2011

Korea EAST-WEST Power
Sustainability Report

EWP

Contents

About Our Report

Reporting Scope and Time Frame

This report has been prepared for the corporate head office in Seoul and five plant sites.
This report outlines the company's sustainability and management activities from 1 January to 31 December 2010; and also includes some of the activities carried on until May 2011.

Reporting Cycle

Korea East-West Power (EWP) has published its Sustainability Report each year since its first issue published in May 2007.

The Difference from Existing Reports

Field reportage has been prepared to enhance action lively. The power utility industry's additional indices have been added.
Plus, outside experts' reviews have been provided to increase report reliability.

Base Unit of Data Used in Report

The units used in this report include KRW (South Korean won) as the currency unit, MW (mega watts of facility capacity), GWh (amount of power generated), TOE (amount of energy used), and kg-CO2/kWh (emission of greenhouse gas).

GRI G3 Guideline Application Level

Korea East-West Power Co, Ltd. (EWP) declares that its Sustainability Report has been prepared to satisfy all the requirements for Level 'A' under the GRI Application Levels Guidelines.

Overview of Report

Purpose of Report | This is the 5th Sustainability Management Report which EWP has published to disclose transparently its economic, environmental, and social performance to all stakeholders.
Reporting Guidelines | This report has been prepared based on the GRI (Global Reporting Initiative) G3 Guidelines and GRI Electric Utility Sector Supplement.

Additional Information

For additional information, please visit the corporate Website or the department indicated below:

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We will do our best to become a valuable company for all stakeholders through sustainable development.

Dear Stakeholders

We express our heartfelt thanks for your interest in and support of Korea East-West Power (EWP).
EWP has also made efforts to prepare a sustainable future for stakeholders in 2010 with confidence that sustainable management would provide sustainable development for the company.

Net Profits

Last year was a very meaningful year to EWP. In the harsh environment with soaring international fuel prices with oil rising by 26.6%, and bituminous coal, 36.7%, EWP achieved its record net income of 241.6 billion won.
This profit laid the foundation for EWP's leap forward into a global energy company through stable development, facility management and cost saving efforts.

Eco-friendly Management with Green Eco-Plant in All Power Plants

EWP has built renewable energy-generation facilities at all the work sites for the first time among Korean power generation companies. These renewable energy facilities produced electricity exceeding the amount of electricity used for the lighting load in the power plants. Such Green Eco-Plant projects will lead to green growth and environmental protection. These efforts can become the groundwork for a new Eco-Corporation by contributing to GHG emissions.
2010 is the year when EWP laid the foundation for renewable energy power plants because EWP started the construction of a 30MW DongHae biomass power plant and a 5MW biofuel power plant at the metropolitan landfill area.
The current renewable energy power plant capacity of only 55MW is expected to increase to 203MW in 2011.

Our Mission and Responsibility: Fulfilling Social Responsibility

EWP has recognized that strengthened competitiveness of SMEs is our competitive edge.
This has been at the forefront of cooperative research and development, and cultivation of overseas markets as well as SME product purchases and their financial support.
Based on these efforts, EWP prides itself in being ranked 1st in 14 public firms including six power generation companies from the "2010 Support Evaluation for SMEs of Public Institutions" organized by the Ministry of Knowledge and Economy.
In addition, EWP opened its doors to Meister High School graduates when hiring new employees to tackle youth unemployment and build a fair society without education discrimination.
EWP will continue its efforts to actively reflect its stakeholders' diverse voices in its business activities. Your continued attention and support are solicited for EWP to energetically leap forward into a global energy company. Sincerely yours

July 2011
Lee Gil Gu
CEO, Korea East-West Power Co., Ltd.
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Site Report , the Republic of Haiti

Conveying Light of Hope to Haiti, Site Devastated By Earthquake Disaster

January 12, 2010

In Haiti, the ground cracked, and the buildings collapsed in a moment.
Those who were left alone were afraid of the world,
and the children who lost their parents cried
and sank exhausted. We wanted to help the children in mourning.

January 20, 2010

EWP started a power sector recovery project to present the light of hope to Haiti.
EWP laid the foundation for helping recover the shattered hope of Haitians
through power equipment damage diagnostic activities.

March 5, 2010

EWP delivered emergency food to 16,000 Haitian refugees.
The children who were tired and hungry tasted a glimmer of hope with a warm meal.
Even adults had hope again.

April 28, 2010

EWP signed an MOU with Haiti for power equipment business operation to
recover from the earthquake damage.

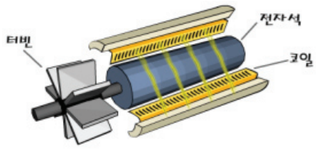
January 14, 2011

Finally, EWP completed the diesel power plant, symbol of the recovery of Haiti.
The plant will give a bright light to the future of Haiti.
EWP will continue its efforts to help those who are in difficult situations.

Special Note

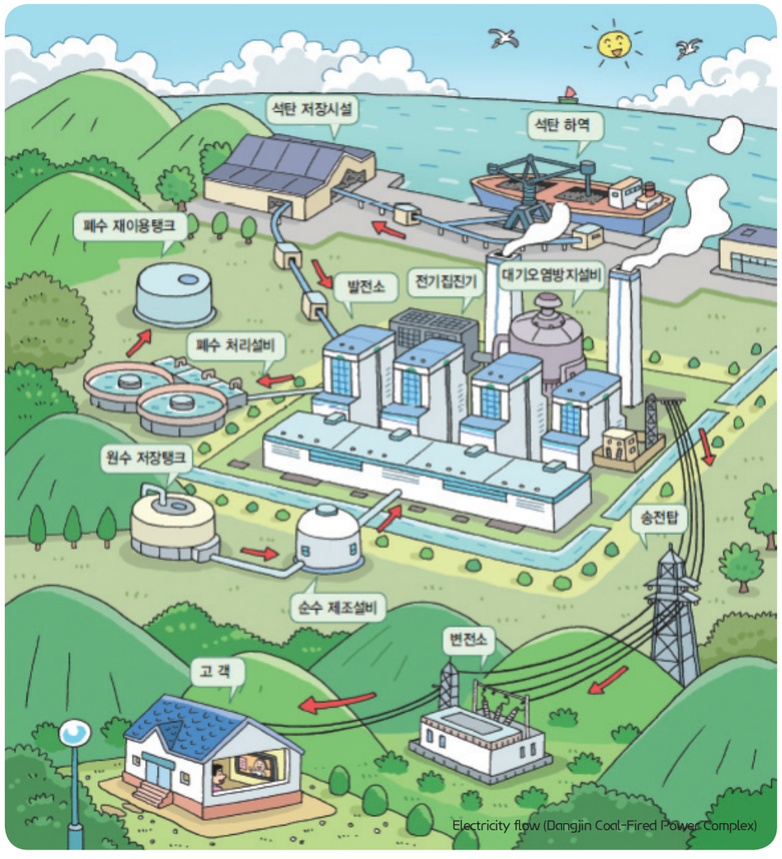
What is electricity?

Electricity in English originated from "Elektron" in Ancient Greek.
The Greeks must have known that the dust that adhered to a pumpkin that was rubbed by certain fabrics carried a force.



Let us take a look at the principle of how electricity is made.

Turbines and generators are needed to generate electricity. Rotor blades in turbines are turned by thermal energy that is obtained from burning coal. During the rotation of the turbine, a cylinder made of an electromagnet in the generator is rotated. When this rotation is repeated, anodes and cathodes in the generator continue to be changed so that the electrical current flows. In other words, it is similar to the action that happens when water boils. Steam turns vanes, and the magnet attached to the vanes spins inside the coil to create electricity.

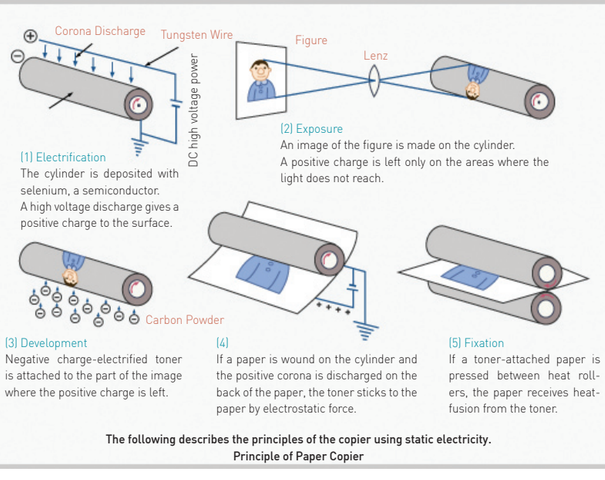


Electricity flow (Dangjin Coal-Fired Power Complex)

Valuable electricity is used for many interesting purposes:

Polygraph

The electrical resistance of human skin varies depending on various conditions.
There are sweat glands on the surface of the skin, so resistance dramatically changes according to the degree of sweating. Typically, sweat gland activities of the skin vary depending on the mental stimulation, and the polygraph records these changes.
Tens of micro amperes of current flow to the polygraph, when electrodes attached to the wrists and the palms of the hands, are connected to the cell (2 and 3 Volts) with an ammeter so that the current flows.
If a variety of mental stimulations are given to the subject, sweat gland cells of the skin reflect the activity by reducing the electrical resistance of the skin and increasing the current.
This is called the electrical skin reflex or mental electrical phenomena; 1 to 2 seconds after a stimulus, a reaction occurs. In 2 to 3 seconds, it reaches the maximum output and gradually returns to its original state. This device is called a 'Lie Detector' because this electrical record shows sensitivity to slight changes in sentiments and helps others detect when a person is telling a lie.



The following describes the principles of the copier using static electricity.
Principle of Paper Copier

Copy Machines

Xerography, the current way to copy a paper, was developed in 1937 by Xerox Corp in the United States. Its inventor was C.F. Carlson. The copy machine has been a monopoly of Xerox Corp since its development because it was patented.

Sustainability Management System

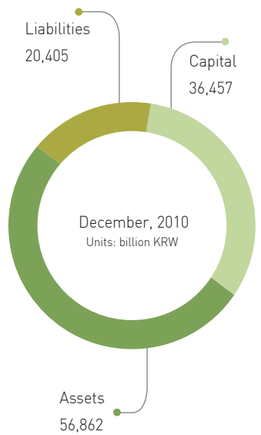
EWP strives to become a 'Global Top 10 Energy Company' on the basis of its mission 'Environmentally friendly, economical and stable supply of electricity that enriches people's lives. 'In addition, it has laid the foundation for a global sustainable corporate by building the key elements: sustainable management, and an ethics management system.

Tell Us about EWP

According to the government's power sector restructuring policy, EWP has specialized in power generation since separation from the Korea Electric Power Corporation April 2, 2001.

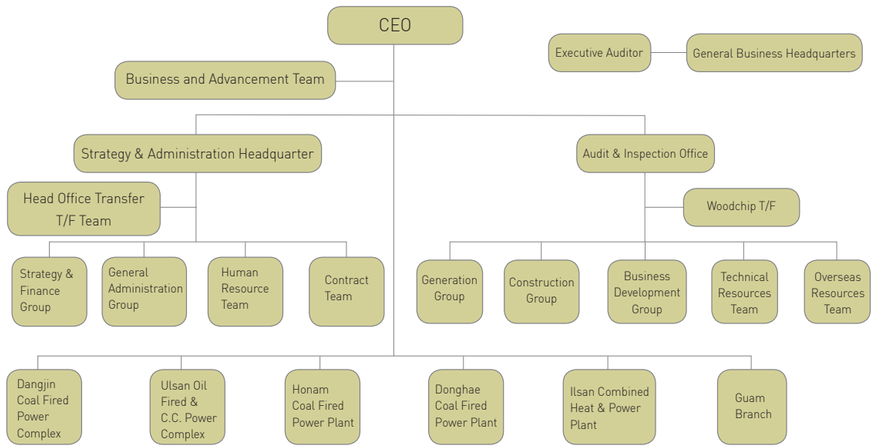
Corporate Overview

Name	Korea East-West Power Co, Ltd
Head Office	512 Yeongdong Blvd, Kangnam-gu, Seoul
Power Plants	Dangjin, Ulsan, Honam, and Donghae Coal Fired Power Plants, and Ilsan Combined Heat & Power Plant
Date of establishment	April 2, 2001
Total Assets	5,686.2
Sales	4,573.4
Net Profit	241.6
Total Power Output	52,249GWH
Major Business	Development of electrical power resources, power generation and related businesses
Number of Employees	1,961
Equipment & Facility	8,812.2 MW



• 2011.1.1 The Sancheong Pumped Storage Power Plant became an affiliate of the Korea Hydro & Nuclear Power Co., Ltd according to the electric power industry's re-structuring

Organizational Chart



• Main Office | 2 Headquarters, 5 Groups, 1 Office, 5 Teams

-2 Headquarters: Strategy & Administration and General Business headquarters
-5 Groups: Strategy & Finance • General Administration • Generation • Construction • Business Development
-1 Office: Audit & Inspection Office / 5 Divisions: Human Resources, Contracts, Technical Resources, Overseas Resources, Business and Advancement Team

• Working Places (5 working places, 1 branch)

Dangjin Coal Fired Power Complex, Ulsan Oil Fired & C.C. Power Complex, Honam Coal Fired Power Plant, Donghae Coal Fired Power Plant, Ilsan Combined Heat & Power Plant, Guam Branch

What kinds of businesses do EWP carry out?

Led by thermal power projects, current flagship projects, EWP supplies electricity and runs renewable energy projects including small hydro power projects and solar power projects. In addition, in order to create sustainable growth engines, EWP focuses on international development projects and resource development.

Renewable Energy Projects

Small Hydro Power • Water that is discharged into the sea after it is used as a coolant for the power plant is used to spin the water turbine in the small dam at the coolant discharge area producing electricity.

Photovoltaic Power Generation Systems • Solar cells convert sunlight directly into electrical energy.

Fuel Cells • Chemical energy is converted by combining LNG hydrogen with oxygen in the air to produce energy.

Thermal Power Generation Project

Electricity is produced and sold by heating water with thermal energy obtained through the combustion of fossil fuels into to create high temperature steam and pressure that turns the turbine.

Overseas Business

EWP makes use of world-class power plant construction and operation expertise obtained through local development projects to pursue 26 projects in 16 countries.

1 PFBC O&M in Cebu, the Philippines
2 Acquisition of shares of Jamaica JPS

Tell us about Corporate Governance

EWP has enhanced the transparency of its governance structure and decision-making processes by adopting the outside direct system.
This protects the interests of stakeholders by strengthening the roles of the board of directors and the consultation with outside directors to realize a fair and transparent management.

Composition of Shareholders

EWP is wholly owned by KEPCO since it was founded as a spin-off from KEPCO in 2001.

Composition and Operation of the Board of Directors

The board of Directors consists of executive and non-executive directors as the supreme decision-making body. The three executive directors include the CEO who presides over the board meetings as its chairman. Four non-executive directors participate in the management as outside directors.

The CEO has signed market management contracts with the president of KEPCO. The CEO and executive directors have signed internal management contracts with the directors and executives, pursuant to the provisions of the executive salaries which vary based on company performance and bonuses.

Board Operation Processes include → Receiving agenda items → Referrals → Notices of meetings → Submitting Agenda items → and Board deliberation. EWP is committed to improving the system by improving the objectivity and transparency of the decision-making processes.

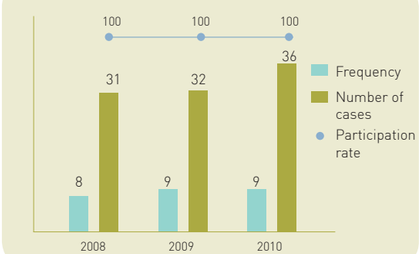
Roles and Responsibilities of the Board of Directors

The board oversees the company and has the authority to work on the deliberations and decisions on key management issues and oversees the company's management. In addition, the board runs an agenda pre-deliberation system to reflect the opinions of stakeholders including shareholders and employees.
Plus, the executives are elected by the executive committee to share the social corporate responsibilities, to enhance the professionalism, efficiency and rational decision-making of the economic, social, and environmental sectors.

Key board resolutions in 2010

Signing PFBC O&M attached documents in Cebu, the Philippines
Woody chip 30 MW PMC1 [1] biomass power plant construction draft
CEO management agreement change draft
Guam Cabras 3 and 4 plants PMC [2] diesel power plant project
Equity investment and a master plan for Hwacheon Daeseong-san wind power plant construction projects
2010 executive compensation limitations
Equity acquisition and operating projects related to PMC [3] Marubeni Corporate sale, development, and assets

Key non-executive director achievements



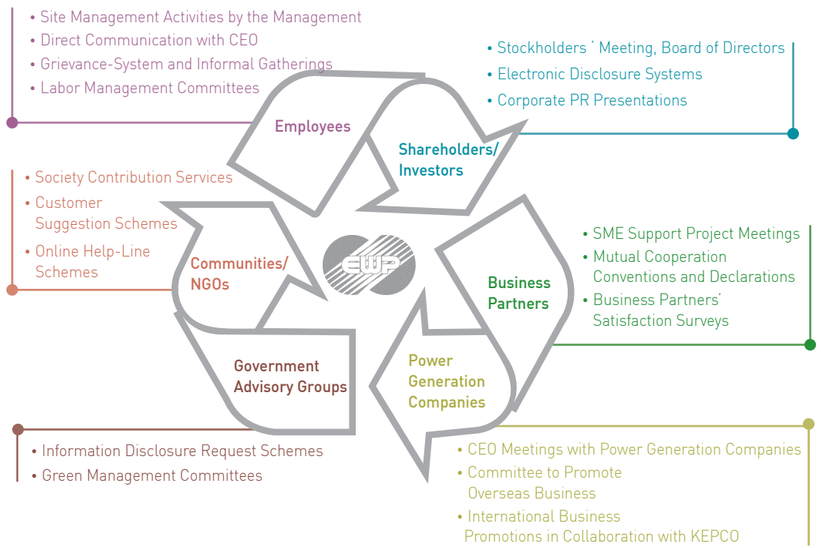
1) **Biomass** : bio-organics that can be used for energy resources and raw materials, area a mass of biological resources
2) **Diesel Power Plant** : a power plant which uses a diesel engine as a motor; with high thermal efficiency, simple facilities and easy operation by generators, but these plants have high costs of power generation due to the use of heavy oil
3) **Marubeni Corporate** : a Japanese general trading company that acquired the JEPCO in Jamaica in collaboration with EWP (EWP 40%, Marubeni 40%)

Who are EWP's stakeholders?

EWP classifies its stakeholders into six groups and collects all stakeholder concerns through various communication channels to reflect them in its business activities.

Communication Channels of Stakeholders

EWP classifies its stakeholders into six groups and collects all stakeholder concerns through various communication channels to reflect them in its business activities.



What are the Processes for Evaluation of Materiality and Results-Derived?

EWP has conducted the materiality test to reflect the opinions of various stakeholders on sustainability.The materiality test has been done to assess key issues of internal and external stakeholders, degree of interest in the issues, and priorities of influence.

Materiality Evaluation Processes

Issue Confirmation	Priority Determination	Materiality Assessment	Report Content Determination
• Internal Issue Confirmation Including Employee Interviews • External Issue Confirmation Including Media Analysis	• Impact on Business Including Strategic Materiality • Degree of interest of stakeholders	• Materiality Matrix	• Economic Performance • Social Performance • Environmental Performance

Materiality Evaluation Results

Fields	Key Issues
Economy	Financial stability, overseas markets, and renewable energy
Environment	Climate change responses and environmental protection
Employees	Personnel system, employee training
Business partners	Win-win cooperation with and support for partners
Community	Investment in community and support funds

Sustainability Survey

- Survey Subjects : internal personnel (366), and external personnel (240) including employees, customers, business partners, government, and communities
- Survey Period: March, 2011 (About 1 month)
- Survey Method: E-mail and personal contact
- Survey Results

Materiality Order of Key Areas of Interest in Previous Year Report		Materiality Order for a Sustainable Corporation	
Internal Stakeholders	External Stakeholders	Internal Stakeholders	External Stakeholders
1 Economic Performance	1 Environmental Performance	1 CEO Leadership	1 Ethics Management
2 Corporate State	2 Economic Performance	2 Ethics Management	2 Recruiting Talent
3 Environmental Performance	3 Social Performance	3 Environmental Management	3 Environmental Management
4 Social Performance	4 Corporate State	4 New Market and Business Expansion	4 Business Partner Satisfaction Management
		5 Recruiting Talent	5 New Market and Business Expansion

• The sustainability report has been prepared based on the order of materiality of the survey results and has been a reference for the corporate strategy development and policy decisions.

How does EWP do their risk management?

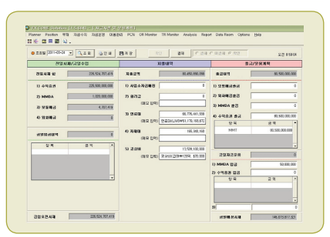
To address risks arising out of market uncertainties at home and abroad, EWP manages in real time, the risks related to strategic management, power generation and operation, fuels used for energy, financial accounting, and technical environment by deploying an enterprise-wide RMS (Risk Management System). As new risks arise they are also added to the RMS.

Risk Fields

Management Strategies	strategic goals, investments, corporate integrity, complaints, information system failures
Development and Operations	power plant operations, power plant efficiency, safety accident prevention, construction work
Fuels for energy	proper fuel, high efficiency and low-cost, fuel supply and transportation, and overseas resource supplies
Financial Accounting	profitability, profit achievement, contingent liabilities, exchange rate expectations and measures, market confidence
Technology and the Environment	R&D practicality, renewable energy, environmental regulation compliance

Liability Management System | LMS

The LMS (Liability Management System) funds the construction of the plant at the appropriate interest rate to minimize borrowing foreign currency caused by exchange rate fluctuation. The LMS is expected to be integrated with the ERP (Enterprise Resource Planning).



Plant Operation & Maintenance Management System | POMMS

POMMS (Plant Operation & Maintenance Management System) is a new facility management system that combines the plant facility management with state-of-the-art IT technology, With the help of this system, EWP has analyzed the stability of the power generation facilities by using reliability-centered maintenance management techniques and risk-based diagnostic techniques. The Cost-Time analysis (analytical techniques to determine the time, objects, and ranges of the economical planning, preventive maintenance based on maintenance costs and the probability of failure) has been used to conduct the economic evaluation. Based on this, the unplanned loss rate was down 41% from 0.66% in 2009 to 0.39 percent in 2010.

• Reductions in Unplanned Power Losses: 126,838MWh (annual electricity consumption used by 3,919 households based on an average of four people in one household)
• Unplanned Power Losses Rate : Power Loss Rate due to unintentional generator Breakdown

ERP Risk Management Comprehensive System

POMMS Screen

What are the vision and strategy for sustainability? With which processes are they established?

EWP has established a 10-year long-term plan in accordance with changes in business conditions such as changes in government targets. It reviews complemented strategic goals every three-years by setting the objective to be a 'Global Top 10 Energy Company'. EWP has strengthened its internal capacity by actualizing the future vision and building the strategic system for achieving the vision.

Mission (Establishment Purpose)

EWP enriches people's lives by providing an environmentally friendly, economical, stable supply of electricity.

2020 Vision Global Top 10 Energy Company

2013 Goal Indicators	Domestic Power Production Gains 250 KRW billio	Overseas Sales 610 KRW billion	Labor Productivity 0.52 KRW billion / person	KoBEX SM AAA
Mid term Strategic Targets	Leading Domestic Power Production Projects	Expansion of New Growth Projects	Capability Strength	Sustainability Achievement
Mid term Strategic Objectives	Timely Expansion of Low Cost Power Generation Equipment • Plant Operating Efficiency, and Credibility Enhancement • Securing Stable Economical Fuel	Winning Overseas Contracts and Increase in Sales • Expanding Green Projects • Domestic Blue Ocean Project Development	Securing Top Power Generation Technology • Global Elite Program • Management System Advancement	Growth with SMEs • Enhanced Social Responsibility

Roadmap for Achieving the Vision

Classification	Current year ('10)	Short Term ('13)	Mid Term ('15)	Long Term ('20)
• Facility (MW)	10,592	20,889	28,246	43,956
Sales (KRW billion)	45,734	52,563	67,810	140,892
Net Profit (KRW billion)	2,416	3,049	5,599	13,832

• Domestic and Overseas Capacity Combined

Key Performance Indicators of Sustainability Management

EWP is committed to building a sustainable corporation through goal achievement by setting key performance indicators based on strategic challenges.

Strategic Direction	Strategic Objectives	KPI	2010	2011	2010	2013
Leading Domestic Power Generation Projects	Timely Expansion of Low Cost Power Generation Equipment	Comprehensive Construction Process (%)	12.86	21.55	39.66	66.49
		Construction Cost Savings Through VE (KRW billion)	564	100	50	–
		Generation Efficiency (%)	39.8	39.8	39.9	40.0
	Plant Operating Efficiency, and Credibility Enhancement	Coal Mixing Heat (kcal/kg)	5,500	5,450	5,400	5,400
		Operation Rate (%)	91.6	93.5	94.5	95.0
		Power Station Internal Consumption Rate (%)	4.72	5	4.8	4.6
	Securing Stable Economical Fuel	Bituminous Coal Low-Cost Purchase Level (Compared with Japan)	23%	15%	16%	17%
		Bituminous Coal Safety Stock Provision Rate	100%	100%	100%	100%
Expansion of New Growth Projects	Winning Overseas Contracts and Increase in Sales	Overseas Project Winning Capacity (MW)	1,782	3,900	5,400	7,100
	Expanding Green Projects	Renewable Energy Facility Capacity (MW)	55	121	214.3	385
		Accumulated CO_2 Reduction Crediting (1,000 ton)	280	400	450	500
	Growth Engine Expansion Through Private Investment Partnership	Key Private Investment Partnership IPP Process	5th Supply And Demand Program Reflection	SPC Establish-ment Permit	Starting Work	Main Equip-ment Installa-tion
		Key Private Investment Partnership Group E Process	MOU Signing	SPC Establish-ment	Starting Work	Main Equip-ment Installa-tion

Strategic Direction	Strategic Objectives	KPI	2010	2011	2012	2013
Core Capability Strength	Securing Top Power Generation Technology	RBI Applicable Generators (Unit numbers)	3	7	13	16
		Engineering Independence (%)	35	45	50	63
	Building Strategic Talents	Performance-based Salary for Executives	Job Improvement	Introduction Of Government Recommendations	Introduction Of Government Recommendations	Enhanced Government Recom-menda-tions
		Talents Building Rate	8%	10%	13%	16%
	Management System Advancement	Enhanced ERP	Costs Settlement D+5	Stable IFRS	Introduction of Fiscal Responsibility	Advanced Fiscal Responsibility
		Value Added Labor Productivity (KRW billion/person)	504	537	542	543
		Material Reduction (compared to stock basis)	16.5%	2.6%	2.6%	2.6%
Sustainable Management	Growth with SMEs	Conditional Purchase Offer Search	9	11	14	17
		Overseas-Made Equipment Localization Funding (KRW billion)	34	45	50	51
	Enhanced Social Responsibility	Labor-Management Joint Programs	29	33	35	37
		Volunteer Service Mileage per person	4.4	10	15	20

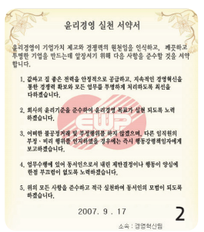
What efforts are made to be an ethical company?

EWP has implemented a variety of Business Ethics action programs for the right ethical decision-making by employees and a sound ethical corporate culture.

All employees are mandated to make integrity and ethics action promises.

All executives (CEO, auditors, and executive directors) sign the 'Executive duty integrity agreement' during inauguration.
After his inauguration, Lee Gil-gu, CEO of EWP, swore 'the Business Ethics action oath' with all the CEOs from other companies at the SM forum. In addition, all the staff signed the Business Ethics action oath through use of workers' booklets, online forms and use ethical business cards.
The five national work places have signed the integrity agreement with their business partners to practice a clear corporate culture without corruption.


1



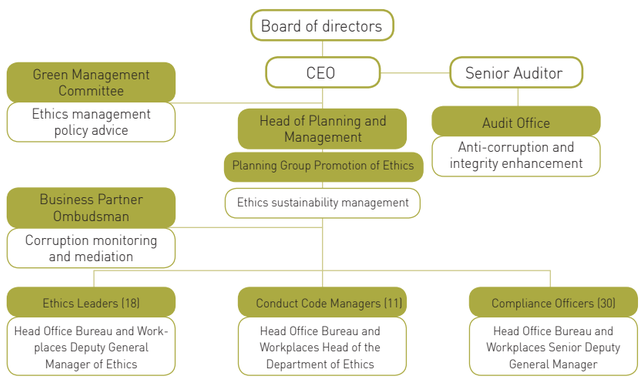
2

1 Business Ethics Action Oath Declaration
2 Business Ethics Action Oath Agreement
3 Examples of Catchphrases Written on Business Ethics Business Cards

3

The ethical business organization is managed based on the working site.

Internal employees take the lead in ethical business as compliance officers, conduct code managers and ethical leaders. Each department and work place is engaged in prevention of corrupt factors and voluntary ethical activities through on-site improvement activities. Based on this system, EWP has established its promotion plan to guard against work place corruption, and practices an ethical business by running the ethical decision-making confirmation window along with the e-approval system.



• Compliance Officer preventing corruption factors in advance and monitoring on site

• Business Partner Ombudsman Checking trading system with business partner

How can we report EWP's unfair work treatment or unethical conduct?

• By Internet: go to the homepage www.ewp.co.kr. Select the customer service center. Then report to Reporting Policy

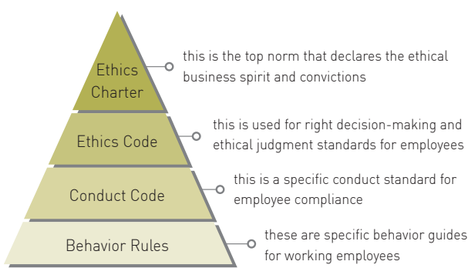
• By Phone: contact the Head Office Audit Office (02)3456-8321~8326

• For all others: send a written report with the complaint, petition, plea, appeal, and recommendation

EWP strengthened the code of conduct and disciplinary rules.

EWP has defined self-ethical business value systems that work as behavioral and value guidelines for employees. Behavioral guidelines of contract work for working employees and foreign companies are separately operated to make ethical decisions in each specific case.

Ethical Business Value System and Ethical Norms Overview



It is compulsory to report all outside activities such as outside lectures and conferences attended by employees. Corruption was inherently blocked through the voluntary reporting system that reports against corrupt partners and contractors.
Penalty standards have been enhanced to allow fellow employees to be disciplined if they do not fulfill their obligations to report corruption.

The ethical business is internalized through a variety of ethical programs and promotions.

EWP provides ethical business cyber education for all employees and runs differentiated education programs for all work types.

Classification	Target	Graduates	Education Methods
Professional Building Training	Ethics Leaders	18	Building Talent through Commissioned Education
Extensive Training for all types of work	Regular Employees	771	Itinerant Integrity Education in All Workplaces
	Shift Employees	515	Site education through in-house ethics leaders
On-line Education	All Employees	1,380	Cyber education Integrity Ethics Management Education Courses (10)

In addition, EWP has implemented a weekly self-evaluation of behavior rules and ethical dilemmas.


▶Self-Evaluation System Screen on Ethics

Ethical business is not limited to regulation and enforcement. EWP has continued to conduct ongoing public relations such as emailing exciting 'integrity messages' to employees.

EWP is making greater efforts to transparently disclose corporate information.

EWP continues to enhance the convenience of information users and the scope of information disclosure to increase the transparency of corporate management and to meet the customer's right to know. EWP responds to information disclosure requests within 10 days according to business guidelines for handling information disclosure, and reveals the management information specifically through the ALIO. EWP strengthens transparency in the accounting fields to actively prepare for the introduction of the international financial reporting standards (IFRS). EWP has been committed to produce the annual sustainability report since 2007 to provide transparent information to various stakeholders.

EWP has been designated as the top corporation for sustainability report submission for four consecutive years !

▶Tuesday May 4, 2010, the Hangyere Special Report, Page 110

EWP listens to customer feedback and is committed to customer satisfaction.

EWP has complied, in good faith, with related laws and regulations for marketing communications including advertising, promotion, and sponsorship.
As a result, there has been no single case of rule violation for regulations, standards, and voluntary codes since its establishment.
Since 2006, EWP has run the self 'Promotion processing instructions'. In addition, EWP has complied with the political finance laws that prohibit the financial support to political parties or politicians. EWP has also been committed to fairly and actively participating in policy-establishing processes for public policy to reflect the people's needs through understanding and settlement.

★Achieving Kobex AAA for Ethical Management Diagnosis for Three Consecutive Years

EWP demonstrated its ethical management level by receiving the Kobex AAA for 'major corporate sustainability survey', organized by KIET, for three consecutive years.

▶AAA is granted when a corporation obtains a total of 90 points.

The Integrity survey of public institutions organized by the Anti-Corruption & Civil Rights Commission (ACRC) states the EWP achieved the top level.

EWP received a rating of "the best among public service related funding and 'funded' subsidiary institutions." (Average 8.78, standard deviation 0.35)

Economic Performance

In 2010, EWP showed visible economic performance through fuel purchase innovation, increased duel fuel rates, low-interest financing and sophisticated budget savings. EWP has raised its status as a professional energy company by active overseas projects including U.S. power plant acquisitions, renewable energy projects and independent power plant projects. Through the performance of domestic and international businesses and creative business innovation, EWP has achieved 2416 billion KRW in net profits, the greatest since its establishment. In the future, EWP will continue to contribute to society and grow as a strong energy company through profitable business innovation.

Key issue & Performance

Economic Performance	• net income (241.6 billion KRW), sales (4,573.4 billion KRW)
Financial Structure	• assets (5,686.2 billion KRW), debts (2,040.5 billion KRW), capital (3,645.7 billion KRW)
Overseas Projects	• Participants (44), sales (17.8 billion KRW), total overseas equipment (1,782MW), Overseas net equity (114MW)

What is EWP's economic performance and how does economic performance contribute to society?

EWP's sales were 4,573.4 billion KRW in 2010 of which 98% was electrical operating revenues and the remaining 2% was other secondary project revenues. The main reasons for increased revenues were increased demands for electricity due to economic recovery (8.0 percent year-on-year increase in sales of electricity) and increased fuel prices by 7.9% according to rising fuel prices.

Economic Performance

Classification		Unit	'06	'07	'08	'09	'10
Finance	Sales	billion KRW	25,734	28,992	39,960	39,223	45,734
	Net Income	billion KRW	457	338	Δ1,996	1,705	2,416
	Debt Ratio	%	75.8	83.1	97.3	75.1	64.4
	Credit Rating	Moody's	A1	A1	A1	A2	A1
		S & P	A-	A-	A	A	A

Debt Ratio

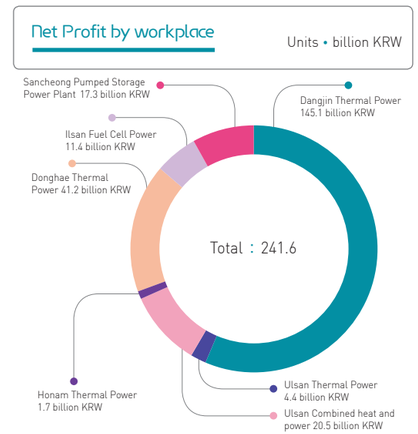
100.4% 2001.2 → 64% 2010.12

Economic Value Distribution Status

Employees (Salary &Benefits)	Creditors (interest)	Stakeholders	Community Investment & Co-Investment	Government (Corporation Tax)
1,828 billion KRW	585billion KRW	725billion KRW	4.8 billion KRW (Contributions)	63.3 billion KRW

We want to know the net profit of each workplace.

Six workplaces including the Dangjin Thermal Power that generates the greatest power, the Ulsan Thermal Power, and the Sancheong Pumped Storage Power Plant obtained the net profits. In terms of their net profits, Dangjin Thermal Power Plant whose main raw material is bituminous coal, made 145.1 billion won; Honam Thermal Power Plant whose sales had dropped due to life extension repairs only made 1.7 billion won, Donghae Thermal Power Plant whose main raw material is anthracite produced 41.2 billion won, the Ulsan Thermal Power Plant earned 4.4 billion won, the Ulsan Combined Heat and Power Plant made 20.5 billion won, the Ilsan Fuel Cell Power Plant made 11.4 billion won, and Sancheong Pumped Storage Power Plant 17.3 billion won.



What profitability measures have been taken?

EWP has made every effort to generate additional projects using existing power generation projects and has promoted the diversification of the revenue by seeking potential revenue sources.

In 2010, EWP made additional profits from Honam Thermal Power steam sales and Dangjin Thermal Power coal yard use, and achieved visible performance by cutting down financial costs and developing sophisticated cost savings such as fuel purchased innovations, increased duel fuel rates, larger state maintenance, lower interest rate financing, promoting management advancements in personnel and evaluation system innovations, as well as developing performance and accountability-oriented professional organizations.

Based on these achievements, EWP has reached the target of achieving 1 trillion won overseas project sales, 170 billion won net profits. It has also developed a 18,000MW facility capacity before 2015 by successfully buying four plants in the U.S., and obtaining overseas power generation projects in the Philippines, Chile, Haiti, and Guam by signing a Guam Cabras diesel power plant operating contract.

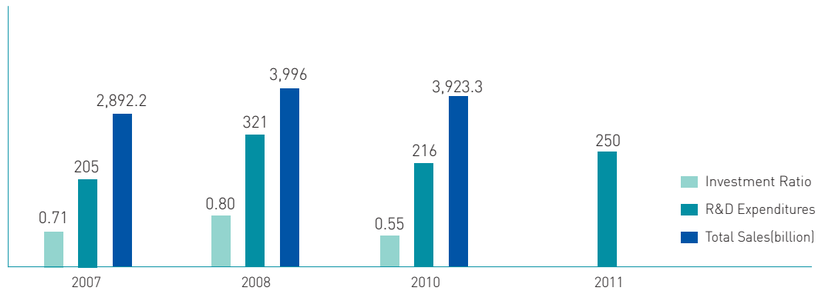
In addition, when it comes to domestic project development sectors, EWP has promoted renewable energy projects such as Jeongseon wind power, Donghae biomass, Ilsan fuel cells, and solar certificate purchases. In particular, EWP has built the largest domestic 5MW small hydro-power plant, and expanded IPP projects through partnerships with major domestic companies including Donghae DS-Project, and Osan Integrated Energy to raise its status as a specialized energy corporation. EWP has held presentations on effective financing with investors and issued its 13th floating rate bonds ($ 50 million) at a low interest rate (4.03%). Therefore, EWP achieved 241.6 billion won of the net profit, the largest since its establishment with tangible results in domestic and international projects as well as the highest cost reductions.

■ IPP project: to become an Independent Power Producer

The goal is to build power plants by attracting investors and recovering investments by owning and operating the power plant for a period of time and selling electricity.

We want to know the status of key research, technology development and key technologies for securing future growth engines.

EWP R&D Investment Status



Excellent Key technology status (based on 2010)

Fuel Cells	250kW MCFC Development Corporate
Wind Power	West Sea adaptive 3MW wind power generation system development
IGCC	Korean 300MW IGCC demonstration plant operation technology development Establishment of gasification TEST BED for IGCC demonstration plant and localization of unit processes
CCS	10MW Post combustion wet amine CO2 capture technology development
Bio	10MW Post combustion wet amine CO2 capture technology development

What projects are eco-friendly, and future-oriented projects?

EWP has accelerated its renewable energy development projects as a future growth engine with high added value to ensure compliance with green growth policies.

Renewable Energy Development Status

Photovoltaic Power Generation

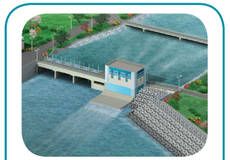
Donghae Photovoltaic Power, 1 MW
Dangjin Photovoltaic Power, 0.5MW
Ulsan Photovoltaic Power, 0.1MW
Honam Photovoltaic Power in operation

3.9MW in operation & completion plan
32.3MW under business development

Wind Power Generation

50MW Critical wind power
34MW Daeseongsan wind power, 24MW Daegiri wind power, 20MW Jeongseon wind power, 20MW Johangsan wind power
A large wind farm will be constructed

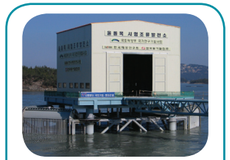
148MW in operation & completion plan
243MW under business development



Small Hydro Power Generation: Using effluent from power plants

5MW Small Hydro Power Generation facility is in operation at the Dangjin Thermal Power Plan

5MW completed



Tidal Power Generation

Uldolmok, where the current flow is 11 knots, is the best place for tidal current power generation.

1MW completed
48MW under business development

Fuel Cells

Devices that convert chemical energy created by combining hydrogen (H2) of LNG with oxygen (O2) in the air to electric energy.

5.2MW completed

Bio Gas Turbine

5MW bio-gas turbine combined heat and power plant using food waste water is under construction in metropolitan landfills with aim of completion in May, 2013

5MW completed

Biomass

A 30MW woody biomass power plant is under construction by May, 2013 in the area of Donghae thermal power generation center

30MW completed

Waste

Active project and investment for RDF: RPF power plant development,
This is an eco-friendly energy development project to recycle energy through the recycling of waste

82MW under business development

- RDF : Refused Derived Fuel
- RPF : Refused Plastic Fuel
- Food Waste Water: washing water and food-containing water that occur during the process to recycle food waste into manure and feed

What are the key development projects in the renewable energy field?

EWP has actively developed renewable energy with various energy sources since renewable energy RPS will be introduced in 2012.

Key Renewable Energy Development Plans

Classification		'11	'12	'13	'15	'20
Mandatory Power Generation (GWh)		–	721	967	1,875	5,349
Renewable Facility (MW)	Photovoltaic	30	46	51	76	79
	General	91	174	321	675	1,600.6
	Total	121	220	372	754	1,679.6

Strategies

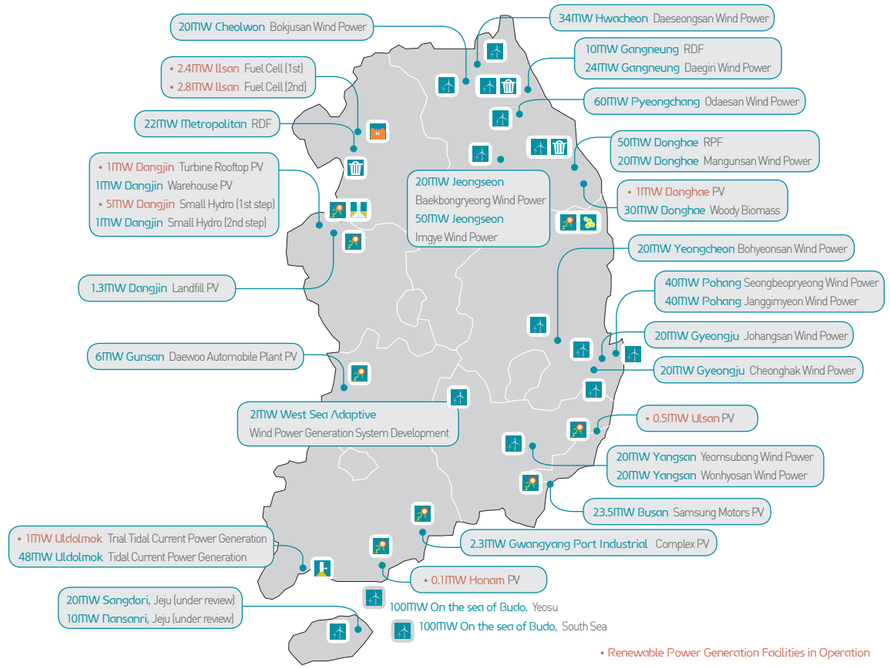
Classification	Promotion Plans
Strategic Renewable Energy Development	Specialized project strategies for promotion of renewable energy compared to other companies: Building wind power complexes, and building a large biomass power plant
Renewable Fuel Procurement	Plan to procure fuel for a large biomass power plant: Building a biomass fuel plant

Key Promotion Status of Renewable Energy Sources

Photovoltaic	Waste, Gwangyang Photovoltaic, Daewoo / Samsung Motors Photovoltaic
Wind Power	Daegi-ri Gangneung, Baekbongryeong, Cheonghak, Imgye, Bohyeonsan, and Pohang Wind Power
Bio	Donghae Biomass and Biogas
Waste	Dongyang RDF, and Gangneung RDF
Fuel Cell	Ilsan Fuel Cell (II) expansion
Tidal Forces and Tides	Asan Gulf, Uldolmok Jindo

Renewable Energy Development

- Wind Power Generation
- Tidal Power Generation
- Small Hydron Power Generation
- Fuel Cell Power Generation
- Waste Power Generation
- Bio Power Generation
- Solar Thermal Power Generation
- PV Power Generation



What are the overseas activities and who are the expansion personnel?

EWP has been actively engaged with overseas projects based on the accumulated power plant construction and operation know-how in accordance with increases in world power consumption needs.

Overseas projects have grown based on commissioning services, O&M, small development projects, and technical cooperation in 2009. This will generate a total of 2,000MW through overseas incorporation establishment, Greenfield projects, and resource development by 2012, the leap period. In addition, EWP will maximize operating revenues and grow as an IPP company or consortium leading company by 2015 to generate the total capacity of 4,000MW.

Classification	Operating	Development	End	Total
Equity Participation	1	3	–	4
O&M • BOO • BOT • IPP	6	19	3	28
M&A	7		–	1
Total	8	22	3	33

• Total Facility Capacity 10,591MW in 2010 (Domestic 8,809MW + Overseas 1,782MW)

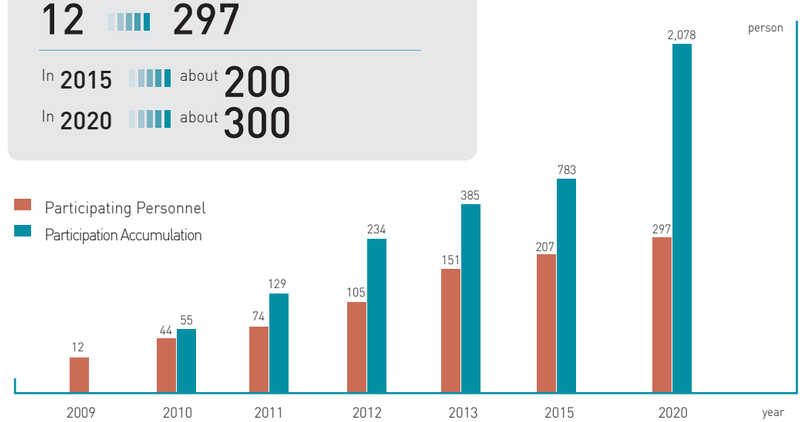
Overseas Project Participating Personnel

Growth will be **24.7** percent by 2020, compared to 2009

12 **297**

In **2015** about **200**

In **2020** about **300**



Overseas Project Promotion Status

Nigeriaa

Ambatovy, Madagascar

Vietnam

Cebu, the Philippines

Guam

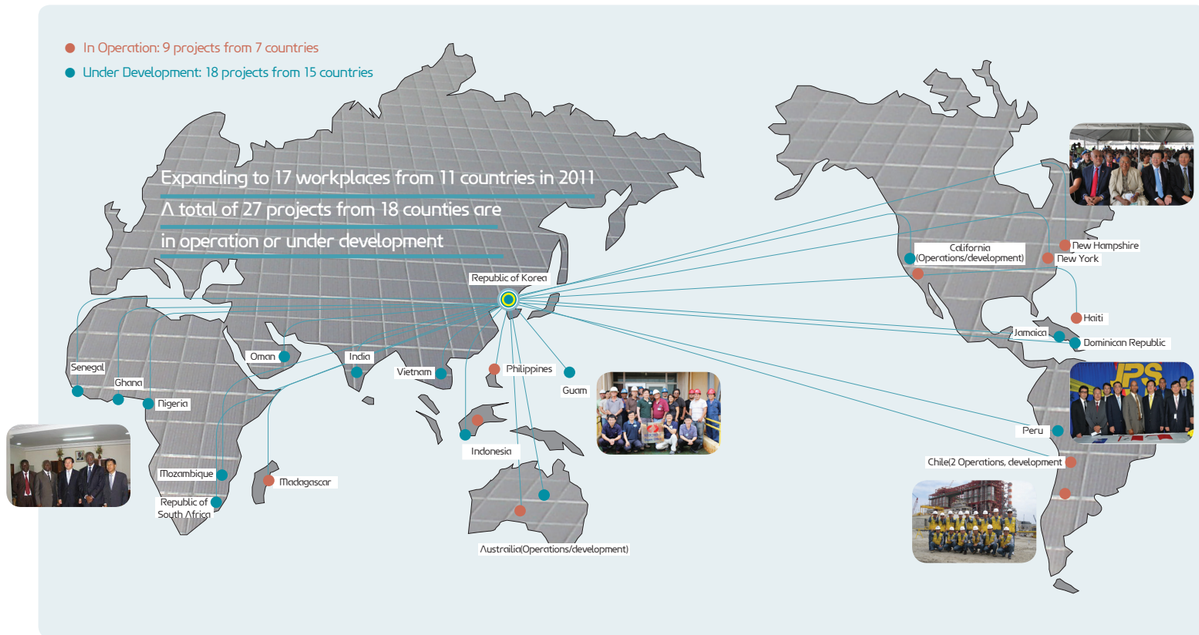
Australia

EWP RC

Diesel Power Generation, Haiti

Coal-Fired Power Plant, Dominican Republic

Angamos, Chile



Are there any projects to create new growth engine sources in Korea?

EWP has promoted new energy development projects to create new growth engines for a stable energy supply and sustainable growth in Korea.

Group Energy Project Participation

Seokmun National Industrial Complex Group Energy Project Participation

- Consortium with SK E&S and west sea City Gas
- Using heat left after generating electricity at the Donghae Thermal Power Plant and planning to supply industrial steam to the Seokmun National Industrial Complex

Osan • Segyo District Group Energy Project Joint Development

- Developing a project to produce and supply both heat and electricity to 86,000 households by using renewable energy and LNG

Donghae Private Investment Power Plant Construction

- Facility Capacity: 500MW×2 units
- Construction Period: '12~'15.4
- SPC Composition: STX Energy, EWP
- Donghae, Gangwon Province Bukpyeong Industrial Complex

Dangjin Private Investment Power Plant Construction

- Facility Capacity: 500MW×2 units
- Construction Period: '12~'15.6
- SPC Composition: Dongbu Construction, EWP
- Gyorori, Seogmun, Dangjingun, Chungnam

What do you do to have smooth funding?

EWP has had a presentation time for better ties with investors.

EWP, held a company briefing at the Seoul City Club in Yeouido for domestic and overseas investors in November 30th.
The financial representative delivered a presentation of the company's current status, management performance, financial status, future vision and strategies.
This presentation allowed investors to share the vision that EWP will leap into a global energy corporation with overseas projects, low carbon and green projects to form better ties with investors.
EWP will continue to improve the relationship between EWP and investors.

What innovative activities are there for the implementation of innovation?

There are six Sigma activities for internal process improvement, business environment innovation goals and BSC based targets.

The Six Sigma Innovative Activities that Make Changes

Since 2004, six Sigma has been introduced and carried out to secure independent promotion through corporate-wide independent problem solving.
As a result, task-oriented self-promotion has brought reductions in costs and improved technology.

Six Sigma Performance Tasks in 2010 [9th Wave]

(Task Performance) Six Sigma
36 Cases, e-PM 16 Cases

Classification	Six Sigma				Total	e-PM		Total
	CB	BB	GB	QW		Office/ Center tasks	Team/ Department tasks	
Number of tasks	8	7	7	14	36 (436 billion KRW)	4	12	16

(Task Participation) 3 people participated per task

Classification	CB	BB	GB	QW	Total
Tasks	8	7	7	14	36
Number of participants	34	27	17	22	100
Number of participants	4.3	3.9	2.4	1.6	2.8

Process Improvement from "Work hard" to "Work smart" for Innovative Business Practices

Classification	Contents	Achievement | Performance
Reduction of Report Documents	• Workplace: Reduction of Head Office Report Documents • Documentation Simplicity (1pg report)	• Document Reduction (1,536 Cases) 64%↓ 12 People Staff Reduction Effect
Work Diet Promotion	• Work Diet T/F Composition and Posco Benchmarking • Task Identification and Implementation	• Abolition Unnecessary and Redundant work, Task Simplicity Reaching 40%

Setting BSC Key Indicators · Targets

EWP has carried out the BSC (Balanced Score Card) system that accelerates target achievement by promoting the corporate vision and strategies.
In 2010, EWP set, as a strategic direction, business restructuring innovations, new growth engines, management systems, and green management. To achieve these goals, EWP has focused all its resources on its core capabilities to reach effective strategies by using indicators from the main office and workplace performance linked with KPI based on the BSC point of view.

Social Performance

"EWP has helped employees grow through reasonable personnel management and various talent building programs to make a good company for them to work with. It has also communicated with the labor union to create a culture to grow together." EWP has promoted sustainable management to coexist with various stakeholders through continuous contributions to the community and the underprivileged. In addition, EWP is strengthening the competencies of business partners based on mutual trust as win-win partners to develop together. EWP will keep its fundamental duty to share excellent performance created through improved management with stakeholders as a social corporation.

Key issue & Performance

Social Contribution
- Support for vulnerable groups: 267.633 million won,
  Welfare support: 273,213 million won

Growth with Partners
- Small Business Technology Development
  Support Performance: 9 cases, 4.1 billion won
  (new product development with conditional purchase)

Good Corporate to work
- Education Performance: Total 13,083, In-house institute training (1761) Domestic commissioned education (11,316), Overseas commissioned education (6)

BWP: Balanced workplace
- BWP : Balanced workplace

How does EWP have community outreach

Operation of the power plant is closely linked with the community's mutual understanding and cooperation. Both can form a win-win partnership in the belief that the power plant works for the community and the community accepts the plant.

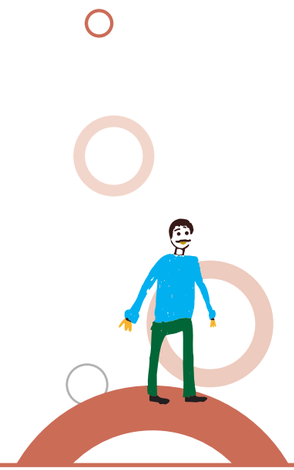
Through the voluntary group, EWP and its employees are creating funding together.

EWP created a voluntary group under the slogan "Hand of Love and Light of Hope" to become a "Corporation of hope that becomes a glimmer of light for those in need." Since its establishment in February, 2004, the voluntary group formed its branch at each power plant up to 2010 and had 2,037 members from 81 teams. The funding was established through a matching grant system. Employees voluntarily collected a certain amount of money each month and the company provided the same amount as the grant for the fundraising. The funding and contributions were used to help those in need.
Regional support expenses according to the regulations of surrounding area support as well as the funds in the company were used to carry out projects for education and culture in the area.

EWP Voluntary Group

Hand of Love and Light of Hope

Employees convey hope to our neighbors and communities.
Hand of Love and Light of Hope desires EWP to be a warm hand reaching neighbors to nourish hope.

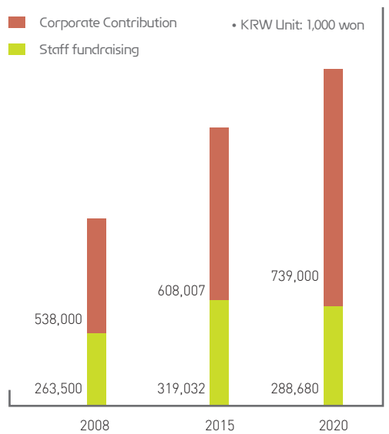


2010 regional support expenses distribution by workplace

Classification	Grant
Dangjin	1,398,000
Ulsan	331,200
Honam	154,000
Donghae	233,100
Ilsan	110,700
Sancheong	132,900
Total	**2,359,900**

• KRW Unit: 1,000 won

Funding Composition Status



EWP is helping the most vulnerable in society including child breadwinners and elderly people with no one to rely on.

The voluntary team at each plant has set a sisterhood relationship with children and elderly persons with no one to rely on to carry out social service work including monthly commodities support, learning materials support, house cleaning and good companionship.
In addition, EWP has provided monthly electricity fees and basic items for those who live near the power plant and cannot pay for electricity fees. Power Plant also is linked with local nursing facilities to hire help for patients with difficulties in walking. Through the caregiver service, EWP is striving to create jobs for local residents and to be a glimmer of light for anyone who needs a helping hand.

In addition, EWP is providing winter heating oil assistance, transporting Kimchi to the elderly who live alone, and giving lunch boxes to those who cannot afford to eat lunch. Also, EWP has held an annual Taking a Picture Event for the elderly and workers at the women's care center and KEPCO fixes the electrical facilities in needy households.

1 Help for the Elderly with No One to Rely on
2 Transfer Lunch Boxes of Love
3 Good Neighbor Voluntary Activities

2010 Vulnerable Group Support Status

Classification	Sisterhood Relationship (persons)	Number of Activities	Number of Participants	Support Amount (1,000 won)
Helping child breadwinners	103	665	1,560	126,873
Helping the Elderly with No Families	72	512	1,234	81,917
Helping the Energy Poor	108 Households			35,648
Caregiver Support	7	-	-	23,195
Total	**290**	**1,177**	**2,794**	**267,633**

2010 Welfare Facility Support Status

Field	Comprehensive Care Facilities	Children's Facilities	Senior Facilities	Facilities for the Disabled	Total
Number of Activities	83	117	152	70	422
Number of Participants	313	439	684	249	1,685
Support Amount (1,000 won)	**64,834**	**91,841**	**80,557**	**35,981**	**273,213**

How does EWP support community education and culture?

EWP is committed to improving the educational environment for students and nurturing local talent.

More than anything else, EWP has made efforts to build talent around the plants.
First, to improve the educational environment of the old facilities around the plant compared with urban areas, EWP has annually supported education by providing learning materials, presentations and lockers to improve the learning environment. As a result, schools around the plant have become better equipped. EWP has provided annual scholarships for students from elementary school to college near the plant to encourage learning and build local talent. To provide special learning opportunities outside the regular classroom, EWP has held English Camps and supported native English teachers to encourage students to have intimate relationships with English speakers in this global age. Also, live education is provided through national museum tours as well as historical and cultural experiences. EWP has also participated in the campaign 'Fence of Love' started by the Ministry of Knowledge and Economy to form sisterhood ties with 3 home schools and 1 local children's center. EWP hopes to help break the vicious cycle of poverty due to the lack of education.

Units: KRW 1,000

Sector	Educational Materials	Scholarship	Special Study	Local Children's Center	Total
Support Amount	322,532	931,978	441,245	80,967	**1,776,722**



1 Scholarship Ceremony
2 Summer Reading Camps
3 Home School Support for Local Children's Centers

If there are power plants in the neighborhood, does it help the local economy?

EWP works to create jobs by hiring local residents.

To relieve youth unemployment, not only headquarters but also all power plants seek to hire a total of 54 interns in 2010. Local candidates are given extra points during staff recruitment.
In addition, for plant cleaning services and scenic landscaping work, EWP hires local residents, first.

EWP performs campaigns for traditional market restoration and direct agricultural sales.

To fulfill responsibilities as a corporate citizen, EWP has worked to encourage local businesses first as a coexistence movement. Each power plant has ties with a traditional market around the power plant to encourage employees and their family members to use the market monthly.
EWP also purchased traditional market vouchers of 278, 29 million won in 2010 to nurture the markets. Employees at EWP are purchasing local produce through direct dealing with producers so that local residents can open a market and employees can purchase good produce at reasonable prices. Currently there are 142 registered items with the purchase cost of 26, 99 million won in 2010. EWP has helped to grow local economies by purchasing Regional Innovation Systems (RIS) costing 2356 million won in 2010.

Regional Innovation System (RIS)
• RIS(Regional Innovation System) : "Regional Industry Promotion Project" led by the Ministry of Knowledge Economy,
• Gathering local R&D capabilities with local companies, universities and research institutions led by local governments, exploring regionally innovated industries and specializing their products through value-added and brand projects.

EWP supports cultural events and encourages sports in communities.

As an effort of corporate culture to support activities, EWP has supported various local cultural events around the plant including Dangjin Waemok Sunrise Festival, Evergreen Cultural Festival, Ulsan Literature Award and others, to meet the community's needs and contribute to local cultural development. EWP has also supported big and small school athletic events including Dangjin youth soccer team, an athletic team in Seokmun middle school, and a Judo team in Ulsan. These activities build young talent and encourage local residents to have physical activity for healthy lives.

Units: KRW 1,000

Field	Culture and Arts	Sports Promotions	Total
Employee fundraising	263,500	319,032	288,680
Company Donations	538,000	608,007	739,000
Total	**801,500**	**927,039**	**1,027,680**


1 Waemok Sunrise Festival Support
2 Building School Athletic Teams

EWP supports the development of the community infrastructure.

The area around the plant enforced the surrounding area support project in accordance with the law. For surrounding area supporting projects, annual subsidies estimated based on electricity generation have been given to local governments. In 2010, 5.5 billion won was granted to local governments to increase residents' income and expand public facilities.

Unit: KRW 1,000

2010 Support Amount for Local Governments by Workplace

Classification	Dangjin	Ulsan	Honam	Donghae	Ilsan	Sancheong	Total
Contributions	3,262,000	772,800	360,000	543,900	258,300	310,100	**5,507,100**


1 Revive Traditional Markets
2 RIS Purchase
3 Fish Discharge

What else does EWP do for social responsibility?

EWP carries out society contribution activities linked with overseas project promotion.

EWP desires to build a favorable foundation for project promotion through both domestic and overseas society contribution activities in new project development areas. EWP sent 72.77 million won in relief money collected by staff and company contributions to Haiti after the earthquake in 2010 to diesel power generation projects and participated in voluntary repair work for Haiti.

EWP carries out environmental protection activities around the power plant.

EWP has minimized the impact of the environment through eco-friendly environment management to ensure there will be a clean environment for future descendants and to preserve the natural environment. Each power plant has carried out regular environmental cleanup activities through the '1 workplace 1 mountain' and '1 workplace 1 river' campaigns.
EWP has regularly held environmental campaigns including Environmental Painting Contests to awaken children about the environment's importance.

Classification	Ties	Number of Participants	Number of Participants	Support Amount(1,000 won)
Preservation of Mountains and Rivers	12	30	623	12,102
Environmental Preservation Activities		52	887	84,441

1 Helping Disaster Damaged Areas in Haiti
2 Environmental cleanup activities
3 7th Blood Donation Relay of Love

EWP helps those in need by purchasing products from social corporations.

The most effective way to help people in need is to help them become independent. EWP purchased 650 cakes to create jobs for the vulnerable.

Social Enterprises
- Providing employment and social services to vulnerable groups to pursue social objectives
- Selling bread to hire, but not hiring to sell bread

EWP practices love through Blood Donation of love.

Led by headquarters, EWP has held annual blood drives at each workplace in May.
In 2010, 154 employees participated in blood donations to help children with childhood cancer.

What efforts are made to make a desirable work environment for the employees?

There is no discrimination to fairness.

EWP does not discriminate by reason of sex, education level, religion, and age in all personnel fields including promotion, payroll, and personnel evaluation. Both men and women receive the same salary standards and particularly, 32% of all women are engaged with core work at headquarters. In cases of discrimination, EWP runs a complaint counseling office to allow workers to make reports freely.

In 2009, EWP removed academic restrictions for employment, actively carried out the governmental Education Abolition Policy, and hired seven graduates at the second half of 2011 through Meister graduate recruitment plans.
EWP received the best company award from the Ministry of Patriots and Veteran Affairs for hiring two children from men of national merit in March, and maintained the annual employment rate for the disabled (2.4%). 61 interns were employed and employment linked internships contributed to easing youth unemployment.

To form a gender equality culture, all employees have enrolled in a mandatory sexual harassment prevention training since 2009 and each workplace received education from outside lecturers.
EWP has given security guards and janitors the education to prevent human rights violations of employees or visitors.

• Socially equitable employment?
EWP gives employment opportunities to the underprivileged including people with disabilities, and veteran's children.

Employee's work-life balance is important.

EWP introduced a variety of schemes to create a work environment that can strike a balance between work and life.

To provide support services for healthy family life, counseling, and family events led by the Ministry of Gender Equality and Family to employees and their families, EWP has signed an MOU with the Central Health and Family Support Center. For the first time among power generation companies, EWP has carried out trial operation of a 1) flexible working system corporate-wide system in May, 2011, and newly introduced a half-day vacation system in which employees can use their vacations by dividing them into four hours.

[1] What is a Flexible Working System? This systems allows employees to adjust the commuting time while maintaining a 40 hour-work week.

In this family-friendly work environment, many employees have benefited a lot. In 2010, all female workers who had a child used their maternity leave. In particular, two male workers used maternity leave for seven months and two months. There was one maternity leave case for an adopted child in September, 2010. Because the maternity leave period included a period of employment, there was no disadvantage in promotions and salaries. In 2010, a Baby Shower system was introduced to encourage childbearing in the company. These efforts were recognized making EWP the best family-friendly management company in 2010.

Two Interviews from Welfare Recipients (Baby Shower and Maternity Leave)

Baby Shower

Human Resources Department
Park Ji-hye

Pregnancy is the reason to receive a congratulation call from family and friends, but as a company worker, it was really burdensome to inform them of the pregnancy because I would have to leave for three months. Particularly, I was really sorry because I thought that my coworkers might be overworked because of me. However, the Baby Shower system allowed me to feel at ease about the burden of my absence because the members publically gave me congratulations on my pregnancy. There are many companies that allow for leave after childbirth, and have maternity leave schemes, but it is rare that they congratulate a pregnancy. I was really touched by the gifts including CDs for my baby, books, and the CEO's letter hoping for my infant to have good health. It might seem ironic for the company to encourage childbearing, but I think that this system will increase the utilization of maternity leave for female employees in the organization.

Maternity leave

Contract Team
Son Eun-jin

In 2009, I applied for my maternity leave for one year after the birth of my first baby. Since 2006 when employment of new workers expanded, the maternity leaves have been actively used since 2009. Now there are many employees who use their maternity leaves the local power plant. There are many who think it is quite surprising in headquarters because I was the first one who applied for maternity leave. I understand that it is difficult to leave a job for one year and it is also hard to use a replacement. However, the team manager welcomed my request. After spending 'sweet time' with my baby for one year, I came back to work. I realized that I was encouraged to return to my work. The company's atmosphere and consideration for maternal care and female workers crucial makes women more engaged with their tasks. I hope that the system will be more actively used. It might be good if there is more systematic support by the personnel management department.

What is the status of personnel, employment and retired personnel?

Staff Status

Classification	2008	2009	2010
Executives	2118	2056	1990
Regular Workers	2118	2056	1990
Part-time Workers	0	0	0
Average Years of Service	15.1	16.5	16.11
Employment Creation Rate	-1.58%	-2.93%	-3.21%
Turnover	0.56%	1.12%	3.52%
Female Workforce	160	150	142
Percentage of female workers	7.55%	7.3%	7.14%
Persons with Maternity Leave (ratio)	100%	100%	100%
Persons with parental leave (ratio)	5%	10%	13%
Disabled Employees (ratio)	2.20%	2.46%	2.61%
Veterans Employees (ratio)	9.49%	9.53%	9.65%

Numbers of Staff by Position

(2010)

Executives	1 Position	2,3 Position	4 Position	5 Position	Sanitation Workers	Total
4	14	484	1314	38	111	1990

Staff Numbers by Workplace

(2010)

Headquarters	Dangjin	Ulsan	Honam	Donghae	Ilsan	Sancheong	Guam Office	Total
260	621	489	186	163	202	65	4	1,990

New Recruitments Status

	'06	'07	'08	'09	'10
Total New Recruits	135	139	6	3	3
Women	16	25	1	0	0
Disabled	4	0	0	0	0
Science And Engineering Staff	110	110	2	1	0
Non-capital Staff	61	54	0	0	2

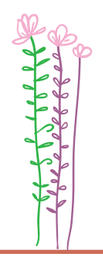
Numbers of Retirement by Occupation within the Next Five Years

Classification	Management	Office Work	Technical Post	Skill Post	Sanitation Post	Total
2011	2	1	14	0	3	20
2012	2		26	2	3	33
2013	4	2	31	2	4	43
2014	1	3	26	2	5	37
2015	9	6	36	3	4	58
2016	9	5	40	2	4	60
2017	27	17	173	11	23	251

Numbers of Recently Retired Personnel and Personnel to be Retired by Occupation

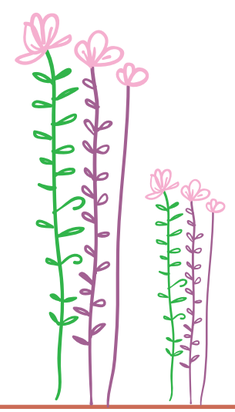
	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Management	6	5	11	2	2	4	1	9	9	27
Office Work	6	7	12	1	0	2	3	6	5	17
Technical Post	22	32	89	14	26	31	26	36	40	173
Skill Post	3	7	8	0	2	2	2	3	2	11
Sanitation Post	2	9	8	3	3	4	5	4	4	23
Total	39	60	128	20	33	43	37	58	60	251

What benefits are provided for the company?



Summary of the Welfare System

Classification	System	Specifics
Creating A Favorable Environment for Childbirth and Nurturing	• Pregnancy Support	Baby Shower System (Giving a pregnant employee gifts or books)
	Maternity Subsidy Support	Monetary Gifts (0.5~2 million won)
	• Childcare Facilities	Support for Corporate-wide Childcare Facilities (50% of the price the government paid childcare given for children under the age of 5)
	Child Education Support	Childhood Education Subsidy Support (0 ~5 years old)
		Secondary School Children and College Tuition Support
		Dorm Support for University Students in Metropolitan Areas
Support for Employees and Their Families	Selective Welfare Programs	Self-Development, Family Anniversary Support
	• Employee Assistance Program	Employee Family Education (Mom School, Playing Classroom with Daddy and others) and Financial Counseling Program
	Support for Special Occasions	Paid Leave and Subsidies for Ceremonial Occasions
	Support in the Event of Disaster	Subsidies for Disasters from Partial to Full Destruction by Fire and Flood
	Family Insurance Group Discount Support	Agreements with Insurance Companies and Insurance Entry Group Discount Support
	Family Unit Event and Program Support	Support for Weekend Events and Workplace Visiting Events
Housing and Livelihood Support	Housing loans	House Renting and Purchasing Loans
	Livelihood loans	Incumbent Employee for more than one year
	Residential Support	Company Housing Support for Local Power Plant Workers Dorm Support for Metropolitan Workers



Classification	System	Specifics
Leisure and Culture Support	Training Institute operation	Training Center Support for Workers in Sokcho, Suanbo, and Muju
	Summer Recreational Facility Support	Recreational Facility Support Near Power Plants During Summer Vacation
	Leisure Contract Support	Transportation: Train and airline discounts (3 agents) Accommodation: National Accommodation supply Discount (10 agents) Travel: Domestic Travel Package Discounts (2 agencies)
Health Support	Group Insurance Support	Seven Key Items Guaranteed Including: Accidental Death, Death by Disease, Accidental Failure, Cancer Diagnosis
	Health Care Support	Annual Health Checkup and Special Screenings
	Medical Facility Use Discount	Health Checkup at Seventeen Hospitals and Discounted Support Including Dental, and Vision
Incentives	National Merit Incentive Training	Monthly, and Quarterly Support for Employees and Their Families with Contributions
	• Meritorious Department and Fellowship Division Teamwork Enhancement Program	Condo Support for Departments and Clubs with Contributions
Retirement Support	Operation of Retirement Benefits	122.2 Billion Won In 2010 (Paid at retirement date) Retirement Benefits Introduction to Give Options to Severance Pay

• New Introductions in 2010

How does EWP educate employees for personal growth?

EWP provides various customized educational opportunities through individual capacity diagnosis.

All employees are evaluated for their work capabilities and performance or on a regular basis twice a year by their supervisors. In addition, through a four sided assessment from supervisors, peers, and juniors, employees have an opportunity to know their lack of competence in order to develop their capabilities. EWP identifies the demand for a variety of training courses by reviewing the evaluations. Experts in each field are developed by enhancing professionally commissioned education and on-site training according to the education and training system.

In particular, EWP has strengthened the education of plant design, construction, and 1.) engineering field to nurture experts in core design engineering. Based on that, 5 billion won was saved by self-engineering when building the Donghae Biomass Power Plant.

E-learning processes are self-run to be used on site.

2.) 'Granular E-learning' which was introduced in 2009 was segmented into fourteen courses and with in-house lectures reviewed by the verification committee.

• 99 hours of Education was allotted per person in 2010

1) What is Power Plant Engineering? This includes the conceptual design at all stages of power plant construction, technology assessment, design work, and management

2) What is Granular E-learning? These are video lectures of less than 30 minutes duration that consist of several modules in actual work segments.

3) What is Best HRD Certification? This is a government certification conducted jointly by the Ministry of Education, Science and Technology and the Ministry of Employment and Labor to select, certify and publish the best human resource management and development screening companies.

EWP explores and nurtures global talent for growth management.

EWP has focused on domestic and overseas power plant operation and renewable energy projects to leap forward as a Global Power Company. Therefore EWP has run the key talent program to build global talent to lead each project. EWP has built Global Pioneers, a workforce pool for overseas and renewable energy projects and increased their potential capacity through intensive language training, pioneer workshops, and business development education courses. In 2011, EWP plans to send interns to the U.S. at various workplaces to build overseas experts and also send more experts to overseas projects including Vietnam and Chile.

EWP received 3) the Best HRD Certification for the first time in 2006. Along with internal talent building, EWP hired seasoned workers for overseas and metal technology projects. Seventeen registered as project financing experts and six as metal analysis experts, but they were not hired. EWP will strive to hire excellent experts by various employment methods.

^ U.S. Office
(EWP Renewable Company)was established for the first time among the power generation companies to enter the U.S. market for renewable energy projects.

Best HRD re-certification

Leadership Education and Prospective Retirement Training Results

(Business Strategy Sharing through Tiered Leadership Training)

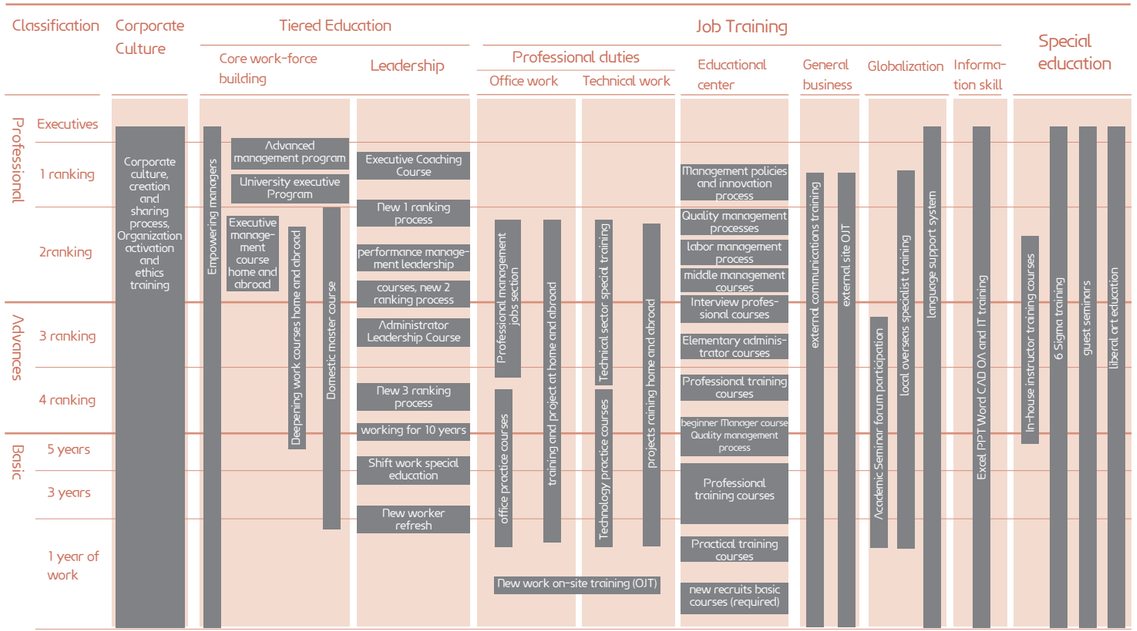
Executive Coaching Education	2 Position Leadership Education	2 Position Leadership Education	Retirement Preparation Training
9	75	392	3

Units : Hours	2008	2009	2010
In-House Training Institute	628	857	1761
Domestically Commissioned Education	8654	9381	11316
Overseas Commissioned Education	50	25	6

Granular E-Learning Process Lists

Field	Course Name
Planning	Management Strategy, Understanding the EWP vision
Personnel	Utilization Methods of Personnel Evaluations and Notices
Accounting	Reading Financial Statements
Contract	Contract Practice
Safety	Safety Management User Training
Overseas Projects	Overseas Project Status
	Actual Experience in Overseas Projects
	Preparation for Overseas Workers
	Cebu Operation Status in the Philippines (English)
Simulation Training Center	Facility Cold Rolling Start (English)
	Facility Stoppage
Technology Center	Turbine Maintenanc (Disassembly, Inspection and Assembly)
	Combustion Characteristics and Damage Cases
POMMS: Plant Operations and Maintenance Management system	Project Design Management Using POMMS
	Electrical Equipment Isolation Analysis and Assessment
	Boiler Control
POMMS	How to use POMMS (Plant Operation and Maintenance Management System)
Elementary Level Executive Test Preparation Process	Elementary Executive Test Prep Cross-process (Understanding Office Fields)
	Elementary Executive Test Prep Cross-process (Understanding Power Generation Fields)
	Essay Writing Tips

Education Training System



How does EWP cooperate with the labor union?

EWP has an active conversation with the labor union using various paths.

1,300 Out of total personnel, 65% of EWP employees have joined the EWP labor union. In the 2008 collective bargaining process, there was a conflict because the labor union strike, but the corporation terminated the collective agreement. However, even though the collective agreement was terminated, both sides talked through various channels. They talked faithfully about important policies related to retirement plans and half-day vacation introduction through the self-ARS survey. As a result, they reached the '11.3 agreement'. The key discussion was about a stipulation stating 'the identities of union members are changed due to stoppage for a company closure, a change in division, assignment, transfer, business change of the company, the company must report 50 days in advance.'

Labor Management Committee	Explanation and Evidence	Number of Operations by Year	
		2009	2010
Labor Management Council	Consultation between company and labor union on treatment of employees	14 times 132 cases	13 times 95 cases
Occupational Safety & Health Committee	Labor management consultation on safety and health of employees	22 times 80 cases	17 times 47 cases
In-house Funding Council	Consultation on how to manage the fund arranged for welfare of employees (in-house labor welfare fund articles)	2 times	4 times
Company Housing Operation Committee	Consultation on how to run company housing provided to employees (In-house operation rules)	4 times	8 cases
Ombudsman Committee	Finding solutions to difficulties in working life of employees through discussion	10 times 35 cases	9 times 25 cases
Restaurant Operation Committee	Discussion on specifics of how to run company cafeteria through discussion (Cafeteria operation rules)	5 times	2 cases

What does EWP do for the health and safety of employees?

EWP considers employee safety a priority.

Safety in the workplace is most important because there are a lot of large machines.
Corporation and labor union have talked with the Occupational Health and Safety Committee and the Labor Management Council to make the workplace safer.
In addition, EWP considers safety of not only the company staff but also employees of business partners as its priority.
It is mandatory for EWP and business partner employees to receive safety education for an accident-free power plant.
For the first time among the power generation companies, EWP received [1] KOSHA / OHSAS 18001 in April, 2010 for efforts to make a disaster-free company.

Joint Certification Ceremony

1) What is OSHA / OHSAS 18001? This is an Official Certification for the autonomous safety system including accident prevention and health maintenance activities of a company's employees and stakeholders.

EWP protects the health of employees and their families.

EWP expanded the health support program to maintain good health of the employees and their families. EWP has expanded the existing comprehensive medical checkup discount agreements with three hospitals in Seoul to ten hospitals in six places including Ulsan, Yeosu, Donghae, Cheonan, and Jinju, and signed discount contracts with dental and eye hospitals for benefits of implants, LASEK, and LASIK surgeries. EWP expanded the guaranteed group insurance coverage to provide wider benefits that were not covered by individual insurance including herbal hospitalization, and maternity hospitalization. All these health support programs are used by family members.

Automated External Defibrillator Introduction and Training

Eleven defibrillators in each plant were installed along with training.

What is an Automated External Defibrillator? It is a machine that gives electric shocks to those whose heart has suddenly stopped working. The shock causes the heart to resume a normal state.

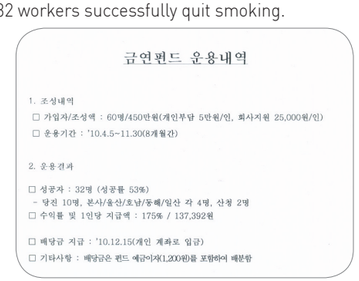
Industrial Accident Related Results

Year & Category	2008	2009	'10년
Industrial Accidents	0	0	0
Accident Classifications	Death 0, Injury 0	Death 0, Injury 0	Death 0, Injury 0
Electricity | Gas | Water Work Average	0.18	0.22	Not accumulated

Non-smoking Fund

The Non-smoking Fund was run for eight months and 32 workers successfully quit smoking.

What is a Non-smoking Fund? Employees give 50,000 won and the company supports them with 25,000 won; then the employees who successfully quit smoking for eight months are eligible to receive the funds.



How does EWP go with SMEs for a win-win situation?

EWP pursues an actual win-win situation through multilateral assistance and cooperation with SMEs.

EWP has run the 'Mutual Growth Center' as a separate organization in Korea. EWP has made its effort to co-exist with SMEs through integral support from technology development to domestic and international marketing support for SMEs. EWP succeeded to create added-value ranging from technology development to commercialization of products, avoiding one-way temporary support. As a result, in 2010, EWP ranked No. 1 among the fourteen companies from the small business assessment by the Ministry of Knowledge and Economy and proposed the role of the 'Korean mutual growth standard model'.

EWP successfully produced new products through excellent technology and tailor-made support.

Since 2004, EWP has developed a variety of power generation facilities and systems through joint research and development with excellent mid-sized companies. EWP has participated in research collaboration with SMEs on a conditional basis and SMEs have increased their technology; plus their competitiveness in industry has been strengthened by successful localization of foreign materials.

Small Business Technology Development (conditional purchase of new product development) Support Performance

Years	2007	2008	2009	2010
Numbers	7	15	9	9
Purchase Amount (100 million won)	8.9	12.1	8.7	41

EWP has made sales channel development support projects for products made by excellent SME companies to competed fairly at home and abroad.

Without marketing, actual sales expansion of good products is difficult.
EWP has directly purchased technical products development, women's enterprise products, and products from the disabled to help SMEs expand their sales. EWP took the lead in testing to apply the SME trial products at plant sites to establish domestic grounds for product sales. It also held various exhibitions for SMEs to participate in International Power IT events. For overseas sales channel development, EWP has built the joint international marketing networks for SMEs and helped SMEs to gain overseas orders through export fairs, and overseas export road shows.

	2007		2008		2009		2010	
	Participating Companies	Orders Gained	Participating Companies	Orders Gained	Participating Companies	Orders Gained	Participating Companies	Orders Gained
Domestic sales channel development	110	35	95	77	123	50.7	77	283
Overseas market sales channel development	24	2,510	11	500	85	7,243	78	13,485
Trade skill sessions	18	2,380	135	6,171	255	5,540	68	4,500

SME Win-Win Project Cases

Shin Kim, deputy head of Ulsan Thermal Power Plant
YuWon TECH, leading producer in gas turbine core parts

YuWon TECH contributed to stable electricity production and operation of the Ulsan Thermal Power Plant by developing gas turbine isolation rings and applying the rings to the Ulsan Thermal Power Plant.

What is an Isolation Ring? These rings are key components of gas turbines connecting the blade ring body in the gas turbine with the turbine vanes and ring segments.

EWP
Interview with Shin Kim, deputy head

"We had difficulties from frequent leakages and malfunctions due to frequent stoppages and long term use when it came to gas turbines in the Ulsan Thermal Power Plant. The worst thing was that we depended on overseas products and high maintenance and material purchase costs too much. Therefore we suggested local development to YuWon TECH and successfully overcame the structural and consistent problems of the gas turbine."

YuWon TECH
Interview from Jo Jeong-bong, vice president

"Almost all key facilities in the power plant have used overseas materials and I felt sorry that frequent malfunctions meant expensive maintenance costs. It was actually difficult for the SME technology development to be used, but EWP used our products without trial experiences and became our strong supporters!"

Enviromental Performance

"EWP has been pursuing an environmentally-friendly management style to provide a clean environment for the next generation. EWP's core values of respect for humanity and nature-friendly business management has led to environmentally-friendly power plants, cooperation with local communities, minimized emissions and controlling against negative environmental impact. EWP is leading green management by actively participating in the government's green policy, implementing a GHG & energy targeting system and a mock carbon credit trading system to respond to global climate changes. Plus, EWP has been making efforts to develop fuel cells and renewable energy, such as photovoltaic (PV), bio mass, and wind, to prepare for the introduction of a Renewable Portfolio Standard (RPS)."

Key issue & Performance

Environmental Pollution Management • GHG emissions (41.3 m tons)

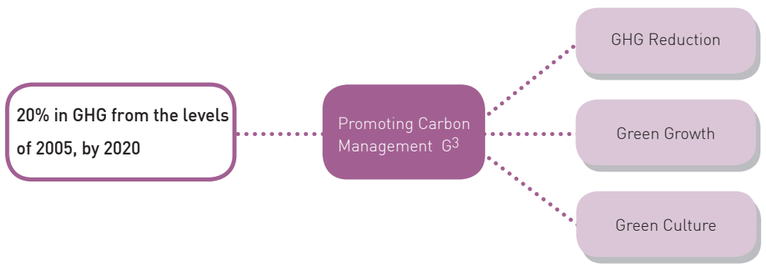
Resources Recycled • Fly ash (58%), Gypsum (424,000 tons), Waste water (1,545,000 tons)

Energy Saved • Saved through an Energy Targeting System 118,000 TOE
(Fuel 100,000 TOE, Electric Power 18,000 TOE

What is the EWP's environmental policy?

According to the Low Carbon Green Growth Act, EWP has been doing its best to reduce GHG, promoting green growth and enhancing a green corporate culture.

Low Carbon Green Growth Promotion Map



Focused Parts of Each Area

GHG Reduction

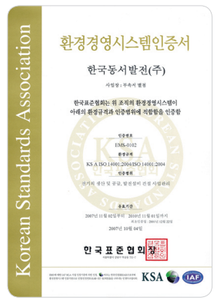
- **Increasing efficiency in power generation and saving energy**
  (2.5 % heat efficiency increase)
  Optimizing power plant management
  Applying advanced technology
- **Technology development for GHG reduction**
  Developing GHG reduction technology including CCS

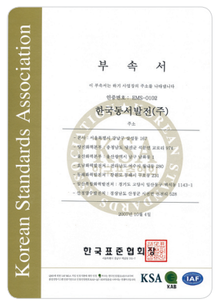
Green Growth

- **Expanding new & renewable energy sources**
  (11% of power generation in 2020)
  Ocean, wind, small hydro power, IGCC, photovoltaic, solid fuel, bio mass
- **Technology development for GHG reduction**
  GHG inventory
  A system to evaluate green management

GreenCulture

- **Creating green working placess**
  Installing BEMS
  (A building energy management system)
- **Pursuing green life Green mileage**
  Introducing a green management system





Environmental Management System Certificate

All EWP's power plants acquired international certifications for their environmental management systems.

EWP set a goal of constructing and managing environmentally-friendly power plants to protect the environment, and has made efforts to save fuel through enhancing power generation efficiency, minimizing wastes, and expanding new and renewable energy development. These efforts have been recognized so that all power plants acquired an ISO 14001 integrated certification, an environmental management system, and EWP was designated as a green company by the Ministry of the Environment, which has helped EWP lay a strong foundation for an environmentally- friendly management system.

Current Green Companies Designated by the Government

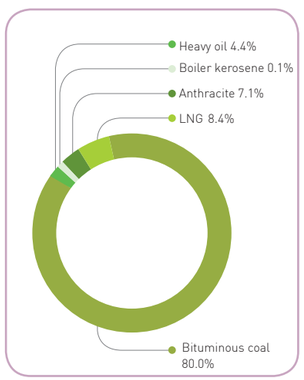
Classification	Date initially designated	Date re-designated	Expiration
Dangjin Coal-Fired	Dec. 20, 2001	Feb. 17, 2010	Feb. 16, 2015
Ulsan Oil-Fired & C.C.	Jul. 14, 2004	Jul. 3, 2007	Jul. 02, 2012
Honam Coal-Fired	Oct. 14, 2000	Apr. 1, 2009	Mar. 31, 2014
Donghae Coal-Fired	Nov. 27, 2001	Dec. 29, 2009	Dec. 28, 2014
Ilsan CHP	Mar. 9, 1996	Jul. 6, 2007	Jul. 5, 2012

What kind of fuel sources is EWP using in power plants?

Anthracite, bituminous coal, heavy oil, kerosene and LNG are used to generate electricity.

Fuel Source Usage

As power generation facilities are increasing, fuel usage is also increasing.
In 2010, 15.21m tons of bituminous coal, 1.34m tons of anthracite, 0.83m kℓ of heavy oil, and 160 kℓ of LNG were used.



	2008 year	2009 year	2010 year
Anthracite(ton)	1,469,902	1,595,149	1,340,895
Bituminous coal(ton)	13,553,246	13,917,584	15,210,392
Heavy oil(kℓ)	712,022	922,287	834,480
Boiler kerosene(kℓ)	17,882	14,490	17,469
LNG(kℓ)	1,292,571	1,085,792	1,601,977

How is EWP doing for environmental monitoring?

Desulfurization facilities, denitrification facilities, electrostatic precipitators and waste water treatment stations minimize pollution emissions.

1 Clean SYS
2 Coal yard CCTV
3 Unloading dock CCTV

Clean SYS Operation

EWP is operating a Clean SYS to monitor pollution emissions in real-time. Information on pollution emissions is transferred on-line to the control center of the Environmental Management Corporation in real time. The system is linked with an environmental monitoring system within the plants to check information on emissions through smokestacks, and the surroundings, including water quality, around-the-clock.

Monitoring Docks and Coal Yards in Real-Time

While unloading docks and coal yards monitoring occurs in real-time. Unloading situations are observed and monitored through CCTV, and the information is reported to the management to check for the environmental impact and to prevent environmental incidents. Real-time information through coal yard CCTVs facilitates the management of coal storage, coal quality and reduces spontaneous ignition. Through the system EWP is endeavoring to minimize the environmental impact on nearby areas.

What kinds of pollutants are there?

Pollutants from power generation are divided into air pollution, water pollution and waste. Air pollution includes sulfur oxides, nitrogen oxides and dust. Water pollution includes organic pollutants and suspended solids.

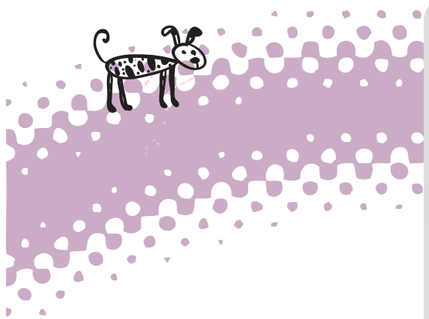
Environmental Pollutants Generated

Classification	Air Pollution	Water Pollution	Wastes
Pollutants	Sulfur oxides, Nitrogen oxides, Dust	Organic pollution, Suspended solids	Coal fly ash
Reduction Methods	Desulfurization facilities (to remove sulfur) Denitrification facilities (to remove nitrogen) Electrostatic precipitators (to remove dust)	Waste water treatment stations	Recycling (Material for cement)

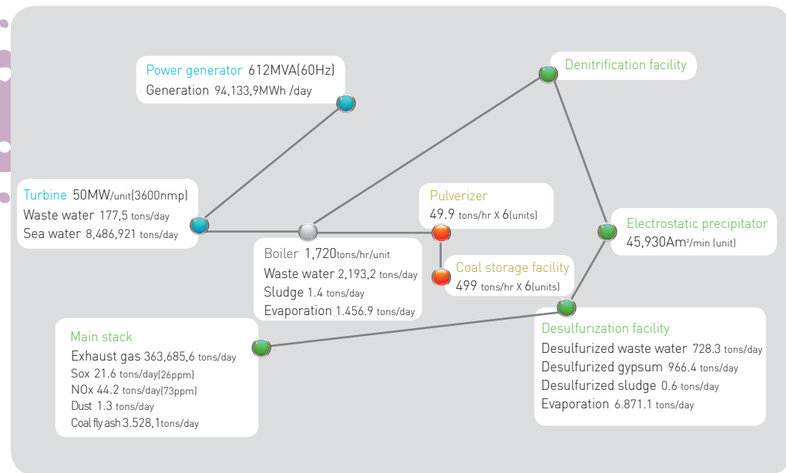
단위 : g/kwh

Air Pollution Emissions

Classification	SOx	NOx	Dust
2010 year	0.32 g/kwh	0.55 g/kwh	0.01 g/kwh



The Environmental Impact of Dangjin Coal-Fired Plant During Operation



What kinds of facilities are there to minimize the environmental impact of operating power plants?

There are desulfurization facilities, denitrification facilities, electrostatic precipitators and waste water treatment stations to minimize pollution emissions.

Cutting-edge air pollution control facilities, such as desulfurization facilities (to remove sulfur), denitrification facilities (to remove nitrogen), and electrostatic precipitators (to remove dust), are installed in each power plant to reduce air pollution emissions to meet the emission standards. Waste water treatment stations are employed to treat waste water created in the power plants. Coal fly ash, which is generated when coal burns, is recycled by selling it to domestic cement companies.

Facilities to Prevent Environmental Pollution

	Desulfurization Facilities (to remove sulfur)		Denitrification Facilities (to remove nitrogen)		Electrostatic Precipitators (to remove dust)	
			Units installed	type	Units installed	type
Dangjin Headquarters	8	Wet lime-gypsum process	8	Selective catalytic reduction	8	Dry (cold) Electrostatic precipitators
Ulsan Headquarters	3	Wet lime-gypsum process	3	Selective catalytic reduction	6	Dry (cold) Electrostatic precipitators
Donghae CFBC Coal-Fired	2	Desulfurization in a dry furnace	2	Desulfurization in a dry furnace	2	Dry (cold) Electrostatic precipitators
Honam Bitumi-nous Coal-Fired	–	Using low sulfur fuel	2	Selective catalytic reduction	2	Dry (cold) Electrostatic precipitators
Ilsan CHP	–	–	6	Low NOx burner	–	–

How does EWP treat hazardous wastes?

Hazardous wastes are properly treated under the Basel Convention Act on the Control of Trans-boundary Movement of Hazardous Wastes and Their Disposal. Some 156 tons of hazardous waste was treated from 2005 to 2010. Wastes were treated overseas before 2009, but since 2009 they have been treated domestically.

Waste Treatment under the Basel Convention

Period	Volume	Country	Cost
Sep. 2005 – Apr. 2006	25.12 tons	France	85 million won
Jan. 2001 – Aug. 2007	10.81 tons	Belgium	51 million won
Jan. 2009 – Dec. 2009	54.55 tons	Korea	26 million won
Jan. 2010 – Dec. 2010	65.98 tons	Korea	32 million won
Total	156.46 tons		

How does EWP recycle wastes?

EWP reuses 62 % of waste water using waste water treatment stations.

Water used in the power plants is treated in waste water treatment stations and 62 % of waste water or 1,545,000 tons of water is reused. The rest, 38 %, is provided by rivers or dams near the plants. Water is used for boilers, cooling equipment, desulfurizing the absorbers in desulfurization facilities, and drinking water. All power plants have comprehensive waste water treatment stations which clean water physically and chemically. Waste water generated in power plants is reused or discharged into the sea. The quality of discharged water is always better than the standards for effluents.

Year	Power Generation	Water Usage	Waste Water Treatment	Waste Water Treatment	Volume Reused	Reuse Rate
		(1000ton)	(tons/GWh)	(1000 tons)	(1000 tons)	%
2008	50,612	8,726	172	2,585	1,453	56
2009	50,776	8,995	179	2,374	1,375	58
2010	54,136	11,998	222	2,495	1,545	62

2010 Water Intake

Classification	Dangjin	Ulsan	Honam	Donghae	Ilsan	Note
2008	952,329	1,929,925	376,066	195,652	2,969,403	
2010	Boryeong Dam Sambong Reservoir	Nakdong River	Juam Dam	Dalbang Dam	Haengju Pumping station	

Coal fly ash generated after burning coal, and desulfurized gypsum, a byproduct of the desulfurization process, are recycled.

Wastes generated in the power generation process include coal fly ash, desulfurized gypsum, waste water sludge, waste oil, and domestic wastes. Among them, coal fly ash is recycled as an mixing agent for ready-mixed concrete or a material for cement. Desulfurized gypsum is used as a material for gypsum boards. EWP is leading in recycling dumped wastes such as coal fly ash, gypsum and waste oil, while considering waste water sludge, waste oil and domestic wastes as resources. Thanks to this effort, the recycling rate is growing every year so that the waste treatment cost is decreasing while the waste sales profit is increasing. Furthermore, EWP is trying to increase recycling and reduce the treatment cost by diversifying demands for recycling, promoting R & D, and creating new uses for recycled materials.

Recycling of Coal Fly Ash and Desulfurized Gypsum

	2008 year	2009 year	2010 year
Recycling rate of coal fly ash	69%	66%	58%
Recycling of gypsum (1000 tons)	397	425	424

Have there been any violations of environmental regulations or environmental accidents?

There has been no leakage accident related to oil, wastes or hazardous materials to date.

To provide against an environmental accident, a risk response drill and an oil/poisonous material controlling drill are carried out every year. According to the Marine Environment Management Act, EWP uses the Korea Marine Environment Management Corporation in charge of deploying response vessels to prepare for an emergency.

2010 Drills

Plant	Type of Drill	Participants
Dangjin	Exercise training against toxic material leakage	Employees of the plant and affiliates
	Exercise training against oil leakage into the sea	Self-training of the environmental management team
Ulsan	Exercise training against toxic material leakage	Employees related to the chemistry team
	Exercise training against marine pollution caused by the spill of fuel oil	Self-training of the employee of the plant and the environmental management team
	Fire drill	Joint drill of the city hall, military and fire station
	Exercise training against fire in oil tanks	Employees of the plant and affiliates
Honam	Emergency response drill against oil leakage	Employees of the plant and affiliates
	Exercise training against toxic material leakage	Employees of the related departments and affiliates
	Fire drill	Employees of the plant and affiliates
Donghae	Exercise training against oil leakage	The environment and chemistry team
	2010 disaster response drill	The National Safety Management Committee, the National Emergency Management Agency
	Joint fire drill	Employees and Donghae Fire Station

1 Public-private joint emergency response drill against oil leakage
2 Exercise training against toxic material leakage

EWP makes efforts to comply with the emission standards.

In 2010, excessive emissions of sulfur oxides, dust and nitrogen oxides occurred twice, eleven times and four times respectively. These accidents happened momentarily because of trouble in the environmental pollution control system or combustion instability in the system operation. EWP signed a voluntary agreement with the Ministry of the Environment, and has been emitting environmental pollutants at a much lower level than the standards. As for Dangjin, the emission standards are Sox 100 ppm, NOx 150 ppm and dust 30 mg/m3, but according to the voluntary agreement, EWP is emitting less than 30 ppm of SOx, less than 60-90 ppm of NOx (different depending on the unit) and less than 12 mg/m3 of dust.

2010 Excessive Pollution Emissions

Location	Frequency of excessive SOx emissions	Frequency of excessive dust emissions	Frequency of excessive NOx emissions	Total
Dangjin	–	–	1	1
Ulsan	–	3	3	6
Honam	1	8	–	9
Donghae	1	–	–	1
Ilsan	–	–	–	–
Total	2	11	4	17

What is EWP doing to protect the environment?

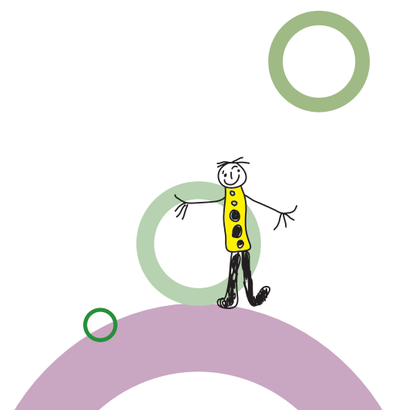
Desulfurization facilities, denitrification facilities, electrostatic precipitators and waste water treatment stations are operated to minimize pollution.

EWP has made efforts to construct and manage environmentally-friendly and eco-friendly power plants.

EWP has invested a total of 43.9 billion won in completing NOx emission control facilities for units #1 to #4 in Dangjin Coal-Fired Plant to reduce NOx emissions from 230 ppm to 50 ppm. In addition, before building Dangjin's unit #9 and unit #10, which are scheduled to be completed in 2015, EWP, with Dangjin Federation for the Environmental Movement, jointly established the Environmental Assessment and Review Committee to improve he air environment for the next generation. Furthermore, EWP is trying to preserve the diversity of fish stock like abalone and rockfish to increase fishermen's income through promoting the construction of aquaculture tanks using warm water from the plants.

An additional denitrification facility was installed.

EWP invested 5.3 billion won in completing a denitrification facility for advanced treatment in Ulsan Heavy Oil-Fired Plant in September 2009 to remove total nitrogen, which causes eutrophication of the sea, rivers or other aquatic ecosystems, from desulfurized waste water. This facility has reduced the total nitrogen concentration from Ulsan Heavy Oil-Fired Plant to less than 20 ppm, which minimizes water pollution.



Dangjin Coal-Fired Plant conducts a fish releasing activity.

To conserve the fish resources near the power plant, each year fish are released at the sea shores of Nanji-do, Janggo Port, and Gyoro-ri.

Environmental Impact Studies

	Investigator	Item	Problem	Period
Dangjin Coal-Fired	Dangjin Coal-Fired Plant	Warm water diffusion	None	Jul. 1994-Jun. 2011
	Kongju National University	Air quality, noise, soil, seawater quality, ocean floor quality	None	Jul. 1994-Jun. 2011
		Crops	None	Jul. 1994-Jun. 2011

Fish released by Dangjin Coal-Fired Plant

Year	Fish species released	Amount invested	Number of fish released
2008	Rockfish	0.3 billion won	150,000
2009	Rockfish	0.3 billion won	150,000
2010	Rockfish	0.3 billion won	150,000

What kinds of environmental events is EWP staging?

EWP is carrying out various environmental events including love the environment activities, nature purification activities, activity-oriented environmental education and publishing environmental newsletters.

Nature Purification Activities

EWP carries out diverse environmental preservation programs including the following: 1-company 1-river/mountain/shore, and caring and feeding wild animals. In addition, EWP holds environmental composition contests, one-day environment classes and painting competitions each year for local residents and students.

Environmental Care Activities

EWP carries out diverse environmental preservation programs to practice its love towards the environment including 1-company 1-river/mountain/shore and caring and feeding wild animals. In addition, EWP holds environmental composition contests, one-day environment classes and painting competitions each year for local residents and students.

Activity-oriented Environmental Education

Activity-oriented education is provided for students of schools near each plant. In particular, elementary students are taught, in a fun way, about the principles of power generation and waste water treatment. Generating electricity, analyzing COD in waste water, and other experiments are good opportunities for the students to learn about various scientific principles.

Publishing Environmental Newsletters

EWP publishes environmental newsletters semi-annually to inform the public about environmental issues, electrical knowledge and to provide common knowledge of news and information on power plants

How does EWP manage GHG emissions?

EWP built operates a GHG inventory system.

EWP deployed an enterprise-wide Web-based GHG inventory system linked to the ERP system, which facilitates generating and managing more reliable data than the existing spread sheet-based inventory system. EWP had its GHG emissions verified by an independent third-party verifier, DNV Korea. Additional complementary measures and updates will be taken to satisfy GHG's energy targeting system.

Range of Building GHG Inventory

Classification	Content
Organizational Boundary	All power plants (Dangjin, Ulsan, Honam, Donghae, Ilsan)
Operational Boundary	• Scope 1 (direct emissions) | emissions from sources owned and controlled by EWP Stationary combustion | Stationary combustion equipment (boiler, G/T, fire extinguishing pumps, emergency generators Mobile combustion | vehicles owned or rented/leased by EWP Fugitive emissions | air-conditioner/freezer coolants, GIS or transformers, H2 gas substitutions Process emissions | desulfurization process
	• Scope 2 (indirect emissions) | emissions from power purchased by EWP Purchased power
	• Optional Information Unregulated GHG emissions under the Kyoto Protocol (HCFC-22, Halon, NAFS-3)
Level	Emission inventories on an individual unit basis

What is the GHG reduction goal set by EWP?

EWP has a plan to reduce GHG levels by 20 % based on the 2005 data, by 2020.

According to the master plan of green management, EWP has set a goal of reducing GHG by 20% from the 2005 levels by 2020. To achieve the goal, EWP has expanded its investment in R&D to improve the efficiency of power generation facilities, develop new and renewable energy, secure carbon credit, and develop carbon capture and storage technology. Also, all employees of EWP are cooperating to reduce GHG by expanding the green life-style program.

GHG Reduction Goals* (%)

2012	2015	2020
2%	5%	20%

Reduction goals: from the 2005 level of GHGs

Enterprise-wide GHG emissions

• There were no emissions of ozone depleting substances in 2010

Classification	Emission Type	Emission Area	2008	2009	2010
Emissions	Direct Emissions	Stationary combustion	36,630,912 tons	39,010,848 tons	41,113,309 tons
		Mobile combustion	1,103 tons	1,248 tons	1,136 tons
		Process Emissions	129,975 tons	111,436 tons	138,042 tons
		Fugitive Emissions	1,641 tons	1,408 tons	680 tons
		Sub total	38,763,632 tons	39,124,940 tons	41,253,167 tons
	Indirect Emissions	Purchased Power	341,164 tons	419,945 tons	62,436 tons
	Total emissions		39,104,796 tons	39,544,885 tons	41,315,602 tons
Generation (GWh)			50,612	50,776	54,136
Consumption unit (kg-CO_2/kWh)			0.773	0.779	0.763

How much is EWP planning to invest in reducing GHG emissions?

EWP plans to invest 26.3 billion won in R&D to respond to climate change.

Project Period	Project Title	Amount invested
Jul. 2000-Jul. 2001	A study on response to the Climate Change Convention	8 million won
Dec. 2001-Mar. 2005	Development of dry regenerable sorbents for CO2 separation	64 million won
Aug. 2005-Mar. 2012	The second and third steps to develop dry regenerable sorbents for CO2 separation	178 million won
Dec. 2003-Sep.2005	Development of a model to utilize GHG credit trade	12 million won
May 2004-Apr. 2007	Development of a thermoelectric generating system using low-grade waste heat in power plants	30 million won
Jul. 2004-Dec. 2007	Commercialization of a MW distributed central photovoltaic generating system.	15 million won
Sep. 2004-May 2010	Development of a 250KW CHP MCFC fuel cell	1,000 million won
Mar. 2005-Feb. 2008	Development of a combined process for exhaust gases in heat power plants	45 million won
Aug. 2005-Mar. 2012	Development of a fluid layer process for the second absorbent to remove CO2 from exhaust gases using dry sorbent	296 million won
Feb. 2006-Dec. 2010	Development of a technology to commercialize tidal energy	7,000 million won
Mar. 2006-Sep. 2006	Development of small hydropower generation to utilize inefficiently discharged surplus energy	40 million won
Sep. 2006-Aug. 2011	Development of technology for mass production of oxygen carrier particles	30 million won
Dec. 2006-Nov. 2008	Securing a futuret generating technology by participating in a FutureGen Project	45 million won
Dec. 2006-Nov. 2014	Securing a futuret generating technology by participating in a FutureGen Project	1,890 million won
Dec. 2006-Nov. 2014	Construction of gasifying process test bed for IGCC demonstration plants and localization of its unit processes	1,793 million won
Feb. 2007-Jan. 2009	Setting a voluntary GHG reduction goal in generation sector and developing an emissions management system	10 million won
Sep. 2007-Dec. 2007	Development of a temperature detecting system to enhance the output of photovoltaic generating	173 million won

EWP will secure the core GHG reduction technology through investment in R&D. In particular, generating companies will jointly focus on the Carbon capture and storage (CCS) technology and the integrated gasification combined cycle (IGCC) technology, which can be immediately applied to the generating business. For this, EWP is securing sites for CCS in Dangjin Coal-Fired Plant and for IGCC in Ulsan Heavy oil-Fired Plant.

Jan. 2008-Jan. 2009	Hourly characteristics of renewable power generation facilities and their impact on the organization of generating facilities	50 million won
Jan. 2008-Jul. 2009	A study on environmental noise predicting techniques for wind turbines and hazards of wind turbines	90 million won
Jan. 2008-Sep. 2009	Development of hydrocarbon-based polymer electrolyte membrane through surface modification and performance evaluation of fuel cell stack	80 million won
Jan. 2008-Dec. 2009	Development of a technology to use RDF and bio mass in a commercial circulating fluidized bed boiler	841 million won
Jan. 2008-Jan. 2010	Reduction of carbon dioxide using a Photo active sensitizer	100 million won
Jan. 2008-Jan. 2010	Forming a ZnO transparent conductive thin film using atmospheric pressure plasma	100 million won
May 2008-Feb. 2009	A feasibility study on replacement or mixed-use of bio-diesel fuel for power generation	96 million won
Aug. 2008-May 2014	Development of a fluidized-bed CHP(5MW) system using waste wood molded fuel	6,000 million won
Nov. 2008-Oct. 2014	Development of a technology of CO2 separation and recovery after combustion in coal-fired generating using wet alkanolamines	300 million won
Jan. 2009-Jan. 2010	Development of a photovoltaic generating module as a roofing sheet and its bonding method	50 million won
Jun. 2009-May 2011	Development of 5MW CHP containing bio gas turbines	352 million won
Nov. 2009-Dec. 2011	Development of wind power generation system adapted for the west sea region	3,100 million won
Jun. 2010-May 2013	Development of functional fertilizer manufacturing technology using coal fly ash from power plants	68 million won
Nov. 2010-Sep. 2014	Development a technology to capture CO2 using wet amine after 10MW combustion	950 million won
Nov. 2010-Sep. 2014	Development a technology to capture CO2 using a dry method after 10MW combustion	1,175 million won
Dec. 2010-Nov. 2013	Development of engineering technology for 30MW lignocellulose bio mass power plants	288 million won
Sep. 2010-Jun. 2011	An environmental study on mixture of coal ash and sand	96 million won
TOTAL INVESTED		**26,365 million won**

How is EWP preparing for a future carbon credit trade?

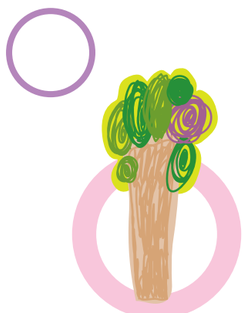
EWP is actively responding to the Climate Change Convention through the international certification of carbon credits and a mock carbon credit trading system.

Securing GHG credits

EWP is pursuing a CDM project and a national GHG reduction registration project as a part of GHG reduction activities. The Photovoltaic Generation Project of Donghae Power Plant was registered in the UN CDM for the first time in the world as a photovoltaic generation sector, and a small hydro-power generation project was also registered in the UN CDM in August 2009. As for the national GHG reduction registration project, a high-voltage inverter was installed in Honam Power Plant in May, 2007, which was followed by registration of new technology development by Dangjin Coal-Fired Plant in September, 2008. HRSG Waste Heat Recovery of Ilsan CHP Plant and GT Waste Heat Recovery of Ulsan Power Plant power plant were registered in November 2009. In 2011, Fuel Cell of Ilsan CHP was registered. Now, Hybrid SCR of Ulsan Power Plant is completing the examination for registration.

UN CDM and National GHG Reduction Registration

Project Title	Date Registered	Reduction
Donghae Photovoltaic (1MW)	August, 2006	690 tons/year
Dangjin Small Hydro-power (5MW)	August, 2009	15,000 tons/year
Honam High-voltage Inverter	May, 2007	16,419 tons/year
Dangjin New Technology Development	September, 2008	91,789 tons/year
Ilsan HRSG Waste Heat Recovery	November, 2009	52,653 tons/year
Ulsan GT Waste Heat Recovery	November, 2009	5,547 tons/year
Ilsan Fuel Cell	July, 2010	6,479 tons/year
Ulsan Hybrid SCR	Pending	4,749 tons/year
Total		193,323 tons/year



The mock carbon credit trading system

EWP agreed with generation companies and the Korea Power Exchange on business cooperation for a mock carbon credit trade to actively and jointly respond to the Climate Change Convention, to build a mock carbon credit trading system, to carry out a mock trade of carbon credits and to calculate GHG emissions. Also, according to the EWP action plan, EWP, for the first time as a generating company, performed a mock trade of carbon credits with the SK Group in October, 2010. In the EWP-SK mock trade, a trade scheme was designed to build expertise in credit trading, expanding partnerships with other business sectors or government organizations, and accumulate the credit-trade knowledge and experience through the participation of working-level staff.

A Mock Trade of GHG Credits

Mock trade	Period	Participant
Integrated mock credit trade within companies	November, 2007	Generating companies, LG Chemical, SK Energy, the Korea Energy Management Corporation
Mock credit trade in the generation sector (1st step)	August, 2008	5 Generating companies, the Korea Power Exchange
Mock credit trade in major industries (2nd step)	August, 2009	Companies representing major industries (24 companies)
Mock credit trade among different industries	October, 2010	EWP, SK Group

EWP is aggressively participating in the government's pilot projects.

EWP is participating in pilot projects such as an energy targeting system and the measurement of GHG and potential reductions.

Satisfying the government's policy of low-carbon and green growth, EWP is actively participating in diverse pilot projects to make a smooth shift toward a low-carbon society. As a main project, Dangjin Power Plant is participating in a pilot program for an energy targeting system before the full implementation of a GHG/energy targeting system and its reduction goal is the highest among the power generating companies organized by the Ministry of Knowledge Economy. Dangjin Power Plant and Ulsan Power Plant are under pilot projects to measure GHG and potential reductions to secure objectivity in calculating GHG emissions (organized by the Presidential Committee on Green Growth).
In the [1] KCCI survey to 1,738 energy consumption companies, conducted by the Business Institute for Sustainable Development of the Korea Chamber of Commerce and Industry at the end of 2009, EWP was selected as the best company in the power generation sector.

[1] KCCI? Korea Climate Change Competitiveness Index

Efforts to Save Energy

EWP is using a real-time performance monitoring system, POMMS, to enhance the facility efficiency according to the mid- and long-term energy management plans. This will improve cost savings and eliminate waste through energy conservation. EWP implemented the Voluntary Energy Saving Action (VESA) in 2010. Since 2011, EWP has been doing its best to conserve energy, satisfying the government's GHS/energy targeting system.

Energy Saving Record

		2008 year	2009 year	2010 year
Usage	Generation	50,612 GWh	50,776 GWh	54,136 GWh
	Energy (1000TOE)	11,617	11,660	11,752
Energy Savings (1000TOE)	Fuel	80	96	100
	Power	50	58	18
	Others	0.4	0.4	0
	Total	130.4	154.4	118

Power Generation Operation

"EWP possesses 11.5 % of the total power facilities of Korea, operating 40 plants in Dangjin, Ulsan, Yeosu, Donghae and Ilsan. EWP has contributed to providing stable electricity to people by generating affordable power through advanced power operation, combustion of blended low-quality and multi-origin coal, and preventing serious accidents through employing talented human resources and cutting-edge systems during operation and maintenance."

Key issue & Performance

Providing Stable Power

Power Facility • 8,812.2MW

Power Output • 54,706GWh

Power Facility Efficiency • 39.85%

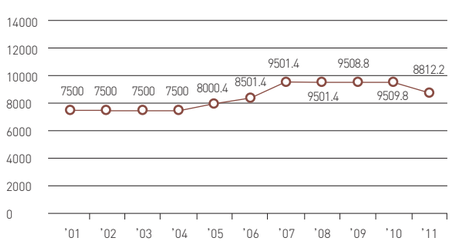
How big is the power capacity of the facilities and how much is the power output?

EWP possesses 11.5 % of Korea's total power facilities, with a capacity of 8,812 MW.

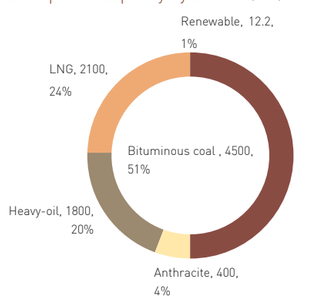
The power capacity of the facilities of EWP was 7,500 MW (33 units) when EWP was spun off from KEPCO in 2001. The capacity was increased by 27% to 9,509.8 MW (42 units) in 2010, but on January the 1st, 2011, Sancheong pump-storage power plant, whose capacity was 700.4MW, was transferred to KHNP. Now, EWP has facilities providing 8,812.2 MW (40 units) of power capacity. Out of all the EWP facilities, the number of steam power generators which use bituminous coal, anthracite or heavy-oil, is 18 units generating 6,700 MW, which accounts for 75% of the entire capacity. Dangjin, Honam, Donghae, and Ulsan plants are steam power generators. About 24% of their capacity comes from combined cycle generators using LNG. There are seventeen units of combined cycled generators (2,100MW) in the Ulsan and Ilsan plants.

• In 2011, the total power capacity of Korea was 78,235MW, and the number of power generators was 3,159.

Capacity (MW)



EWP power capacity by source (MW)

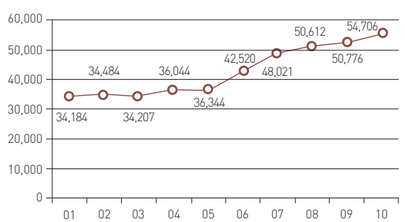


New and renewable energy such as photovoltaic, small hydro-power, and fuel cells, are being used to create 12.2 MW of power in 5 units. By sources, bituminous coal generates 4,500 MW, accounting for 51% of the whole capacity, and the bituminous coal capacity will increase to 8,000 MW by 2024. EWP is expanding its renewable energy capacity nationwide to prepare for the Renewable Energy Portfolio Standard (RPS) and a carbon credit trade system introduced by the government.

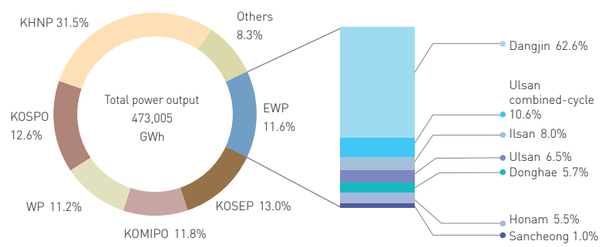
Research Period	Plant	Source	Units	Capacity (MW)	Budget
Steam Power	Dangjin	Bituminous coal	8	4,000	8 millions
	Honam	Bituminous coal	2	500	64 millions
	Donghae	Anthracite	2	400	178 millions
	Ulsan	Heavy-oil	6	1,800	12 millions
	Sub-total		18	6,700	30 millions
Combined-cycle	Ulsan Combined-cycle	LNG	9	1,200	15 millions
	Ilsan CHP	LNG	8	900	1,000 millions
	Sub-total		17	2,100	45 millions
Renewable Power	Dangjin Photovoltaic		1	1	
	Dangjin Small Hydro-power		1	5	
	Donghae Photovoltaic		1	1	
	Ilsan Fuel Cell		2	5,2	
	Sub-total		5	12,2	100 millions
Total			40	8,812.2	10,000 millions

In 2010, EWP generated 11.6% of all domestic power in Korea.

As of 2010, EWP generated 54,706GWh, which accounted for 11.6% of the gross domestic power generation (473, 005 GWh). Annual power production increased by 60% from 34,184 GWh in 2001 to 54,706 GWh in 2010, providing stable power to industrial complexes in the capital region and non-capital region. As for annual power output by types, energy that comes from steam power drastically increased after building Dangjin unit #5 to unit #8. Electricity from combined-cycle or pump-storage power generators has also increased because of the growing demand for energy. In 2010, renewable power increased as the facilities have been expanded.



Power Output



• annual power output of EWP is equivalent to the power that Seoul uses for one year.

Types of Power Output

Unit: GWh

Year	Steam Power	Combined-cycle	Pump-storage	Renewable	Total
2007	39,766	8,016	236	3	48,021
2008	42,077	8,065	467	3	50,612
2009	43,512	6,672	585	7	50,776
2010	43,916	10,173	569	48	54,706

• Sancheong Pump-storage (700 MW), and Sancheong Small Hydro-power were transferred to KHNP (since Jan. 1st, 2011)

1. Uldolmok Tidal
2. Donghae Private Capital unit #1,#2
3. Dangjin unit #9, #10

EWP has a plan to expand its power facilities by 4,014.9 MW by 2016.

To supply stable power, EWP has analyzed Korea's power demand and conducted a construction feasibility research project to set plans to build generating facilities, and listened to stakeholders through public hearings to reflect their opinions on building a power infrastructure. According to the 5th national power supply master plan, EWP will construct power facilities which can generate 4,014.9 MW. The construction includes high-efficiency Dangjin unit #9 and unit #10, and coal-fired plants will be built with private capital (Donghae private capital unit #1 and unit #2, and Dongbu Green unit #1 and unit #2). Uldolmok Tidal Plant using renewable energy sources will be constructed as well.

• The 5th power supply based on the basic plan

Facilities being/will be constructed

Plant	Projected Completion Dates	Fuel	Capacity(MW)	Capacity summed (MW)
Uldolmok Tidal	Jun. 2014	-	14.9	8,712.2MW
Donghae Private Capital unit #1	Dec. 2014	Bituminous coal	500	8,727.1MW
Donghae Private Capital unit #2	Apr. 2015	Bituminous coal	500	9,227.1MW
Dongbu green unit #1	Jun. 2015	Bituminous coal	500	9,727.1MW
Dongbu green unit #2	Jun. 2015	Bituminous coal	500	10,227.1MW
Dangjin unit #9	Dec. 2015	Bituminous coal	1000	11,227.1MW
Dangjin unit #10	Jun. 2016	Bituminous coal	1000	12,227.1MW
Total			4,014.9	12.227.1MW

The power generation facilities of EWP are as follows:

Dangjin Coal-Fired Power Complex

Dangjin Power Complex is a state-of-the-art power plant which was constructed using environmental technology friendly. EWP's core power plant currently generates electricity with a total capacity of 4,000MW from Units #1 to #8. Units #5 to unit #8 serve as the model in the application of the Ultra Super Critical (USC) system, which leads to 2.36 % improvement in power efficiency. Units #9 and #10 are now under construction each with a 1,000MW-capacity. When they are completed, Dangjin Power Complex will become a globally competitive power plant with its total capacity reaching 6,000MW.

Capacity | 4,000MW
Main source | bituminous coal
Location | Dangjin-gun, Chungcheongnam-doChungcheongnam-do

Ulsan Oil-Fired and CC Power Complex

The Ulsan Power Plant, located in the Ulsan Petrochemical Complex, generates electricity using a two-way system of steam and combined power. Its facility capacity is 3,000MW, accounting for 34% of EWP's total output. The plant contributes to Korea's national economic growth by supplying stable electricity to the Ulsan Petrochemical Complex and its neighboring areas.

Capacity | 3,000MW
Main source | low sulfur heavy oil, BC oil, LNG
Location | Nam-gu, Ulsan Metropolitan City

Honam Coal-Fired Power Plant

Honam Power Plant is situated in the Yeosu National Industrial Complex. The plant, with a facility capacity of 500MW, originally utilized heavy oil when it started generating power in 1973. However, due to a government-led energy diversification program, it was modified to use bituminous coal in 1985. With the completion of life-extension construction of unit #1 and unit #2 in 2010, it will supply stable electricity to the Yeosu National Industrial Complex until 2021.

Capacity | 500MW
Main source | bituminous coal
Location | Yeosu-si, Jeollanam-do

Donghae Coal-Fired Power Plant

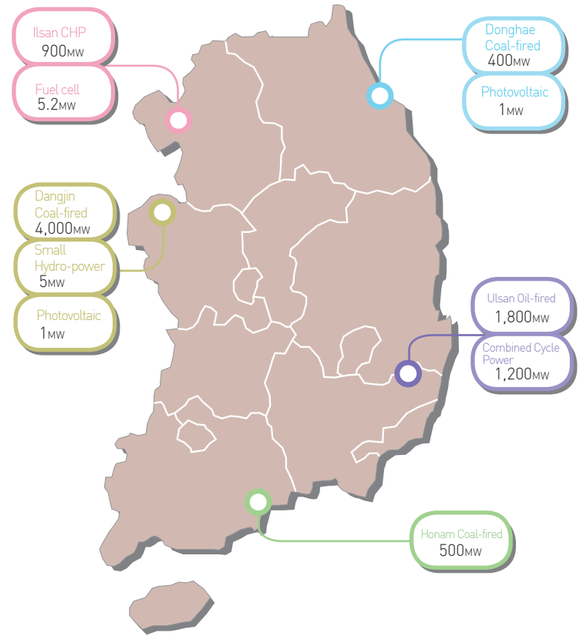
Donghae Power Plant is the world's largest capacity CFBC power plant fueled by anthracite. This CFBC power plant is a highly-efficient power generation model that fluidizes fine fluid medium inside the furnace. Desulfurization is possible without a desulfurization facility, and low temperature combustion prevents NOx in this environment-friendly plant.

Capacity | 400MW
Main source | anthracite (domestic, imported)
Location | Donghae-si, Gangwon-do

Ilsan Combined Heat & Power Plant

The Ilsan Combined Heat & Power Plant located in Ilsan was constructed to supply stable electricity and residual heat to the Seoul metropolitan area. This plant uses LNG, a clean energy source which is free from air pollutants such as SOx and dust.

Capacity | 900MW
Main source | LNG
Location | Goyang-si, Gyeonggi-do



What is EWP's experience in operating power plants?

EWP has operated various kinds of power plants.

EWP has not only globally recognized expertise in operating USC, CFBC and CHP plants but also know-how in stable operation and efficient power plant maintenance.

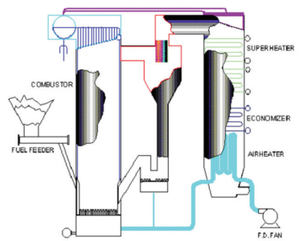
USC Plant

EWP is operating the USC system (500 MW) in Dangjin Coal-fired Plant units #1 to #8. Based on advanced generating technology and maintenance know-how, EWP is operating electricity safely. A comprehensive plan for stable facilities was set to accomplish both efficiency and stability.

• Ultra Super Critical (USC) pressure is much higher than critical pressure. At critical pressure, when water is heated, it changes into stream, skipping the boiling stage. In USC plants, the steam pressure is higher than 246kg/cm2, and the temperature is higher than 593°C.

CFBC Boiler Plant

EWP is stably operating the world's largest capacity CFBC power plant fueled by anthracite. EWP has secured patents in this area based on their remarkable technology developments.



Combined Cycle Power Plant

EWP has been successfully operating Ilsan CHP Plant and Ulsan CC Plant. EWP has the combustion stabilization technology, various tuning techniques and operation techniques, which contribute to increasing the life and efficiency of components used at high temperatures.

What are the performance characteristics of power operation?

EWP has been awarded the "Longest Run Award" by the Electric Utility Cost Group (EUCG) 3 years in a row.

Unit #4 in Dangjin Plant was awarded the "2009 Longest Run Award" by EUCG in 2010. This was the third time after Unit #3 and Unit #1 in Dangjin Plant were awarded the prize in 2007 and 2008, respectively. This proves that the reliability of EWP in power operation and management is recognized on the global stage.

EUCG Award

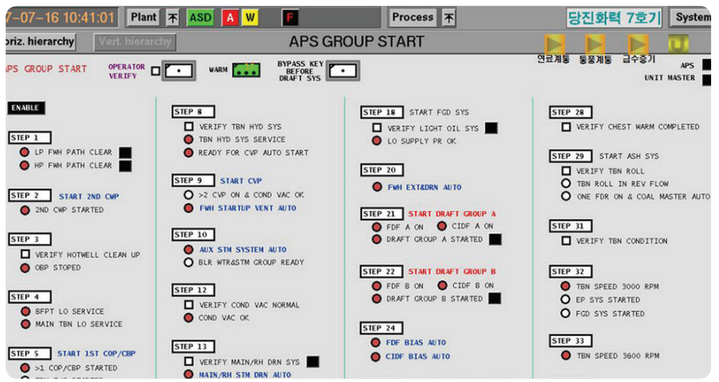
POMMS System


Leader of the Power Generation Team
Lee Seok-gu

EWP is not complacent about what it has done and continuously endeavors to maintain reliability through enhancing power operation with new systems such as the extension of forecasting maintenance using POMMS plus securing and training core technical staff.

EWP has implemented the Automatic Plant Start and Stop System (APS) for the first time in Korea.

Dangjin Power Plant unit #7 and unit #8, as a coal-fired plant, applied and implemented APS for the first time in Korea. As a result, 629 steps for normal power operation were made automatic, increasing the reliability of the power plant's operation.



How efficient is EWP power operation and how many maintenance days are there per year?

In 2010, the power operation efficiency was 39.85 % and the average number of maintenance days was 12.5 days.

EWP has a small number of combined cycle plants with high efficiency and a large number of old and outdated facilities with low efficiency so that the total efficiency is relatively low. However, EWP has made continuous efforts to improve efficiency through building a highly-efficient USC plant (Dangjin units #5 to unit #8) and extending the lives of units #4 to unit #6 in Honam and Ulsan Plants which are old steam power facilities.
Also, in 2016 when Dangjin unit # 9 and unit #10 are completed, the power generation efficiency of EWP will increase further.

• What is efficiency? Efficiency shows how much fuel is used to generate power.

Power Generation Efficiency

$$\text{Calculation} = \frac{\text{Power output (kWh)} \times 860\ (\text{kcal/kWh})}{\text{Fuelused (kg, ℓ)} \times \text{Energy (kcal/kg, ℓ)}} \times 100(\%)$$

EWP has maintained power plants using its own technology.

EWP has performed planned and preventive maintenance for power plants using its own technology. Abundant technical staff performs maintenance suitable for individual equipment, actively employing scientific analysis methods as well as new and advanced maintenance techniques.
Strict process control facilitates, shortening installation periods, and extending the maintenance intervals, leads to a high facility operating rate and a short average maintenance day (12.5 days).

Average Maintenance Day

$$\text{Calculation} = \frac{\text{(Operating hours + Availiabe operating hours)}}{\text{365Daysx 24Hours}} \times 100(\%)$$

Year	2007	2008	2009	2010
Thermal Efficiency	39.72	39.90	39.73	39.85
The Number of Breakdowns	9	4	9	13
Average Breakdown Time	09:56	06:21	06:39	07:54
Average Operating Rate	90.74	92.35	93.14	91.57

Appendix

Third-Party Comments

Park Wan-gyu

President of the Korea Environmental Economics Association

Professor of School of Economics, Chung-Ang Univeristy

Third-Party comments on the 2011 Sustainability Report Korea EAST-WEST Power

As a reviewer for this 2011 Sustainability Report Korea EAST-WEST Power, I have confirmed that this report was organized and written according to the GRI G3 index.

As for the sustainability management system, EWP checked internal and external main issues and assessed them to prioritize them depending on the interest and influence, which help set a concrete strategy for sustainability management. Also, EWP implemented a self-reporting system under which the employees have to report their partners when they work with them. This system was introduced to prevent corruption, and if an employee does not comply with this system, the employee's department and colleagues would be punished. This strict rule shows the company's strong will for its ethnic management.

As for the economic performance, EWP remarkably achieved the largest net profit since its foundation through creative management innovation. To innovate its working practice, EWP improved the working process under a slogan of "From Work Hard To Work Smart", so that it halved documents, removed unnecessary works, and integrated overlapping works, which essential for sustainability management. To prepare for the introduction of a Renewable Portfolio Standard, EWP is aggressively developing various renewable energy sources. However, the company should precisely analyze comparative advantages considering efficiency, profitability and effects on the environment, and then pursue the "choice and focus" strategy according to the result of analysis.

As for social performance, EWP has run the 'Mutual Growth Center' as a separate organization in Korea. Through the center, EWP has integrally supported SMEs from technology development to domestic and international marketing. The company's effort was recognized by the government, and in 2010, EWP ranked No. 1 among the fourteen companies from the small business assessment by the Ministry of Knowledge and Economy and proposed the role of the 'Korean mutual growth standard model.' This was an absolutely remarkable result. Plus, it is desirable that EWP has staged various events to help the local community. However, these kinds of social responsibility activities should have obvious purposes which are directly related to the company's business strategies, and be systematically managed to turn into an essential investment close to the company's core business.

As for environmental performance, it is desirable achievement that all power plants acquired an ISO 14001 integrated certification, an environmental management system, and EWP was designated as a green company by the Ministry of the Environment, which has helped EWP lay a strong foundation for an environmentally- friendly management system. In addition, it was a good approach that EWP, with Dangjin Federation for the Environmental Movement, jointly established the Environmental Assessment and Review Committee to improve he air environment and prevent conflict between the company and the local community, before building Dangjin's unit #9 and unit #10, which are scheduled to be completed in 2015. However, not only this microscopic approach but also enterprise-wide mid-and-long term strategies are critical for sustainability management. Therefore at the corporation level, EWP should secure experts to prepare for climate change and set up a department to take charge of it. Also, the company should not forget to establish an integral environmental management system to analyze and deal with environmental issues.

Third-Party Comments

Lee Won-jae

President of Hankyoreh Economic Research Institute

External comments on the 2011 Sustainability Report Korea EAST-WEST Power

I have reviewed this report as the president of Hankyoreh Economic Research Institute which holds AA1000, the international standards to verify the sustainability report, and evaluates and studies companies by developing Asian models to assess companies' social responsibility management. In particular, I focused on if this report was reader-friendly and if core stakeholders and core issues are all defined and included in this report.

EWP is a leader of sustainability management in the power generation sector of Korea. Since sustainability management was introduced in Korea, EWP has participated in corporate responsibility management through environmental-friendly management and social responsibility activities.
This report well represents these strong points, using new key index of GRI guidelines which are global report standards and other index which are closely related to the industry. Above all, it is highly recognized that the report uses easy expressions and pictures to allow ordinary readers and power consumers to understand the report. Also, as a power company, EWP faithfully reported on environmental performance. However, there are several points to be improved: (1) more customer-friendly approach, (2) clear description of the challenges the company is facing, (3) enhancement of the link between social responsibility activities and the business, and (4) more ambitious goals in terms of energy and the environment.

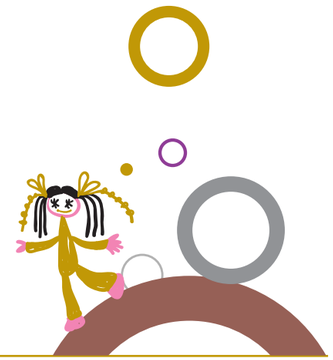
First, the beginning and general parts are reader-friendly, which is highly recognized. However, in specific parts kind explanations are relatively small. For instance, GWh and MW calculations in renewable energy facilities should have been explained more easily.
Second, even though the company has achieved great performance, tasks related to corporate responsibility management will still remain. Responsibility reports should play a role in telling the readers about the challenges, which is short in this report.
Third, the link between social responsibility activities and the business should be enhanced. The issue of energy welfare and housing welfare became important as much as the issue of the gap between the poor and the rich. The company should focus on the energy and housing welfare issue.
Fourth, more ambitious goals are necessary in terms of renewable energy. In addition to the mandatory parts, the reason why the renewable energy sector is important, and if there is a goal voluntarily set by the company, should be precisely described.

If EWP supplements these four points and writes a report full of detailed information, the report would be the most reader-friendly report in Korea. Plus, it could be an interesting guidebook for power customers about the power industry. This would be a remarkable event in the sustainability report history.

Awards (2010)

Date	Name	Awarding body	Winner	Note
Dec. 6th	The 2nd National Green Technology Award	The Ministry of the Environment	Technical Solution Team	
Sep. 27th	2009 Longest Run Award	Electric Utility Cost Group	Power Generation Group	Unit #4, Dangjin
Nov. 24th	2010 Green Business Award	The Ministry of the Environment	Power Generation Group	Climate Change Part
Oct. 12th	KEPIC Contribution	The Ministry of Knowledge Economy	Construction Management Group	
Nov. 19th	Family-friendly Organization	The Ministry of Gender Equality and Family	Human Resources Management team	AA Certification
Sep. 28th	Best Human Resources Developer	The Ministry of Education, Science and Technology The Ministry of Knowledge Economy The Ministry of Employment and Labor The Small and Medium Business Administration	Human Resources Management team	

Association Memberships



The Korean Institute of Auditors	The Business Ethics for Top performance	The Korea Employers Federation	The Korea Power Exchange
The Korean Society of Mechanical Engineers	The Korean Institute of Electrical Engineers	The Korea Electric Association	The Korea Energy Foundation
The Electric Utility Cost Group (EUCG)	The Korea Association of Small Business Studies	The Korea Association of Engineering & Consulting Association	The Business Institute for Sustainable Development
The Korea Smart Grid Association	The Korea Carbon Capture and Storage Association	The Edison Electric Institute (EEI)	UN Global Compact

GRI INDEX

GRI index		Description	Page
Strategy and Analysis	1.1	Statement from the most senior decision-maker of the organization (e.g., CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and its strategy.	5
	1.2	Description of key areas of impact, risks, and opportunities	16
Organizational Profile	2.1	Name of the organization	12
	2.2	Primary brands, products, and/or services	12
	2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	13
	2.4	Location of the organization's headquarters	12
	2.5	Number of countries where the organization operates, and the names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	28
	2.6	Nature of ownership and legal forms	14
	2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	12
	2.8	Scale of the reporting organization	12
	2.9	Significant changes during the reporting period regarding size, structure	12
	2.10	Awards received in the reporting period	74
Report Parameters	3.1	Reporting period (e.g., fiscal/calendar year) for information provided	2
	3.2	Date of most recent previous report (if any)	79
	3.3	Reporting cycle (annual, biennial, etc.)	2
	3.4	Contact point for questions regarding the report or its contents.	79
	3.5	Process for defining report content	16
	3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers)	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 basis of calculations	2
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	N/A
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	2
	3.12	GRI Content Index	75
	3.13	Policy and current practice with regard to seeking external assurance for the report	2
Governance, Commitments, and Engagement	4.1	Governance structure of the organization	14
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer	14
	4.3	For organizations that have a unitary board structure, state the number and gender 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	15
	4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives (including departure arrangements), and the organization's performance (including social and environmental performance).	14
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	14
	4.7	Process for determining the composition, qualifications, and expertise of the members of the highest governance body and its committees	15
	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.	18
	4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social	14
	4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	15
	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	15
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	78
	4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	74
	4.14	List of stakeholder groups engaged by the organization	14
	4.15	Basis for identification and selection of stakeholders with whom to engage	16,17
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	14
	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, including through its reporting	17

GRI INDEX

GRI index		Description	page
Economic Performance Indicators	EC1	Direct 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	24
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	58–61
	EC3	Coverage of the organization's defined benefit plan obligations.	41
	EC4	Significant financial assistance received from government	–
	EC5	Range of ratios of standard entry level wages by gender compared to local minimum wages at significant locations of operation	–
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	36
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	36
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	37
	EC9	Understanding and describing significant indirect economic impact, including the extent of the impact.	37
Environmental Performance Indicators	EN1	Materials used by weight or volume	50
	EN2	Percentage of materials used that are recycled materials	55
	EN3	Direct energy consumption by primary energy source	50
	EN4	Indirect energy consumption by primary source	50
	EN5	Energy saved due to conservation and efficiency improvements	61
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	61
	EN7	Initiatives to reduce indirect energy consumption and completed reductions	60,61
	EN8	Total water withdrawal by source	54
	EN9	Water sources significantly affected by withdrawal of water	54
	EN10	Percentage and total volume of water recycled and reused	54
	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	N/A
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	56
	EN13	Habitats protected or restored	N/A
	EN14	Strategies, current actions, and future plans for managing the impact on biodiversity	57
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	N/A
	EN16	Total direct and indirect greenhouse gas emissions by weight	59
	EN17	Other relevant indirect greenhouse gas emissions by weight	59
	EN18	Initiatives to reduce greenhouse gas emissions and completed reductions	60
	EN19	Emissions of ozone-depleting substances by weight	59
	EN20	NO, SO, and other significant air emissions by type and weight	52
	EN21	Total water discharge by quality and destination	53
	EN22	Total weight of waste by type and disposal method	53
	EN23	Total number and volume of significant spills	54
	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	53
	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	57
	EN26	Initiatives to mitigate the environmental impact of products and services, and the extent of impact mitigation	53
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category	N/A
	EN28	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with environmental laws and regulations	55
	EN29	The significant environmental impact of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	–
	EN30	Total environmental protection expenditures and investments by type	58
Labor Practices and Decent Work Performance	LA1	Total workforce by employment type, employment contract, and region, broken down by gender	40
	LA2	Total number and rate of new employee hires and employee turnover by age group, gender, and region	40
	LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by significant locations of operation	40

GRI INDEX

GRI index		Description	page
Labor Practices and Decent Work Performance	LA4	Percentage of employees covered by collective bargaining agreements	44
	LA5	Minimum notice period[s] regarding operational changes, including whether it is specified in collective agreements	44
	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	45
	LA7	Rates of injury, occupational diseases, lost days, absenteeism, and total number of work-related fatalities, by region and by gender	45
	LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	44,45
	LA9	Health and safety topics covered in formal agreements with trade unions	45
	LA10	Average hours of training per year per employee by gender, and by employee category	42
	LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing the conclusion of their careers	42,43
	LA12	Percentage of employees receiving regular performance and career development reviews, by gender	42
	LA13	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	40,41
	LA14	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	38
Human Rights Performance Indicators	HR1	Percentage and total number of significant investment agreements and contracts that include clauses incorporating human rights concerns, or that have undergone human rights screening	–
	HR2	Percentage of significant suppliers, contractors, and other business partners that have undergone human rights screening, and the subsequent actions taken	–
	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	38
	HR4	Total number of incidents of discrimination and corrective actions taken	N/A
	HR5	Operations and significant suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and actions taken to support these rights	N/A
	HR6	Operations and significant suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	N/A
	HR7	Operations and significant suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	N/A
	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	N/A
Society Performance Indicators	SO1	Percentage of operations with implemented local community engagement, impact assessments, and development programs	51
	SO2	Percentage and total number of business units analyzed for risks related to corruption	20
	SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	20
	SO4	Actions taken in response to incidents of corruption	21
	SO5	Public policy positions and participation in public policy development and lobbying	21
	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	21
	SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	21
	SO8	Monetary value of significant fines and total number of non-monetary sanctions for noncompliance with laws and regulations	21
Product Responsibility Performance Indicators	PR1	Life cycle stages in which the health and safety impact of products and services are assessed for improvement, and the percentage of significant products and services	52
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impact of products and services during their life cycle, by type of outcome	N/A
	PR3	Type of product and service information required by procedure, and percentage of significant products and services subject to such information requirements	N/A
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcome	N/A
	PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	21
	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communication, including advertising, promotion, and sponsorship	20,21
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communication, including advertising, promotion, and sponsorship by type of outcome	N/A
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	N/A
	PR9	Monetary value of significant fines for noncompliance with laws and regulations concerning the provision and use of products and services	N/A
Electric Utilities Sector	EU1	Installed capacity, broken down by primary energy source and by regulatory regime	65
	EU2	Net energy output broken down by primary energy source and by regulatory regime	64
	EU3	Number of residential, industrial, institutional and commercial customer accounts	N/A
	EU4	Length of above and underground transmission and distribution lines by regulatory regime	N/A
	EU5	Allocation of CO2 emissions allowances or equivalent, broken down by carbon trading framework.	N/A

GRI INDEX

GRI index		Description	page
Electric Utilities Sector	EU6	Management approach to ensure short and long-term electricity availability and reliability	65
	EU7	Demand-side management programs including residential, commercial, institutional and industrial programs	N/A
	EU8	Research and development activity and expenditures aimed at providing reliable electricity and promoting sustainable development	25
	EU9	Provisions for decommissioning of nuclear power sites	N/A
	EU10	Planned capacity versus projected electricity demand over the long term, broken down by energy source and regulatory regime	65
	EU11	Average generation efficiency of thermal plants by energy source and regulatory regime	68
	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	N/A
	EU14	Processes to ensure the availability of a skilled workforce	43
	EU15	Percentage of employees eligible to retire in the next five and ten years broken down by job category and by region	41
	EU16	Policies and requirements regarding health and safety of employees, contractors' employees and subcontractors	45
	EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities	–
	EU18	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	45
	EU19	Stakeholder participation in the decision making process related to energy planning and infrastructure development	65
	EU20	Approach to managing the impacts of displacement	36
	EU21	Contingency planning measures, disaster/emergency management plans, disaster/emergency training programs, and recovery/restoration plans	54
	EU22	Number of people physically or economically displaced and compensation, broken down by type of project	N/A
	EU23	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	N/A
	EU24	Practices to address language, cultural, literacy and disability related barriers to accessing and safely using electricity and customer support services	N/A
	EU25	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	N/A
	EU26	Percentage of population un-served in licensed distribution or service areas	N/A
	EU27	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	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

EWP became a signatory to the UN Global Compact in August 2006 as part of its mission to ensure transparent management and to fulfill its social responsibilities. The company discloses its compliance with the Global Compact through the following ten principles in four major areas.

UN Global Compact Ten Principles in Four Areas	
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights; and
	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.Businesses should eliminate all forms of forced and compulsory labor;
	5. Businesses should eliminate child labor; and
	6. Businesses should eliminate discrimination in respect to employment and occupation.
Environment	7. Businesses should support a precautionary approach to environmental challenges
	8. Businesses should undertake initiatives to promote greater environmental responsibility; an
	9. Businesses should encourage the development and diffusion of environmentally friendly technology
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.

Process of Writing Report

This report is the 5th sustainability report of EWP to inform the stakeholders of economic, social and environmental efforts and achievements.
The latest report was published on July 15th, 2010.

This report is written according to the G3 guideline of the Global Reporting Initiative (GRI).

To increase the reliability of this report, EWP organized a task force consisting of head office workers.
The contents of this report were based on data provided by individual departments, and determined after the approval of the management.

T/F

Task	Position	Person	Telephone Number
The General	Planning and Performance	An Hee-won	02-3456-8350
Management System	Planning and Performance	Je Hwan-seon	02-3456-8357
Economy	Finance	Park Ji-yeong	02-3456-8443
Society	TPublic Relations • Ethics	Kim Mi-ae	02-3456-8336
Human Resources • Welfare	Fuel	Kim Hyeon-mi	02-3456-8474
Environment	Green Environment	Hwang Seok-hyeon	02-3456-8534
Social Responsibility	Society • Safety	Seo Han-hyeon	02-3456-8412
Development	Development	Kim Jeong-nam	02-3456-8509

2011 EWP's Sustainability Report Reader Opinion Survey

In this report, EWP has tried to disclose its sustainability management activities as openly as possible.
To improve its contents and level of completeness, we would like to hear from you.
Your opinions will be reflected in future reports.

1. What is your position?
☐Investor/shareholder ☐Employee of an affiliate ☐Local resident ☐NGO ☐Employee of a Power Generating Company ☐Member of the Academic Community ☐Civil Servant ☐Employee of EWP ☐Other( )

2. What is your overall evaluation of this report?
☐Good ☐Moderate ☐Bad

3. How understandable is this report?
☐Easy ☐Moderate ☐Difficult

4. What is your evaluation of the amount of information in this report?
☐Too much ☐Moderate ☐Too little

5. Which section of this report did you find the most interesting?
☐Sustainability at EWP ☐Economy ☐Environment ☐Society

6. Which section of this report do you think needs improvement?
☐Sustainability at EWP ☐Economy ☐Environment ☐Society

7. Please feel free to make any comments on this report.

Thank you for your cooperation.
Please forward this form to 02-3456-8379 (Fax) or hwansun@ewp.co.kr (E-mail).

Your Energy Friend !