with high efficiency, and it is expected that they will significantly contribute to stable power supply of Korea.

Community Energy Project at Pyeongtaek International Zone

As part of its efforts to improve the capacity of Pyeongtaek Thermal Power Plant and contribute to the national energy-saving strategy by responding to the government's expansion of the community energy supply, the Company has developed the community energy program for Pyeongtaek International Zone with the aim of supplying heat using the waste heat of Pyeongtaek Thermal Power Plant. It is expected that the zone will accommodate about 54,000 households, and the first heat supply is scheduled for 2013.

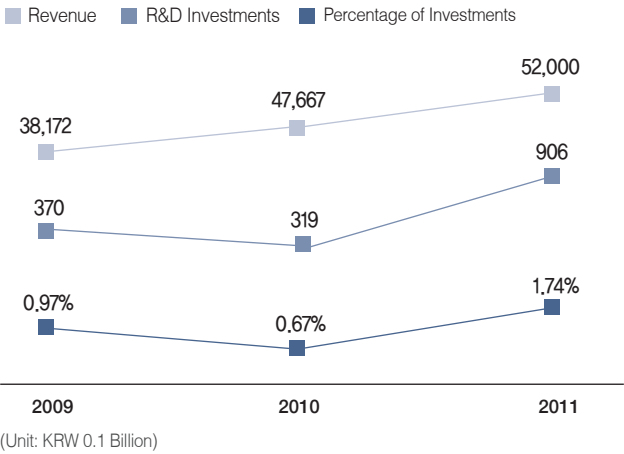
The 2nd Phase of Pyeontae Thermal Power Complex

The 2nd Phase of Pyeongtaek Thermal Power Complex is a cutting-edge gas-fired combined-cycle power plant with the capacity of 900MW, and it will be built at the previous site of a steel structure-type substation. Korea Western Power targets to stabilize power supply in summer of 2013 by achieving early completion of the gas turbine by June 2013. If completed in 2014, the facility will significantly contribute to stable power supply based on the utilization rate equivalent to that of the base facility and the capability of prompt response to changes in supply and demand.

R&D

Korea Western Power has strived to expand its R&D technology development and related investments so that it can develop key technologies and create growth engines as a leading domestic and global power firm. Since its establishment, the company has completed 177 R&D initiatives (130 initiatives completed and 47 initiatives pending) as of 2009, and worked on 65 initiatives (15 new initiatives and 50continuing initiatives) in 2009. It has invested about KRW 160 billion for R&D for the past three years, and investd KRW 90.6 billion in 2011, a year-on-year increase of KRW 58.7 billion.

Amount & Percentage of R&D Investments



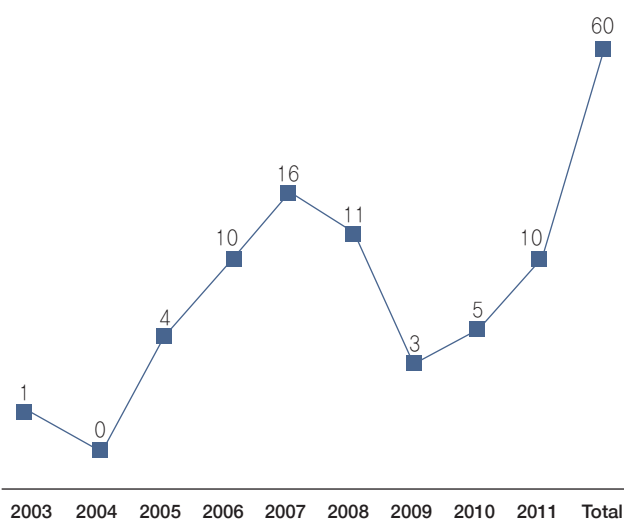
Facilitation of SME Support

Korea Western Power has continuously made efforts to secure industrial property rights, which are intangible intellectual properties. The company owns 170 industrial property rights including utility models, and the number of industrial property rights acquired after separation reaches 90. As part of its policy for SME support, Korea Western Power has transferred 45 industrial property rights to 23 companies, including three paid transfers and 42 free transfers. The Company will continuously acquire competitive industrial property rights, and support SMEs through technology transfer.

Major Technology Development

3 Categories	5 Key Technologies
Renewable Energy	<div>- Securing CCT (Clean Coal Technology)</div> <div>- Development of Design Skills for and Construction of Localized IGCC with the capacity of 30WM</div> <div>- Renewable Energy & New Power Generation Technology</div> <div>- Development of 250 kW-class MCFC technology</div>
Cost Saving & Reliability	<div>- Development for Operation and Optimization of Facility</div> <div>- Local development of parts for the 1350℃-class gas turbines</div> <div>- Development of New I&C System Technology</div> <div>- Development of integrated control system for thermal power plants</div>
Development of Environmental Technology for the Future	<div>-CO₂ Collection & Storage Technology</div> <div>- Development of high-efficiency CO₂ collecting materials and absorption technology</div>

Number of Technology Transfer

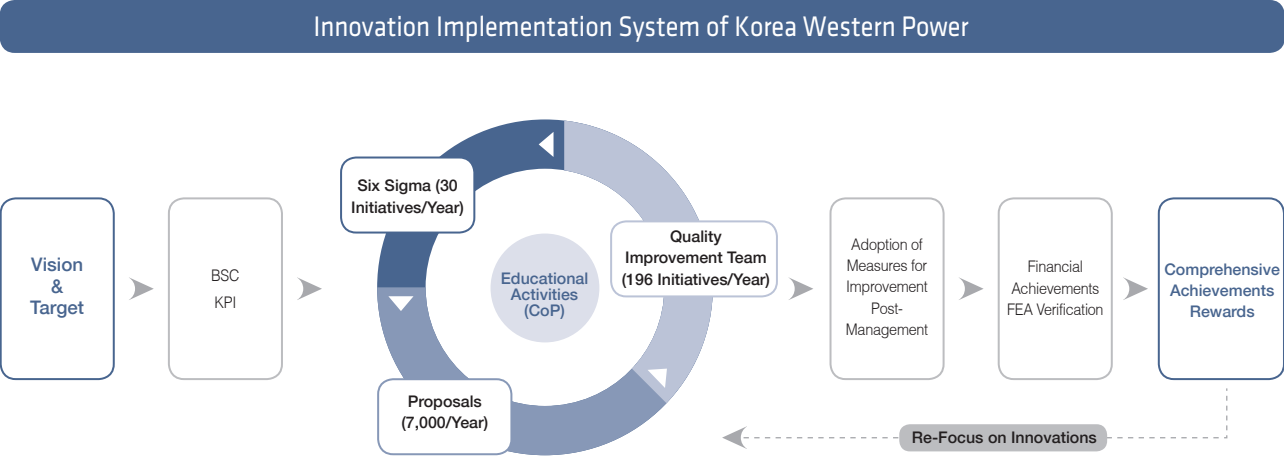


Status of Ownership of Industrial Property Rights

Items	2004	2005	2006	2007	2008	2009	2010	2011	Total
Patents	0	2	17	11	12	3	9	8	62
Utility Models	11	6	7	1	6	2	6	9	48
Design & Trademarks	6	1	0	0	2	2	-	-	11
Total	17	9	24	12	20	7	15	17	121

Management Innovations

Korea Western Power has worked for innovation at the enterprise level, in order to reach its corporate goals and improve its corporate value through continuous achievements. A balanced scorecard (BSC) is defined from financial and non-financial perspectives to set goals for innovations by the organization, and members are selecting and implementing action plans to achieve the goals. The initiatives for innovation are being implemented by utilizing Six Sigma, operating a quality management team and receiving proposals, and the evaluation and rewarding related to implementation of initiatives are being conducted in a fair and objective manner. Korea Western Power has encouraged the voluntary participation of all members by building a virtuous circle of innovation through the adoption of systematic activities to encourage innovation.



Establishment of Key BSC Indexes and Targets

Korea Western Power has set mid-to-long-term management goals and strategies for implementation; developed detailed yearly management targets, strategic initiatives and KPI; and implemented targets at the enterprise level and by organization, based on an analysis of the domestic and overseas management environment, in order to provide systematic innovation indexes and targets by unit organization. In 2010, the Company aimed to produce profit of KRW 190 billion and implement initiatives for low carbon green growth from the perspective of sustainable growth. The Company has developed detailed initiatives and applied various methodologies, including Six Sigma, for the successful implementation of its initiatives.

Utilization of Six Sigma and Benefits

Korea Western Power adopted Six Sigma, a top-down innovation approach led by the management and managers, at the enterprise level, and has applied it to 346 items. The financial benefit of the program reaches KRW 451.1 billion. In addition, Korea Western Power has reinforced the adoption of Six Sigma activities by combining its Six Sigma practice with its HR management system. Since 2007, it has mandated Six Sigma GB certification for managers promoted to first or second class.

Operation of the Click and Suggest Now Program and Benefits

The Quality Management Team that was established in the 1970s is a bottom-up organization participated in by every member of the Company, which focuses on each function and facility in the field. The Company has continuously operated the program by combining it with the Six Sigma innovation practice.

Operation of the Click and Suggest Now Program and Benefits

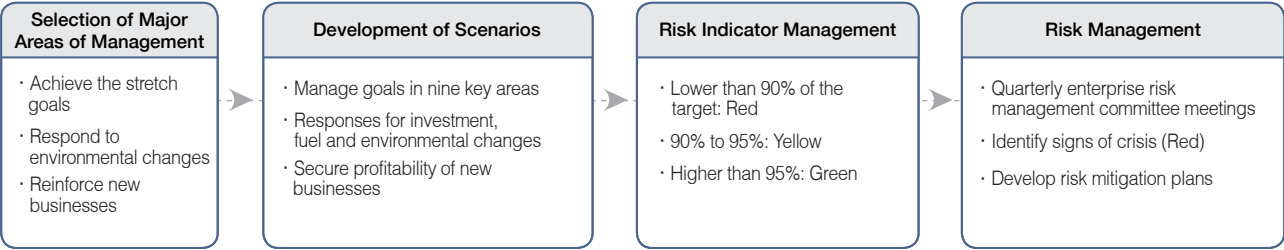
One of Korea Western Power's meaningful achievements has been to improve its proposal system. The scope of proposals has been expanded from innovative ideas to overall operation. For real-time submission and evaluation of proposals, a new web-based proposal management system that maximizes ease of use, promptness and convenience was developed. The company encourages all of its members to actively participate in the proposal system.

Evaluation & Rewarding of Activities for Innovations

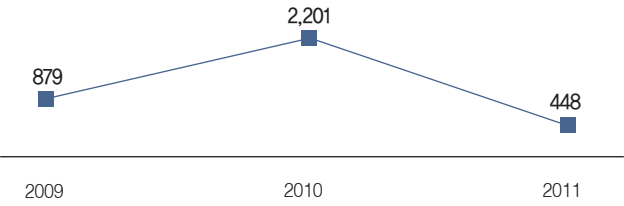
To evaluate and reward the implementation of initiatives, Korea Western Power adopted a comprehensive evaluation and reward policy in December 2005, integrating diverse reward systems. In addition, the company has eliminated complaints about rewards by enabling an objective and fair evaluation through hiring a dedicated financial effect analyst (FEA). Korea Western Power encourages its employees to voluntarily participate in innovation activities through systematic evaluation and reward efforts.

Financial Soundness

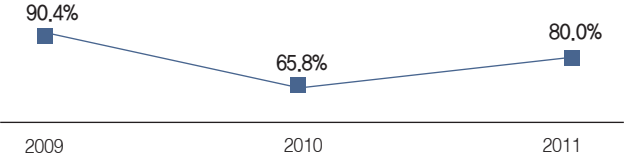
Korea Western Power recorded a deficit in 2008 due to rapid changes in global business conditions, including oil price hikes. Since then, the Company developed a risk management system at the enterprise level in 2009, based on an awareness of the limitations of risk management approaches by sector. In 2010, the Company adopted scenario management techniques in addition to the risk management system. The scenario management technique allows the Company to develop countermeasures against potential risks, and carry out optimized responses to emergencies.



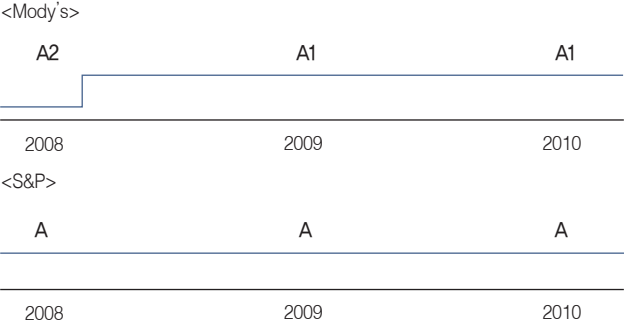
◎ Changes of Net Income



◎ Improvement of Debt Ratios



◎ Changes of Credit Rates



Management for mid-to-long term financial soundness improvement

Korea Western Power set the key management goals for 2011: proactive risk management, timely financing, financial structure improvement for financial system stability in accordance with increasing investment in power plants.

Thanks to proactive risk management, the Company increased operation profit by KRW 30 billion higher than that of 2010 and reduced the loss in exchange by KRW 15 billion.

With timely financing, the Company adjusted the ratio of KRW and foreign currency financing as 6:4 and cut financing cost off KRW 3.6 billion through prolonging extension of debt maturity and raising fund at low interest rate.

In terms of financial structure improvement for sustaining mid-and-long term debt ratio as under the 200%, the Company set the key management 4 fields as cost reduction, business alignment, cutting down the investment cost and disposal of assets and promoted yearly improvement plans and goals. In 2011, KOWEPO reduced the fuel cost down the amount of KRW 15.5 billion through mixture of low cost coal combustion.

Preparing for increasing investment cost and debt ratio from 2012 to 2016, Korea Western Power will make best efforts to sustain and enhance the financial stability and soundness with active management and operation.

The same credit rate as Korea Government in Moody's and S&P

Because Korea Western Power gained high recognition for its stable cash flow and sound financial structure, the Company maintained the Moody's credit rate as A1 and that of S&P as A. The credit rates of Korea Western Power are the same as Korea government's rates and it prove the sound repayment capability of Korea Western Power.

Appendix

Verification Statements
Key Financial Data
Summary of Environmental Performance
GRI Index Chart
Definitions
Certification & Awards
Code of Conduct
Recipient

Verification Statements

We are requested to verify the Korea Western Power's 2012 Sustainability Report. However, Korea Western Power shall bear all liabilities on this report and report preparation standards including identification of stakeholders and material issues. We shall bear liability to provide our verification statements on this report.

Backgrounds and Scope of Verification

The verification was appropriately planned so that Korea Western Power may confirm whether this report satisfies the following standards.

- 1. Application of "AA1000 Account Ability Principles Standard(2008)" by Korea Western Power
- 2. Appropriate statements of information contained in this report from the perspective of materiality in accordance with the principles of report specified in 'About This Report'

The scope of this verification has satisfied the requirements for Type 2 Verification defined in AA1000AS (2008) by Account Ability, including aspects of reliability. We checked whether the financial data (page 12~13) used for this report was properly extracted from the audited financial statements of Korea Western Power. For full understandings on business results and financial status of Korea Western Power, please refer to the audited financial statements of Korea Western Power dated Dec 31, 2010

Verification Criteria

Korea Western Power has applied AA1000APS (2008) which stipulates three principles including importance, completeness and adaptability. In addition, Korea Western Power has applied Sustainability Reporting Guidelines (G3) of GRI (Global Reporting Initiative).

Verification Standards

We have prepared and performed the verification based on ISAE 30001 and AA1000AS2. Limited verification based on ISAE 3000 is aligned with the moderate level defined in AA1000AS (2008). Above standards include requirements for independence and qualifications of the verifier.

Independence, Fairness and Capability

We comply with the ethical charter of IFAC (International Federation of Accountants), and we are not engaged in any business which may affect independent verification activities and expression of opinions including preparation of report. This charter includes requirements for integrity, objectivity, professionalism, proper care, confidentiality and expert behaviors of verifiers. KPMG operates proper systems and processes for prevention of independence issues and monitoring on compliance with the ethical charter.

We, as a group of experts with years of verification experiences in sustainability and with professional skills in stakeholder engagement, economics, environment and society, have conducted this verification.

Services Provided

We have performed the following activities to make a conclusion.

- Evaluation on the results of the stakeholder engagement process of Korea Western Power
- Visits to business sites for verification of sustainable management data management, reporting system and reporting process
- Evaluation on the process of selection of material issues of major stakeholder groups of Korea Western Power
- Research on press coverage and Internet data containing statements on sustainability of Korea Western Power during the reporting period
- Interviews with persons in charge of Korea Western Power and stakeholders of Korea Western Power for evaluation on sustainable management activities and processes during the reporting period
- Verification of systems and processes used for generation of data used for the report

- Limited verification of internal documents and sources of Intranet at the enterprise level in relation to calculation and collection of data to be verified, based on questions and analytical verification
- Verification on whether financial data contained in page12~13 was properly extracted from the audited 2010 financial statements of Korea Western Power
We have discussed correction of the report with Korea Western Power during the process of verification, and verified the final version of the report to check whether our findings were properly reflected.

Conclusion

- Application of AA1000APS
- Completeness – Korea Western Power is operating communication channels with stakeholders including environmental stakeholders, investors, social stakeholders, partners, employees and customers through the stakeholder engagement process.
- We have discovered no material stakeholder groups excluded from the stakeholder engagement process described in the report.
 - Importance – Korea Western Power is operating the importance evaluation process to verify priorities of stakeholders. The results of the evaluation are internally reported, and externally audited on a regular basis.
- We have discovered no material sustainability issues omitted in this report.
 - Adaptability – Korea Western Power is regularly communicating with stakeholders in relation to achievements related to selected issues.
- We have discovered no additional interests of stakeholders other than the important issues mentioned in the report.

Information Contained in the Report

No inappropriate statements were contained in this report in terms of importance.

Our Suggestion for the Improvements

- The followings are the issues that do not affect the conclusion of the verification but are deemed as critical for improved sustainability report of Korea Western Power.
- Korea Western Power needs to apply its systematic sustainable management activities which it operate in Korea, including corporate ethics, social contributions and environmental management to its overseas business sites as it pursues global management. To improve the level of sustainable management of Korea Western Power, it is required to systematize and apply its sustainable management activities to its overseas business sites.
 - Korea Western Power is operating various stakeholder engagement activities. In order to support comprehensive decision making of the company with such stakeholder activities, it needs to operate more strategic activities.
 - We recommend that Korea Western Power will expand the scope of sustainable management into itself and its partners, and include sustainability issues and management status related to the supply chain to the report.

We have discussed the reporting process and the observation issues related to the report with the management of Korea Western Power, which were not included in the scope of the contract. Korea Western Power has positively accepted the statements of the verification.

International Standard on Assurance Engagements 3000: Assurance Engagements other than Audits or Reviews of Historical Financial Information, issued by International Auditing and Assurance Standards Board

* AA1000 Assurance Standard (2008), issued by Account Ability

Seoul, February 2012

Samjong KPMG Advisory Inc.

상정 KPMG

Key Financial Data

◎ Balance Sheets

(Unit : KRW 0.1 Billion)

Items		2009	2010	2011
Balance Sheets	Current Assets	8,428	8,319	11,450
	Non-Current Assets	36,388	45,375	41,056
	Total Assets	44,816	53,694	52,506
	Current Liabilities	9,562	7,726	9,367
	Non-Current Liabilities	11,711	13,582	13,973
	Total Liabilities	21,273	21,308	23,340
	Capital	1,760	1,760	1,589
	Capital Surplus	12,666	12,666	9,924
	Total Capital	23,543	32,386	29,166
	Total Assets/Liabilities	44,816	53,694	52,506
Income Statements	Revenue	38,172	47,667	52,045
	Cost of Goods Sold	36,812	44,291	50,273
	Gross Profit	1,360	3,376	1,772
	Selling and General Administrative Expenses	320	374	523
	Operating Profit	1,100	3,147	1,258
	Financial Profit	1,292	653	263
	Financial Expense	1,263	953	821
	Net Income Before Taxes	1,129	2,847	700
	Incomes Tax Expenses	250	646	252
	Net Profit	879	2,201	448

◎ Financial Indexes

Items		2009	2010	2011
Growth Potential	Ratio of Asset Growth (%)	6.7%	-0.1%	-2.2%
	Ratio of Sales Growth (%)	3.2%	24.9%	9.2%
	Ratio of Net Profit Growth (%)	185.0%	150.4%	-79.6%
Profitability	Ratio of Operating Profit to Net Sales (%)	2.9%	6.6%	2.4%
	Ratio of Net Profit to Sales (%)	2.3%	4.6%	0.9%
	ROA (%)	2.0%	4.1%	0.8%
	ROE (%)	3.8%	7.0%	1.5%
Stability	Debt Ratio (%)	90.4%	65.8%	80.0%
	Current Ratio (%)	88.1%	107.7%	122.2%
	Quick Ratio (%)	63.6%	88.1%	92.9%
Activeness	Total Asset Turnover Ratio(Number of Turnover)	0.9	0.9	1.0
	Paid-in Capital Turnover ratio(Number of Turnover)	1.7	1.5	1.7
	Inventory Asset Turnover Ratio (Number of Turnover)	13.4	27.0	23.6
	Accounts Receivable Turnover Ratio (Number of Turnover)	10.9	11.5	10.6

(adopted IFRS from 2010)

Summary of Environmental Performance
(Environmental Performance Indicators)

◎ Environmental Performance Indicators

Items	Indicators	Targets (2020)	Performance (2011)	Rate of Progress toward 2020 Targets
Climate Change	CO ₂ (g-CO ₂ eq/kWh)	700	703	100
Air Quality	SO _x (g-SO _x /kWh)	0.21	0.231	91
	NO _x (g-NO _x /kWh)	0.24	0.451	53
	TSP (g-TSP/kWh)	0.02	0.015	133
Water Quality	Use of Chemical Materials (g/kWh)	0.30	0.238	126
	Rate of Water Recycling (%)	80	41	51
Resource Recycling	Rate of Fly Ashes Recycling (%)	90	83	92
	Rate of Desulfogypsum Recycling (%)	100	100	100

◎ Status of Power Generation by Year

(Unit : GWh)

Workplace	2009	2010	2011
Tae'an Thermal	33,083	32,601	33,725
Pyeongtaek Steam	3,644	3,146	2,609
Pyeongtaek CC	490	1,493	1,473
Seoincheon CC	7,587	11,883	11,986
gunsan CC	-	2,996	5,012
Renewable Energy	9	8	8
Total	45,719	53,033	54,815

◎ Yearly Thermal Efficiency

2009	2010	2011
40.73	41.71	41.46

◎ Primary Energy Consumption

(Unit : GJ)

Classification		2007	2008	2009	2010	2011
Direct Energy	Soft coal	277,222	295,955	298,184	293,993	310,604
	Heavy Oil	51,395	18,256	33,660	29,693	20,691
	Light Oil & Kerosene	338	174	165	205	258
	Gas	90,941	87,464	63,216	125,007	143,681
		419,896	401,850	395,224	448,898	475,235
Indirect Energy	Power Purchased	1,291	1,120	1,018	1,212	1,178
Total		421,187	402,969	396,243	450,111	476,413

◎ Direct & Indirect Greenhouse Gas Discharge

(Unit : 1,000 GJ)

Classification		2009	2010	2011
Direct Energy	Soft coal	33,106	35,463	38,452
Indirect Energy	Power Purchased	53	63	61
Total		33,159	35,525	38,513

GRI Index Chart

Category	Index & Contents		Page	UNGC
Climate Change	1.1	Statement from the most senior decision-maker of the about the relevance of sustainability to the organization and its strategy.	3	
	1.2	Description of key impacts, risks, and opportunities	4	
Air Quality	2.1	Name of the organization.	5	
	2.2	Primary brands, products, and/or services.	5	
	2.3	Operational structure of the organization	5	
	2.4	Location of organization's headquarters.	4	
	2.5	Number of countries where the organization operates, and names of countries with either major rations or that are specifically relevant to the sustainability issues covered in the report.	6	
	2.6	Nature of ownership and legal form.	7	
	2.7	Markets served	5	
	2.8	Scale of the reporting organization	5	
	2.9	Significant changes during the reporting period regarding size, structure, or ownership	5	
	2.10	Awards received in the reporting period.	86	
Water Quality	3.1	Reporting period	2	
	3.2	Date of most recent previous report	2	
	3.3	Reporting cycle	2	
	3.4	Contact point for questions regarding the report or its contents	2	
	3.5	Process for defining report content	24	
	3.6	Boundary of the report	2	
	3.7	State any specific limitations on the scope or boundary of the report	2	
	3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	N/A	
	3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report.	2	
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such restatement	N/A	
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	2	
	3.12	Table identifying the location of the Standard Disclosures in the report.	80	
	3.13	Policy and current practice with regard to seeking external assurance for the report	2	
Resource Recycling	4.1	Governance structure of the organization	14	1-10
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer	14	1-10
	4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	14	
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	16	1-10
	4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance	16	1-10
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	14	1-10
	4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	N/A	1-10
	4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	87	1-10
	4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance	14	1-10
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	17	1-10
	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	14	
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	86	1-10
	4.13	Memberships in associations and/or national/international advocacy organizations	86	1-10
	4.14	List of stakeholder groups engaged by the organization.	19	
	4.15	Basis for identification and selection of stakeholders with whom to engage.	19,20	
	4.16	Approaches to stakeholder engagement	19	1-10
	4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns	24,25	1-10

◎ Yearly Air Pollutant Discharge

Year	Volume of Wastewater Discharge (1t)	Volume of Discharge (㎏)				Volume of Discharge per unit (g/MWh)			
		COD	SS	T-N	T-P	COD	SS	T-N	T-P
2009	619,867	2,374	1,318	1,330	12	52.99	29.42	29.67	0.26
2010	1,010,092	4,640	1,322	3,906	55	89.0	25.4	74.9	1.1
2011	775,269	6,634	1,027	2,747	11	121.0	18.7	50.1	0.2

◎ Yearly Water Pollutant Discharge

Year	Volume of Discharge (1t)			Volume of Discharge per unit (g/kWh)		
	SOx	NOx	TSP	SOx	NOx	TSP
2009	12,372	18,590	797	0.263	0.396	0.017
2010	11,739	19,920	728	0.257	0.436	0.016
2011	10,794	22,382	714	0.204	0.422	0.013

◎ Yearly Use of Cooling Water

Items			Volume of Water Used (1 million tons)
2009	Volume of Water Used		4,882
	Temperature (℃)	Water Intake	13.6
		Water Distribution	23.0
		Difference	9.4
2010	Volume of Water Used		5,407
	Temperature (℃)	Water Intake	14.5
		Water Distribution	23.6
		Difference	9.1
2011	Volume of Water Used		4,760
	Temperature (℃)	Water Intake	13.1
		Water Distribution	22.3
		Difference	9.2

Based on the temperature difference at inlet and outlet of steam Condenser

◎ Yearly Environmental Costs

(Unit : Won /kWh)							
Year	Taeon	Pyeongtaek	Seoincheon	Samrangjin	Cheongsong	Gunsan	Total
2008	2.58	8.78	0.21	0.22	0.39	-	2.50
2009	2.39	7.44	0.42	0.74	0.45	-	2.48
2010	2.57	5.76	0.25	1.38		0.93	2.21

* Environmental Costs = (Environmental Operating Costs + R&D Costs) ÷ Total Volume of Generation
* 2011data will be recorded at the 2013 sustainability report.

Environmental Accounting System

Korea Western Power has operated the environmental accounting system for environmental investments, operating costs and calculation of costs from 2006 through bold facility investments for reduction of emissions of pollutants. This system analyzes environmental benefits and costs incurred through energy recycling and waste-to-energy conversion for efficient environmental-friendly decision making.

◎ Volume of Water Consumption for Power Generation

Year	Taeon	Pyeongtaek	Seoincheon	Gunsan
2009	4,750	1,331	336	-
2010	4,743	1,635	435	312
2011	5,381	1,476	397	185

(Unit: 1,000 tons)

◎ Yearly Wastes

Year	Volume of Wastes (1,000t)	Volume of Recycling (1,000t)	Recycling Rate (%)
2009	8.8	1.2	13.6
2010	6.4	1.7	26.6
2011	30.6	7.6	24.7

* Calculated based on the actual heating values

Category	Index & Contents		Page	UNGC
Economic	Disclosure of Management Approach		21	
	EC1	Economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments	12,13	
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	29	7
	EC3	Coverage of the organization's defined benefit plan obligations	56,57	
	EC4	Significant financial assistance received from government	13	
	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	N/A	1
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	45	
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	45	6
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	46,47,48,49	
	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	45	
Environmental	Disclosure of Management Approach		29	7-9
	EN1	Materials used by weight or volume	33	8
	EN2	Percentage of materials used that are recycled input materials	35,36	8
	EN3	Direct energy consumption by primary energy source	30,76	8
	EN4	Indirect energy consumption by primary source	30,76	8
	EN5	Energy saved due to conservation and efficiency improvements	31	8,9
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	31	8,9
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	31	8
	EN8	Total water withdrawal by source	35	8
	EN9	Water sources significantly affected by withdrawal of water	35	8
	EN10	Percentage and total volume of water recycled and reused	35	8
	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	37	
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	37	7,8
	EN13	Habitats protected or restored	38	
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	37,38	
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	38	
	EN16	Total direct and indirect greenhouse gas emissions by weight	30	8
	EN17	Other relevant indirect greenhouse gas emissions by weight	30	8
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	31,32	8,9
	EN19	Emissions of ozone-depleting substances by weight	38	8
	EN20	NOx, SOx, and other significant air emissions by type and weight	34	8
	EN21	Total water discharge by quality and destination	77	8
	EN22	Total weight of waste by type and disposal method	36	8
	EN23	Total number and volume of significant spills	36,37	8
	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	36,37	8
	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	35	8
	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	37,38	8
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category	32,33	
	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	37	8
	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's	39	8,9
	EN30	Total environmental protection expenditures and investments by type.		8,9

Category	Index & Contents		Page	UNGC
Social (Labor)	Disclosure of Management Approach		-	1,3,6
	LA1	Total workforce by employment type, employment contract, and region	54	
	LA2	Total number and rate of employee turnover by age group, gender, and region	56	
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	55	6
	LA4	Percentage of employees covered by collective bargaining agreements	55	1, 3
	LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	55	3
	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	64	1
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	64	
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their	65	
	LA9	Health and safety topics covered in formal agreements with trade unions	65	1
	LA10	Average hours of training per year per employee by employee category	57	
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	57	
	LA12	Percentage of employees receiving regular performance and career development reviews	57	
	LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	54	
	LA14	Ratio of basic salary of men to women by employee category	N/A	6
Social (Human Rights)	Disclosure of Management Approach		60	1-6
	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	60	
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	62	
	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	55	1-6
	HR4	Total number of incidents of discrimination and actions taken.	55	1, 2, 6
	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	55	1-3
	HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	55	5
	HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor	55	1, 2, 4
	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	-	
	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	45,46	
Social (Society)	Disclosure of Management Approach		-	7, 10
	SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	37,38	7
	SO2	Percentage and total number of business units analyzed for risks related to corruption	61,62	
	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	61	10
	SO4	Actions taken in response to incidents of corruption	61	10
	SO5	Public policy positions and participation in public policy development and lobbying	8	
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions	62,63	
	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices	62,63	
	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	63	
Social (Product Responsibility)	Disclosure of Management Approach		-	8
	PR1	Life cycle stages in which health and safety impacts of products and percentage of significant products and services categories	37,38	1
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	62	
	PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	N/A	8
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	N/A	8
	PR5	Practices related to customer satisfaction	62,63	
	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications	63	
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications	63	
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	63	
	PR9	Monetary value of significant fines for non-compliance with laws and regulations	63	

Category	Index & Contents		Page	UNGC
Electric Utility Sector Supplement	EU1	Installed capacity, broken down by primary energy source and by regulatory regime	6	
	EU2	Net energy output, broken down by primary energy source and by regulatory regime	68	
	EU3	Number of residential, industrial, institutional and commercial customer accounts	N/A	
	EU4	Length of above and underground transmiision and distribution lines by regulatory regime	N/A	
	EU5	Allocation of CO ₂ emissions allowances or equivalent, broken down by carbon trading framework	N/A	
	EU6	Management approach to ensure short and long-term electricity availability and reliability	68	
	EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	N/A	
	EU8	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	72	
	EU9	Provisions for decommissioning of nuclear power sites	N/A	
	EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	68,70,71	
	EU11	Average generation efficiency of thermal plants by energy source and regulatory regime	69	
	EU12	Transmission and distribution losses as a percentage of total energy	N/A	
	EU13	Biodiversity of offset habitats compared to the biodiversity of the affected areas	36,37	
	EU14	Programs and processes to ensure the availability of a skilled workforce	57	
	EU15	Percentage of employees eligible to retire in the next 5 and 10 years broken down by job category and by region	56	
	EU16	Policies and requirements regarding health and safety of employees and employees of contractors and subcontractors	63,64	
	EU17	Days worked by contractor and subcontractor employees involved in construction, operation & maintenance activities	-	
	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	63,64	
	EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development	45	
	EU20	Approach to managing the impacts of displacement	45	7
	EU21	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	64	7
	EU22	Number of people physically or economically displaced and compensation, broken down by type of project	45	
	EU23	Programs, including those in partnership with government, to improve or maintain access to electricity	N/A	
	EU24	Practices to address language, culture, low literacy and disability related barrier to accessing and safely using electricity and customer support services	N/A	
	EU25	Number of injuries and fatalities to the public involving company assets	-	
	EU26	Percentage of population unserved in licensed distribution or service areas	N/A	
	EU27	Number of residential disconnections for non-payment	N/A	
	EU28	Power outage frequency	69	
	EU29	Average power outage duration	69	
	EU30	Average plant availability factor by energy source and by regulatory regime	69	

© The Ten Principles of UN Global Compact

Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights;
	2. make sure that they are not complicit in human rights abuses
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
	4. the elimination of all forms of forced and compulsory labour;
	5. the effective abolition of child labour
	6. the elimination of discrimination in respect of employment and occupation.
Environment	7. Businesses should support a precautionary approach to environmental challenges
	8. undertake initiatives to promote greater environmental responsibility
	9. encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery

Definitions

BSC (Balanced Score Card)
BSC is a new strategic management and performance evaluation tool that converts the missions and strategies of an organization into comprehensive indexes.

CCM (Clean Cooperator Monitorig)
CCM is a phone survey targeting contract managers, field managers and visitors of partners.

CEM (Customer Experience Management)
CEM analyzes and integrates all conditions and mental processes related to the customer experience, in order to better the understand customers. CEM focuses on the procedure and the execution rather than the results.

CDM (Clean Development Mechanism)
The CDM is defined in Article 12 of the Kyoto Protocol. Under the CDM, advanced countries make financial and technological investments so that developing countries can reduce greenhouse gas emissions, and the amount by which gas emissions are reduced as a result is added to the advanced countries'performance for greenhouse gas reduction

Electric Precipitator
An Electric Precipitator circulates the dust particles in gases so that they gain electrical properties, and collects them using the magnetic field.

GRI (Global Reporting Initiative)
GRI is a sub-division of UNEP (UN Environmental Program), and provides the guidelines for the publication of the sustainable management report.

GWP (Great Work Place)
GWP refers to a workplace where all employees trust their supervisors and the management, take pride in their duties, and work pleasantly with colleagues. Employees shall have a humanistic attitude, and pursue ethical behavior, principles and standards. They shall be proud of their responsibilities, and fully enjoy what they do.

IGCC (Integrated Gasification Combined Cycle)
IGCC refers to a process of incomplete combustion and gasification of low-quality solid and liquid fuels including coals, heavy residual oil and petroleum coke, which generates gases consisting of carbon monoxide and hydrogen. The gases are purified and sent to the gas turbine for the first power generation, and then to the steam turbine for the second power generation.

IPCC (Intergovernmental Panel on Climate Change)
IPCC is an UN organization consisting of experts from diverse countries, which was formed to review comprehensive responses to changes in the global environment, particularly global warming. Since it was established in 1988, three working groups in charge of the scientific assessment of global warming, its impacts on the environment and society and global warming responses have been operated. The ultimate goal of IPCC is to enter into an Agreement for the Prevention of Global Warming.

K-OHSMS (Occupational Health & Safety Management System)
K-OHSMS refers to the management system used to set up the goals to maintain and improve the safety and health of workers; to define the organization, responsibilities and procedures by which such goals will be achieved; and to efficiently allocate physical resources and human resources within the organization, in order to prevent industrial accidents and create pleasant working conditions.

PCBs (Polychlorinated Biphenyls)
PCBs are materials in which one or more hydrogen atoms of Biphenyl (C12H10) have been replaced with chlorine. As they are very toxic and decompose extremely slowly, they are considered one of the residual organic pollutants that can damage the ecosystem for a long period of time.

P-CRM (Policy Customer Relationship Management)
P-CRM is a system of providing customers with differentiated and customized policy information by policy area. It is a PR tool that government organizations have recently adopted to build social consensus and improve reliability and efficiency in operation.

PSMS (Product Safety Management System)
PSMS is the comprehensive management activity of a business undertaken to respond to the Product Liability Law. The new management system model aims to improve product safety in the total product lifecycle, including product development, design, manufacturing, delivery and disposal.

SCR (Selective Catalytic Reduction)
The SCR device filters NOx in gases emitted with the catalyst layer, and discharges N2 and O2 separated in the natural air.

TPH (Total Petroleum Hydrocarbon)
Total petroleum hydrocarbon is used to identify pollutants, including kerosene, light oil, jet oil and bunker fuel oil C.

Certification & Awards

Year	Number of Certificates & Awards	Organizer/Sponsor
2011	Prize for "2011 National Competition for quality control circles"(Pyeongtaek)	Korea Standards Association
	Prize for "National Competition for quality control circles"(Seoincheon)	Korea Standards Association
	Grand Prize for Korea Management Conference	Korea Suggestion Association
	Prize for National Security Management	Ministry of Knowledge Economy
	Prize for 2011 Korea Green Award	Ministry of Knowledge Economy
	Grand Prize for 2011 Korea Ethical Management Grandprix	New Industry Management Academy
2010	Grand Prize for Korea Idea Management Conference	Korea Suggestion System Association
	Korea Grand Prize for Corporate Communications	Business Communicators Association
	Grand Prize for Korea Ethical Management Grandprix	Korea Economic Daily
	Prize for Win-win Partnership	Small & Medium Business Administration
	Prize for 2012 Save Energy Award	Ministry of Knowledgy Economy
	Certificate for reduction in greenhouse gasses	Ministry of Knowledgy Economy
	Certificate for Energy Management System(Seoincheon)	Korea Energy Management Corporation
2009	Korea Grand Prize for Corporate Communications (Printed Media)	Business Communicators Association
	Chairman's Prize (Korea Energy Management Corporation)	Korea Energy Management Corporation
	Contest for the Best Water Quality TMS Management Cases	Korea Environment Corporation/Ministry of Environment
	Minister of Environment's Prize	Korea Environmental Preservation Association
	Korea Environmental Preservation Association/Ministry of Environment	Small & Medium Business Administration
	Prize for the Best Case of Development of Areas Adjacent to Power Plants	Ministry of Knowledge Economy

Memberships

Areas	Name of Association	Areas	Name of Association
Ethics & Transparency	BEST Forum	Power Generation Technology	Korea Energy Economics Association
	BEST CEO Club		Korea Energy Foundation (2013 WEC Korea)
	The Institute of Internal Auditors		Korean Society of Mechanical Engineers
Social Contributions	The Republic of Korea National Red Cross		Korean Society of Electrical Engineers
Quality & Innovations	Korea Plant Industries Association		Korea Standards Association
	The Korean Society for Quality Management		EEI(Edison Electric Institute)
	Korea Quality Master Association		East Asia-West Pacific Electrical Manufacturers'ssocation
	National Quality Award Winners Association	Construction	Korea Construction Consulting Engineers Association
	Korea Six Sigma Academy		Korea Project Management Association
	KSSA	Environment	Korea Environmental Preservation Association
	Korea Management Association	Renewable Energy	Korean Society for New and Renewable Energy
Safety	Korea Fire Safety Association		Korea New & Renewable Energy
	Korea Occupational Safety & Health Agency	Management & Finance	The Federation of Korean Industries
Fuel & Contracting	The Korean Committee for WPC		Korea Employers Federation
	Korea International Trade Association		IMI of the Federation of Korean Industries

Code of Conduct(Credo of Western Power Employees)



we think and act from the perspective of our customers, and strive to earn the continued trust of our customers through integrity and transparency. Our primary responsibility is to provide customers with better quality power at lower prices. We will never compromise the rights and interests of our customers to protect our own. We promptly and transparently disclose all major issues related to corporate management.



as a member of the community, we pursue shared prosperity through ethical and reasonable corporate activities and social services. We participate in academic, cultural, sports, scholarship and welfare programs to support our local communities, and actively contribute to local economic growth. We do our utmost to preserve the environment and protect nature, and fully conform with all laws and regulations. We improve friendly relations with our partners, and compete fairly through sound corporate activities. We maintain an equal status with partners, and avoid any activities related to corruption or bribery.



we work actively to improve the quality of life and job satisfaction of our employees. The salaries we pay are always reasonable, and the working environment is pleasant. Employees are always free to make suggestions or complaints. Equal opportunities for recruitment, relocation, promotion and professional development are given to all employees, according to their capability and achievements. The company spares no efforts in helping employees to fulfill their responsibilities for their families. Employees shall work steadily for self-development, and fulfill their responsibilities for the success of the company.



we generate sound profits through efficient corporate management and reasonable investments, in order to create higher shareholder value. We maintain and manage all facilities to be in the best condition, and build a sound profit-creating structure by securing the best level of competitiveness in an ever-changing business environment through improving our product and service quality based on continuous innovation. We pursue transparent account management in accordance with international accounting standards, and actively promote our company so that the company can be evaluated reasonably based on our corporate values.



Recipient

Please send us your feedback about Korea Western Power's 2010 Sustainable Management Report.

Your feedback will significantly help us to improve the completeness and the contents of the Report. We promise that we will fully reflect your feedback in future publications.

1. How did you access this Report?

☐ Website ☐ Media, including newspapers and TV ☐ Korea Western Power ☐ Seminar or lectures ☐ Others

2. To which of the following groups do you belong?

☐ Government, shareholders or investors ☐ Executives and employees ☐ Local residents and NGOs
☐ Partners and parties in business relations with Korea Western Power ☐ General public ☐ Other:

3. How readable is this Report?

☐ Very easy to understand ☐ Easy to understand ☐ Not easy to understand ☐ Very difficult to understand

4. Which section of this Report has attracted your interest?

☐ Management System ☐ Economic Performance ☐ Environmental Performance ☐ Social Performance

5. In which area do you see the need for improvements?

Stage 1	Stage 2			
<input type="checkbox"/> Management System	<input type="checkbox"/> Corporate Overview	<input type="checkbox"/> Vision & Management Strateg	<input type="checkbox"/> Corporate Governance	<input type="checkbox"/> Risk Management
<input type="checkbox"/> Economic Performance	<input type="checkbox"/> Operation of Power Facilities		<input type="checkbox"/> New Business Development (Domestic & Overseas)	
	<input type="checkbox"/> Renewable Energy Development		<input type="checkbox"/> Research & Development	
	<input type="checkbox"/> Management Innovations		<input type="checkbox"/> Economic Achievements	
<input type="checkbox"/> Environmental Performance	<input type="checkbox"/> Climate Change & Energy		<input type="checkbox"/> Minimization of the Emission of Pollutants	
	<input type="checkbox"/> Green Technology Development & investment		<input type="checkbox"/> Environmental Achievements	
<input type="checkbox"/> Social Performance	<input type="checkbox"/> Safety & Health <input type="checkbox"/> Employee Satisfaction		<input type="checkbox"/> Ethical Management	
	<input type="checkbox"/> Development of Employee Capability		<input type="checkbox"/> Local Communities Support & Social Contributions	
	<input type="checkbox"/> Cooperation with SMEs			
<input type="checkbox"/> Others	<input type="checkbox"/> Purchase of Fuels		<input type="checkbox"/> Building of Infrastructure for the Expansion of Power Facilities	

6. What could be improved to make this Report better?

7. Please feel free to add any suggestions you have about Korea Western Power's sustainability management.

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