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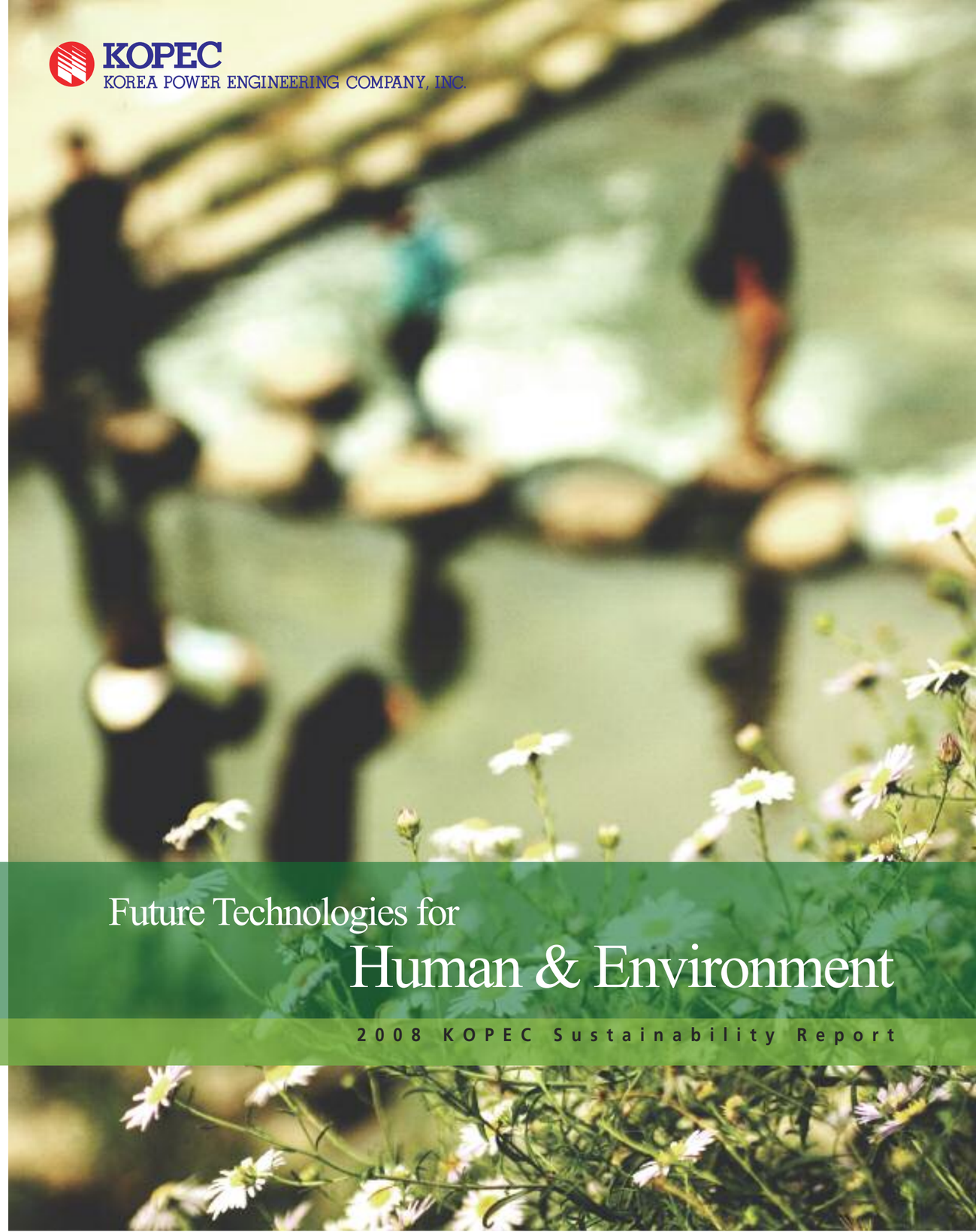


KOPEC
KOREA POWER ENGINEERING COMPANY, INC.

# Future Technologies for Human & Environment

2008 KOPEC Sustainability Report

Future Technologies for

# Human & Environment

2008 KOPEC Sustainability Report

# On 2008 Sustainability Management Report

## Purpose of Report

This is the first sustainability management report of Korea Power Engineering Company ("KOPEC"). The report is about KOPEC's efforts and achievements in terms of economic, social and environmental responsibilities. KOPEC wishes to seek and share improvement measures and solutions through continued communication with its interested parties. The report is based on our internal data and was approved by the management.

## Guidelines for Report

The report is based on the three guidelines of GRI (Global Reporting Initiative) and the evaluation details are shown in the attachment. The report is posted at the company's website (www.kopec.co.kr). Korean won (₩) and American dollar (US$) are used for the currency units. For measurement units, the meter system which encompasses kW, MW, Ton, $m^3$, $m^2$, and kg is used.

## Contents of Report

The report consists of four chapters on corporate information, sustainability management, economic achievements, social achievements and environmental achievements, as well as appendices.

## Reporting Period and Cycle

The reporting period spans from January 1 to December 31, 2008, and the data were presented sequentially for last three years for easy comparison. Some non-measurement achievements covered the last three years and the period leading up to the publication of the report. The report will be published every year.

## Scope and Limitations of Report

KOPEC does not have branch offices, and thus the report is based on the data of KOPEC headquarters.

# Contents

# “KOPEC aims to become a world-class power plant engineering specialist.”

Since its foundation in 1975, Korea Power Engineering Company (KOPEC) has developed its own design engineering technologies in the field of nuclear and thermal power plants, and standard Korean nuclear/fossil power plants. KOPEC designed numerous power plants with its innovative engineering technologies, earning worldwide recognition in the process.

KOPEC is also directing its efforts towards the creation of a new paradigm of sustainable management in which economic, social and environmental values are harmonized. To maintain viability and growth, a corporation needs not only to generate revenues, but also to fulfill its social responsibilities based on ethics management and management philosophy of sharing with interested parties, and to serve the world cause of environmental preservation. To that end, KOPEC signed up to the UN Global Compact in July 2007.

KOPEC observes the Global Compact's ten principles on human rights, labor rights, environmental preservation, and anti-corruption. KOPEC endeavors to create economic values based on a healthy revenue structure, and to strengthen its partnerships with the aim of creating a better future. KOPEC makes consistent efforts to reinforce its social responsibility activities as a beloved public enterprise while providing positive support for its employees' participation in social volunteer services. KOPEC is committed to developing technologies regarding environmental problems to lead the way to the resolution of the world's concerns for it.

KOPEC's drive for quality innovation and service improvement has earned it two consecutive nominations as a Superior Quality Company, as well as Grand Awards for Productivity and National Quality Management Awards. KOPEC has also won the Volunteer Award at the Corporate Social Service Awards for three consecutive years and National Environmental Management Awards in recognition of its endeavors.

The 2008 KOPEC Sustainability Management Report outlines its economic, social and environmental achievements in accordance with the GRI guide lines. It is hoped that this report will serve as a channel of communication through which KOPEC will receive from interested parties feedback and assistance in its practice of sustainable management.

KOPEC has launched its sustainability management report, which will certainly provide the information for its past, present and future. All employees at KOPEC are committed to sharing the consensus about sustainable management and putting it in place. As KOPEC aims to become a world-class specialist in power plant engineering and construction, I earnestly solicit your continued support and assistance.

Thank you very much.

President & CEO

An, Seung-Kyoo

# About KOPEC

2008 KOPEC Sustainability Report

**Korea Power Engineering Company has successfully attained engineering services of numerous power plants, both nuclear and fossil with Korea and abroad.**

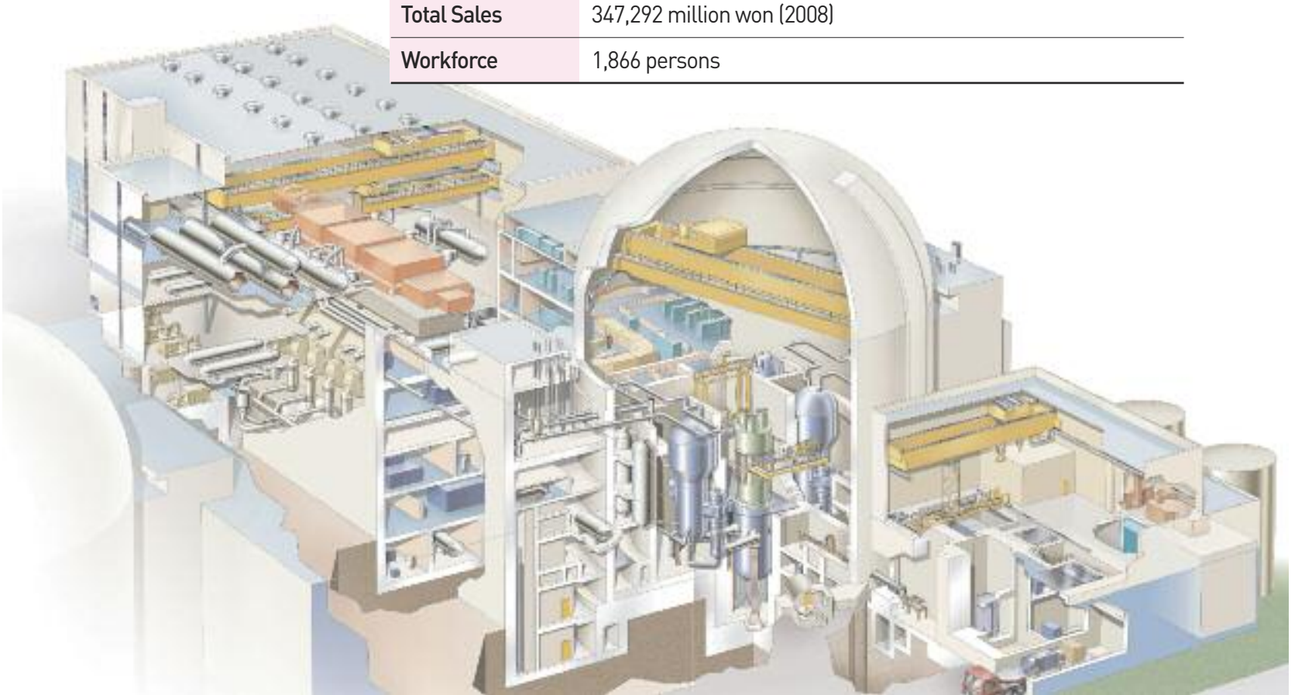
- **Company Overview** Established in 1975 / Design Engineering of Nuclear, Thermal and Water hydro-electric Power Plants in Korea and Overseas
- **General Information** Sales 347.3 Billion Won / 3 Divisions(Yongin) and 1 Division(Daejeon) / Workforce 1,866 Employees
- **Technology Overview**
  - **Nuclear Power** Designed OPR1000 (Optimized Power Reactor 1000) and OPR1000+ (Improved OPR) / Designed APR1400 (Advanced Power Reactor 1400) / On Developing the Design Technology of APR+ (Improved APR)
  - **Thermal Power** Designed 500MW, 800MW (Super-critical Pressure) and 1000MW (Advanced-super-critical Pressure) Standard Fossil Plants
  - **Operation and Maintenance** Improving the Operation and Safety of Plants / Extending the Lifecycle of Plants and Recovering their performance
  - **Environmental Sector** Designed Korean Flue Gas Desulfurization Facilities and Denitrification Facilities / Developed the Low-temperature Denitrification System
  - **PM&CM** Performed PM/CM projects under Korea's huge SOC

About KOPEC

# Company Overview

Established in 1975, KOPEC has under taken the core business of power plants by developing the engineering technologies for nuclear, thermal, combined-cycle and hydro-electric power plants, and providing technical support to power plants. KOPEC specializes in both architect engineering and nuclear steam supply system design(NSSS) for nuclear power plants, making it the first such enterprise in the world. Based on its accumulated design engineering technologies and abundant experience in power plants, KOPEC is expanding into diverse areas of business, such as power plant maintenance, and goverment projects including environmental, high-speed railroad and new airport construction projects.

| | |
|---|---|
| **Company name** | Korea Power Engineering Company |
| **President & CEO** | An, Seung-Kyoo |
| **Foundation** | October 2, 1975 |
| **Address** | 257, Yonggudaero Road, Giheung-gu, Yongin-si, Gyeonggi-do |
| **Business** | Architect engineering in the field of nuclear, thermal and hydro-electric power plants in Korea and overseas |
| **Total Sales** | 347,292 million won (2008) |
| **Workforce** | 1,866 persons |

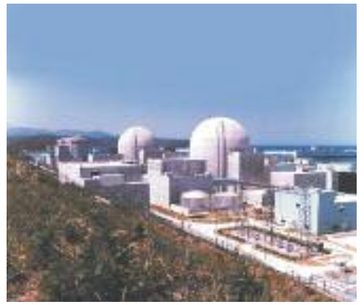


# General Information

## KOPEC's History

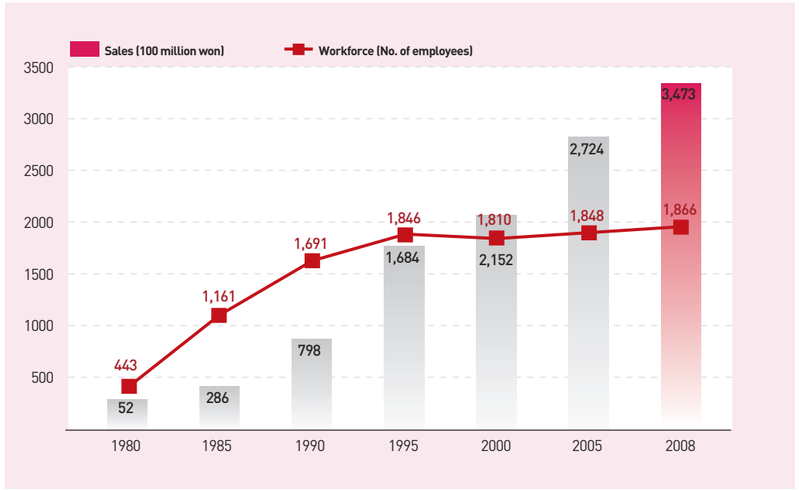
| | |
|---|---|
| **Oct. 1975** | Established Korea Atomic Burns & Roe (a joint venture between KAERI and the Burns & Roe). |
| **July 1982** | KEPCO Subscribed for Shares from Korea Atomic Burns & Roe, and renamed as KOPEC. |
| **Jan. 1997** | Took over the NSSS business and conducted an integrated nuclear power plant design |

※NSSS : Nuclear Steam Supply System



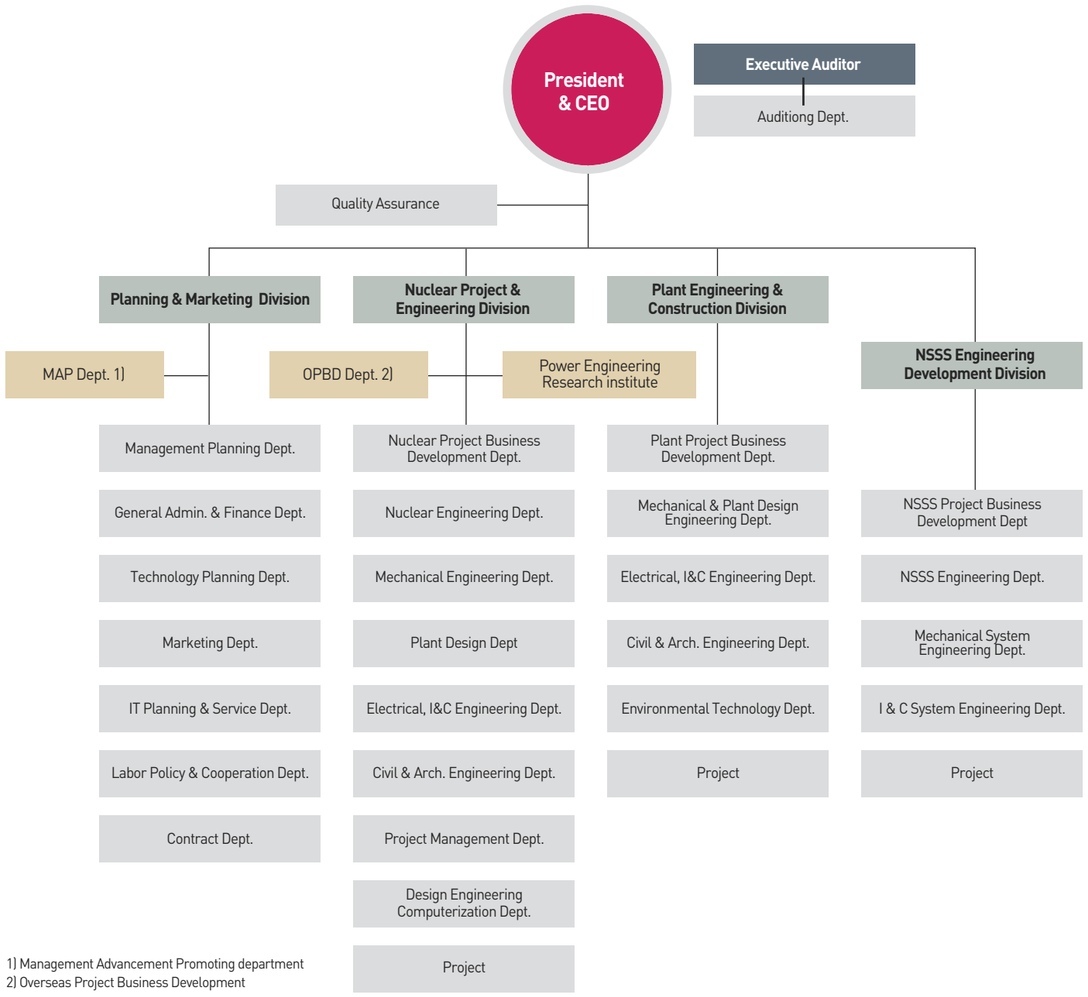
## Sales and Workforce

KOPEC's workforce increased fourfold from 443 in 1980 to 1,866 in 2008, while in the same span of time, sales expanded a staggering 67 times, from 5.2 bn. won to 347.3 bn. won. Indeed, sales have dramaticlly sharply over the last ten years.



## Organization

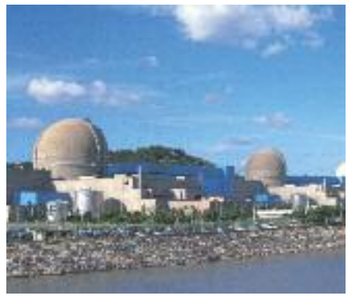
Headquartered in Yongin, KOPEC has three divisions with three executive directors, as well as NSSS Engineering Development Division based in Daejeon.




1) Management Advancement Promoting department
2) Overseas Project Business Development

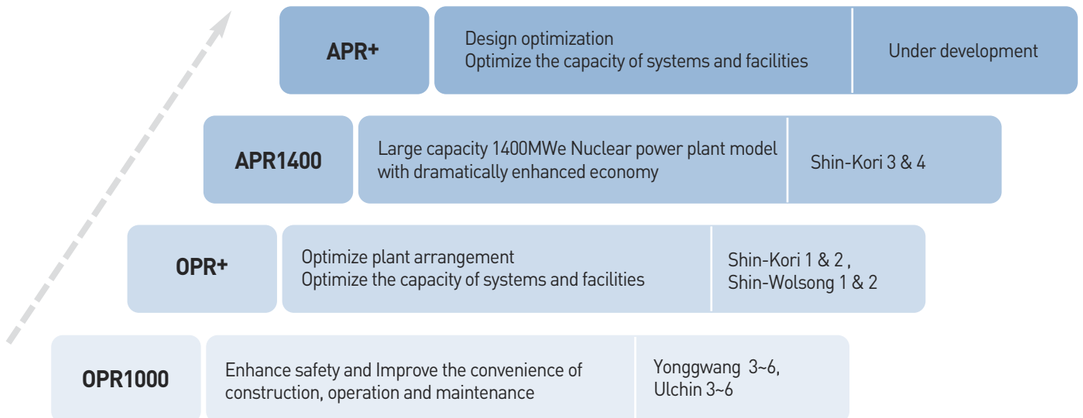
# Technology Overview

KOPEC has designed 60% of Korea's nuclear and thermal power plants in terms of power generation volume. With the experience and know-how thus acquired, KOPEC also participated in large infrastructure construction projects such as Incheon Airport and Korea Train Express (KTX). In line with the government's policy on low-carbon, green growth, KOPEC has posted remarkable achievements in the environmental field of desulfurization and denitrification facilities, as well as in that of new and renewable energy sources.



## Nuclear Power

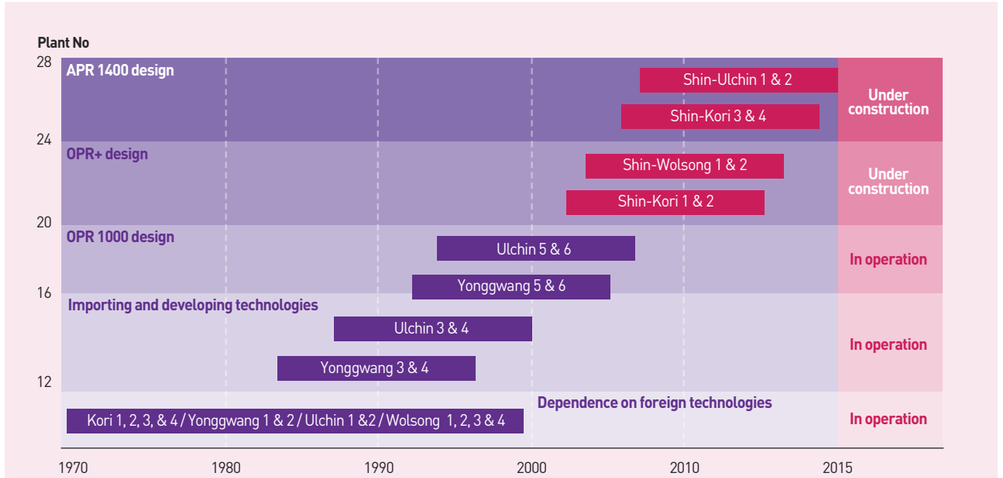
KOPEC is firmly committed to continuously improve the safety and economical viability of nuclear power based on technical know-how and manpower resources developed through designing every single nuclear power plants in Korea. At the same time, KOPEC is dedicated to prepare for the future to provide even better engineering services to our clients at home and abroad.
We have applied our OPR design in the Ulchin Units 3~6 and Yonggwang Units 5 & 6, and are currently building the Shin-Kori Units 1 & 2 and Shin-Wolsong Units 1 & 2 by using the OPR+ design with improved safety and economic efficiency.



## About KOPEC

Also the Shin-Kori Units 3 & 4 will be equipped with our APR1400, which is regarded as the next-generation reactor that can contribute to national competitiveness. KOPEC is now developing APR+(Improved APR), and has achieved 95% technological independence in terms of improvements and design engineering capabilities, for which it has earned widespread international recognition.

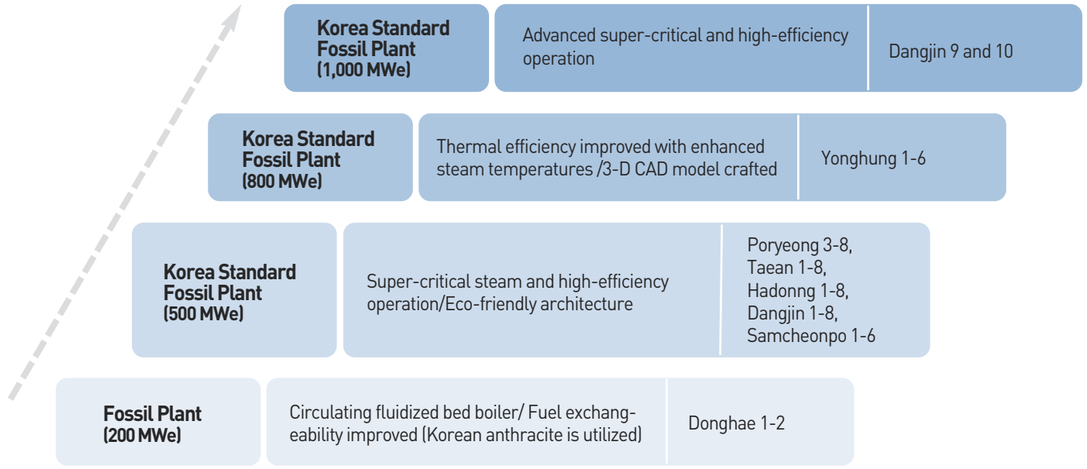
■ KOPEC's design engineering technologies for nuclear power plants




### Thermal Power

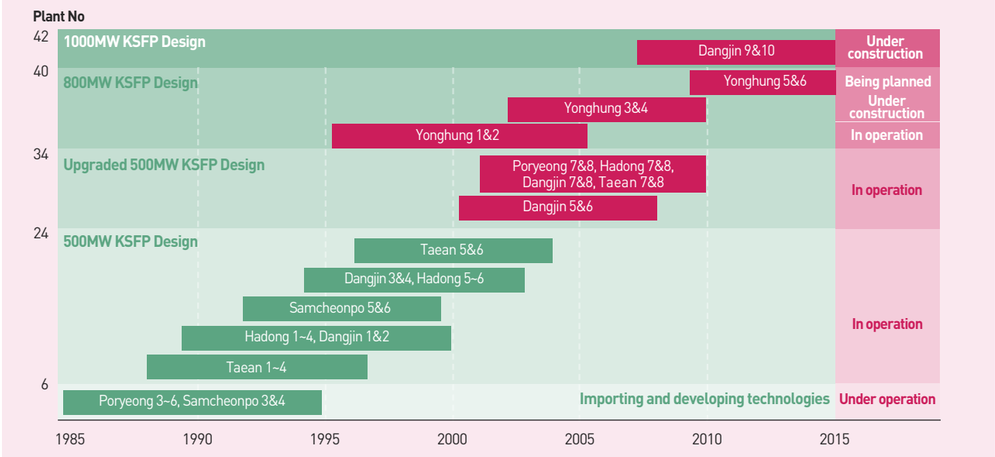
KOPEC boasts world-class architect engineering technologies in the field of coal-fired thermal power, combined cycle power and cogeneration power plants. Concerning its architect engineering technologies for thermal power plants, KOPEC developed the 500MWe Korean standard architect engineering technology and its follow-up, the 800MWe model, in 1987, and the 1000MWe ultra-super-critical architect engineering technology for thermal power plants, units of which are now being installed in Dangjin Thermal Power Plants 9 and 10, in 2007.

KOPEC began to earn worldwide recognition for its architect engineering technologies for thermal power plants from the mid 1990s. Indeed, the Poryeong, Taean, and Dangjin Thermal Power Plants, all of which were designed by KOPEC, were nominated as the best power plants in the world by a world-class electric power technology magazine.




■ KOPEC's design engineering technologies for thermal power plants

※KSFP : Korea Standard Fossil Plant



## About KOPEC

### Operation and Maintenance


KOPEC, as an A/E, has dedicated itself to improving the operability and maintainability of the entire 20 units of the commercial nuclear plants that are currently in operation in Korea by providing comprehensive technical support services to the utility company. As a part of such a vast task, KOPEC conducts Probabilistic Safety Assessment evaluation for the nulear units to ensure plant safety and provides cost-benefit analyses for life extension for the units. KOPEC has years of experience in designing, refurbishing and extending the life of thermal power plant as well, while also making much efforts in the area of alternative energy development.

※ PSA (Probabilistic Safety Assessment) : A method of assessing the total safety of nuclear power plants based on the probabilistic method.

### Environmental Sector


KOPEC is committed to conserving our environment. KOPEC has developed the design and construction capabilities required for the construction of cutting-edge air pollution control facilities, water pollution control facilities, and waste treatment facilities, including Korean flue gas desulfurization facilities and denitrification(De-NOx) facilities.

KOPEC has executed a large number of relevant projects, and developed the low-temperature denitrification system KoNOx®. KOPEC, as an environmental impact assessor, and has performed the largest number of relevant projects in Korea. KOPEC continues improving geographic information systems and environmental facilities, and is developing environmental control facilities and green house gas emission reduction facilities. All of these efforts are part of its response to the Climate Change Convention, the system of carbon emission credits, and other environmental markets at home and abroad.

Furthermore, KOPEC has designed the automation of hydro-electric power plants in the Han River water system, and constructed pumped-storage power plants in Muju and Sancheong. In addition, KOPEC has designed wind power plants in Hangyeong, Jeju-do. KOPEC is now ready for greater participation in the new and renewable energy markets in line with the projected policy of the government.

### PM/CM

KOPEC has successfully carried out many huge government-run projects. The company was involved as the major A/E contractor in all of the complex, long-term domestic nuclear/fossil power plant projects.

KOPEC also participated as a project management consultant in the Seoul-Busan High Speed Railway Construction Project, the largest infrastructure construction project ever in Korea, and undertook project management services for the Incheon International Airport Project, the hub airport of northeast Asia.

In addition, the company served as the construction management contractor during the Incheon International Airport Railroad Express Project that connects Seoul and Incheon Airport, and the Busan-Geoje Fixed Link Project that is composed of the first deep immerged tunnels and the longest cable stayed bridge ever in Korea.



# Sustainable Management

2008 KOPEC Sustainability Report

**We will be reborn as a company that envisages sustainable future through the implementation of the vision and strategies of KOPEC and fulfillment of our economic, social and environmental responsibilities.**

- **Sustainable Management System** Systematization of Philosophy, Vision and Strategies
- **Sustainable Management Strategy** Improvement of the Quality and the Operational Economy of Design / Export of Nuclear Power Plants / Development of Leading Technology
- **Economic, Social and Environmental Responsibilities KOPEC Persues** Boost in Sales / Design of Safe Power Plants / Development of Eco-friendly Technologies

Sustainable Management

# KOPEC's Sustainabililty

## Sustainable Management System

KOPEC espouses the philosophy of "humaneering," which is based on the convergence of humanity, environment, and technology, with the aim of creating an abundant, pleasant living environment with human-oriented technology, thereby promoting human happiness. In keeping with this philosophy, KOPEC implements sustainable management strategies that are designed to achieve its long-term vision of becoming a world-class engineering company which puts customer values first.

**Philosophy of KOPEC |** Convergence of humanity, environment and technology

**Long-term vision |** A world-class engineering company that puts customer values first

**Mid- and long-term strategies**

| Project sector | Sales sector | R&D sector | Business management Sector |
|---|---|---|---|
| Conduct customer-oriented projects | Diversification of domains | Upgraded technologies | Innovation of the management system |

Setting yearly management goals, project planning, and budgeting

## Sustainable Management Strategy

KOPEC implements its management strategies on the basis of its capacity to improve the quality of design engineering and the operational economy of power plants, to export nuclear power plants technologies and to focus on the environmental and energy businesses of the future. KOPEC also conducts sustainable management based on comprehensive inspection and improvement efforts.

**Opportunities**

- Opportunities to enter overseas markets are increasing.
- The "renaissance era" of nuclear power plants has arrived.
- The numbers of eco-friendly facilities and businesses are increasing.
- New and renewable energy are being increasingly used.

**Strengths**

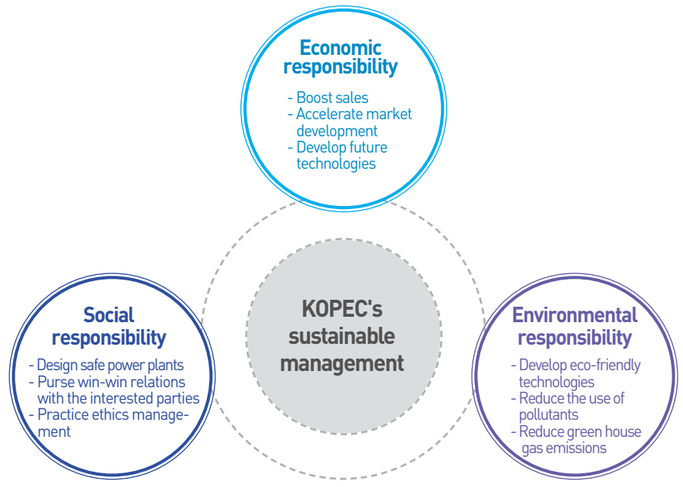
- Ownership of architect engineering technologies for standard nuclear power plants and standard thermal power plants.
- Equipped with highly skilled engineers and ample architect experience.
- Ownership of competitive denitrification, desulfurization and other environmental technologies.
- Enjoy financial stability and superior external credibility

**Threats**

- Domestic monopoly → Globally competitive system
- Domestic electric power demand is decreasing
- New technologies are being rapidly developed
- Additional corporate social responsibilities are required

## KOPEC Pursues Its Economic, Social and Environmental Responsibilities

KOPEC has put into practice sustainable management with a view to recording further economic, social and environmental achievements, and ultimately to securing competitive superiority and boosting sustainable corporate values.



# Economic Performance

2008 KOPEC Sustainability Report

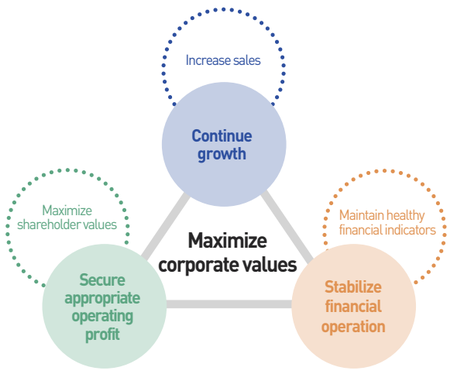
**KOPEC continues to implement innovation and creative activities to improve its economic values, and contribute to the nation and the society in diverse methods.**

- **Creating and Sharing Economic Values** Net Profits Increased by 55.6% from the Previous Year / Attained to a 7.9% Net Profit Ratio / Selected as a Superior Quality-Competitive Company for Two Consecutive Years
- **Corporate Social Responsibilities** 145 Million Won of Donations for Social Volunteer Services / Participation in Government-conducted 15 R&D Projects / Paid Taxes of 57.8 Billion Won / Invested 10.7% of its Sales in R&D
- **Innovation Management** Innovation Infrastructure / Applying 4D System / Innovating the Quality of Design / Participation in CDM Business
- **Creative Management** Low-Temperature Denitrification Catalyst Technology / Proposed Projects Attained to 6.5 Billion Won

Economic Performance

# Creating and Sharing Economic Values

## Financial Management System




KOPEC endeavors to fulfill its corporate social financial responsibilities and to stabilize its financial management in a bid to maintain its rate of growth. To that end, KOPEC regularly inspects and monitors its business performances, and ensures that it achieves its management goals. KOPEC also manages various financial indicators including liability ratios and market risks, thereby maintaining its financial stability.

### Major Financial Results

KOPEC increased sales by 12.5%, and net profits by 55.6% from the previous year, and posted 7.9% net profit ratio, therefore indicating healthy profitability by the standards of the same industry.

■ Major Financial Statements (Unit : million won)

| Category | | Description | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|
| Economic value generated | Sales and profits | Sales | 330,707 | 308,833 | 347,292 |
| | | Operating profit | 11,824 | 16,352 | 20,112 |
| | | Pre-tax net | 14,999 | 24,289 | 38,091 |
| | | Net profit | 11,061 | 17,649 | 27,462 |
| | Capital and assets | Current assets | 260,042 | 298,281 | 283,225 |
| | | Non-Current assets | 60,062 | 67,735 | 69,920 |
| | | Total assets | 320,104 | 366,016 | 353,145 |
| | | Liabilities | 110,890 | 142,936 | 107,898 |
| | | Capital (paid-in capital) | 209,214(7,644) | 223,080(7,644) | 245,247(7,644) |
| | | Liabilities and capital | 320,104 | 366,016 | 353,145 |
| Economic value shared | Government | Corporate tax | 4,618 | 4,855 | 8,407 |
| | | Other tax | 34,295 | 35,591 | 49,436 |
| | Employees | Wages and fringe benefits | 132,611 | 140,507 | 153,843 |
| | Shareholders | Dividends | 2,059 | 3,783 | 5,295 |
| | Investment in local communities (corporate social activities) | Donation to marginalized members of society | 240 | 263 | 257 |

※ Other tax includes VAT, withholding tax, and other public charges.

■ Yearly Sales and Operating Profit Margin (Unit : million won)


## Financial Impact of Climate Change

Although Korea is experiencing a slowdown in construction of power plants due to a sluggish demand for power, which would appear to present negative prospects, nuclear power is reemerging as an important eco-friendly source of energy due to the impact of global warming. This situation is highly encouraging KOPEC, since it also has a variety of eco-friendly technologies such as desulfrization and denitrification, and thus sees climate change as an opportunity to become a world-class company.

## Major Awards

### Brand Value

KOPEC was nominated as a superior quality-competitive company for two consecutive years by the Ministry of Knowledge and Economy. In 2008, KOPEC won the National Quality Award organized by the Ministry of Public Administration and Security, and the Productivity Grand Prize in the category of customer value innovation provided by the Korea Management Association. KOPEC enjoys Korea's unique brand value as a power engineering company.

### Credit Assessment Results

KOPEC earned a AA- credit rating from Korea Ratings in recognition of its stable business, exclusive position in the nuclear power plant engineering sector, stable profit and cash flows, healthy financial indicators, and financial flexibility.

Economic Performance

# Contribution to the Nation and the Society

## Corporate Social Activities

KOPEC practices its management principle of sharing with the marginalized members of our society under its corporate social responsibility program, thereby conducting its business activities and fulfilling its corporate social responsibilities simultaneously. KOPEC implements a matching grant program by which the company donates double the monthly amount donated by its employees, a full 80% of whom voluntarily participate in the program. Over the last three years, the value of the donations has risen steadily, exceeding 400 million won.

■ **Fund Raising Overview** (Unit : 1,000 won)

| Category | 2006 | 2007 | 2008 |
|---|---|---|---|
| Company donations | 84,763 | 90,485 | 96,936 |
| Employee donations | 42,382 | 45,242 | 48,468 |
| Total | 127,595 | 135,727 | 145,404 |

## Severance Program

The company regularly deposits employee severance reserves with major banks. Under the severance program, the company pays a lump-sum severance payment to retirees, thereby helping them to manage their retirement more comfortably, and also stabilizes its long-term financial operation. In line with the government's guideline, one month of salary per year served is deposited.

## Community Services

KOPEC is headquartered in Yongin, and its NSSS Engineering & Development Division is located in Daejeon. 32.4% of the managers and higher-ranking employees based at the headquarters live in Yongin, while 90.3% of the employees based at the NSSS Engineering & Development Division live in Daejeon. In this way KOPEC contributes to the revitalization of regional economies.

※ Managers and higher-ranking employees : Employees who undertake certain duties and responsibilities within individual units.

## Goverment R&D Projects

With the support of government-funded R&D grants, KOPEC conducts 15 R&D projects aimed at boosting the operational economy and securing the safety of nuclear power plants, as well as preventing environmental pollution. In this way, KOPEC particpates in the government's low-carbon, green growth policy.

■ **Goverment R&D Projects**

| | |
|---|---|
| 1 | Development of 3-D evaluation technologies for optimal IRWST thermal hydraulic behavior |
| 2 | Development of technologies for architecting joints of different metals in nuclear power plant plumbing, and evaluating their lifespan |
| 3 | Development of non-ammonia-based nano-catalyst technologies for the high-efficiency denitrification of exhaust gases |
| 4 | Development of low-cost, high-activation catalysts and low-energy consumption process systems |
| 5 | Development of denitrification engineering technologies for use in small and medium-sized cogeneration plants |
| 6 | Development of technologies for architecting and analyzing SC structures |
| 7 | Development of technologies for modularizing structures and combined structures |
| 8 | Development of architect engineering technologies for upgrading the wattage of the Korean flue gas process (KEPAR) to 500MW |
| 9 | Development of safety analysis codes for nuclear power plants |
| 10 | Evaluation of the feasibility of developing APR+ |
| 11 | Development of technologies for manufacturing corrugated catalysts |
| 12 | Development of technologies for comprehensively evaluating the atmospheric environment of coal-fired thermal power plants |
| 13 | A feasibility study on the development of technologies for using polyethylene-made plumbing in nuclear power plants |
| 14 | Pilot denitrification project in China |
| 15 | Development of technologies for manufacturing nano-catalyst materials for denitrification, and large-scale upgrading the denitrification function |

※ IRWST : In-containment Refueling Water Storage Tank

## Tax Payment

In 2008, KOPEC paid national taxes of 55.2bn won and local taxes of 2.6bn won.

■ **Tax Payment** (Unit : 100 million won)

| Category | 2006 | 2007 | 2008 |
|---|---|---|---|
| National tax | 368 | 381 | 552 |
| Local tax | 21 | 24 | 26 |

## R&D Investment

KOPEC invests 10.7% of its sales revenue in R&D to upgrad its architect engineering technologies in the field of power plants and to develop its new growth engines. This is the largest such figure for any enterprise or organization in Korea.

■ **R&D Investment** (Unit : 100 million won)

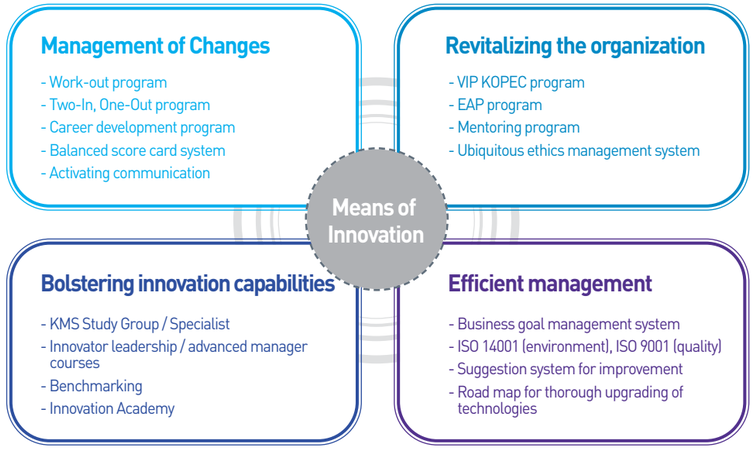
| Category | 2006 | 2007 | 2008 |
|---|---|---|---|
| Sales | 3,307 | 3,088 | 3,473 |
| R&D costs | 326 | 333 | 372 |
| Investment ratio | 9.9% | 10.8% | 10.7% |

# Innovation Management

Economic Performance

## Innovation Infrastructure

In its drive to become a world-class company, KOPEC continues to innovate itself so as to secure high-quality architect engineering and reinforce its technological competitiveness.
KOPEC utilizes diverse methods of innovation to revitalize its innovation activities. Up until 2006, KOPEC emphasizes to bolster its innovation capabilities and to revitalize the organization. Since 2007, KOPEC has implemented a career development program (CDP) and balanced score card (BSC) systems to manage innovative changes.



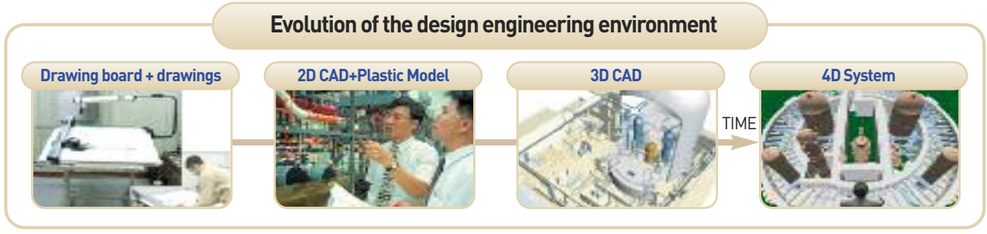

※EAP: Employee Assistance Program
※KMS: Knowledge Management System
※VIP KOPEC: An employee mindset innovation program aimed at revitalizing the organization

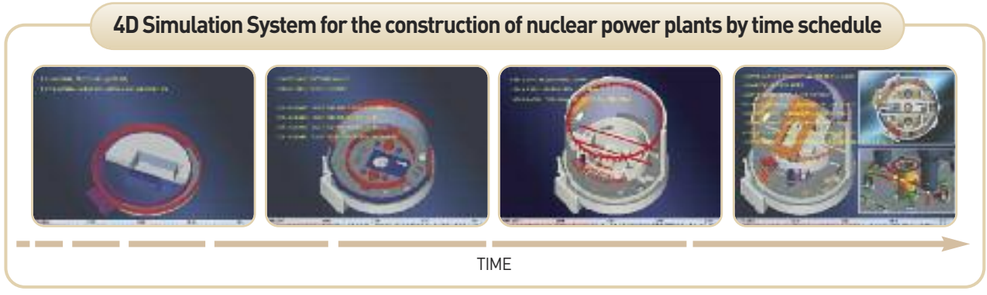
Furthermore, by holding internal innovation competitions, best practices are explored and success cases are written into manuals. Employees also participate in external innovation competitions to promote innovation. To help boost the capability of the company's innovators, KOPEC runs courses on in-depth innovator leadership, innovation academy, cyber customer satisfaction, and ethics management. The budgets for innovation programs are allocated and executed with top priority.

## Innovation Achievements

### 4-D Design Technique and Process Innovation

KOPEC upgraded its construction process management system from a 3-D system to a 4-D system via the incorporation of a time frame. This development was aimed at securing the operational economy and international competitiveness of its OPR1000. The new system boosted the visual effects of process management, enabling KOPEC to cut the power plant construction period and improve the quality of its design engineering to a dramatic extent. The system is now being applied to Shin-Wolsong plants 1 and 2. Optimization of the 4-D process has improved 351 construction works and cut the construction period by one month, thereby reducing overall costs. Furthermore, 4-D prior virtual simulation has reduced re-work and delay factors by 10%.



# Creative Management

### Innovation of Design Engineering Quality

KOPEC has innovated the quality of its design engineering work by pursuing continual improvement activities and conducting regular inspections since 2007. In recognition of these efforts, KOPEC was nominated as a superior quality-competitive company in 2007 and 2008.


The global standard quality management system was introduced in 2008 to bolster the process capabilities. This helped KOPEC to secure external quality competitiveness and promote a global stadard quality mindset among its employees, as well as win a number of National Quality Awards.

### Clean Development Mechanism (CDM) Project

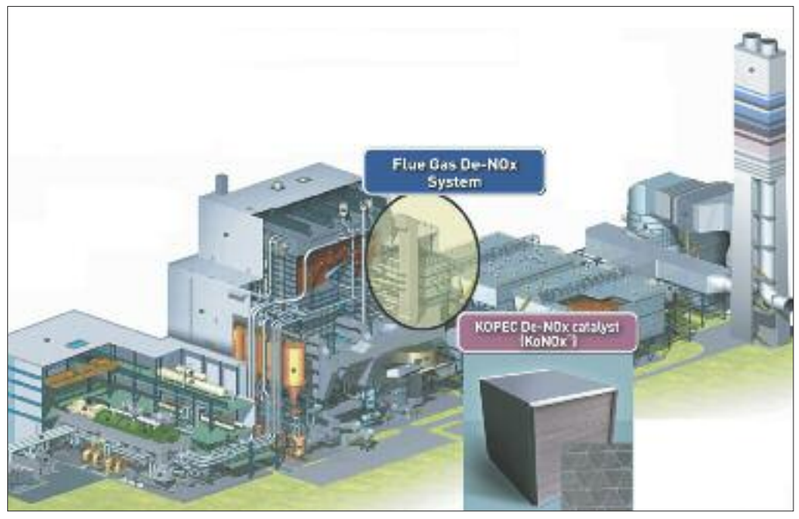
With the invocation of the Kyoto Convention, the new Kyoto mechanism-based market is being formed as an effective means of reducing greenhouse gas.

With the emergence of new service demand in connection with the reduction of greenhouse gas emissions, KOPEC participated in the project to convert Greater Seoul's landfill gases into energy resources, thereby serving the cause of CDM and contributing to carbon dioxide reduction activities. As the system requiring the mandatory reduction of greenhouse gas emissions is now being impleme- nted, KOPEC is developing innovative technologies and bolstering its technological power in preparation for the gigantic, newly emerging global markets.

**KOPEC is expanding into new business areas and overseas projects, moving away from KEPCO and its power-affiliated companies.**

### Low-Temperature De-NOx Catalyst Technology

As problematic gas emissions emitted by thermal power plants generally derive from sulfur oxides and nitrogen oxides, methods of treating sulfur oxides have been steadily developed, while the development of treatment methods for nitrogen oxides has been delayed. That being the case, KOPEC developed a denitrification process system using low-temperature catalysts by itself, enabling it to effectively respond to ever more rigid regulations. KOPEC tested the performance of its low-temperature denitrification system at the Bundang No. 6 combined-cycle thermal power plant, thereby proving the superiority of the technology. KOPEC also secured technologies for analyzing boiler field flow and architect engineering technologies for injecting reducing agents, and also standardized the low-temperature denitrification facility process. These technologies

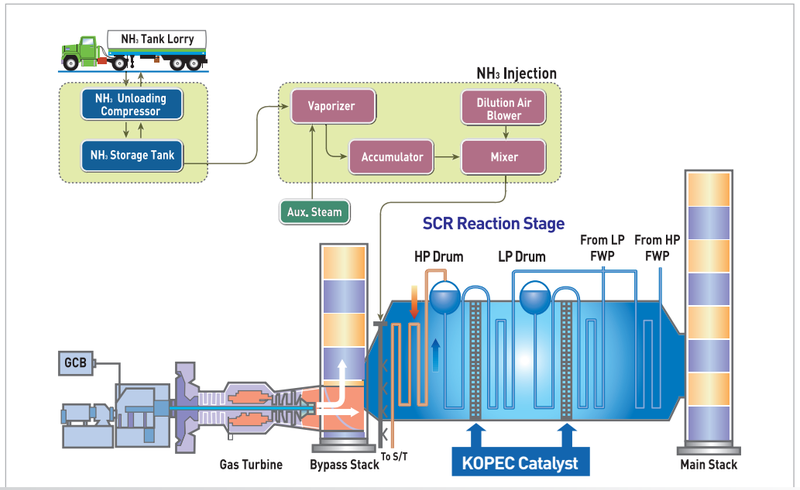


Economic Performance

earned KOPEC the Green Management Grand Prize of the KMA and the Nano Business Technical Silver Prize.

Catalysts need to be replaced regularly; so, with the implementation of the total allowable emissions system (effective from July 2007), the environmental markets in China, India and the emerging nations are expanding, which will lead to a remarkable increase in the size of the global denitrification market. This constitutes a huge opportunity for KOPEC to venture into overseas businesses.

■ KoNOx, KOPEC's denitrification catalyst system




### Development and commercialization of a nitrogen-oxide reduction catalyst

- Product name: KoNOx®(KOPEC DeNOx System)
- Development period: January 1997 - present (further improvements are being made)
- Strengths of KoNOx®
  - Low production cost due to the use of a $TiO_2$-based catalyst
  - Low-temperature (170~450℃) catalyst can be applied to various fields (power plants, incinerators, and industrial businesses)
  - Energy reduction at re-heating, short construction period, and low construction/operation costs

■ KOPEC's Technologies

| Category | Registered patents | Patents filed |
|---|---|---|
| Korea | 12 | 1 |
| Overseas | 5 | 15 |
| Others | Two patents designated as new technologies (MOE) and as world-class products (MKE) | |

■ Denitrification Markets

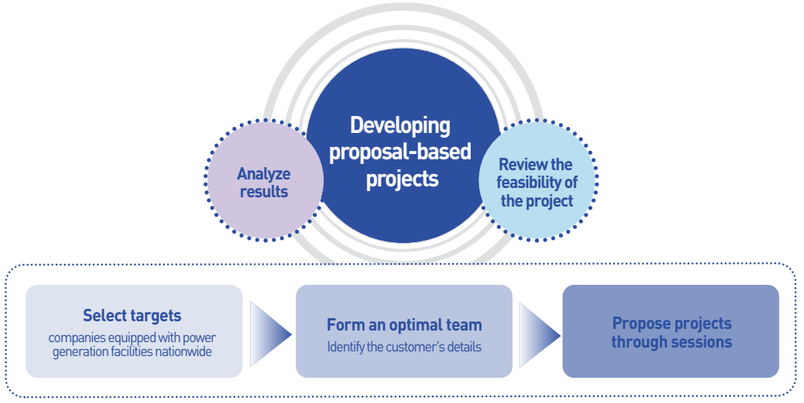
| Category | Market size | Targeted areas |
|---|---|---|
| Korea | 1.0 - 1.6 billion won | Large thermal power plants,cogeneration power plants, incinerators, industrial businesses, etc |
| Overseas | 30 billion won | Large thermal power plants |

## Proposed Project Development

KOPEC is pushing ahead with a proposal-based type of business by which the company proposes prospective projects to its customers. This scheme is aimed at improving the performance (i.e the operational efficiency) and extending the lifespan of its customers' facilities, as well as strengthening KOPEC's demand base and stabilizing the generation of revenue. Since 2006, orders for this type of business have continued to rise.

■ Results of Proposed Projects (Unit : 100 million won)

| Category | 2006 | 2007 | 2008 |
|---|---|---|---|
| Amount | 60.9 | 73.1 | 65 |



# Social Performance

2008 KOPEC Sustainability Report

**KOPEC is committed to enhancing values of interested parties including shareholders, employees, partnered firms, customers and local communities, and developing all together.**

- **Shareholders** Board's enhanced professionalism / Reasonable evaluation of and Remuneration for Executives / Systematic risk management
- **Employees** Compliance with obligatory employment of handicapped people / 99 hours of education per person / The industrial accident rate of 0.03% / Offering stable workplace / Labor-Management Grand Prize awarded
- **Business Partners** Transparent criteria for selecting partners / System for handling partners' complaints / Technical education courses for partnered firms
- **Customers** Design quality assessment system / Dedicated staff system / One hundred customer-oriented technical sessions held / Customer Satisfaction Management Committee
- **Local Communities** 1,529 employees joined 116 volunteer events led by the True Love Volunteer Group / Awarded the Grand Prize in the category of volunteer services for the three consecutive years
- **Ethics Management** Ethics Management Committee / Establishment of the Code of Ethics / Integrity reporting system / Implementation of integrity surveys

Social Performance

| Shareholders |

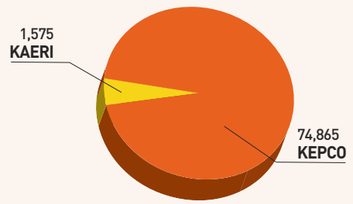
# Shareholders

## ◆ Transparent Governance

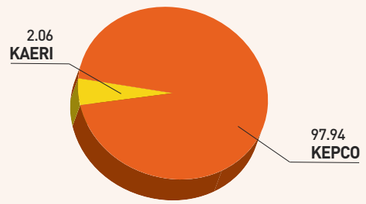
### Corporate Governance

KOPEC, which has been classified into the category of other public agencies under the pertinent Act, is owned by KEPCO and KAERI (97.94% and 2.06% respectively). With paid-in capital of 7.644 billion won, it is a non-listed company (as of 2008). In line with the government's advancement initiative, KOPEC will list 20% of its shares on the stock market in 2009.

■ **Paid-in Capital** (Unit : 100,000 won)




■ **Shareholders** (Unit : %)




### Board Membership

#### Board Membership

KOPEC's board of directors consists of KOPEC's executives, officials from the government and KEPCO, and external directors. The chairman of the board is CEO. The board is committed to promoting shareholder value and accruing benefits for the interested parties.

■ **Directors** (Unit: people)

| Year | Executive directors | Non-executive director | | Total |
|---|---|---|---|---|
| | | Government/KEPCO | Outside directors | |
| 2006 | 4(57.1%) | 3(42.9%) | - | 7 |
| 2007 | 4(44.4%) | 3(33.3%) | 2(22.3%) | 9 |
| 2008 | 4(44.4%) | 3(33.3%) | 2(22.3%) | 9 |

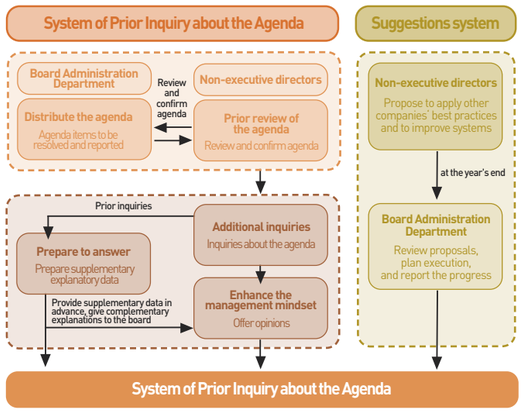
■ **Election of Directors**

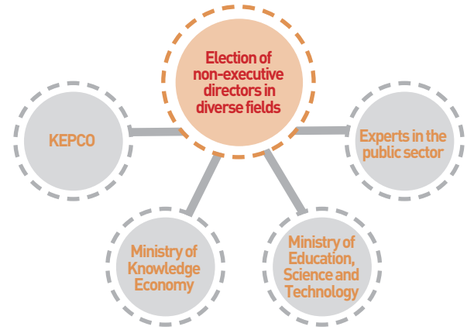
| Category | Method of Election |
|---|---|
| President | Recommended by the Nomination Committee, and elected by the shareholders' assembly |
| Executive directors | Recommended by the Nomination Committee, and elected by the shareholders' assembly |
| Non-executive directors | Elected by the shareholders' assembly |

#### Professionalism in the Decision-Making Process

KOPEC's board of non-executive directors is drawn from the ranks of government officials in the fields of nuclear power and policy, along with KEPCO executive and consultants on business administration, with the aim of enhancing the professionalism of the decision-making process. The board implements a system of prior inquiry about the agenda by non-executive directors, as well as a 'suggestions' system, and covers a wide range of items including the company's economic, social and environmental achievements.

■ **Board's Enhanced Professionalism**




#### Resolutions and Activities

The board convenes a meeting with a majority presence, and passes resolutions on items of the agenda based on the majority approval of the attendees, pursuant to the Commercial Act and the company's Articles of Association. The board also makes decisions on management goals, business plans and budgets, company rules, and important new business matters. A director is not allowed to vote if he or she has a vested interest in or deep connection with the pertinent agenda.

■ **Board's Activities**

| Year | Meetings | Attendance | Prior review | No. of agenda |
|---|---|---|---|---|
| 2006 | 7 | 77.5% | 100% | 42 |
| 2007 | 12 | 87.5% | 100% | 50 |
| 2008 | 11 | 94.7% | 100% | 34 |

Social Performance

| Shareholders |

■ 2008 Important Board Resolutions

| Category | Agenda |
|---|---|
| 1st (February 26) | 2007 major business results |
| | Evaluation of (the second half of 2007) accounting system operation |
| | 33rd financial statement (draft) |
| | 33rd business result report (draft) |
| 6th (July 24) | 2008 extra expenses and budget revision (draft) |
| 7th (September 10) | Election of the members of the President's Nomination Committee (draft) |
| 8th (November 3) | President's agreement on management (draft) |
| | 2009 business goals (draft) |
| 9th (December 9) | Revision of the regulations on executives' annual salaries (draft) |
| 11th (December 29) | Revision of the regulations on the job and position system (draft) |

### Board's Strengthened Review of Businesses

The board strictly reviews any matters which may impose a burden on the company's operation.

The board strengthened its checks and balances, supervisory function to receive reports on important domestic and overseas project plans, and approves thereof, in order to prevent operational risks. Based on the regulations on the disclosure of important matters required of a non-listed company under the Fair Trade Act, the company discloses operational risks such as the provision of collateral and the guarantee of debts, ensuring operational transparency.

### Evaluation of and Remuneration for Executives

Executives' remuneration is based on the evaluation of their performance under the responsible management system. Each year, the president makes a management agreement with the mother company, KEPCO, with regard to business goals, authority and responsibilities, remuneration, and so forth in order to bolster management performance and competitiveness. Likewise, management agreements are made between the president and the executives.

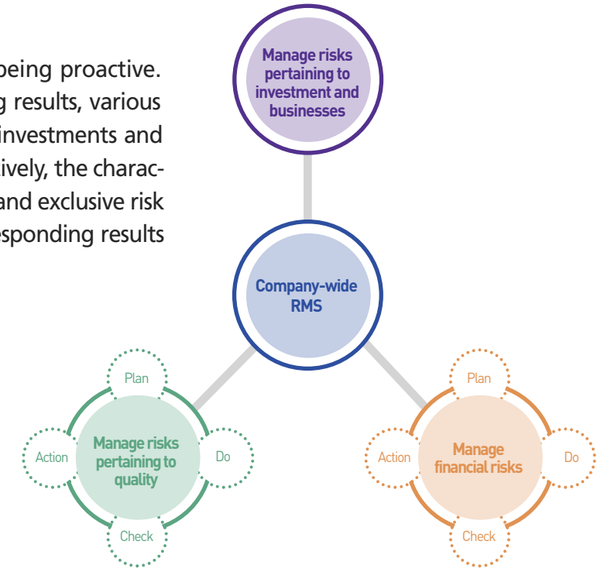
### Meetings with Shareholders

Executives regularly hold meetings with the shareholders in order to share operational information. In 2008, seven meetings were held to report on 49 agenda items including business results, innovation initiatives, and education and training programs. As such, efforts are being made to strengthen the employees' management mindset and their understanding of ethics management.

## ◆ Systematic Risk Management

### Risk Management System

The risk management system is geared towards being proactive. Risks may be posed by errors in design engineering results, various financial errors, and poor decisions on important investments and other business matters. To manage such risks effectively, the characteristics of the matrix organization are considered, and exclusive risk management departments are operated. The corresponding results are regularly reported to the CEO.




### Risk Management Procedure

Quality assurance procedure manuals are updated on a regular basis to manage quality risks. Internal accounting management procedures are implemented to manage the various financial risks.

### Diagnosis of Risks

The quality of design documents is inspected by examiners appointed exclusively to that task. Quality inspections are conducted once a year along with daily monitoring activities. Financial risks are inspected on the basis of a yearly plan concerning the operation of the internal accounting system. In 2008, accounting errors were inspected twice in six months, and the results were reported to the board. Interest rates and foreign exchange fluctuations are monitored on a daily basis to respond speedily to potential risks. In 2008, US-led financial risks were managed proactively.

### Risk Management Education

Quality assurance education is regularly provided to employees, and education is also provided to those employees in charge of financial risk management to reinforce their professionalism.

Social Performance

| Employees |

# Employees

## ◆ Employment Opportunities

### Employee Overview


The yearly job quitting rate for 2008 was 2.11%, suggesting high employment stability and employee satisfaction, compared with the industry's average of 2.4% (KNSO). In line with the government's advancement initiative, KOPEC did not hire any new employees in 2008, but will employ around 90 young interns in 2009. The average period of service for our employees is 16.4 years, and the total absences per employee was 1 day/year in 2008.

■ **Employee Statistics** (Unit : people, %, year, day)

| Year | 2006 | 2007 | 2008 |
|---|---|---|---|
| Employees | 1,866 | 1,889 | 1,861 |
| Executives | 5 | 5 | 5 |
| Average years served | 15.0 | 15.5 | 16.4 |
| Job quitting rate | 1.10 | 1.31 | 2.11 |
| Hiring rate | 2.54 | 2.45 | 0.00 |
| Total absent days | 7 | 0 | 1 |

### Equal Employment

Equal employment and human rights are guaranteed pursuant to the employment rules, and discrimination in personnel affairs on the basis of race, gender, age, religion, nationality and physical disability is strictly prohibited.
A procedure has been established to deal with reported incidents involving any form of discrimination. No wage discrimination by gender is allowed. Pursuant to the Act on Hadicapped People and Employment Promotion and the Act on Occupational Rehabilitation, the obligatory employment rate of over 2% has been met.

■ **Female Employees** (Unit : people, %)

| 2006 | | 2007 | | 2008 | |
|---|---|---|---|---|---|
| female employees | percentage of total employees | female employees | percentage of total employees | female employees | percentage of total employees |
| 116 | 6.2 | 121 | 6.4 | 119 | 6.3 |

■ **Disabled Employees** (Unit : people)

| Category | 2006 | 2007 | 2008 |
|---|---|---|---|
| Required employees | 37 | 37 | 37 |
| Actual employees | 41 | 45 | 46 |

### Employees' Welfare Benefits

As there are no comparable engineering companies of a similar size in Yongin where KOPEC is located. However, compared with other Korean engineering companies of a similar size, KOPEC's employees enjoy somewhat higher levels of welfare benefits and salaries.

### Compliance with ILO Regulations and Maternal Protection Policy

KOPEC complies with the ILO's regulations concerning the ban on child labor and forced labor. No violations occurred in 2008 in this regard. The company's maternal protection policy has also been implemented. Maternal benefits include 90 days of childbearing leave, temporary retirement or curtailed labor to assist the raising of infants younger than 3years child care facilities in workplaces, and convenient medical checks for expectant women. All these benefits are specified in the collective labor agreement.

Social Performance

| Employees |

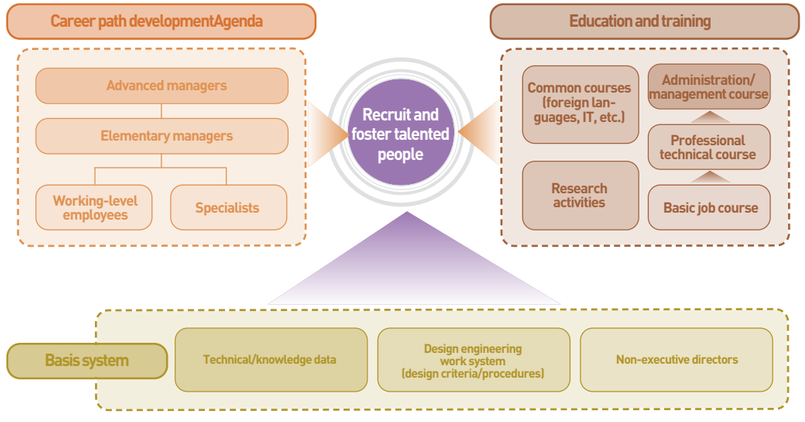
# ◆ Human Resources

Based on a philosophy of convergence between humans, environment and technology, and the application of its cutting-edge technologies, KOPEC continues to enhance employee values through technical education and is striving to become a world-class company. KOPEC also provides foreign language, ethics, and human rights education.

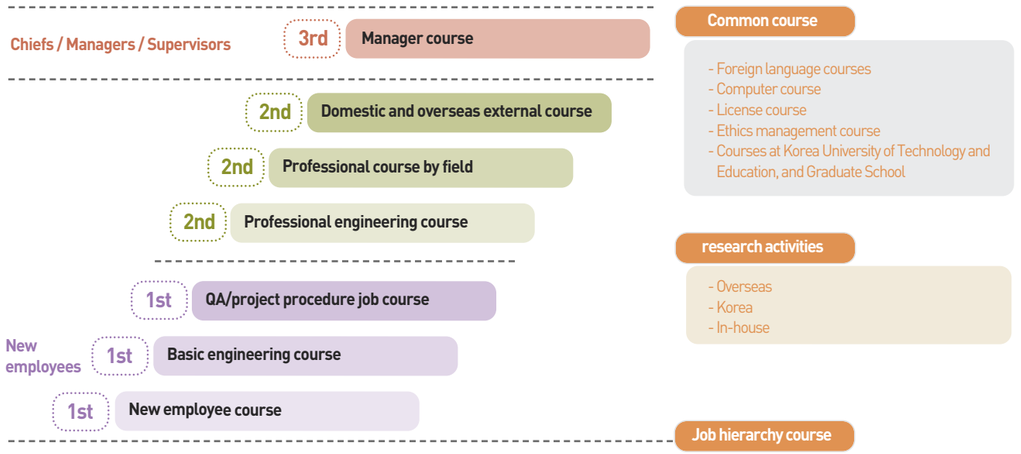
## Human Resources Management System

KOPEC offers employee career path development courses and general training courses to its employees. The career path development course focuses on the fostering of managers. The general training course focuses on technical knowledge, foreign languages, IT, and research activities. Training programs aimed at fostering experts are also provided; these are divided into the job hierarchy course, common course, and research activity course. Furthermore, key human resource fostering programs aimed at nurturing specialists and global leaders are operated, while foreign language and working knowledge courses are provided to strengthen the capabilities required of developing overseas markets. These courses are provided according to the employees' jobs and positions. To effectively implement educational programs, the Integrated Plant Information Management System (IPIMS) is operated along with design work procedures and knowledge data.

■ Key HR Fostering System




■ Training Program System




## Annual Employee Education Time

Employees receive 99 hours of education each year or 8.3 hours a month on average under the company's scheme to foster talented people.

■ Education and Traing Results (Unit : 100 million won, hour)

| Year | 2006 | 2007 | 2008 |
|---|---|---|---|
| Total traing costs | 19 | 15 | 17 |
| Education time per person | 101 | 95 | 99 |

## Human Rights Education

Human rights education, including sexual harassment prevention, is offered to all employees through online ethics management courses and other courses with the use of CATVs. In 2008, 98% of KOPEC's employees completed the online ethics management course, and 91% of its employees participated in sexual harassment prevention education. To minimize human rights infringements arising from sexual harassment, a Sexual Harassment Consultancy Staff system (one male employee, and one female employee) is operated, while special education is provided to sexual harassment consultancy staff to enable them to effectively conduct their duties.

# ◆ Safety

## Industrial Accident Management

Industrial accident rate of KOPEC is very low resulting from the nature of its work and environment. The relevant monthly data for which are electronically produced and reported to the CEO. The industrial accident rate for 2008 was a mere 0.03%, which compares extremely favorably with an average of 4.51% throughout the industry.

## Safety and Health Benefits

Labor and management have agreed upon the provision of medical checks for employees and their family members, and support for their medical costs, among other health and safety benefits.

## Healthcare Program

Through mutual agreement between workes and management, medical check-ups are provided to employees and their spouses under a healthcare scheme. Employees have expressed their satisfaction over medical examinations, posting a 96% approval rate. Furthermore, healthcare information is posted via the company's portal, and a range of programs encompassing monthly health consultations, a smoking cessation clinic, and influenza vaccination has been established.

## Compliance with ILO Industrial Safety and Healthcare Guidelines

In accordance with the ILO's industrial safety and healthcare guidelines, KOPEC is now operating an infirmary for its employees. Compensation for employees injured in work accidents is specified in the collective labor agreement, Article 56, pursuant to the Industrial Accident Compensation Act.

# ◆ Welfare

## Welfare System

The employee welfare system includes support for medical costs, support for tuition fees for employees' children (middle and high schoolers), support for resort facilities, support for occasions of congratulations and condolences, and the "Yes Support Center." The support for their children's tuition fees provides an additional incentive for employees to work hard. The company insurance supports the costs of employees' medical checkups, and the costs of medical treatment. The company welfare fund also supports employees' medical costs, from 5 million to 30 million (won) that is assessed on the year-end tax adjustment at. And, lastly, the Yes Support Center issues twelve types of civil documents on behalf of the employees.

## Family-friendly Policy and Support System

In order to help our employees strike a sound balance between their work and home lives, diverse welfare programs along with emotion management programs are provided. Subsidies for childbirth and employees' kindergarten children, as well as maternal leave and leave for infant care, are also provided. From 2009, support will be provided to employees' children aged 5 years and younger using child care facilities located near the company premises. Furthermore, to create a sense of fun in the workplace, diverse emotion management programs have been implemented. There are also programs for congratulating employees' children upon their entry to elementary school and for wishing them success in their college scholastic tests, as well as letters from the CEO. New employee inauguration ceremonies, to which their family members are naturally invited, and a Child Care Day are also organized. Employee consultancy services which was introduced for the first time in the public institutions are provided to help address work-related problems, and problems concerning employees' spouses, marriage, and child education.

## Improvement of the Working Environment

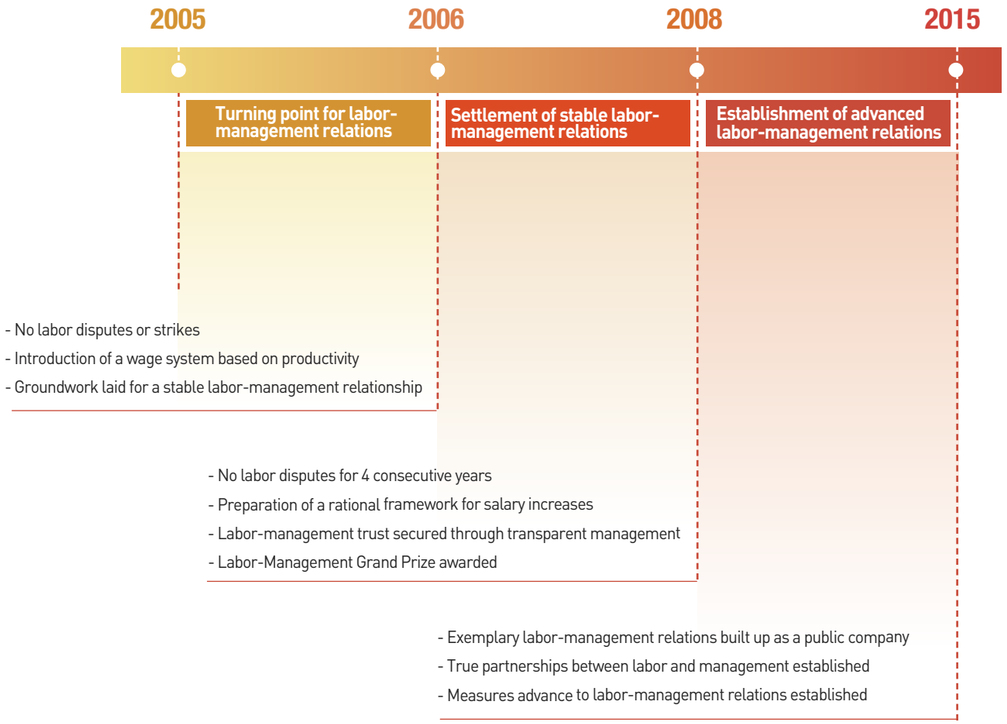
Efforts are being made to create a pleasant working environment by replacing dilapidated office furniture and so forth. IPTV system will be eguipped to allow the video-conference between the head office and the field.

Social Performance

| Employees |

# ◆ Good Labor-Management Relations

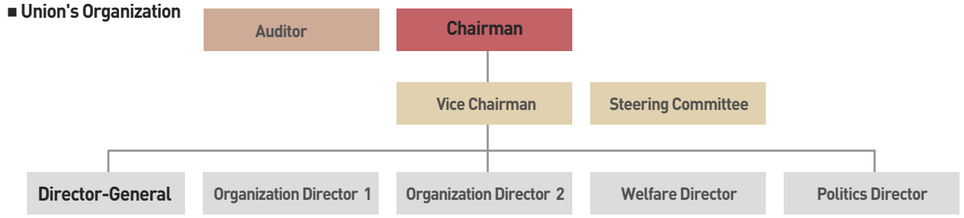
After the financial crisis of 1997, labor disputes over the sharing of business results and restructuring broke out, arousing a great deal of concern. However, labor and management together strove to establish common goals, and to form a consensus and build up trust through dialogue, thereby establishing a win-win relationship.




## Organization of the Labor Union

KOPEC's Labor Union, which was launched on December 7, 1987, and its Superior organization is the Korea Federation of Public Services and Transportation Workers' Unions, under the control of the Korean Confederation of Trade Unions. According to unionshoprale of collective agreement, all employees must be members of the union except managers and higher-ranking officials. As of 2008, 1,197 employees were unionists. The union consists of an assembly, a high-ranking committee, a Chairman, officials of a permanent execution conittee, and sub-committees such as working-level bureaus and departments.

■ Union's Organization




## The right of Collective bargaining and Freedom of Assembly and Association

The union is guaranteed collective bargaing right and freedom of assembly and association. All employees except managers and higher-ranking employees come to be members of the union the union pursuant to the shop rule of collective agreement and Labor Relation Arbitration.

## Open Dialogue Channel Between Labor and Management

A win-win labor-management relationship has been established through active communications and diverse channels of dialogue, thereby forming the basis for sustainable management. Such channels include the Labor-Management Joint Committee, the Labor-Management Joint promotion Committee on Public Institute Relocation, and the Labor-Management Consultative Council. Other meetings are also held to boost mutual consensus.

Social Performance

| Employees |

## Labor-Management Consultative Council

The Labor-Management Consultative Council, which is composed of six members each from labor and management, handles the welfare and productivity enhancement agenda on a quarterly basis, thereby promoting collaborative relationships.

■ Channel of Labor-Management Dialogue


## Friendship Meeting

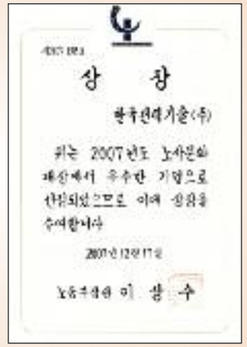
Through the friendship meeting, which is held for one hour every Tuesday and Thursday, working-level managers and union officials share their opinions on company issues and promote mutual understanding thereby helping to consolidate labor-management relations.

## Employee Consultancy System

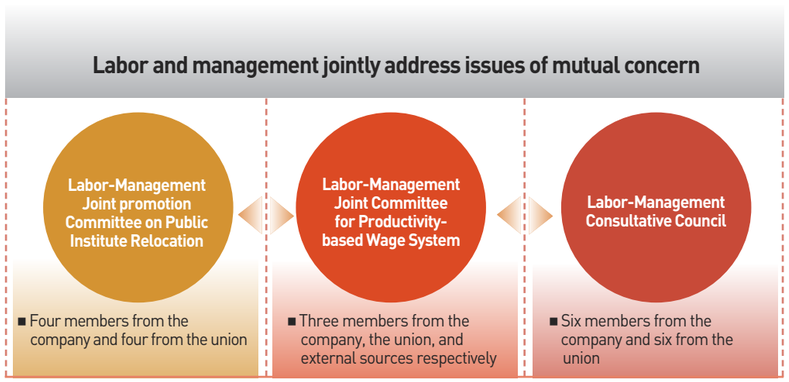
The Employee Consultancy Committee, which is composed of two members from the company and two from the union, is held twice each month to activate the handling of employees' problems. Requests are processed, and employees are notified of the results within ten days of their request being received. For the last five years, there have been no requests to rectify improper labor acts.

## Labor-Management Culture Prize Awarded

For four consecutive years from 2005, labor and management accomplished the feat of having no labor disputes or strikes. In recognition of this achievement, KOPEC was awarded the Labor-Management Culture Grand Prize in 2007, and concluded a no-negotiation-based wage agrement between labor and management in 2008.




■ Labor-management Joint Committees




Social Performance

| Business Partners |

# Business Partners

## ◆ Win-Win Policy

### Overview of KOPEC's Partners

KOPEC implements a partnership system by which we conduct joint design engineering and construction projects, provide mutual technical support, and share information.

### Issue in Sustainable Management With Partners

KOPEC is open to new partnerships and allows open bidding based on competition, thereby securing the best possible quality. KOPEC also shares lifelong learning programs and ethics management with its partnered firms. Notably, KOPEC assists them with employee training and the acquisition of essential technologies and information, further bolstering its social responsibility activities.

■ Partners Overview

| Architect engineering | |
|---|---|
| **Technologies** | **firms** |
| Nuclear | 10 |
| Machines and plants | 26 |
| Project management | 18 |
| Electricity and measurement | 17 |
| Information | 8 |
| Civil engineering and construction | 70 |
| Environment | 9 |
| Total | 158 |

| Construction | |
|---|---|
| **Fields of construction** | **firms** |
| Electricity | 41 |
| New renewable energy | 3 |
| Construction work | 107 |
| Total | 151 |

### Criteria and Procedure for Selecting Partners

KOPEC selects its partnered firms through open bids every three years and at need. Bidders are evaluated on the basis of their management status, capabilities, and so on, thus helping to make the procedure more transparent. The criteria for the selection of partners have yet to fully include their social and environmental achievements; thus, the criteria regarding the observance of human rights, compliance with the relevant laws, and environmental achievements will be formulated.

■ Partner Evaluation Criteria

| Category | Evaluation Items | Score |
|---|---|---|
| Management status | Credit rating | 40 |
| Capabilities | Workforce | 30 |
| | Achievements | 10 |
| | Quality assurance activities | 20 |
| Bonus score | Superior partners | (+2) |
| Total | - | 100 |

### Handling of Partner Complaints

KOPEC engages in dialogue with its partnered firms' employees through diverse channels of communication, including the Internet Cyber Support Center and the Customer Consultancy Room, the RINGO Service, and the 3-Phone-Calls-A-Day Campaign, as well as through working-level meetings, meetings with CEOs, and technical workshops. Surveys are conducted annually in order to gauge our partners' satisfaction with KOPEC's supporting efforts and to gather their recommendations and opinions. Support Centers are also operated in order to support the site for partners' workplaces and to lend computer systems, education on quality has been improved, and educational materials are provided to better assist our partners.

### Support for Partners and the Management Process

KOPEC, in its commitment to a win-win partnership, is striving to boost mutual competitiveness based on technical collaboration in order to realize sustainable customer values. Technical seminars are held throughout the year to impart our technologies to our partners, and customized technical courses are provided on the basis of annual surveys of demand. Notably, KOPEC's Basic Course on Engineering for new employees - using its key talented employees, which consists of 60 subjects in the nuclear power, thermal power and common fields, has been run for its partners since 2006, drawing a great deal of interest and participation. Prizes are awarded to superior partners and their employees in recognition of their achievements. Superior partners are granted such benefits as a bonus score in bidding, and exemption from contract guarantees. On the other hand, violators of partnership and integrity agreements may face a termination of their partnership with KOPEC under the guideline.

■ Partner Education

| 2006 | 2007 | 2008 |
|---|---|---|
| 8 times | 12 times | 20 times |

■ Technical Education Courses

- Understanding and practice of steel-frame drawings of turbine buildings
- Detailed design of small-caliber plumbing
- Plumbing design of turbine buildings and outdoor buildings
- Guideline on the drafting of drawings and calculation details, and architect management procedure on penetrations
- High- and low-pressure switchboards
- Design of major system diagrams (CLD, LWD)
- Common course for partners
- Design of deployment of air conditioning systems, and drafting of drawings
- Design of lighting and communication systems
- Design of automatic fire detection facilities and systems, and design of deployment of electrical facilities
- Characteristics of structures, scope of code application, etc.
- Guidelines on architect design and structural calculation details
- Procedure for and guidelines on design of small-caliber plumbing
- Functions and configuration of protection systems in power plants
- Design of APR 1400 MOV and impact assessment
- Design issues for APR 1400 MOV
- Working-level AutoCAD
- Customized technical course for partners
- Basic engineering
- Job improvement

# Customers

## ◆ Product Safety Policy

### Overview of Products and Customers

KOPEC specializes in design engineering for the construction of power plants, such as nuclear power plants and thermal power plants, as well as in desulfurization and denitrification environmental technologies. Accordingly, its customers are power generation companies which need design engineering services, as well as general electric power consumers.

### Issue in Sustainable Management

It is imperative that we enhance customer satisfaction and provide safe and economic energy sources to the general public. To that end, KOPEC is striving to provide the best possible design engineering services for the construction of safe plants.

### Upgrading Customer Safety and Engineering Services

■ **Design Quality Assessment System**

| Category | Details |
|---|---|
| Reporting system | Serious design defects and problems will be reported to the Quality Assurance Department so that corrective steps can be taken, thereby preventing the proliferation of such defects. |
| Fact-finding system | Anticipated or repetitive design problems are submitted to rigorous inspection so that the most appropriate measures can be devised, thereby preventing design defects. |
| Assurance and audit | Quality assurance and auditing for design work are conducted in order to maintain optimal design quality. |
| System of analyzing trends | After publishing design documents for construction and manufacturing, various design changes and discrepancies will occur; such trends are analyzed, their fundamental causes are defined, and improvement measures are devised. |

KOPEC is committed to minimizing the damage caused by errors in design to ensure a safe supply of electric power to the general public. To that end, KOPEC implements an overall design quality assessment system under which thorough examinations - including multiple checks - are conducted to ascertain whether systems and structures have been properly designed, and whether specific design requirements have been properly reflected. In this way, anticipated design defects and problems will be prevented to minimize the need for design changes and re-working during the course of manufacturing and construction.

## ◆ Customer Satisfaction


### Reflecting Customers' Suggestions

Dedicated staff from are designated each to gather the opinions of KOPEC's customers. One hundred customer-oriented technical sessions are held annually to share updated technologies, listen to customers' suggestions, and devise improvement measures. Customer databases are built to share relevant information among project implementers and enable immediate response to customer demands. Thanks to this system, no lawsuits involving claims for compensation adout design defects have been filed by KOPEC's customers.

### Customer Satisfaction Policy and Management

Every year, KOPEC participates in the Ministry of Strategy and Finance-led customer satisfaction surveys targeting public institutes. KOPEC evaluates its customer services based on the PCSI (the ministry's assessment model for customer satisfaction targeting public institutes) indicators. The results of such surveys are reflected in the formulation of service improvement measures which are reported to the Customer Satisfaction Management Committee, and then applied.

# Communities

## ◆ Duties as a Corporate Citizen

### Sustainable Management Issue With Communities

KOPEC is striving to communicate actively with local communities in order to build healthy relationships with them. KOPEC not only makes monetary donations, but also conducts various volunteer services. For instance, the True Love Group volunteers its time and effort to serve local communities. It has joined forces in serving 16 welfare facilities in Yongin and Daejeon and in the vicinity of power plants, as well as three villages.

#### The True Love Group's Activities

■ Targeted facilities: Facilities for disabled people, nursing homes for the elderly, and orphanages, and 16 rural villages.

**- Four facilities for disabled people, five orphanages, five nursing homes for the elderly, and two rural villages**

· Gapyeong (sister village)
· Anyang (Yongsachon, Jungbu)
· Yongin (eight facilities including Mubeopjeongsa)
· Uljin (Yeongsin Women's Shelter)
· Gyeongju (Daejawon)
· Jangsu (sister village)
· Busan (Baekyangwon)
· Yeonggwang (Sunrise House)

KOPEC 참사랑 봉사단

### Corporate Social Responsibility Programs

KOPEC's True Love Volunteer Group, which was launched in 2005, provides assistance and donations to welfare facilities in local communities and rural villages. Along with the contribution of donations, KOPEC also conducts organ donation campaigns, Habitat campaigns, blood donation campaigns, and meal serving campaigns, in conjunction with the Korean Organ Donors Association, Habitat, and Blood Bank.
Notably, the company donates twice the amount of the employees' voluntary donations from their monthly salaries under a matching grant system in order to raise the operating fund of the True Love Volunteer Group. Around 80% of employees have now joined this campaign.

Social Performance

| Communities |

**Sharing life: National social volunteer activities**

- Blood donation campaigns
- Conducting and publicizing organ donation campaigns

**Sharing love: Serving sister villages in rural areas**

- Helping farmers during the farming season
- Inviting rural villagers on an observation tour of the company, and offering employees' children hands-on rural experience
- Providing medical services to rural villages, and buying specialty agricultural products in conjunction with the company's cafeterias

**Diversifying corporate social responsibility activities**

**Sharing happiness: Conducting volunteer services**

- Conducting volunteer services at community welfare facilities (orphanages, nursing homes for the elderly, and rehabilitation centers for disabled people)
- Checking electrical safety at welfare facilities, examining energy-cutting measures, and conducting technical services

**Sharing hope: Sponsorship activities**

- Supporting needy neighbors at the recommendation of the community's government offices (teenage supporters of households, elderly people living alone)
- Sending donations to boost the morale of soldiers
- Helping clean up the oil spill in Taean County

## Employees' Time and Costs Dedicated to Social Volunteer Service Programs

In 2008, a total of 1,529 employees joined 116 volunteer events led by the True Love Volunteer Group, for a monthly average of 9.6 events. They joined clean-up campaigns at orphanages and children's welfare facilities. In recognition of its passionate volunteer activities, the True Love Volunteer Group was awarded the Grand Prize in the category of volunteer services for the three consecutive years at the corporate social activity competition hosted by the Korea Economic Daily.

■ **Employees' Time and Costs Dedicated to Volunteer Services** (Unit : hour, 1,000 won)

| Year | 2006 | 2007 | 2008 |
|---|---|---|---|
| Time | 5,765 | 4,091 | 7,716 |
| Costs | 119,406 | 112,279 | 124,988 |

## Policy and Procedure for Handling Communities' Requests

KOPEC maintains its communications with local communities through diverse channels. It provides the Internet Cyber Support Center and the Customer Consultancy Room,  the RINGO Service, and the 3-Phone-Calls-A-Day Campaign.

Social Performance

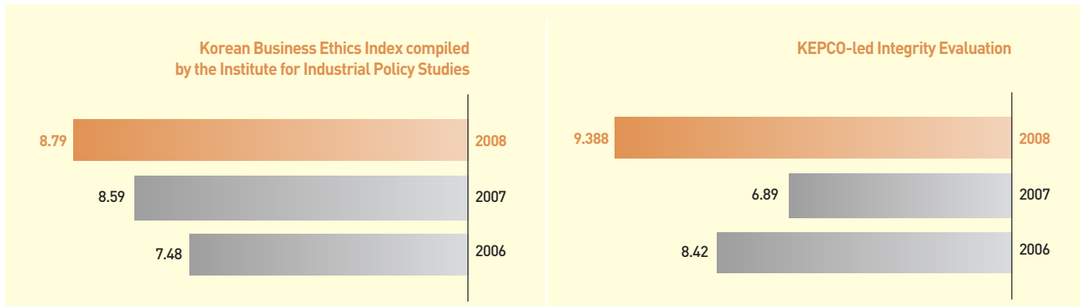
| Ethics Management |

# Ethics Management

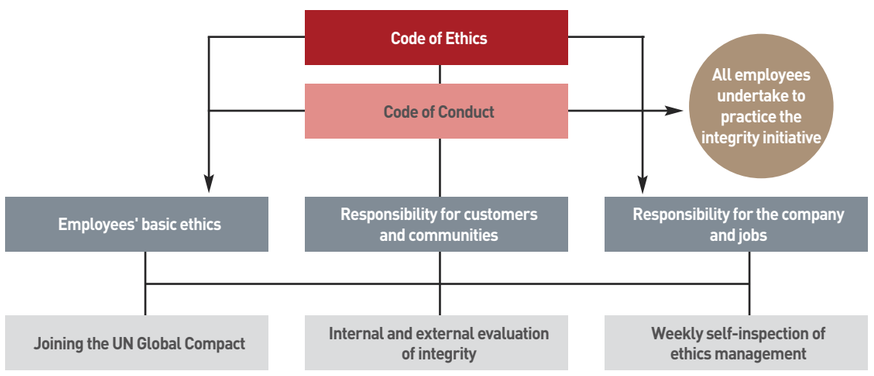
## ◆ Reliable Enterprise

### Ethics Management System

KOPEC implements the Code of Conduct for Employees (enacted in 2003) to ensure the practice of ethics management. Furthermore, KOPEC has joined the UN Global Compact to align its operations with the initiative's ethical principles. An employees' integrity regulation has also been enforced, while self-inspection and ethical campaigns are conducted thereby establishing a transparent, clean corporate culture.




■ Ethics Management System




### Code of Ethics

KOPEC espouses a philosophy based on the convergence of humans, the environment, and technology, and has established a culture of fair, and transparent ethics in a bid to become a world-class company that puts customer values first. To that end, KOPEC implements the Code of Ethics for Employees.

**| Employees' basic ethics**

- Based on trust and sincerity, we shall establish the right job ethics and values, perform our jobs honestly and fairly, and thereby fulfill our duties and responsibilities.

**| Responsibility for customers**

- On the understanding that the company's value lies in creating customer values, we shall respect the morality of business, observe the relevant laws and regulations, and do our best to satisfy our customers.
- We shall refrain from accepting entertainment and gifts from our partners when making business deals with them, make fair and transparent deals, establish mutual trust, and pursue mutual development.

**| Responsibility for the company and jobs**

- We shall respect all members of the company, evaluate and treat them fairly according to their competence and achievements, and do our best to exercise our creativity.
- Based on continual self-development and a challenging spirit, we shall abolish all inefficient or irrational work practices.
- We shall observe all the laws and regulations, establish good work etiquette and work discipline, strictly distinguish between official and private affairs, and promote a culture of honor and dignity.
- Based on trust and reconciliation between labor and management, we shall pursue mutual prosperity and develop partnerships afresh.

**| Responsibility for society**

- We shall continuously innovate technologies, and grow into a world-class engineering company, thereby contributing to the conservation of the environment and the development of society.
- We shall create jobs, and do our best to play a corporate citizen's role in serving the nation and its communities.

Social Performance

| Ethics Management |

## Organization of Ethics Management

### Department of Ethics Management

The Department of Ethics Management, which was established in 2005, is responsible for establishing a culture of ethics. To that end, the department operates the company-wide ethics management system and educates its employees to cultivate an ethical mindset. The department also regularly surveys, evaluates and improves ethical practices, thereby helping the company's transparent management.

### Ethics Management Committee

KOPEC began practicing "ubiquitous ethics management" in September 2007, under a system which enables employees to practice ethics management anywhere, anytime on a consensual basis. To that end the Ethics Management Committee, which is composed of a president (chairman) and division heads, strongly drives forward the handling of ethical issues and policies. Also, "ubiquitous" ethics management is implemented with the focus placed on 30 projects using 16 strategies.

■ Company-wide Organization of Ethics Management


## Investment in Ethics Management

KOPEC conducts education aimed at cultivating an ethical mindset among its employees, including the cyber ethics course and the external expert course, as well as publishing ethics management guidebooks and self-inspection programs. In this way, KOPEC links all its management activities to ethics management.

■ Investment Size (Unit : 1,000 won)

| Category | 2006 | 2007 | 2008 |
|---|---|---|---|
| Amount of investment | 60,670 | 10,317 | 101,533 |

## Education on Ethics Management

Since 2005, KOPEC has held annual integrity practice commitment rallies for all its employees. In 2008, KOPEC published the ethics management guidebook, titled The Practice of Clean and White Ethics Management. As such, KOPEC is striving to promote corporate ethics, to create a healthy corporate culture, and to establish itself as a respectable company.

## Integrity Reporting System

The Integrity Reporting System, as part of the company's ethics management, is designed to allow employees and customers to offer constructive suggestions and to report improper and unfair practices, such as demands for bribes and so on. These reports can be made via the Internet, mail, direct visit, phone, or e-mail. Reporters are protected by keeping their privacy confidential.

## Policy on the Prevention of Bribes and Corruption

KOPEC has implemented a corruption prevention system to establish itself as a respectable company. A transparent accounting system has also been implemented, and electronic, open bids for purchases, and construction works and services are offered over the Internet - with the exception of certain optional contracts - to minimize any possible improprieties. Such contracts specify an integrity provision, since ethics is an important evaluation item in selecting our partners. An ethics hotline under the control of the president is operated to protect the privacy of reporters, and integrity surveys are conducted to boost anti-corruption activities.

# Environmental Performance

2008 KOPEC Sustainability Report

**Pursuing the harmony of human, environment and technology, KOPEC has practiced an environmental management system to cope with protection of environment, and is continuously developing eco-friendly technologies for green growth.**

- **Environmental Management** Environmental Management System / ISO 14001 Certification / 7.3% of the Expenses for the Development of Technologies Invested in the Environmental Field
- **Saving on Raw Materials and Energy** Reducing the Volume of Direct and Indirect Energy Consumption / Reducing Volume of Water Consumption
- **Reduction of Environmental Pollutants** Reduction and Recycling of Domestic Garbage / Improvement of Sewage Treatment Facilities
- **Global Warming Prevention and Greenhouse Gas Reduction** Volome of GHG Emissions Declined by 10% / Executing the Strategy for GHG Reduction
- **Eco-friendly Technologies and Services** Flue Gas Desulfurization Systems / Flue Gas De-NOx Systems / Water Pollution Control Facilities / Environmental Assessment / ESCO Business / New and Renewable Energy / Management of Radioactive Waste and Decontamination & Decommissioning of Nuclear Power Plants

Environmental Performance

# Environmental Management

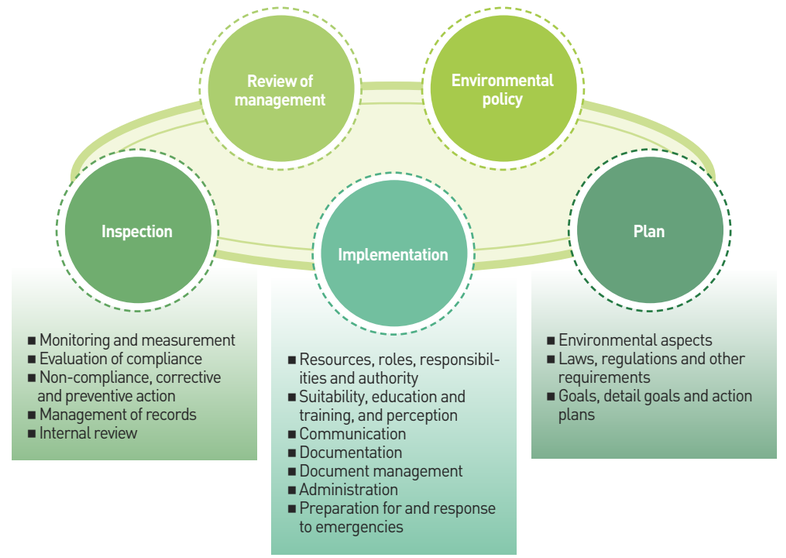
**KOPEC endeavors to help preserve the environment. KOPEC externally uses its technologies to foster and increase the number of environmental businesses, internally saves on resources, and increases the use of eco-friendly products.**

## Environmental Management System

KOPEC practices environmental management under the related system in order to ensure "environmentally sound and sustainable development" (ESSD) and eco-friendly management.

In compliance with the international environmental standard, ISO 14001, KOPEC implements the policy of providing eco-friendly technical services for sustainable management.

**ISO 14001 Environmental Management System Loop**




## ISO 14001 Environmental Management System Accreditation


KOPEC's environmental management system has been certified by a globally acknowledged accreditation agency, the British Standards Institution (BSI), with regard to its electrical, architectural, civil engineering and other facility works, as well as CM and supervision. With the introduction of the environmental management system, the mindset of KOPEC's employees and its corporate culture have begun to change, and our environmental business capabilities have been bolstered.

## Achievements and Investment in Environmental Management

KOPEC strives to internally economize energy consumption to reduce environmental damage, and is implementing diverse plans to that end. KOPEC uses its cuttingedge environmental load reduction technologies such as flue gas desulfurization systems and denitrification systems, and installs air pollution control, water pollution control, and waste treatment facilities.

In recognition of these efforts, KOPEC was awarded the 2008 National Environmental Management Grand Prize.

In 2008, KOPEC invested 37.2 billion won in the development of technologies, of which 2.7 billion won (7.3%) was invested in the environmental field, and a total of 16 personnel has commited in.

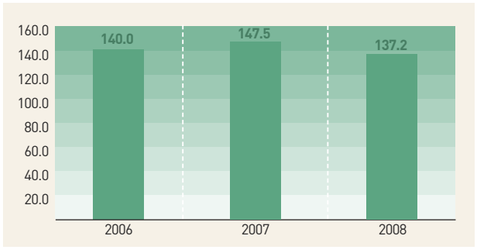
**■ Development of enviornmental Technologies**

- Technology to restore polluted environments
- Technology to evaluate the atmospheric environment in the vicinity of coal-fired thermal power plants
- Technology to reduce and treat $CO_2$ at thermal power plants
- Pilot projects for the installation of denitrification systems in China
- Technology to optimize flows in desulfurization systems
- Engineering technology for small- and medium-sized denitrification systems
- Low-cost, high-activation catalyst, low-energy-consumption process systems
- Engineering technology to upgrade KEPAR to 500MW
- Technology to manufacture materials for denitrification nano catalysts and to upgrade denitrification functions
- Non-ammonia, nano-catalyst technology for high-efficiency flue gas denitrification
- Technology to manufacture corrugate catalysts

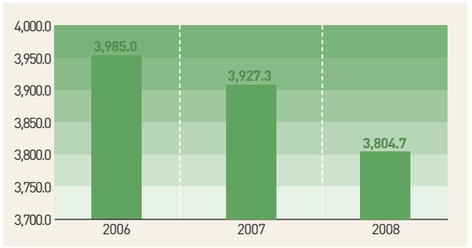
Environmental Performance

# Saving on Raw Materials and Energy

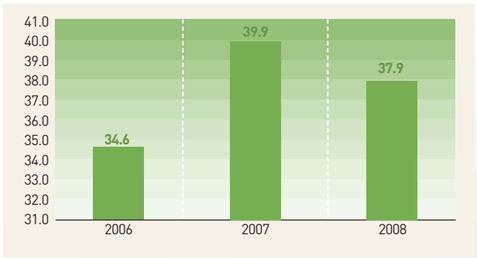
■ Annual Direct Energy (Gas) Consumption Per Person (Unit : m³)




■ Annual Indirect Energy(electricity) Consumption Per Person (Unit : Kwh)




■ Annual Water Consumption Per Person (Unit : m³)




## Volume of Direct Energy Consumption

KOPEC uses natural gas to generate steam for heating its headquarters buildings and to produce hot water. To reduce energy consumption, indoor temperatures are maintained at 18 ~ 20℃ during the winter season, while the heating time is controlled in line with indoor temperatures. Also, a minimum level of heating is operated after work in order to prevent pipes from freezing and/or bursting.

## Volume of Indirect Energy Consumption

Electric power is used to heat and cool buildings, to operate sewage and sanitation facilities, and to generate industrial power and heat. To reduce the consumption of electric power, only two of six available passenger elevators are operated to cover all floors, while four are synchronized with one another for sequential operation. In addition, power saving and control systems have been installed in fluorescent lights, lights are turned off at lunchtime, and lights are switched off in three time stages (18:00, 19:00, 21:00) after work. High-efficiency electronic ballasts for fluorescent lamps, and power-saving outlets have been installed.

## Volume of Water Consumption

Although KOPEC does not directly use water in the execution of its business, employees endeavor to cut water consumption in a bid to conserve the environment.

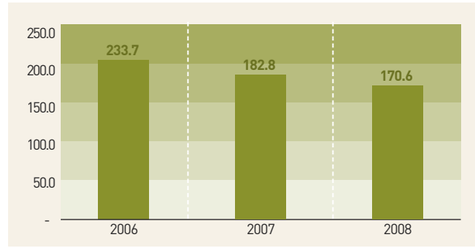
# Reduction of Environmental Pollutants

**KOPEC, which specializes in design engineering, does not produce industrial waste although it inevitably produces domestic garbage. As such, it endeavors to reduce the volume of domestic garbage and to cut waiting electric power, thereby reducing greenhouse gas emissions indirectly.**

## Reduction and Recycling of Garbage

36,000kg of waste paper, 6,000kg of bottles, and 8000kg of other types (including cans) of garbage were recycled by recycling firms. Domestic garbage of 220,000kg was also processed by waste disposal firms. As such, KOPEC endeavors to improve its recycling rates, thereby reducing the amount of garbage it produces.

■ Annual Garbage Volume Per Person (Unit : kg)




## Improvement of Sewage Treatment Systems and Facilities

Pursuant to the strengthening of the relevant laws, KOPEC has improved the performance of the sewage treatment facilities in the Yongin company building and the Hongnong company residences. An advanced method of wastewater treatment involving the removal of nitrogen and phosphorus has been implemented, in addition to the contact oxidization method which involves the removal only of existing carbon from the effluent water. In this way, levels of BOD (15mg/l) and SS (15mg/l) that are lower than the current legally permissible levels of 20mg/l and 20mg/l, respectively, can be maintained.

※ BOD : Biochemical Oxygen Demand

※ SS : Suspended Solids

Environmental Performance

# Global Warming Prevention and Greenhouse Gas Reduction

## Reduction of Greenhouse Gas Emissions

Greenhouse gas emissions emanate directly from the consumption of heating city gas, as well as indirectly from the consumption of electric power for cooling, lighting, elevators, office equipment, electronics, and so on. In 2008, the total volume of greenhouse emissions declined by 10% to 2,699ton.CO2, and the annual volume of GHG emissions per person was reduced by 13% to 1.8ton.CO2, compared with the previous year.
Each year, KOPEC diagnoses its energy management status in a bid to reduce its greenhouse gas emissions. Many employees now strive to commute to and from work by bus or other forms of public transport, participate in "car pools," drive private cars every other day, or ride bikes.

■ Strategy for the Reduction of GHG Emissions

| Category | Activities |
|---|---|
| Improving energy efficiency | - Programs are carried out to reduce waiting electric power |
| Every-saving campaigns | - Cooling and heating temperatures are limited (automatic operation temperature : 26 ~28℃).<br>- Operation of elevators is restricted and controlled.<br>- Simple clothing is worn during summer.<br>- Employees drive private cars only on designated days of the week.<br>- Commuter buses are operated. |
| ESCO projects | - Midnight electric power is used to produce and store heat for cooling and heating.<br>- Light bulbs have been replaced with high-efficiency bulbs. |

# Eco-friendly Technologies and Services

KOPEC designs high-efficiency, eco-friendly power plants, develops $CO_2$ reduction technologies, trades carbon emission credits, and conducts its clean development mechanism business in compliance with the Climate Change Convention. In a bid to reduce the volume of sulfur oxide and nitrogen oxide emissions generated by power plants, KOPEC designs and constructs innovative facilities such as the Korean flue gas desulfurization systems and denitrification systems. KOPEC holds the technical prowess required to design and construct air and water pollution control system, and waste treatment facilities. As such, KOPEC has acquired abundant experience in the execution of these types of projects.

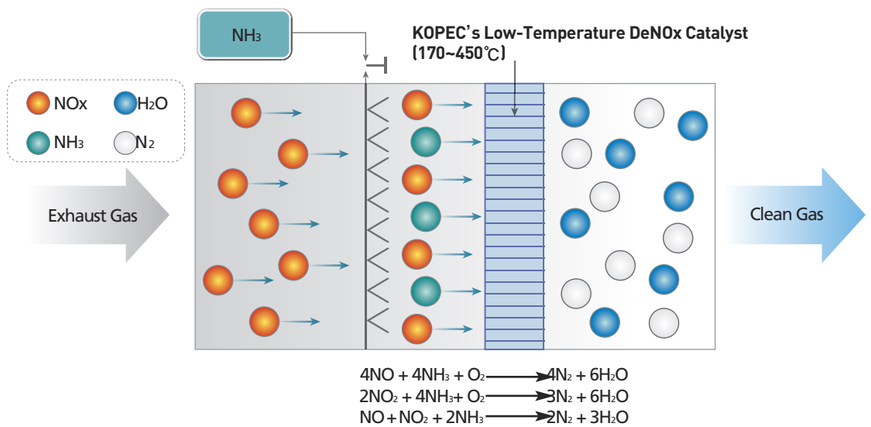
## Flue Gas Desulfurization Systems

A flue gas desulfurization system is designed to remove sulfur oxides - which are the main cause of acid rain, and respiratory and skin diseases from the atmosphere. KOPEC is equipped with the outstanding expertise and experience required to design and construct innovative air pollution prevention systems including FGD systems.

Environmental Performance

## Flue Gas De-NOx Systems

A flue gas De-NOx system is designed to remove nitrogen oxides, which are the main cause of acid rain and photochemstric smog, from the atmosphere.
As for De-NOx systems, KOPEC was the first Korean company to complete a turnkey project at Namjeju Thermal Power Plant. In addition to this project, KOPEC has successfully completed the feasibility studies, engineering, and test runs of nearly all thermal power plants in Korea. Ordinary industrial SCR catalysts only react at high temperatures of over 300℃, but KOPEC has developed a low-temperature KoNOx catalyst that reacts at a wide range of temperatures between 170~450℃ and features over 80% NOx removal.




## Water Pollution Control Systems

KOPEC provides optimal designs for water pollution control systems for power and manufacturing plants based on years of experience in raw water treatment, water purification, condensate demineralization and seawater desalination, while also providing economical and reliable systems based on many years of experience in design, purchase, construction and testing of industrial wastewater treatment and water reuse. KOPEC has been involved in a number of government funded sewage, excreta and livestock wastewater treatment plant projects, and continues to develop clean technologies through technical cooperation with advanced countries for the implementation of the latest technologies for improving water quality such as MF, UF, EDR, R/O and EDI.

## Environmental Impact Assessment

Providing environmental impact assessment services for power plant construction, water resource development and industrial complex development projects, KOPEC is the most experienced company in Korea in the areas of environmental survey, impact assessment and safety analysis

## ESCO (Energy Service Company) Project

KOPEC, listed as an energy service company (ESCO), provides a range of professional services. The ESCO Project was conceived with the aim of investing in energy-saving facilities on behalf of the consumers of energy, and thereby securing a good return on investments. KOPEC also performs the business of introducing cogeneration systems and installing energy-saving facilities in power plants and other industrial companies.

Environmental Performance

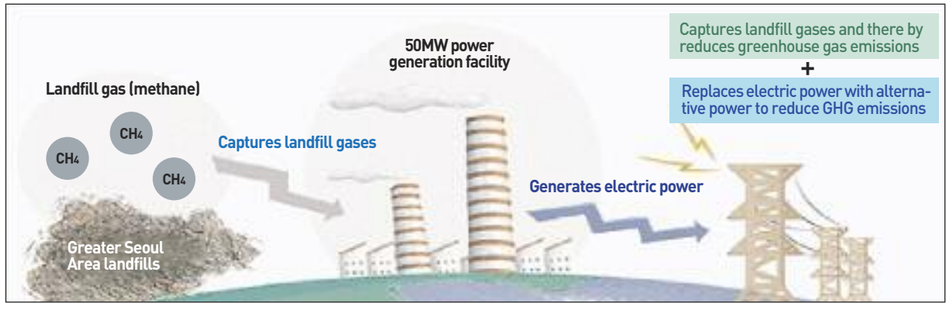
# New and Renewable Energy

## Wind Power Business

KOPEC provides a wide range of wind power generation services, including the creation of wind power plant complexes, the selection of optimal wind power generator models, the drawing up of basic and detailed designs, the designing of the linkage with electric transmission networks, and the pilot operation of wind power plants. Since carrying out the design work for the second-stage construction project of the Jeju Hangyeong Wind Power Plant in September 2004, KOPEC has designed various wind power projects such as wind power plants in Jeongseon and Pyeongchang, Gangwon-do.

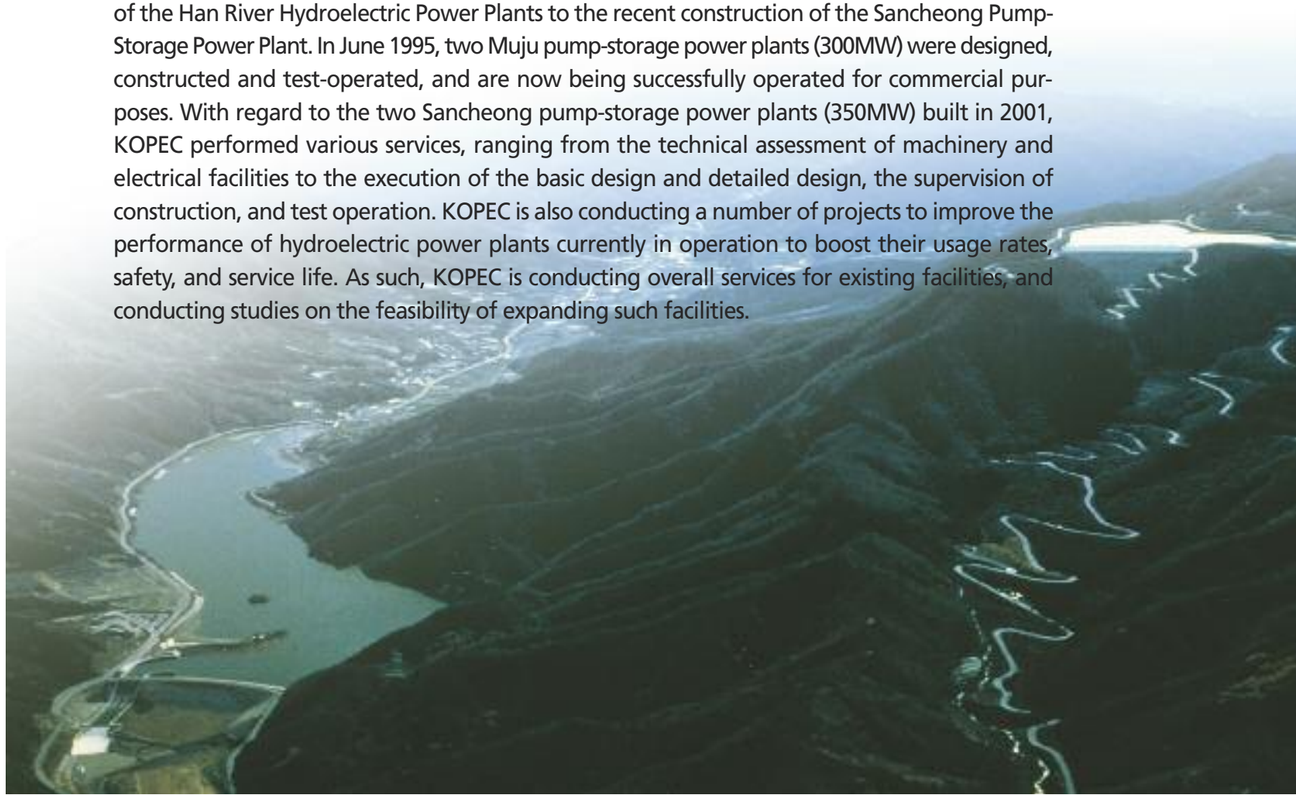
## Landfill Gas Power Plants

KOPEC is forging ahead with the business of reducing greenhouse gas emissions in linkage with the clean development mechanism. As part of this wider effort, KOPEC executed the project to convert gases emanating from the Greater Seoul Area landfills into an energy resource, which was expected to reduce carbon emissions by 1.37 million tons per year. This project, listed with the UN, has created various economic benefits and reduced air pollution in the vicinity of the landfills.




## Hydroelectric Power Business

Beginning with the expansion of the Seomjin River Hydroelectric Power Plant in 1982, KOPEC has executed a number of projects to design hydroelectric power plants, from the automation of the Han River Hydroelectric Power Plants to the recent construction of the Sancheong Pump-Storage Power Plant. In June 1995, two Muju pump-storage power plants (300MW) were designed, constructed and test-operated, and are now being successfully operated for commercial purposes. With regard to the two Sancheong pump-storage power plants (350MW) built in 2001, KOPEC performed various services, ranging from the technical assessment of machinery and electrical facilities to the execution of the basic design and detailed design, the supervision of construction, and test operation. KOPEC is also conducting a number of projects to improve the performance of hydroelectric power plants currently in operation to boost their usage rates, safety, and service life. As such, KOPEC is conducting overall services for existing facilities, and conducting studies on the feasibility of expanding such facilities.



## Management of Radioactive Waste and Decontamination & Decommissioning of Nuclear Power Plants

### Management of Radioactive Waste

KOPEC properly separates, treats, and disposes of radioactive waste in order to protect the public against potential risks and to prevent environmental pollution. KOPEC began to devise comprehensive design facilities for the disposal of low and intermediate-level radioactive waste in 2006, and is scheduled to complete the work by December 2009.

### Decontamination & Decommissioning of Nuclear Power Plants

KOPEC conducts the business of decontamination & decommissioning nuclear power systems and restoring facilities or sites affected by radioactivity to their original safe state in order to protect the health and safety of workers and the general public, as well as the surrounding environments, against the harmful impact of radioactive and non-radioactive materials. KOPEC is driving forward the development of technologies in the mid and long term for the massive dismantling of nuclear power systems. KOPEC is now engaged in decontamination and decommissioning of TRIGA projects, and to restore the environment affected by uranium conversion facilities. As such, KOPEC is conducting the business of decontamination & decommissioning nuclear power plants in Korea.

# Appendix

2008 KOPEC Sustainability Report

- GRI Index Chart
- COP on Global Compact Principles
- Major Awards (2006~2008)
- Association and Organization Membership

# GRI Index Chart

| Index | Wordings/Reasonings | Extent | page |
|---|---|---|---|
| **Vision and Strategy** | | | |
| 1.1 | Statement from the most senior decision-maker of the organization | ■ | 6 |
| 1.2 | Description of key impacts, risks, and opportunities | ■ | 21 |
| **Profile** | | | |
| **Organizational Profile** | | | |
| 2.1 | Name of the organization | ■ | 10 |
| 2.2 | Primary brands, products, and/or services | ■ | 12~17 |
| 2.3 | Operational structure of the organization, including main divisions, operating companies, subsidiaries and joint venture | ■ | 12 |
| 2.4 | Location of organization's headquarters | ■ | 10, 12 |
| 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 | ■ | - |
| 2.6 | Nature of ownership and legal form | ■ | 36 |
| 2.7 | Markets served(including geographic breakdown, sectors served, and type of customers/beneficiaries) | ■ | 13 |
| 2.8 | Scale of the reporting organization including ; Number of employees ; Net sales(for private sector organizations) or net revenues (for public sector organizations) ; | ■ | 11 |
| 2.9 | Significant changes during the reporting period regarding size, structure, or ownership. | ■ | - |
| 2.10 | Awards received in the reporting period | ■ | 81 |
| **Report Parametes** | | | |
| 3.1 | Reporting period for information provided | ■ | 2 |
| 3.2 | Date of most recent previous report (if any) | ■ | - |
| 3.3 | Reporting cycle (annual, biennial, etc) | ■ | 2 |
| 3.4 | Contact point for questions regarding the report or its contents | ■ | 83 |
| 3.5 | Process for defining report content | ■ | 2 |
| 3.6 | Boundary of the report | ■ | 2 |
| 3.7 | State any specific limitations on the scope or boundary of the report | ■ | 2 |
| 3.8 | Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations | ■ | - |
| 3.9 | Data measurement techniques and the bases of calculations | ■ | 2 |
| 3.10 | Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement | ■ | 2 |
| 3.11 | Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report | ■ | 2 |
| 3.12 | Table identifying the location of the Standard Disclosures in the report | ■ | 76~79 |
| 3.13 | Policy and current practice with regard to seeking external assurance for the report | ■ | - |
| **Management System** | | | |
| **Governance, Commitments, and Engagement** | | | |
| 4.1 | Governance structure of the organization, including committeess under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight | ■ | 36 |
| 4.2 | Indicate whether the Chair of the highest governance body is also an executive officer | ■ | 36 |
| 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 | ■ | 36 |
| 4.4 | Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body | ■ | 38 |
| 4.5 | Linkage between compensation for members of the highest governance body, senior managers, and executives and the organization's performance | ■ | 38 |
| 4.6 | Process in place for the highest governance body to ensure conflicts of interest are avoided | ■ | 39 |
| 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 | ■ | 37 |
| 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 | ■ | 21, 59 |
| 4.9 | Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental and social performance | ■ | 38 |
| 4.10 | Processes for evaluating the highest governance body's own performance particularly with respect to economic, enviornmental, and socal performance | ■ | 38 |
| 4.11 | Explanation of whether and how the precautionary approach or principle is addressed by the organization | ■ | 38, 39 |
| 4.12 | Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses | ■ | 6 |
| 4.13 | Memberships in association advocacy organizations in which the organization | ■ | 82 |
| 4.14 | List of stakeholder groups engaged by the organization | ■ | 36,40,50 |
| 4.15 | Basis for identification and selection of stakeholders with whom to engag | ■ | 36,40,50 |
| 4.16 | Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group | ■ | 38, 48, 51, 53 |
| 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 | ■ | 50, 52 |
| **Economic** | | | |
| EC1 | Direct economic value generated and distributed including revenues, operating costs, employees compensations, donations and other community investment, retained earnings, and payment to capital providers and governments | ■ | 24 |
| EC2 | Financial implications and other risks and opportunities for the organization's activities due to climate change. | ■ | 25 |
| EC3 | Coverage of the organization's defined benefit plan obligations | ■ | 26 |
| EC4 | Significant financial assistance received from government. | ■ | 27 |
| EC5 | Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation | ■ | 41 |
| EC6 | Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation. | ■ | - |
| EC7 | Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation | ■ | 26 |
| EC8 | Development and impact of infrastructure investment and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement | ■ | 27 |
| EC9 | Understanding and describing significant indirect economic impact, including the extent of impacts | ■ | 26~27 |
| **Environmental** | | | |
| EN1 | Materials used by weight or volume | ■ | 67 |
| EN2 | Percentage of materials used that are recycled input materials | ■ | 67 |
| EN3 | Direct energy consumption by primary energy source | ■ | 66 |
| EN4 | Indirect energy consumption by primary source | ■ | 66 |
| EN5 | Energy saved due to conservation and efficiency improvements | ■ | 66 |
| EN6 | Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives | ■ | 66 |
| EN7 | Initiatives to reduce indirect energy consumption and reductions achieved | ■ | 66 |
| EN8 | Total water withdrawal by source | ■ | 66 |
| EN9 | Water sources significantly affected by withdrawal of water | ■ | - |
| EN10 | Percentage and total volume of water recycled and reused | ■ | 66 |
| EN11 | Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas | ■ | - |

■ Reported ■ N/A(Or No Case) ■ Partially Reported ■ Not reported

| Index | Wordings/Reasonings | Extent | page |
|---|---|---|---|
| EN12 | Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas | ■ | - |
| EN13 | Habitats protected or restored | ■ | - |
| EN14 | Strategies, current actions, and future plans for managing impacts on biodiversity | ■ | - |
| EN15 | Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk | ■ | - |
| EN16 | Total direct and indirect greenbouse gas emissions by weight | ■ | 68 |
| EN17 | Other relevant indirect greenhouse gas emissions by weight | ■ | 68 |
| EN18 | Intiatives to reduce greenbouse gas emissions and reductions achieved | ■ | 68 |
| EN19 | Emissions of ozone-depleting substances by weight | ■ | - |
| EN20 | NOx, SOx, and other significant air emissions by type and weight | ■ | - |
| EN21 | Total water discharge by quality and destination | ■ | 66 |
| EN22 | Total weight of waste by type and disposal method | ■ | 67 |
| EN23 | Total number and volume of significant spills | ■ | - |
| 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 | ■ | - |
| 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 | ■ | - |
| EN26 | Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation. | ■ | 64~65<br>69~74 |
| EN27 | Percentage of products sold and their packaging materials that are reclaimed by category | ■ | - |
| EN28 | Monetary value of significant fines and total number of non-monetary sanctions for 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 | ■ | - |
| EN30 | Total environmental protection expenditures and investments by type | ■ | 65 |
| **Social : Labor Practices and Decent Work** | | | |
| LA1 | Total workforce by employment type, employment contract, and region | ■ | 40 |
| LA2 | Total number and rate of employee turnover by age group, gender, and region | ■ | 40 |
| LA3 | Benefits provided to full-time employees that are not provide to temporary or part-time emplolyees, by major operations | ■ | 45 |
| LA4 | Percentage of employees covered by collective bargaining agreements | ■ | 47 |
| LA5 | Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements | ■ | 48 |
| 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 | ■ | 47 |
| LA7 | Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region | ■ | 42, 44 |
| LA8 | Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases | ■ | 45 |
| LA9 | Health and safety topics covered in formal agreements with trade unions | ■ | 44 |
| LA10 | Average hours of training per year per employee by employee category | ■ | 43 |
| LA11 | Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings | ■ | 42~43 |
| LA12 | Percentage of employees receiving regular performance and career development reviews | ■ | - |
| LA13 | Composition of governance bodies and breakdown of employees per category according to gender, age, group, minority group membership, and other indicators of diversity | ■ | 36, 40 |
| LA14 | Ratio of basic salary of men to women by employee category | ■ | 40 |

| Index | Wordings/Reasonings | Extent | page |
|---|---|---|---|
| **Social: Human Rights** | | | |
| HR1 | Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening | ■ | 51 |
| HR2 | Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken | ■ | 51 |
| 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 | ■ | 43 |
| HR4 | Total number of incidents of discrimination and actions taken | ■ | - |
| 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 | ■ | 47 |
| HR6 | Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor | ■ | 41 |
| HR7 | Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor | ■ | 41 |
| HR8 | Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations | ■ | 43 |
| HR9 | Total number of incidents of violations involving rights of indigenous people and actions taken | ■ | - |
| **Social : Society** | | | |
| SO1 | Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting | ■ | 54~55 |
| SO2 | Percentage and total number of business units analyzed for risks related to corruption | ■ | - |
| SO3 | Percentage of employees trained in organization's anti-corruption policies and procedures | ■ | 61 |
| SO4 | Actions taken in response to incidents of corruption | ■ | 61 |
| SO5 | Public policy positions and participation in public policy development and lobbying | ■ | - |
| SO6 | Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country | ■ | - |
| SO7 | Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes | ■ | 38 |
| SO8 | Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations | ■ | 38 |
| **Social: Product Responsibility** | | | |
| 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 | ■ | 52 |
| PR2 | Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and sevices during their life cycle, by type of outcomes | ■ | - |
| PR3 | Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements | ■ | - |
| PR4 | Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes | ■ | - |
| PR5 | Practices related to customer satisfaction, including results of surveys measuring customer satisfaction | ■ | 53 |
| PR6 | Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship | ■ | - |
| 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 | ■ | - |
| PR8 | Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data | ■ | - |
| PR9 | Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services | ■ | - |

■ Reported ■ N/A(Or No Case) ■ Partially Reported ■ Not reported

# COP on Global Compact Principles

| Principles | Supporting Rules and Regulations at KOPEC | GRI | Page |
|---|---|---|---|
| **Human Rights** | | | |
| We Support and respect the protection of internationally proclaimed human rights | Code of Ethics/Collective Agreement, Article 99/ Employment Rules, Article 4 | ■HR1 ■HR4 ■HR7 ■HR2 ■HR5 ■HR8 ■HR3 ■HR6 ■HR9 | 41, 43, 47, 51 |
| We make sure that we are not complicit in human rights abuses | Code of Conduct for ethics management, Article 29/Collective Agreement, Article 99/ Employment Rules, Article 5 | ■HR1 ■HR2 ■HR8 | 43, 51 |
| **Labor Standards** | | | |
| We uphold the freedom of association and the effective recognition of the right to collective bargaining | Collective Agreement, Articles 2, 5 and 6/ Employment Rules, Article | ■HR5 ■LA4 ■LA5 | 47, 48 |
| We eliminate all forms of forced and compulsory labor | Collective Agreement, Articles 34, 35 and 37/ Employment Rules, Article 16 | ■HR7 | 42, 44 |
| We effectively abolish child labor | Collective Agreement, Article 99/ Employment Rules, Article | ■HR6 | 41 |
| We eliminate discrimination in respect of employment and occupation | Code of Conduct for ethics management, Article 5/Collective Agreement Article25/ Employment Rules, Article4 | ■HR4 ■LA10 ■LA14 ■LA2 ■LA13 | 36, 40, 43 |
| **Environment** | | | |
| We support a precautionary approach to environmental challenges | Environmental Policy/ISO 14001 Certification/Environmental Management Manual | ■4.11 | 38, 39 |
| We undertake initiatives to promote greater environmental responsibility | Environmental Policy/Environmental Management Manual | ■EN2 ■EN13 ■EN22 ■EN5 ■EN14 ■EN26 ■EN6 ■EN18 ■EN27 ■EN7 ■EN21 ■EN30 ■EN10 | 64~74 |
| We encourage the development and diffusion of environmentally friendly technologies | Environmental Policy/Management Policy | ■EN2 ■EN7 ■EN26 ■EN5 ■EN10 ■EN27 ■EN6 ■EN18 ■EN26 | 64~74 |
| **Anti-corruption** | | | |
| We work against corruption in all its forms, including extortion and bribery | Code of Conduct for ethics management, Article 16/Collective Agreement, Article 99/Employment Rules, Article 9/Pledge of Moral Management Forum of CEOs | ■SO2 ■SO3 ■SO4 | 61 |

■Reported ■N/A(Or No Case) ■Partially Reported ■Not reported

# Major Awards(2006~2008)

| Date | Awarders | Awards |
|---|---|---|
| Nov. 26, 2008 | Korea Economic Daily | 2008 Corporate Social Responsibility Award in the voluntary category |
| Nov. 20, 2008 | Ministry of Public Administration and Security | 2008 National Quality Award |
| Nov. 18, 2008 | Korea Management Association | 2008 Korea Management Productivity Award in the customer value innovation category |
| Oct. 29, 2008 | Ministry of Knowledge Economy (Korean Agency for Technology and Standards) | 2008 Nominated as a superior quality-competitive enterprise |
| Oct. 16, 2008 | Choongang Ilbo, GWP Korea | 2008 Great Work Place Award in the public sector |
| Jun. 10, 2008 | Ministry of Environment | 2008 National Environmental Management Promotion Award |
| Dec. 17, 2008 | Ministry of Labor (The Korea Labor Foundation) | 2007 Labor Culture Award |
| Dec. 5, 2008 | Choongang Ilbo, GWP Korea | 2007 Fun Work Place Award in the public sector |
| Nov. 20, 2008 | Korea Economic Daily | 2007 Corporate Social Responsibility Award in the voluntary sector |
| Nov. 7, 2008 | Ministry of Commerce, Industry, and Energy (Korean Agency for Technology and Standards) | 2007 Nominated as a superior quality-competitive enterprise |
| Oct. 15, 2008 | Korea Management Association | 2007 Productivity Award |
| Sep. 18, 2008 | Ministry of Labor | 2007 Superior Labor Culture Award |
| Nov. 9, 2008 | Korea Economic Daily, Open Economic Research Institute | 2006 Corporate Social Responsibility Award |
| Sep. 26, 2008 | Ministry of Commerce, Industry, and Energy | 2006 Energy, and New Resource Technology Development Award in the greenhouse gas treatment category ward |

# Association and Organization Membership

| Category | Organizations | Entry Year |
|---|---|---|
| Mandatory | Korea Engineering & Consulting Association | 1982 |
| | International Contractors Association of Korea | 1983 |
| | Korea Fire Construction Association | 1984 |
| | Daejeon Chamber of Commerce and Industry | 1984 |
| | Yongin Chamber of Commerce and Industry | 1984 |
| | Construction Association of Korea | 1992 |
| | Korea Electrical Contractors Association | 1993 |
| | Korea Construction Consulting Engineers Association | 1994 |
| | United Defense Association | 1997 |
| | Energy Service Company (ESCO) Association | 1999 |
| Optional entry | Korean Emergency Plan Association | 1987 |
| | Korean National Red Cross | 1992 |
| | Korea Plant Engineering Association | 1993 |
| | Korea International Trade Association (KITA) | 1993 |
| | ISO 9000/14000 Association | 1994 |
| | Science Technology Information Association | 1997 |
| | Korea Management Association | 1999 |
| | The Institute of Internal Auditors Korea | 2001 |
| | Moral Management Forum | 2003 |
| | Korea Personnel Improvement Association (KPI) | 2004 |
| | Korea Document Management Association | 2005 |
| | Korea Plant Industries Association | 2005 |
| | UN GLOBAL COMPACT Network Korea | 2007 |
| | Moral Management Club of CEOs | 2007 |
| | Institute of Business Development | 2007 |
| | The Korean Society for New and Renewable Energy | 2008 |
| | Korean Wind Energy Association (KWEA) | 2008 |
| | Korean Standards Association | 2008 |
| | The Korea Society for Quality Management | 2008 |
| | Korea Productivity Center | 2008 |
| | Korea Association of Industrial Technology Security | 2009 |

2008 KOPEC's Sustainability Report

# Reader Opinion Survey

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

**1. What is your profession?**

① Investor/Shareholder ② Cooperative Business Associate ③ Employee ④ Local Resident
⑤ NGO ⑥ Business ⑦ Academic Community ⑧ Civil Servant ⑨ Journalist ⑩ Other (  )

**2. Through which channels did you find out about KOPEC's Sustainability Report?**

① KOPEC's homepage ② UN Global Compact homepage ③ KOPEC Employees ④ Other (  )

**3. How would you evaluate this report?**

① Good ② Average ③ Poor

**4. Which section of the report did you find most interesting?**

① About KOPEC ② Sustainable Managemanet ③ Economic Performance
④ Social Performance ⑤ Environmental Performance

**5. Which part of the report should be added to, if any?**

① About KOPEC ② Sustainable Managemanet ③ Economic Performance
④ Social Performance ⑤ Environmental Performance

**6. Please feel free to make comments on the report**

(  )

Thank you! Please cut the dotted line and return the questionnaire to the following

■ **Address Mail** Management Planning Department,
257, Yonggudaero, Giheung-gu, Yongin-si, Gyuenggi-do, 446-713, Korea
■ **Fax** 82-31-289-4419 ■ **E-mail** sustainability@kopec.co.kr