

2009 Sustainability Report

Smart **KPX**
2009 Sustainability Report



GRI G3 Guideline Application level

We declare that this report meets level A+ requirement on the GRI G3 Guidelines. Also, external third party checked the report in conformity with G3 application level A+ requirement.

Purpose of Publication

This report details the economic, environmental and social performance of KPX.

Reporting Guidelines

This report is based on the G3 Guidelines of the Global Reporting Initiative (GRI) and the BEST Sustainability Reporting Guideline (BSR). This report’s currency unit is the Korean won.

Reporting Scope

This report deals with the Seoul head office and two branches.

Period Covered and Major changes

The reporting period is for 2008; beginning January 1, 2008 and ending December 31, 2008. However, various aspects of the company’s performance before 2008 have been included to show changes in and to its operations. It includes news CEO message since the current CEO was inaugurated in June 2008.

Reporting Cycle

KPX published its second sustainability report; “The world’s heart moving with bright light,” following last year(2008). We intend to publish a report every year from now on.

Reporting Verification

This report was made by T/F, including internal staff responsible for each area. In order to ensure the reliability and accuracy of this report, it has been verified by an external institute.

Additional Information

Additional information is available on the internet and through KPX’s planning team.

Homepage : www.kpx.or.kr
Responsible team : planning and budget team, General Affairs Department
Contact number : Tel : 02-3456-6562 Fax : 02-3456-6569
E-mail : scwee@kpx.or.kr

The Meaning of Smart Grid

KPX, the center of the electricity industry, strives for a brigh future by connecting the world and it’s people through an advanced network.

- | | | |
|---|-------------|---|
| S | Sustainable | Endeavors to create sustainable growth engines |
| M | Motivated | Active and motivated organizational behaviour |
| A | Advanced | Leading role in electricity industry through creativity and advanced thinking |
| R | Reliable | Achievement of customer reliability by completing missions |
| T | Transparent | Enhancement of transparency and fairness through ethics management |



The Core of the Electric Network for our Future

KPX, the center of the electricity network, opens future opportunities.

There exist smart human resources and passion in KPX.
Our dream network connects the world and people fostering bright futures.



C	O	N	T	E	N	T	S
CEO Message							04
Corporate History							06
Hot Issues							08
About Our Institute (KPX)							16
Economic Performance							30
Innovative Management Performance							36
Ethical Management Performance							42
Environmental Management Performance							48
Social responsibility Management Performance							54
Customer Satisfaction Management Performance							60
Appendix							66

CEO Message

We are transforming into a core institute for the green growth industry.

The future will be bright as KPX fosters creativity and challenging minds, KPX encourages innovative thinking toward green future and a smart world.

With an ambitious mission to strengthen competition in the electricity industry, KPX was established to manage the power market and operate the power system in 2001. Since then, it has made every effort including real time dispatch, long term power planning etc. as core competency of the electricity industry. Through these activities, KPX is trying to be positioned as a globally recognized organization, enhancing people's standard of living one step at a time.

KPX's remarkable growth is a result of our active investment and efforts on major missions, including the advancement of the power market, system operations, and continual R&D activities like power IT localization etc. coupled with our clear vision of becoming "a world class professional institute leading the electricity industry".

We will make efforts to be a trusted institution by pursuing a sustainable future based on economic growth and social responsibility.

Firstly, we will do our best to be a central institution in comprehensive energy trading. KPX is making efforts to establish a smart grid and develop its self technology for the energy management system fifthly in the world. Also, we are trying to determine a reliable demand response market in order to meet future green energy system while driving forward CO₂ emission trading and REC(renewable energy certificates) trading. Consequently, we will become a central institution for energy trading.

Secondly, KPX will be reborn with transparent management and creative innovation. KPX, as a public institution, will fulfill its responsibility through fair and efficient ethics management. Tireless innovation activities and creative ideas enable us to realize a competitive organization.

Thirdly, we will put emphasis on environment management, as well as long term growth. KPX will establish an environmentally sustainable energy system while strengthening environment policy including greenhouse gas reduction and promotion of expansion renewables. We will pursue long term growth to achieve our vision of becoming a World class professional institute leading the electricity industry.

Fourthly, we never overlook the need to maintain a customer oriented mind and socially responsible management. We are creating CS value through PCRM, based on the CS vision of "growing KPX with customers." KPX makes every effort to fulfill management responsibilities and contribute to regional society through our staff's voluntary participation.

Finally, KPX will make further strides for establishing a smarter world. With smart human resources and technologies, we are challenging the industry to continuously meet the future green energy system, making us a core institute in the green growth industry as a result. And we will send a creative and hopeful message for the development of company's a smarter world.

This report is our 3rd sustainability report showing the economic, environmental and social responsibility performance. It will be published once every year to the public.

We ask you to watch with sincerity as we move forward toward a new future with great strength, passion, and determination.

As we take steps to build a wonderful future electricity industry, we would like work with you. Your trust and support will continue to play a vital role as we pursue our goals.

Thank You

Il-Hwan Oh

Chairman & CEO
Korea Power Exchange



Corporate History

Wonderful aviation continues for the future of the electricity industry.

We have achieved remarkable achievements that the world envies.

KPX, a think tank of the Korean electricity industry, expands the future with our continuous passion and challenging mindsets.

2001



- 4. 2 Foundation of KPX, inauguration of the 1st CEO (Paik, Young Ki)
- 7. 24 Declaration of management policy "Reliable power trading"
- 12. 27 Announcement of KPX Vision "Trustful KPX to people"

2002



- 5. 2 Inauguration of the 2nd CEO (Kim, Young Jun)
- 7. 10 Declaration of the management policy "Credible leaders pursuing change"
- 8. 17 Establishment of the 1st Basic Plan for Long-term Electricity Supply and Demand

2003



- 2. 26 KPX-ERCOT (US Texas) cooperation agreement
- 7. 25 Announcement of code of conduct and action principles
- 9. 30 Completion of market operating system

2004



- 3. 12 Completion of Jeju dispatch center
- 9. 3 First prize in leadership at national productivity in innovation contest
- 12. 30 Establishment of the 2nd Basic Plan for Long-term Electricity Supply and Demand

2005



- 5. 30 Inauguration of 3rd CEO (Park Soo Hun)
- 7. 5 Declaration of management policy (Perfect system operation, active power market, creative R&D, continuous innovation)
- 10. 5 Establishment of mid to long term management strategy (Vision : World class professional institution leading the electricity industry)
- 11. 8 Agreement with Ministry of Commerce, Industry and Economy for Developing Korean Energy Management System
- 12. 6 Award in innovation for management in the Korea management contest

2006



- 2. 5 Establishment of knowledge management system
- 8. 11 Set the innovation brand "Power Hub"
- 10. 29 Hosted 11th annual APEx (Association of Power Exchanges) conference
- 12. 20 Creation of social contribution corporations (Bandi volunteer corporation)
- 12. 31 First prize in national contest on public innovation
- 12. 31 Establishment of the 3rd Basic Plan for Long-term Electricity Supply and Demand
- 12. 31 Establishment of 2020 mid to long term management strategy

2007



- 1. 19 First award in national contest on public innovation
- 3. 30 KPX-PJM (US independent system operator) cooperation agreement
- 7. 24 Establishment of BSC (Balanced Score Card)
- 7. 31 President's commendation on national productivity
- 9. 11 Establishment of 2010 mid term management strategy
- 10. 31 First award in responsibility management in public innovation
- 12. 31 Establishment of inter-year long term power plan

2008



- 3. 27 Completion of cheonan dispatch center
- 4. 29 Joined UN Global Compact
- 6. 14 Inauguration of 4th CEO (Oh Il Hwan)
- 9. 9 Won prize of Minister of Knowledge and Economy on labor-management cooperation at the national productivity contest
- 11. 4 Announcement of sustainable management
- 12. 5 Won the 2008 Prime Minister's prize in power IT innovation
- 12. 31 Establishment of the 4th Basic Plan for Long-term Electricity Supply and Demand

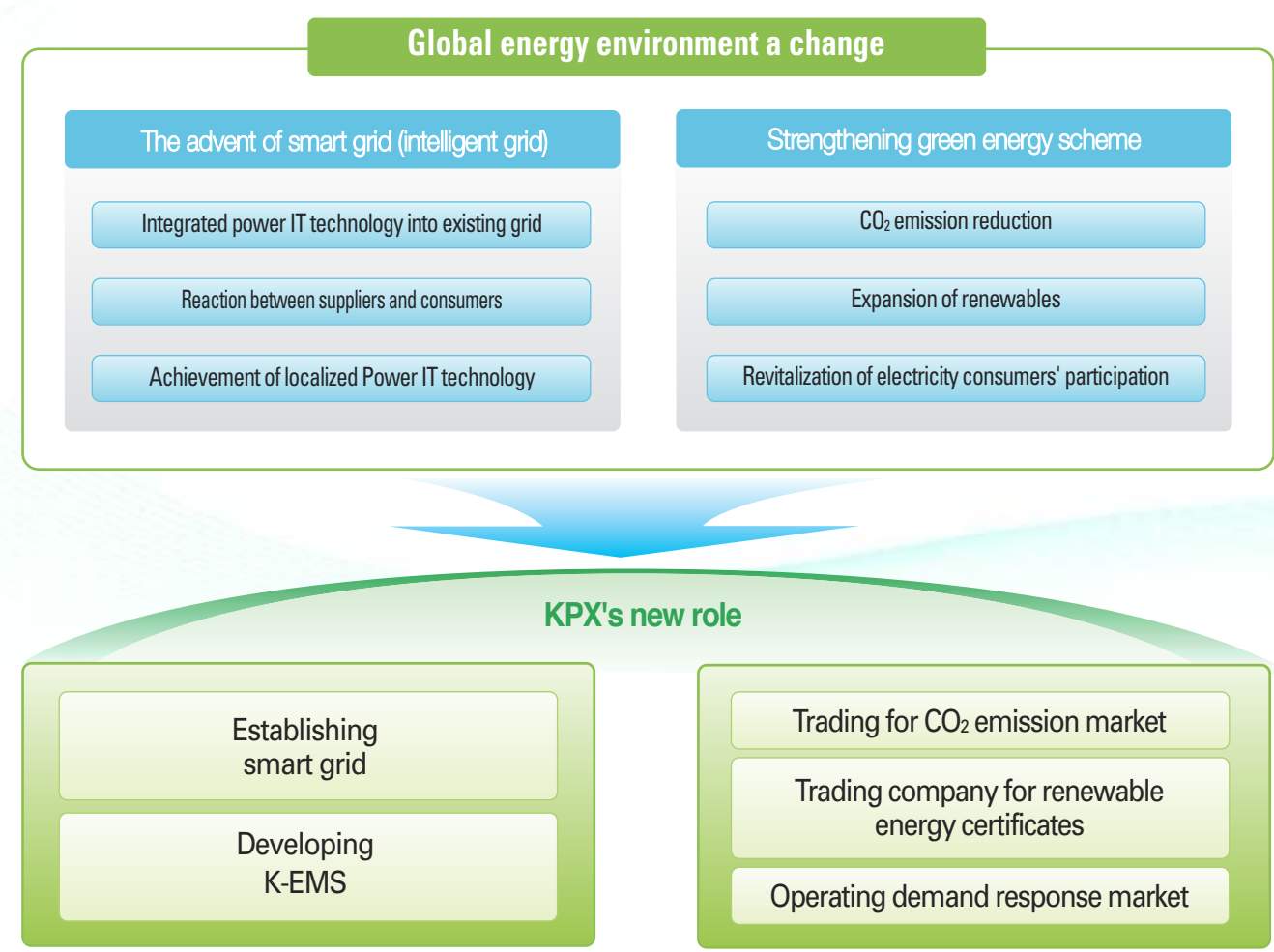
Hot Issues

We are transforming into an energy trading center.

We will be a comprehensive energy trading center in response to the future green energy system through the development of KEMS, CO₂ emission trading and trading of REC, and the demand response market.

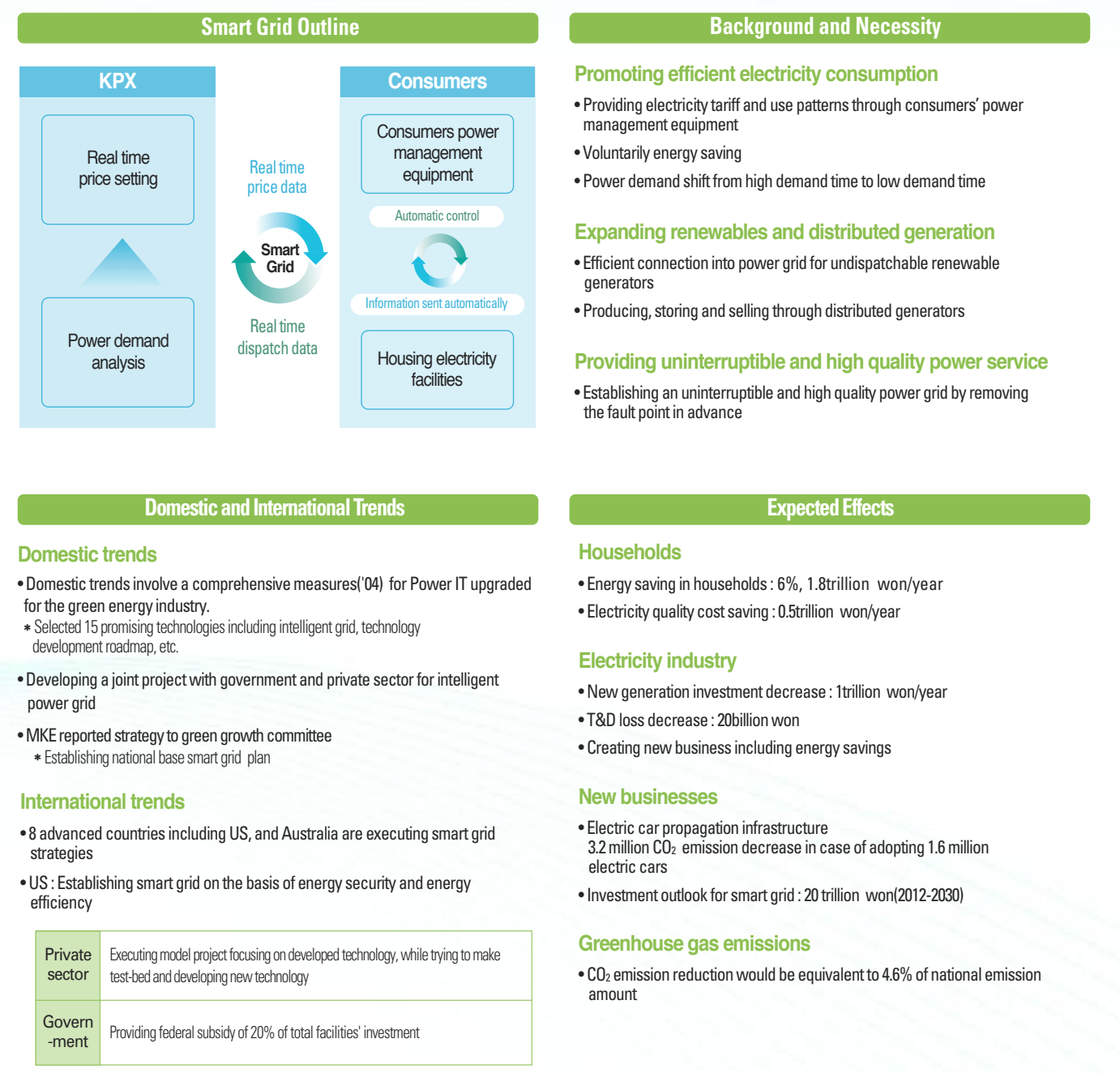
Global energy environmental change

The global energy environment has changed rapidly due to the green energy system, based on consumers' active participation, along with the smart grid era, bringing forth the sharing of information between suppliers and consumers.



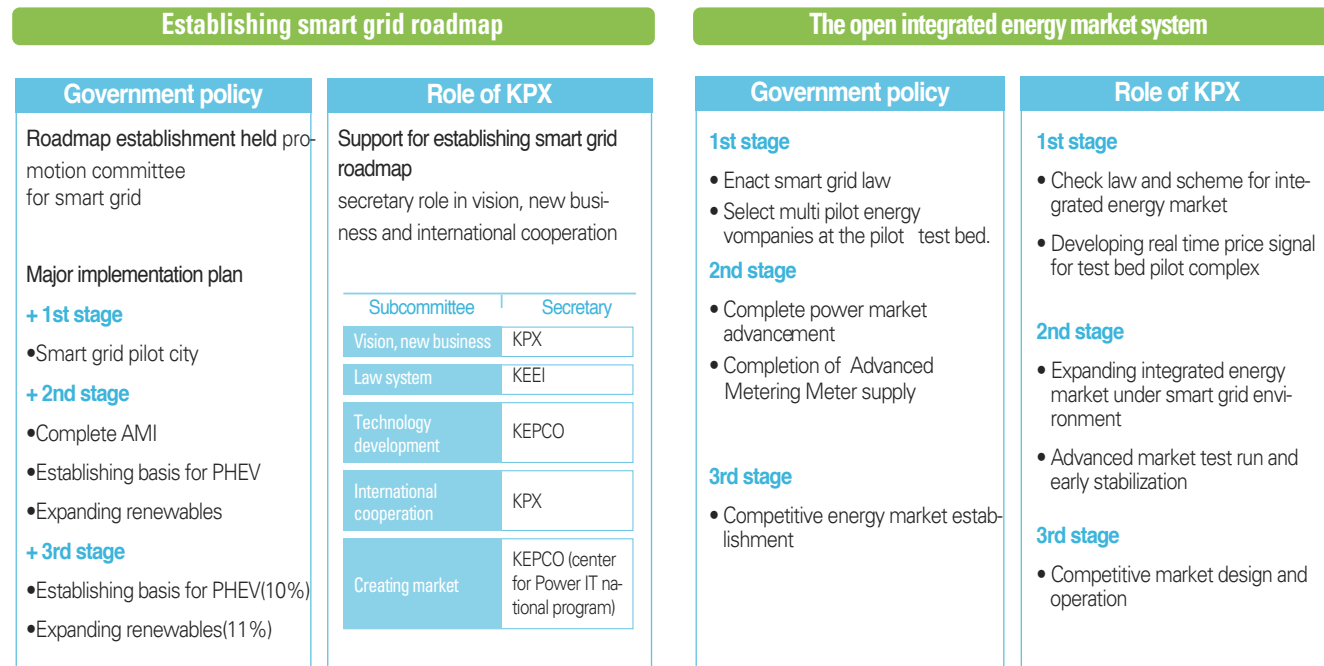
1. Establishing smart grid

Smart grid maximizes efficient electricity use by exchanging electricity consumption data and price, while adopting IT technology into the electricity industry. KPX will take a leading role in improving the electricity consumption pattern.



1-1. Establishing smart grid

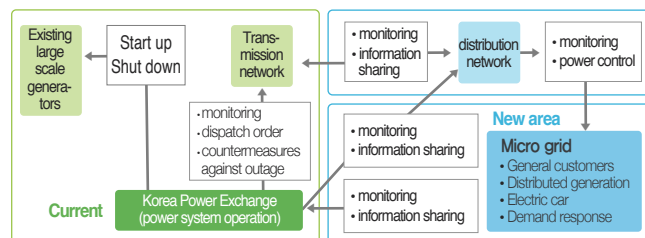
KPX is establishing a smart grid roadmap, open integrated energy system, and power system operation methodology under the smart grid environment. And, we will concentrate on completing the establishment of the smart grid by 2030 for reasonable power consumption.



Development of power system operation technologies under Smart Grid environment

Characteristics of Smart Grid

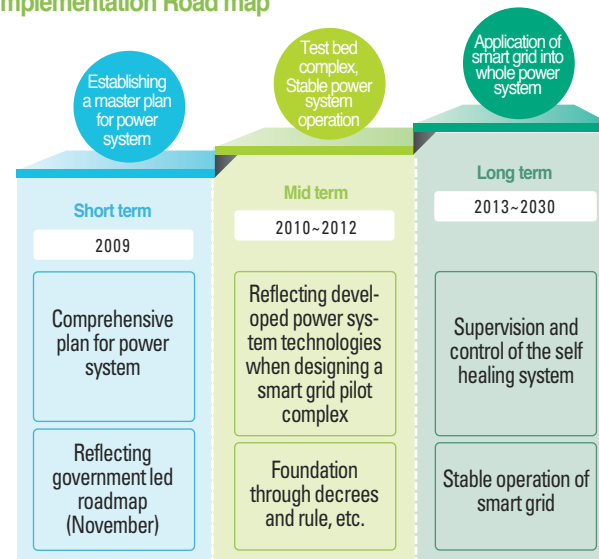
- Difficult to predict the output of wind farm, solar power
- Rapid changes due to electricity storage technology
- Suppliers' leading → Customers' choice
- Need to monitor and control the distribution network and micro grid



Technology development area

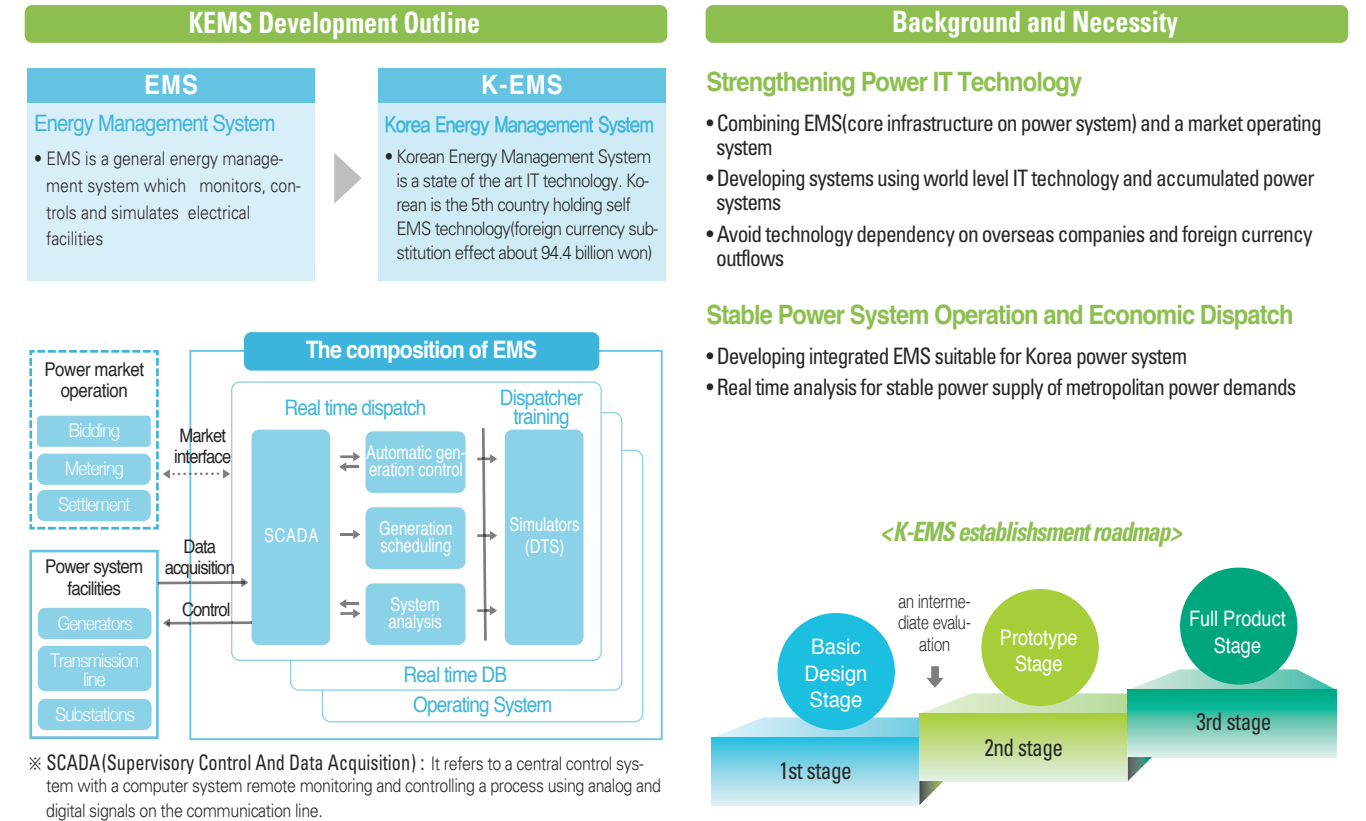
- Distributed generators' output prediction and quality control
- Technologies for electricity storage like batteries
- Operating the demand response market

Implementation Road map



2. Development of Korean style energy management system

EMS(Energy Management System) is state of the art IT technology which monitors and controls electrical facilities to produce electricity economically and simulate power systems for analysis. In 2010, Korea will be the 5th country holding self EMS technology and will establish an overseas business base.



Domestic and international trend

Domestic trend

- Operation experiences after adopted EMS three times
- * ALD : US L&N(1979)
- * Energy management system : Japan Toshiba(1988)
- * New EMS : US Areva(2001)

International trend

- a few advanced countries developed and manufactured EMS system
- * Before 1990 : SCADA, SGC, generation scheduling
- * After 1990s : State estimate, contingency analysis function
- * 2000s : Market Operation System for integrated operation

The Role of KPX

A leading company in developing K-EMS

- Developing K-EMS in coordination with 9 companies and 6 subcontractors including laboratories and academic institutions
- Setting the business strategies; the localization of advanced technology, development of a Korean product suitable for power system through technology integration, standardization, benchmarking and technical consultation
- KEMS full scale product will be completed after test run by October 2010

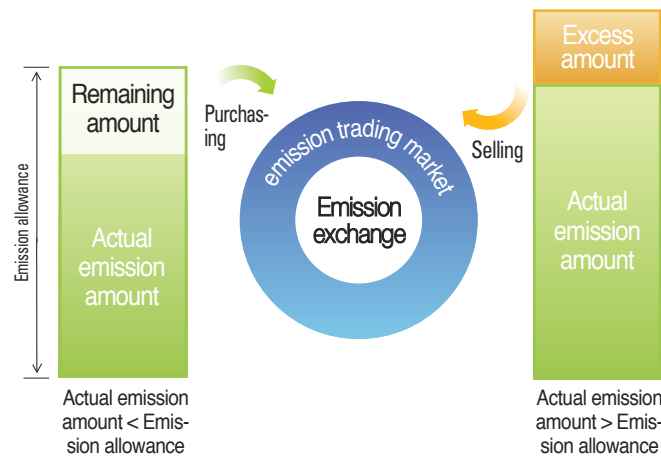
Application of KEMS

- Application of KEMS in replacing backup EMS after test of K-EMS prototype
- Attempt to adopt KEMS into Naju dispatch center
- KEMS commercialization and marketing in Korea and abroad

3. Efforts to become the carbon credits trading company

Emission trading minimizes emission costs based on the market function. Korea is likely to be required to meet the mandatory emission reduction following 2012. As such, we are preparing an emission trading scheme thoroughly.

Emission Trading Outline



Domestic and International Trends

Korea is likely to become obliged to meet the mandatory emission reduction following 2012.

- The 10th green house gas emission country
- Among OECD countries, Korea and Mexico are not bounded by Kyotos 1st obligation energy sector protocol

Energy sector(generation) dominates emission trading market

- Energy sector occupies about 84% of green house gas emissions
- Generation sector occupies about 31% of the energy sector greenhouse gas emissions

KPX in charge of emission trading for stable power supply

- Central control and supervision are required for stable power supply and demand due to characteristics of electricity (instorability, publicity)
- Avoid wholesale electricity market price spike through real-time monitoring against CO₂ emission companies

In Europe, power exchanges are leading emissions trading.

- Nordpool, EEX, Bluenext

Domestic and International Trends

Domestic trends

- President announced the national vision for 'low carbon green growth' at the 60th anniversary of independence (August 15, 2008)
- Process the green growth act(February, 2009) preparing a law of emission trading(2009)
- Executing emission trading pilot projects(2010)

International trends

- Kyoto protocol took effect
- EU : introduced and has operated emission trading market
- Japan, Canada : preparing emission trading market
- US: operating voluntary emission trading market
- To be set post-2012 climate change policy(December, 2009) in Copenhagen

The Role of KPX

Leading company in developing K-EMS

- Developing emission coefficient
- The first pilot emission trading in Korea
 - * 1st : 5 generation companies
 - * 2nd : private generation companies, large companies(August 2009)
- Nurturing expertise on climate change treaty (140 persons/2007-2008)

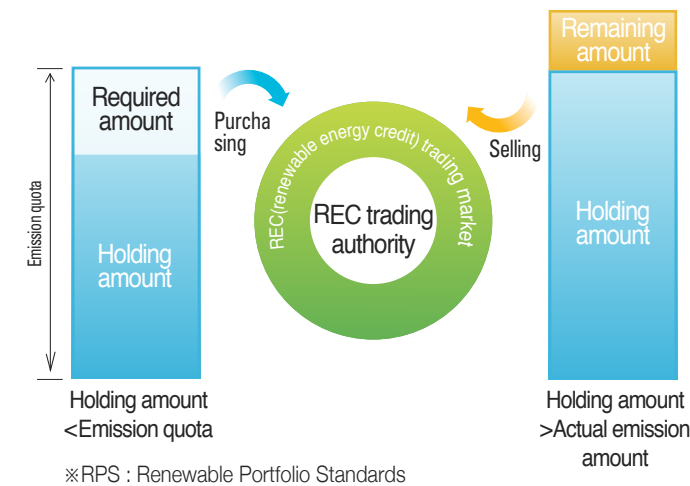
Cooperation with domestic and international institutes

- KPX -Joongang University cooperation agreement in the environmental policy sector
- Smart grid MOU between KPX and PJM(2009)
- Connecting international emission trading business through APEx activities
- Expanding cooperation with CCX, Nordpool and domestic banks

4. Efforts to become the trading company for renewable energy certificates

The RPS(renewable portfolio standard) for generation companies above a certain capacity will be introduced in 2012. If KPX becomes a trading company for REC, it will create a more reasonable renewable energy policy since KPX's member companies have to join the REC market.

Renewable Portfolio Standard Outline



Background and Necessity

RPS to be introduced in 2012

- Price determination on the market function under renewable energy supply obligation
- Trying to revise renewable energy legislation(lay a bill to national assembly)

Improving existing feed in tariff

- FIT guarantees investment recovery but it creates resource misallocation and no incentive for keeping costs low
- Feed in tariff : Setting the standard price for renewable energy and providing subsidies for the difference between market price and standard price

All REC traders are KPX member companies

- Efficient RPS trading is possible using the existing power trading system

Domestic and International Trends

Domestic trends

- Enacting FIT program(October, 2001)
- Purchasing renewable generation
- Implementing Renewable Portfolio Agreement(July, 2005)
 - * Selected 15 promising technologies including intelligent grid, technology development roadmap, etc.

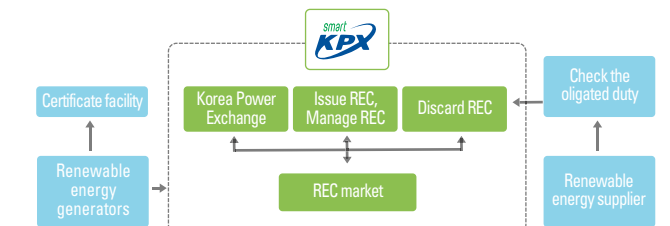
International trends

- 16 countries including US, Italy(2001), UK, Australia (2002), Sweden(2003), Japan(2003) have introduced RPS
- * Selected 15 promising technologies including intelligent grid, technology development roadmap, etc.

The Role of KPX

Setting the role of the RPS leading company

- Opening REC market, issuing and managing REC



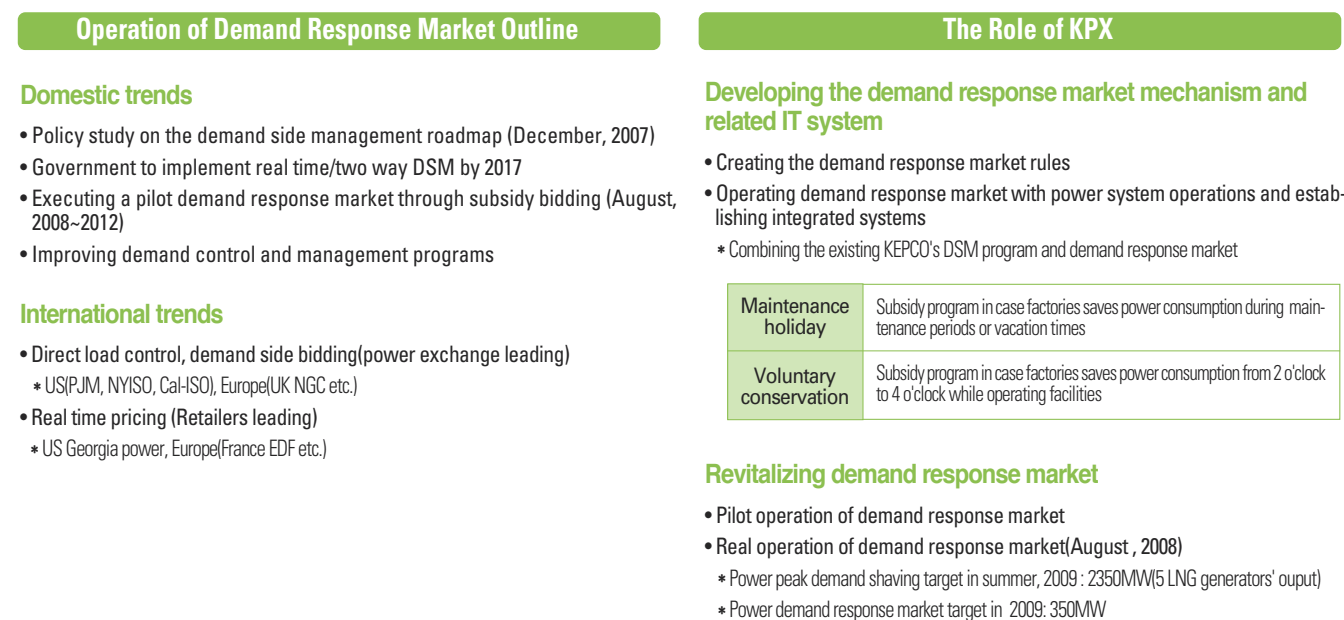
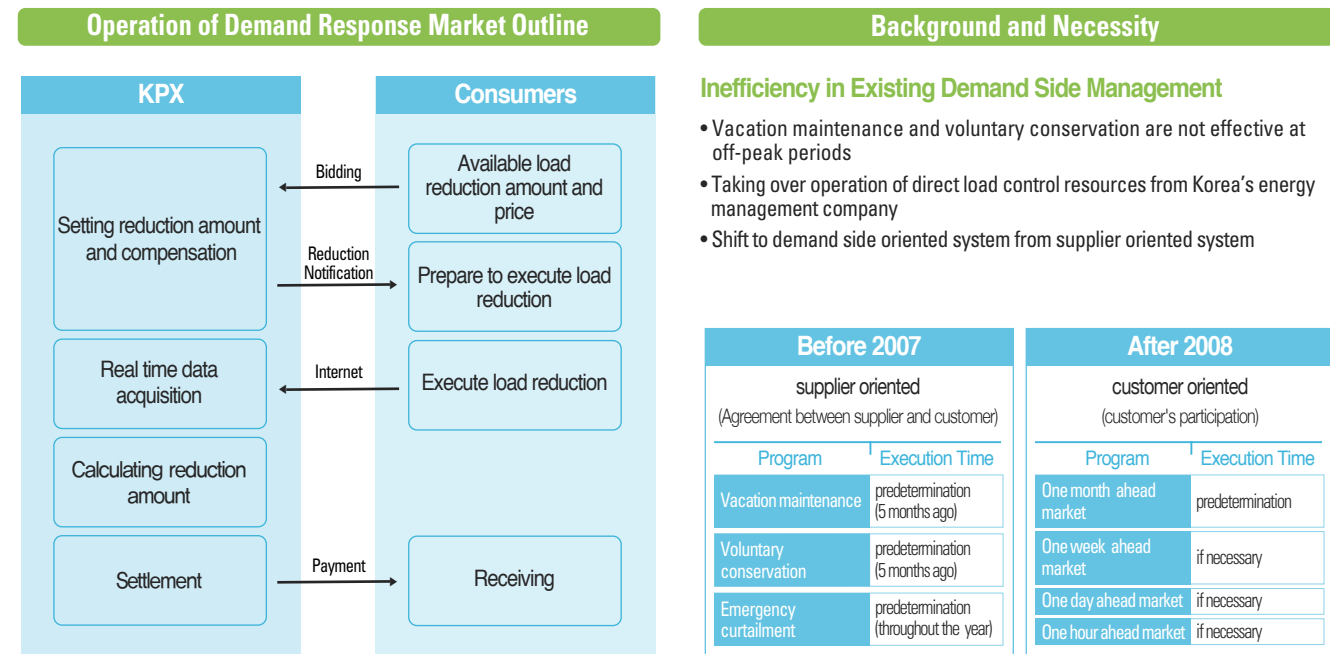
Preparing RPS certificate institutions

- Enacting FIT program(October, 2001)
 - * Participating RPS working T/F and promotion committee(March, 2009-)
 - * Establishing basis of REC
 - * RPS trading simulation and designing the trading rules

5. Power demand response market

In a demand response market, an advanced demand management system is operated through market function between consumers' voluntary peak shaving, and compensation.

KPX will secure stable power supply with peak load reduction through the demand response market while consumers receive corresponding compensation on the basis of the market function.



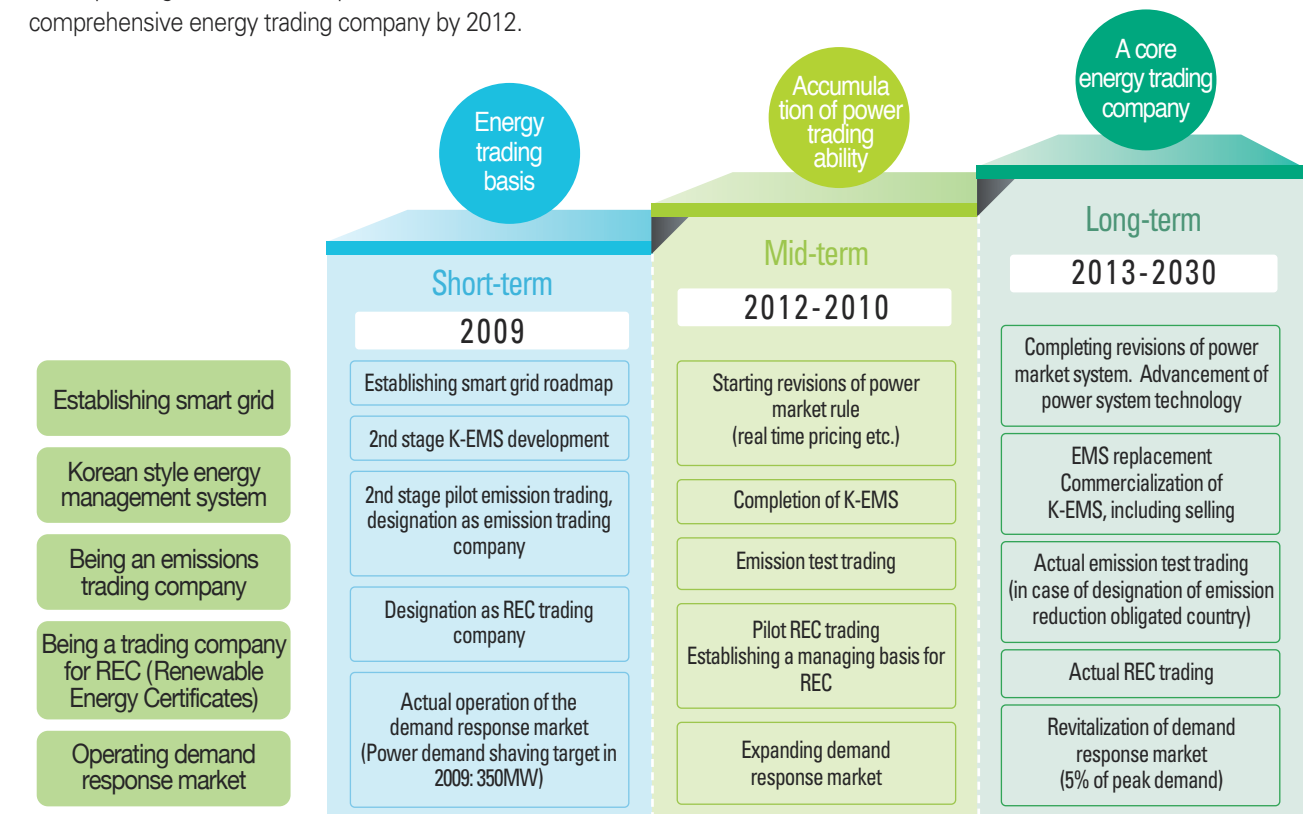
Accomplishment of 2020 Vision

We have ambitious plans to become a comprehensive energy trading company by developing a Korean style energy management system, making efforts to trade REC(Renewable Energy Certificates), establishing an emission trading market and opening a demand response market. We will achieve our vision to become a "world class professional institute leading the electricity industry" through these businesses.



6. Road map for leading in energy trading

We will accumulate trading competencies by establishing smart grid, putting efforts to become a REC(Renewable Energy Certificates) trading company by 2009, completing a Korean style energy management system, conducting pilot emission trading, and expanding the demand response market in 2010. As a result, KPX will be a comprehensive energy trading company by 2012.



About Our Institute

- Establishment background ▶18
- Organization and staff ▶18
- Main functions ▶19
- Sustainable management VISION and management strategy ▶23
- Roadmap for achieving Vision ▶25
- KPX's image of the future ▶26
- Sustainable management organization ▶26
- Governing structure ▶27
- Risk management ▶27
- Cooperation with stakeholders ▶28
- Join the UN Global Compact ▶29

It is not just a dream that KPX will be reborn as the best institute in the world. It is a reality.

About the institute

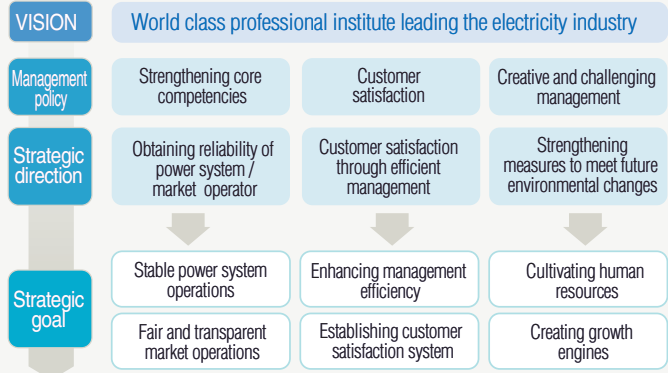
Organization and personnel

Organization	2 divisions 5 departments 2 offices 2 branches 1 dispatch center
Personnel	T/O 322, P/O 313

Main functions



Sustainable management vision and strategy



Governing structure

KPX observes guidelines involving personnel, budgeting and organization in accordance with the operational law for public institutions. Also, we maintain a Board of Directors and general meeting as a top decision making authority.

Cooperation with stakeholders

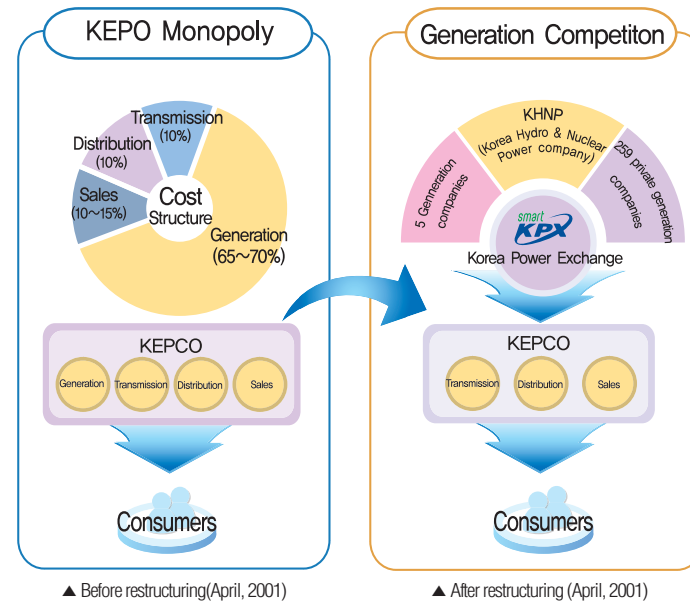
We classify stakeholder into five categories : government, member companies, employees, affiliated companies, and local community/NGO. We reflect their opinions in the economic, environmental and social responsibilities of general management.

Establishment background

In July of 1961, the Korean Government established the Korea Electric Company (KECO) by merging three existing regional electric power companies (Chosun, KyungSung and Namsun) and later renamed it as KEPCO in January 1982. KPX (Korea Power Exchange) was established in order to manage the operation of the newly formed competitive generation market, according to the electricity business law article 35. Furthermore six (6) power generation companies (including 1 nuclear generation company) were separated from KEPCO.



Company name	Korea Power Exchange
CEO	Oh, Il-Hwan
Foundation date	April 2, 2001
Main business	Power system operations, power market operations, long-term planning support
Headquarters	411 Yeongdong Street, Samseong-Dong, Seoul
Branches	Jeju, Cheonan Branches



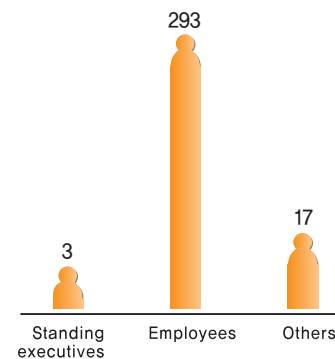
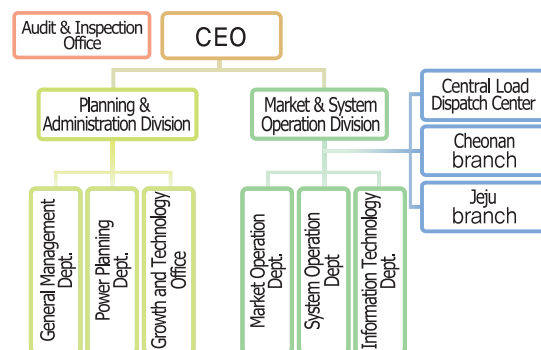
Organization and staff

KPX has two divisions with 5 departments, and 2 offices, 1 central dispatch center. Presently, our organization consists of 313 employees with 322 T/O.

2 divisions 5/departments 2/offices 1 dispatch center 2 branches

Personnel status T/O 322, P/O 313

'08.12.31

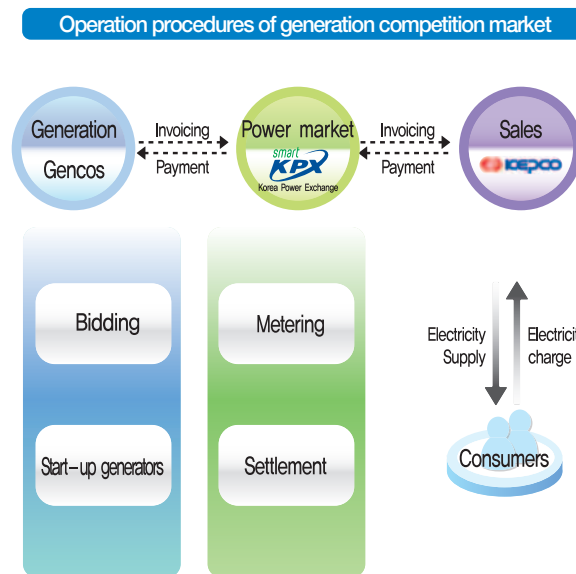


Main functions

Our main functions are to oversee fair market operations, stable system operations, real time balancing with quality control, and short and long term power planning.

Power market operations

The operational procedures of the generation competition market includes bidding, demand forecasting, price setting, operation generation planning, real time dispatching, settlement, and payment. The market price is set by the generator's fuel cost to meet daily electricity demand.

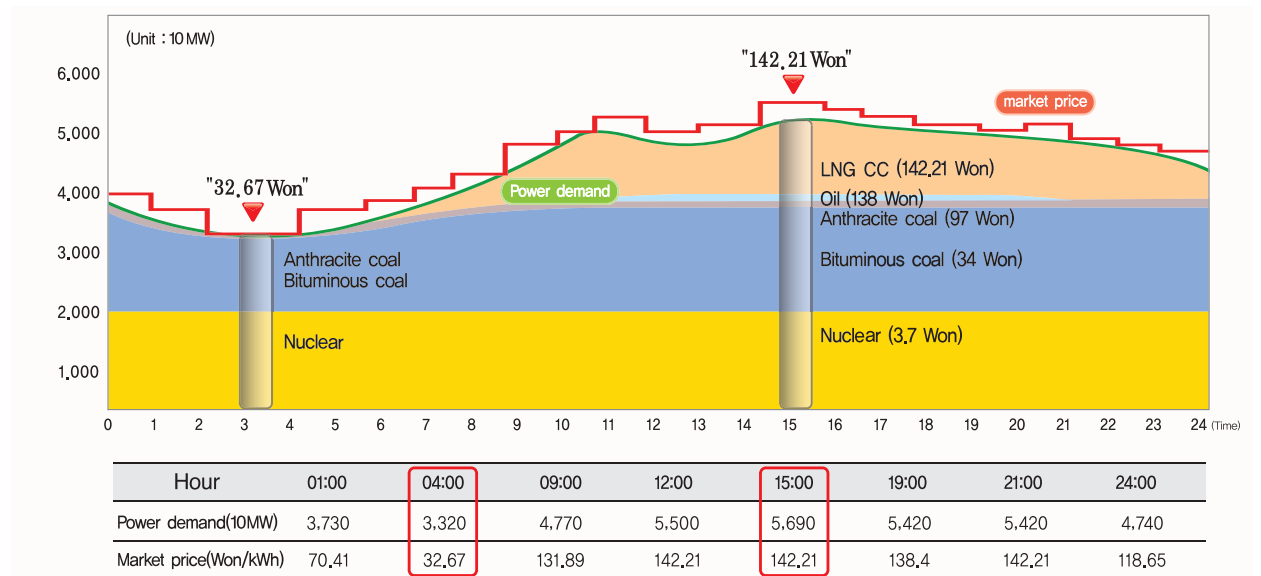


Member companies' status

※ As of December 31, 2008

Classification	Companies	Remarks
Formal members (295)	Electricity Retail Companies(1)	KEPCO Single buyer transmission & distribution company
	Large scale generation Companies(6)	KHNP, KOSEP, WP, KOMIPO, KOSPO, KEWP 87.4% of the total installed capacity
	Small scale generation Companies (288)	General generators(K-water etc.) Community cogeneration system (Korea district heating corp, etc.) Community energy service provider (Yechon NCC) renewable energy etc. 12.6% of the total installed capacity
Associate members (7)	PPA generation Companies(3)	Posco Power, GS Power, Meiya power Direct contract with KEPCO
	Under construction (4)	Incheon Total Energy Company, Kumho Petrochemical, HUCES, Samchully

Electricity demand and market price

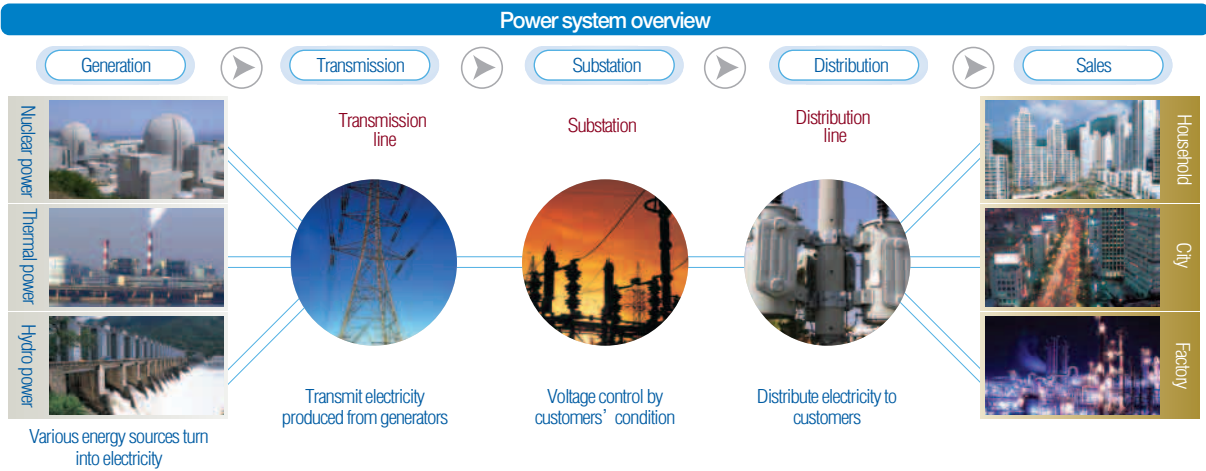


TIP Power market

The power market is for trading electricity between generation companies and retailers similar to the stock exchange.

Power system operations

KPX sets an in-depth plan in advance for operation generators, transmission lines, and transformers etc. along with stable and economical approaches among diversified operating entities through restructuring.



Power balance stabilization measures at summer peak

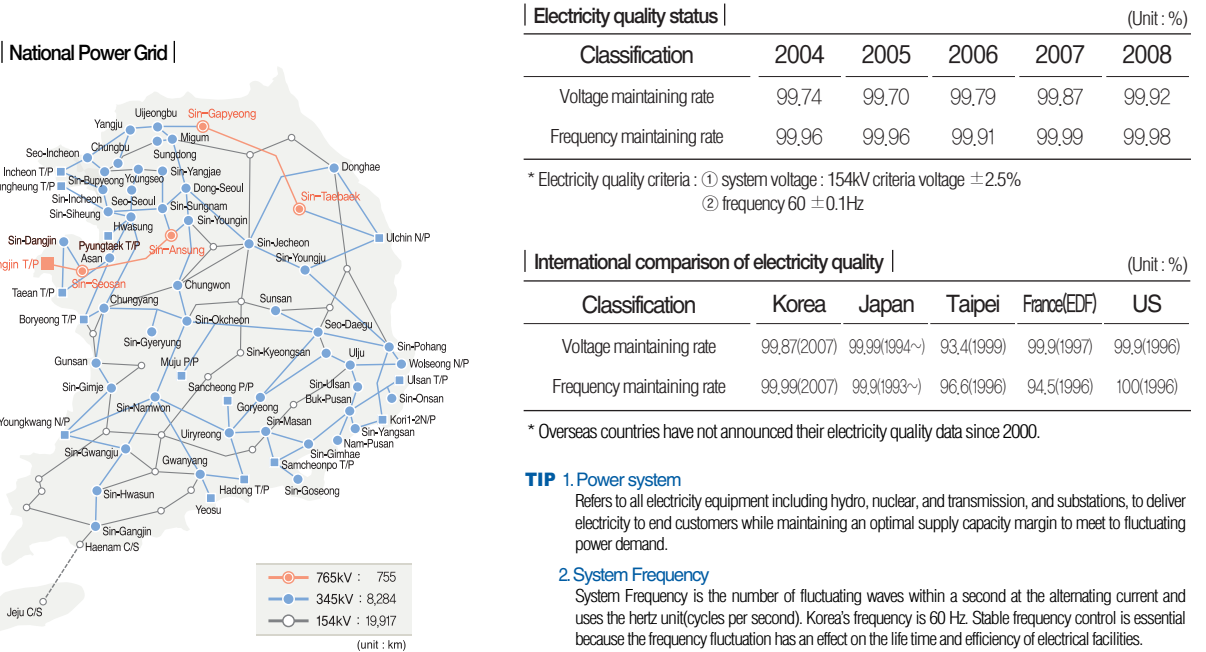
Every year, KPX secures supply resources through the optimization of power plant operations, such as commissioning resources in time, demand side management, and emergency power. The Korean Government, KEPCO and the generating companies have jointly reviewed facilities' operating status and supply measures on the basis of cooperative works. KPX succeeded in achieving stable power supply at the peak in 2008, despite the renewed peak demand in July.

Classification	2006	2007	2008	2009(Forecast)	
				Normal Temperatures	Abnormal high Temperatures
Supply capacity	6,518	6,678	6,852	7,299	7,250
Peak demand	5,899	6,229	6,279	6,535	6,751
Reserve capacity	619	449	573	764	499
Reserve ratio	10.5	7.2	9.1	11.7	7.4

※ Abnormal high temperature : 2℃ above normal temperature (32.4℃)

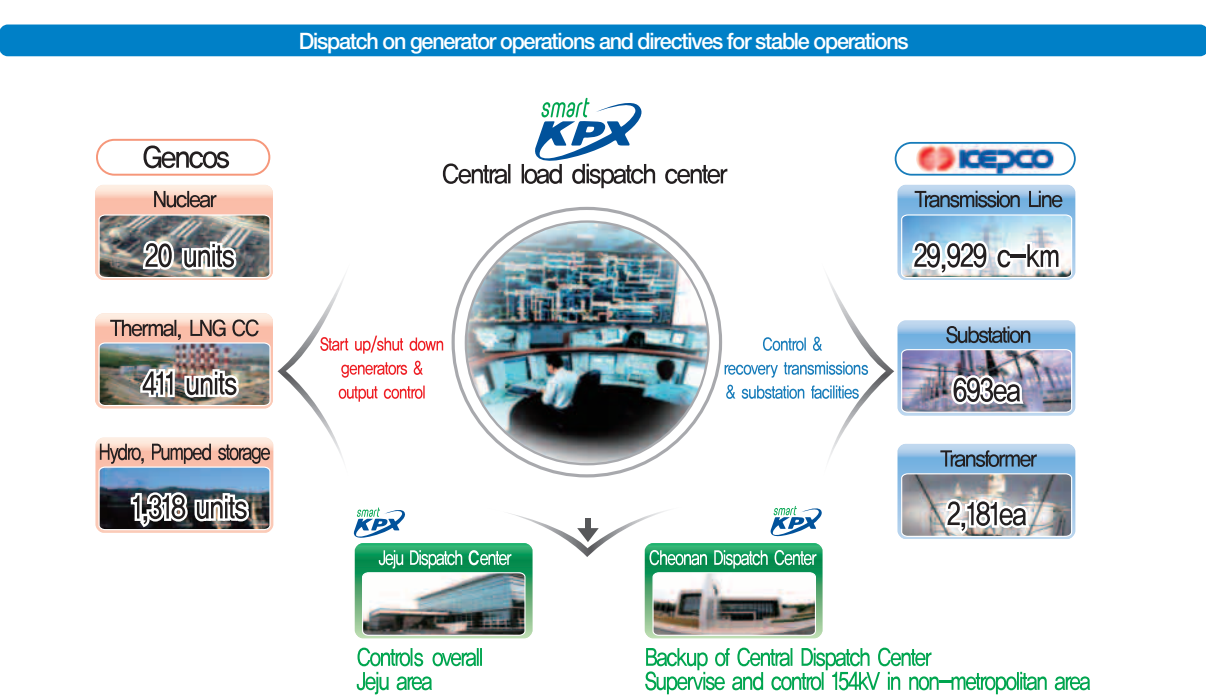
Stable electricity supply with high quality

KPX has maintained a frequency and voltage well above advanced countries' control levels. We developed a frequency simulation system for analysis of stable supply, while maintaining frequency and feedback. In addition, we manage the system voltage area during peak times and optimize the regional voltage control.



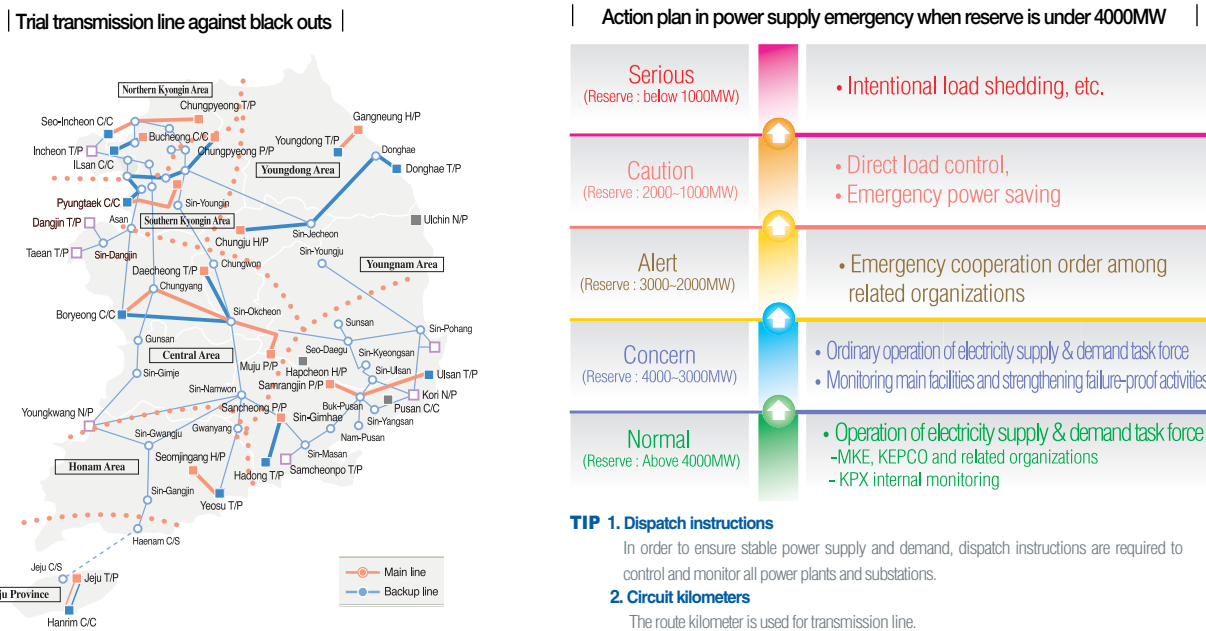
Real time dispatch

The operating supervisory system allows KPX to monitor abnormal symptoms at electrical facilities and take rapid action. In cases of a contingency situation in complicated facilities and complex transmissions, current real time dispatch measures are required immediately.



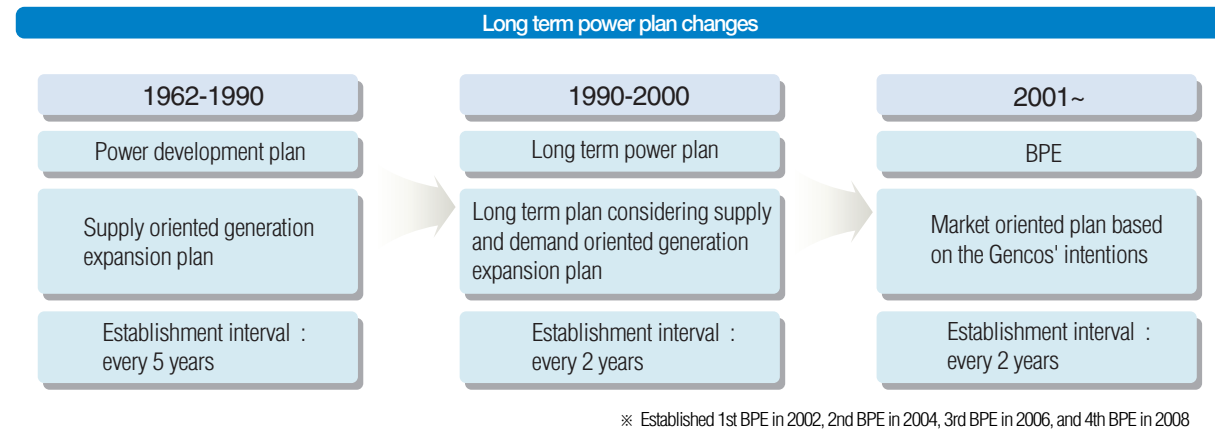
Emergency measures against black out

In order to overcome an extensive system blackout, KPX sets forth a blackout recovery plan including self start plants and regional trial transmission. The DTS, using real time data makes it possible to simulate more than 100 recovery trainings in a year. In addition, the dispatch center sets the step by step recovery measures with several recovery scenarios and conducts system recovery training in cooperation with Korea Power Corporation, as well as generation companies.



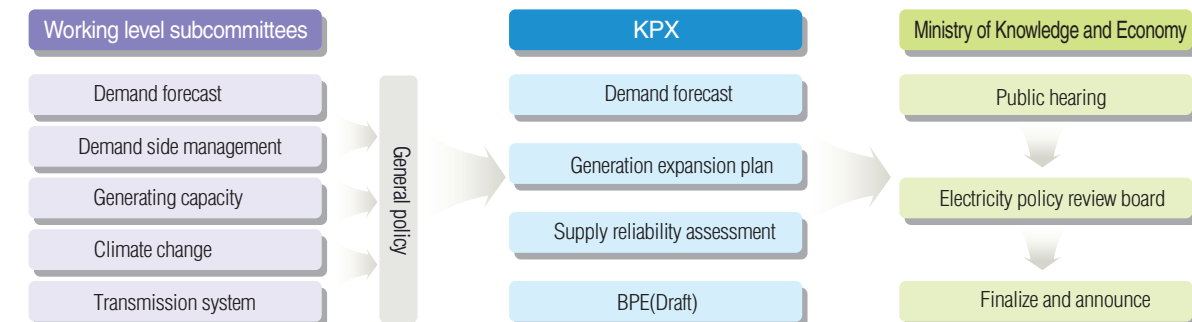
Establishment of Basic Plan for Electricity supply and demand(BPE)

KPX, the general support institution, establishes a BPE for stable supply with a low tariff and high quality every two years.



Procedure for BPE establishment

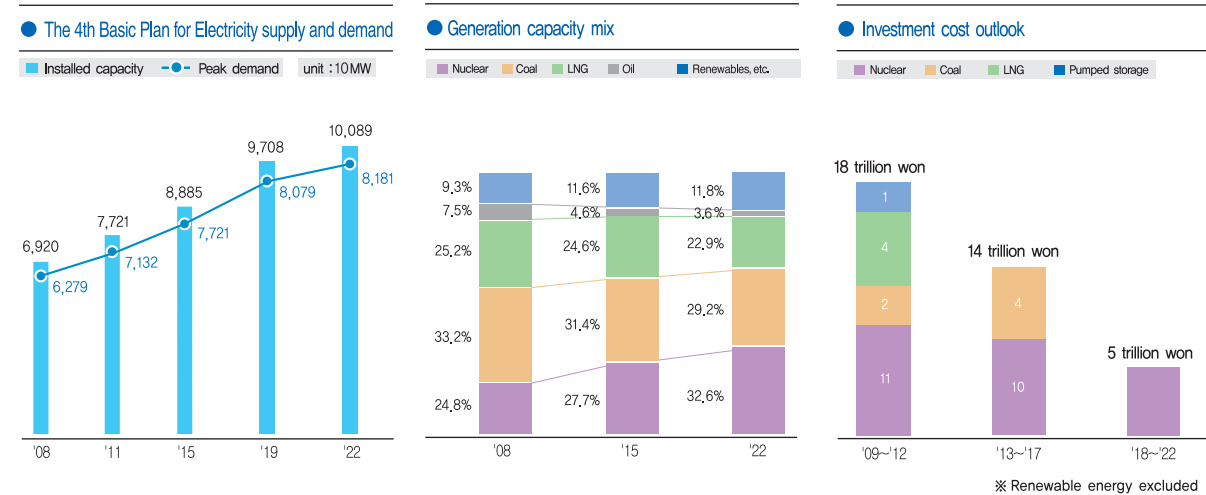
Initially, working level subcommittees are formed and KPX establishes a demand forecast while investigating Genco's new plant intentions. Then, the BPE is finalized after a public hearing and a policy review committee meeting as set by the Government.



The 4th Basic Plan for Electricity supply and demand

Total capacity and peak demand are expected to reach 81,810MW and 100,890MW respectively in 2022.

The generation expansion plan suggest an optimal generation mix considering economic efficiency, technology, and CO₂ emission costs. The total investment in DSM from 2008 to 2022 will amount to KRW 27trillion.

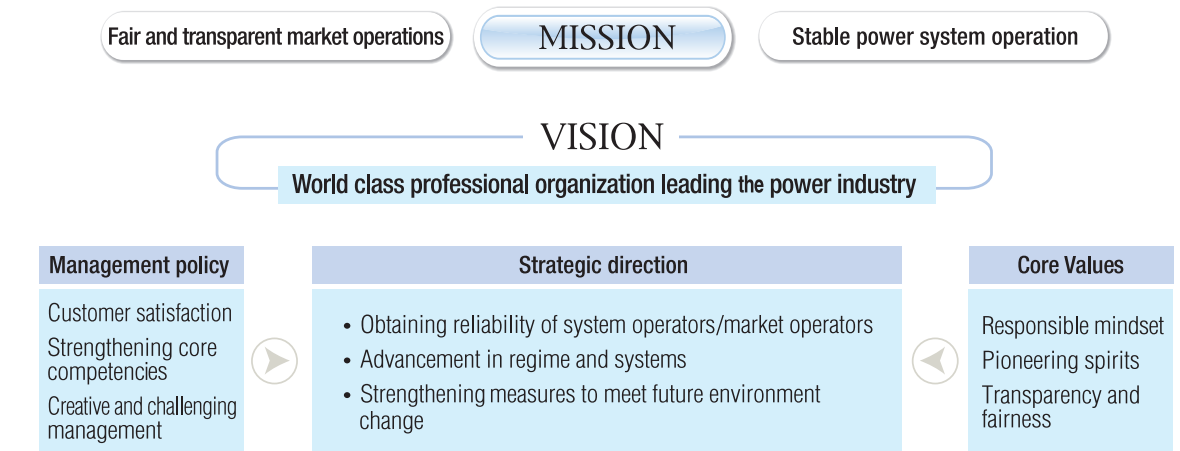


Sustainable management VISION and management strategy

Mission and vision

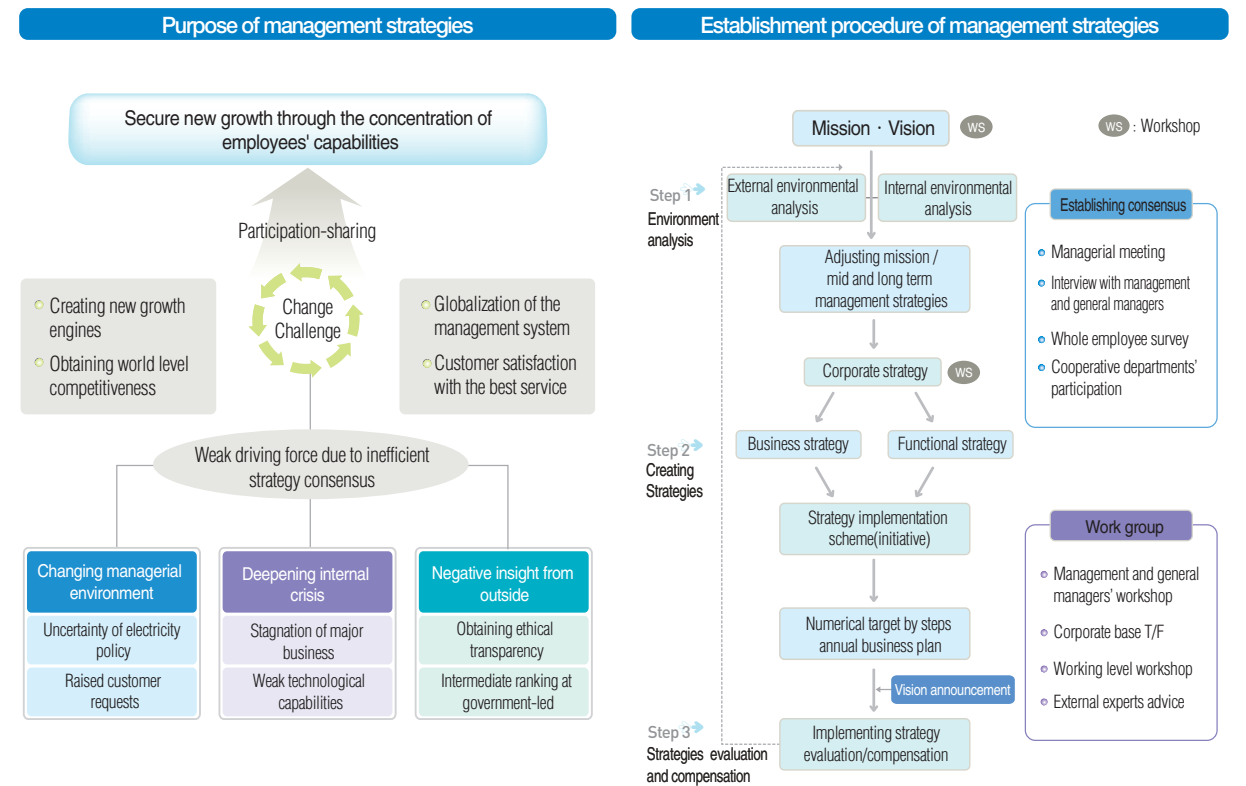
In order to generate awareness of KPX's identity within society, the corporate mission, "fair and transparent power market operations and stable system operations" is stipulated in article 35 of the electricity business law.

As vision demonstrates the future milestones of a company after 5-10 years, KPX has set its vision through a collection of opinions aimed at meeting the changing environment.



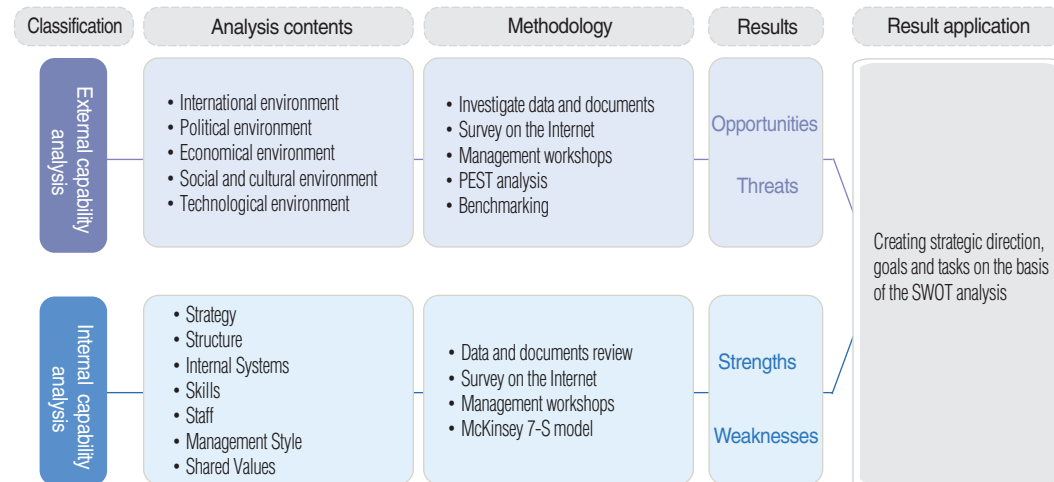
2020 mid and long term management strategies

In December 2008, the 2020 management strategies were revised to concentrate KPX's capabilities on meeting the changing environment, while managing internal and external problems.



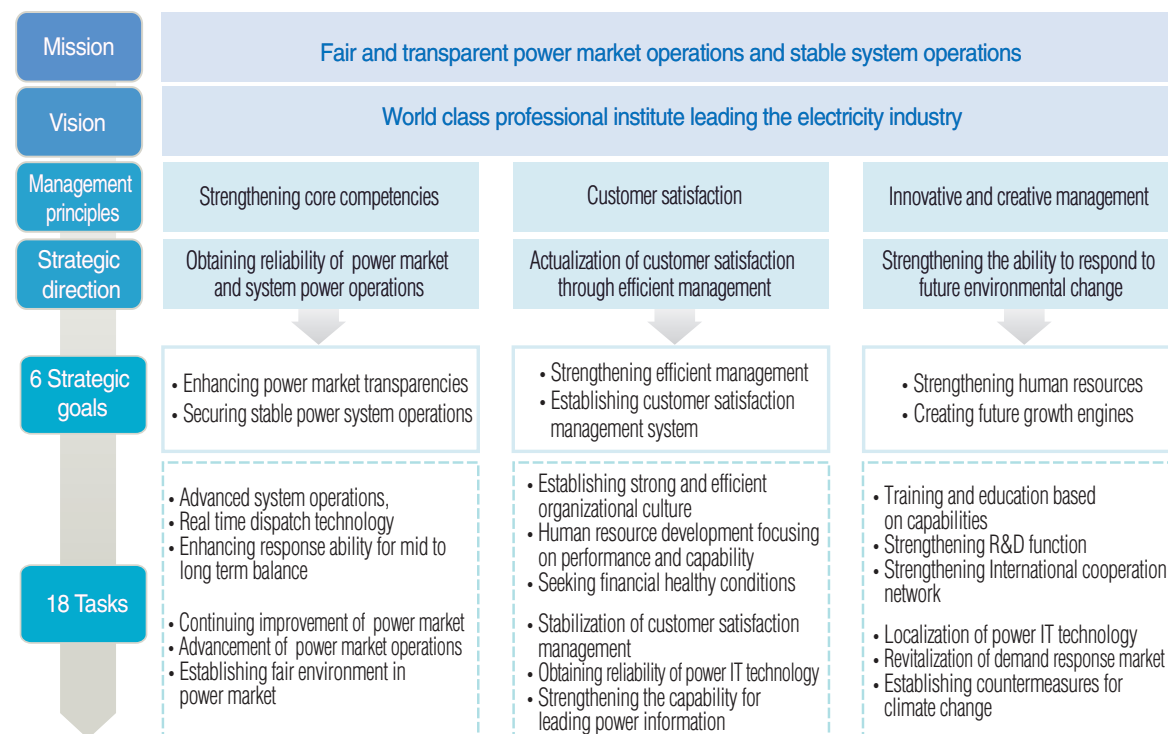
Internal and external management environmental analysis

Management analysis divides into internal and external capability assessments, which results in a mid to long term management strategy. On the basis of the SWOT analysis, a management environment analysis scheme was established for creating strategic direction, goals, and tasks.



Establishment of 2020 mid and long term management strategies

KPX's management strategy scheme emphasizes the connection between mission, vision, strategic direction, strategic goals, and tasks, which is made through a top-down framework.



TIP 1. SWOT analysis

The swot analysis is a tool for auditing an organization and its environment. SWOT stands for strengths, weaknesses, opportunities, and threats. A company can determine its internal factors; strengths and weaknesses, and external factors; opportunities and threats, and establish strategies based on these factors.

2. PEST analysis

The acronym PEST (Political, Economic, Social, Technological) is used to describe a framework for the analysis of macroenvironmental factors.

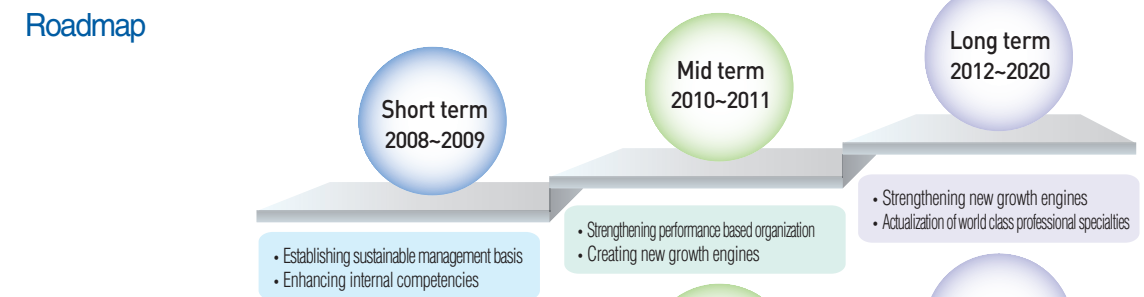
3. McKinsey 7-S model

The 7-S Framework of McKinsey is a management model that describes 7 factors to organize a company in an holistic and effective way. Together these factors determine the way to solve the problems of companies.

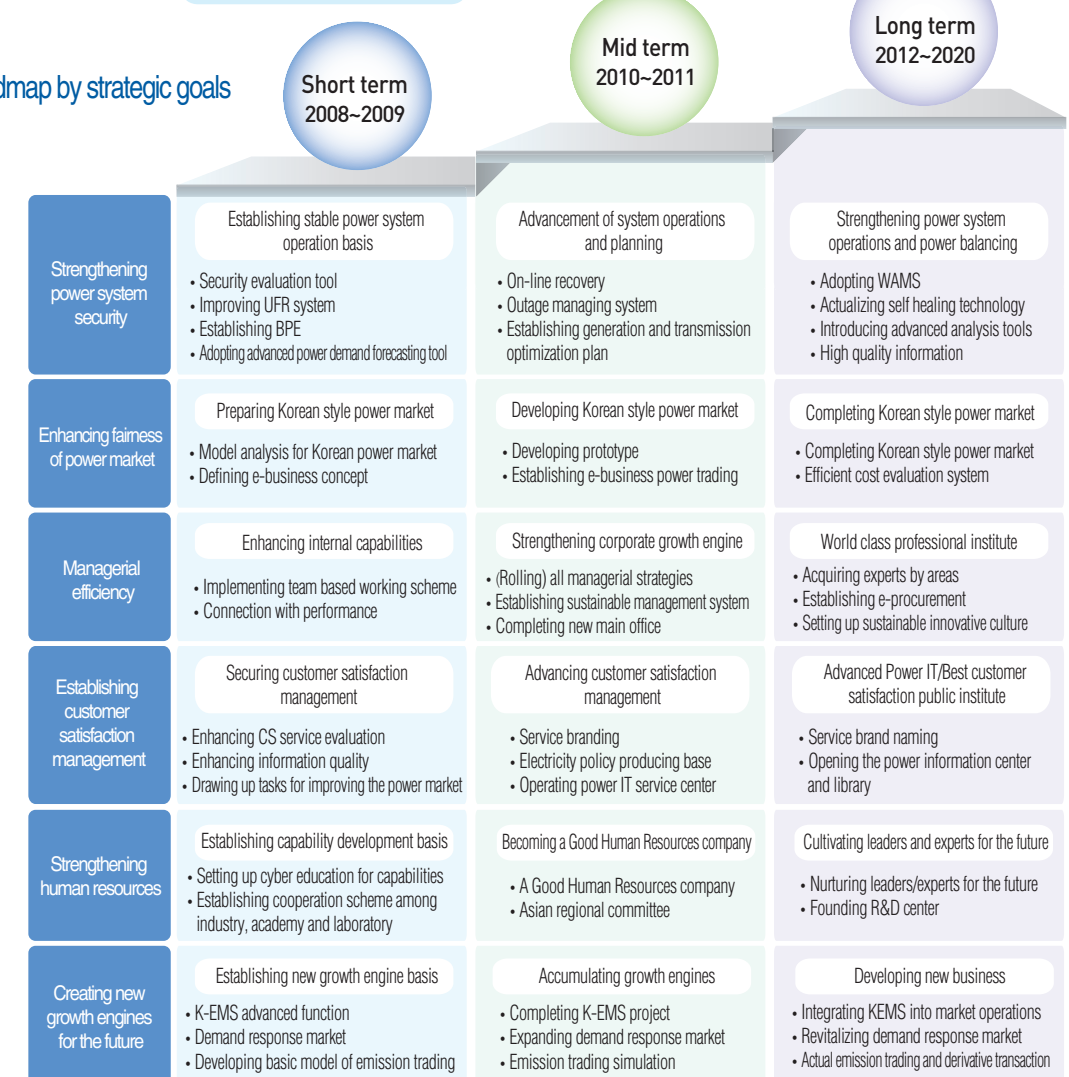
Roadmap for achieving Vision

We derived a corporate roadmap and strategic goals for achieving our vision "World class professional institute leading the electricity industry".

Roadmap



Roadmap by strategic goals



TIP 1. UFR(Under Frequency Relay)

Under frequency relays are used for protection against under frequency due to abnormal power balance in generators and power system network.

2. WAMS(Wide Area Management System)

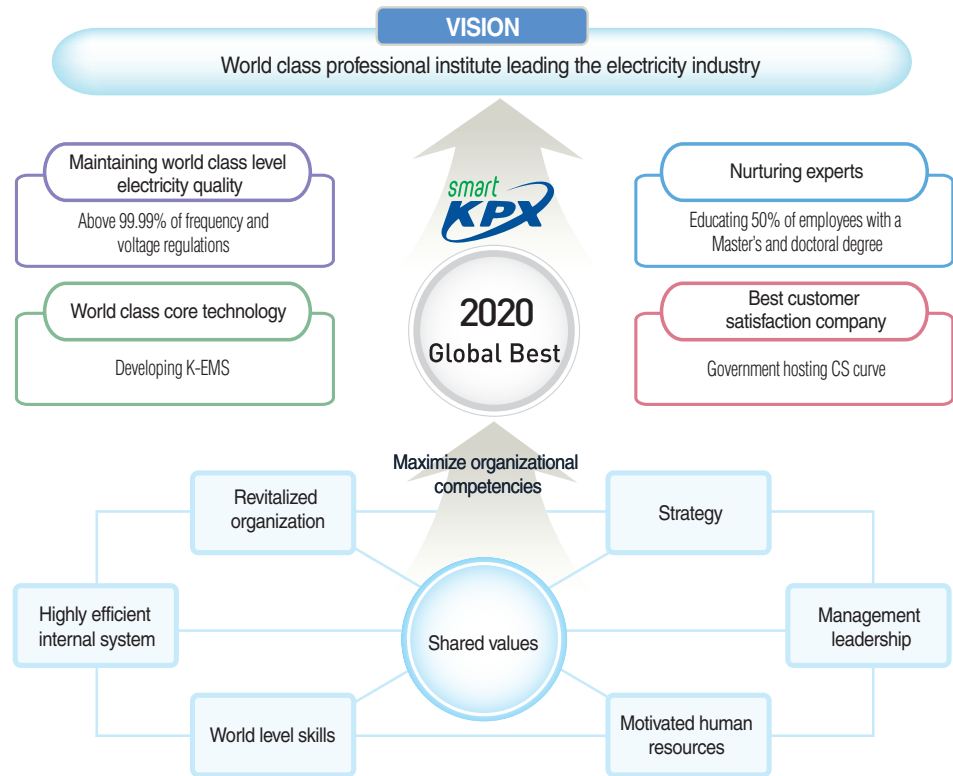
The Wide Area Monitoring System (WAMS) supports utilities in making optimal usage of transmission grid capacity and in preventing the spread of disturbances. It provides real-time information on stability and operating safety margins based on data from any number of GPS-synchronized phasor measurement units (PMUs).

3. K-EMS(Korea Energy Management System)

The Korean style energy management system, a supervisory computer system, monitors and controls hydro, nuclear, and transmission and substations, to deliver electricity to end customers while maintaining an optimal supply capacity margin to meet fluctuating power demand.

KPX's image of the future

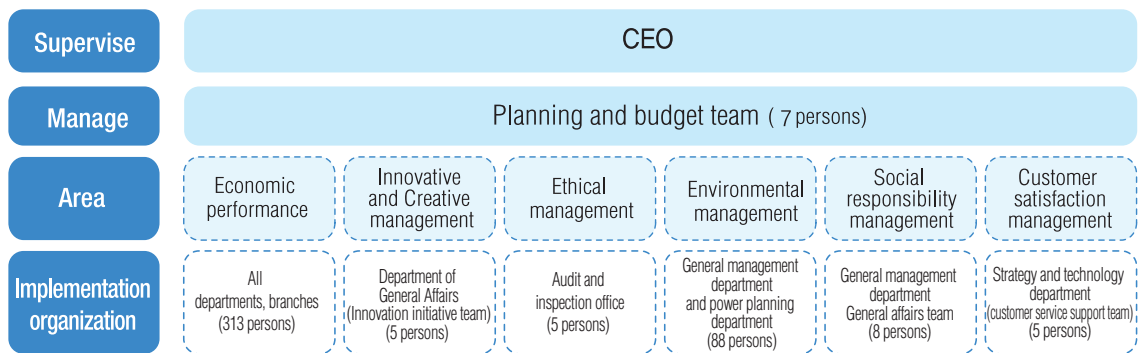
By achieving world class electricity quality, experts, and core technology, through concentrated organizational competencies , KPX will become a world class professional institute leading the electricity industry.



Sustainable management organization

The execution of sustainable management, backed by the CEOs, is carried out within a network of relevant organizations, including all departments and 2 branches. The planning team responsible for sustainable management has collected opinions and supported to develop sustainable management.

In addition, implementation organizations have made efforts to steadily improve the economy, innovation, creativity, the environment, social responsibility and customer satisfaction for efficient management activities.



TIP 1. NGO(Non-Government Organization)

Non governmental organizations are set by individuals and private groups for anti corruption, environment, human rights and poverty expulsion.

Governing structure

KPX observes guidelines involving personnel, budgets and organization in accordance with the operational law for public institutions and maintains a Board of Directors and general meetings as a top decision making authority.

General meetings

General meetings consist of KEPCO, generation companies, and IPP. They have discussions and decide on amendments of the pool rule and article, as a top decision making authority.

Board of Directors

The Board of Directors consists of standing and non-standing directors, which includes the KPX Chairman & CEO, two standing directors and seven non-standing directors who are representative of the government, the public and member companies. Last year, we held a fourteen member BOD with a 92.1% meeting attendance rate. KPX allows non-standing directors to access management information sharing system, such as the Intranet, customer satisfaction system, electricity power statistics information system, and the management information system. KPX promotes non-standing directors to participate in the subcommittee of the BPE and in the generation cost evaluation committee in order to use their specialties.

Board of Directors' meeting results

Classification	Meetings	Items
2006	11	33
2007	14	31
2008	12	36

Board of Directors' main items

- 2008 Power balance stabilization measures at summer peak
- 2008 publication of the sustainable management report
- Mid term management goals (2009 to 2011)
- 2009 budget plan

The nomination committee appoints managing directors who are not main shareholders

The nomination committee, comprised of non-standing directors and non-public representatives, designates capable and innovative managing directors. The nomination committee appoints managing directors who are not main shareholders or executives of a electricity business company. It recommends CEO to the Ministry of Knowledge Economy, and executives and auditors to the public institute operation committee.

Evaluation of managing directors and compensation

KPX's implementation of management style is reviewed by the government, the Management Evaluation Board, and an internal evaluation group. As a result of the evaluations, KPX provides managing directors with differentiated compensation for enhancing the responsible management system.

Risk management

KPX has made process improvement geared at moving away from the risk control scheme of the past, where each department separately controlled risks at the corporative level.

Establishment of Enterprise Risk Management(ERM)

We have established the risk types considering the government's risk management model. KPX drew 22 key risk indexes affecting its management after classifying risk into management risk, internal process risk, and emergency risk, considering forecast and possibility of control. There are three key risk indexes : normal, attention, and risk. The ERP system was linked to an early warning system to avoid various kinds of risk. By sending an SMS message to a person in charge, we are able to hedge against all risks in case of attention and risky environment.

Infrastructure for Enterprise Risk Management

The Risk Management Committee enables real-time monitoring of risk and reports key cases to the BOD. By setting operational policies and manuals in December 2007, we established infrastructure for employees to take rapid countermeasures.

Enterprise Risk management

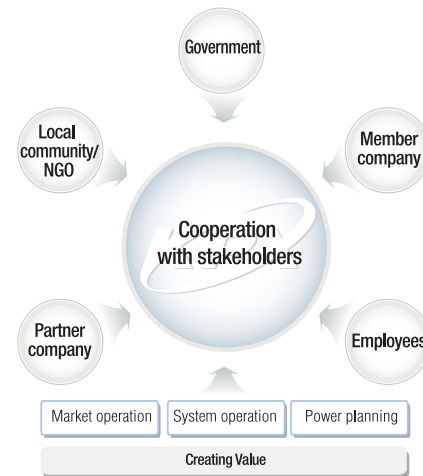
Classification	risk index	management period
Managerial risk	Supply reserve	real time
	Optimal frequency	real time
	Optimal voltage	real time
	Wholesale market price setting	day
	Settlement price	day
	CBP operation	real time
	MOS operation	real time
	EMS operation	real time
	Appropriate operating fund	day
	Appropriate liquidity	month
Internal process risk	Appropriate borrowings	month
	Corporate level control	semi annual
	Financial accounting management	semi annual
	Sales management	semi annual
	Fixed asset management	semi annual
	Fund management	semi annual
	Tax management	semi annual
	Salary and personnel management	semi annual
	budget management	semi annual
	Supply and demand control	If it occurs
Emergency risk	Disaster management	If it occurs
	Cyber terror management	If it occurs

Cooperation with stakeholders

It is essential to expand mutual understanding through continuous dialogue with stakeholders for the long term growth of KPX. We classified stakeholder into five categories : government, member companies, employees, partner companies, and local community/NGO. KPX reflects their opinions in the economic, environmental and social responsibilities of general management.

Stakeholder Group

Classification	Definition	Target	How to participate
Government	Policy maker and regulator	<ul style="list-style-type: none"> Ministry of Strategy and Finance Ministry of Knowledge and Economy 	<ul style="list-style-type: none"> Public organization operation law Various committees and councils
Member companies	Generation and distribution companies participating in power market	KEPCO, Generation companies	Customer satisfaction systems of various committees and councils
Employees	Internal stakeholders	Employees	Internal customer satisfaction survey, labor-management council meetings
Affiliated companies	Joint technology developer and service provider	Contractors	Survey on the satisfaction level of partner companies, reporting center on improper activities
Local community / NGO	External experts and persons affecting policy making	Academies, laboratories, NGOs, citizens	Various committees and councils



Expert interview

Adopting Smart Grid and sustainable management Seung-il Moon, professor of Seoul national university

I think that KPX already has a world class capability in terms of stable power supply function. Especially KPX's attempt to enhance the efficiency of electricity use will contribute to end-users, power market participants, and social sustainability. However, it requires more active efforts for new technology development relating to power system operation and power market operation. Moreover KPX needs to put the emphasis on seeking methodologies for stable power system operation under changing environment including expansion of distributed generations, adoption of Smart Grid, and difficulties of transmission expansion. Organizational improvement and creating technologies with securing human resources are essential factors. KPX seems to be requested to readjust HR system for sustainable evolvement as a first priority.

Efforts to be a REC trading company Soon-Pa Hong, director of Renewable energy division, Ministry of knowledge and economy

Developing power market operating mechanism and enhancing customer value will be starting point of KPX's sustainability on the basis of main functions including power market, system operation and supporting long term power planning. As current Feed in tariff program which KPX has supported will be replaced by market based RPS program, KPX needs to cultivate expertise on the renewables through the know-how of the existing power market operation. Consequently entire workers should understand REC market as a type of financial instrument.

Join the UN Global Compact

KPX joined voluntarily the UN Global Compact with formal declaration, in April, 2008 in order to comply its ten principles regarding human rights, labor, the environment and anti-corruption. As we will publish the sustainability report every year to disclose the compliance ten principles of UN Global Compact, which will be a goal for transparent and corporate socially responsible management.

The UN global compact is an agreement which former UN secretary-General Kofi Annan suggested at the Davos forum in Switzerland in January 1999. He presented the ten universal principles in the four areas of human rights, labor, the environment and anti-corruption.



Classification	Principle	Performance index	G3	BEST	Page
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights within their sphere of influence	<ul style="list-style-type: none"> Strengthening monitoring of ethical management implementation Respecting employees' human rights Establishing a cooperative channel between Company and union 	HR1 HR6 HR2 HR7 HR3 HR8 HR4 HR9 HR5	PN2 EM10 PN3 EM30 EM7 EM31 EM8 CO2 EM9	43, 46 47, 56 57, 59
	2. Businesses should make sure they are not complicit in human rights abuses.	<ul style="list-style-type: none"> Collective bargaining agreements Respecting employees' human rights 	HR1 HR8 HR2	PN2 EM31 PN3	43, 46 47
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	<ul style="list-style-type: none"> 112 union members(about 30% of employees) through Union Shop System Labour dispute occurrences 	HR5 LA4 LA5	EM8 EM12 EM13	59
	4. Businesses should uphold the elimination of all forms of forced and compulsory labour.	<ul style="list-style-type: none"> Abiding by articles on forced and child labor stipulated in regulations set forth by the International Labor Organization (ILO) and in the Korean Labor Standards Act 	HR7	EM10	57
	5. Businesses should uphold the effective abolition of child labour.	<ul style="list-style-type: none"> Abiding by articles on forced and child labor stipulated in regulations set forth by the International Labor Organization (ILO) and in the Korean Labor Standards Act. 	HR8	EM9	57
	6. Businesses should uphold the elimination of discrimination in respect of employment and occupation.	<ul style="list-style-type: none"> More employment opportunities to the disabled and persons of national merit, when hiring new employees. Increase employment opportunities to engineering graduates and local persons 	HR4 LA13 LA2 LA14 LA10	EM2 EM7 EM3 EM17 EM5 EM27	27, 54 57, 58
Environment	7. Businesses should support a precautionary approach to environmental challenges.	<ul style="list-style-type: none"> Enterprise risk management system 	4, 11	GR11	59
	8. Businesses should undertake initiatives to promote greater environmental responsibility	<ul style="list-style-type: none"> Establishing a long term power plan considering CO₂ emissions Supporting expansion policy on Renewable energy Introducing foundation of greenhouse gas emissions trading 	EN2 EN18 EN5 EN21 EN6 EN22 EN7 EN26 EN10 EN27 EN13 EN30 EN14	EV1 EV17 EV2 EV23 EV3 EV24 EV4 EV26 EV11 EV27 EV16	8~15 49, 50 51, 52 53, 74 77
	9. Businesses should encourage the development and diffusion of environmentally friendly technologies.	<ul style="list-style-type: none"> Establishing a long term power plan Introducing foundation of greenhouse gas emissions trading Nurture climate change specialists Energy saving activities 	EN2 EN10 EN5 EN18 EN6 EN26 EN7 EN27	EV4 EV23 EV5 EV24 EV11 EV18	9, 10 12, 13 51, 52 53
Anti corruption	10. "Businesses should work against corruption in all its forms, including extortion and bribery."	<ul style="list-style-type: none"> Expanding training on ethical management Integrity agreements Strengthening monitoring of ethical management 	SO2 SO3 SO4	CO5 EM25 EM26	43, 45 46, 47 55, 56

Economic Performance

- Acquiring financial health ▶32
- Establish mid and long-term financial plan ▶33
- Efforts for higher economic efficiency ▶35

A person who is preparing and considering even small variables can produce valuable results.

Disclosure on Management Approach

1. Managing system of economic performance

Vision and strategic goal

In order to obtain our vision, to become a "World class professional organization leading the power industry", KPX has set the financial goal of "acquiring the financial health" and has implemented actual strategies, including finance optimization, high profitability, and a returned increase on investment.

Policy

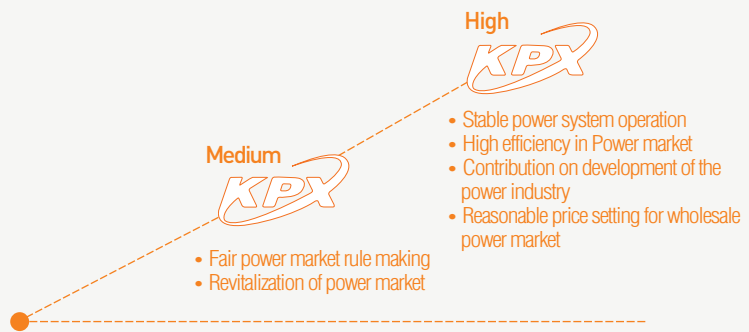
The 2020 mid and long-term financial plan reflects the fast changing environment and enhances the feasibility of management strategies. It has contributed to national energy cost savings by improving the power market and an operating optimized power system.

Responsibility in the organization

- Financial team : Financial planning and implementation
- Management advancement team : Develop internal competency
- Department and branches : Working for higher economic efficiency

2. Materiality test

Important issues such as a stable power system operation and an efficient market performance were drawn through "IPS Materiality Test Model™"



3. Main performance and implementation plan

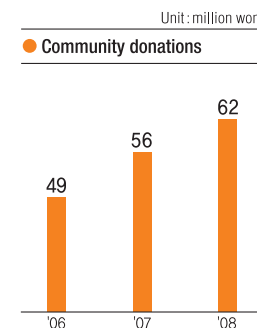
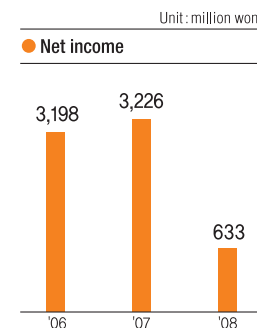
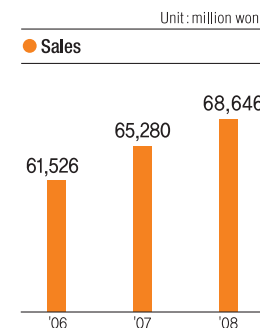
Classification	Main performance		Implementation plan
	2007	2008	2009
Mid and long term financial plan	Completion of the 2020 financial plan	Revise 2020 financial plan	Revise 2020 financial plan
National energy cost saving(100million won)	1,365	1,998	1,333
Power trading (GWh)	374,384	392,323	397,645
Labour productivity per capita(million won)	159	158	188

Acquiring financial health

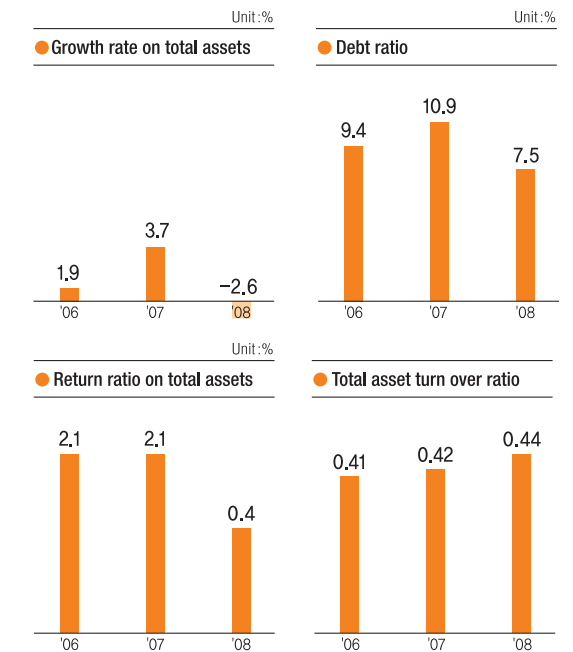
KPX has achieved high financial performance in terms of stability, profitability, and activity since its foundation in 2001. Strengthening innovative management allowed the Company to receive a net income of about 633 million won in 2008, without any external financing at a debt ratio exceeding 7.5%.

Financial statements		(Unit : million won)		
Classification	Contents	2006	2007	2008
Produced economic value	Sales	61,526	65,280	68,646
	Operating revenue	3,117	709	931
	Pretax revenue	4,428	4,479	2,761
	Current net profit	3,198	3,226	633
	Capital	127,839	127,839	127,839
	Debt	13,050	15,382	10,599
	Equity	138,198	141,424	142,057
Delivered economic value	Sum	151,248	156,806	152,656
	Corporate tax	1,231	1,253	2,129
	Other tax	4,100	3,981	4,815
	Salary and benefits	24,423	26,231	27,260
	Donations	49	56	62

※ Main financial results are based on the balance sheet
 ※ Tax items are based on imputed year
 ※ Other tax includes value added tax, business office tax, inhabitants tax, etc.

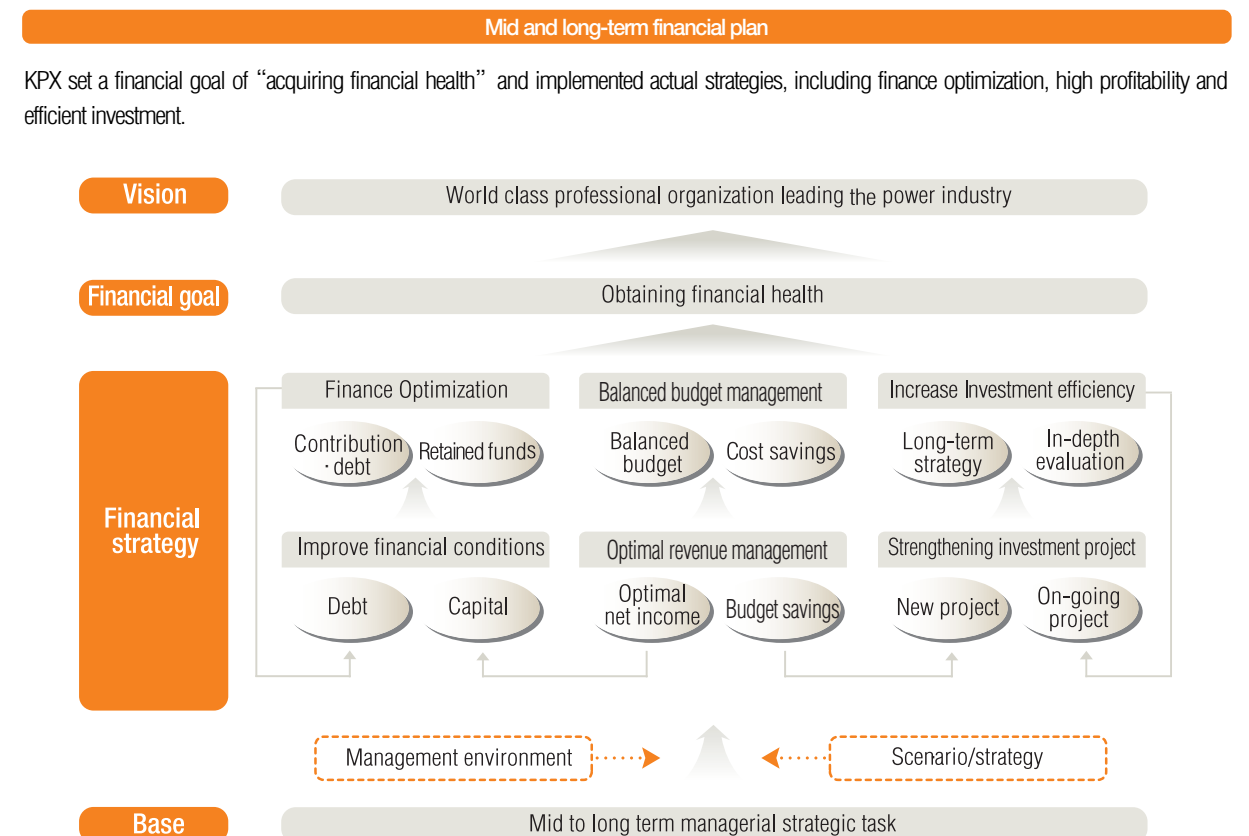


Main financial ratio		(Unit : %)		
Classification		2006	2007	2008
Growth	Total asset growth	1.9	3.7	-2.6
	Sales growth	4.7	6.1	5.2
Stability	Liquidity ratio	678.0	643.7	1,210.0
	Debt ratio	9.4	10.9	7.5
	Equity ratio	78.8	76.4	70.2
Profitability	Net profit ratio on sales	5.2	4.9	0.9
	Net profit ratio on total sales	2.1	2.1	0.4
Activity	Total asset turn over ratio	0.41	0.42	0.44



Establish mid and long-term financial plan

The 2020 mid and long-term financial plan has reflected the fast changing environment and management status in consideration with the power market to enhance the feasibility of management strategies.



Mid to long term financial planning procedure

We established three scenarios and action plans to make the right decision on the future, while setting the mid and long term financial plan in consideration of the financial analyses of the generation companies.



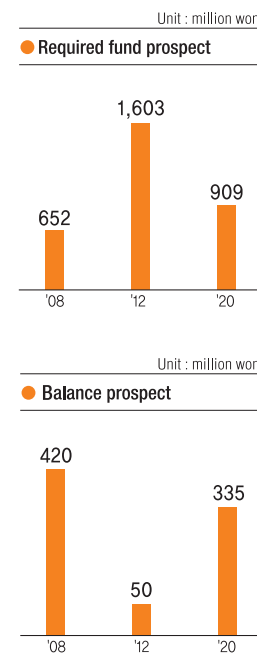
Mid to long term financing measures

The mid and long term financial plan requires 670.9billion won for the development of EMS facilities, the headquarter relocation project, and reinforcement of EMS, MOS and CBP facilities. This will be covered by the current terms of net profit(retained earnings), non-cash items(depreciation) and debt or member companies' contributions.

Cash flow outlook (Unit : million won)							
Classification	2008	2009	2010	2011	2012	2015	2020
Required Expenditures	652	703	838	1,075	1,603	929	909
Ordinary expenses	501	554	546	593	601	692	789
Corporate tax	21	7	6	2	0	0	0
Investment	130	153	323	559	1,144	69	79
Retirement insurance deposit	30	16	20	20	20	22	25
Financing	717	744	770	784	1,552	928	991
Revenue	717	744	770	784	975	928	991
Debt	0	0	0	0	696	0	0
Current fund	65	41	-68	-291	-51	-1	83
Balance	420	461	393	102	50	289	335

※ Non cash flow items excluded

(Source : 2020 mid to long-term financial plan, 2007.12)



TIP 1. EMS(energy management system)

Power system operator can control generators above 20MW KPX has an essential role in controlling and managing the generation, transmission and distribution of energy as the "brain of the entire power system".

2. MOS : Market Operating System

It can promptly carry out complicated power trading from bidding to settlement and accurately use various computer systems in connection with the dispatching system.

3. CBP : Cost-Based Pool

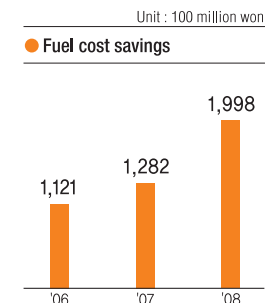
The current Korean electricity market is called a Cost-Based Pool, since the market price reflects actual generation costs. CBP under limited competition is introduced to accumulate experience and to avoid risk at the initial stage for the next market evolution.

Efforts for higher economic efficiency

Optimized operation of power system

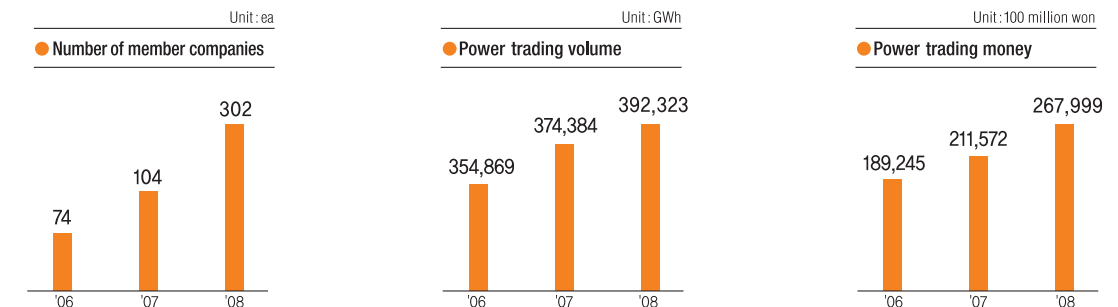
KPX saved about 200billion won of fuel cost in 2008 by efficiently implementing three main functions in coordination with market operations, system operations and long term power planning.

Fuel cost savings (Unit : 100 million won)			
ITEMS	2006	2007	2008
Increased plant factor - low (generation) cost generators	582	705	1,019
Increased plant factor - pumped storage	336	396	723
Optimal outage scheduling	203	181	256
Sum	1,121	1,282	1,998



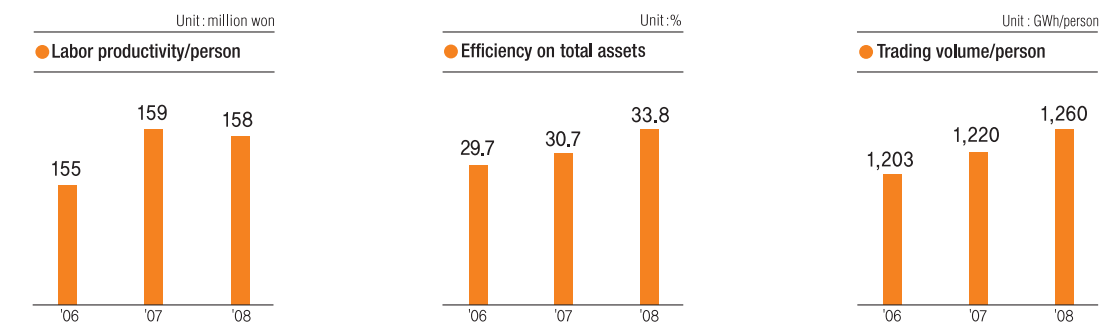
Revitalized competition effects in power market.

Incremental customer satisfaction and awareness of KPX lead to the growth of trading volume and trading money. As a result, it generates high profits from member generation companies, without an electricity tariff increase.



Managerial productivity increase

KPX has increased managerial productivity, labor productivity/person, return on assets, and trading volume, through the effective management of human resources and assets. Strengthening internal competitiveness and cost cutting efforts will continuously lead managerial productivity.



TIP 1. Low cost generation power plant

This includes coal-fired, and nuclear power plants. System operators can save total generation through the costs optimization and use of coal-fired power plants.

2. Pumped storage

Pumped storage hydroelectricity is a type of hydroelectric/power generation used by some power plants for load balancing. The method stores energy in the form of water, pumped from a lower elevation reservoir to a higher elevation. Low-cost off-peak electric power is used to run the pumps.

3. Outage scheduling

The equipment of power systems are periodically maintained. The planning and scheduling of outages of plant and equipment are inherently iterative processes that are progressively refined as real time operation is approached. There are yearly, and monthly outage scheduling.

Innovative Management Performance

- Innovative management vision and strategy ▶38
- Identifying the innovative task and process ▶38
- Innovate organization and CEO leadership ▶39
- Innovate information sharing and implementation ▶40
- Compensation for innovate activities ▶41
- Innovation management performance ▶41

True beauty comes from people's continuous passion and courage in pursuing change.

Disclosure on management approach

1. Managing the system of innovative management performance

VISION and strategic goals

In order to obtain our vision to become a “ world class professional organization leading the power industry,” KPX has set the strategic goal of “maximizing customer satisfaction by competitive organization culture” and implemented actual strategies, including customer satisfaction innovation, process innovation, performance management innovation, organizational culture innovation and responsible management innovation.

Policy

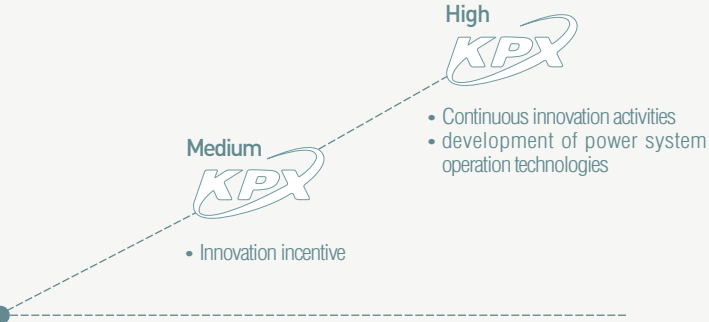
KPX operates a management innovation committee to conduct systematic, efficient and innovative management. We adopted an innovative management methodology such as workout for work improvement and encouraged employees’ voluntarily troubleshooting capabilities.

Responsibility of the organization

- Management innovation committee : financial planning and implementation
- Innovation management team : responsible for innovation affairs
- Department and branches : implementing innovation tasks

2. Materiality test

Important issues such as continuous innovation and development of power system operation technologies were drawn through ‘IPS Materiality Test Model™’



3. Main performance and implementation plan

Classification	Main performance		Implementation plan
	2007	2008	2009
Innovation mileage per capita	16.4	16.8	20
No. of suggestions	706	237	700
Innovation methodology	Implementing work out 1st stage	Implementing work out 2nd stage	Implementing work out 3rd stage
Innovation management performance	President's commendation at Korea National Productivity Awards	• Won prize of Minister of Knowledge and Economy on labor-management cooperation at National Productivity Contest • Won the 2008 Prime Minister's prize in power IT innovation	Award on sustainability management

Innovative management vision and strategy

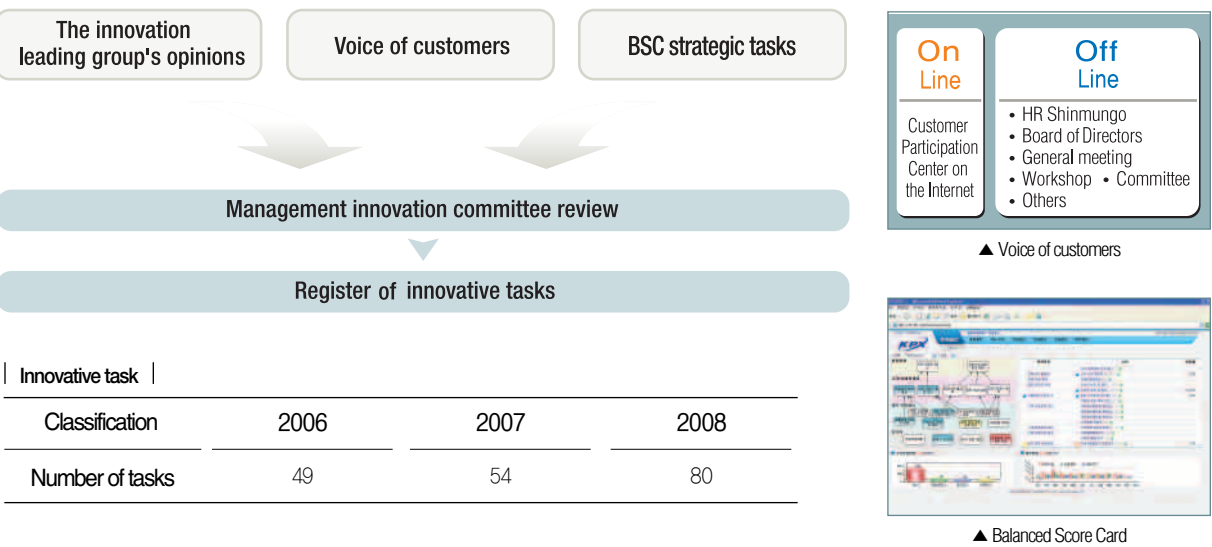
KPX recognized the changed managerial environment and established a stable supply growth foundation. Also, the Company has tried its best to become a world class professional organization leading power industry. Our innovative goal is to maximize customer value by establishing a competitive organizational culture with implementation strategies, such as customer satisfaction, process innovation, performance management innovation, organizational culture innovation, and transparent and responsible management innovation.

Innovation management scheme



Identifying innovative tasks and processes

Innovative tasks have been developed and registered through the innovation leading group's opinions, the voice of customers, and the BSC(Balanced Score Card).



TIP Balanced Score Card
This was originated by Robert Kaplan (Harvard Business School) and David Norton as a performance measurement framework that added strategic non-financial performance measures to traditional financial metrics to give managers and executives a more 'balanced' view of organizational performance.

Innovative organization and CEO leadership

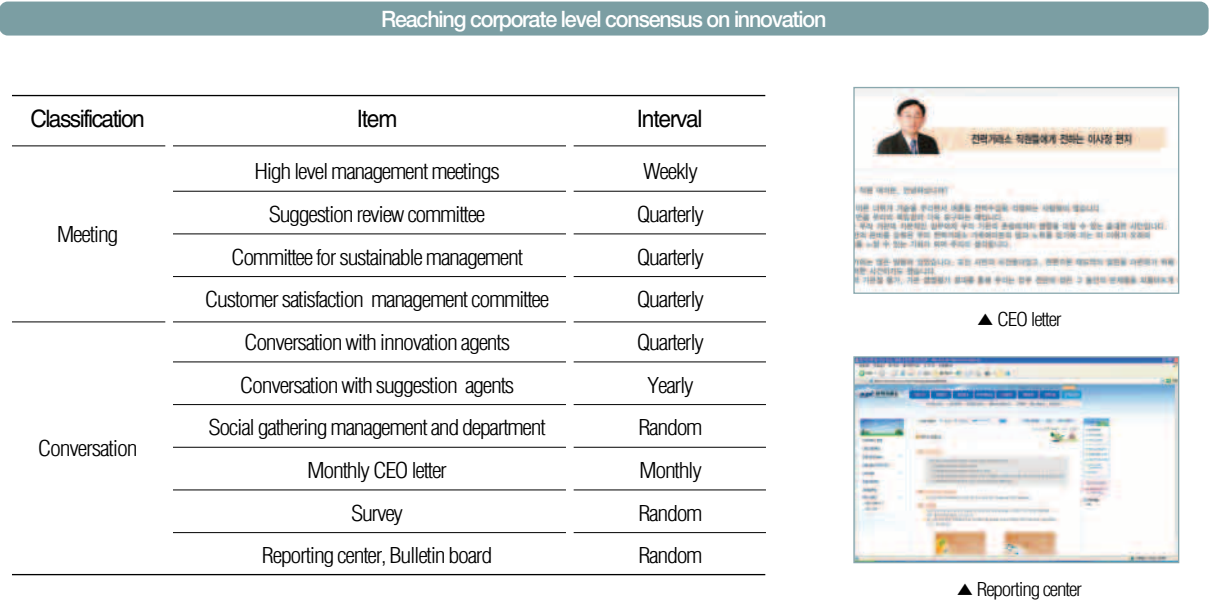
Innovation implementation organization

KPX operates an innovation implementation organization and an advisory committee as key organizations to implement innovation systematically and effectively. The management innovation team enhances the workability of innovation management, along with internal and external support groups.



CEO leadership

The CEO has taken an advanced role in expanding the innovative environment. He has hosted several innovation meetings and concluded the main managerial pending issue with the establishment of an innovative consensus through the department level, such as lunch meeting conversations with staff.



TIP Innovation leader
Innovative management leaders by department lead the daily innovative events, innovative tasks, and evaluation of related contests.

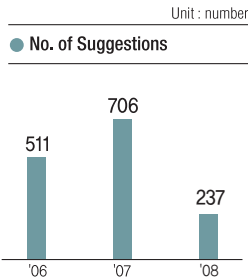
Innovative information sharing and implementation

Knowledge Management System(KMS)

Operating KMS allows us to integrate internal and external intellectual assets and to compensate intellectual value properly. KMS consists of knowledge suggestions and innovative suggestions. Knowledge suggestions include the entire staff's knowledge system. Innovation suggestions contribute to management efficiency by resolving problems among staff.

Suggestion items and economic effect

Classification	2006	2007	2008
No.of Suggestions	511	706	237
No.of Suggesters	773	798	237
Compensation for Suggestions (10,000 Won)	1,965	1,247	440
Economic effect (100million Won)	1,586	585	1,659



Work-Out

We conduct the workout to eradicate unnecessary work in order to stimulate employees' voluntary innovation activities. KPX completed 27 of 33 tasks through town meetings with the title "speed KPX". In 2008, the 2nd stage workout to improve working processes has helped to create a fun organization motivating internal change.

Strengthening training for innovation capabilities

KPX has provided various systematic training programs, including common capability, leadership capability and working capability, and shared innovative information through the best practice presentation.

Training for Strengthening Innovation Capabilities

Classification	Program	Contents
Common capability	• Classroom training and online training • Mentoring training	• Professionalism • Innovation • Cooperation
Leadership capability	• Classroom training and online training • External training	• Strategic thinking and communication • Organizational synergy • Cultivating staff capabilities and decision making capability
Working capability	• Classroom training and online training • Internal OJT and external training • Thursday lecture, academic clubs	• Power market and system operations • Power planning and operating IT facilities • Management planning
Other	• Classroom training and online training • Innovation day on a department basis	• Vitalization of the organizational culture • Sharing vision • Sharing innovation on a department basis



▲ Town meeting for workout



▲ Innovation management contest

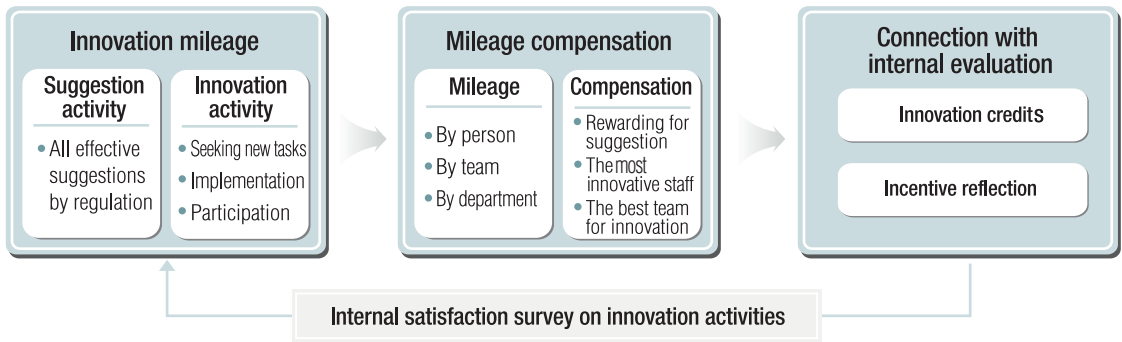
Best practice at innovation contest

- 1st Wonderful change of our office
- 2nd Guide movie for power IT adoption and use
- 3rd Publishing creative power book
- 4th Lunch communication for sharing ideas
- 5th Efficient use of office supplies

Compensation for innovative activities

KPX provides appropriate incentives to stimulate its staff's morale on innovation activities. Incentives are classified into suggestion incentive and innovation activity incentives. Innovation mileage is connected with internal evaluations by departments.

Compensation process



Reward results for suggestions

Classification	2006	2007	2008
No. participants rewarded	813	865	343
Reward (10,000won)	3,535	3,042	2,887



▲ Innovation reward

Innovation management performance

As a result of our innovation management activities, KPX won first prize in the National Contest on Public Innovation in 2006, the President's commendation at the "National Productivity Awards" Ceremony in 2007 and first prize in the Responsible Management of Public Innovation in 2007.

Main awards received from outside organization

Award	Awarding organization	Date
First prize at National Productivity Innovation Leadership	Korea Productivity Center	2004. 9
2nd place for excellence of a public financial institute based on the government evaluation.	Ministry of Planning & Budget	2005. 6
Prime Minister's award in Kyunghyang Electricity Energy Contest	Kyunghyang Newspaper	2005. 11
ISO 9001 certificate on power system operations	Korean Standards Association	2005. 11
Award for innovative management in Korea Management Contest in 2005	Korean Management Association	2005. 12
First prize at the national contest on public innovation in 2006	Korean Institute for Public Autonomy	2006. 12
Advanced into Level-5 in government's innovation evaluation	Ministry of Planning & Budget	2007. 6
President's commendation at the "National Productivity Awards" Ceremony	Korea Productivity Center	2007. 9
First prize in the Responsible Management of Public Innovation	Korean Institute for Public Autonomy	2007. 12
Bronze prize at the Korea SW Awards	Information Technology Professionals Association of Korea	2007. 12
2008 National Productivity Innovation Leadership prize	Korea Productivity Center	2008. 9
2008 Sustainability Prize as one of the most sustainable CEO's	Seoul School of Integrated Science and Technologies	2008. 12
First prize in Power IT Innovation	Korea Institute for Electronic Commerce	2008. 12



President's commendation at the National Productivity Awards Ceremony



Won prize of Minister of Knowledge and Economy for labor-management cooperation at National Productivity Contest

TIP 1. Knowledge management system

KMS enables companies to use accumulated intangible assets for higher competitiveness, which is connected with informal data and information.

2. Workout

Work-Out was first used by former GE CEO, Jack Welch, and is management tool to gather all employees' innovative ideas with their participation in the future of GE.

TIP National productivity contest

This provides a prize for a company with excellent management performance, and is led by the government to encourage systemized and efficient management.

Ethical Management Performance

We are creating a model for ethical management with responsible organizational culture, and fair and transparent management.

- Ethical management vision and strategy ▶44
- Ethical management organization ▶44
- Implementation process of ethical management ▶45
- Ethics regulations ▶45
- Ethical management implementation ▶46
- Strengthening monitoring of ethical management execution evaluation and feedback ▶47
- Ethics management action and feedback ▶47

Disclosure on management approach

1. Managing system for ethical management

Vision and strategy goal

In order to obtain our vision to become a “ world class professional organization leading power industry,” KPX has set a strategic goal of becoming the “transparent and efficiently clean KPX” and implemented actual strategies, including ethical management and transparent management.

Policy

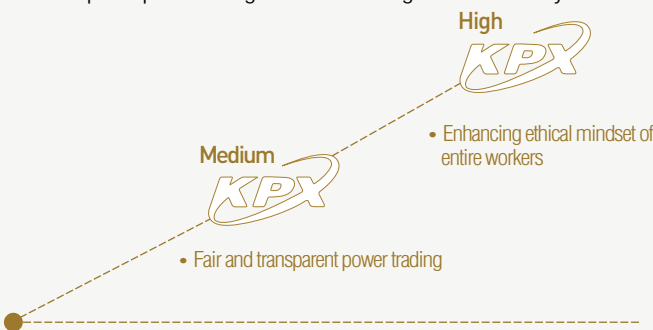
Our systematic ethical management policy and monitoring scheme were established by setting an ethical management policy on the basis of a code of conduct and developing action principles launched in 2003.

Responsibility in the organization

- CEO : Ethical management leader
- Ethical management committee : ethical management institutional improvement
- General manager of general affairs : general manager responsible for ethical management
- Planning and budget team : responsible for ethical management
- Department and branches : implementing creative management

2. Materiality test

Important issues such as enhancement of the ethical mindset of entire workers, fair and transparent power trading were drawn through ‘IPS Materiality Test Model’.

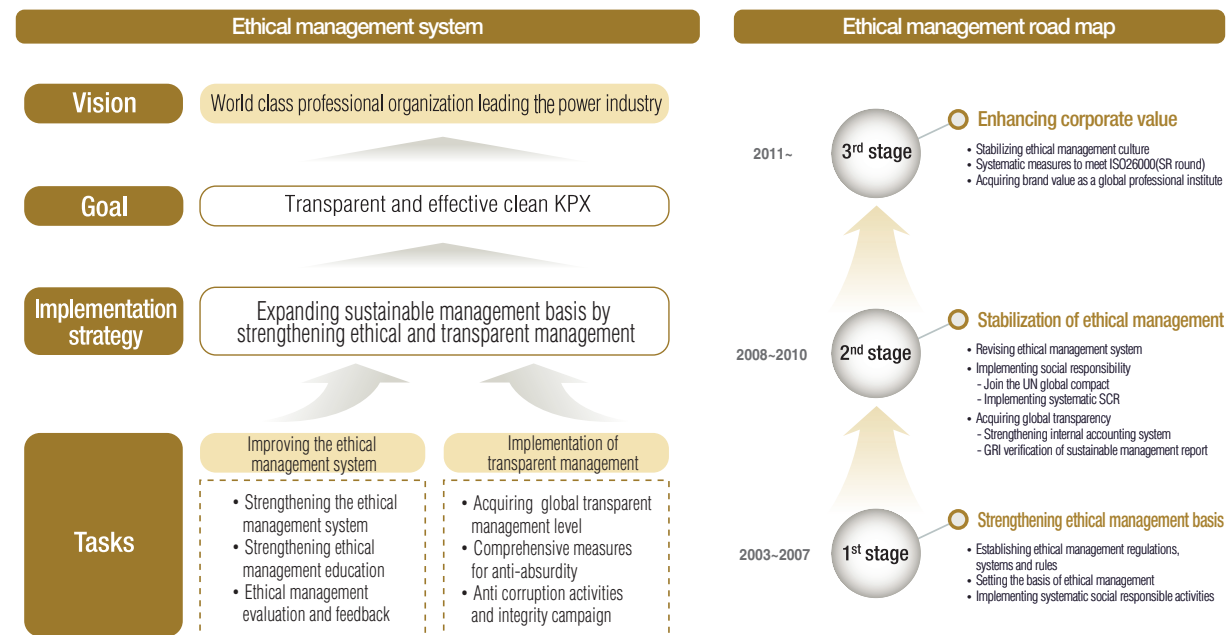


3. Main performance and implementation plan

Classification	Main performance		Implementation plan
	2007	2008	2009
Ethical road map	Establishing ethical management basis	Improving ethical management system	Obtaining ethical management
Participants in ethical management cyber training(person)	280	313 (all employees)	313 (all employees)
Competitive bidding(case)	42	37	37
Cyber procurement ratio(%)	95	99	99

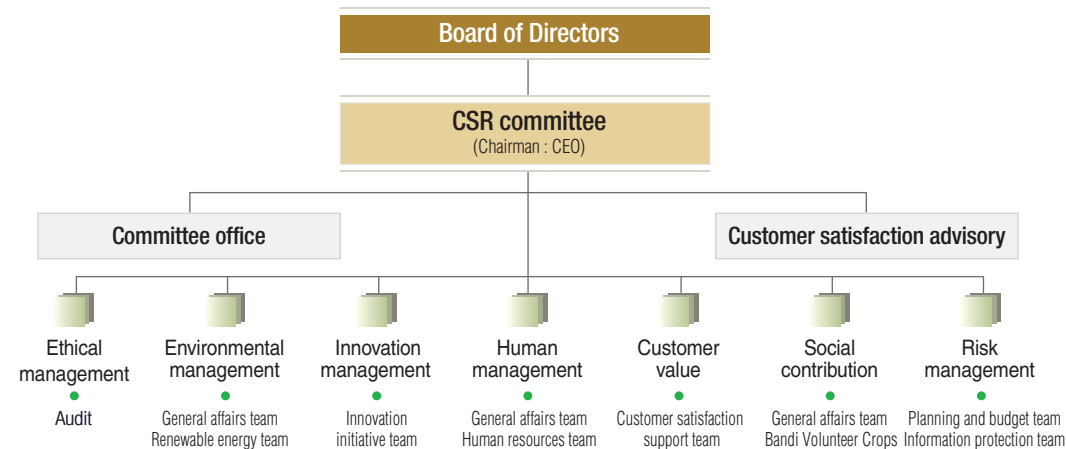
Ethical management vision and strategy

KPX set an ethical management goal to achieve a transparent and efficient clean company and set a vision to become a “world class level professional organization.” It is crucial for domestic companies as well as public companies, to comply with ethical management principles. Therefore, KPX places its top priority on ethical management, since it was founded on the pursuit of public interest.



Ethical management organization

We are operating an ethical management committee, as well as staff, managers and a department in charge of ethical management.

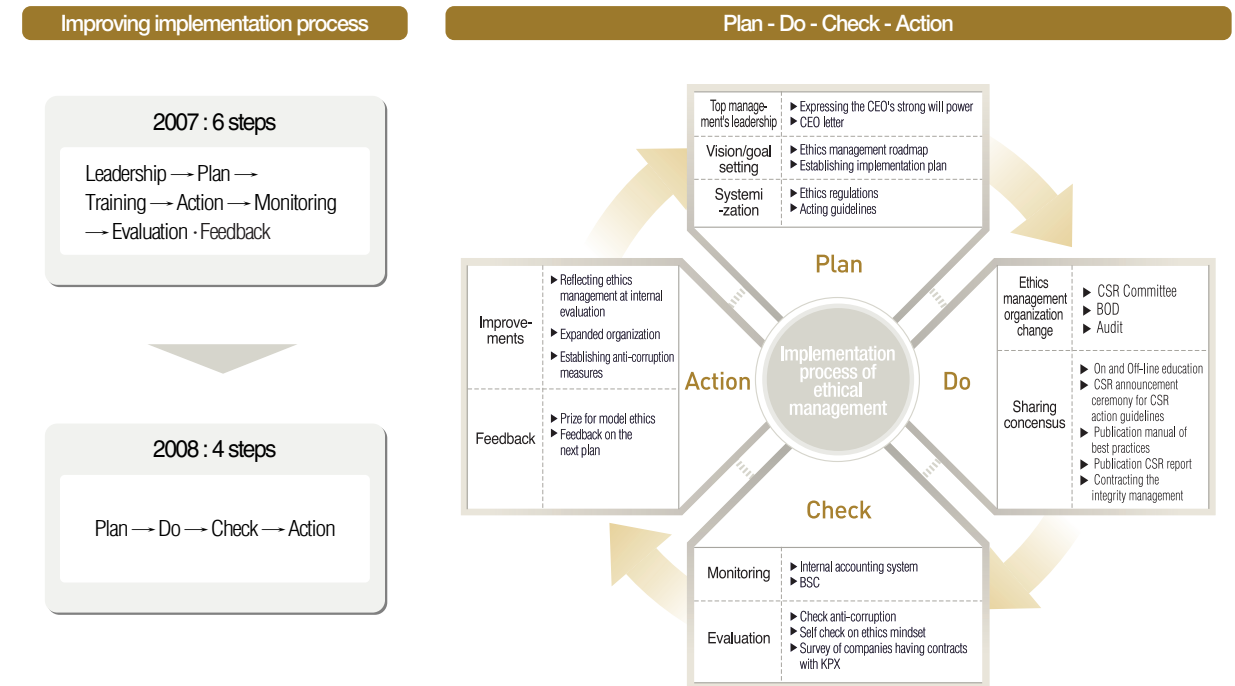


TIP ISO 26000

ISO, the International Organization for Standardization, has launched the development of an International Standard providing guidelines for social responsibility (SR) including principles of the 7 major areas.

Implementation process of ethical management

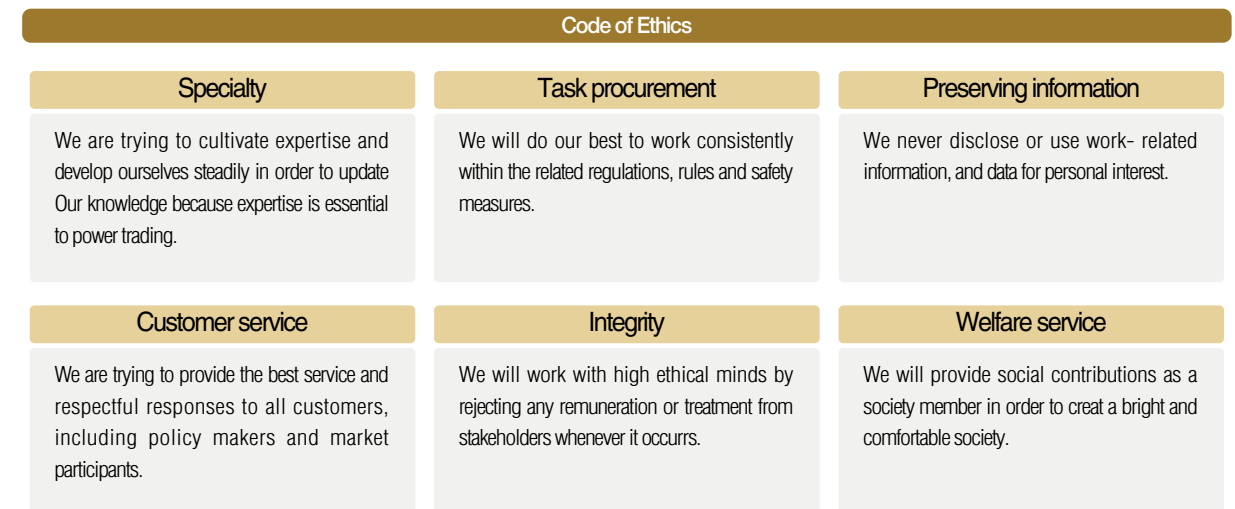
It is the CEO's will power that creates the systematic ethical management loop, including planning, training, action, monitoring, evaluation, and feedback.



Ethics regulations

With its long term growth and healthy organizational culture, KPX sets six directives including strengthening employees' pride to meet public responsibility in June 2003.

In 2007, specifying action standards, such as fair working processes, enable staff to decide the value criteria for personal activities and working hours in a transparent manner.



Ethical management implementation

In order to realize our vision of a "transparent and efficiently clean KPX" and implement an ethical management plan, KPX has conducted an ethics management process including the CEO's strong will power, integrity activities, and education on ethical management.

CEO's strong will power

We held an announcement ceremony in August 2008 on KPX's integrity action guidelines including preventing past unfair practices, treatments, and bribes in preparation for the implementation of ethical management, environment management and socially responsible management practices.

Period	Contents
2008. 1~12	Expressing the CEO's strong will power in monthly meeting and management meeting
2008. 11	Announcement ceremony on sustainable management and commitment meeting for ethical management
2008. 11	Reflecting the CEO's strong will power in CEO letter
2008. 12	Selected model staff for ethical management
2008. 12	Readjusting the ethical management roadmap

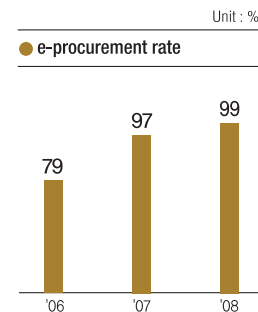


▲ Announcement ceremony on KPX's sustainable management and ethical management implementation campaign

Integrity activities for anti-corruption

KPX is leading the integrity activities for anti-corruption, including fundamental principles at work, anti-corruption case practices, and competitive procurement and e-procurement, etc.

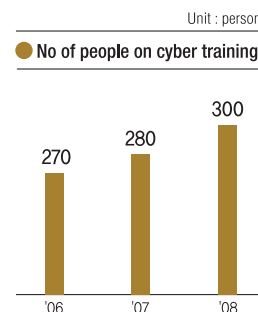
Period	Contents
2008. 1~12	Intensive review of fundamental principles at work
2008. 1~12	Education on sample practices of anti-corruption through case studies
2008. 1~12	Implementing integrity pact
2008. 1~12	Expanding competitive procurement(37 cases) and e-procurement(99%)



Education on ethical management

We carried out cyber education to establish a consensus on theoretical knowledge and the necessity for an ethical mindset from August to October of 2008. A celebrity delivered a special lecture to all employees on the necessity for ethical management and activities emphasizing the importance of ethical management in November 2008.

Period	Contents
2008. 3	Special morning lecture - lecturer : Kim ki chan(Catholic Management College)
2008. 8~9	Cyber education on ethical management
2008. 10~	Online quiz on ethical management
2008. 11	Posting other ethical management practices from other institutes like the anti-corruption & civil rights commission



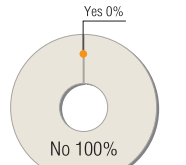
TIP Integrity Pact

The Integrity Pact is intended to make public procurement transparent by binding both parties to ethical conduct. It also envisages a monitoring role for civil society who are the ultimate beneficiaries of government action. IP should cover all activities related to the contract from pre-selection of bidders, bidding and contracting, implementation, completion and operation.

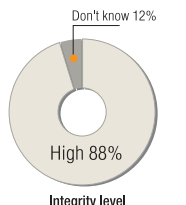
Strengthening monitoring of ethical management execution evaluation and feedback

KPX established continual internal and external monitoring systems. In 2008, offenders were given disciplinary measures through an audit from the Board of Audit and Inspection. Also, the performance management system(BSC) has monitored ethical management activities and reflected those in the internal evaluation.

	Classification	Period	Contents	Results
External	Board of Directors	Throughout the year	<ul style="list-style-type: none"> BOD information desk on intranet Increase the issue report 	Appropriate
	Audit from the Board of Audit and Inspection	2008. 4-6	<ul style="list-style-type: none"> Periodic auditing 	Taking disciplinary measures on the offending persons
	Audit Office	Throughout the year	<ul style="list-style-type: none"> Periodic and general auditing 	Appropriate
Internal	Enterprise Risk Management(ERM)	Throughout the year	<ul style="list-style-type: none"> Checking the effectiveness of the internal accounting system 	Appropriate
	Sustainable Management Report	2008. 10	<ul style="list-style-type: none"> Verification of sustainable management 	Acquired GRI application level A+ requirement
	Performance Management System(BSC)	Throughout the year	<ul style="list-style-type: none"> Evaluating ethics management activities 	The participation rate of education for ethical management 100% The participation rate of self check for ethical mindset 85%
	Stakeholder Integrity Survey	2008. 4-6	<ul style="list-style-type: none"> Integrity survey of companies having contracts with KPX Operating ethical management Help Line "HR Shinmungo"(a grievances filing system) (no cases) 	Positive answer about 88% No case No case



Did you provide gifts/treats to KPX employees?



▲ Integrity survey results

Ethics management action and feedback

KPX expanded the CSR committee in order to enhance ethics management activities and established comprehensive measures considering internal opinions. Finally, we have implemented ethics management evaluation and feedback.

Ethics management organizational changes

Classification	Before December 2008	After December 2008
Committee	Ethics management committee	CSR committee
Chairperson	Director of Planning	CEO
Committee members	13 members including general managers and representatives of labor union	10 members including directors, general managers, representatives of labor union, etc.
Subcommittee members	None	Managers and staff in charge of 7 areas
Main tasks	Ethics management, social contribution area	7 areas including ethics management, environmental management area

Main items of committee of corporate sustainability

- Improvement of the sustainable management implementation system
- Reporting the results of public institutes' meeting organized by MKE
- 2008 exemplary staff of ethical management
- Reporting the results of 2008 customer satisfaction activities
- Social responsibility management results and plan

Comprehensive measures to prevent offenses

Classification	Main tasks	Execution date	Department in charge
Strengthening ethics management	<ul style="list-style-type: none"> Announcement ceremony of KPX's integrity actions Prize for staff of ethical management Cyber education on ethical management Expanding ethical mindset through CEO letter and employee meeting 	2008. 11 2008. 12 2008. 12 More than once every quarter	Planning & budget team " " General affairs team, planning & budget team, innovation initiative team
	<ul style="list-style-type: none"> Revised personal regulations Revised overseas business regulations Reviewed prize and punishment regulations Revised working performance evaluation guidelines Enhanced transparency of the procurement and service contract 	2008. 10 2008. 11 2008. 11 2008. 11 2008. 11	General affairs team " " Innovation initiative team Finance team
	<ul style="list-style-type: none"> Strengthening self auditing function Integrity survey of companies having contracts with KPX Monitoring the integrity action guidelines Periodic monitoring and check on implementation to prevent offenses Continual auditing on weak areas Education to prevent recurrence on the auditing cases Campaign for clean company General auditing by departments 	2008. 9 2008. 10 2008. 11 2008. 11 On demand On demand 2008. 11	Audit and inspection office

TIP GRI(Global Reporting Initiative)

GRI is a UNEP (United National Environmental Program) body in charge of developing globally applicable guidelines for sustainability reporting.

Environmental Management Performance

- Environmental management vision and strategy ▶50
- Electricity supply and demand policy and environment ▶50
- Strengthening electricity policy in the environmental sector ▶51
- Foundation to cope with climate change ▶52
- Strengthening energy saving activities and environmental preservation ▶53
- Establishment of environmental infrastructure of electricity sector ▶53

In environmental management, looking ahead is another strategy for sustainable development.

Disclosure on Management Approach

1. Managing system for environmental management

Vision and strategy goal

In order to obtain our environment vision of a "economical and environmental sustainable energy system," KPX sets four strategy goals and implements actual strategies including strengthening electricity policy in the environmental sector, measures to meet climate change, energy efficiency and strengthening environmental preservation, and the establishment of environmental infrastructure in electricity areas.

Policy

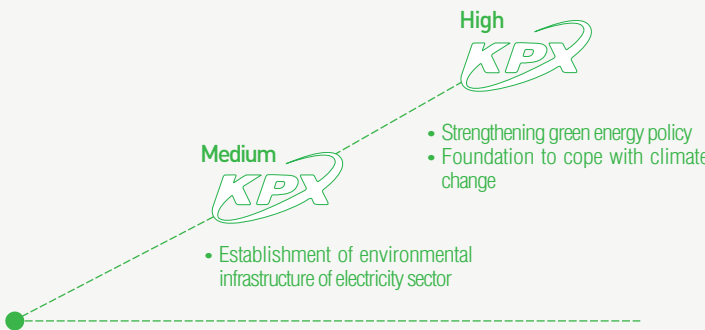
The BPE occurs biannually and considers the CO₂ emission cost and is aimed at forming an optimal generation mix reflecting environmentally friendly generators, such as renewables. We are trying to carry out energy saving campaigns at the corporate level to increase energy efficiency and eliminate wasted elements.

Responsibility in the organization

- General Affairs and Power Planning Department : Responsible for environmental management
- Department and Branches : Implementing environmental management

2. Materiality test

Important issues such as green energy policy promotion and foundation to cope with climate change were drawn through 'IPS Materiality Test Model™'.



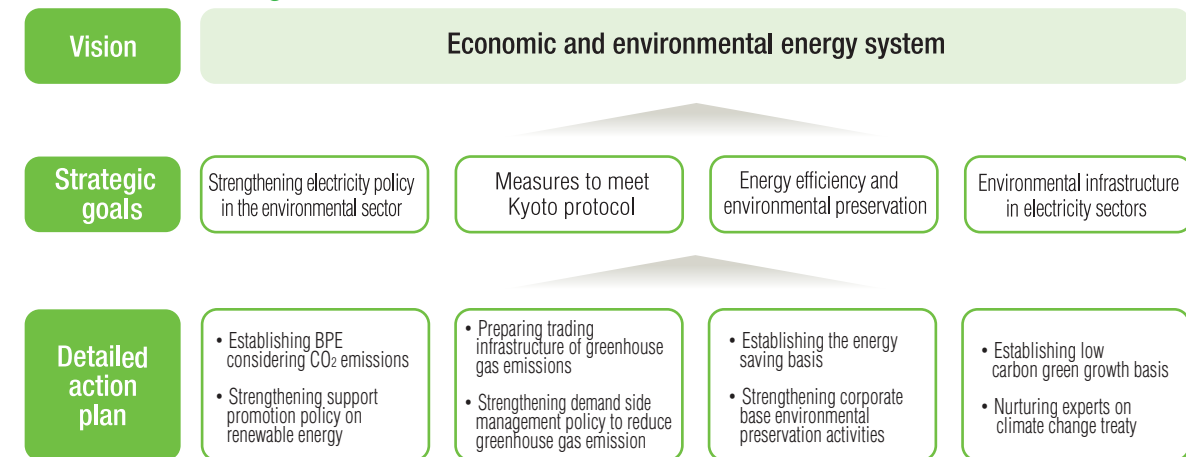
3. Main performance and implementation plan

Classification	Main performance		Implementation plan
	2007	2008	2009
Establishing BPE	Inter-year power plan	Establishing 4 th BPE	Inter-year power plan
CO ₂ Emission(kg-C/kWh)	0,119	0,119	0,124
Emission trading road map	Develop basic model for emission trading	1st stage pilot emission trading	2nd stage pilot emission trading
Procurement of environmentally friendly goods (million won)	304	362	267

Environmental management vision and strategy

KPX sets an environmental vision, as the establishment of an economical and environmentally conscious energy system to lead the national environmental energy policy. We established four core strategic goals including strengthening the environmental sector's electricity policy, measures to meet the Kyoto protocol, energy efficiency and conservation, and environmental infrastructure in the electricity sectors, following a detailed action plan.

Environmental management structure

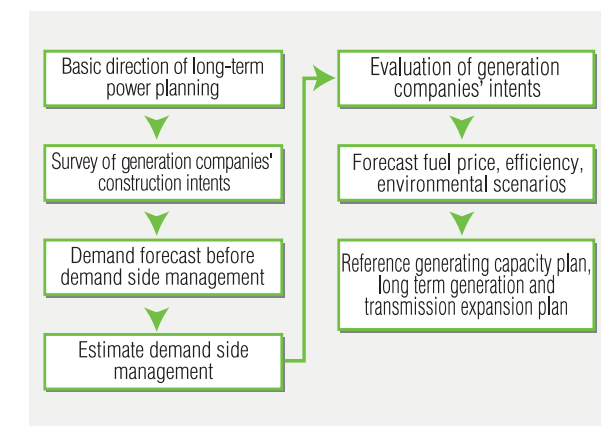


Electricity supply and demand policy and the environment

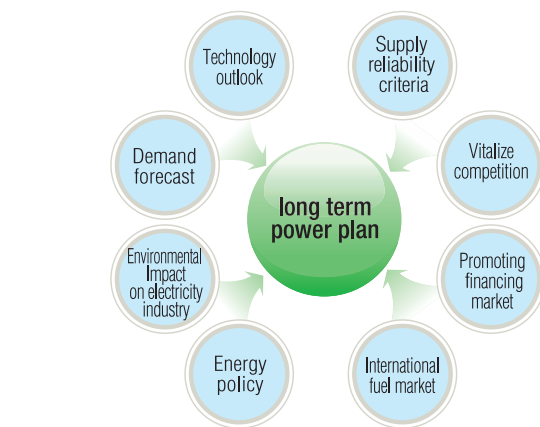
KPX has biannually supported and cooperated in the establishment of a basic plan on electricity supply and demand. We forecast mid and long term demand and set a generation expansion plan, as well as DSM plan, to meet the growing demand.

KPX has created an optimal generation expansion plan with the least cost goal under the scenario, since it is necessary to analyze the future energy environmental scenarios, including fuel prices, technology outlook, and environmental regulations.

Establishment procedure of the basic plan of electricity supply and demand (basic direction of BPE)



Considerations when establishing long term BPE



TIP Emission trading

Allows international trading after setting greenhouse gas emission cap to industrialized countries specified in Kyoto protocol.

Strengthening electricity policy in environmental sector

The 4th BPE(December 2008) encouraged finding an optimal generation mix with the newly adopted CO₂ cost. Also, it focused on air pollution reduction, DSM expansion and renewable energy expansion.

Establishing long term BPE considering CO₂ emissions

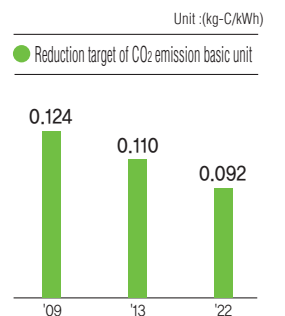
From 2013, Korea is likely to have a CO₂ reduction burden since the Kyoto protocol was effective in February 2005. CO₂ costs are considered in forming an optimal generation mix, since the CO₂ emissions from the generation sector are about 25%. Separately, setting a per unit CO₂ emission target makes it possible to prepare a national base for climate change

Per unit CO₂ emission target and CO₂ cost

Classification	2009	2013	2018	2022
CO ₂ emission(Ton-C)	55,255	54,859	56,370	51,099
Per unit CO ₂ emissions	0.124	0.110	0.105	0.092
CO ₂ cost(won/ton)	32,000			

Kyoto protocol key items

- Reduce 5.2% of greenhouse gas compared to 90's (2008-2012 period)



Strengthening support promotion policy on renewable energy

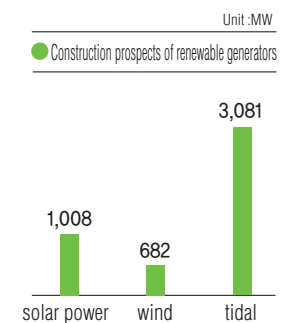
Reflection of renewable energy in BPE

Recently, more renewable energy has entered into the market according to the government's renewable energy expansion policy. BPE reflected all intents for the construction of renewable energy in consideration with environmentally friendly planning. According to the 4th BPE, new renewables will be constructed up to 6456MW until 2022.

Construction prospects of renewable energy

Classification	Hydro	Wind	Tidal	Solar	LFG · other
Capacity	1,008	682	88	3,081	1,597

※Construction period : 2008-2022

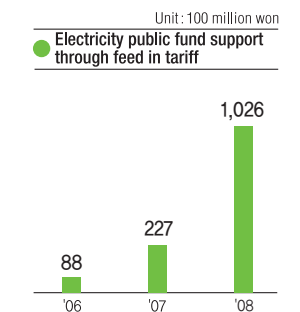


Timely licensing review for renewables and support by feed-in tariff

KPX has contributed to and supported renewable energy licensing, technology review, and feed-in tariff payment instead of local governments or the Ministry of Knowledge and Economy.

Licensing status of renewable energy

Classification	2006	2007	2008
Solar	87	675	479
Wind	187	195	200
Hydro	12	8	63
Others	10	23	28
Sum	296	901	770



TIP Kyoto protocol

The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries for reducing greenhouse gas (GHG) emissions. The Kyoto Protocol was adopted in Kyoto, Japan, on 11 December 1997 and entered into force on 16 February 2005.

Foundation to cope with climate change

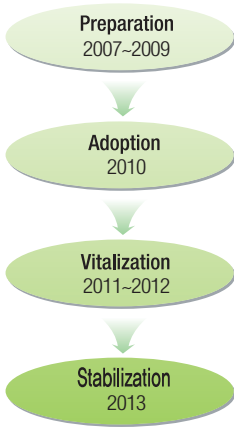
In order to meet climate change, KPX prepared the development of an emissions trading simulation, since the company is working to adopt emissions trading. In addition, strengthening DSM policy is conducted to reduce air pollution.

Adoption of emission trading infrastructure in power sector

Emission trading is the most effective mechanism used by advanced countries, such as Europe, to reduce greenhouse gas. KPX is trying to play a key role in the national base emissions trading related R&D study. In addition, we committed to the adoption of a roadmap on emissions trading and execution of related tasks.

Implementing emission trading by steps

Step	Period	Contents
Preparation	2007~2008	<ul style="list-style-type: none">Develop a basic model for emissions tradingDevelop emission coefficient at generation
	2009	<ul style="list-style-type: none">Establish the emissions trading roadmapBuild up the emissions trading system connected with market operating system2nd stage pilot emissions trading
Adoption (trial run)	2010	<ul style="list-style-type: none">Adopt simulation system connected with market operating systemAnalyze and review the simulation resultsReview emissions trading rules
Vitalization	2011	<ul style="list-style-type: none">Operat trial run of emissions trading systemReview emissions strading rules for supporting policy
	2012	<ul style="list-style-type: none">Review trial run operation resultsPrepar the actual emissions trading
Stabilization	2013	<ul style="list-style-type: none">Actual emission trading in case KPX is designated as emission trading company



Strengthening DSM policy to reduce air pollution

Demand side management is very important for Korea to save energy due to its high dependence on imported fuel, especially as demand steadily grows based on higher summer peak and higher oil prices.

DSM has effects in substituting new power plants and reducing green house gas emissions. To do so, the 4th BPE strengthened DSM policy, such as setting targets and detailed action plans.

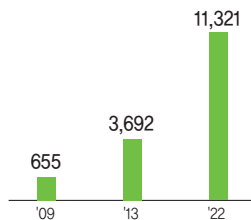
Demand side management target and CO2 emisnons

Classification	2009	2013	2018	2022
Demand side management target	655	3,692	7,901	11,321
CO2 emisnons	1,094	6,070	16,348	26,862

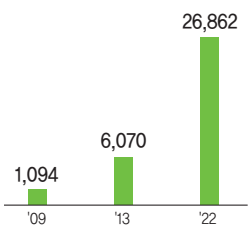
TIP The United Nations Framework Convention on Climate Change (UNFCCC or FCCC)

An international environmental treaty produced at the United Nations Conference on Environment and Development (UNCED), informally known as the Earth Summit, held in Rio de Janeiro from 3 to 14 June 1992. The treaty is aimed at stabilizing greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system.

DSM Target Unit:MW



CO2 reduction Unit :1000ton



Strengthening energy saving activities and environmental preservation

Creating a foundation for conserving energy

KPX produced green house gas mainly from electricity, tap water and transportation of employees' on business trips. In order to reduce emissions, KPX has adopted high efficiency lights, reduced portable water by half, and turn off lights at lunch time. As a result, electricity and tap water consumption decreased by 0.7% and 6.5%, respectively, compared with last year.

Main energy consumption and CO2 emissions

Classification	2006	2007	2008
Electricity(MWh)	1,998	2,081	2,067
Water (m³)	7,825	8,486	7,936
CO2 emission(ton)	849	884	878

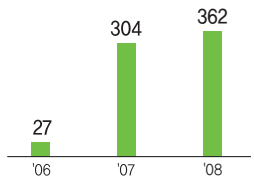


Cheong-gae hill cleanup activities

Strengthening environmental preservation activities

KPX has conducted an environmental impact analysis on neighboring areas and a company one mountain campaign. Cheonan branch is located in a residential area, not categorized into an Eco-preservation area. However, the neighboring area of Cheonan belongs to a tap water conservation area, which had an environmental impact analysis in advance and a furnished water purifier tank. To strengthen environmental preservation activities at procurement, we have expanded eco-friendly products by adding points to companies having a green mark certificate or Those deemed an environmental-friendly company.

Unit : million won
Procurement of environmentally-friendly goods



Establishment of environmental infrastructure in electricity sector

Academy and industry cooperation network

Domestic and international surroundings such as the global environmental regulations and emissions limit in metropolitan areas are changing dramatically. KPX and Joongang University agreed to cooperate in the environmental policy sector to make a reliable sustainable electricity policy.

Nurturing experts on climate change treaty

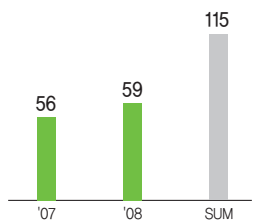
In 2008, KPX opened training courses on the climate change treaty to various government, members civilians, NGOs and its own employees in order to meet international pressure on climate change.



MOU for pilot emissions trading for generation sector

Joint agreement for establishing the emissions trading exchange

Unit :Person
Training results for cultivating experts on climate change treaty



Training course on climate change treaty

Title	Main contents	Days	No. of trainees
Climate Change treaty	<ul style="list-style-type: none">Basic theory of emission stradingGovernment's policy on CO2 emissionsCountermeasures in generation sector on the climate change treaty	3 days × 2 times	59

TIP Post -2012 measures system

Korea is likely to be obligated to achieve green house gas reductions and needs to take appropriate measures since the Kyoto protocol entered into effect in February 2006.

Socially Responsible Management Performance

- Local contribution strategy ▶56
- Respecting human rights ▶57
- Human resources development ▶58
- Win-win cooperation between company and labor union ▶59
- Harmony between work and life ▶59



We promise to create a wonderful world where happiness and joy are shared by all.

Disclosure on Management Approach

1. Managing system for socially responsible management

Vision and strategy goal

In order to obtain our socially responsible management vision for “a beautiful and bright society with KPX,” KPX has set and implemented three strategies, including local community cooperation activities, promoting volunteer activities to welfare facilities, and establishing a voluntary donation culture.

Policy

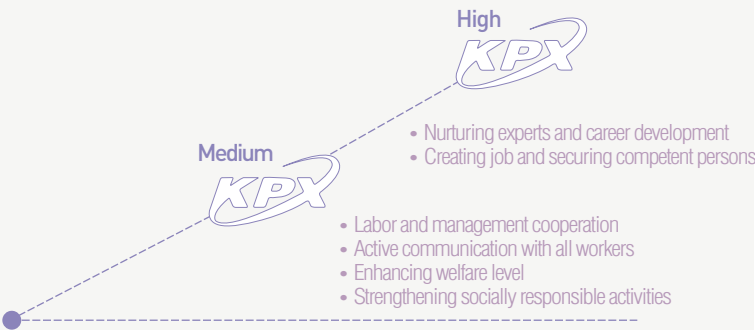
Social contribution activities have been conducted in three areas : local community cooperation activities, promoting volunteer activities to welfare facilities and establishing a voluntary donation culture. Our employees make efforts in social responsibility by respecting human rights, volunteering in activities and cooperating with the union.

Responsibility in the organization

- CEO : Socially responsible leader
- General affairs team : Responsible for socially responsible management
- Department and branches : Implementing socially responsible management

2. Materiality test

Important issues such as cultivating experts, developing career, creating job and securing competent persons were drawn through ‘IPS Materiality Test Model’.



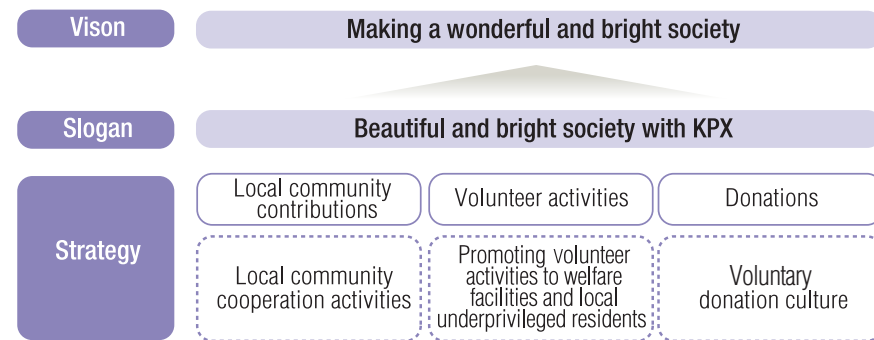
3. Main performance and implementation plan

Classification	Main performance		Implementation plan
	2007	2008	2009
Participants in social contribution activities (Person)	405	426	450
Social contribution expenditures(10,000won)	5,622	6,158	8,270
People of national merit (Person)	21	28	30
Training expenditures per person(10,000won)	454	379	427

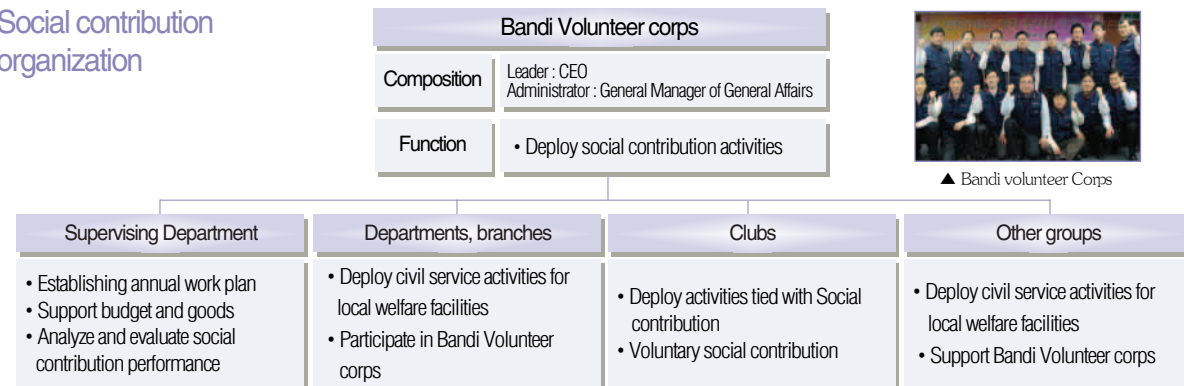
Local community contributions

KPX, the public institute leading the electricity industry, makes every effort in social responsibility and contributions to the regional society through entire staff's voluntary participation.

Social contribution implementation structure



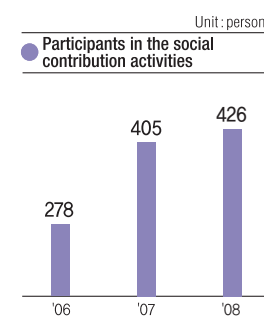
Social contribution organization



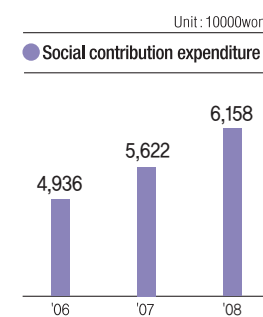
Social contribution program

KPX's social contribution programs are divided into regional contribution and voluntary service and donation. We are providing labor with help and subsidies to people having no surviving relatives, physically challenged persons, and boys/girls who are the head of the family. The labor union and female staffs also perform social contribution activities.

Program	Main activities
Local community contribution	<ul style="list-style-type: none"> Environmental cleanup activities Local community Contributions
Volunteer activities	<ul style="list-style-type: none"> Cheong-gae hill cleanup activities Han riverside cleanup activities One company one sister/village campaign (Ansung Dokjung) Support welfare facilities Volunteer activities for physically challenged persons Consolatory visits to Anyang Juvenile Reformatory One day picnic to Hyeonchungsa for physically challenged children Hope filled program for underprivileged persons Briquette delivery service with love(Sangdo dong) Bathing services at Somang house and 3 other welfare facilities
Donation	<ul style="list-style-type: none"> Donation with love Supporting households of children living alone (Cheonan si) Periodic support for Anyang Bethesda house Support for the Briquette delivery service associate Support for rural service community



▲ One company one sister/village campaign



▲ Briquet delivery service with love

Respecting human rights

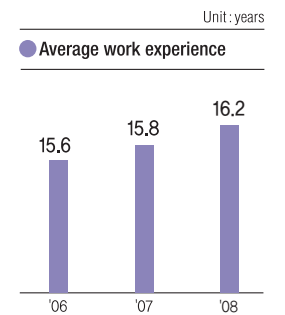
Employees' status

KPX has a 313 person work force with 16.2years of average work experience as of 2008. Since 2001, employees have worked stably with 15 retired workers.

(Unit: person, year, %)

Classification	2006	2007	2008
Employees	297	314	313
Average work experience(yrs)	15.6	15.8	16.2
Job creation rate	4.58	5.72	-0.32
Staff turn over rate	0.34	0.32	0.32

※ Job creation rate decreased due to Government led public institute's restructuring plan



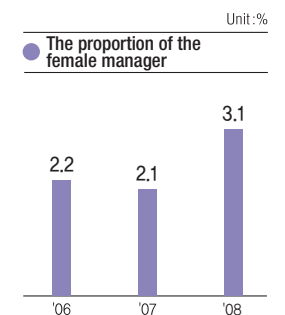
Respecting employees' human rights

We are strictly complying with articles on forced and child labor stipulated in regulations set forth by the International Labor Organization (ILO) and the Korean Labor Standards Act. For respecting human rights, we hold yearly education opportunities on preventing sexual harassment. KPX advocates gender equality by taking affirmative action to support female employees, such as eliminating discrimination against women in hiring, promotion and salary, while newly hired female employees increased by applying the female employment quota.

(Unit: person)

Classification	2006	2007	2008
Female workers	27(9.1%)	29(9.2%)	28(8.9%)
Female managers	4(2.2%)	4(2.1%)	6(3.1%)

※ Female managers : above at least the assistant manager level

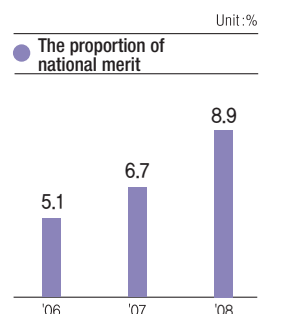


Expanding employment of the disabled or people of national merit

We apply incentives and an employment quota to provide job opportunities for the socially neglected and disabled, and for people of national merit. In 2008, there were 8 disabled workers and 28 people of national merit employed.

(Unit: person)

Classification	2006	2007	2008
Disabled	4(1.4%)	6(1.9%)	8(2.6%)
People of national merit	15(5.1%)	21(6.7%)	28(8.9%)

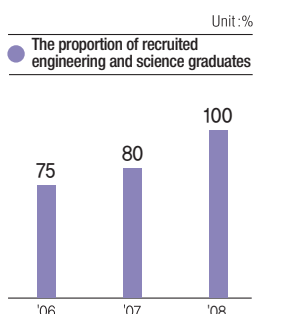


Expanding employment of engineering graduates and local people

Expanding employment of engineering graduates and local people without discrimination allows KPX to achieve a diversified staff composition. Engineering graduates and local people occupied 100% and 71% respectively among 10 new employees in 2008. For reference, the first annual salary reaches 27million won like the average in electricity companies.

(Unit: person)

Classification	2006	2007	2008
Employment of Engineering graduate	15(75%)	16(80%)	7(100%)
Employment of local person	4(20%)	7(35%)	5(71%)



TIP People of national merit

People of national merit means the surviving families of the dead soldiers and policemen, and KPX hires those people by open recruitment and hiring order.

Human resources development

Strategy for human resources development

In order to achieve our vision "World class professional institution leading the electricity industry," we have implemented HRD strategy, "Achieving 2020 vision through HRD," including HRD vision and nurturing competent employees. KPX has implemented a medium and long-term human resource development plan such as fostering competent people, learner's capability, and cultivating workers in advanced areas.



Nurturing experts

In order to nurture experts with theory as well as practice, we trained 2,246 people in 2008. We make various efforts aimed at educating 50% of total employees with a master's and doctoral degrees.

Training course		(Unit : person)		
Classification	Training course	2006	2007	2008
Basic capability	Introduction, ethics management	367	1,521	1,506
Common capability	Power trading basic	1,163	658	102
	Power system degree	138	106	351
Development capability	Domestic and overseas graduate degree	2	7	17
	Manager capability development	153	159	270
SEM		1,823	2,451	2,246

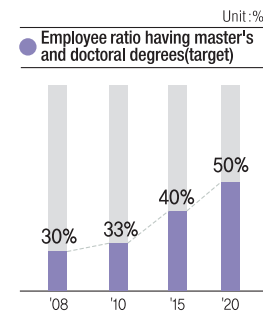
Training performance			(unit : 10,000Won)
Classification	2006	2007	2008
Training expense	350	454	379
Training hours/person	99	101	178

Establishment of continual learning organization

For cultivating expertise, KPX has established a continual learning program to provide employees with continuous opportunities to grow and develop their career through self-led learning, including an academic club, Thursday lectures and cyber learning.

Learning organization status

Classification	Academic clubs	Thursday lecture	Cyber learning
Participants	6 teams (223Persons)	17 times	1,712 persons



▲ Academic club's presentation

TIP e-HRD(Electronic-Human Resource Development)

As a series of continual learning, e-Human resource development system is for capability check and analysis of GAP, and overcoming GAP.

Win-win cooperation between company and labor union

Labor union status

The labor union includes 36%(113 persons) of all employees. There have been no labor disputes since the establishment of the labor union in June 2001.

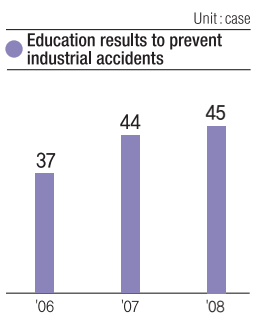
Establishing a cooperation channel between labor and management

KPX guarantees the freedom of association and the right to organize and bargain collectively. KPX and the labor union have entered into collective labor agreements every 2 years on the basis of conversation and cooperation. Ten labor and management representatives (the number of people from each party is the same) come together to hold a labor-management council meeting. Conducting a round table conference each quarter between labor and management promotes understanding and cooperation on pending issues.

No industrial accidents

KPX held 45 education sessions for preventing industrial accidents. As a result of these preventative activities in 2008, we have achieved a record of zero industrial accidents for four consecutive years.

Labor collective agreement's main items in 2008	
•	Amendment of salary regulations
•	Period and conditions for temporary rest
•	Indispensable work scope



Harmony between work and life

Fair evaluation and compensation

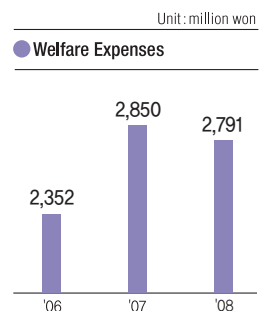
We continuously enhance job satisfaction and support and career development through consultation with executives. Our base salary differs from multi-dimensional evaluations and manager evaluation in terms of basic work and leadership. Also, personal incentives are compensated based on work performance.

Welfare policy

We operate a flexible benefits program aimed at removing inconsistency in the welfare system and raising employee satisfaction. Operating a flexible benefits program allows staff to choose welfare items within a preallocated welfare point.

Main fringe benefit status

Child education	Support of tuition fees for middle, high and college students, subsidies for day care and student dormitory in Seoul
Working support	4 compulsory social insurances, group insurance
Leisure culture	Operate recreational services, support club activities
Preservation of health	General health examination, accurate self diagnosis
Support housing matters	Support for housing costs and stabilization of livelihood, dormitory for employees
Family-friendly	Vacation after birth, rest for child care



Strengthening health management

Various health management programs allow staff to strengthen the organizational culture. KPX encourages staff to undergo precise health diagnosis, as well as an annual check up to prevent disease and control disease every 2 years. By installing healthcare equipment, KPX enables employees to check their own health condition.

TIP A retirement pension

Considering the recent low interest rate era, it is adopted for the worker's remaining life instead of current retirement allowances. The company can change the pension type with the worker's consent.

Customer Satisfaction Performance

There is no end point
in our customer-oriented mind

- Customer satisfaction vision and strategy ▶62
- Customer satisfaction management, execution and organization ▶62
- Establishment and use of the Policy Customer Relationship Management(PCRM) ▶63
- VOC integrated management system ▶63
- Customized service to meet customer needs ▶64
- Customer satisfaction management survey, evaluation and feedback ▶65

Disclosure on Management Approach

1. System for customer satisfaction management

Vision and strategy goal

In order to obtain our customer satisfaction management vision, "growing KPX together with customers", KPX has set and implemented three strategies, including establishing an organizational culture, developing a customer management and support system, and improving customer oriented institute and process.

Policy

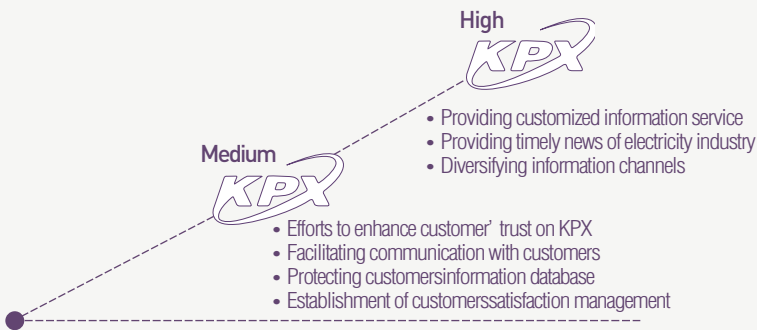
To efficiently manage customers' opinions, KPX has operated a customer satisfaction management organization and VOC system to deal with on/off-line customer voices.

Responsibility in the organization

- Customer satisfaction management council : Supervise customer satisfaction management
- Customer satisfaction team : Responsible for customer satisfaction management
- Department and branches : Implement customer satisfaction management

2. Materiality test

Important issues such as customized information service, timely news of electricity industry and diversified information channels were drawn through 'IPS Materiality Test Model'



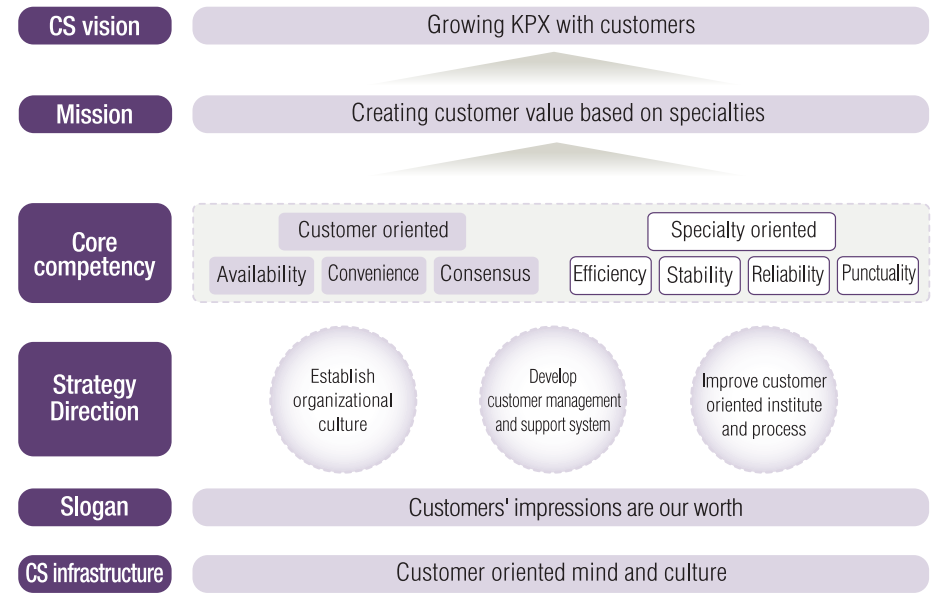
3. Main performance and implementation plan

Classification	Main performance		Implementation plan
	2007	2008	2009
Customer satisfaction score	85.7	87.9	89.0
Power IT availability(%)	99.94	99.96	99.95
Power IT Performance index	3.43	4.02	4.22
Power information cases	307	353	380

Customer satisfaction vision and strategy

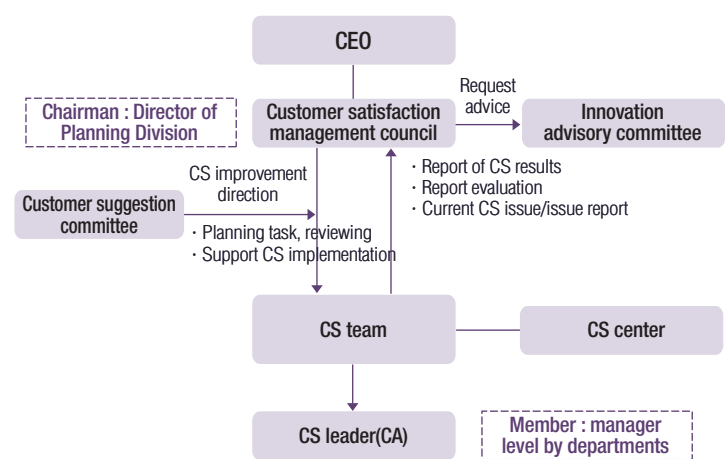
KPX has set its customer satisfaction vision, “growing KPX with customers”, to create new customer value based on specialties and recognized the importance of customer satisfaction for the company’s stable growth and development.

Customer satisfaction management scheme



Customer satisfaction management, execution and organization

KPX, with its CS team and department based CA leaders, has operated a customer satisfaction management council to effectively manage VOC from government and members.

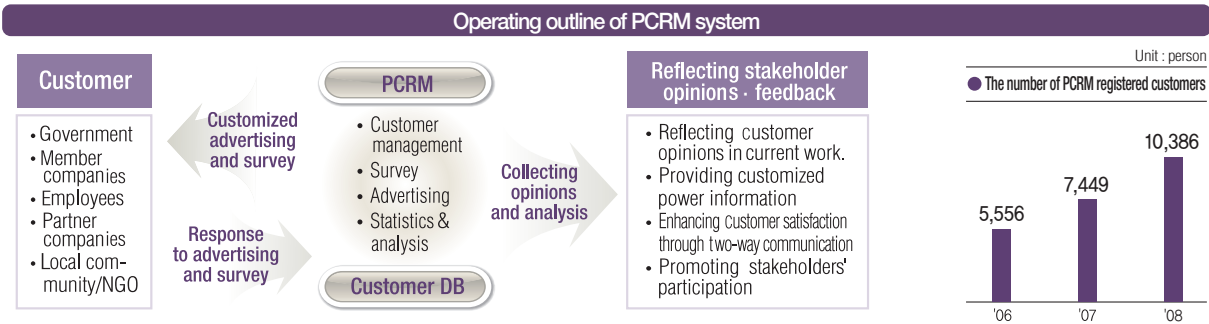


Activity results		
CS organization	Times	Results
CS management council	3	• Checking 2007 CS result and making 2008 plan • CS survey analysis and feedback • 2008 results check and feedback
Innovation advisory committee	2	• Two way type CS activities • Reviewing the possibility of CS system upgrade
Customer suggestion board	2	• No. of suggestions :44

TIP CS : Customer satisfaction
CA : Customer satisfaction agent

Establishment and use of the Policy Customer Relationship Management system(PCRM)

After establishing the PCRM, We are constantly collecting customers’ opinions of tasks and reflecting the feedback into current work. As a result, 10,386 registered customers were approached in December 2008.



Use of K-PCRM

K-PCRM provides general management information such as a newsletter, customized information service, self customer satisfaction survey, and workshop.

Operating results

Contents	Times
Sending newsletters	12
Customized information service	154
Self customer satisfaction survey	7
Events including workshops	18

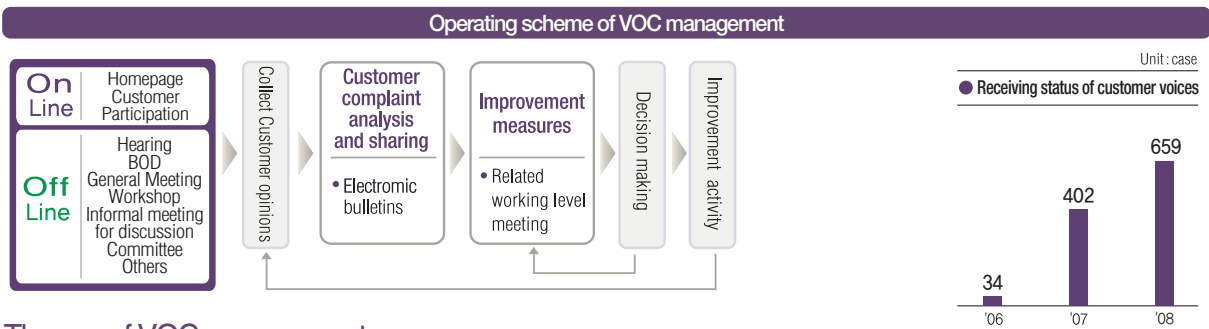


▲ KPX Newsletter

▲ Self customer satisfaction survey

VOC integrated management system

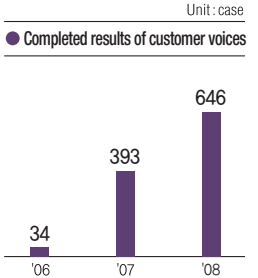
Operating the VOC integrated management system includes on-line and off-line improved work processes without similar complaints.



The use of VOC management

KPX not only acts swiftly to respond to the voice of customers but also reflects their suggestions in terms of work process, system upgrades and in the process of PCRM. In 2008, the VOC received 659 cases from customers and completed 646 cases.

Classification	Case	Main contents
General queries	86	Reducing responding time of general queries
Request data	187	Publication and delivery of handbook
Improving tasks	261	Provided UCC(user generated contents) regarding power trading
Improving system	87	Adopting web-based bidding type
Customer reply	38	Operating CS agents for member companies



TIP The Power trading Handbook

Since 2001, this handbook has been published to promote efficient working processes, which includes member registration, bidding, generation cost evaluation, as well as frequent questions and answers.

Customized service to meet customer needs

KPX committed itself to delivering customer oriented to promote a centered service on technology and better understanding of the power industry.

Operating member company agents

We are operating agents for 191 small scale member companies, having less than 1000kW in capacity, to support their understanding of the power market and electricity policy.

| Operating results |

Major difficulties	Supporting results
Public information disclosure system	Provided UCC(user generated contents) regarding power trading
Request of bidding and settlement manual	Publication and delivery of settlement manual
Omittance of metering data	Support metering data acquisition
Notification personal change in charge	Notifying through e-mail and homepage



▲ UCC for helping power trading

Technical support for small scale member companies

KPX provides member companies with monitoring and technical support for electricity IT facilities. In particular, new member companies have received field education services since November 2005. We transfer new technology, power plant control technology developed by small and medium sized partner companies, to member companies by the CEO conference and workshop.

| Technical support actual results |

Period	Service	Contents
2008. 5~8	Technical support for small scale member companies	Cover the power IT capability
2008. 5/8	Power IT workshop	Exchanging power IT technolog information to enhance IT use capability of member companies
2008. 6~12	New product development for small scale company	Small scale company sustainable growth and win-win cooperation
2008. 3/10	Meeting for overseas business of promising small to mid-size companies	Building overseas business



▲ Power IT workshop

PR activities to enhance understanding of the power industry

We engage in PR activities to enhance understanding in the power industry, which includes an experience group on the power market, supported by the electricity public fund, in accordance with establishing infrastructure on power industry regulations.

| PR results |

Period	Service	Target	Persons	Contents
August 2008	Electricity education teaching contest	Teachers	80	Induce reasonable electricity consumption
April~November 2008	Movable type PR center	Students, citizens	51,144	Modelling basic electricity theories
July~August 2008	Thesis contest	College students	87	Electricity and energy issues
January~December 2008	Regional forum by area	Government, academy, press	15	Electricity development direction, privatization effects



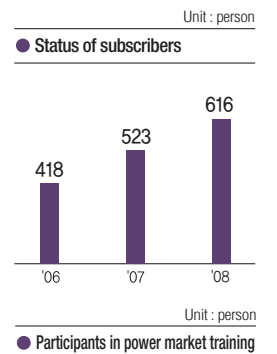
▲ Movable type PR center

Customized information providing service

KPX provides customers who are interested in electricity with a customized information service. To do so, we are operating EPSIS and an overseas electricity information homepage as a subscription gate. Also, as an institutional system, an information dissemination committee was equipped to protect the member companies' information.

| Information service result |

Information	Number of times	Persons
Overseas power industry status	51	616 (Subscribers)
Power market and system operation report	28	
KPX's major statistics	23	
Asia bidding news	21	
Monthly generation capacity, etc.	31	
Sum	154	



Expanding training services for power market participants

KPX has provided various training classes to enhance capabilities for the prevention of outages and for rapid recovery. Also, we expanded training services to 2,043 persons, including 825 for the power market and 1,218 for the power system, which are supported by a public fund in accordance with establishing infrastructure for power industry regulation.

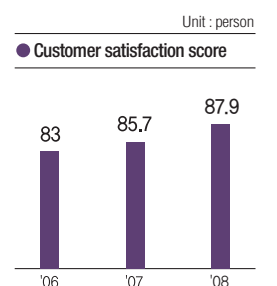
Customer satisfaction management survey, evaluation, and feedback

KPX has implemented a customer satisfaction management survey and evaluation, in order to understand customer complaints about its various services.

Customer satisfaction management survey

From September to December 2008, KPX carried out a customer satisfaction survey with member companies and staff responsible for power markets and power system operations. The results of the customer satisfaction survey marked an increase compared to last year's.

Classification	Customers	Survey institute	Score	Improvement
Customer satisfaction management survey for public institutes	Member companies' customers	Minister of Strategy and Finance, Korea Management Association	87.9	+2.2
Customer satisfaction management survey on power market operations	Member companies	Self survey	77.3	+1.3
Customer satisfaction management survey on power IT support	Power IT support at site for member companies	Self survey	88.7	+2.9
Customer satisfaction management survey on the newsletter	PCRM customers	Self survey	74.5	+5.0
Internal customer satisfaction survey	All employees	Self survey	73	+4.0



Survey results sharing through a customer satisfaction management, feedback workshop

In December 2008, KPX held workshops for customer satisfaction management feedback and shared the results. In addition, we identified tasks to be improved for better customer satisfaction service.

Customer opinions	Results
The option to select the mobile company for wireless metering data acquisition	Providing option to select mobile company
Power IT workshop introduction	Sending workshop brochure
Interval change for power trading payment	Amending rule to choose a payment interval between one or six times per month
Change the receiving bank from IBK to another bank for power trading payment	Amending rule for member company to choose the settlement bank
Request workforce for metering facility Sealing	Setting up the T/F for metering facilities sealing



▲ Customer satisfaction management feedback workshop

APPENDIX



2009 Sustainability Report

- Third Party Assurance Statement ▶ 67
- Derivation of major issues in sustainable management ▶ 69
- GRI / BEST Index ▶ 70
- Main goals and achievements in 2008 ▶ 74
- Guidelines on conduct for the implementation of sustainable management ▶ 75
- Guidelines on conduct for the implementation of code of ethics ▶ 75
- Membership in associations and organizations ▶ 76
- Power market operation results ▶ 77
- Power system operation results ▶ 78
- The 4th basic plan for electricity supply and demand ▶ 79



Independent Assurance Statement

To the Management of KPX regarding its “2009 Sustainability Report”

The Institute for Industrial Policy Studies¹ (The Auditor) was engaged by the Korea Power Exchange (KPX) to review information specified in its 2009 Sustainability Management Report (The Report) to provide independent third-party assurance on its contents. KPX is responsible for the collection and presentation of all information within The Report as well as the maintenance of the underlying data collection system and internal controls. The key objective of our review is to provide independent assurance that all statements and data cited in The Report are free of material misstatement or bias and that the data collection systems used are robust. On the basis of the above, The Auditor presents the following independent statement of assurance.

Assurance Method and Scope

In its 2009 Sustainability Management Report, KPX describes efforts and progress made toward sustainability management as well as its plans for the future. The Auditor’s review examined the following.

- Reasonable assurance on whether:

- the financial data specified under “Economic Performance” is properly derived from KPX’s audited Annual Report for 2008;

- Limited assurance on whether:

- the data specified under “Current Status of the Organization”, “Innovation Management Performance”, “Environmental Management Performance”, “CSR Management Performance”, and “Customer Satisfaction Management Performance” are stated adequately and are free of material misstatement or bias.

* Reasonable assurance constitutes a higher level of assurance than limited.

1. The Institute for Industrial Policy Studies (IPS)

Established in 1993, the Institute for Industrial Policy Studies has accumulated broad expertise in the area of sustainability management since 2002. “The Auditor” is composed of practitioners and professors at Korea’s top universities with professional accreditation and extensive experience in sustainability management after majoring in business management, accounting, environmental science etc.

Independence

The Auditor was not involved in the preparation of any part of The Report, and has no other affiliation with KPX that might compromise our independence or autonomy, or otherwise place The Auditor under its influence, thereby leading to possible conflicts of interest. The Auditor has no relationship with KPX regarding any of its for-profit operations and activities.

Criteria

The Auditor reviewed whether The Report was written in accordance with the following reporting guidelines:

- (1) The AA1000 Assurance Standard’s (AA1000 AS)* three core principles of Materiality, Completeness and Responsiveness;
- (2) The Global Reporting Initiative’s (GRI) G3 Sustainability Reporting Guidelines Version 3.0**; and
- (3) The BEST Sustainability Reporting Guidelines***.

* AA1000 AS is an assurance standard for social and sustainable reporting developed by the U.K.-based Institute of Social and Ethical AccountAbility in November 1999. A nonprofit organization that promotes corporate social responsibility, business ethics and responsible business practices, AccountAbility aims to improve the quality of social and ethical accounting, auditing and reporting through the AA1000 AS.

** The Global Reporting Initiative (GRI)’s Sustainability Reporting Guideline was jointly convened by the Coalition for Environmentally Responsible Economies (CERES) and UNEP in 1997. The newly revised G3 version was launched in October 2006.

*** The BEST Sustainability Reporting Guideline was jointly developed by the Ministry of Knowledge Economy (MKE), the Korea Chamber of Commerce and Industry (KCCI), and the Institute for Industrial Policy Studies (IPS) and provides for five levels of reporting rigor (Level 1 ~ 5).

Work Undertaken and Scope

The Auditor reviewed the Materiality, Completeness, and Responsiveness of The Report through the process outlined below:

- review of media reports relating to KPX
- collection and review of source information to substantiate reported content
- interviews with management and employees in charge of sustainability management and reporting, as well as persons responsible for The Report’s source information
- review reporting information and information collection systems (i.e. organizations, systems, and activities for sustainability management covering business ethics, CSR, etc.)
- data sampling and intensive assessment of key statements in The Report, internal policies, documentation, and information systems
- review of response system for material issues
- review of the stakeholder engagement process
- on-site review of KPX Headquarters from Sept.30 to Oct.6, 2009

Third Party Assurance Statement

Conclusions

On the basis of the above we provide the following conclusions. The Auditor did not find The Report to contain any material misstatements or bias. All material findings of The Auditor are included herein, and detailed review results and follow-up recommendations have been submitted to KPX.

Materiality

Does The Report cover economic, social and environmental issues of the greatest importance to KPX?
It is The Auditor’ s view that The Report contains information of the greatest importance to KPX and its stakeholders. We confirmed that the company has carried out materiality testing to identify and report on issues of material importance to its stakeholders. After publishing its first sustainability report in 2007, KPX has been conducting materiality tests every year since 2008, which The Auditor finds highly commendable. Going forward, we recommend broadening the scope of testing while strengthening procedures to help identify material issues more systematically, and also suggest establishing stronger relevance between the identified issues and the reported content.

Completeness

How reliable is the information and data stated in The Report, and is the underlying information and data collection system complete and robust?

The Auditor took note of the task force team consisting of individuals from each of the respective performance dimensions, established by KPX to provide company-wide support for sustainability management as well as data collection and management for sustainability reporting purposes. Moreover, KPX has established a systematic mid-to-long term financial plan for data and performance management and has been managing its social performance through various means such as its knowledge management system, business ethics management system, and Balanced Score Card system. The Auditor also confirmed efforts by KPX to manage its environmental performance by establishing a basic plan for energy supply and demand, greenhouse gas emissions, and climate change response according to the company’ s vision for building an energy system. We do suggest that KPX further reinforce its information collection and analysis system for the economic and environmental dimensions, and recommend building a separate data system that collects economic, social, and environmental information and performance data specific only to the KPX.

Responsiveness

How well does The Report address information of importance to KPX stakeholders?

The Auditor confirmed that KPX has been working to assess stakeholder views by categorizing them into five groupings i.e. the government, member companies, KPX management and employees, business partners, the local community and NGOs, and operating various channels for on-going and smooth communication including various committees and deliberative councils, a petitioning system, surveys, expert interviews etc. Going forward, The Auditor suggests further strengthening its channel for collecting stakeholder views and needs as well as providing better feedback. We also recommend presenting concrete case studies of the company’ s response to certain issues as well as the garnered results to display its commitment toward sustainability management and show its active engagement with its stakeholder base.

- Relative to the BEST Guidelines, in view of the level of reporting rigor and intensity of information provided, The Auditor finds The Report to fulfill 94.2% of the reporting requirements necessary to qualify for a Level 4 Report (from among Level 1 ~ 5).

[Fulfillment Ratio Trends Relative to Sustainability Reporting Indicators (unit: %)]

Year of Publication	2007	2008	2009
Report Cycle	1 st	2 nd	3 rd
Reporting Level	—	Level 4	Level 4
Fulfillment Ratio	—	97.1%	94.2%

※Assurance findings were converted uniformly into fulfillment ratios as measured against Level 1 through 5 requirements.

As the third report by KPX, The Auditor found The Report commendable in the following respects. KPX (1) carried out materiality testing to identify issues of material stakeholder importance; (2) enhanced the readability of The Report by presenting a “Hot Issues” page outlining the company’ s activities and plans for developing into a central energy trading organization; and (3) made efforts to enhance the reliability of The Report through the “assurance” process.

In the interest of improved future reports, The Auditor recommends the following:

- Report on content and performance outcomes that highlight the unique characteristics of KPX and present a stronger narrative on its sustainability management outcomes to enhance understanding toward its initiatives.
- Reorganize its sustainability goals and strategies for economic performance, innovation management, business ethics, CSR, and customer management and improve its data collection and management system to enhance the reliability of reported data and information.
- Strengthen its communication channels to better respond to stakeholder needs and reinforce linkages with media outlets to better publicize various response initiatives and collect feedback.
- Strengthen the materiality testing procedures and enhance relevance between the identified issue findings and the reported content.

October 15, 2009

Lee, Yoon-Chul

President, The Institute for Industrial Policy Studies



Derivation of major issues in sustainable management

Using the IPS Materiality Test Model, KPX was able to ascertain the major concerns and issues on the management of the organization, and has reflected these in this report.

Interest Party Survey

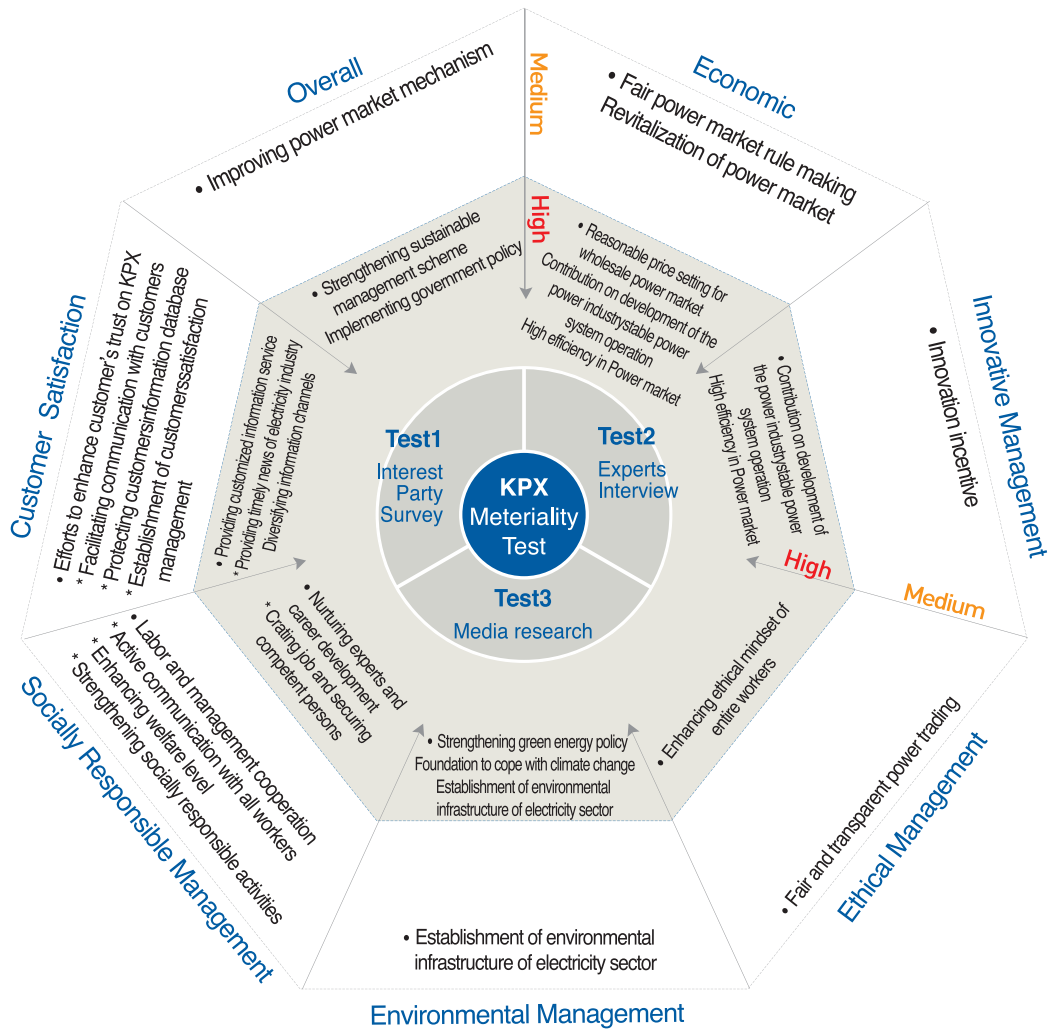
The opinions of interest parties, both inside and outside of KPX, were collected based on a staff survey and customer satisfaction survey conducted by KPX in 2007.

Expert Interviews

Experts in the field of sustainability management suggested priority issues on management and development for KPX.

Media Research

From January 2005 to June 2008, KPX analyzed related articles reported via the media in order to determine out concerns of the interest parties.



GRI / B.E.S.T Index

● : Reported ● : Partially Reported ○ : Not Reported N/A : Not Applicable or Not Available

GRI Index		Indicators	B.E.S.T Index	Extent of Reporting	Page
Strategy and Analysis	1.1	Statement from the most senior decision-maker of the organization	A_1	●	4, 5
	1.2	Description of key impacts, risks, and opportunities	A_2	●	9,11,13,14,24,27
Organizational Profile	2.1	Name of the organization	A_3	●	18
	2.2	Primary brands, products, and/or services	A_4	●	19–21
	2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	A_5	●	18,19
	2.4	Location of organization’ s headquarters	A_7	●	18
	2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	A_7	●	18,19
	2.6	Nature of ownership and legal form	A_8	●	27
	2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	A_9	●	19
	2.8	Scale of the reporting organization	A_10	●	17, 18
	2.9	Significant changes during the reporting period regarding size, structure, or ownership	B_8	●	1
	2.10	Awards received in the reporting period	C08	●	41
Report Parameters	3.1	Reporting period (e.g., fiscal/calendar year) for information provided	B_3	●	1
	3.2	Date of most recent previous report (if any)	B_8	●	1
	3.3	Reporting cycle (annual, biennial, etc.)	B_6	●	1, 29
	3.4	Contact point for questions regarding the report or its contents	B_9	●	1, 81
	3.5	Process for defining report content	B_10	●	74
	3.6	Boundary of the report (e.g., countries, divisions, subsidiaries, leased facilities, joint ventures, suppliers). See GRI Boundary Protocol for further guidance	B_1	●	1
	3.7	State any specific limitations on the scope or boundary of the report (see completeness principle for explanation of scope)	B_2	●	1
	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	A_6	●	18
	3.9	Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report. Explain any decisions not to apply, or to substantially diverge from, the GRI Indicator Protocols	-	●	1
	3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods)	-	●	1
	3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	B_5	●	47, 74
	3.12	Table identifying the location of the Standard Disclosures in the report	B_10	●	70–73
	3.13	Policy and current practice with regard to seeking external assurance for the report	B_7	●	1
Governance, Commitments, and Engagement	4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	GR1	●	27
	4.2	Indicate whether the Chair of the highest governance body is also an executive officer	GR1/GR3	●	27
	4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	GR2	●	27
	4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	GR12	●	27
	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)	GR7	●	26, 41
	4.6	Processes in place for the highest governance body to ensure conflicts of interest are avoided	GR13	●	27, 39, 47

GRI Index	GRI Index details	B.E.S.T Guideline Index No.	Reporting level	Where reported
Governance, Commitments, and Engagement	4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization’ s strategy on economic, environmental, and social topics	GR4	● 27
	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	-	● 75
	4.9	Procedures of the highest governance body for overseeing the organization’ s identification and management of economic, environmental, and social performance, including relevant risks and opportunities, and adherence or compliance with internationally agreed standards, codes of conduct, and principles	GR5	● 27
	4.10	Processes for evaluating the highest governance body’ s own performance, particularly with respect to economic, environmental, and social performance	GR6	● 26, 44, 62
	4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	GR11	● 59
	4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	GR10	● 75
	4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	A_11	● 29, 76
	4.14	List of stakeholder groups engaged by the organization.	C_1/C_2	● 28
	4.15	Basis for identification and selection of stakeholders with whom to engage	C_1	● 28
	4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	C_2	● 28
	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	C_3	● 28
Economic Performance	Disclosure on Management Approach			● 31
	EC1	Direct economic value generated and distributed	EC1	● 32
	EC2	Financial implications and other risks and opportunities for the organization’ s activities due to climate change	EC2	● 9, 51
	EC3	Coverage of the organization’ s defined benefit plan obligations	EC3	● 34, 59
	EC4	Significant financial assistance received from government	EC5	● 51
	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	EM4	● 57, 59, 64
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	EC4	● 57, 64
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation	EC4	○ Human Resources Management does traditionally depositing from head office to local offices. KPX does not have separated local hiring strategy. In the long term, HR processing system will be considered local inrult and build related strategy
	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	EC6	○ KPX currently does not have the infrastructure investments yet. In the long term, progress for the development and an impact of infrastructure investments and relevant services will be related with social contribution system and the public service.
	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	EC7	● 9, 35
Environmental Performance	Disclosure on Management Approach			● 49
	EN1	Materials used by weight or volume	EV10	● 53, 77
	EN2	Percentage of materials used that are recycled input materials	EV11	○ KPX will be introduced data management program regarding to the materials used that are recycled input materials in the short term.
	EN3	Direct energy consumption by primary energy source	EV7	● 53, 79
	EN4	Indirect energy consumption by primary source	EV8	● 53
	EN5	Energy saved due to conservation and efficiency improvements	EV5	● 9, 10, 13, 53
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	EV5	● 9, 10, 13, 53
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved	EV5	● 9, 10, 13, 53
	EN8	Total water withdrawal by source	EV9	● 53
	EN9	Water sources significantly affected by withdrawal of water	EV20	● 53
	EN10	Percentage and total volume of water recycled and reused	EV18	○ This company does not report the percentage of property regarding biodiversity and protection

GRI Index	GRI Index details	B.E.S.T Guideline Index No.	Reporting level	Where reported
Environmental Performance	EN11 Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	EV22	●	53
	EN12 Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	EV22/EV26	●	53
	EN13 Habitats protected or restored	EV27	◇	This company does not have worksite on habitats where have to be protected or restored
	EN14 Strategies, current actions, and future plans for managing impacts on biodiversity	EV6/EV26	●	53
	EN15 Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	EV28	◇	This is not an index that this company does not applicable regarding the industry which this company has involving
	EN16 Total direct and indirect greenhouse gas emissions by weight	EV12	●	51, 53
	EN17 Other relevant indirect greenhouse gas emissions by weight	EV13	●	51, 53
	EN18 Initiatives to reduce greenhouse gas emissions and reductions achieved	EV4	●	12, 51, 52, 53
	EN19 Emissions of ozone-depleting substances by weight	EV14	●	51, 53
	EN20 NOx, SOx, and other significant air emissions by type and weight	EV15	◇	KPX manages electricity dispatch center and demand and supply of electricity use in Korea. The industry which KPX involves does not create air-emission directly.
	EN21 Total water discharge by quality and destination	EV17	●	53
	EN22 Total weight of waste by type and disposal method	EV16	○	"Yet data collecting system regarding total weight of waste and its management started. KPX will figure system out in the short term."
	EN23 Total number and volume of significant spills	EV21	◇	KPX manages electricity dispatch center and demand and supply of electricity use in Korea. The industry which KPX involves does not create significant spills directly.
	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	EV29	◇	This is not an index that this company does not applicable regarding the industry which this company has involving
	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	EV19	●	53
	EN26 Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	EV23	●	9, 52
	EN27 Percentage of products sold and their packaging materials that are reclaimed by category	EV24	◇	"KPX manages electricity dispatch center and demand and supply of electricity use in Korea. The industry which KPX involves does not have any products sold nor their packaging materials at all."
	EN28 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	EV31	◇	There are neither certain cases regarding non-monetary sanctions nor non-compliance with environmental laws and regulations
	EN29 Significant environmental impacts of transporting products and other goods and materials used for the organization' s operations, and transporting members of the workforce	EV30	◇	This is not an index that this company does not applicable regarding the industry which this company has involving
	EN30 Total environmental protection expenditures and investments by type	EV1	●	9, 49

Social: Labor Practices and Decent Work Performance	Disclosure on Management Approach		●	43, 55, 57
	LA1 Total workforce by employment type, employment contract, and region	EM1	●	57
	LA2 Total number and rate of employee turnover by age group, gender, and region	EM5	●	57
	LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	EM20	●	59
	LA4 Percentage of employees covered by collective bargaining agreements	EM12	●	59
	LA5 Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	EM13	●	59
	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	EM14	●	59
	LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	EM19	●	59
	LA8 Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	EM18	●	59
	LA9 Health and safety topics covered in formal agreements with trade unions	EM15	●	59
	LA10 Average hours of training per year per employee by employee category	EM27	●	54, 58
	LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	EM28	●	40, 58
	LA12 Percentage of employees receiving regular performance and career development reviews	EM29	●	40, 41, 58
	LA13 Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	EM2	●	27, 57
	LA14 Ratio of basic salary of men to women by employee category	EM3/EM17	○	KPX does not have any difference of salary between men and women. KPX have open to the online public of the average salary and the salary for new employees(http://www.alio.go.kr)

GRI Index	GRI Index details	B.E.S.T Guideline Index No.	Reporting level	Where reported
Human Rights Performance	Disclosure on Management Approach		●	43, 55, 56
	HR1 Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	PN2	●	46, 47
	HR2 Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	PN3	●	47
	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	EM30	●	43, 46
	HR4 Total number of incidents of discrimination and actions taken	EM7	●	57
	HR5 Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	EM8	●	59
	HR6 Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	EM9	●	57
	HR7 Operations that are likely to have forced labor and measures taken	EM10	●	57
	HR8 Percentage of security personnel trained in the organization' s policies or procedures concerning aspects of human rights that are relevant to operations	EM31	●	43
Society Performance	HR9 Total number of incidents of violations involving rights of indigenous people and actions taken	CO2	●	56
	Disclosure on Management Approach		●	55
	S01 Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	CO1/CO2	●	28, 44, 56
	S02 Percentage and total number of business units analyzed for risks related to corruption	CO5	●	46, 47
	S03 Percentage of employees trained in organization' s anti-corruption policies and procedures	CO5	●	46, 47
	S04 Actions taken in response to incidents of corruption	CO5	●	46, 47
	S05 Public policy positions and participation in public policy development and lobbying	CO6	◇	This company does not participate to develop any lobbying nor to contribute to any political issue
	S06 Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	CO7	◇	
	S07 Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	CS3	●	46, 47
Product Responsibility Performance	S08 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	CO9	○	This company does not report any fact regarding on monetary value and non-monetary sanctions
	Disclosure on Management Approach		●	37, 61
	PR1 Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	CS4	◇	KPX manages electricity dispatch center and demand and supply of electricity use in Korea. The industry which KPX involves does not have individuals as a customer nor assesses health and safety impacts of products and services.
	PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	CS11	◇	This company does not applicable regarding this index because of the industry which this company has involving
	PR3 Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	CS5	●	64, 65
	PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	CS12	◇	As following regulations of electricity dispatch operation service and customer information use, this company operate public relation activities and promotions. There is no offense about business performance
	PR5 Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	CS9	●	62-65
	PR6 Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	CS13	●	65
	PR7 Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	CS14	◇	Concerning of laws regarding electricity industry and technology foundation, this company operate public relation activities and promotions. There is no offense about business performance
	PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	CS15	◇	This is not an index that this company does not applicable regarding the industry which this company has involving
	PR9 Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	CS15	◇	Considering to keep the law related with information use and operation electricity dispatch, this company provide relevant information. And there is not a certain violation.

Main goals and achievements in 2008

Classification		Target	Actuals
Economic Performance	· 2020 mid and long term financial plan	· Revise financial plan	· Completed financial plan('08.12)
	· National energy cost savings (0.1billion won)	· 1,710	· 1,998
	· Power trading (Gwh)	· 391,231	· 392,323
	· Labour productivity per capita(million won)	· 166	· 158
Innovative management performance	· Innovation mileage per person	· 17.0	· 16.8
	· No. of suggestions	· 750	· 237
	· Innovation methodology	· Revitalizing knowledge management · Implementing Work out 2nd stage	· Set the rule of knowledge management · Implemented Work out 2nd stage
	· Innovation Management Performance	· Award on sustainability management	· Award for contributor of sustainability management ('08.12)
Creative management performance	· Improve power market scheme	· Award on sustainability management	· Established development direction of power market
	· Develop Korean energy management system	· Developing basic function	· Developed the basic function('08.10)
	· Establishing basic plan of long term electricity supply and demand	· Establishing 4th BPE	· Completed 4th BPE('08.12)
	· Establishing strategic management system	· Operating strategic management system	· Initiated strategic management system
Ethical management performance	· Establishing strategic management system	· Introducing individual base performance management	· Adopted individual base performance management
	· Operating BSC system		
	· Ethical (management) road map	· Sustainability report verified by external institute	· Acquired the internal and external GRI A+level
	· Participants in Ethical management cyber training (person)	· 300	· 300
Environmental management performance	· Competitive bidding(cases)	· 42	· 42
	· Cyber procurement ratio(%)	· 96	
	· Establishing BPE	· Establishing BPE considering CO2 emissions	· Established BPE considering CO2 emissions('08.12)
	· CO2 emissions(kg-C/kWh)	· 0.121	· 0.119
Socially responsible management performance	· Emission trading road map	· Adopting pilot model for emission strading	· Operated 1st stage pilot emissions trading('08.11)
	· Procurement of environmentally friendly goods	· 400	· 362
	· Participants in social contribution activities (Persons)	· 450	· 426
	· Social contribution expenditures(10000won)	· 6,000	· 6,158
Customer satisfaction management performance	· People of national merit(Person)	· 25	· 28
	· Training expenditures per person(10000won)	· 480	· 379
	· Customer satisfaction score	· 87.5	· 87.9
	· Days to respond to customer requests	· 1.5	· 0.48
	· Power information cases	· 350	· 353
	· Support cases on power IT	· 29.69	· 48.55

Guidelines on conduct for the implementation of sustainable management

KPX announces and adheres to the following guidelines when implementing the ethical management, environmental management, and socially responsible management.

1. KPX will lead ethical management under recognition of core value for sustainable growth.
2. While observing domestic and international environmental guidelines, we will join in the promotion and expansion of environmental management.
3. KPX implements socially responsible management thoroughly and leads joint improvements with its customers.
4. KPX puts efforts into sustainable management and supports 10 UN global compacts.

Guidelines on conduct for the implementation of code of ethics

Chapter 1 General

- Article 1 Purpose
- Article 2 Definition of terms
- Article 3 Scope

Chapter 4 Establishing a healthy organizational culture

- Article 19 Prohibiting borrowing money, etc.
- Article 20 Establishing a healthy culture on congratulatory and condolatory issues

Chapter 2 Fair work implementation

- Article 4 Dealing with order hindering fair work
- Article 5 Avoiding interest related work
- Article 6 Excluding preferences
- Article 7 Prohibiting using budget for improper purposes
- Article 8 Dealing with unreasonable requests from politicians
- Article 9 Prohibiting personnel favors
- Article 10 Transparent accounting

Chapter 5 Handling violation cases

- Article 21 Consultation on violation cases
- Article 22 Declaration and confirmation of violation cases
- Article 23 Protecting report's position
- Article 24 Punishment
- Article 25 Handling of prohibited presents, etc.

Chapter 3 Prohibiting receipt of improper profits

- Article 11 Prohibiting intervention for interest
- Article 12 Prohibiting intercession and requests
- Article 13 Prohibiting transactions using work related information
- Article 14 Prohibiting use of public assets for personal interest
- Article 15 Prohibiting receipt of money, etc.
- Article 16 Restricting employees' spouses in receiving money, etc.
- Article 17 Prohibiting providing money, etc.
- Article 18 Integrity agreement and implementation

Chapter 6 Prohibiting speculative entertainment and golf standards

- Article 26 Prohibiting of golf activity
- Article 27 Prohibiting speculative entertainment

Chapter 7 Appendix

- Article 28 Training
- Article 29 Designation of staff responsible for code of ethics
- Article 30 Compliance status check
- Article 31 Rewards

Membership in associations and organizations

Classification	Associations and organizations	Joining Date
Domestic	Korea Personnel Improvement Associate	2001. 7
	Korea Energy Foundation	2002. 2
	The Korean Institute of Electrical Engineers	2002. 5
	Korea Electric Association	2002. 9
	Korea Energy Economics Institute	2003. 3
	Korea Productivity Center	2003. 10
	Korea Atomic Industrial Forum	2004. 3
	SERICEO	2004. 5
	The Institute of Internal Auditors	2005. 12
	The Korea Society For New And Renewable Energy	2007. 3
	Korea Society of Energy & Climate	2007. 3
	Korea Academic Society of Industrial Organization	2008. 10
	IAEA (International Atomic Energy Agency)	2001. 4
	IEA (International Energy Agency)	2001. 4
Overseas	VLPGO (Very Large Power Grid Operator)	2001. 4
	GIGRE (International Council on Large Electric Systems)	2002. 4
	APEx (Association of Power Exchanges)	2002. 6
	EISG (Energy Intermarket Surveillance Group)	2002. 10
	AESIEAP (The Association of the Electricity Supply Industry of East Asia and the Western Pacific)	2003. 5
	Institute of Electrical and Electronics Engineers	2006. 12

Power market operation results

Member companies and generation capacity

Year	No. of member companies			Generation capacity	Growth rate(%)
	Formal member	Associate member	Sum		
2001	13	6	19	47,959	-
2002	25	8	33	51,467	7.31
2003	44	5	49	56,925	10.60
2004	51	5	56	58,943	3.55
2005	59	6	65	61,554	4.43
2006	69	5	74	65,357	6.18
2007	97	7	104	68,493	4.80
2008	295	7	302	71,255	4.03

* Generation capacity participated in power market

Power trading amount and volume

Year	Power trading amount		Power trading volume	
	Power trading amount	Growth rate(%)	Power trading volume	Growth rate(%)
2001*	199,027	-	95,276	-
2002	281,871	41.62	133,049	39.65
2003	299,509	6.26	145,741	9.54
2004	318,045	6.19	156,568	7.43
2005	338,861	6.54	172,809	10.37
2006	354,869	4.72	189,245	9.51
2007	374,384	5.50	211,572	11.80
2008	392,323	4.79	267,999	26.67

* Figures after April 1, 2001

Power trading amount and volume

Year	System marginal price(won/kWh)	Settlement price(won/kWh)
2001	48.81	47.87
2002	47.32	47.20
2003	50.48	48.66
2004	55.78	49.23
2005	61.97	51.00
2006	79.07	53.33
2007	83.75	56.52
2008	122.58	68.31

* SMP : System marginal price

Power system operation result

Status of power supply and demand (as of Dec. 31, 2007)					
Year	Capacity (10,000kW)	Supply capacity (10,000kW)	Peak demand (10,000kW)	Peak demand growth(%)	Reserve margin rate(%)
1984	1,419.0	1,162.6	881.1	15.9	31.9
1985	1,613.7	1,227.6	934.9	6.1	31.3
1986	1,806.0	1,598.4	991.5	6.1	61.2
1987	1,902.1	1,672.3	1,103.9	11.3	51.5
1988	1,994.4	1,621.7	1,365.8	23.7	18.7
1989	2,099.7	1,786.9	1,505.8	10.3	18.7
1990	2,102.1	1,868.0	1,725.2	14.6	8.3
1991	2,111.1	2,014.8	1,912.4	10.9	5.4
1992	2,412.0	2,173.7	2,043.8	6.9	6.4
1993	2,765.4	2,440.5	2,211.2	8.2	10.4
1994	2,875.0	2,743.1	2,669.6	20.7	2.8
1995	3,218.4	3,196.8	2,987.8	11.9	7.0
1996	3,571.5	3,429.5	3,228.2	8.0	6.2
1997	4,104.2	3,845.2	3,585.1	11.1	7.3
1998	4,340.6	3,792.8	3,299.6	-8.0	14.9
1999	4,697.8	4,341.8	3,729.3	13.0	16.4
2000	4,845.1	4,607.8	4,100.7	10.0	12.4
2001	5,085.9	4,869.9	4,312.5	5.2	12.9
2002	5,380.1	5,211.3	4,577.3	6.1	13.9
2003	5,605.3	5,548.8	4,738.5	3.5	17.1
2004	5,996.1	5,752.8	5,126.4	8.2	12.2
2005	6,225.8	6,081.8	5,463.1	6.6	11.3
2006	6,477.8	6,518.3	5,899.4	8.0	10.5
2007	6,719.6	6,677.8	6,228.5	5.6	7.2
2008	7,035.3	6,851.9	6,279.4	0.8	9.1

* 1. Supply capacity, growth rate and reserve margin rate are based on the actual peak demand
2. Reserve margin rate is based on the supply capacity

The 4th Basic Plan for Long-Term Electricity Supply and Demand

Mid and long term electricity demand outlook								
Year	Before DSM		Peak demand					
	MW	Increase Rate(%)	Before DSM		DSM Effect(MW)	After DSM GWh		
			MW	Load Factor(%)		MW	Increase Rate(%)	Load Factor(%)
2007 (actual)	368,605	5.7	62,298	-	(5,460)	62,285	5.6	73.9
2008	389,745	5.7	62,794	77.4	(5,876)	62,794	0.8	77.2
2009	409,029	4.9	67,881	75.5	655(6,531)	97,226	7.1	75.7
2010	425,020	3.9	70,827	75.5	1,372(7,248)	69,455	3.3	76.1
2011	438,762	3.2	73,442	75.6	2,118(7,994)	71,324	2.7	76.5
2012	449,798	2.5	75,873	75.5	2,915(8,791)	72,958	2.3	76.7
2013	458,982	2.0	78,256	75.2	3,692(9,568)	74,564	2.2	76.6
2014	466,856	1.7	80,448	75.0	4,506(10,382)	75,942	1.8	76.4
2045	472,966	1.3	82,554	74.7	5,340(11,216)	77,214	1.7	76.2
2016	478,337	1.1	84,566	74.4	6,168(12,044)	78,398	1.5	75.9
2017	483,034	1.0	86,449	74.2	7,007(12,883)	79,442	1.3	75.6
2018	487,219	0.9	88,075	74.3	7,901(13,777)	80,174	0.9	75.7
2019	491,214	0.8	89,495	74.4	8,706(14,582)	80,789	0.8	75.7
2020	494,527	0.7	90,719	74.8	9,568(15,444)	81,151	0.4	75.9
2021	497,559	0.6	91,937	75.0	10,435(16,311)	81,502	0.4	76.0
2022	500,092	0.5	93,126	75.3	11,321(17,197)	81,805	0.4	76.1
'08~'22	-	2.1	2.7	-	-	-	1.8	-

* 1. DSM effect refers to the net incremental value compared to the year 2008. The values in parenthesis refer to the cumulative total amounts.
2. Electricity Sales reflect the reduction by DSM, Peak Load for 2008 is an actual value.

2009 Sustainability Report

Publisher

Oh il Hwan
411 Yeondong daero, Samsung-dong, Gangnam-gu, Seoul, Republic of Korea
(zip code : 135-791)
Tel : 82-2-3456-6562
www.kpx.or.kr

Project leader

Planning & Budget Team, Cho Young Tae
Planning & Budget Team, Wi Sung Cheol

Staff in charge

Power Planning Team, Kim sang il
Environmental management performance

Planning & Budget Team, Wi Sung Cheol
Hot issues, About our Institute(KPX),
Creative management performance, Ethical management performance,
Environmental management performance,
Socially Responsible management performance,
Customer Satisfaction Performance

Design planning

Lee Jun IL

Editor

Mark Dowd - Sungshin Women's University Instructor

Printing

Moonsung Printing Co.