



Better Energy, Better World

Beyond LNG, Global KOGAS

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REPORT INFORMATION

This is the fifth sustainable management report issued by KOGAS. KOGAS is a public organization whose aim is to provide a stable supply of natural gas, to enrich public life and enhance the public welfare as the world's best energy provider. This report was made to disseminate the sustainable management accomplishments achieved by KOGAS in 2010 through the assistance of our stakeholders.

This basic report structure aimed to deliver consistent messages to stakeholders is similar to existing reports, but some changes have been for increased readability and convenience. Additional explanations on main changes and particularities have been given.

Reporting Principles

This report is compiled in reference with the GRI G3 Guidelines, and covers the findings from the DJSI Korea survey in 2011 as well as the company's internal survey on stakeholders' opinion regarding KOGAS' sustainability management strategy and a media analysis in order to ensure the transparent disclosure of information.

Reporting Scope

The scope of this report includes the headquarters and 12 domestic business locations, including its affiliated company, Korea Gas Technology Corporation, but the report excludes its subsidiaries and overseas branches.

Reporting Period

Being issued once a year, this report covers the period from the 1st of January, 2010 to the 31st of December, 2010. It contains report information for three years from 2008 to 2010 for the purpose of judging the trends of achievements by sector in principle. If the information pertains to 2011, it is specified.

Report Assurance

In order to enhance the reliability of the data stated in the report, we have consulted with external economic, social and environmental experts, employed an outside survey agency to identify major issues of interest to our stakeholders, and received assurances from an independent third party.

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KOGAS will fulfill its obligations as a responsible company cooperating with the global community and serving the public in an effort to emerge as a top-rated global company,



CEO's Message

Dear Stakeholders

Since its foundation in 1983, KOGAS has made continuous efforts to enhance convenience of life and improve public welfare through the stable supply of natural gas, a clean energy source. In addition, KOGAS has ceaselessly endeavored to fulfill its social responsibilities and to create sustainable value under the corporate motto, 'Better Energy, Better World'. In particular, all employees of the company are unified in producing tangible results by focusing on acquiring overseas resources, developing green growth strategies and realizing energy welfare in 2010.

As Korea needs to import most of its energy resources from foreign countries, the stable acquisition of energy is of the highest importance. Under the motto, 'the independent development and production of energy resources', KOGAS has explored, developed and produced natural gas and crude oil across the world based resources in Iraqi gas field operation, Indonesian liquefaction operations, Australian unconventional gas-based LNG and Canadian Arctic oil and gas resources development since 2010, and this has led to excellent achievements.

In addition, KOGAS has continuously sought to determine the diversified interests and demands on the part of its stakeholders, employees, customers, local communities and partners and pursued stakeholder-oriented sustainable management by reflecting these concerns and interests in management. As a result, the company has become the only Korean public company that ranked 4th in the energy sector on Fortune's "World's most admired companies."

Against this backdrop, KOGAS will set a course to realize sustainable management that reflects an energy company serving the public, a leading environmentally friendly energy company and a trustworthy company that holds its stakeholder confidence while fulfilling its role as a responsible company emerging as a top-rated global company.

KOGAS will emerge as an energy company that serves the public

KOGAS is steadily expanding its pipeline network in alienated areas for the purpose of expanding the universal benefits of natural gas in the nation while continuously increasing our natural gas storage capacity by initiating the construction of a fourth LNG terminal in Samcheok. Toward this end, the company is doing its utmost to realize energy welfare and expanding our overseas resource development projects for the purpose of a stabilized supply of natural gas while focusing on acquiring energy resources for the future.

KOGAS will endeavor to enhance its status as an environmentally friendly energy leader

KOGAS is making enterprise-wide efforts to respond to climate change, clearly understanding our responsibility for constructing a green society and preserving the dream of a clean earth environment. KOGAS taking us one step closer to constructing a green society by expanding the distribution of natural gas, the green energy, and proactively participating in achieving the goals of reducing greenhouse gas. In addition KOGAS is saving energy while taking the initiative in furthering new green projects in the bio gas and new renewable energy sectors in an effort to achieve environmentally friendly management in harmony with growth and environmental preservation.

KOGAS will fulfill its social responsibilities and emerge as an energy company adored by all its stakeholders.

KOGAS is proactively responding to public demand for principled management where a higher standard is applied to public companies. All employees are more unified in realizing ethical management based on higher transparency and credibility than any other company. In addition, the company is focused on improving the quality of life for employees, introducing industrial relationships based on harmony and coexistence to realize WLB (Work-Life Balance) and taking an important role in facilitating the sagging national economy by expanding investments and creating jobs. In addition, KOGAS is providing reduced gas rates to the underprivileged including welfare recipients and the low-income class while making efforts to create a sharing culture ranging from such activities such as the expanded scholarship and sponsorship for the East Timor Youth Soccer Team to specified social contribution activities as cultural heritage preservation projects.

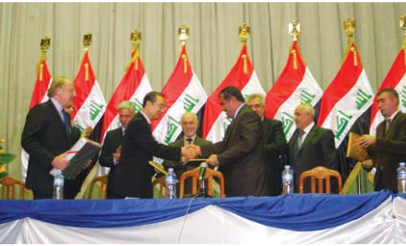
The company is issuing its fifth sustainable management report to help all stakeholders including the government, investors, local community, employees and our public and overseas partners better understand its efforts to further sustainable management. We hope that our sustainable management will help stakeholders further enhance their confidence in KOGAS. In the future, we will continue to do our utmost to emerge as a global company that serves the public in cooperation with the global community by reflecting the diverse opinions of our stakeholders.

Thank you.

President & CEO
Korea Gas Corporation

2010 Highlights

Economy



Established a contract to develop and produce the 'Badra' Iraqi oil field (Jan. 28, 2010)

KOGAS was the only Korean bidder and won the final contract. The KOGAS consortium is expected to produce a total of 800 million barrels of crude oil over 20 years and acquire 20 million barrels of crude oil.

Established an equity participation contract in gas fields Canada (Feb. 27, 2010) and initiated commercial production (May 2010)

KOGAS established a contract of 50% equity participation and joint operation of three fields (Kiwigana, Jackpine and Noel) owned by EnCana in Canada and initiated commercial production. During the project period, the company will acquire about 20 million tons of gas (estimated by KOGAS) and initiated production in 2010. The contract is expected to produce and lead to the sales of about 1.2Tcf (25 million tons) of gas for 40 years from the 3 fields.

Established a cooperation contract on an LNG project with Pemex Gas in Mexico (Jul. 1, 2010)

KOGAS established a contract with the Mexican LNG Project with Pemex Gas in Mexico to cooperate in the Lazaro Cardenas LNG Terminal Project in Mexico. This is expected to contribute to generating profits in technological projects including the expansion, design and construction management of midstream and downstream projects in Central and South America while supporting plant exports on the part of private companies.

Joined DJSI KOREA (Dow-Jones Sustainable Management Index) for 2 years in a row (Oct. 28, 2010)

Out of the top 200 Korean companies, 49 companies joined the DJSI Korea Index, and KOGAS was selected as the best company in the gas sector for 2 consecutive years as a result of its diversified evaluation on financials, social contribution, environmental and corporate governance.

Jointly implemented the CNG Project in Uzbekistan (Dec. 15, 2010)

KOGAS and Kolon Group established an MOU to jointly pursue CNG Projects for natural gas-fueled vehicles in Uzbekistan. The company is attempting to achieve synergy effects by advancing into midstream and downstream projects in addition to upstream E&P

Advanced into the development of the Arctic resources project for the first time in Korea (Feb. 15, 2011)

KOGAS established a contract to purchase 20% stake in the Umiak Field with MGM Energy in Canada. The Umiak Field is located at the 69° line of latitude, and the company plans to produce gas from 2020 by evaluating the quality of resources and conducting development.

Environment



Announced the Five-Year Green Management Plan (Jan. 1, 2010)

KOGAS announced the 'KOGAS Five-Year Green Management Plan' enthusiastically pursuing a green growth project for a five year period from 2010 to 2014. According to the plan, 'A sustainable green energy company' was set as the corporate vision, and 52 items were designated for 7 assignments in 3 areas on the back of a total 74.1 billion won in investments.

Established a contract on mutual support and cooperation in new and renewable energies with Korea Southern Power Co., Ltd. (Jun. 7, 2010)

The Samcheok LNG Terminal of KOGAS (under construction) and the Samcheok Green Power Generator of Korea Southern Power Co., Ltd. (under construction) are expected to explore Korea's largest scale of new and renewable energies (about 500MW) responding to low-carbon green growth. The contract is expected to further enhance cooperative relationships with the application of various technologies on new and renewable energies and the establishment of business models on social contribution.

District Divisions in chungcheong established the Blue Sky project Agreement in 2010 (Jun. 22, 2010)

District Divisions in chungcheong established the Blue Sky Project Agreement with Green Korea in Daejeon and Chungnam in 2010. The agreement is expected to lead to the monitoring of air pollution in 120 locations in the Daejeon area on a continual basis. In addition, the installation of photovoltaic generators in children's libraries will enable the children who are expected to play a leading role in the future to develop a healthy interest in environmentally friendly green growth and future energies. The Blue Sky Project hopes to pass down blue skies to future generations in these regions. This has been pursued for 6 years from 2005, emerging as a representative clean air campaign.

Incheon LNG Terminal receives the Presidential Award in the 9th Korea Safety Awards (Nov. 15, 2010)

KOGAS received the most honorable Presidential Award in Korea's most recognized representative safety awards organized by the National Emergency Management Agency for conducting various safety activities based on a systematic safety management system for the safe and continuous supply of natural gas.



The KOGAS Taekwondo Team supports resources diplomacy (Sept. 7, 2010)

The KOGAS Taekwondo Team conducted sports exchanges with the Uzbekistan National Taekwondo Team for two weeks and played its role as a civilian diplomat to enhance friendly relationships by visiting a nursing home. The company plans to support overseas resources development projects and act as a civilian diplomat through sports exchanges.

Established a collective agreement on Love Fence (Sept. 8, 2010)

'Love Fence' is an ongoing project that provides children from low income families who are exposed to unfavorable social and economic conditions with the opportunity to climb up the social ladder and overcome a vicious circle of poverty. 'Love Fence' plans to conduct various support activities by establishing sisterhood relationships with 13 business locations and 13 regional children's centers nationwide.

Received the 2010 Korea CSR Award (Dec. 15, 2010)

KOGAS conducted evaluations on CSR achievements based on criteria established by Asian CSR experts in HERI, and as a result, received the highest award among 109 domestic companies affiliated with the FTSE Advanced Countries Index and listed on the EAST ASIA 30 selections based on the evaluation of companies in KOREA, China and Japan

Received the best institution grade for 4 consecutive years in the customer satisfaction evaluation of public companies (Dec. 24, 2010)

KOGAS received the highest grade for 4 years consecutively in the 'Customer Satisfaction Evaluation on Public Institutions' organized by the Ministry of Planning and Finance. The purpose was to objectively measure the level of services enhancing public convenience and satisfaction with public institutions.

Selected as one of the world's most admired companies by Fortune (Energy Sector) (Mar. 4, 2011)

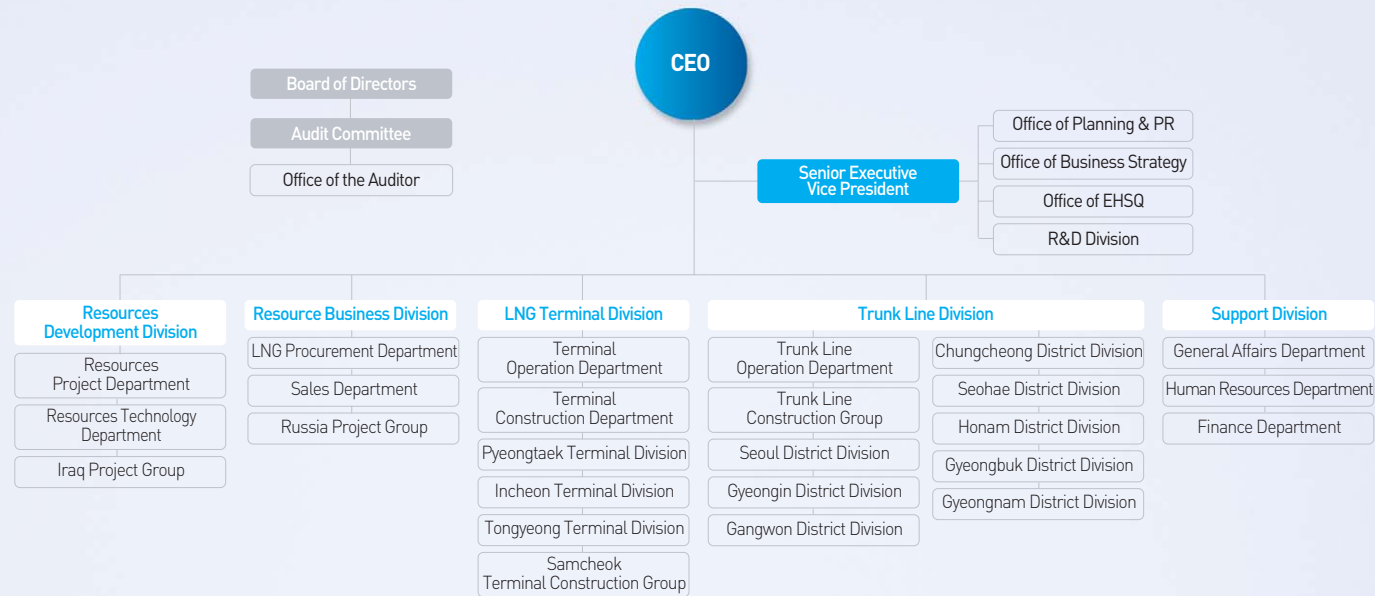
As a result of evaluations conducted by CEOs and analysts, KOGAS ranked 6th in the energy sector and recognized as one of the world's most admired companies in 2009. Among 1400 global companies in nine sectors including global competitiveness, innovation, people management, Use of corporate assets, social responsibility, Quality of management, financial soundness, long-term investments and quality of products and services, KOGAS ranked 4th in 2010.

Society



KOGAS Profile

Organization Chart



*18 departments including offices, centers and groups under 5 divisions and 12 branches including terminal divisions, district divisions and construction groups

KOGAS Overview

Company Name	Korea Gas Corporation
President & CEO	Choo, Kang-Soo
Date Established	August 18, 1983
Business Type	Import & Supply of Natural Gas
Main Office	Dolmaro 171 (215 Jeongja-dong), Bundang-gu, Seongnam-Si, Gyeonggi-do, Korea
Premises	- Terminal Divisions in Incheon, Pyeongtaek, Tongyoung and Samcheok - District Divisions in Seoul, Gyeongin, Gangwon, Chuncheong, Seohae, Honam, Gyeongbuk and Gyeongnam
Major Businesses	1. Production & Distribution of Natural Gas including Purification and Sales of By-products 2. Construction and Operation of LNG Terminals and Natural Gas Distribution Network 3. Exploration and Import/Export of Natural Gas 4. Exploration and Import/Export of Liquefied Natural Gas 5. New and renewable energies based on natural gas or its by-products, clean synthetic fuels and eco-friendly business 6. Projects commissioned by national and local governments 7. Exploration and development of petroleum resources (Conditional on approval by the Knowledge Economy Minister)
Employees	2,890 persons (as of March 7, 2011)
Total Sales	KRW 22,611.3 billion
Total Assets	KRW 24,292.4 billion
Natural Gas Sales	31,202 thousand tons
IPO	1999 on Korea Stock Exchange

*Total sales, total assets and natural gas sales as of December 31, 2010

Beyond LNG, Global KOGAS

2010 Ranked 4th in the energy sector by Fortune as one of the most admired companies in the world
Advanced into Iraq as an Akkas gas field operator
Selected as the best institution in customer satisfaction sector for 4 consecutive years
2009 Acquired an oilfield in Zubair and Badra in Iraq
Joined DJSI Korea

2008 Participated in the Surgil Project in Uzbekistan
2007 Declares the 2017 Vision
2007 Issued the first Sustainable Management Report
2006 Awarded the Grand Prize in the "Enterprise of the Year" Category

2004 Received the Environmental Management Award
2004 Ranked 1st in customer satisfaction among public corporations
2003 Established agreement of cooperation with Gazprom

2002 Completed construction of nationwide supply pipes
2001 Organized the 'LNG 13' Conference
2001 Acquired the equity of A-1 Mine in Myanmar

1999 Listed on the Korea Stock Exchange
1997 Completed construction of the Incheon Terminal
1996 Announced a second foundation of KOGAS
1997 Established KOLNG, 1999 Established KORAS

1994 Placed a national flag carrier for LNG transport in service
1993 Established Korea Gas Maintenance & Engineering Co., LTD.
1992 Initiated construction of the Incheon Terminal
1991 Established a long-term plan to supply natural gas

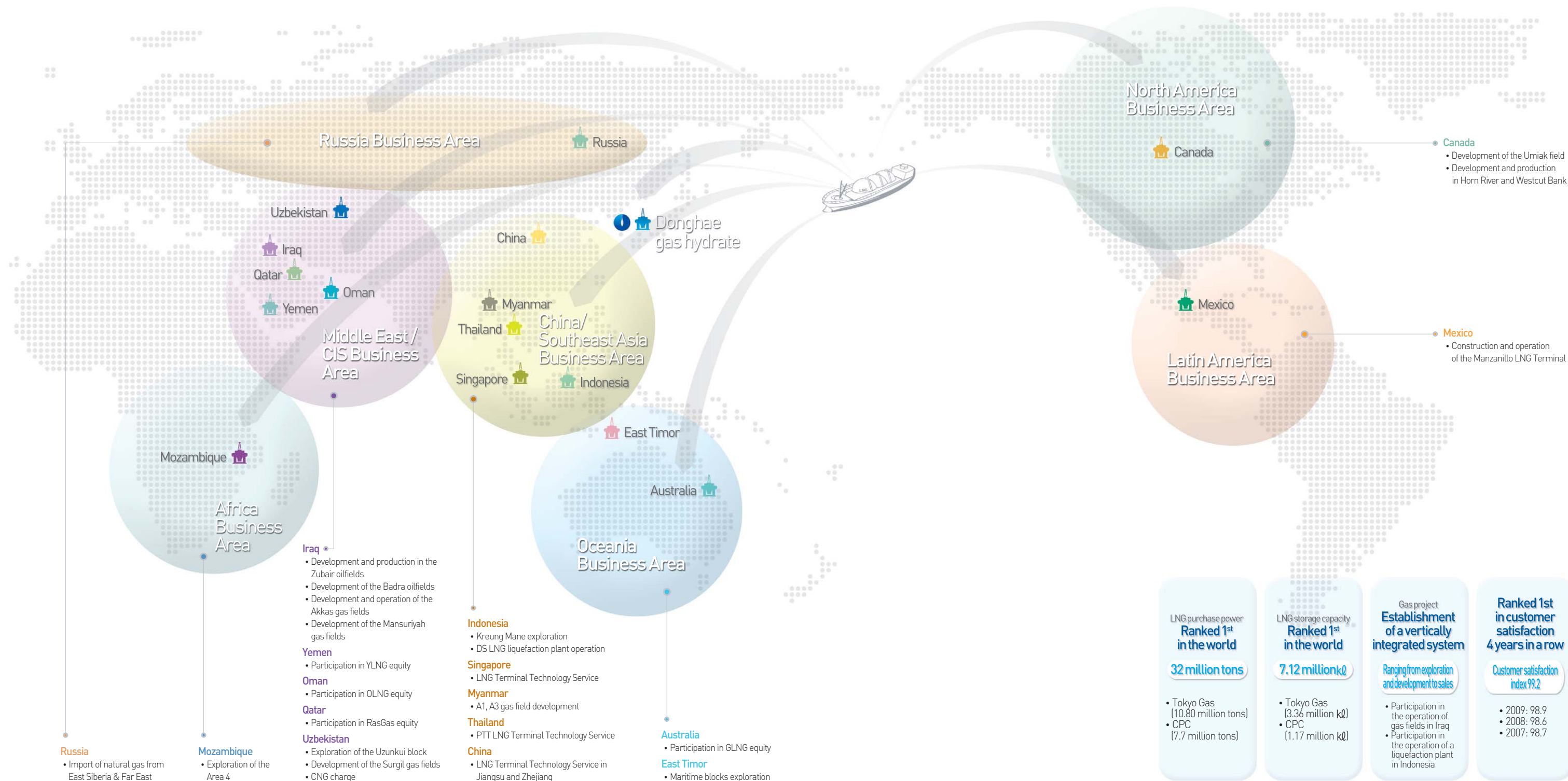
1988 Established the master plan for the nationwide natural gas distribution system
1987 Commenced city gas supply to the Seoul metropolitan area
1987 Commenced terminal and distribution facilities at Pyeongtaek
1986 Commenced natural gas distribution to power plant operations

1983
Established KOGAS

KOGAS Cooperates with the World and Grows with the People of Korea

Ranked 4th in the global energy sector and selected as one of the world's most admired companies by "Fortune" (6th in 2009)

*Ranked 2nd in Korea and was the only Korean public corporation selected
-GDF (France) 6th, Gazprom (Russia) 8th

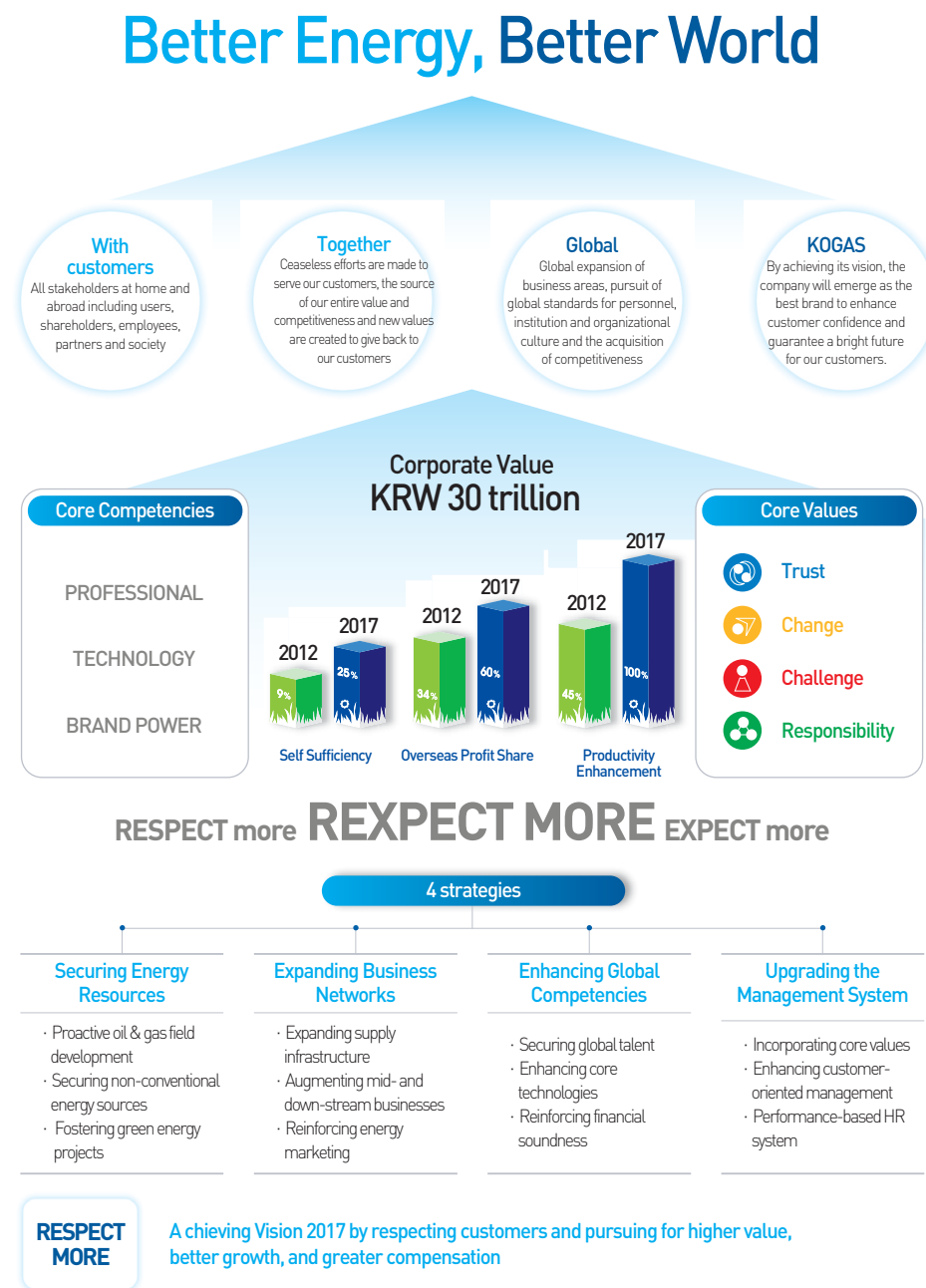


KOGAS VISION 2017

Vision 2017 (Global KOGAS Growing Together with Customers) well expresses the enthusiasm and determination of all KOGAS members in their desire to realize our corporate philosophy of 'Better Energy, Better World' and to respond effectively to the rapidly changing energy market.

KOGAS employees are focusing on enterprise-wide competence by setting the acquisition of energy sources, the expansion of business networks, enhancement of global competence and the advancement of our management system. These are the 4 strategies to help achieve our 4 target visions : 30 trillion won in corporate value ; 25% in self sufficiency in Natural Gas ; 60% in overseas profits ; and 100% in productivity enhancement.

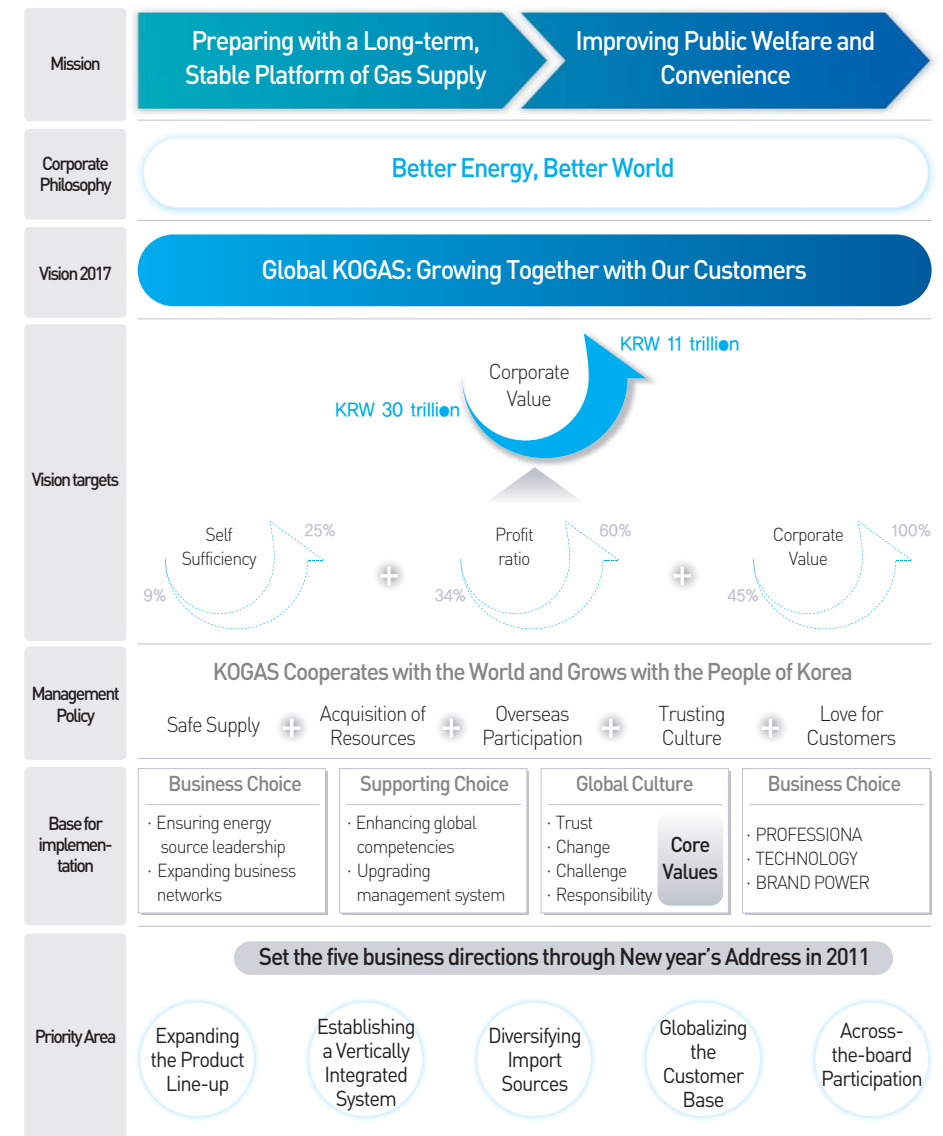
VISION 2017 & Strategies Scheme



Through Vision 2017, KOGAS aims to establish a vertically integrated system extending through the entire value chain ranging from the exploration and production of oil and gas, construction and operation of overseas LNG terminals, energy trading and overseas city gas projects to gas chemical plant projects. This goes far beyond the mere introduction and sale of natural gas in the domestic market. KOGAS plans to emerge as a global energy company that sells KOGAS's products in the global market by diversifying products into petroleum and unconventional gas resources (coal seam gas, shale gas, bio gas, gas hydrate etc.) in addition to existing natural gas.

KOGAS considers trust, change, challenge and responsibility as core values that form the framework of an organizational culture where the corporate philosophy and vision are realized and employees are integrated. The core value is the essential belief continuously espoused by KOGAS, a way of thinking and a code of conduct. This corporate philosophy-vision-core value will lead to the establishment of a vertically integrated system, diversification of import sources, and expansion of products and globalization of customers through KOGAS aimed to cooperates with the World and Grows with the People of Korea as desired by CEO.

The KOGAS Management Value System



Natural Gas Industry Overview



Natural Gas for a Carbon-lean Green Society

Natural gas emits the least CO₂ and other air pollutants during combustion. Consequently, it is the best option to fight climate change before the next-generation of alternative energy sources becomes widely available. Looking at the entire process, from the production to the transmission of natural gas, the production stage displays the highest GHG emissions, which can be technologically controllable. Most responsibly, KOGAS has engaged in a campaign to promote CNG-fueled buses in metropolitan areas. These CNG-fueled buses are dust-and SOx-free and emit negligible levels of NOx.

The Concept of Natural Gas

Natural gas is an ignitable hydrocarbon gas mixture divided into conventional and unconventional gas according to the existence of lower layers and its method of production.

► Conventional Gas

: is dissolved in crude oil or coexists with crude oil underground.

► Unconventional Gas

: is a general term for gases included in geological strata where there are difficulties found in production.

Natural gas is divided into PNG (Pipeline Natural Gas) supplied through pipelines and LNG (Liquefied Natural Gas) supplied as vaporized gas after maritime transport.

– Comparison between LNG and LPG

Distinction	Main components	Specific gravity	Ignition temperature	Liquefaction temperature	Use
LNG	Methane	0.66	530°C	-162°C	City gas and power generation
	Propane	1.5	450°C	-42°C	
LPG	Butane	2.0	400°C	-0.5°C	Car fuel and industrial fuel

*LPG : Liquefied Petroleum Gas

Eco-friendly Natural Gas

Although it is a fossil fuel, the structure of natural gas has a 1:4 carbon to hydrogen atom ratio, so it contains much more hydrogen per molecule than carbon, as opposed to other fossil fuels such as coal and oil. Therefore it emits less CO₂ during combustion and since most impurities such as sulfur and nitrogen are eliminated during the liquefaction process, the process emits virtually none of the energy production pollutant by-products such as SO_x, NO_x, radioactive waste or ash, all of which require costly reprocessing. Coal has a 2:1 carbon to hydrogen atom ratio, the highest among fossil fuels, while petroleum has a 1:2 carbon to hydrogen atom ratio.

– GHG Emission Comparison

Distinction	Gas	Liquid				Solid		
	LNG	Gasoline	Kerosene	Diesel	Heavy oil	Anthracite Coal	Thermal Coal	Lignite
Carbon Emission Factors (kg C/GJ)	15.30	18.90	19.60	20.20	21.10	26.80	25.80	27.60
CO ₂ Emissions (based on 1 LNG)	1.00	1.24	1.28	1.32	1.38	1.75	1.69	1.80

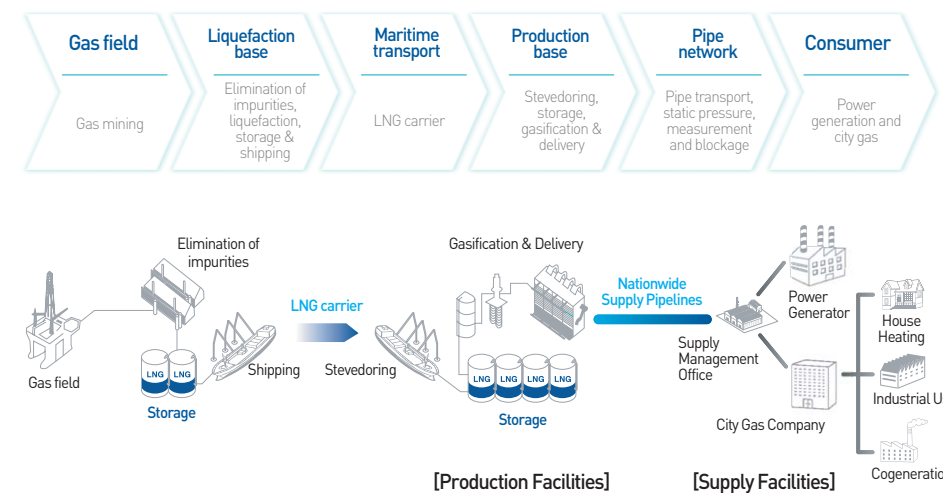
*Source : IPCC guidelines

– Air Pollutant Emission Comparison

Pollutant	Energy Source	LNG	LPG	B-C oil	Diesel	Kerosene	Anthracite Coal	Soft Coal
CO ₂		1	1.03	1.20	1.20	1.17	1.60	1.58
SO ₂		1	0.002	3,360	808.7	19.2	3,233.6	3,149.7
CO		1	393.5	1,767.7	1,202.2	2,011.5	3,888.9	2,651.5
NO _x		1	78.7	858.2	595.7	178.3	1,348.6	919.5
Dust		1	833.3	12,506	3,105.6	3,284.1	3,597.9	24,603.2

*Source : CO₂ (IPCC), others (U.S. Environmental Protection Agency)

Flow Chart of LNG Industry



Characteristics of Natural Gas Trading

The current state of the global natural gas market

As for the current state of production and consumption of the global natural gas as of 2010, the market recorded 149.5 billion tons in proven reserves, 2.7 billion tons in annual production and 2.65 tons in annual consumption. As natural gas reserves are sufficient (60 years in reduction production ratio, 42 years in petroleum), and dependency on the Middle East is low, it has drawn attention as a promising energy source that can be substituted for petroleum, and accounts for 24.0% of the global primary energy resources (based on consumption). As for the current state of the global natural gas trade, about one fourth (675 million tons) of natural gas production (2.7 billion tons) was traded globally (2010). PNG accounted for about 70% (470 million tons) of international trade, and LNG accounted for about 30% (205 million tons) of international trade. Five Asian countries including Korea, Japan, Taiwan, China and India account for 62.7% of the global LNG imports.

Produced in gas form in the field, the prevailing form of trading is Pipe-Line Natural Gas (PNG) for convenience and economic reasons, especially over short distances. For distances longer than 4,000km and for economic reasons, inter-continental or trans-ocean transmission, liquefied natural gas (LNG) is the popular trading form. Furthermore, LNG trading continues to grow due to its flexible marketability. Although Korea imports only LNG to date for geographical reasons, it is positively reviewing the import of PNG from Russia and China in the future.

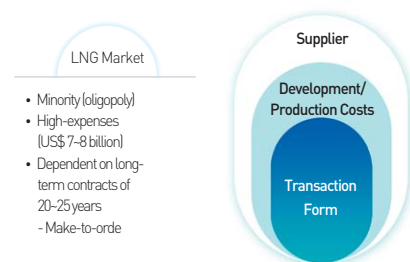
Characteristics of the Global LNG Markets

The natural gas business characteristically entails enormous investment and long waiting periods before the production of gas is realized. The trading of natural gas is, in general, conducted under strict conditions, such as "take or pay, ship or pay" terms, with prohibitions against reselling after designation of a destination. In terms of transactions, Korea and Japan, the two major LNG importers in Asia, couple their natural gas prices with crude oil prices, furthering rigidity, while North America mostly opts for an open free-market pricing policy. Nonetheless, the rising demands for more flexibility in the market will allow alternative transaction methods, such as spot markets and diverse pricing methods.

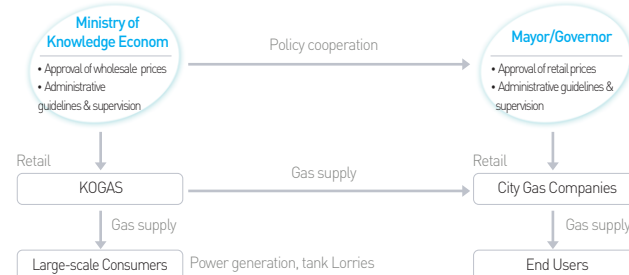
The Korea Natural Gas Business System

KOGAS is the major importer of natural gas for the domestic natural gas industry and directly supplies Korea's large-scale consumers-22 power stations from 14 power generation companies and 31 out of the total 32 city gas companies across the nation. These retail city gas companies then distribute the gas to the end users.

- LNG Market vs. Petroleum Market



- Natural Gas Business Flow Chart



Corporate Governance

As a public corporation, KOGAS has established a rational and transparent decision-making system in a bid to contribute to the nation's energy security and globalization. At the same time, it has worked to improve its internal corporate governance through autonomy and responsible management for management efficiency.

Ownership Structure

Unchanged from 2009, 61.1% of KOGAS shares are held by public entities such as the Korean government, local authorities and the Korea Electric Power Corp. (KEPCO), with issued shares of KRW 386.4 billion.

Board of Directors

KOGAS has conducted various activities to check and supervise management so that governmental policies can be implemented to improve the corporate governance of public corporations based on BOD operational objectives that can respond to the rapidly changing management environment.

The company established a board of directors composed of a total of 13 directors including 6 permanent directors and 7 non-permanent directors. In addition to a Chair in accordance with the Act on Operation of Public Institutions and articles of incorporation, KOGAS operates a BOD centering on non-permanent directors by applying procedural independence when selecting the members of the BOD. In addition, the company operates three subcommittees including an Audit Committee and discloses the BOD activities in time. KOGAS has enhanced prior deliberation capability by introducing a subcommittee and council while continuously providing an opportunity for the BOD to reflect employee opinions when making decisions. It is also focused on deliberating on sustainable management issues through planning and strategic subcommittees. KOGAS aims to realize BOD-centered management models through enhanced BOD roles and improve management achievements based on the expertise on the part of non-permanent directors.

- BOD Decision-making Process



Subcommittees Activities

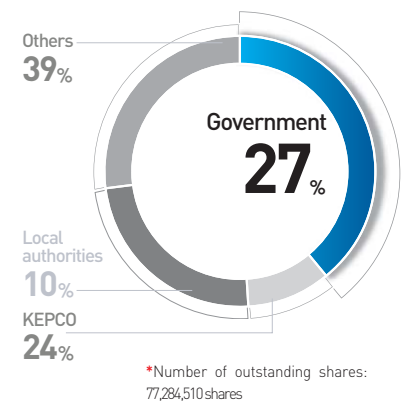
Under the improved operational scheme, the KOGAS BOD adopted a business suggestion & feedback system. During subcommittee and preliminary council meetings, a total of 30 suggestions were made on cost-savings and overseas expansion. The subcommittee held 17 meetings, significantly increasing the opportunities for directors to make their voices heard in major decisions regarding management activities.

In addition, a phased program aimed to further understanding has been operated to enhance competence of non-permanent directors, and an opportunity for non-permanent directors to participate in field management has been expanded through BOD's meetings held in the field and through facilitated support for overseas projects.

- Suggestion Feedback System



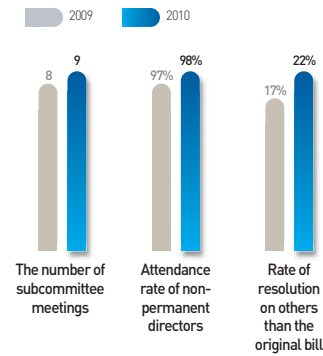
- Ownership Structure



- BOD Operational Scheme



*Composition of BOD and minutes can be confirmed on the KOGAS homepage



- No. of BOD Meetings & Agenda (Unit: meetings, cases)

Year	No. of meetings			No. of agenda	Agenda passed				Subtotal	Agenda reported
	Convened	Written	Subtotal		w/o change	with change	under conditions	rejected		
2008	16	0	16	82	47	4	4	2	57	25
2009	18	0	18	87	43	7	2	0	52	35
2010	16	0	16	76	40	8	1	1	50	26

- Increased Contribution by Non-standing Directors to the BOD

Distinction	2008	2009	2010	Remarks
No. of Agenda Resolved by BOD	82	87	76	
No. of Agenda Resolved by subcommittees	15	45	50	5 cases (11%) growth
No. of Suggestions on the Management	16	26	30	4 cases (15%) growth
Participation Rate	97%	97%	98%	Relatively good performance

Nomination and Compensation of Directors and Executives

KOGAS ensures transparency in the nomination and compensation of its directors and executives under its governing regulations and BOD resolutions. Candidates undergo deliberation by the related committee before being elected at the general shareholders' meeting. On the passing of a resolution, the KOGAS CEO is designated by the Korean President, while non-standing directors are designated by the Minister of Strategy & Finance. Standing directors are designated by the KOGAS CEO after they are recommended by the Executive Recommendation Committee and approved at the general shareholders' meeting. Remuneration of executive members includes basic salary, incentives and retirement allowances. The annual basic salary is determined by non-standing directors within the limits approved at the general shareholders' meeting. Incentives paid to the CEO and other directors vary: the CEO is paid in accordance with the ratio decided by the Governmental Performance Evaluation Committee; standing directors, according to their performance based management contracts; and standing auditors according to the limit and ratio set by the government.

- Directors and Executives Nomination Process



- Compensation to Executives (as of December 31, 2010)

	Total Amount	Approved Amount	Per Capita Average Payment	Remarks
Non-standing Directors	-	-	-	KRW 2.5 million per month
Standing Directors	771,509 KRW 1,000	1,178,966 KRW 1,000	133,249 KRW 1,000	for research and allowances
Standing Auditor	137,893 KRW 1,000	172,068 KRW 1,000	137,893 KRW 1,000	

For objective evaluation, KOGAS runs separate evaluations on the performance of the BOD and individual directors every December and uses the findings to improve its efficiency. All directors were evaluated through the use of 4 general items and 29 detailed items in 2010. The results of the evaluations on the BOD and directors were improved from the year before on the back of systematic and efficient operation of the BOD, and job training and meetings were enhanced to minimize the period of adjustment on the part of new directors.

- 2010 Results

Items	BOD Evaluation		Individual Director Evaluation	
	2009	2010	2009	2010
Roles and Responsibilities of the BOD	4.58	4.69	Participation in Fulfilling of Fiduciary Duties	4.54 4.65
BOD Structure	4.35	4.63	Contributing to the Enhancement of Corporate Value	4.29 4.33
BOD Operation	4.58	4.74	Fulfilling Due Diligence as an Ethical Supervisor	4.97 4.93
Activities of Subcommittees	4.52	4.58	Average	4.60 4.64
Average	4.51	4.67		

- Selected as a corporate governance improvement company based on the establishment of the BOD-centered management system

Evaluator	Corporate Governance Service
Evaluatee	645 listed companies
Winners	19 listed companies (within top 3%) *KOGAS and KEPCO were the only public corporations included.
Reasons	<ul style="list-style-type: none"> Inducement of directors to proactively conduct activities through the use of BOD evaluation and its results Mandatory indication of obligations for non-permanent directors to provide information and enhancement of bases for activities conducted by non-permanent directors
Significance	Acquisition of top-rate corporate governance and management transparency in Korea

Operation and Evaluation of BOD



* Corporate Governance Service: A non-profit organization to conduct evaluation, research and study on corporate governance and social

KOGAS was the first market-oriented public corporation to adopt an audit committee. Designated by a resolution at a general shareholders' meeting, the three members include two non-standing directors and one of them is an accounting and/or financial expert. The committee audits accounting practices, requests reporting on business activities, surveys the performance and financial status of the company and implements special assignments commissioned by the BOD. Furthermore, the audit scheme shifted from traditional post de facto auditing to preemptive monitoring and a policy-oriented auditing scheme through system and process improvement, for the realization of management efficiency and cost-saving.

- Audit Committee

Category	No. of Meetings	Passed without change	Passed with change	Items on the agenda		Total	Participation ratio
				Shelved	Issues reported		
2009	9	4	3	1	11	19	100%
2010	8	10	-	2	13	25	100%

Audit Committee & Auditing System

The Management Committee, comprised of the CEO, the standing auditor, and all vice presidents and directors in each division, holds regular meetings every Thursday. Chaired by the CEO, the committee resolves on a submitted agenda management issues through the consensus of the majority. Any member with interests in the submitted agenda or a standing auditor who proposed an audit opinion waives their voting rights on that agenda.

Management Committee

Sustainability Management

Sustainability Strategy Scheme

KOGAS was established to contribute to the nation's welfare by ensuring a long-term stable supply of natural gas. The driving goal of the company is also embodied in its mission, "Better Energy, Better World," which sets the direction for its vision and strategies.

As a public corporation in charge of the nation's energy welfare, KOGAS strives to serve the nation through a spirit of continuous innovative change and challenge, while at the same time fulfilling its corporate social responsibilities. Based on a systematic analysis of corporate social responsibilities and business activities, we have devised a sustainable management strategy scheme. The harmony of the triple bottom-line constitutes the core of the scheme. To that effect, the Management Strategy Team integrates and realigns the respective strategies of the environmental, ethical, social contribution and safety management teams with the corporate business strategies. Strategy-building practices are periodically reviewed and determined by the Management Committee which is the company's top decision-making body.

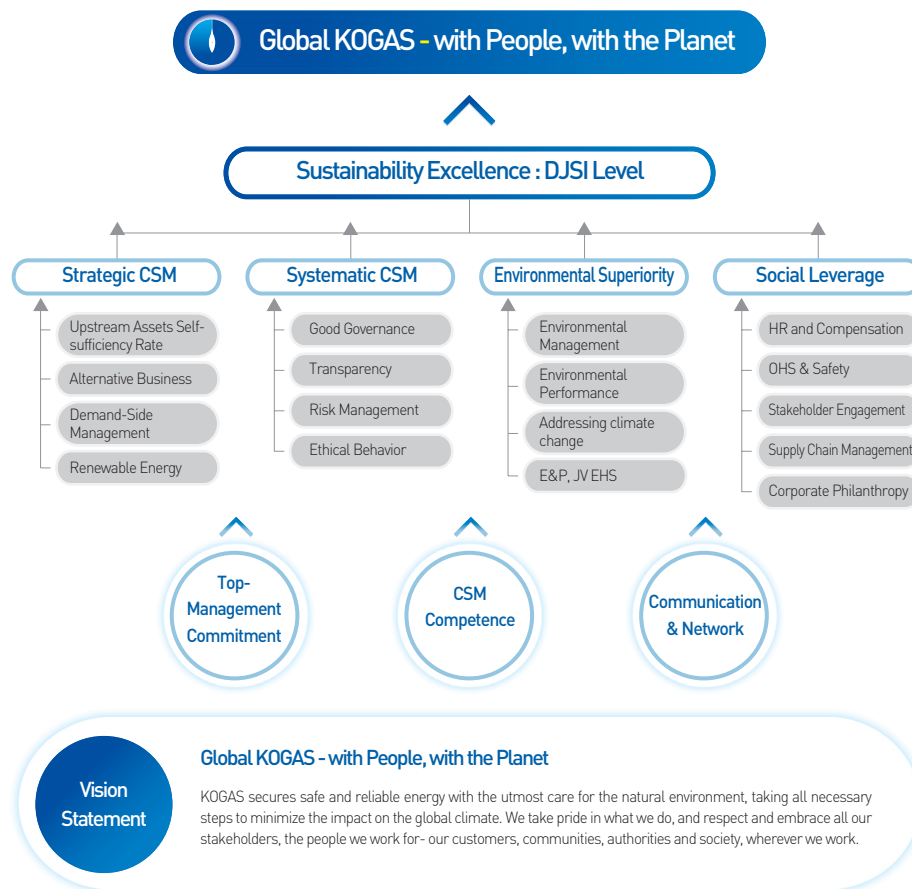
KOGAS has realigned its strategic scheme with the business environment and internal competencies based on its review of the vision and strategy performances in 2010. In the process, we incorporated our sustainability management strategy and roadmap into each strategic agenda, creating a platform for implementing sustainability management.

In coping with various business environmental factors, such as the rising issue of human rights in overseas resource development projects, we came up with a customer-oriented management policy, while also promoting the integrated practices of sustainability management and socially responsible management. Furthermore, we set our target at enlisting in the DJSI indexes and devised a sustainability roadmap based on the 2009 experience of being enlisted on the DJSI Korea Index, the DJSI Asia /Pacific by 2012 and ultimately the DJSI World.

In addition, various preparation tasks aimed to use ISO26000 confirmed at the end of 2010 as a new key issue of sustainable management were included as a part of strategic agenda. This has led KOGAS to brace itself for proactively responding to external environmental changes.

Sustainability Management Strategy & Business Strategy

- Sustainability Management Roadmap



Vision 2017 Strategic Agenda		Ensuring Energy Source Leadership	Expanding Business Networks	Enhancing Global Competencies	Upgrading Management System
Sustainability Management Strategic Agenda	Upstream Assets Self-sufficiency Rate				
	Alternative Business				
	Demand-side Management				
	Renewable Energy				
Systematic CSM	Good Governance				
	Transparency				
	Risk Management				
	Ethical Behavior				
Environmental Superiority	Environmental Management				
	Environmental Performances				
	Carbon Risk Management				
Social Leverage	E&P, JV EHS				
	HR and Compensation				
	OHS & Safety				
	Stakeholder Engagement				
		Corporate Philanthropy			



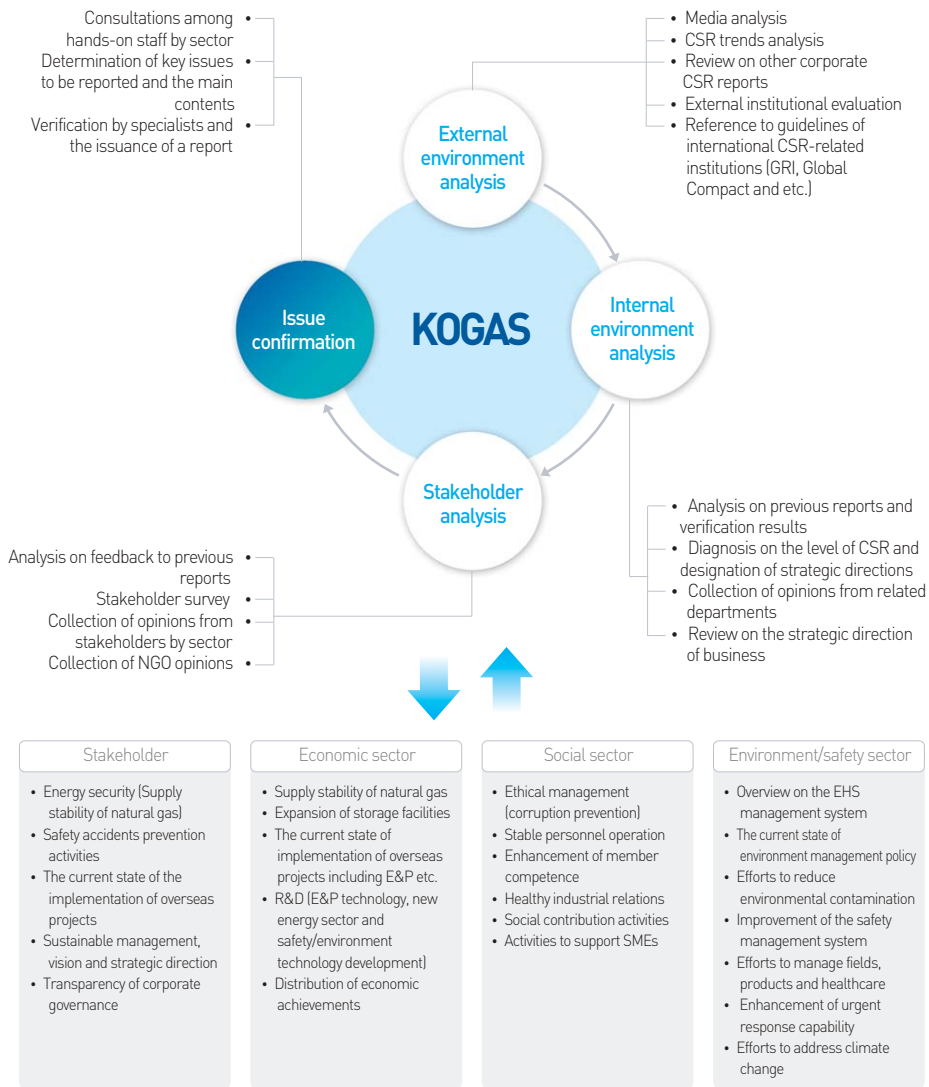
KOGAS was designated as an autonomy management public company by the government in 2009. An autonomy management company is endowed with autonomous management rights, allowing merit-oriented accountable management under reduced government control regarding management activities. In particular, KOGAS has expanded the autonomy of its organizational and personnel operations within the 2% limit of its regular workforce, enabling flexible personnel recruitment for overseas projects. Without any influence on corporate governance, the partial autonomy in the operation of the workforce contributed to management efficiency. KOGAS is working to return the fruits of this to the people.

Reinforcing the Binding Force of Strategies as an Autonomy Management Agency

Materiality Test & Key Issues

Materiality Test Process & Results

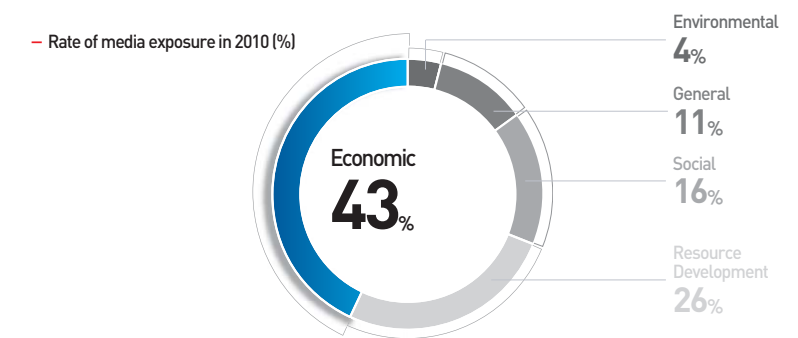
KOGAS has made efforts to introduce the core issues by main sector and include them in this report. Based on the experience and information acquired in the process of issuing previous reports, this report aims to influence the sustainability of the economy, society, environment and business and to selectively provide information in which stakeholders have interests, present external sustainable management trends, internal sustainable management competence, diagnosis on the present conditions and results of various surveys for stakeholders. The following key issues have been defined in consideration of our survey on stakeholders; the urgency of the sustainable management of KOGAS, future success factors and based on risk assessment supported by future projections and possible effects, and these have been reflected in the report with care and detail.



Key Issues	Contents	Page
Energy Security	Korea is the world's 10th largest energy consumer, and imports 97% of energy sources from other countries. KOGAS is making every effort to acquire resources by continuously pushing for overseas projects and participating in oil field development in Iraq in addition to providing a stable supply of natural gas.	36 ~ 39
Sustainability Management Strategies	In 2009, KOGAS enhanced its executive power in connection with its company-wide strategies, and it particularly furthered assignments addressing climate change by acquiring economic resources and environmental green growth strategies.	20 ~ 21
Overseas Projects	The company is pushing various overseas projects by proactively participating in overseas resources developments with regard to the entire value chain of the gas industry linking exploration, development, production, transport, and the supply and sale of oil and gas resources.	40 ~ 45
Social Contribution Activities (Onnuri sharing management)	The company is sparing no effort to promote a sharing culture for a warm-hearted and fair society by spending more time with the local community. In addition we are endeavoring to achieve mutual growth based on expanded energy welfare for the underprivileged and fair and transparent business practices with regard to relationships with all of our partners including SMBs.	83 ~ 89
Addressing Climate Change	In connection with the low carbon green growth strategy of the government, KOGAS has established and implemented a 'low carbon green growth' strategy to lay the foundations for mid-to-long-term efforts to address climate change.	58 ~ 61
Environmental Protection	KOGAS pushes for an environmental friendliness level superior to other energy companies and has rarely had any incidents of environmental contamination. However, the company recognizes the importance of environmental protection as a natural gas supplier and endeavors to preserve the environment in areas such as water and soil quality while conducting diversified campaigns to raise public awareness about environmental protection.	54 ~ 57

As of 2010, KOGAS was exposed to the domestic media 143 times. 95% were positive articles. Economic articles accounted for the highest portion, and this appears due to the fact that KOGAS suffered managerial difficulties caused by the company unable to collect on an outstanding debt that was owed. Others include energy security in relation to resources development, social contribution activities and support for low income classes, which is connected to the social responsibility of a public corporation. Some of the articles also deal with an interest in environmental issues including technological development aimed to address climate change. Until now, KOGAS has been rarely exposed to the overseas media, so this exposure has not been analyzed. However, information will be collected and analyzed every year from now on so that KOGAS can determine issues of interest by stakeholders with regard to sustainable management.

Media Analysis



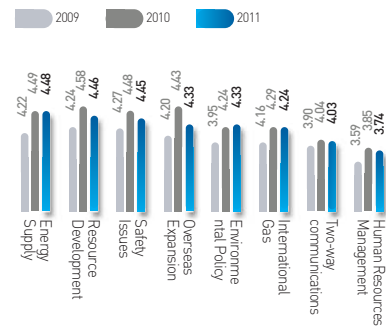
As KOGAS was enlisted on DJSI Korea for its second consecutive year in 2010, it has been able to acquire a basis for implementation of sustainable management at the DJSI level. Through this, KOGAS has been able to more objectively confirm the level of sustainable management conducted by the company. Closely reviewing the feedback from the DJSI, the company reflected these results in its 2010 sustainability management initiatives and continues to improve its sustainability management practices to attain and exceed global standards.

DJSI Korea Enlisting

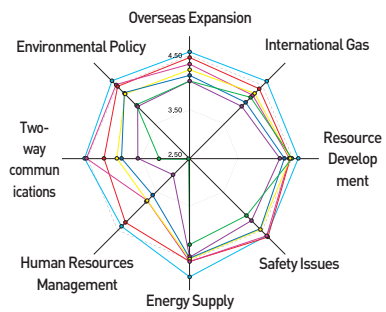
Communication with Stakeholders

Stakeholder Survey

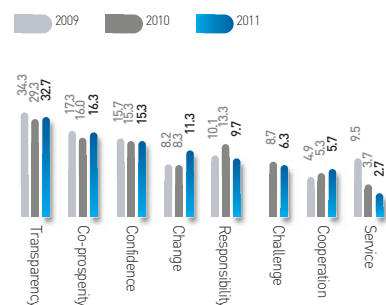
Material issues for sustainable development



Assessment of Responses to Major Issues



Assessment on the Importance of Core Values



Survey Summary

KOGAS conducted a phone-based survey on 100 internal and 200 external stakeholders so as to define their interest in KOGAS' sustainability management activities. The 200 external stakeholders were randomly selected from customers, shareholders & investors, business partners, local communities & NGOs, governmental bodies and authorities groups. Based on the results, we have compiled our 2010 sustainability report and our 2011 sustainability management initiatives.

Material issues for sustainable development

The KOGAS survey on material sustainability issues found that stakeholders are highly interested in resource development, energy supply and safety issues. In particular, their concerns for eco-friendliness rose significantly on the previous year, highlighting their expectations regarding green growth initiatives related to addressing climate change. Although advances into the overseas expansion have been somewhat reduced, many still have a high interest in it.

Major Issues of Interest to Each Stakeholder Group

As a result of the survey on material issues related to sustainable management centering on interest by stakeholder, customers and employees turned out to show relatively higher interest than the average whereas shareholders & investors, governmental bodies and authorities exhibited a relatively lower interest. Customers usually expressed high interest in material issues including environmentally friendly policy and safety accidents, and all stakeholders displayed a high interest in such issues as resource development and energy supply.

Assessment of the Response to Major Issues

As a result of the survey on the level of response by material issues for the purpose of the sustainable development of KOGAS, such items as contribution to economic development, environmental protection and international cooperation were somewhat improved, but such items as the establishment of a vision, strategy, energy security and social achievements declined. The fluctuations were from the previous year, but the absolute scores turned out to be relatively high.

Assessment on the Importance of Core Values

For the purpose of KOGAS' sustainable development, stakeholders cited 'transparency' and 'co-prosperity' as the most important values. Transparency turned out to be the most important value of sustainable development for KOGAS, and its importance grew by 3.4% from 2010. Confidence and Co-prosperity were also cited as important values by stakeholders.

Stakeholder's Response to Material Issues

As a result of the survey, such issues as energy supply and resources development which received high marks in interest by material issues suggested by stakeholders were intensively reported in the economic area, and transparency and co-prosperity that earned high marks in the importance of core values were intensively reported in ethical management, social achievements, safety accidents and environmental achievements.

As KOGAS is a wholesale supplier of natural gas, primary customers are confined to city gas companies or developers. However, the company recognizes its basic responsibility for serving the public, the fundamental customers of natural gas, and makes efforts to realize more transparent and proactive communications by defining all members of society as stakeholders who are interested in or influenced by the operation of KOGAS.

In particular, KOGAS has no overseas premises under its direct control; the company encourages responsible management practices regarding socio-environmental issues at locations where it holds stakes. Therefore, it shares its principles and guidelines on socio-environmental issues via Web pages and related reports with all of its partners. In the future, the scope of stakeholders will be expanded for more active stakeholder engagement.



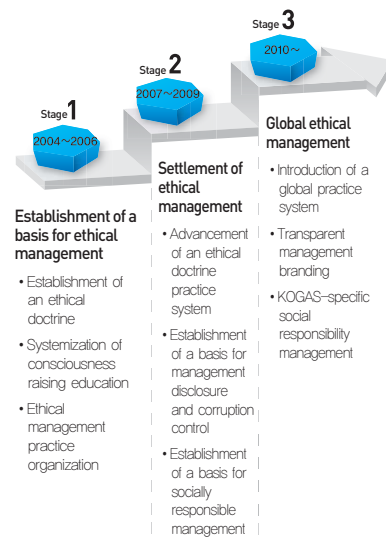
<p>Internal Stakeholders</p> <p>Business Expansion, Wages, Job Security, Health & Safety, Welfare & Benefits, Competency-building, Union Relations</p> <p>Presentation by Executive Management, Presentations on Major Business Developments (via intranet), Labor-Management Council, Ombudsman (HRM, etc.)</p>	<p>Shareholders/Investors</p> <p>Stock prices, Investment security, Growth potential, Financial soundness, Dividends, Corporate governance</p> <p>IR activities, Electronic disclosures (Alio, KRX & FSS), News Letter, Internal Magazine, Disclosure on the Web</p>	<p>Direct Customers (city Gas companies, power plants, etc.)</p> <p>Supply Stability, Facility Soundness, Price, Business Expansion, Transparency, Customer support</p> <p>Conferences with Customers, Customer Satisfaction Survey, "Biz" Portal, Joint Workshop, Charge Scheme Explanation Session, Technological Information Exchange</p>	<p>The Nation</p> <p>Gas Price, Stable Supply, Thermal Value (quality), Safety & Environmental Management, Social Contribution, Transparency (ethical management), Energy Welfare</p> <p>Charge Scheme Explanation Session, VOC(web-based), KOGAS News Letter, Disclosure on the Web, Campaigns and Social Contribution Activities, Appeal for Information Disclosure</p>
<p>Governments/Authorities</p> <p>Green Growth (addressing climate change), Securing Energy Sources, Corporate Governance, Business Expansion, Supply Stability, Restructuring</p> <p>Appeal for Information Disclosure, Report on Management Activities, Parliamentary Inspection of the Administration & Audit by the Board of Audit and Inspection of Korea, Joint Workshop</p>	<p>Local Communities, NGOs</p> <p>Social Contribution, Safety & Environmental Management, Human Rights Management, Addressing Climate Change, Sustainability Management, Ethical Management, ISO26000</p> <p>IR Sessions including on-site observation), Campaigns and Social Contribution Activities, Conferences, KOGAS Newsletter in Korean, Internal Magazine, Disclosure on the Web</p>	<p>Business Partners (suppliers)</p> <p>Business Expansion, SME Support, Financial Soundness</p> <p>Joint Workshops, IR Sessions, Management Disclosure, Contract Satisfaction Survey, Talkfest</p>	<p>Global Stakeholders</p> <p>Environmental & Human Rights Policy, ISO26000</p> <p>English Newsletter, Sustainability Report</p>

Ethical Management

The practice of ethical management at KOGAS is based on transparent and sound management principles. As a public corporation supplying safe and convenient natural gas, KOGAS applies a high standard of ethics. Not only does it abide by national regulations and normal social and ethical values, it also works hard to establish global-standard ethical management practices in all its systems and mechanisms. Thanks to these efforts, no cases of corruption were detected in 2010, but the company's score in the government ratings on the integrity of public organizations was 9.14 (out of 10), down 0.1 from the previous year.

Ethical Management Strategies

Achievement of Vision 2017



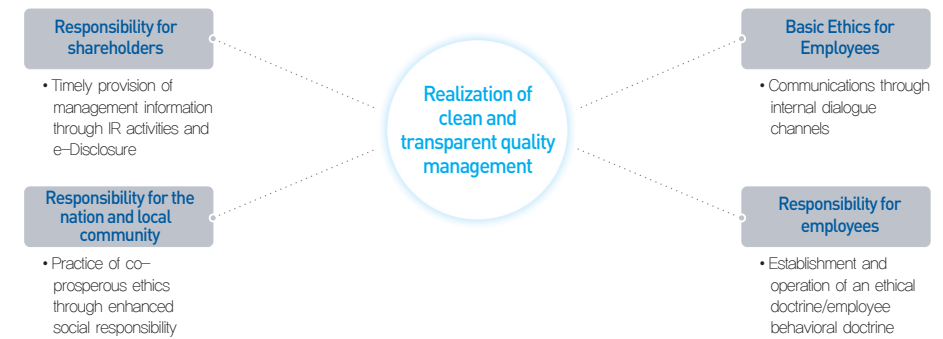
KOGAS' ethical management system segments the ethics codes to ensure that all its employees understand and comply. This, in turn, constitutes the basic platform for anti-corruption, and ultimately facilitates the company in fulfilling its social responsibilities to the nation. As for the company's four major initiatives, the key performance indicators (KPI) were set and kept in check, with feedback regarding ethical management performances on a regular basis generated.

Ethical Management Practice Roadmap



Top management's strong commitment can easily propel the spread of ethical practices across-the-board to reach the contact point with customers. The strong commitment of KOGAS executives towards ethical management is embedded in the ethics regulations and bylaws, including the ethics codes, and conveyed to all employees.

KOGAS stakeholders & ethical management



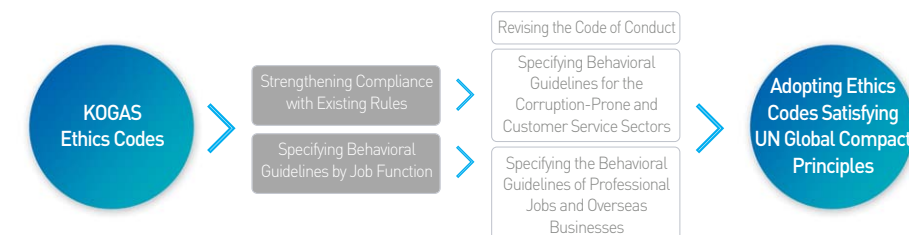
Ethical Management Organization

KOGAS' ethical management organization not only establishes and promotes ethics regulations and systems but also articulates the roles and responsibilities of each segment, ensuring a bottom-up practice of ethical management.



Specifying Ethics Codes by Job Function

KOGAS is currently working to tune its ethics codes to individual job functions. The company established 'a pledge of ethics for sales people' and 'regulations on officers' transparency contract' to complete a code of job ethics.



Ethical Management Practice Infrastructure

– CEO’s Message on Ethical Management



Main contents of ethical standards by job function

Characteristics of standard	Distinction	Contents of practice
Proclamatory characteristics (for all employees)	KOGAS ethics doctrine	<ul style="list-style-type: none"> Employees’ basic ethics/ Responsibility for employees Responsibility for shareholders, customers, the nation and the cooperating society
	Our Promise 30	<ul style="list-style-type: none"> Employees’ concrete basic ethics, protection of intellectual property rights, disclosure of information and prohibition of unauthorized use of corporate assets and factions etc.
	KOGAS employee behavioral doctrine	<ul style="list-style-type: none"> Restriction on receipt of money and valuables and prohibition of requests for special consideration for a job position Mandatory report and protection of a reporter
Standard for management and executives	Ethical doctrine for non-permanent directors	<ul style="list-style-type: none"> Corporate social responsibility/Confidentiality Fair job performance/ corporate value improvement
	Executive job transparency contract	<ul style="list-style-type: none"> Stipulation of executive transparency obligations
	An executive code of conduct to lead by examples	<ul style="list-style-type: none"> Employees’ basic ethics/ Fair personnel evaluation Respect for employees’ personality/ Inducement of self-development
	An auditor’s pledge of ethics	
Practical characteristics (core job functions · ethics on job functions)	An R&D employee pledge of ethics	
	A constructor pledge of ethics	<ul style="list-style-type: none"> As it became necessary to introduce a pledge of ethics with regard to main job functions for the purpose of improved ethical practice in the field, a code of ethics for sales people was established.
	A contractor pledge of ethics	
	An inspector pledge of ethics	
	A salesperson pledge of ethics	

KOGAS-specific Ethics Training

Ethics training provided by KOGAS is designed to continuously offer diversified content so that the same message can be delivered repetitively without causing any boredom. In 2010, the company generated and conducted a unique KOGAS ethics training program in consideration of the results of the external transparency evaluations and governmental management evaluations of the past.

In addition, KOGAS held a co-prosperous ethics camp along with customers in an effort to lay the foundation for coexistence and ethical management practice. The camp aimed to express KOGAS’ determination to conduct ethical management, realize continuous practice, share a sense of ethics, narrow gaps through cases of ethical dilemma, promote mutual understanding based on a strong will to achieve co-prosperity and create ethics guidelines for the purpose of reconciling ideas and overcoming difficulties.

– Customized Training for Corruption-prone Areas (co-prosperous ethics camp with customers)

Target	Date	Program
Facility sector (27 persons)	Oct. 2010	Efforts are being made to resolve ethical dilemmas that could occur in the field through discussions and experiences in which KOGAS employees and employees of partners and customers involved in facility repair & maintenance, sales, constructors and subcontractors take part.
Construction (20 persons)	Nov. 2010	
Contractual (23 persons)		
Marketing (22 persons)		

Practice Committee

The Practice Committee takes the lead in collaborating with district divisions (on-sites), the ethical practices of clients, partners and communities, PR, training and social contributions and ensuring that everyone is on the same page.

Practice Committee	
Objective	<ul style="list-style-type: none"> Searching for balance in the image of individual divisions with the company’ s overall image Building solidarity and a platform for ethical practices in collaboration with clients and partners
Composition & Periods	<ul style="list-style-type: none"> Chairman: heads of district divisions (clients and partners participate when necessary) Period: concurrently with the meetings of district division committees
Performances	<ul style="list-style-type: none"> Joint education with local communities, clients and partners, transferring technologies to small businesses and other activities focused on the initial stages of building solidarity

Facilitation of communication with partners for the purpose of co-prosperous management

KOGAS is endeavoring to establish a transparent corporate culture by holding breakfast meetings for the CEOs of constructors, forming a task force team for subcontractors and pushing for a resolution on mutual growth with large, medium and small constructors. In addition, the company is focused on facilitating communications with its partners and pursuing to implement construction and to conduct seamless co-prosperous management based on mutual trust.



Ethical Management Monitoring System

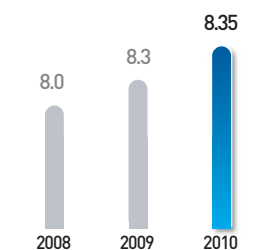
In the monitoring of ethical management practices, KOGAS conducts quarterly reviews and evaluations on the performances and activities of ethical management. The results are used to identify issues and develop solutions. In this way, this constant flow of feedback provides opportunities for continuous study and improvement.

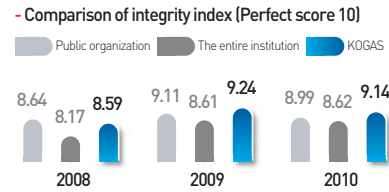
Internal Evaluation of KOGAS’ Ethical Level

The test by an external agency constitutes the core element of the monitoring system, and can be classified into internal and external (customer) monitoring. Since the declaration of the company’s commitment to ethical management in 2004, the ethical mindset and practices of KOGAS employees have gradually improved. In 2010, the company scored 8.35 points on a scale of 10 in its internal evaluation of ethical levels by 1,004 respondents; strong evidence of a gradual improvement in the company’s ethical level.

Ethical Management Monitoring

– Integrity Evaluation Results (Dec. 2010)





Ethical Level Evaluation by Customers

To understand customer recognition of KOGAS' ethical levels, KOGAS has consigned a government agent to perform integrity assessments from 2007. In order to address the issues raised from the results of the 2009 assessment, the company expanded its ethics camp, which has traditionally concentrated on the contract, construction and marketing areas, to include facility repair & maintenance areas. As a result, KOGAS earned 9.24 points in the organization integrity assessment by the Anti-corruption & Civil Rights Commission (ACRC) in 2010, ranking 6th among a total of 21 public organizations.

Anti-corruption System

Internal Anti-corruption Activities

The rate of e-Bid increased to 94.5% in 2010 from 93% in 2009 in an effort to enhance contract transparency, and an integrity contract was conducted based on the KOGAS construction integrity manual to eliminate corruption factors in advance. In addition, the Standard for Transparency Contracts with Foreign Invested Suppliers was established to prohibit the receipt of money, valuables and gifts from foreign companies and domestic agents related to contracts. The standards clearly define the rights and obligations of foreign companies and domestic agents so that corruption factors do not occur. Promotion and training were enhanced based on an internal report system for the purpose of preventing ethics accidents, and a convenient access to the Report Center on the Internet was offered. In addition, anonymous reports were facilitated, and an external independent report center was additionally installed to thoroughly protect reporters based on the enhanced operation of the Irregularities Report Center.

Ethical Management Performances

More than just simple window-dressing, ethical management is establishing itself as a type of management system with accurate measurements and improvement mechanisms for employees.

In 2008, KOGAS pushed the envelope past the typical difficulties of measuring ethical management performances by adopting key performance indicators (KPI), a first in the industry. However, the six categories introduced fell short of effectively quantifying these performances. In addressing this issue, which was raised by an external consulting agency, the company revised the six indicators and added four new indicators, such as the investment information provision rate in 2009. The following 9 indicators were designated in 2010 to enhance the effectiveness in the measurement of performances.

In the future, KOGAS will continue to develop more indicators for a more objective assessment of its ethical practices so as to establish a reliable evaluation system. It will also continue to serve company initiatives of earning customer trust and achieving sustainable growth befitting its position as a leading global company.

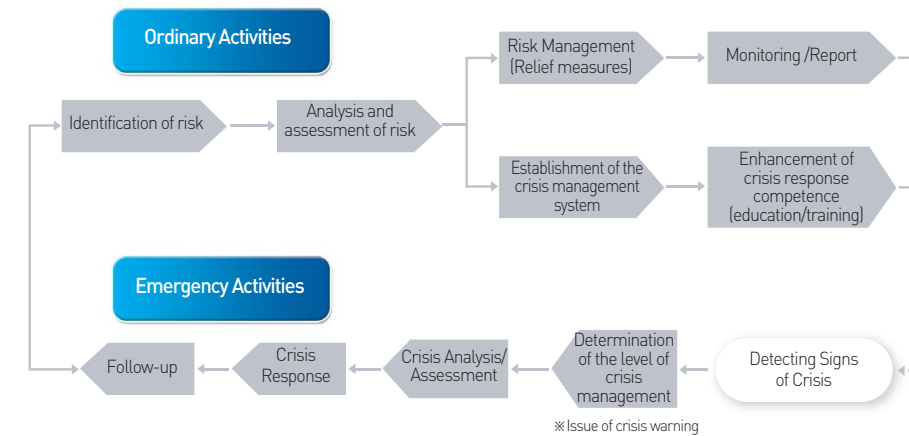
- 2009 Ethical Management Key Performance Indicators (KPI)

Strategies	KPI	2009 Performance	2010 Goal	2010 Performance
System-upgrading for Ethical Management	Employees' ethics compliance level	83 Points	83.5 Points	83.5 Points
	Rate of compliance with information disclosure days	Goal achieved	7 days/case	100%
	Cyber education satisfaction	83 Points	83.5 Points	77 Points
Enhancement of a monitoring and feedback system	Organizational integrity	9.24 Points	9.3 Points	9.14 Points
	Contract satisfaction	9.6 Points	9.6 Points	9.8 Points
Establishing an Anti-corruption Platform	Number of reports on irregularities	-	-	21 cases
	Implementing a 'Co-prosperous Ethics Camp' with Customers	Conducted 4 times	Conducted 4 times	Goal achieved
Establishing a Platform for Social Responsibility	Cheongyeon fund participation rate	60%	60%	Goal achieved (73.4%)
	Community service hours per employee	-	5.73 Hours	Goal achieved [11.14Hours]

Risk Management

KOGAS seriously recognizes the importance of risk management for a safe and stable supply of natural gas in accordance with the objectives of the corporate foundation. So KOGAS conducts effective implementation strategies stage by stage and by mid-to-long-term strategic assignments.

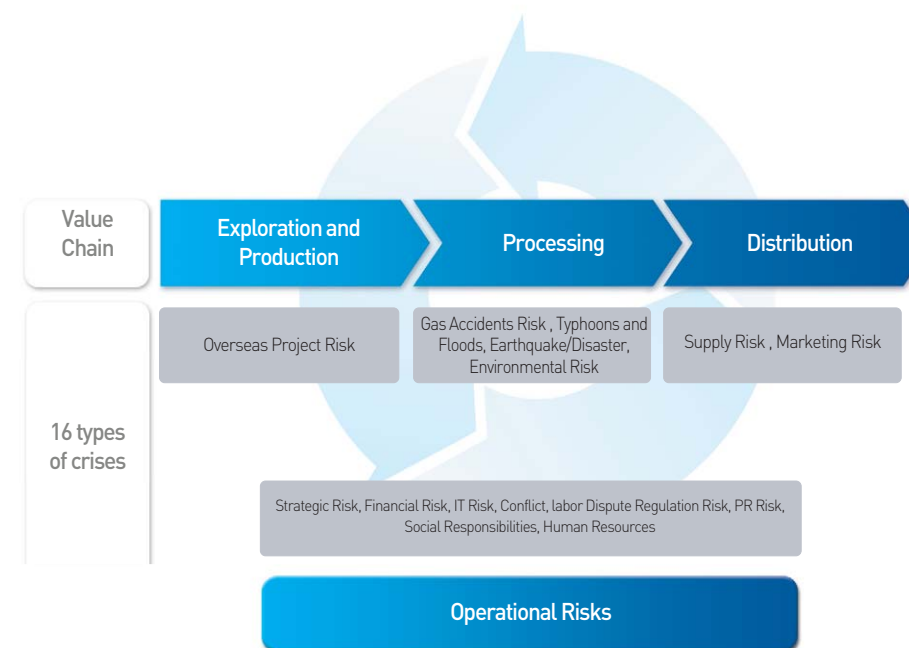
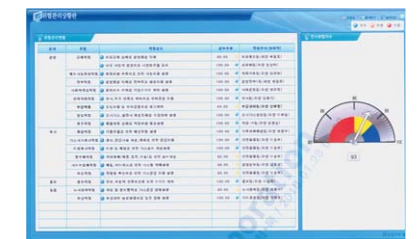
KOGAS risk management consists of regular risk management activities aimed to discern, assess, prevent and counter risks in advance and crisis response activities aimed to respond to and aid recovery in times of crisis as well as to conduct post-management when risks escalate into crises.



Risk Management System

KOGAS expanded its existing crisis management guidelines into crisis management regulations in order to conduct integrated management on enterprise-wide risks (Aug. 2010). In addition, operational risks including value chain risks and financial risks were classified into 16 types so as to improve management strategies based on a practical response manual for each type of crisis.

- Risk management plotting board.



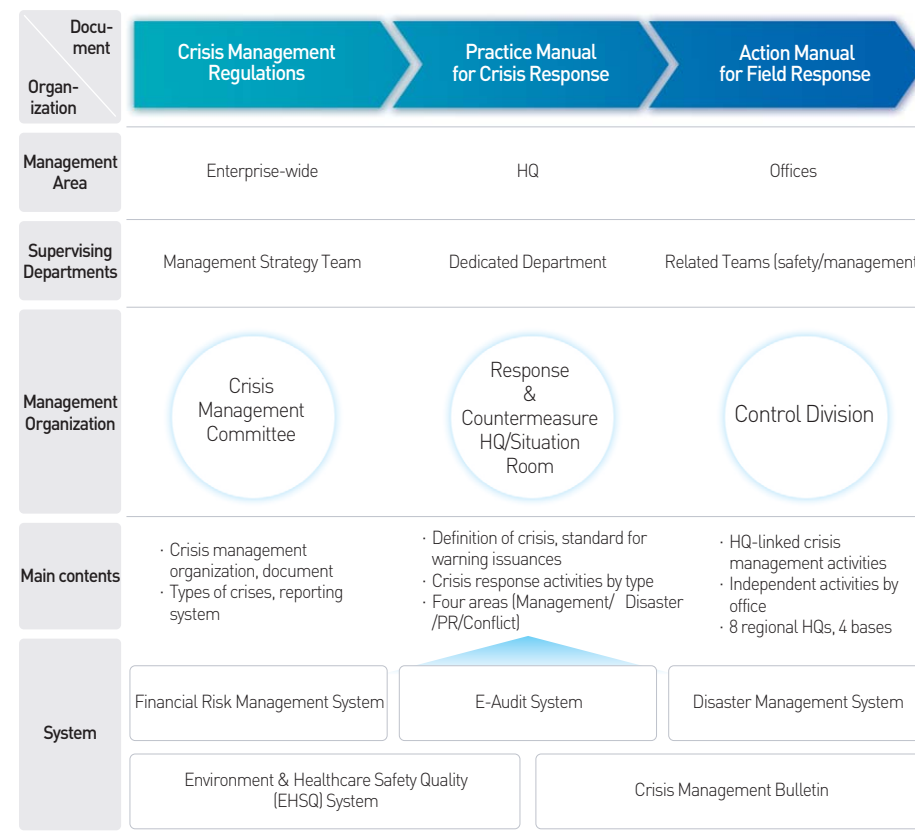


The 12 offices of KOGAS are conducting immediate crisis management activities through its use of a special field activity manual for swift response to gas accidents and disasters while also designing a Business Contingency Plan to counter possible contingencies such as the spread of the H1N1 virus in 2009.

For purposes of effective response, all crises handled by KOGAS are immediately reported to the Safety Division Head, crisis management executives (CRO & Chief Risk Officer) and the CEO through the use of extensive reporting systems such as the executive support information system, and the Crisis Management Committee led by the CEO, the Emergency HQ supervised by the Vice President, and a crisis management executive and Field Control Team are formed in accordance with the seriousness of the crisis situation.

KOGAS is operating the following respective crisis management systems: a financial risk management system, an e-Audit system, a disaster management system, an environment & healthcare safety quality (EHSQ) system and a crisis management bulletin within the ERP system for risk management and plans to establish an enterprise-wide crisis management system by integrating the above in 2011.

– Establishment of an enterprise-wide crisis management system



KOGAS generated 71 risk pools by identifying typical risks throughout the entire management system through workshops for working-level employees (September 2010). KOGAS is continuously conducting identification and assessment activities with regard to main risks by generating 124 risk pools that prevent KPI from being attained and by conducting evaluations on importance and appropriateness.

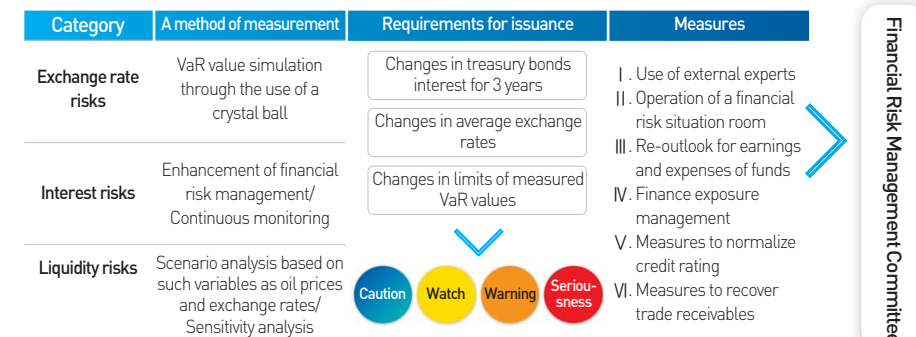
In particular, it has come up with various risk management measures including acceptance (hedge), avoidance and relaxation of risks with regard to Akkas Project in which KOGAS participates as the first operator in an effort to respond to expanded overseas E&P projects.

Category	Main Risk	Management Measures
Country Risk	War, civil war etc.	<ul style="list-style-type: none"> Joint response along with participating IOC (Eni, Gazprom and Shell etc.) Cash flow management through Economic Evaluation based on reflection of risks
Operational Risk	Insufficient technology & experience	<ul style="list-style-type: none"> Employment of experts through subsidiaries Establishment of a service contract with PMC (Project Management Company)
	Occurrence of default including financial crises	<ul style="list-style-type: none"> Payment guarantee along with KSURE Establishment of a guarantee credit line with Korea EXIM (about \$ 1 billion)
Financial Risk	Increase in exchange risks and investment costs	<ul style="list-style-type: none"> Raising Funds in foreign market for overseas investment projects Prioritized review on finance in the local market
Security	Personal safety of dispatched staff members	<ul style="list-style-type: none"> Selection of Security Provider & safety support for dispatched staff members Minimization of staff members dispatched to the field and transfer of subcontract contracts

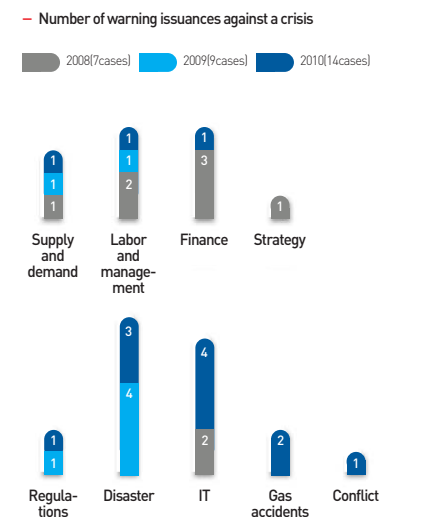
Risk Management Activities

KOGAS is conducting efficient crisis management activities to counter various crises whose number is growing year after year; recording 7 in 2008, 9 in 2009 and 14 in 2010 with regard to supply and demand of natural gas, disasters and the finance sector. In 2010, crises occurred in problematic supply and demand in the winter, failure in collective bargaining, changes in exchange rates, regulations on gas rates such disasters as typhoon, cyber terrorist acts and compensation-linked conflicts, but the ripple effects were minimized through the use of a practical manual for crises response EHSQ System, financial risk management system and disaster management system.

In particular, it conducted VaR value simulation, sensitivity analysis and scenario analysis in order to manage main financial crises related to exchange rates, interest and liquidity, and if the pre-designated limit is exceeded, it was reported to the Financial Risk Management Committee before responses were made in accordance with regulations on financial risk management in the manual.



Crisis Management Activities



Economic Performance

Total Reserves and Resources in 2010



3,900 million tons

2009 **3,700** million tons
2008 **2,347** million tons

Disclosure Management Approach

KOGAS expands a basis for stable import of LNG according to the objectives of improving the convenience of public life and enhancing public welfare based on a long-term stable supply of natural gas while responding to changes in demand caused by economic and environmental factors and seasonal factors in an appropriate way. The company is making every effort not only to push for an expanded basis for stable supply of natural gas but also to pursue a green energy development project.



Our Approach

The financial crisis 2008 pushed up oil prices to an unprecedented level and caused alarm in Korea, a country heavily dependent on imported energy sources.

Dedicated to the stable supply of energy sources, KOGAS has therefore strived to diversify its LNG import routes, while aggressively pursuing a number of overseas E&P projects. In addition, the company is expanding its service areas to cover not-yet-in service areas for the popularization of natural gas nationwide. Furthermore, KOGAS is steadily promoting the development of green energy as a future energy source.

Our Performance in 2010

In 2010, KOGAS achieved significant results in overseas resources development by overcoming the economic recession in 2009 and participating in gas sales and the Akkas Gas Field as an operator. The company started supplying gas to Youngweol, Hoengseong and Geumsan and revived fuel cost pass-through system in September 2010. It collected about 500 billion won of outstanding amounts by resuming fuel cost pass-through system (base material costs) and increased assets by 1.4 trillion won through expanded investments in resources development on the back of gas supply projects in not-yet-in service areas including Gangweon and the Akkas Gas Field while expanding debts and capital by 1.2 trillion won and 0.2 trillion won, respectively. It recorded 831.5 billion won in operating profit up 37.5 billion won from the previous year, but it posted 206.2 billion won in net profit during the term including foreign exchange-related profits, down 31.8 billion won. KOGAS recorded 359% in the ratio of debts, down 14%P from a year ago, in the wake of increases in the rate of investment, and it posted 3.89% in the rate of return of equity capital, down 0.72%P, due to reductions in net profit during this term.

Key Indicators

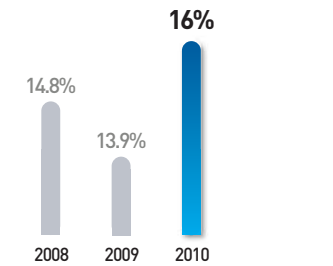
Category	Account	Major Performances		
		2008	2009	2010
Financial Performances	Assets	21.9KRW trillion	22.9KRW trillion	24.3KRW trillion
	Liabilities	17.8KRW trillion	17.8KRW trillion	19.0KRW trillion
	Equity	4.1KRW trillion	5.2KRW trillion	5.3KRW trillion
Profit/Loss	Sales	23.2KRW trillion	19.4KRW trillion	22.6KRW trillion
	Operating Profits	6,356KRW billion	7,940KRW billion	8,315KRW billion
	Net Income	3,308KRW billion	2,380KRW billion	2,062KRW billion
Major Ratio	Debt-to-equity Ratio	438%	344%	359%
	Current Ratio	141%	132%	140%
	Return on Equity (ROE)	8.11%	4.61%	3.89%
Facility Expansion	LNG Storage Capacity	5640000m ³	6120000m ³	7120000m ³
	Natural Gas Pipeline	2,739km	2,777km	2,879km
Natural gas Transaction	LNG import	279,441,000tons	238,021,000tons	318,161,000tons
	Natural Gas Sales	263,451,000tons	246,441,000tons	312,021,000tons
Overseas Resource Development	Reserves and Resources	234,710,000tons	370,010,000tons	390,010,000tons
	Self Sufficiency	1.24%	1.5%	2.5%
Overseas Businesses	Dividend Income from Overseas Projects	140 US\$million	86 US\$million	97 US\$million
Customer Satisfaction	PCSI (Ministry of Strategy & Finance)	98.6	98.9	99.2

Stable Supply of Natural Gas

KOGAS is working hard in expanding its LNG infrastructure while flexibly responding to seasonal ups and downs in the Korean natural gas market so as to contribute to public convenience and welfare. The pervading resource nationalism around the world is giving rise to the need for energy security. Therefore, just diversifying LNG supply lines is not enough to ensure the stable supply of natural gas. KOGAS has proactively pursued the upstream business of natural gas, and is thus securing sources of energy. In addition, the company is strenuously strengthening its storage capacity and expanding pipelines in not-yet-in service areas in a bid to strengthen the supply infrastructure.

Natural Gas as the Nation's Source of Energy

- Natural Gas' Share in Energy Consumption



As of 2010, natural gas accounts for 16.0% of primary energy consumption and 27.0% of power generation and is cited as one of the most important national energy resources along with petroleum, coal and nuclear energy. In the wake of the economic recession in 2009, the consumption of inexpensive fuels including coal was increased reducing the importance of natural gas to some extent, but it became more important on the back of the economic recovery in 2010.

As seen in 75.9% recorded in the rate of distribution of city gas for homes, natural gas fully plays its part as a civic fuel, and as the company supplies the city gas to areas alienated from the existing supply of city gas, it contributes to stabilizing the life of the underprivileged in regions and realizing energy equity. On the back of these efforts, demand for the city gas is expected to experience a continuous increase although the rate of increase is on the decrease after the completion of pipelines nationwide. However, demand in the power generation sector is expected to be reduced after 2015 due to long-term expansion of new and renewable energies and nuclear energy.

- Consumption of primary energies as of 2010

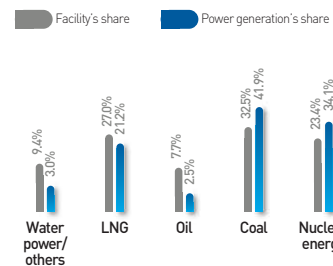
Category	coal	Petroleum	Natural gas	Water power	Nuclear energy	Others	Total
1,000 TOE	76,012	104,341	40,835	1,354	31,707	6,215	260,464
Rate (%)	29	40	16	0.5	12.2	2.3	100

*Source: KEEI

- Share for Power Generation [as of 2010]

Power generation	Nuclear energy	coal	Oil	LNG	Water power/Others	Total
Capacity (MW)	17,716	24,800	5,805	20,471	7,286	76,078
Production (GWh)	148,755	198,410	11,616	100,199	14,025	473,005
Share of capacity (%)	23.4	32.5	7.7	27.0	9.4	100
Share of production (%)	34.1	41.9	2.5	21.2	3.0	100

*Source: KPX December Issue



Stable Supply of Natural Gas

Natural gas sales maintained an annual growth rate of 13.7% on average from 1987 to 2009. However, this growth is forecasted to slow to an annual growth of 0.1% between 2011 and 2020. Demand will be gradually increased until 2015, but the rate of growth is expected to be at a standstill due to increased demand for new and renewable energies and nuclear energy on a long-term basis. Accordingly, KOGAS is endeavoring to expand a basis for overseas projects for the purpose of creating new growth engines.

- Natural Gas Sales & Outlook (Unit: 1,000 tons)

Category	Sales			Forecast			Average Annual Growth Rate 2009~2024
	2005	2008	2010	2015	2020	2024	
City Gas	14,032	15,316	17,522	19,210	20,298	21,770	2.3%
Power Generation	8,821	11,029	13,680	15,805	12,617	12,345	1.1%
Total	22,853	26,345	31,202	35,015	32,915	34,115	1.8%

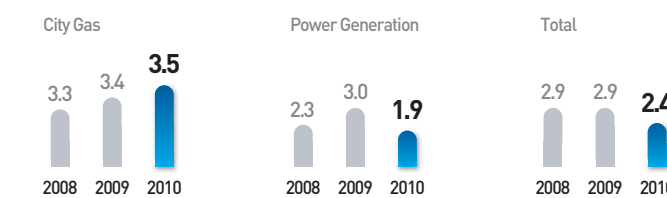
Characteristics of Domestic Natural Gas Consumption

Korea has four distinctive seasons. Due to these seasonal characteristics, domestic demand for natural gas is concentrated on heating during the winter time, and leads to a pattern of high-demand-in-winter-and-low-demand-in-summer. On the other hand, natural gas producing countries make efforts to equalize production befitting facility limitations for the purpose of maximizing production efficiency. Due to conflicts of interest between producing countries and consuming countries, an imbalance between demand and supply exists in the natural gas market. In an effort to resolve the structural difficulties in the market, KOGAS has continuously acquired storage facilities to adjust an imbalance between supply and demand. In particular, it makes purchases for storage in summer when prices are lower in the spot market for the purpose of economic efficiency. It aims to stably supply energy at lower prices. The company is also focused on demand forecasts, improved accuracy of prediction and establishment of an appropriate stockpile management model.

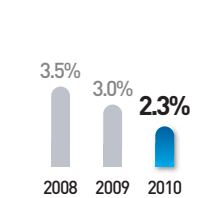
Enhancing Accuracy in Demand Forecasts

Efforts to realize the stable supply and demand of the natural gas stem from accurate demand forecasts. KOGAS is forecasting demands in the long term, short term and in the winter time and pursues to establish a short-and-long-term import contract through this. In order to improve the accuracy of demand forecasts, the company has cooperated with the Econometrics Research Center of Sungkyunkwan University to continuously improve and complement a demand forecast model for natural gas while nurturing experts in demand forecasts.

- TDR by year (Unit: 1,000 tons)



- Accuracy of demand forecasts (Unit: %)

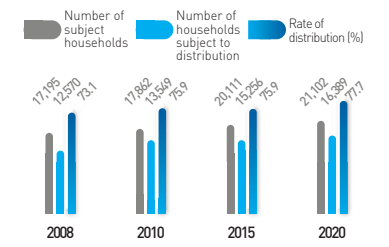


*TDR(Turn Down Ratio) : The largest monthly sales volume to the lowest monthly sales volume ratio for a given year

Diversifying LNG supply lines

KOGAS imports LNG mostly from South East Asia including Indonesia and Malaysia. However, as the development of the natural gas is reduced in the region, the company has recently increased the quantity of import from the Middle East centering on Qatar. It is also concentrated on improving the stability of supply of LNG through diversification of channels of LNG sources. In particular, the company is relieving geographical and political risks caused by regional concentration through the acquisition of LNG from new channels in Australia and Russia.

- Achievements in natural gas distribution and outlook (Unit: 1,000 households, %)



*2011~13: Expected to be supplied to 37 local governments including Geumsan

Natural Gas Demand Forecasts

Effort for Stable Supply

-The current state of KOGAS mid-to-long-term LNG import contracts

Category	Producing countries	Project	Quantity (10,000 tons/Year)	Contract period	Delivery terms
Long-term contract	Indonesia	KOREA II	200	1994-2014	FOB
		BADAK V	100	1998-2017	FOB
	Malaysia	MLNG II	200	1995-2015	FOB
		MLNG III	200	2008-2028	Ex-Ship
	Qatar	RasGas	492	1999-2024	FOB
		RasGas III	210	2007-2026	Ex-Ship
	Oman	OLNG	406	2000-2024	FOB
	Yemen	YLNG	200	2008-2028	FOB
	Russia	Sakhalin II	150	2008-2028	FOB
	Brunei	BLNG	70	1997-2013	Ex-Ship
Korea	East Sea Gas	40	2004-2018	PNG	
Subtotal			2,268		
Mid-term contract	Australia	NWS	50	2003-2016	Ex-Ship
	Egypt and others	BG	156	2008-2016	Ex-Ship
Subtotal			406		
Existing contracts	14 contracts (9 countries)		26.74 million tons of annually		
New long-term contracts	Australia	GLNG	300+Option 50	2015-2035	FOB
	Indonesia	DSLNG	70	2015-2028	FOB

Efforts to stabilize supply and demand

Concerns factors of supply and demand and measures

Concerns factors of supply and demand are divided into demand and supply aspects. Concerns factors in the demand aspects are classified into demand for city gas and power generation. In the meantime, demand for city gas changes or occurs according to business fluctuations and temperature change.

As natural gas used in generating power is used as base material for electricity production, its demand changes according to increased demand for electricity, mechanical problems in power generation facilities, preventive maintenance and the relative prices of heavy oil competing with LNG in addition to changes in weather or economic conditions. Concerns factors in supply aspects include mechanical troubles in production facilities, problems in LNG transport ships and political factors in producing countries. In addition, problematic storage and supply facilities may cause concerns about supply and demand. In this regard, KOGAS is making diverse efforts to stabilize the supply and demand of LNG. First of all, the company thoroughly puts short and long term demand and the winter time into perspective to calculate the seasonally needed quantity while purchasing additional quantity or treating surplus quantity by using the LNG spot market during times of excess or deficient demand. The company has also set up branch offices in South East Asia and the Middle East where most LNG is concentrated to monitor the state of operation of facilities in producing countries and political and economic conditions of each and every country. In addition, it is expanding the channels of introduction into Russia and Australia in order to overcome regional concentration of the introduction channels and minimize geographical and political risks.

In order to counter possible difficulties in managing supply and demand through adjustment of supply, the company established a quantity contract with city gas providers and power generators and took measures to manage supply and demand during emergencies by dealing with demand for LNG used in generating power through increase in the quantity of power generation in heavy oil power generators and coal power generators while conducting operations based on systemization of regulations on natural gas supply and demand

management and an emergency supply and demand manual. The company is expanding a demand management-type meter rate in order to realize stable supply and demand as well as reasonable demand while enhancing capacity to manage supply and demand through the use of overseas storage tanks.

KOGAS established a long-term contract (20-25 years) to annually introduce 238.3 to 200.8 billion tons of LNG until 2024, and it also made a mid-term 10 year contract to introduce 2.06 million tons of LNG. As of 2011, the mid-to-long-term contract responsible for introduction of 25.89 million tons of LNG accounts for 76% of 34.04 million tons, the demand forecasts for 2011. Main contract partners number ten, and they include South East Asia, the Middle East and Oceania.

Expanding LNG Storage Capacity

At the end of 2009, the rate of LNG storage of KOGAS was only 10%. This is very low even compared to Japan (16-18%) that was one of the major LNG importing countries. KOGAS has filled the shortage in low storage capacity by conducting spots and swaps. However, it plans to increase the rate of storage to 21% by 2024 taking fundamental measures to achieve stable supply and demand in the future. The company will reduce gas import costs by decreasing high priced spot purchases in the winter time through expanded storage facilities while acquiring a reliable mid-to-long-term supply.

In addition, the company is pushing for construction of a 4th LNG terminal (Samcheok) in addition to 3 LNG terminals in Incheon, Pyeongtaek and Tongyoung. It is also reviewing a new method of storage facility construction based on underground bedrock storage technology aimed to turn East Sea gas fields into storage facilities.

Laying Pipelines in Not-Yet-In Service Areas

KOGAS is continuously supplying natural gas to areas that have been alienated from the existing benefits of natural gas so that the entire public can use clean fuels. Through this, KOGAS contributes to resolving energy discrimination facing some areas and expanding energy options. The company plans to additionally lay about 858km supply pipeline by 2016 in addition to existing supply pipeline network (2853km) while expanding supply areas to 212 from the existing 158 cities and counties. If the project is completed, 54 small-and-medium cities nationwide will be able to additionally choose natural gas.

Supply and Demand Management in 2010

After reduction in demand in the wake of global financial crises in 2008 and 2009, the economy recovered to increase demand in 2010, and changes in demand were as much as 26.6% from the previous year, and this resulted in difficulties in supply and demand management. However, as a result of continuous efforts made to reduce the margin of errors in demand forecasts, KOGAS was able to decrease the margin of errors by 0.7% in 2010 when it was 3.0% while laying the foundation for a stable supply and demand. Through this, the company was able to establish a short-term-supply-and-demand plan in 2010 to calculate sufficient quantity while pursuing to acquire an anticipatory quantity. In order to acquire needed quantities, the company formed a purchase portfolio to secure 18 cargo units in the winter months based on a new-short-term contract and re-established a supply and demand plan for the winter at the end of September after the spot purchase of 6 cargo units in the summer when prices are relatively lower in a permitted range of storage tank capacity before additional purchase of 31 cargo units. If the 22 cargo units of purchase quantity from January to March, 2010, the previous winter period, are added, the company has acquired a total of 77 cargo units to achieve a stable supply and demand based on economics and a stable adjustment of supply.

- Quantity of Introduction in 2010

Category	Long-term	Mid-term	Short-term	SPOT	Total
Quantity (1,000 tons)	23,838	3,170	1,088	3,720	31,816
Number of cargo units	376	51	18	59	504



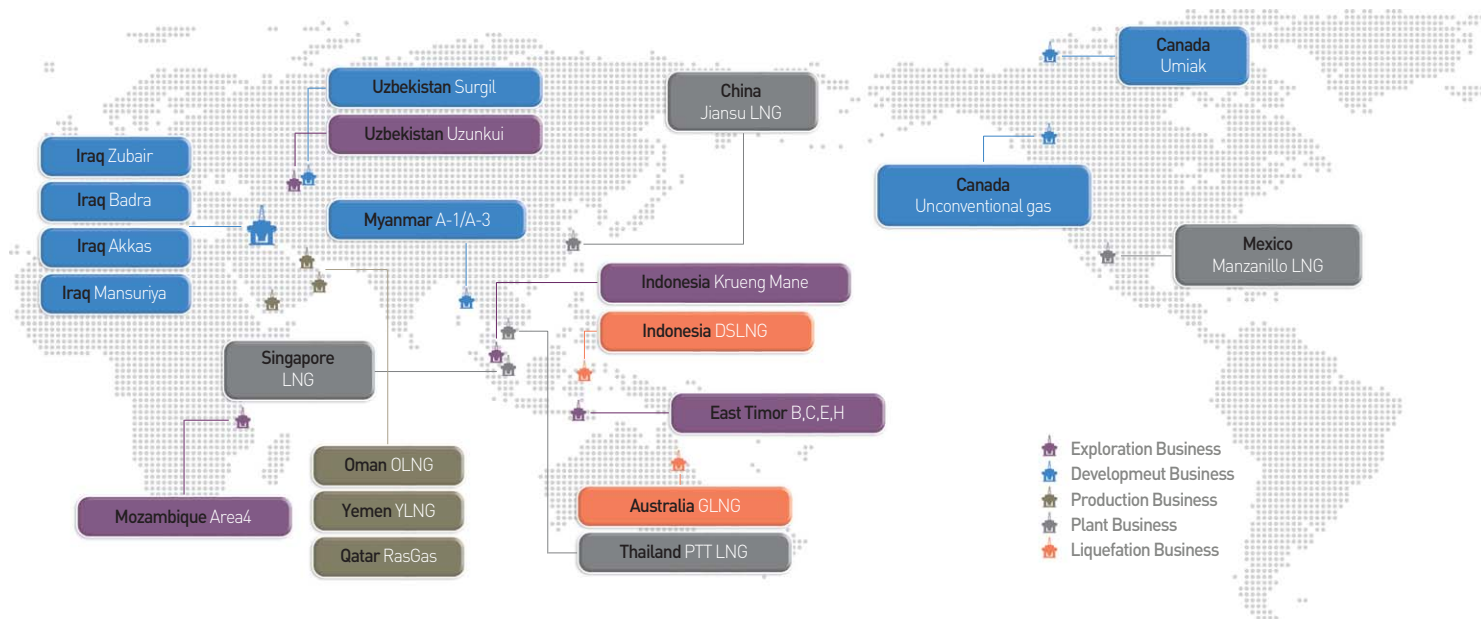
Overseas Project Performance

KOGAS is involved in overseas projects so as to secure the stable, long-term supply of energy sources and expand its business portfolio. Its business expansion is across the entire value chain of the natural gas business, from the upstream businesses including the development and production of natural gas and the midstream business of transportation and trading of natural gas to downstream businesses such as providing natural gas to end users.

The Current State of Business by Value Chain



- KOGAS Overseas Business (Exploration 4, Development 8, Production 3, Liquefaction 2, Plant 4)



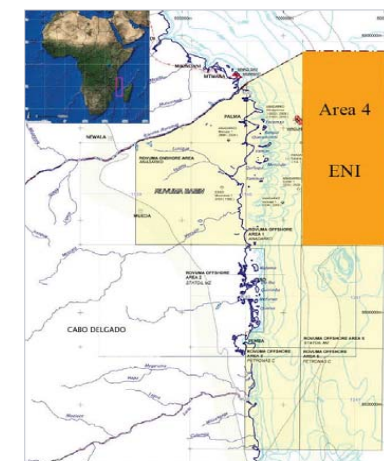
Exploration Business

KOGAS is conducting its exploration business in various countries including East Timor, Mozambique, Indonesia and Uzbekistan for the purpose of acquiring energy and expanding the upstream E&P business. KOGAS is proactively conducting drilling in four maritime blocks in East Timor. As the Mozambique Area 4 is a gas field highly likely to have massive natural gas reserves, the company has acquired data on three-dimensional elasticity wave exploration in 2010. This carries significance in that KOGAS has secured a bridgehead to advance into the African energy market by successfully pushing for business in Mozambique. In addition, the company is taking part in the maritime main exploration in Krueng Mane, Indonesia and has submitted a development plan (IPOD) on the JAU Gas Field (Aug. 2010) awaiting government approval.

KOGAS is expanding business areas into different regions like North America, Oceania, Africa, South East Asia, Middle East, CIS, and the pan-pacific and polar region. The company has established a portfolio strategy with regard to regional business characteristics for a stable supply of natural gas to the domestic market in an effort to emerge as a global energy provider.

In addition, the company established a contract with an outsourcer to conduct elasticity wave exploration in Uzunkui, Uzbekistan, and is currently working to acquire two-dimensional elasticity wave data. These upstream exploration projects will secure a long-term stable platform of natural gas, while also diversifying the revenue structure of KOGAS.

- A map of the Area 4 in Mozambique



- A map of the Gas Field in Indonesia



Acquisition of Akkas/Mansuriyah gas field development rights in Iraq

Iraq ranks 4th in petroleum reserves and 12th in natural gas reserves. It is also a strategic point of resources development where global companies including oil majors and public corporations are engaged in fierce competition. KOGAS has participated in the region as an Akkas gas field operator and acquired development rights by defeating various competitors. In addition, the company formed a consortium along with TPAO and the Kuwait Energy Company in Mansuriyah Gas Field to acquire gas field development rights.

Oil Field Development & Production Business in Iraq

Zubair

Located 20km southwest of Basra, Iraq, the Zubair oil & gas field spans 900km²; equivalent to 1.5 times the size of Seoul. KOGAS is the only Korean company participating in the project, the largest ever developed by a Korean company. The project includes the restoration and upgrading of the worn-out production field (blocks) and increasing production with the aim of generating approximately 6.4 billion barrels of oil over the next 20 years. KOGAS formed a consortium with ENI and Occidental, who have years of E&P business experience. The consortium will render the company with technological development in the area of resource development, while also securing new sources of revenue and serving as a foothold for becoming an independent business in the future. As KOGAS has advanced into the oil trading sector for the first time, it is expected to make a great contribution to creating profits.

*Consortium Composition : KOGAS(18.75%), ENI(32.81%), Occidental(23.44%), Missan Oil Company (25%)

Development Business

- A map of four mines in Iraq





Badra

The Badra Oil & Gas Field located about 160 km southeast of Bagdad in Iraq was discovered through exploration, and progress has been made based on approval of a preliminary development plan (Nov. 2010). The company plans to initiate a development system in earnest through three-dimensional wave exploration, appraisal well drilling etc in 2011. Over a period of 20 years, a total of 800 million barrels will be produced, with a maximum daily production capacity of 170,000 barrels for seven years. The consortium of KOGAS and experienced E&P enterprises such as Gazprom (Russia), Petronas (Malaysia) and TPAO (Turkey) will be jointly involved in the project. The project provides KOGAS with an opportunity to enhance its corporate image in Iraq and to enter future bids as well as advance into E&P and related businesses.

***Consortium composition:** KOGAS(22.5%), Gazprom Neft(30%), Petronas Carigali(15%), TPAO(7.5%), Oil Exploration Company(25%)

Preoccupation of domestic gas resources in the polar region

Gas field development in Umiak

About 430 billion barrels of petroleum/gas are buried in the Arctic, and it is 8.6 times the total global consumption per annum. On the back of the possibilities in the opening of the Arctic Sea routes in the wake of global warming and advanced drilling technology, it has emerged as a new advance base for the supply of resources drawing attention from the U.S., Russia and China now engaged in fierce competition to secure resources. At this important juncture, KOGAS has advanced into the Arctic for the first time as a Korean operator to participate in gas field projects and plans to proactively pursue the acquisition of resources for the future in the region.

***Participation in the Umiak Gas Field in the Arctic, Canada (Nov. 2010, LOI)**

***Consortium composition:** KOGAS(20%), MGM(40%), Conocophillips(40%)

Participation in the Myanmar Gas Field Project



KOGAS joined gas field development projects on the A-1/A-3 blocks in Myanmar in November 2001. The consortium signed a sales agreement with the China National United Oil Corporation (CNUOC) in 2008 and completed the front-end engineering and design (FEED) for the gas field and submarine pipeline construction in May 2009. In November 2009, the company announced Commercial Discovery and initiated construction to enter the development stage in earnest. It established an overland pipeline company to transport gas produced in Myanmar A-1/A-3 in Hong Kong in June 2010, and if the construction of submarine pipes and overland pipes is completed, the gas produced in the maritime gas field in

Myanmar will be exported to China through submarine pipes and overland pipes from May 2013. In addition, Daewoo International conducted an official environmental impact assessment on the platform construction in a bid to ensure its operation is free of any environmental infringement. At the same time, the consortium did its utmost to eliminate any environmental or human rights issues while also complying with regulations, international labor law and environmental standards as well as OECD guidelines regarding onshore and offshore pipeline construction.

***Consortium Composition :** KOGAS(8.5%), Daewoo International(51%), MOGE(15%), OVL(17%), Gail(8.5%)

Unconventional gas developments in Canada (Horn River/ West Cutbank)

In a bid to secure an unconventional gas resource in Canada, KOGAS has entered into the Farmout Agreement, acquiring a 50% share of three fields in Kiwigana, Jackpine and Noel that EnCana has in Canada. Under the agreement, the company will collaborate with EnCana on the exploration, development and production of the three mining blocks in the northeast of the province of British Columbia. The Horn River and West Cutbank regions, where the blocks are located, have received attention as an unconventional gas production source in North America.

This project is significant in many aspects: KOGAS has not only secured a stable supply source overseas for a large amount of gas in the long-term, but is also entitled to receive technologies regarding the development of unconventional gas. The company has also established a foothold for an LNG liquefaction terminal business in the region.

Through this project, KOGAS will be able to strengthen its capabilities in exploration and the development of shale gas, coal bed methane (CBM) and other unconventional gas resources. When an additional supply source is realized in the local LNG business operation, the company plans to introduce an integrated business line-up covering the entire value chain from up and mid to downstream businesses by importing natural gas from Canada. KOGAS believes its exploration into new and unconventional energy sources will contribute to its growth as a leading global energy company.

***Consortium composition:** KOGAS and EnCana 50% shareholding and joint operation

- Regional mines Horn River/ West Cutbank in Canada



Surgil, Uzbekistan

The Surgil Gas Field development and production in Uzbekistan is an integrated package project between a Korean consortium led by KOGAS and Uzbekneftegaz that involves the Surgil gas field development - pipe network construction - gas chemical plant(GCC) - production - trading - infrastructure, A total of \$4 billion was invested in the project. Which is aimed at improving the added value of gas resources through the production of chemical products (HDPE, PP) and the sale of gas based on competitive base material prices. As of February 2010, the company established an investment agreement, and conducted main projects in a faithful manner by establishing HOA on 11 projects as of November 2010. As KOGAS advances into the chemical plant EPC/O&M sector worth \$2.4 billion, it is expected to contribute greatly to facilitating the economy.



Equity Investment in LNG Projects

KOGAS invested in the RasGas project in Qatar acquiring stakes in Ras Laffan I Company in 1999, its first LNG importation related investment. Since that time, the company has secured stakes in Oman LNG and Yemen LNG projects, reaping profits from these projects. These investments have been made in consortium with Korean companies. All in all, KOGAS generated US\$ 723.7 million in accumulated profits as of 2010. Increased profit inflow is expected as the Yemen LNG project begins commercial operations in 2011.

Production Business

Category	RasGas	Oman LNG	Yeman LNG
Project Period	1999 ~ 2029	2000 ~ 2025	2008 ~ 2033
Production Volume (per year)	6~6.5 million tons	6.6~7.0 million tons	6.7 million tons
Stake	3%	1.2%	8.88%
Accumulated Profits	US\$ 597.8 million	US\$ 125.9 million	Generating profits from 2011

Pursuing Coal Bed Methane (CBM) project in Australia

KOGAS plans to preoccupy CBM (Coal Bed Methane) resources which are expected to emerge as important resources in the future and in so doing secure a bridgehead to acquire LNG in the long term and advance into the Australian energy markets. To this end, KOGAS participated in CBM gas field development, pipelines and a liquefaction plant producing 7.8 million tons of gas per annum in terms of construction and operation in Queensland in Australia. The project involves the entire value chain including gas field development, pipelines, a liquefaction plant, LNG transport and sale, and this is expected to improve KOGAS' status in the global market. KOGAS is doing its utmost to realize the stable acquisition of resources.

*Consortium Composition : KOGAS(15%), Santos(30%), Petronas(27.5%), Total(27.5%)

Advance into joint projects on DS LNG liquefaction plant in Indonesia

KOGAS has obtained qualifications to join the LNG Club by gaining experience in LNG liquefaction for the first time, and as the company has acquired know-how in the independent operation of LNG development and the liquefaction plants, we now have firm strategies for stability and minimized operational risks through this joint operation with Mitsubishi. This has achieved vertical integration in terms of upstream and downstream and is expected to make a great contribution to furthering our competence in future overseas projects.

Plant Business

Advancing into Mid and Down-stream Businesses (Including LNG Terminal Projects)

Drawing on its more than 25-years of gas plant operational knowledge and experience, KOGAS is now proactively pursuing overseas mid and down-stream business opportunities. As it collaborates with Korean construction & engineering companies to participate in overseas gas plant markets, these efforts will prop up the capital investment boom both domestically and overseas.

Mexico LNG Terminal Investment & Operation Project

This is a build-own-operate (BOO) project, in which KMS will own and operate the project as an administrator to recover investment. Of the total US\$ 880 million, KOGAS invested 25%, with Samsung Corporation and Mitsui contributing 37.5% each. Construction began in April 2008, with the consortium operating the terminal for 20 years until 2031 provided construction is completed in August 2011 as scheduled. Major facilities of the LNG Terminal include two 150,000kℓ-class storage tanks and a jetty, handling 3.94 million tons of LNG annually. Since the ground breaking ceremony in June 2008, construction has been slightly delayed due to environmental issues concerning the neighboring seashore. However, construction resumed in 2009 and is expected to meet the original completion schedule of August 2011.

- Bird's-eye view of the Mexico Manzanillo LNG Terminal



Thailand PTT LNG Terminal EPC Project

This is an order placed by the state-owned PTT LNG of Thailand for the construction of an LNG terminal, including two 165,000kℓ storage tanks and jetty. As a member of the consortium, (which includes GS E&C, Daewoo Engineering) KOGAS serves as technical advisor, as well as a trainer of technicians including conducting start-up operations. The project period spans from February 2008 to May 2011. As of the end of 2009, KOGAS had established a local subsidiary and completed the second stage of its training and technical advisory services. As of August 2010, the company dispatched start-up operation personnel to the field to conduct business.

China LNG Terminal Start-up Operation & Consulting Project

In 2010, the company successfully conducted LNG terminal education, technical consulting and start-up operation in Jiangsu, China while seeing success in LNG terminal design consulting in Zhejiang. It has also secured a bridgehead to advance into the natural gas sector with a high growth potential and established mutually cooperative relationships with energy majors in China (PetroChina and CNOOC) through technology projects. KOGAS has contributed to expanding a pool of experts in overseas LNG terminal technology projects and won new orders worth a total of \$8.38 million by expanding advance into the low-risk and technology-intensive overseas business including technical consulting.

Singapore LNG Terminal EPC Project

Singaporean SLNG placed an order for the construction of a Singapore LNG Terminal equipped with two 180,000kℓ storage tanks and a jetty. KOGAS landed this project in collaboration with Samsung Corporation. Its role in the project includes serving as a technical advisor, training and start-up operations. In the project period spanning from March 2010 to August 2013, KOGAS has provided technical consulting since March 2010.

- The construction site of the PTT LNG Terminal



- Establishment of a contract on Jiangsu LNG Terminal



- LNG production & operation education



Continuous supply for 25 years without suspension

KOGAS puts the strongest emphasis on the safe and stable supply of natural gas while focusing on expanding energy welfare through stable supply and demand and pipes-laying in not-yet-in service areas on the back of expanded storage capacity.

Production capacity expansion As of 2010, it recorded 7.12 millionkℓ in storage capacity, and this will be drastically expanded to 106.6 billionkℓ by 2015, and the rate of storage will be increased to 14.4% (2015) from 10.4% (2010).

Samcheok production terminal Under construction	Pyeongtaek production terminal (Expansion)	Tongyoung production terminal (Expansion)
9 units (1.8 million kℓ)	6 units (1.2 million kℓ)	3 units (540,000 kℓ)

Not-yet-in service areas

KOGAS plans to lay and operate a total of 4,244km of pipes by 2016.
 - Pipe-laying achievements in 2010: 489km (Supply initiated in Youngweol, Hoengseong and Goseong)
 - 158 cities and counties in January 2010 ▶ Supply initiated in 212 cities and counties by 2016 (out of 230 cities and counties) (up from 54)

Domestic gas sale business

Research & Development Performances

Business Implementation System and Process

Business Implementation System

Objectives

- Advancement of core natural gas technology
- Enhancement and development of new growth engine technologies including unconventional energy

Implementation Strategy

- Enhancement of research development strategy
- Development of future growth engine technologies
- Creation of proactive achievements

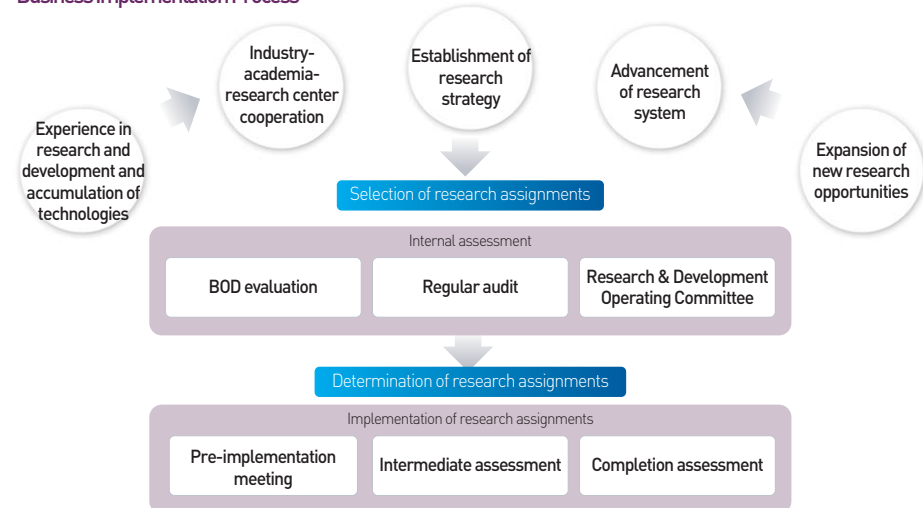
Practical assignments

Category	2008	2009	2010
Investment costs/budget (100 million won)	320	347	383
Personnel (persons)	77	77	75

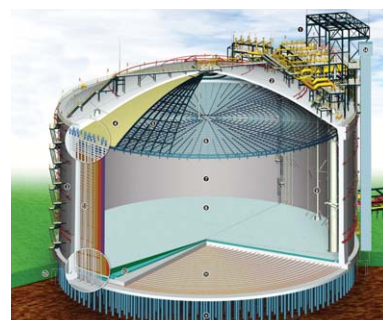
Performance Targets

Category	2008	2009	2010
Application for industrial property (Number of accumulated cases)	180cases	216cases	232cases
Accumulated amount of overseas export of technologies (100 million won)	-	190	222

Business Implementation Process



- A 270,000-kℓ-LNG storage tank



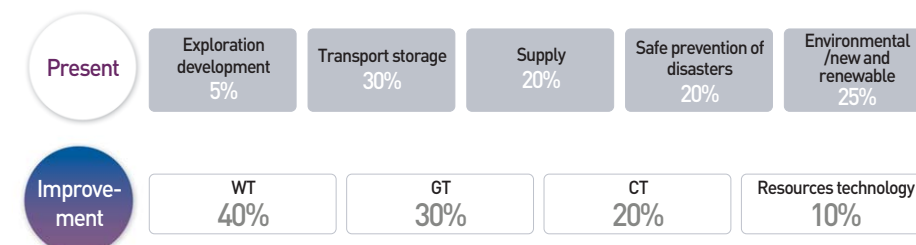
The R&D Division of KOGAS has introduced research development power generation plans and a technology roadmap for nine central areas in an effort to respond to changed roles. This was necessary to facilitate R&D according to managerial environmental changes, choose central research areas based on selection, concentration and the enhanced roles of the Profit Center and establish a basic strategy to reform the research system. In consideration of the marketability of technology and the appropriateness of strategy in main research areas, the company selected 3T areas including WT (World Technology), GT (Green Technology) and CT (Core Technology).

Large-scale technology development-oriented reorganization

The company has made large-scale investments by choosing 3T and 9 areas based on selection and concentration.

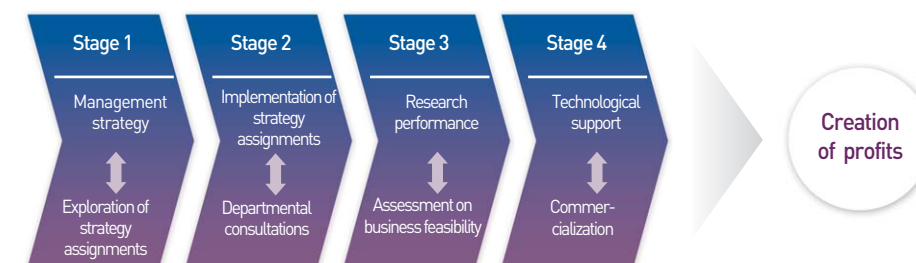
Category	Technology areas
WT(World Technology)	LNG plant, floating maritime plant & DME technology
GT(Growth Technology)	GTL plant, new and renewable energies & unconventional energy technology
CT(Core Technology)	Pipe integrity, improvement of facility efficiency, facility operation & maintenance technology

Research & Development Investment Portfolio Reorganization

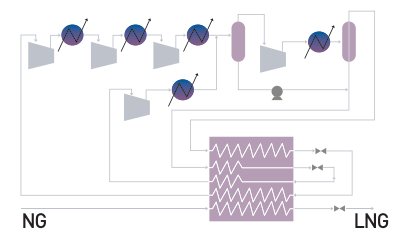


In addition, the company conducted assessment and feedback on market environments, strategy linkage, possibilities of success in R&D and economic benefits by stage when selecting and conducting research assignments for enhancing the roles of the Profit Center so that the R&BD (Research & Business Development) system where profits are made can be established.

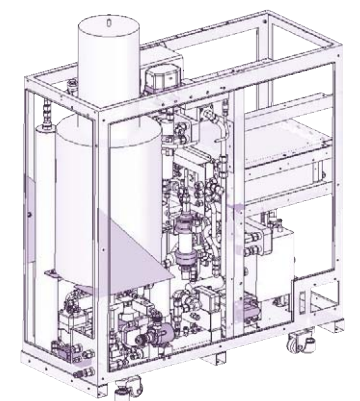
Establishment of R&BD (Research & Business Development) System



- Natural gas liquefaction process



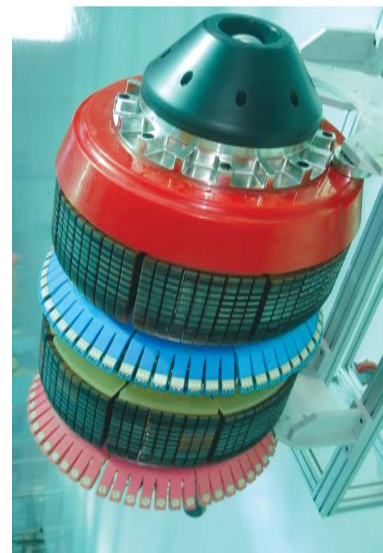
- Fuel cell system



– Ulleung Basin gas hydrate core



– 26-inch magnetic leakage pig



The R&D Division of KOGAS plans to continuously expand investments in R&D investing up to 4% of net sales by 2015 and concentrate investments on strategy areas (3T) to maximize research performance.

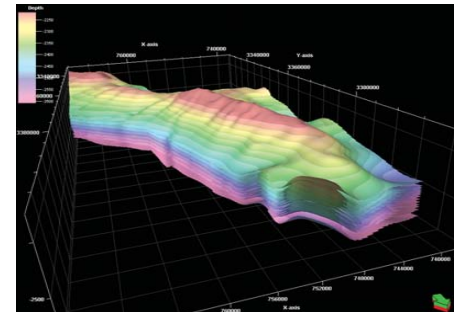
The current state of sector research by the R&D Division of KOGAS is as follows.

First, research is conducted on the exploration and development of oil and gas fields and unconventional energy resources in the resources exploration R&D sector.

Second, development of the liquefaction process and research on liquefaction plant design technology that pertains to the upstream of LNG technology research in the entire LNG Value Chain (R&D on LNG transport carrier hold pertains to the middle stream, and mega-scale LNG storage tank design technology development, technological transfer at home and abroad and research on LNG terminal design technology pertains to the downstream that are being proactively implemented).

Third, development of source technology on production of DME, a representative clean energy, has been completed in an effort to conduct research on green growth, and activities are being proactively conducted to develop commercial plant design technology and establish joint business agreement with foreign companies. In addition, research on hydrogen stations aimed to produce hydrogen fuel, a future energy source that does not generate carbon dioxide, is being conducted in addition to domestic production of polyelectrolyte fuel cells for homes and the pilot distribution and monitoring business.

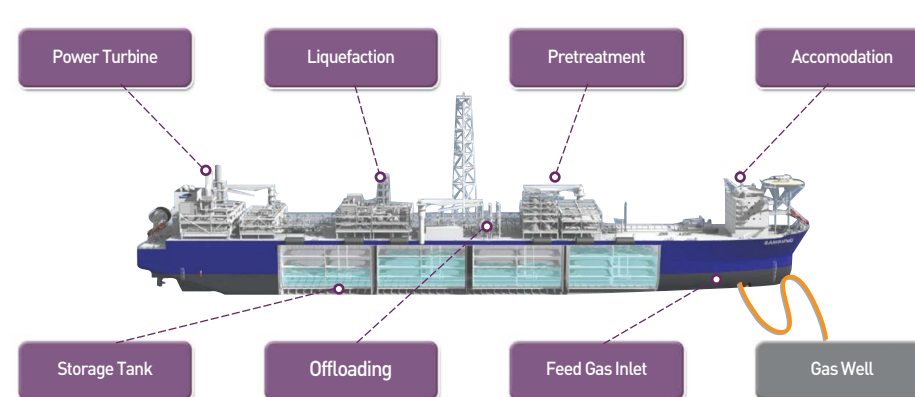
– Establishment of Zubair oil field G&G model (some stratum data)



– DME production plant operation



– LNG-FPSO liquefaction process (example)



Main Economic Performance

In the overseas resources development sector, the company participated in bids for gas fields in Iraq and was selected as an Akkas gas field operator. The company took part in unconventional gas-based LNG business (Australia) for the first time in the world and produced great results including the development of gas fields and construction of liquefaction plants in Indonesia.

Constructing the Infrastructure for Energy Supply

In an effort to realize energy welfare through a convenient supply of natural gas for lower prices, KOGAS expanded 102km of pipelines to enlarge service areas. It also completed the construction of a storage facility in an area covering 1 millionm³ for the purpose of a stable supply and demand during the winter. KOGAS plans to continuously lay pipelines in not-yet-in service areas in order to conveniently supply natural gas at lower prices while installing a small-scale LNG acquisition base (LNG Terminal) to supply natural gas to Jeju Island. In addition, the company will increase the rate of storage that is presently 10.4% to 16% through the construction of the Samcheok Terminal in an effort to enhance a basis for stable supply of natural gas.

– Equipment & Facilities

Category		2008	2009	2010
Pipelines	Length (km)	2,739	2,777	2,879
	No. of Tanks (units)	43	46	51
Storage Tanks	Capacity (10,000kl)	564	612	712

Natural Gas Procurement & Sales

In 2010, KOGAS imported 31.82 million tons of natural gas and had sales of a total of 31.20 million tons of natural gas, with power generation with about 13.68 million tons and city gas with about 17.52 million tons. City gas recorded 17.51 million tons in sales, up 13% from last year due to expanded supply areas and cold waves during the winter. As for the natural gas used in generating power, 13.68 million tons in sales was recorded, up 50% from last year due to the increase in demand for electricity and reduction in prices relative to heavy oil in the wake of economic recovery. Of primary energies, the natural gas share was 15.7%, up 1.8% on the previous year.

– Natural Gas Procurement & Sales (Unit: 1,000 tons, cargo)

Category		2008	2009	2010
Procurement	Imported Volume	27,944	23,796	31,816
	Cargoes	460	384	504
Sales	City Gas Use	15,316	15,510	17,522
	Power Generation	11,029	9,134	13,680
	Total	26,345	24,644	31,202
Primary energy share (%)		14.8	13.9	15.7

Facilitation of Overseas Resources Development

As of 2010, KOGAS participated in 22 overseas resources development projects including five oil and gas fields in Akkas, Mansuriyah and others as an operator or an equity participant, GLNG unconventional gas field and liquefaction plant project in Australia. It also increased the quantity of independent development to 770,000 tons. KOGAS plans to continuously expand investments in upstream sectors by improving the rate of independent development of energies while securing stable gas supply resources.

Financial Performance by Business Sector

– The current state of resources development business

Category	2008	2009	2010
Overseas participation mines (Number)	17	19	22
Quantity of independent development (10,000 tons)	33	38	77

— Educational expenses / sales and labor productivity

Category	2008	2009	2010
Educational expenses /sales (%)	0.04	0.04	0.04
Labor productivity (100 million won)	6.3	7.3	6.3

Enhancing Management Efficiency

Interest in and support for the human desire to find new growth opportunities has increased and KOGAS uses about 0.04% of annual sales as educational expenses for employees to help develop business competence. Through this, the company endeavors to improve labor productivity on a continual basis.

In 2010, the company recorded 630 million won in labor productivity, down 90 million won from the previous year due to reduction in annual net profits during the term. However, KOGAS has operated a human resources development program while supporting competence development for employees until 2017 in an effort to improve the 2006 labor productivity rate by 100%.

Credit Rating and Diversification of Debts

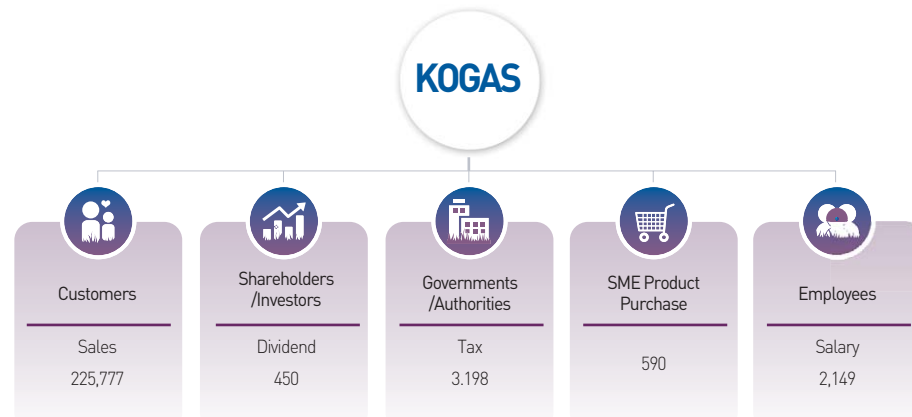
As the government is continuously focused on stabilizing public fees, unpaid amounts accumulated to record 4.2 trillion won as of the end of 2010, and our credit rating was upgraded to A1 from A2 by Moody's due to proactive IR and this despite increases in the rate of debts on the strength of supply of gas to not-yet-in service areas and expansion of overseas resource development investments. Moody's rated KOGAS as A1, and S&P rated the company as A, which is the same level as the national sovereign rating. In addition, KOGAS makes efforts to enhance financial stability by diversifying debts by issuing Swiss bonds in 2010 while endeavoring to reduce debts by introducing foreign currency debts at lower interest.

Efforts towards Economic Recovery

Until now, KOGAS has done its best to safely and stably supply natural gas at lower prices while developing interest in improving corporate competitiveness through reduced fuel costs. The company responded to governmental policy by executing finance at an earlier date in 2010 while contributing to creating jobs by employing 98 persons through public recruitment and hiring 95 interns. In addition, the company has contributed to coexistence management and mutual growth by spending 59 billion won on purchasing goods produced by SMBs, 28.4 billion won on helping the underprivileged including the lower income class, the physically challenged and people of national merit.

Beyond our primary mission of ensuring a stable supply of natural gas, we also endeavor to maximize values for our stakeholders, our shareholders, investors, customers, employees, government, community and partners, by creating new value and returning profits to society.

— 2010 Value Distributions to Stakeholders (Unit: KRW billion)



Distribution of Economic Value to Stakeholders

Customers

The primary customers of KOGAS are power generation and city gas companies. However, we continue to improve our facilities and amend our supply contracts in order to provide a better service to our end users, the entire nation. In particular, the company pushed for supply of gas to not-yet-in service areas in 2010 to start supplying inexpensive and convenient natural gas to additional 450,000 households. At the same time, we conduct regular customer satisfaction surveys of our primary customers; city gas companies, and incorporate these findings in our customer satisfaction improvement initiatives. These efforts have been honored as we have topped the customer satisfaction survey conducted by the Ministry of Knowledge Economy for four consecutive years.

Government

In 2010, KOGAS paid 17.5 billion won in local taxes and 302.3 billion won in VAT to fulfill its social responsibility for local governments and the central government.

Shareholders & Investors

Despite the weakened financial structure caused by increase in debt rate, KOGAS paid a dividend of 620 won per share in 2010, and the total amount of dividends was 45 billion won. The company plans to continuously pay a certain ratio of profits as a dividend to shareholders unless it causes problems in finance for the purpose of increasing benefits for shareholders. In addition, the company will make proactive efforts to raise share prices while endeavoring to increase shareholder value

Category	2008	2009	2010
Dividend ratio (%)	23.4	15.4	12
Dividend per share (KRW)	1,170	770	620
Total dividend payout (KRW billion)	850	559	450
Year-end share price (KRW)	57,500	48,600	48,500
Earnings per share (KRW)	4,555	3,278	2,840

Local Communities & Suppliers

KOGAS makes efforts to expand participation by local companies during construction and purchases for the purpose of power generation in the local community while giving attention to strengthening ties with local residents through the KOGAS Scholarship and the Onnuri Project as a Cultural Property Protector. In 2010, the company improved heating facilities for 300 low income households and 70 social welfare centers while subsidizing heating costs for 300 low income households during the winter time. In 2010, the company spent a total of 12.8 billion won for the social contribution project.

In 2010, the company improved methods of payment to SMBs to reduce the period of payment to 5 days from the existing 7 days thus relieving the cash burden on the part of SMBs. In addition, the company introduced an organization dedicated to supporting SMBs to systematically support our partners and SMBs.

Employees

In 2010, a total of KRW 214.9 billion was spent on wages. In addition, a variety of welfare programs are in place to enhance the welfare and competence of our employees. In full compliance with domestic and international regulations, we have eliminated all discrimination regarding pay, age, gender, race or employment status, and instead differentiate our payment schemes only on the basis of performance.



Environmental Performances

2010 Costs of environmental activities in 2010



33,345 KRW million

2009 **34,694** KRW million
2008 **21,984** KRW million

Disclosure Management Approach

Regarding its environmental policy, KOGAS recognizes its role and responsibility for climate change as a seller of fossil fuels while pushing for the reduction in green house gas emissions on a preferential basis. The company endeavors to research in advance the environmental effects of facility operation on surrounding areas to minimize leakage and emission, and efforts are being made to minimize effects on the quality of air and water and the local community. In the meantime, the company is putting emphasis on raising the awareness of employees and the local community through ongoing campaign activities.



Our Approach

KOGAS' business has characteristically low environmental impact factors due to the clean and environmentally friendly features of natural gas. Despite this, the company is well aware of its social responsibility to climate change as an energy enterprise. Its approach to environmental protection starts from responding to the global concern over the greenhouse effect, and also includes low carbon green growth initiatives for new growth engines and minimizing environmental impact from its construction and operation of natural gas facilities.

In order to control these various efforts within a single system, the company operates the EHSQ management system and applies a total quality management (TQM) process to continuously improve the company's effectiveness and soundness.

Our Performance in 2010

In terms of energy efficiency, the sale of natural gas drastically increased by 27% on the previous year, but sales were somewhat reduced by 6.5% in terms of basic units. Considering that the basic unit increases up to 250% in the winter time in the natural gas industry, it shows improved energy efficiency on the back of optimized facility operation and improved TDR (Turn Down Ratio) in both winter and the summer.

This is the result of the implementation of low cost green management on the back of integrated management on green house gas emissions and improved energy efficiency in accordance with the KOGAS green management strategy established based on the governmental 'low carbon green growth strategy.' Although construction waste products have increased in the wake of the construction of the Samcheok Base and in the expansion of supply networks for not-yet-in service areas, the company makes efforts to treat its wastes in an appropriate manner.

Key Indicators

Category	Items	Major Performances		
		2008	2009	2010
Greenhouse Gas	Emissions (tCO ₂)	491,438	390,295	524,894
	Unit Load (tCO ₂ eq/LNG1,000ton)	18.7	15.8	16.8
NOx Emissions	Emissions(kg)	371,820	233,351	380,129
	Unit Load	14.10	9.55	12.18
Wastes	Emissions(ton)	8,636	224,112	695,719
	Unit Load	0.32	9.09	22.29
Energy Consumption	Energy Consumption (TJ)	9,553	7,567	10,198
	Unit Load(TJ/LNG1,000ton)	0.363	0.307	0.327
Environmental Activity Expenses	Environmental Activity Expenses (KRW million)	21,984	34,694	33,345
Water Usage	Amount (kℓ)	-	481,461	483,696
	BOD Emissions(kg)	169.0	250.0	111.9
Water Pollutants Emission	Unit Load(kg / 1,000ton)	0.0064	0.0100	0.0040
	COD Emissions(kg)	47.0	79.0	56.1
	Unit Load(kg / 1,000ton)	0.0017	0.0032	0.0018
	SS Emissions(kg)	217.0	286.0	155.7
	Unit Load(kg / 1,000ton)	0.0082	0.0116	0.0050

※ GHG emissions figures were adjusted in accordance with the opinion of a third party
※ Water usage was included from 2009.

Environmental Policies

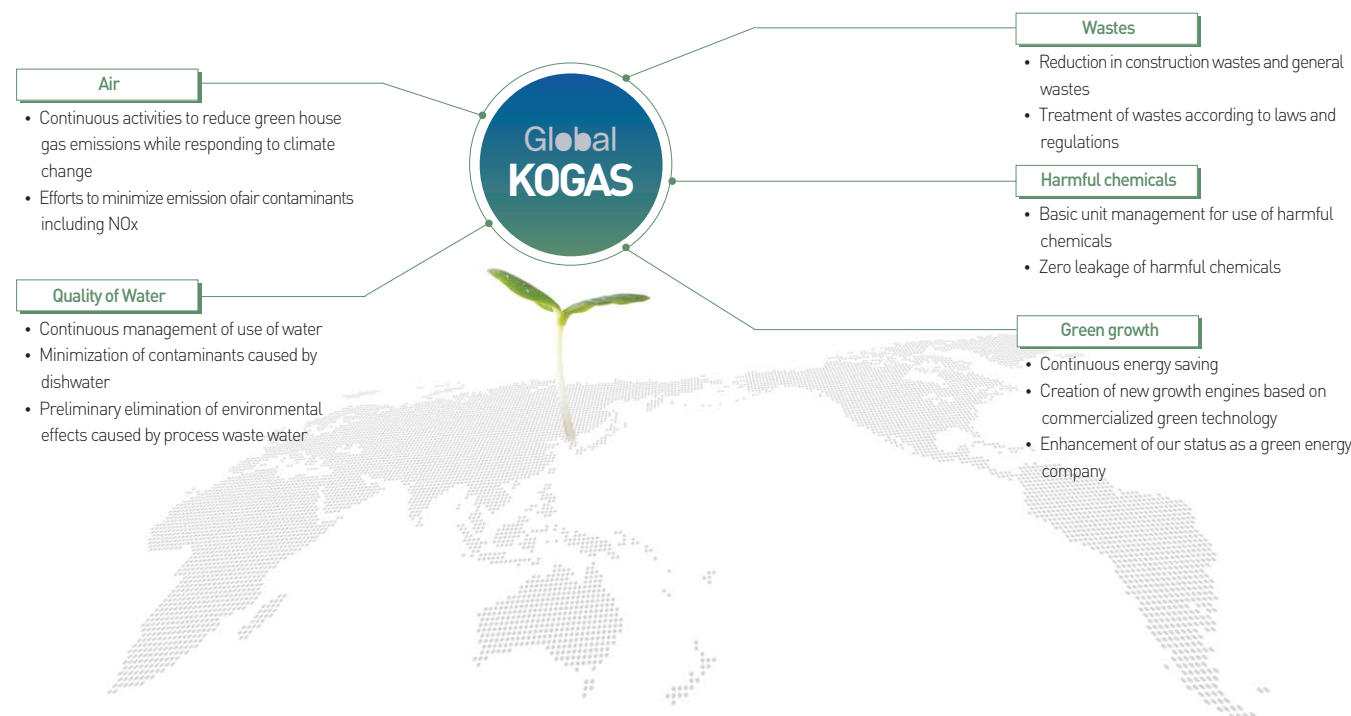
Regarding its environmental policy, KOGAS recognizes its role and responsibility for climate change as a seller of fossil fuels while pushing for reductions in green house gas emission on a preferential basis. The company endeavors to research environmental effects of facility operation on surrounding areas in advance to minimize leakage and emissions. Also efforts are being made to minimize the effects on the quality of air and water and the local community. In the meantime, the company is putting emphasis on raising the awareness of employees and the local community through ongoing campaign activities. The company is pursuing to satisfy the legal requirements for the environment in various overseas resources development projects executed for the purpose of national energy security while conducting environmental management activities at a level required in domestic business activities.

Essence of KOGAS Environmental Management

Regarding KOGAS business activities in 2010, the KOGAS core process that affects the environment is the operation of the LNG Base and supply network aimed to provide natural gas through a grid of nationwide pipelines after gasification of LNG. However, **this vaporization does not involve any chemical change in property, causing only negligible environmental impact. Located on the coast, LNG terminals inevitably bring about change in the neighboring environment, as does the construction and operation of the pipelines nationwide. Therefore, it is imperative for KOGAS to minimize any impact on the environment.** In addition, the company established a 'Green Growth Team' in order to proactively respond to climate change, the latest global concern, and braces itself to comprehensively manage responses to climate change and turn green growth into a new business model in accordance with the governmental low carbon green growth policy.

While controlling its emissions of soil, water and air pollutants, the company added water usage to its company-wide monitoring list in 2009. The company employs the EHSQ Management System as an integrated environmental management system, which collects and maintains the environmental database on the KOSMOS System (KOGAS' integrated information management system). To date, none of KOGAS' business sites have influenced any protected areas such as the Ramsar Wetlands. In response to rising public concern over biodiversity, the company will discreetly approach the issue in all its environmental impact assessments in the future.

As part of these efforts, the company has excluded the local wetlands and lagoon from its Samcheok LNG Terminal construction site as well as relocated the sea grabbles to neighboring beaches.



Continuous Improvement of Environmental Activities

KOGAS runs an integrated EHSQ Management System for the comprehensive control of its environmental, health, safety & quality management activities. The key functions of the EHSQMS include the periodic measuring and monitoring of corporate activities in order to identify any improvement opportunities and make any necessary corrections.

KOGAS establishes an Environmental Performance Evaluation (EPE) System to conduct environmental activities and to objectively and quantitatively assess activities and performances according to the environmental index.

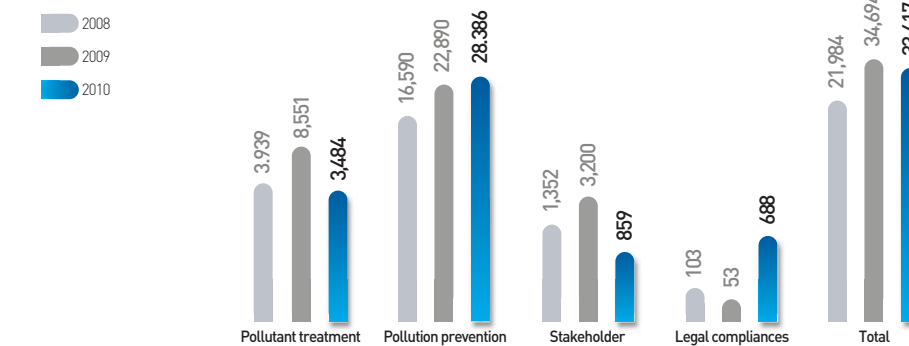
In particular, the company regularly revises the 'Environmental Contamination (Maritime) Practice Manual' to effectively and efficiently respond to environmental emergencies including leakage of Bunker-C used in LNG transport carriers while enhancing crisis response competence through regular training conducted in our 3 LNG Bases.

2010 Environmental Expenses

KOGAS has developed its own standards for environmental cost calculation in four categories: pollution prevention, pollutant treatment, stakeholder activities and legal compliances. The lion's share of the company's environmental budgets is spent on preventing pollution, followed by the treatment of pollutants.

As waste treatment costs related to construction that was calculated as contamination treatment costs in 2009 were excluded from the costs of environmental activities in 2010, contamination treatment costs were drastically reduced last year to the level of previous years. In the meantime, legal costs were increased in the wake of general consultation costs in the process of negotiations to compensate nearby fishermen with regard to changes in ocean temperature in Tongyoung Terminal.

Annual Environmental Expenses Breakdown (Unit: KRW million)



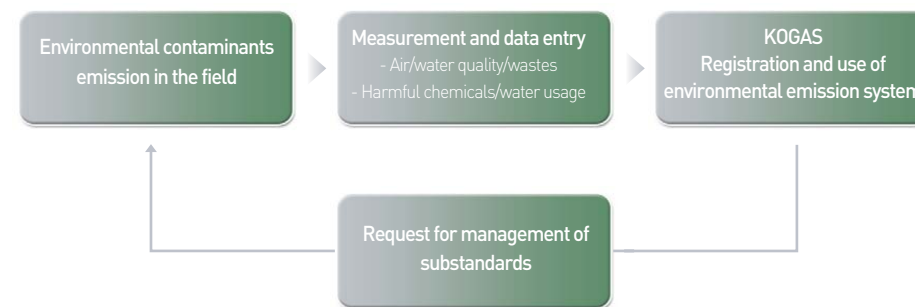
2010 environmental activities expenses (Unit: KRW million)

By Activity	Pollutant Treatment activities	Pollution prevention activities	Stakeholder activities	Legal compliances & Restoration	Total
Air	54	4,580	-	-	4,634
Water	1,792	850	-	-	2,642
Waste	157	4	-	-	161
Noise & Vibration	-	2,078	-	-	2,078
Land	31	15	-	-	46
Others	1,450	20,859	859	688	23,856
Total	3,484	28,386	859	688	33,417

Efforts to Reduce Pollution

Dedicated to minimizing the environmental impact of its LNG receiving and vaporizing facilities, as well as the national pipeline grid, KOGAS continues to monitor its waste control and use of hazardous chemicals. During all procedures connected with controlling and treating pollutants, KOGAS fully abides by governing laws and regulations.

Operation of Environmental Contaminants Emission Management System



Water Pollution Control

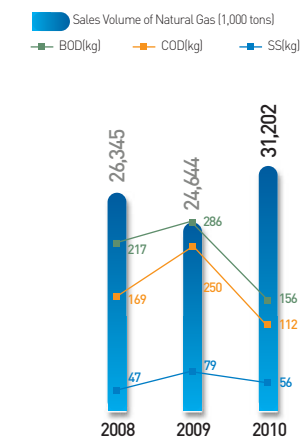
Water Usage

KOGAS commenced collecting and controlling data on its use of water resources and underground water in 2009. The main source of water use is the water service, but some of our valve stations operating in remote areas use underground water. As the water usage increase factor is insignificant due to rising sales in consideration of the operational characteristics of the facilities, water usage was similar to the previous year.

Water Usage & Unit Load

Category	2009	2010
Sales Volume of Natural Gas (1,000 tons)	24,644	31,202
Water Service	474,990	467,579
Usage (kℓ)		
Underground Water	6,471	16,117
Total	481,461	483,696
Unit Load (kℓ/1,000 tons)	19.54	15.50

Water Pollutant Discharge (Pyeongtaek & Incheon Terminal)



Sewage Discharge

Of KOGAS' three LNG receiving terminals, the Pyeongtaek and Incheon Terminals treat sewage water on-site before discharging it into the sea. The sewage water from the Tongyeong Terminal and valve stations of the Trunk Line Operation Department are sent to city wastewater treatment facilities. We control the pollutant concentration of all our effluents within the legal requirement of 20 ppm.

Industrial Water Discharge

The Incheon Terminal operates its own oil mixed water and general water treatment facilities in order to treat the wastewater from its cogeneration facilities and laboratories. Other business premises recycle most of their used water on-site after eliminating water pollutants. Seawater used in the LNG vaporizer is discharged without any harmful effects. In 2010, the level of BOD, COD and SS waste water emitted from Pyeongtaek and Incheon Terminal was significantly lower than the previous year.

Hazardous Chemical Substance Control

Main chemicals used in the KOGAS fields include NaOH and HCl, and soaring sales caused by cold waves and reduced ocean temperatures during the winter time in 2010 led to increased use of combustion SMV. As the use of NaOH aimed to adjust pH within an SMV water tank is increased, general use rose to the level indicated in 2008, but favorable results have been generated in terms of basic units compared to 2008.

Wastes

Most of KOGAS' waste originates from construction sites. In particular, as the construction of the 4th LNG Base in Samcheok kicked into high gear in 2010, construction wastes were increased in the wake of ongoing installation and expansion of other bases, enlargement of supply network in not-yet-in service areas and increased construction. Other general wastes increased by a small margin compared to 2009, and designated wastes were reduced. KOGAS applies higher standards than the legal requirements to all its waste management. We farm out the treatment of waste to external expert agencies, which are selected after careful verification, on their actual treatment capacity and methods. We also conduct regular audits on their legal compliances.

Waste Discharge & Unit Load

Category	2008	2009	2010
Natural Gas Sales Volume (1,000 tons)	26,345	24,644	31,202
Wastes (tons)			
General	1,344	585	610
Specified	214	231	164
Construction	7,077	223,295	694,944
Total	8,635	224,111	695,718
Unit Load (tons/LNG 1,000 tons)	0.32	9.09	22.29

NOx Emissions & Unit Load

The increase in the sales volume of natural gas in 2010 and the enlarged operating hours of SMVs at Incheon LNG Terminal during winter resulted in a significant increase in NOx emissions from 2009.

Category	2008	2009	2010
Unit load (kg/1,000 tons)	14.1	9.55	12.18
Usage (kg)	371,820	235,282	380,129

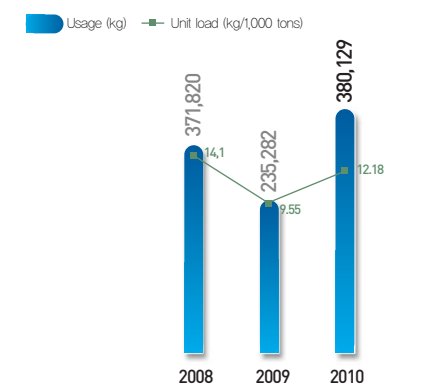
Maintaining the EDF Certificates

KOGAS' Pyeongtaek Terminal acquired the environmental declaration of products (EDP) certificate from the Korea Eco-products Institution (KEI) in 2004, a first for the Korean energy industry. In 2008, our Incheon and Tongyeong Terminals were added to the list. These terminals renew these certificates every three years.

***Environmental Declaration of Products (EDP):** Based on a Life Cycle Assessment (LCA), a declaration is made on a product for its measured environmental performance.

Pollutant Discharge Control

Hazardous Chemical Substance Usage & Unit Load



Environmentally-friendly
KOGAS

Strategic Green Growth

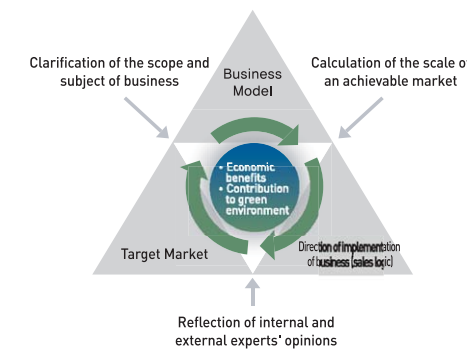
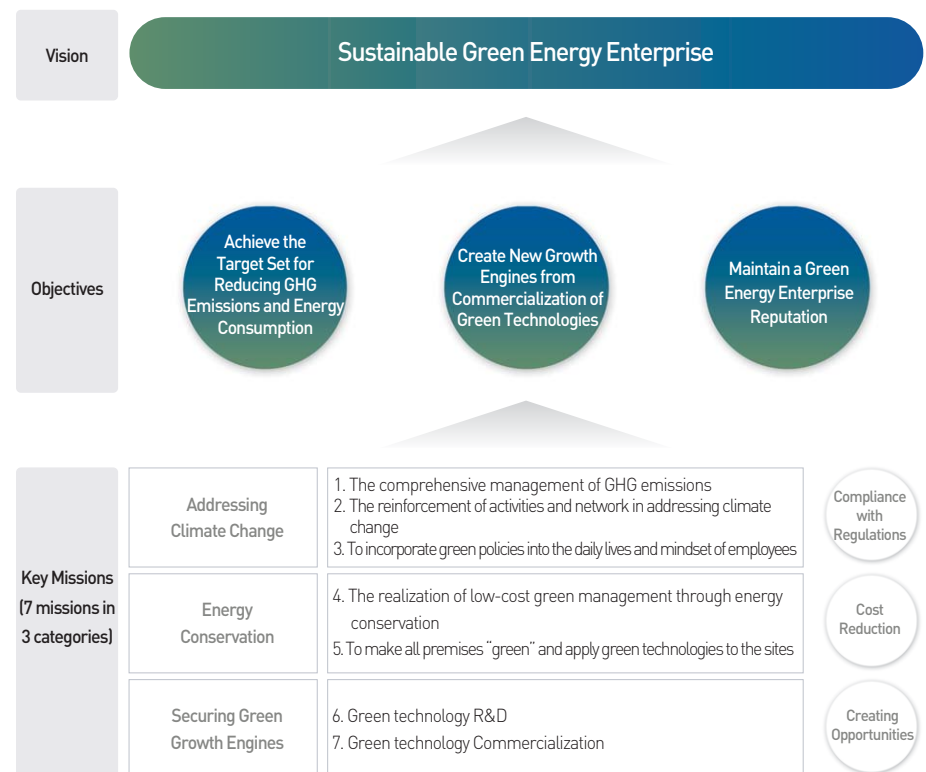
As Korea's leading environmental-friendly energy enterprise, KOGAS has developed its green management strategies in line with the nation's carbon-lean green growth initiatives. Through the implementation of these green management strategies, KOGAS has proactively engaged in GHG reduction initiatives and established itself as a sustainable green energy enterprise by securing green growth engines.

Green growth Organization

KOGAS has made continuous efforts to respond to climate change and installed a 'Green Growth Team' in the Management Strategy Department in order to proactively push for green growth. The existing Climate Change & Environment Team that focused on responding to climate change was reorganized into the 'Green Growth Team' now concentrated on environmentally friendly growth, and the company is doing its utmost to acquire new growth engines through green growth on the back of low carbon management and green house gas reductions.

Green Management Mid-term Strategies

Under the vision of becoming a "sustainable green energy enterprise" KOGAS is pushing forward green management mid-term strategies (2010-2014), including seven missions and 52 action plans in three categories: "addressing climate change," "energy conservation" and "securing green growth engines". From the comprehensive information management system controlling GHG emissions to renewable energy technology R&D and commercialization, these 52 action plans will utilize the PDCA process to implement a five-year plan. Performances will be closely monitored at the Green Growth Commission meeting held biannually. At the same time, an annual review of plans will keep us updated on policies and strategies regarding the rapidly changing business environment.



In addition, the company conducted a project to explore a green growth business model with the aim to achieve low carbon green growth. KOGAS defined 3 strategic directions including green gas, clean fossil fuel and new and renewable energy efficiency based on natural gas, a popular fuel emitting the smallest amount of green house gases. This was done while conducting analysis on 15 business candidates to explore five business areas for strategic appropriateness and strong market appeal. The company concentrated on analyzing five business areas such as production and sale of biogas, overseas gas sales, sale of car fuel gas (NGV), efficient gas field process management and investment in new and

renewable energies to push for overseas gas sales and biogas business on the preferential basis. This growth industry is expected to contribute to reducing green house gases and improving the rate of energy independence. Through this, the company will establish the KOGAS Green Growth Master Plan in 2011 to systematically push for green growth policy from a strategic viewpoint.

Exploration of the Green Growth Business Model

Carbon Disclosure Project (CDP)

KOGAS participates in a carbon disclosure project (CDP) involving about 3,000 global companies, including 534 leading global financial institutions such as Goldman Sachs, Morgan Stanley, AIG including the companies on the FT500 Index after 2008. The company worked hard to provide more accurate and credible climate change information, which was then utilized to evaluate investment risks and opportunities by numerous global financing and investment organizations.

Carbon Point Program for Individual Workers

Reducing GHG emissions begins with changes in individual habits. Providing its employees with opportunities to better understand the company's GHG reduction efforts, KOGAS is dedicated to establishing a habit of reducing GHG emissions in the day-to-day lives of its workforce both at work and in society. Encouraged by the successful results of the pilot program, KOGAS expanded the program to a company-wide level, providing its employees with opportunities to contribute to a carbon-lean society.



At the same time, a dedicated web-based program for carbon mileage points was constructed on the corporate Web site, where employees can keep records of their energy consumption patterns. In 2009, the participants numbered 776, but the number drastically increased to 1,767 in 2010 to facilitate these activities.

Improving the Green Mindset

- CDP Award



GHG & Energy Management

Calculation and verification of GHG emissions

In order to effectively reduce green house gases, it is necessary to determine the current state of green house gas emissions according to objective and accurate standards above all else. KOGAS has established an enterprise-wide green house gas inventory from 2007 to 2010 based on the 'KOGAS Inventory Guidelines' that fully comply with international standards. Furthermore, the company once again calculated green house gas emissions in accordance with the Guidelines for GHG & Energy Management as the government notified laws on the target management system with regard to GHG and energy. In order to improve the efficiency of GHG inventory management and the level of credibility of calculations of GHG emissions, the company has designated and operated one or more Green Manager in 14 business sites nationwide. As a result, it was able to calculate GHG emissions for the four years from 2007 to 2010 and enhanced its credibility by completing third party verification through the use of a specialized institution designated by the Ministry of Environment. The company plans to set and achieve reasonable GHG and energy reduction targets based on these calculated emissions in consultation with the government before making every effort to attain the goals.

- GHG Emissions & Unit Loads

Category		2008	2009	2010
Natural gas sales volume (1,000 tons)		26,345	24,644	31,202
Emissions (CO ₂)	Gas fuel combustion	232,229	143,135	230,934
	Liquid fuel combustion	18	18	35
	Mobile combustion (roads)	1,263	1,252	1,194
	Subtotal	233,510	144,406	232,164
	Scope2 External electricity	257,928	245,889	292,730
Total	491,438	390,295	524,894	
Unit Load (tCO ₂ eq/ 1,000 tons)		18.7	15.8	16.8

*In June 2011 third-party verification emissions completed
*Modifications generated in the process of calculating national GHG emission are reflected to partially revise previous reports.

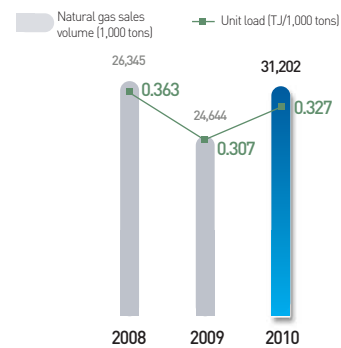
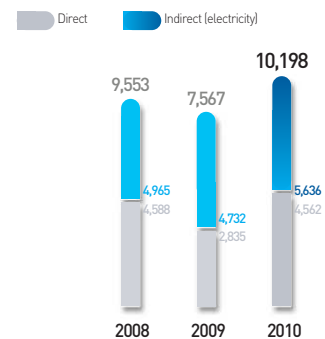
Improvement of energy efficiency

KOGAS continuously endeavors to save energy in order to proactively respond to changing management environments including the governmental low carbon green growth policy and the global response to climate change. As the quantity of energy input into production is directly related to green house gas emissions, the company is proactively pursuing to conduct energy saving activities to efficiently use energy.

The Enterprise-Wide Energy Saving Committee consisting of executives sets enterprise-wide energy saving targets at the beginning of the year with goals for each of the 14 business sites. Then, the Green Growth Team dedicated to managing energy regularly analyzes and assesses energy use before reporting on it. The company conducts assessment on enterprise-wide achievement of energy saving targets and efforts to save energy and rewards excellent business sites to further encourage further energy savings.

In terms of energy efficiency, the sales of natural gas rose 27% from the previous year, but the basic unit experienced a minor decrease of 6.5% from last year. Considering the industrial characteristics of natural gas where the basic unit soars up to 250% in the winter time, energy efficiency has been improved on the back of optimized facility operation and an enhanced TDR (Turn Down Ratio) during both summer and winter.

- Annual Energy Consumption & Unit Loads



*The amount of energy used has been indicated in TJ units in accordance with GHG energy management targets.

KOGAS also introduced the Energy Management System (EnMS) to its Incheon Base on a trial basis for the first time in the domestic gas industry and plans to expand it enterprise-wide based on ISO 50001.

The company will establish an IT system for integrated green house gas and energy management in order to achieve energy savings and reduce green house gases in a more organized and systemized way.

KOGAS is making efforts to establish a system to respond to the national green house gas and energy targets management conducted by the government since 2011 and plans to set reasonable green house gas and energy targets in consultation with the government so that policy can be fully implemented.

Green Work Place

KOGAS has introduced new and renewable energy to its business places in an effort to achieve green working conditions, starting with the introduction of photovoltaic power generators and a solar heat-based hot water system in the Cheonan and Gunsan Management Offices in 2009. The company has also installed and operated photovoltaic power generation facilities and a solar heat-based hot water system in the regional head offices in Chungcheong, Honam and Gyeongnam in 2010. In addition, the company selected the Cheongju Management Office as a trial operation management office for the purpose of producing electricity by using waste pressure of gas. As for the new HQ building into which the company plans transfer in 2014, KOGAS will introduce photovoltaic and geothermal heat-based power generation comprising 10% of its energy use.

- Photovoltaic power generation facility



- Recompression facility



Reducing Greenhouse Gas Emissions by Recovering Vent Gas

KOGAS has adapted recompression equipment since 2003 in order to recycle vent gas produced by repairing and/or relocating pipelines. In 2010, KOGAS recycled a total of 837 tons of natural gas, in turn reducing the equivalent of 17,577 tCO₂ in GHG emissions. The company will purchase one more unit of recompression equipment in 2011 for more effective use in the field.

Reduction of GHG through Efficient Facilities in the Field

Proactive efforts have been made to reduce GHG with efficient facilities in the field of production and supply. The Incheon Production Terminal replaced existing water-pipe boilers with high-efficiency steam boilers, and the Banghwa and Gimhae Management Offices have installed and operated a gas heater waste heat recovery system. The company also replaced all of its incandescent lamps numbering 2323 and will change 30% of its enterprise-wide light fixtures into LED by 2012.

Voluntary GHG Reduction

- LED Lamp



Social Performances

Gas fee discounts for welfare facilities in 2010



41 billion Won (15,284 places)

2009 **39** billion won (13,266 places)
2008 **29** billion won (11,000 places)

Disclosure Management Approach

KOGAS' business decisions are made in consideration of public interest and profitability that improve cost benefits. This is the purpose of our foundation which aims to contribute to improving public welfare through the stable supply of natural gas. So KOGAS is continuously conducting various social contribution activities to protect the environment and develop the local community in a fashion befitting its role as a clean fuel supplier.



Our Approach

Staying faithful to our business principles of contributing to public welfare through the stable supply of natural gas, all business decisions at KOGAS are made in consideration of their social benefits and profits. In line with its basic principles, KOGAS is involved in numerous environmental activities and community programs in the vicinities of its business premises. Internally, the company strives to ensure safe and pleasant working conditions for all its employees as well as create systematic programs that cultivate a worker's talents. The recruitment system and human resource development (HRD) programs render all candidates with equal opportunity, while the company also takes full responsibility for everything it does by proactively cooperating with the labor union in various community programs. Above all, KOGAS overarching business principle is one of respecting human rights in all circumstances.

Our Performance in 2010

In 2010, KOGAS endeavored to improve its management efficiency through layoffs and improve its welfare program in response to government-driven management efficiency initiatives. While assisting its employees to strengthen competencies so as to enhance labor productivity, the company also worked to deal with issues arising from a smaller workforce. At the same time, we continue to encourage our employees to proactively participate in voluntary services. KOGAS also supports its business partners by helping SMEs with management issues. In addition, the company fully abides by international standards regarding human rights and labor law protection. In 2010, the company did not have any cases involving the infringement of human rights or other social issues.

Key Indicators

Category	Items	Major Performances		
		2008	2009	2010
Workforce	Total Employees	2,813persons	2,796persons	2,862persons
	Female Workers Ratio	7.7%(216persons)	7.7%(215persons)	8.1%(231persons)
	No. of Nonregular Staffs	100persons	72persons	72persons
Labor Relations	Labor Union Members	2,454persons	2,424persons	2,525persons
	Treasury Stock Holding Ratio	6.05%	6.05%	6.05%
Social Contribution	Social Philanthropy Expenses	35 billion KRW	37 billion KRW	38 billion KRW
	No. of Accumulated Volunteers	4,670persons	4,788persons	3,270persons
	Gas rate Discount for Charities	29billion KRW(11,000places)	39billion KRW(13,266places)	41billion KRW(15,284places)
SME Product Purchase	Total Procurement	8,184billion KRW	23,317billion KRW	16,140billion KRW
	SME Product Purchase	1,554billion KRW	5,656billion KRW	3,280billion KRW
	Percentage	19%	24%	20%
Safety Management	No. of Industrial Accidents	3case	1case	0case
Talent Cultivation	Training Investments	7,313 million KRW	6,528 million KRW	7,943 million KRW
	Per Capita Training Expenses	2,600thousand KRW	2,335thousand KRW	2,772thousand KRW

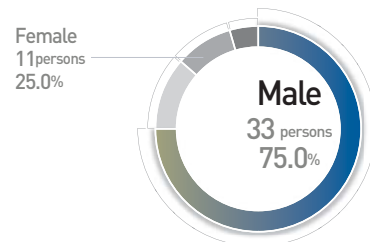
Fair and Efficient Human Resources Management

In an effort to proactively respond to expanded overseas business, KOGAS is employing core personnel appropriate for global competition and has established and operated a fair and efficient human resources system where employees are promoted according to competence and performance. The company also makes efforts to fulfill its social responsibility by providing more opportunities to the underprivileged for the purpose of realizing a fair society while endeavoring to comply with international standards in addition to laws and regulations by implementing fair human resources management.

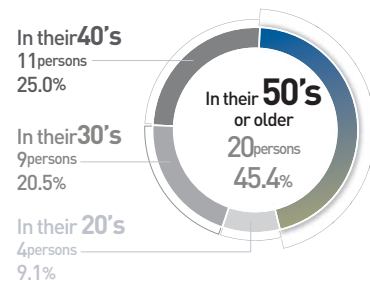
KOGAS Human Resources Management

- The current state of retirees

Gender distribution



Age distribution



- Current state of maternity leave

Age	Male	Female
Number of people (persons)	1	22
Rate (%)	4.3	95.7
12 months after maternity leave Current state of employment at conclusion	1	21

* Gender distribution & the current state of employment (As of Jan. 1, 2009 - Dec. 13, 2010)

Employment Status

As of the end of 2010, 2,862 dedicated staff worked for KOGAS, excluding temporary workers. The company continuously maintains the rate of handicapped and patriots & veterans on the back of employment equity and added points to those subject to patriots & veterans benefits. Under Affirmative Action, the disabled company employees and National Meritorious Persons, and has also reduced its number of non-regular workers in a bid to eliminate discrimination on its premises.

- Employment Status

Category	As of the end of 2008	As of the end of 2009	As of the end of 2010
Workforce (persons)	2,813	2,796	2,862
Female			
No. of Persons	216	215	231
Ratio(%)	7.7	7.7	8.1
Physically Challenged			
No. of Persons	64	63	65
Ratio(%)	2.3	2.3	2.3
National Meritorious Persons			
No. of Persons	247	246	252
Ratio(%)	8.8	8.8	8.8

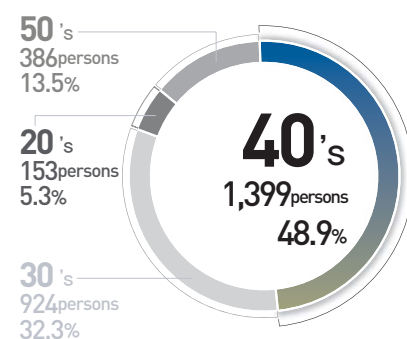
- Temporary Employment Status

Category	2008	2009	2010
No. of Persons	100persons	72persons	72persons
Male	61.0%	54.2%	69.4%
Female	39.0%	45.8%	30.6%

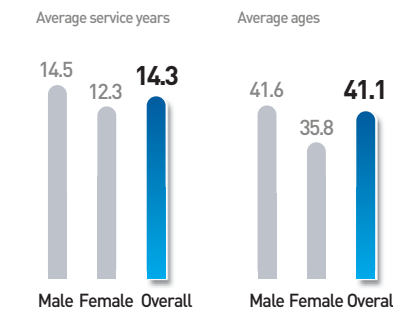
Average Service Years & Age

As of the end of 2010, the average service years for KOGAS employees are 14.3 years, and at an average age of 41.1. The average service years are maintained at a favorable level, and the company recruited over 200 new employees through two public recruitments in 2010 in an effort to reform the organization.

- Age distribution



- Average Service Years & Age



Employment system

KOGAS has improved its corporate image by establishing an employment brand and conducting proactive promotion. The company in principle recruits personnel through open competition regardless of age and academic background so that it can acquire talented people without discrimination. KOGAS has introduced diversified selection techniques by stage in order to acquire the Right People befitting our vision and core values while enhancing fairness and transparency of employment.

- KOGAS employment brand leaflet



Employment brand slogan

Blue Space for your Work & Life

- *Blue : Clean Energy Company
- *Space : Space for global activities
- *Work & Life : Balance between work and life

- KOGAS Employment Process

Screening	Main contents
Documentary Screening	<ul style="list-style-type: none"> No discrimination against age and academic background Increasing the number of candidates passing documentary screening Offering weighted scores for qualifications or a third language skill or Korean History Capacity Result other than English
Written Test	<ul style="list-style-type: none"> Test of one's specialty Job competency test Personality test
Interview	<ul style="list-style-type: none"> Presentation skill and English speaking skill (working-level interviewers) Competence and personality (executive interviewers) Training interviewers and inviting an external expert

Employment equity

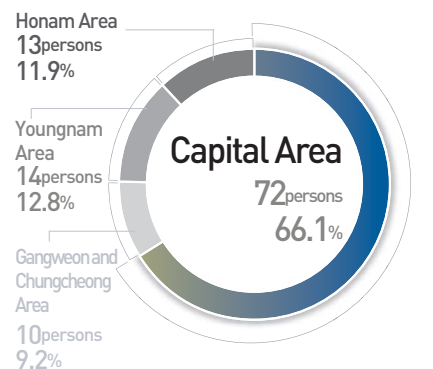
The company recruits a certain number of handicapped people, patriots and veterans, low income people and talented people living in regions and grants points to the handicapped and patriots & veterans during open recruitment in an effort to expand employment of the underprivileged. The company has proactively participated in government policy to resolve the problem of unemployment among young people and introduced an intern system to employ 95 interns. It plans to continue to push for the intern system.

Gender Equality

KOGAS eliminates gender discrimination in its employment policies and working conditions. In a bid to recruit and retain competent female workers, the company offers advanced female-friendly employment policies, such as maternity leave, day care centers at work, lady's lounges and sexual harassment prevention campaigns.

Employment of core personnel and employment equity

- The current state of employment of talented people living in regional areas



Evaluation System

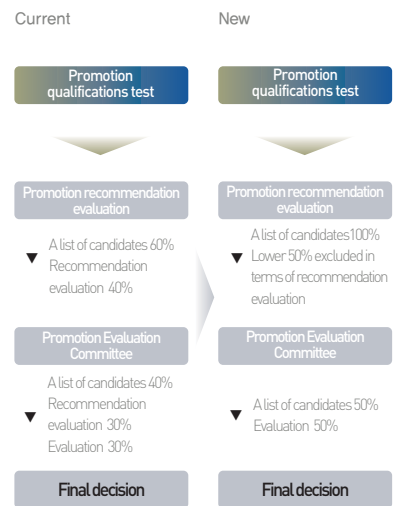
The company conducts evaluation on personal competence and work performance in a fair manner, and evaluation results are used in data for standards of promotion, transfer, education, training and compensation. The performance evaluation of teams and divisions invigorates constructive competition within the company, and ultimately contributes to the attainment of our organizational goals.

- Individual Evaluation Scheme

Category	Competence Evaluation	Performance Evaluation	Multi-rater Evaluation	Recommendation for Promotion Evaluation
Target	All employees lower than 1st grade	All employees lower than 1st grade	Employees in 1st and 2nd grades	Employees in 3rd and 4th grades
Evaluator	Supervisor	Supervisor	Supervisor, peer and subordinate	Supervisor, peer and subordinate
Reference	Promotion, qualification for education program	Differentiated incentives	Promotion, appointment	Promotion

Fair Evaluation & Promotion

Improvement to the Promotion Process of Grade-3 Deputy Managers



Promotions

KOGAS practices a competence and performance-based promotion system. A performance evaluation, service year and a multi-rater promotion screening system are used to determine employees' eligibility for promotion. The candidates then undergo a review by a promotion review board before the executives or the President makes a final decision. All process are conducted in a transparent and fair manner. As unfavorable or favorable evaluations might occur in accordance with business characteristics, changes were made to organizational scale and personnel composition in bureaus, departments and business places when promoting grade-2-and-3 employees in 2010. This was done to exclude lower score earners (lower than 50% in evaluation) instead of applying a fixed rate promotion system in order to improve fairness. When promoting grade-3 employees (deputy managers) who are considered core personnel of KOGAS, the company pays attention to encouraging employees by preventing promoted personnel from being concentrated at HQ or certain business places through the designation of a minimum rate of promotion by HQ and business place while improving organization competitiveness and productivity.

Career development for employees and facilitation of in-house contests

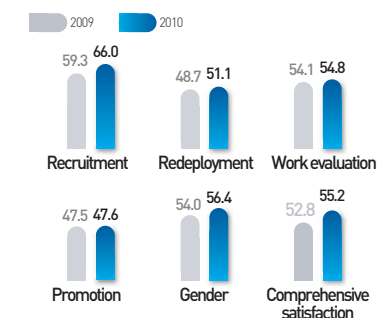
KOGAS operates its own career development system to provide career development support to employees according to corporate and personal career development systems while placing personnel with the right talent in the right position. In addition, the company selects personnel to fulfill important obligations through in-house contests in an effort to create a healthy competitive environment within the organization and improve fairness and transparency in the selection process. In particular, the company has introduced in-house contests among Team Leaders or higher with the aim to reform personnel management while enhancing job satisfaction and responsibility by granting appropriate positions to the right people. The increasing number of overseas projects has also given rise to more opportunities for work abroad. The company publicly recruits candidates for overseas dispatches, recruiting talented workers and assigning employees to their dream positions, which, in turn, improves rationality and transparency in our human resources management practices.

Improvement of Job satisfaction (for 3 years in a row)

The current state of personnel satisfaction for 3 years

Category	2008	2009	2010
Score (points)	48.6	52.8	55.2
Degree of improvement	-	8%	4.5%

2010 personnel satisfaction details (Unit: Persons)



Job Satisfaction Survey

KOGAS conducts surveys of its employee satisfaction levels as part of its human resources management practices. For objectiveness and transparency in its procedures and results, the company outsources the survey to an external agency. Based on the objective diagnosis of its human resources management system and operation, the company prepares improvements and future directions. In addition, the company conducts follow-up surveys on employee satisfaction in regards to recruitment, evaluation, rewards, dispatches and promotion for a more effective and specific analysis of its system. In 2010, employee HRM satisfaction improved by 4.5% on the previous year, a clear indication of improved rationality and employee satisfaction.

Improvement and operation of personnel management system through communication



HRM employees run tour sessions of all our business premises in order to explain current HRM policies and issues and listen to employees' suggestions, thus enhancing the employees' acceptance of the HRM systems and its rationality. In case of a revision to the system, the company holds workshops to reflect employees' opinions. It also operates diversified channels for its employees to voice their grievances and complaints, such as e-mail, telephone, visits and an intranet system. Those voices are incorporated in the assigning process.

Human Resources Development

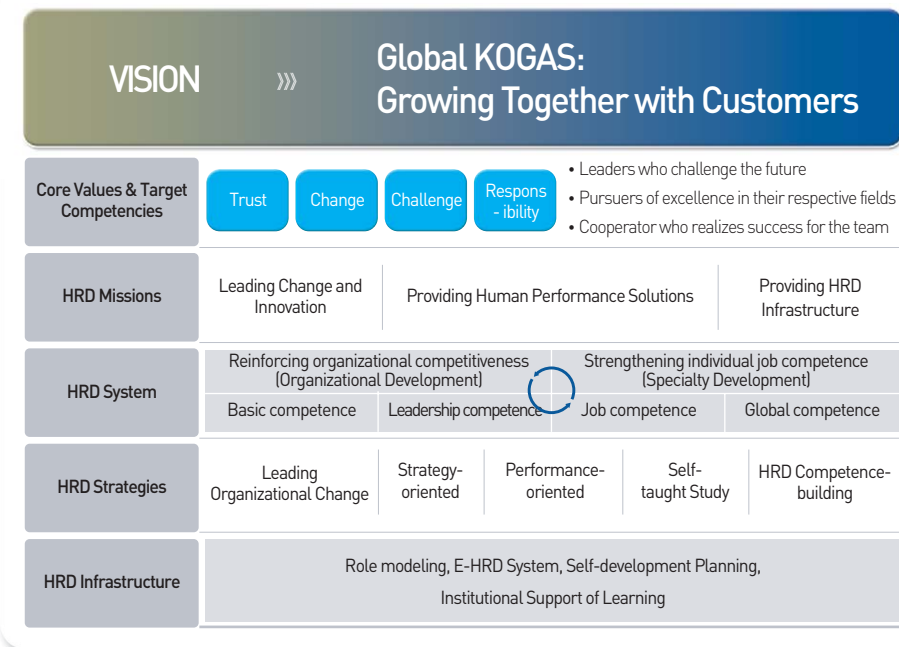
In order to attain its vision of "Global KOGAS: Growing Together with Customers," KOGAS developed numerous strategic tasks in order to retain a globally competent workforce with core technologies. In particular, KOGAS has established a human resources development system based on competence and strategically nurtures excellent personnel through the use of a systematic development road map while pushing for an autonomous learning culture through self-initiated study and facilitated study groups. At the same time, it operates a number of community programs in order to pursue co-prosperity with our local communities.

KOGAS Education Philosophy & Target Competencies

The HRD program of KOGAS has set its target at strengthening individual job competences and the four major competences of its employees, including basic competence, leadership competence, job competence and global competence. While inducing changes in individuals that will lead innovation in the organization, the company also encourages self-directed learning and OJT (on-the-job training) in a bid to help them increase their competences for overseas projects and new businesses. For the comprehensive and systematic management of these goals and programs, KOGAS has constructed an HRD infrastructure, including the e-HRD system, which serves as an effective tool in incorporating the four core values into the corporate culture and fostering future leaders.

Fostering Future Leaders

HRD Strategic Scheme



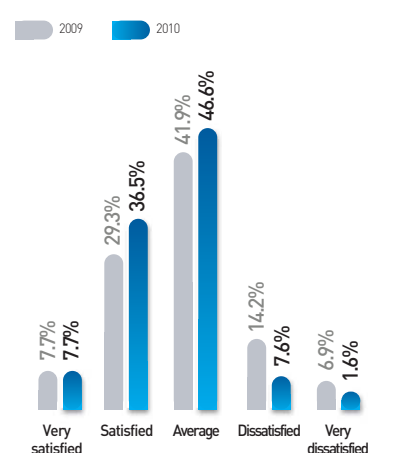
Training Investments

KOGAS makes consistent investments in education programs in order to foster a talented workforce, while also customizing training programs to individual and organizational demands and needs.

Total & Per Capita Training Expenses

Category	2008	2009	2010
Total training expenses (KRW million)	7,313	6,528	7,943
No. of employees (current, persons)	2,813	2,796	2,862
Per capita training expenses (KRW 1,000)	2,600	2,335	2,772
Annual average training hours	93	104	101

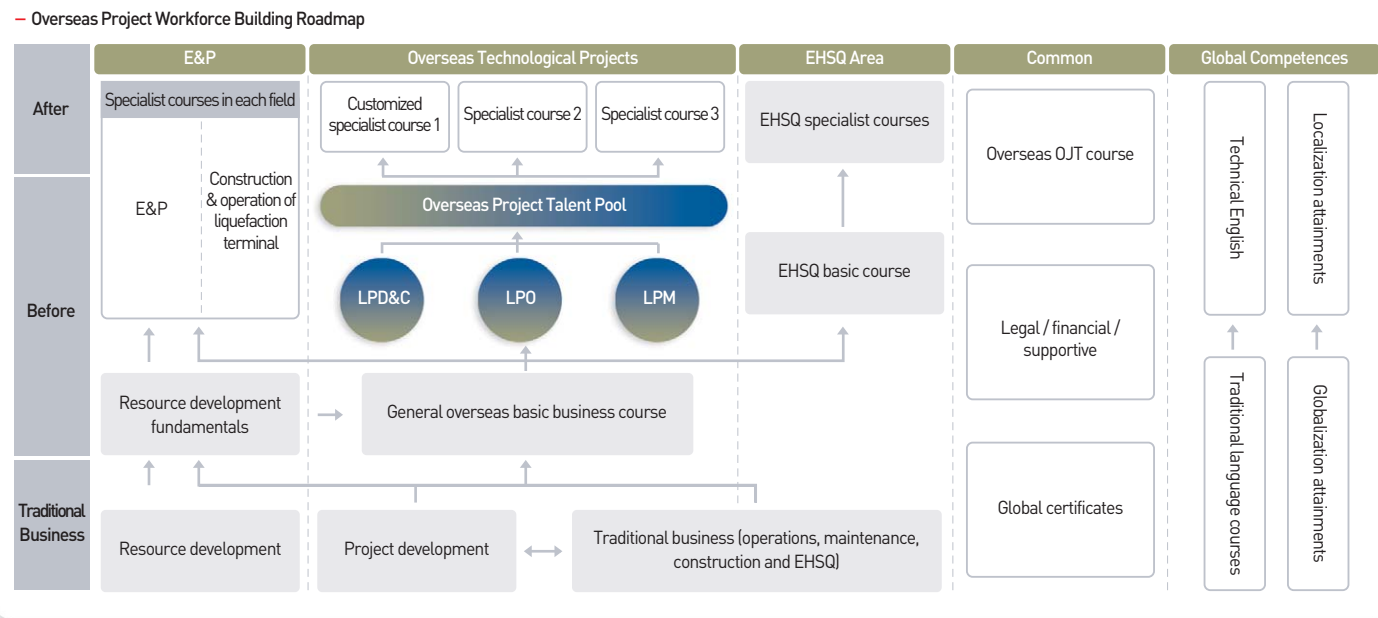
Education service satisfaction



Development of Specialized Global Talent

Development of core experts to achieve our vision and strategy

KOGAS is advancing into various overseas business areas and new businesses in the entire value chain of the natural gas industry in order to contribute to furthering national energy security. This also induces proliferation and development and helps overcome limitations in growth that are facing the domestic industry. In this regard, the company desperately needs to develop experts for the purpose of making inroads into new business areas. In order to resolve the problem, KOGAS has established an Overseas Project Workforce Building Roadmap to provide various types of ongoing education and training including long-term OJT at home and abroad, degree programs, language education, field education, short-term specialized education and OJT etc.



Domestic and foreign long-term education system

KOGAS is making every effort to nurture excellent core members who can lead global energy projects. In particular, the company offers degree programs and OJT at home and abroad in order to develop a pool of experts equipped with specialized competence by strategic area and managerial capability. In 2010, the company newly selected 17 persons, up 20% from a year ago, in an effort to develop experts in the entire value chain embracing the upstream, middle stream and downstream of the natural gas industry in terms of E&P, O&M, EPC and financing.

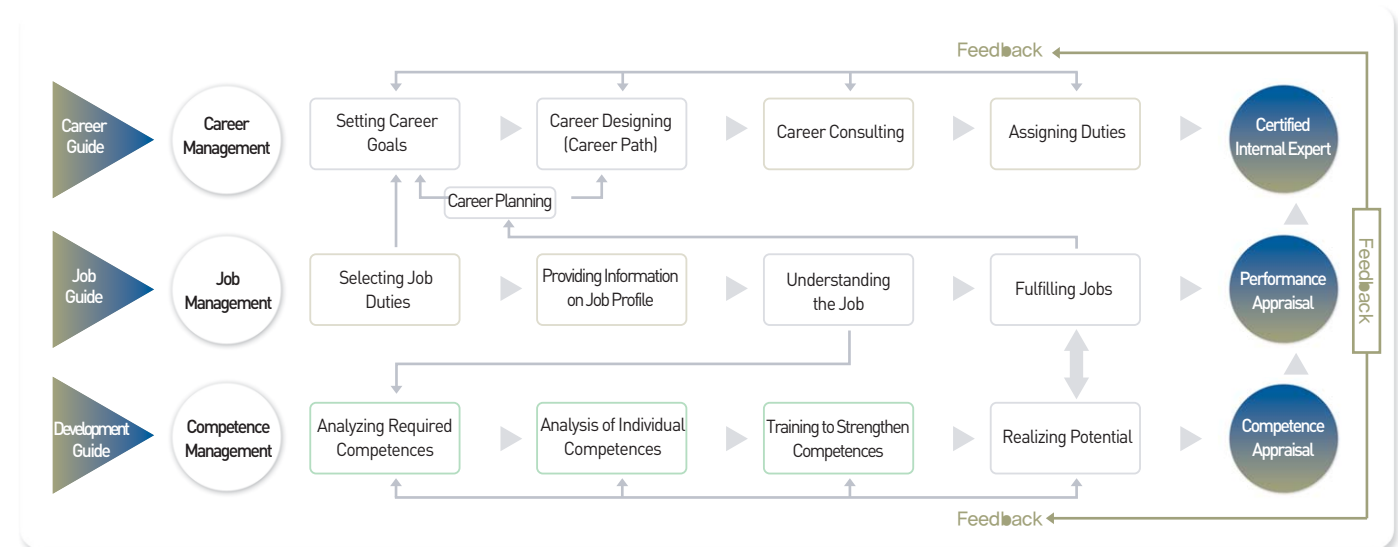
— The current state of long-term education at home and abroad by year (Unit: persons)

Category	2008	2009	2010
Domestic	3	7	7
Overseas	11	7	10
Total	14	14	17

※Main education areas in 2010: E&P, O&M, EPC, MBA, financing, resource economy and overseas OJT

Comprehensive HRD System

The most important competence for members is to acquire knowledge required to fulfill obligations and achieve development based on accumulated experiences. It is effectively realized through the use of a career development program (CDP) operated by KOGAS. The career development program (CDP) aims to systematically manage a series of processes of designing and implementing a competence development plan by designating career targets and paths and diagnosing present competence and needed competence. The CDP progress is monitored at each step and feedback provided to employees in order to strengthen their competencies and increase job fulfillment. Through the objective review of their achievements, the company then positions qualified employees in the most suitable areas.



Self-directed Life Learning

Through a multi-dimensional analysis of individual and organizational demands, KOGAS is able to create optimal conditions for self-directed learning, setting the stage for co-prosperous growth. Individuals establish a career development plan targeting desired performances in the future, and the company suggests the level of required competence by individual through a corporate stratum and performance analysis while providing optimized and customized education that systematically offers procedures and methods so that the needed education and self-initiated learning can be implemented.

Knowledge Management

KOGAS' knowledge management consists of action learning where learning, sharing and improvement are pursued at the same time. To this end, a CoP (Community of Practice) system, an autonomous learning organization, has been facilitated, and knowledge owned by individuals is registered with KOSMOS, an enterprise-wide managerial management system, so that experts by area can share the knowledge when conducting evaluation and management.

Since 2009, the company has conducted integrated management of CoP where subdivision was executed into knowledge, suggestions and performances in an effort to encourage smooth operation of the CoP, and as of 2010, 367 CoP were registered, and activities conducted, and this is up 23% from the previous year. As for the current state of registration of knowledge, a total of 3,124 cases have been registered and shared, which is up 16% from a year ago.

Future-oriented labor and management relationship

CoP activities by year

Category	2008	2009	2010
CoP activities (cases)	Knowledge	84	
	Suggestion	109	298
	Performances	92	
Subtotal	285	298	367
The current state of registration of knowledge (cases)	5,894	2,687	3,124

※Since 2009, it has been operated by area including knowledge, suggestion and performances, but integrated management is being conducted at the moment.

Implementation of a program where business, families and local communities experience growth together

Implementation of a mutual growth program for the company and families

KOGAS values a work-life balance for the mutual growth of the company and its employees' families. Under the belief that a healthy family constitutes a prosperous company, KOGAS operates family programs in an attempt to improve the quality of life of its employees and their families, including weekend family camps, teenager vision camps and Summer English language camps. The company pursues to conduct co-prosperity management where labor and management achieve prosperity together and realize an ideal business as a family business like-company.

Implementation of a local community-friendly program to contribute to mutual growth within the local community

Since September 2006, KOGAS has invited speakers every month in an effort to fulfill its social responsibility and contribute to improving the quality of life of local residents and also for the KOGAS Academy's activities based on various themes including health management, children's learning, financial technology and self-development. This has led KOGAS to contribute to advancing local communities and emerge as a trusted company.

KOGAS acquired the Best-HRD certification and the Korea Management Award (HRD sector)

KOGAS has continuously conducted human-resources-oriented management with a clear vision and a firm conviction, and as a result, acquired the Best-HRD certification granted to an excellent re-development and HRD company by experts based on governmental evaluation in 2009, and it also received the 2010 Korea Management Award (HRD sector) organized by KMAC.



KOGAS complies with the "ILO Convention 87 Freedom of Association and Protection of the Right to Organize Convention", the "ILO Convention 98 Right to Organize and Collective Bargaining Convention" and the "ILO Convention 182 Worst Form of Child Labor" to respect employees' rights. Founded in November 1985, the KOGAS labor union was incorporated as a branch of the Korean Public Services Union in November 2006 under the reorganization of labor union associations. The union operates under the union shop system, in which all employees under grade 3 are automatically entitled to membership. As of the end of 2010, 2,525 people, or 88.2% of the company's regular staff, were members of the union.

Number of Union Members Trend over the Past Three Years

Category	As of the of 2008	As of the of 2009	As of the of 2010	Remarks
Workforce (persons)	2,813persons	2,796persons	2,862persons	Current standards
Union members (persons)	2,454persons	2,424persons	2,525persons	
Percentage	87.2%	86.7%	88.2%	

The Labor and Management Council consists of not more than 10 members, and the same number of members, respectively, from the labor and the management participate in the council where a meeting is held quarterly to prevent conflicts and disputes in advance and create a cooperative environment for labor and management. KOGAS has made efforts to share important projects or pending issues through the Labor and Management Council or through managerial briefing sessions so that employees' complaints can be resolved. In addition, the company is obligated to immediately notify important changes in projects in writing through collective agreement. As a result, 2010 KOGAS employee satisfaction was improved by 3 points on average from a year ago with regard to the Index of Communication between the Management and Employees and the Labor and Management Communication Index.

Index of Communication between Management and Employees



*T.I: Trust Index (on a scale of 5)

Communication & Debate Culture Index



Labor and Management Communication Index



In an effort to raise awareness about safety and health on the part of labor and management in accordance with the Occupation Safety and Health Act, KOGAS holds Occupational Safety and Health Committee Meetings composed of the same number of members from labor and management, (5 persons from the labor and 5 persons from the management) to discuss pending issues including activities to improve safety and health and to prevent industrial disasters biannually.

Labor and management are making various efforts to protect laborers' rights and improve their social and economic status through the use of various communication channels, and this is represented by improved labor productivity and mutual social contribution activities on the part of both labor and management. In particular, the company is endeavoring to fulfill its social responsibility as a public corporation on the strength of Labor and Management Cooperation Day held quarterly and other social contribution activities.

Creation of a new labor and management culture through the voluntary fulfillment of social responsibility on the part of labor and management

HO • Donation to energy-poor people and the underprivileged at year end (a total of 90 million won)	Seoul • Labor and management volunteer activities for rural communities with sisterhood relationships
Gyeongin • Labor and management joint Gimjang Love Share Project	Gangweon • Labor and management One Day, One Coin Campaign
Incheon • Labor and management support for the Yeonsu-gu Cultural Court Festival	Pyeongtaek • Labor and management delivery of Love 'Lunchbox', 'Rice' & 'Briquettes'
Chungcheong • Labor and management social contribution activities on Father's Day	Seohae • Labor and management Onnuri Project (Repair Project for Low Income Families)
Honam • Labor and management environmental protection activities & volunteer activities for the underprivileged	Tongyoung • Labor and management Korean culture experience programs for multicultural families
Gyeongbuk • Labor and management support for migrant workers in Gyeongbuk	Gyeongnam • Labor and management cultivation of vegetable gardens for Koreans residing in Sakhalin

Labor Union

Collective Agreement Signing Ceremony



Facilitation of communication on the back of the Labor and Management Council

Labor and Management Communication Index



Occupational Safety and Health Committee

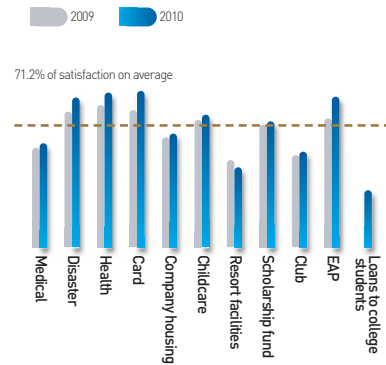
Cooperative labor and management culture

Honam District Division Social Contribution Award



Efforts to enhance employee welfare

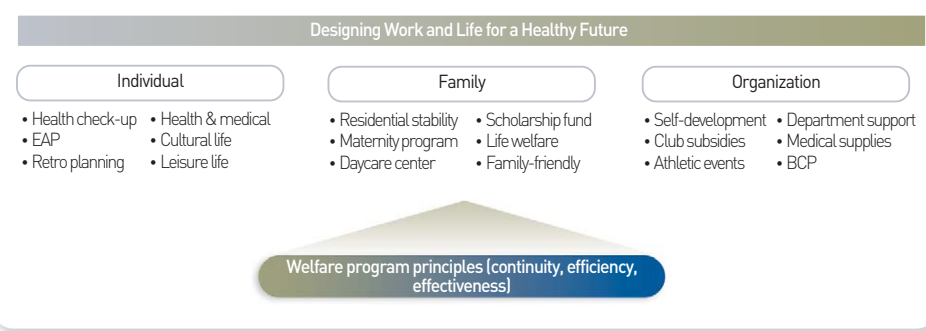
2010 welfare benefits satisfaction survey



KOGAS adopted an optional welfare program in 1998 that caters to the individual needs of employees, and thereby enhancing their satisfaction and productivity. The welfare card, introduced in 2007, further enhanced efficiency and transparency of the welfare programs.

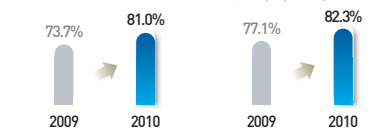
As of 2011, new KOGAS employees' minimum wage (1,572,700 won) is 174% of the national monthly minimum wage (902,880 won). Amid difficult economic conditions, the government has recently decided to control excessive spending on labor costs and employee benefits in an effort to share hardships in the public sector while improving the welfare benefits system to counter an aging society, reflect various employee demands and increase satisfaction based on a more efficient non-monetary welfare benefits system that can better respond to the managerial environment and governmental policy.

KOGAS Welfare Program



Improvement of welfare benefits in response to an aging society

Enhancement of employee satisfaction through expanded non-monetary welfare benefits



In an annual health examination conducted on employees for the purpose of health management of employees in an aging society, KOGAS has employees aged 40 or older designate examination types including detailed items to help improve health. In addition, the company operates the EAP (Employee Assistance Program) System to realize advanced health management by providing effective stress management support and preventing risk factors. Through this, the company helps employees feel happier and improves organizational productivity based on a win-win strategy while giving employees a chance to lead a stable life through a savings system for scientists and engineers.

Effects of import of EAP services



Effects of provision of EAP services



Retirement Pension Program

Dedicated to ensuring a stable retirement life for its employees, KOGAS is reviewing a retirement pension program that has been proven effective by some public corporations. Following consultancy with an expert agency, the company designed its own retirement pension program customized to its needs. Before finalizing the program, the company conducted surveys, seminars and workshops to ensure that employees, the direct beneficiaries of the program, and the labor union were on the same page. Aiming to implement the program in 2011, the company is planning to give a presentation with the labor union and gain consent from its employees before finalizing the system.

Customer Satisfaction Management

KOGAS has conducted customer-oriented management based on the CS management vision, 4 strategic directions and 10 action plans. As a result, the company has been evaluated as the best institution in a survey on customer satisfaction with public institutions organized by the Ministry of Planning and Finance for four years in a row from 2007, and ranked 1st in the past 10 years while achieving growth on the back of support from our customers.

CS Management System

VISION >>> Global KOGAS: Growing Together with Our Customers				
Management principle	KOGAS cooperating with the world and growing with the public			
CS Vision	KOGAS pursuing the value of a happy life together with our customers			
Mid-to-long-term CS targets	Realization of customer satisfaction at a global level			
2010 CS strategic direction	Establishment of an advanced CS management system	CS competence specialization	Establishment of a basis for VOC management resources	Maximized satisfaction with Customer contact points
CS competence specialization	<ul style="list-style-type: none"> Re-establishment of management strategy system Advancement of CS managerial management system 	<ul style="list-style-type: none"> Operation of CS leaders Expansion of a customer support team in the field Operation of CS School 	<ul style="list-style-type: none"> Phased improvement of VOC management Creation of VOC management performances 	<ul style="list-style-type: none"> Development of manual for upward adjustment Sophistication of service implementation standards Development of core service quality index
Performance index	Immeasurable evaluation	COI CS competence diagnosis	VOC performances index	Governmental customer satisfaction survey, In-house customer satisfaction survey

KOGAS has expanded customers into public customers including not only city gas providers, developers, director suppliers, shareholders and direct service providers but also final consumers, the general public and local communities while subdividing customers according to the flow of service value and providing differentiated services based on core demand value by customer group.

Subdivision of customers according to flow of value

	Value creation customers	Value delivery customers	Value demand customers	Value effect customer
Subdivision of value-oriented customers	Employees	Consignment companies	30 city gas providers nationwide Natural gas-using developers	Government Local community
	Resource suppliers	Partners	Large customers subject to direct supply Production and pipe facility using companies Small and institutional investors	The general public End users
	Core demand value	Enhancement of CS competence	Enhancement of cooperative relationship	<ul style="list-style-type: none"> Safe and stable natural gas supply Enhancement of marketing service Social responsibility management Reflection of government policy Social responsibility of public corporations
	CS response	CS competence specialization	Establishment of organic CS cooperation organization	Activities to improve services and quality

- Customer support system

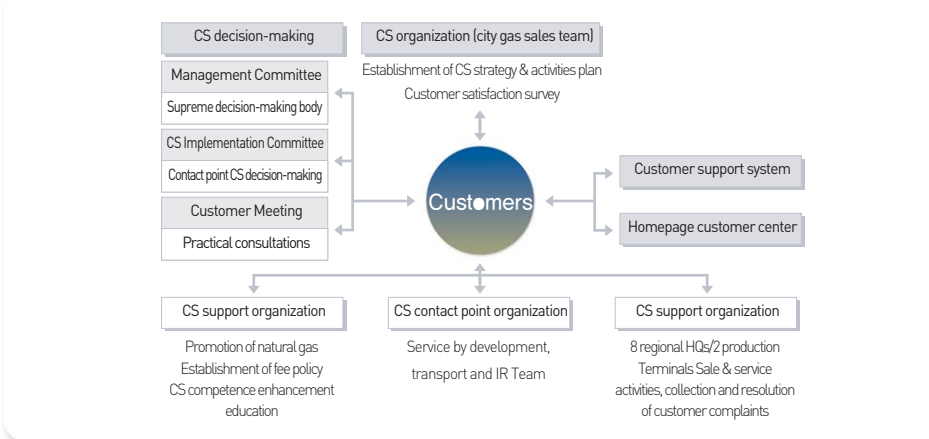


- Internet Customer Center



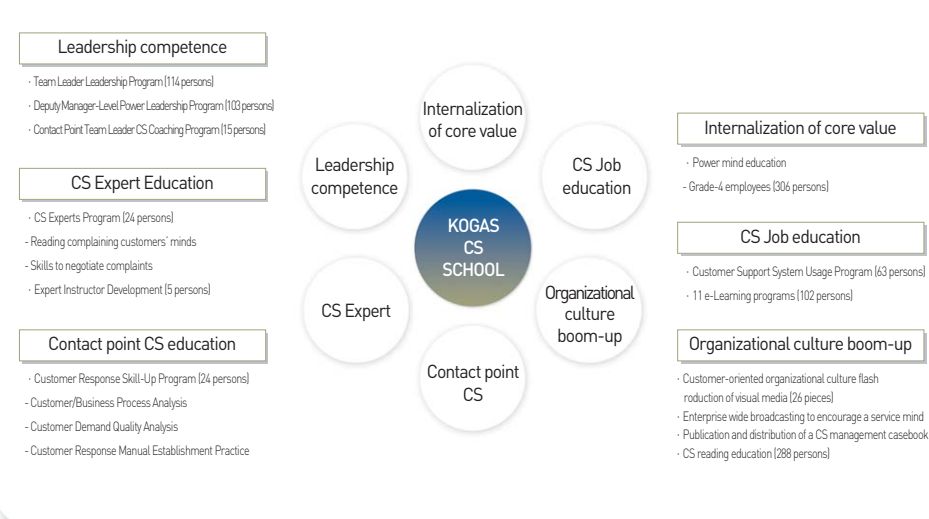
As for KOGAS customer satisfaction management, service departments including eight regional HQs and 2 production bases address these issues centering around a HQ handling organization, and the company operates the CS Implementation Committee where customer members can directly participate in addition to our Customer Support Center on the Internet.

- Enterprise wide CS network enhancement



In particular, KOGAS selected and operated CS leaders by customer type and contact point to enhance the executive power of CS implementation assignments in 2010. The company also improved its customer center by putting the emphasis on our customers and newly commenced a customer support system to enhance response to contact point customers while laying the foundation for implementation of customer satisfaction management. The company has operated the KOGAS CS School to increase executive power for customer satisfaction management through an organizational culture boom-up program in addition to a leadership coating program, CS expert program and customer response skill-up program.

- KOGAS CS School operation performance



KOGAS energy starts with customers. KOGAS exists because of our customers' support and confidence. KOGAS has pursued the value of happiness together with our customers and listened to what they have to say to reflect customers' reasonable demand in management while expanding energy welfare to enable the general public to benefit from natural gas.

Strengthening On and Offline Customer Communications

In an effort to resolve problems in customer contact points in advance, KOGAS has held 20 or more meetings to directly communicate with our customers under the leadership of CEO. KOGAS has connected with customers through various contact points and communication channels. In addition to its demand development council, rate pricing presentations, customer talkfest, technology information exchange sessions, demand development workshops, Anti-corrosion council and field experience days, the company held a total of 220 meetings with customers in 2010.

- Contact point channel operation performances

Category	VOC channel	Operation cycle	Main contents	Performances in 2010
Base	Rate pricing presentations	Frequently	Policy explanation on fees, calories, supply and demand	9
	Customer talkfest	Frequently	Collection of opinions from CEO, executives and working-level personnel	134
	Demand development council	Quarterly	Inducement of cooperative measures related to demand development	10
	Demand development workshops	Quarterly	Joint workshop (seminar) related to demand development	11
Marketing	Briefing session	Quarterly	Briefing session on natural gas	12
	Joint seminar	Quarterly	Seminar on air-conditioning/industry	3
	Field experience days	Frequently	Joint visitations and marketing activities for the industry	35
Technology	Anti-corrosion council	Biannually	Technological operation related to pipe corrosion	2
	Technology information exchange sessions	Quarterly	Exchange of information related to technology, safety and fees	5

The company monitors the VOC (Voice of Customers) on a real-time basis by establishing a customer support system and improving web customer center. We enhance VOC management by improving VOC statistics and analysis functions while furthering the rate of treatment, timeliness and adoption of VOC based on the satisfaction evaluation on VOC treatment.

Strategic use of customer VOC and provision of tailored service by customer

KOGAS has made efforts to open new supply offices at the request of local governments and local residents in the wake of development of industrial complexes and corporate cities while advancing the supply time of natural gas. It has also installed a satellite base through the use of a tank lorry in not-yet-in-service areas through pipeline in an effort to realize supply at an earlier possible date while laying the basis for improved public welfare in energy-poor areas and paving the way for an advanced regional economy.

The company has also provided customer-oriented marketing services by expanding the gas-fueled air-conditioning support system and fixed quantity system for collective energy operators while relieving the burden on gas fees by changing the fee systems for semi-residence facilities. These measures are creating factors leading to reduced natural gas fees based on a decreased financial burden on our customers through requests for developmental natural gas fees, improved procedures, delivery of city gas to the military, and enhanced refund procedures for individual consumption taxes and a shortened period of warranty insurance for direct tank lorry-supplied industries. KOGAS has expanded the safety diagnosis service in the field of customer facilities based on systematized safety system and provided such free safety check services on customer facilities as special inspections in preparations for the spring thaw and in the winter time. It has done this over 100 times in 2010 in an effort to enhance stability in the use of natural gas.

- City gas company CEOs' meeting



- Joint workshop on demand development



- Improvement of VOC performance index

Category	2009	2010
Rate of treatment	98%	99%
Rate of timeliness	94%	95%
Rate of adoption	83%	87%
VOC performance index	92%	94%

- Safe diagnosis service



Supporting SMEs

KOGAS depends on SMEs for 90% of its materials and procurement of LNG terminal construction or natural gas pipelines. Therefore, competent SMEs contribute to KOGAS' competitiveness. The stable construction and operation of cryogenic high pressure gas facilities heavily depends on these SME' s technologies. Therefore, KOGAS supports its SME partners so as to improve the quality of its gas facilities and stabilize management.

Enhancement of social responsibility as a public company and improvement of its roles

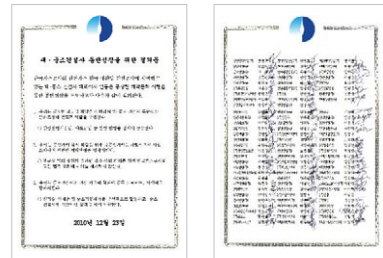
The government is pushing for a mutual growth between large companies and SMEs in an effort to acquire global competitiveness and enhance a sustainable growth engine for the national economy thus laying a fair socio-economic foundation for creating good jobs. After measures to achieve mutual growth in the private sector were reported to the President last September, countermeasures to be pursued in the public sector were reported in December to emphasize proactive roles to attain mutual growth. KOGAS will endeavor to respond to governmental policy and fulfill its social responsibility as a public corporation.

– The CEO' s determination to attain mutual growth

KOGAS will take the initiative in sharing-oriented management for the purpose of mutual growth based on fair and transparent transaction practices and cooperation in its relationships with partners including SMEs.
(CEO Choo, Kang-soo, New Year' s Address in 2011)

Organizational reform to support SMEs

– Resolution to induce mutual growth in large, medium and small constructors



KOGAS will review diversified action plans to expand the purchase of SME goods and conduct co-prosperity management along with SMEs for the purpose of achieving mutual growth and systematically pushing it forward. To this end, the company formed the 'SME Support Team,' an organization dedicated to leading support for SMEs last December and established the "Co-prosperity Management Council," a permanent consultative body, in 2011 to conduct restructuring for the purpose of supporting the SMEs.

– A permanent consultative body to support SMEs

Category	Composition	Main business
Co-prosperity Management Council	Chairman : Head of Support Division Committee Members : Managers and Deputy Managers of related departments	Direction of expansion of support to improve -prosperity management for SMEs
Practical Co-prosperity Management Council	Chairman : General Affairs Manager Committee Members : Team Leaders of related departments	Concrete action plans to induce participation by SMEs and explore support business
Public Purchase managers Council	Chairman : General Affairs Manager Committee Members : Team Leaders of related departments by HQ/Business Place	Promotion of purchase of SME products and effective purchase support

Establishment of a fair trade order

KOGAS is making efforts to settle a transparent and fair contract culture for small, medium and large constructors in the construction sector. Last October, the company formed a Special Subcontractor Improvement Team to conduct research on the actual conditions in the field for 2 months with regard to main pipe construction to supply natural gas (17 construction areas).

The company requested autonomous corrections with regard to violations detected in an inspection, and if this is not implemented, the company will report the problems to the related institutions. In addition, KOGAS established the Subcontractor Management Instructions to systematically correct problems detected in research on the actual conditions.

In order to eliminate unfair subcontract practices, KOGAS signed the Fair Contract Culture Agreement among the National Assembly, KOGAS and constructors, after which held a rally to encourage mutual growth for small, medium and large constructors. The company will enhance checks on the state of implementation in the future and continuously and systematically conduct operation for mutual growth for small, medium and large constructors based on subcontracts and cross-confirmation on payment.

Increasing SME Product Purchases

As KOGAS orders mostly consist of large-scale plant construction projects (64% of total purchase amount), SME support plans have been established to enable more SME to take part while a variety of action plans are being pursued. As for SME products and SME technological development, purchase targets and purchase expansion plans have been established for the purpose of enabling more SMEs to have more opportunities to deliver products, and efforts have been made to provide SMEs more chances to win project orders based on monthly check on implementation performance.

– SME Product Purchase (Unit: KRW billion)				– SME technology development product purchase performance (Unit: 1 million won)			
Evaluation index	2008	2009	2010	Category	2008	2009	2010
Total purchases (A)	8,184	23,317	16,140	Purchase amount	3,130	4,822	2,915
SMEs (B)	1,554	5,656	3,280				
Percentage (B/A)	19.0%	24.3%	20.3%				

In encouragement of SMEs' technological development, KOGAS promotes new product development projects with purchase guarantees and localization of core components. These programs provide stable supply lines and encourage SMEs to push forward with technological R&D activities.

New Product Development Projects with Purchase Guarantees

Entering into an agreement with the Small and Medium Business Administration (SMEA) in 2003, KOGAS selects items every year in order to fund SME development activities, making preferred purchases of these items for two years. Through this program, KOGAS has purchased four items in deals worth KRW 780 million from 2005 to 2010. *SMEA's selection of and support for developers as to development assignments include new products for which the government, public institutions and large companies have applied (75% of project costs, up to 500 million won). Also we seek the acquisition of sale routes through purchase for a certain period of time (2 years or longer) on the part of technology consumers if SMEs succeed in developing and commercializing the technology

Localization of Terminal Equipments

In a bid to stabilize its facility operations, KOGAS supports its SME partners' technology development and the localization of spare component supplies of foreign made LNG Terminal facilities. In 2010, KOGAS completed commercialization of 12 items and established a mid-term plan to localize parts so that 82 items can be additionally localized by 2015.

Supporting SMEs with Liquidity Issues

KOGAS runs a liquidity aid program for its SME partners to improve management conditions and stability in post sales service. KOGAS has paid SMEs in cash since October 2004. Furthermore, it raised the portion of prepayments and has paid its SME partners up to 70% of bills in prepayment since January 2011. In addition, KOGAS plans to support the public purchase loans for SMEs facing financial difficulties.

*Loans extended by banks based on public institutions purchase contract

Furthermore, KOGAS continues to educate its employees on the public purchase program, cultivating a mutual cooperation mindset and reinforcing its internal competencies for SME support. It also holds regular meetings with partners to listen to their grievances and suggestions, as well as collects opinions through anonymous surveys in order to eliminate any inconvenience or unfairness regarding their transactions with KOGAS.

Increasing SME Product Purchases

Supporting SME Technology Innovation

– Localization Performance of Terminal Reserve Supplies (No. of items)

	2008	2009	2010
Pyeongtaek	7	6	4
Incheon	2	2	15
Tongyeong	28	10	4
Total	37	18	23

Safe work places & healthy employees

KOGAS benchmarked the EHSMS of Mobil (presently Exxon Mobil) to develop its own Environment, Health, Safety & Quality Management System (EHSQMS) in 1997. The system makes it possible to conduct integrated and effective management of safety, health, environment and quality issues while minimizing risks and improving productivity in the field. In addition, KOGAS EHSQMS acquired and maintained ISO 9001, ISO 14001 and OHSAS 18001; all highly recognized at home and abroad.

Zero disaster targets



Category	2008	2009	2010
Number of occurrences	3 cases	1 cases	0 cases

*Industrial disaster standards (Occupation Safety and Health Act): Diseases, wounds or death that requires hospitalization for 4 days or longer

ISRS-based evaluation and proliferation of the safety culture

In 2010, KOGAS while receiving Level 7; conducted evaluations through use of the ISRS (International Safety Rating System) developed and operated by DNV for the purpose of a more objective evaluation on EHSQMS.

Although the result was rather disappointing in consideration of the time-honored experiences and expectations on EHSQMS, the company is bracing itself for another leap forward a new development. The company continues to conduct evaluations not only on the ISRS-based system but also on the safety culture. As the safety culture has failed to meet expectations in the wake of the latest business diversification and internal competence dispersion for the establishment of infrastructure, the company is considering taking proactive measures to promote the safety culture centering on the CEO. In particular, the company helps safety take root in daily life by inducing employees to raise their awareness about risk factors in the field and to introduce proper safety behavior.

KOGAS safety management is conducted in a way that risk factors in the field are defined and eliminated in advance or that measures are taken to minimize contacts with workers in the field. This leads to a safe work place based on fundamental safety management, and an emergency response plan is made to minimize damage caused by accidents. Continuous and repetitive training is conducted along with governmental institutions and nearby businesses. Thanks to these efforts, KOGAS achieved its zero-disaster goal in 12 business places in 2010.

A new challenge in EHSQMS

The current state of occurrence of industrial disasters by year

In 2010, no industrial disasters occurred in KOGAS in accordance with laws and regulations related to its employees. However, various construction projects to establish infrastructure nationwide including the expansion of supply network in not-yet-in-service areas and the Samcheok Base have resulted in increased risks on the part of our partners. As three people lost their lives, the company came up with various measures to enhance safety management for their partners, and these have been implemented since 2011.

Establishment of an evaluation system befitting global standards

EHSQMS has turned out to be the best choice for KOGAS when managing risks in the field and supplying natural gas in a safe and stable way. The fundamental purpose of KOGAS EHSQMS is to continuously improve activities and generate the best performances. To this end, KOGAS operates an annual evaluation system and assesses the level of operation of EHSQMS in the entire business to reflect the result in the internal performance evaluation. In 2010, KOGAS developed an objective global evaluation system to acquire the capability of conducting internal audits

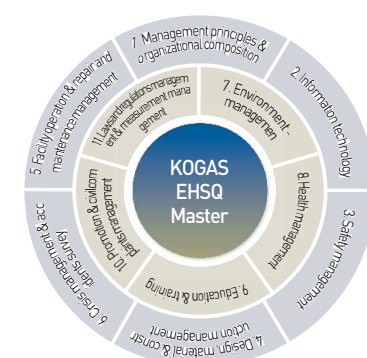
on employees while raising EHSQMS to the global level and guaranteeing consistent and objective evaluation.

The evaluation system named MASTER (Management & Assessment Tool for Efficient Rating) helps objectively and quantitatively conduct evaluations on the level of safety, health, environment and quality management activities by KOGAS, and the company is making efforts to improve EHSQMS to meet global standards and secure global competitiveness by making the most of Improvement Opportunities through evaluation.

KOGAS MASTER



Composition of MASTER



Enhancement of a basis for safe behavior through an improved safety culture

KOGAS is advancing our safety culture through the adoption of top-down and bottom-up methods in order to confirm the current level more objectively, figure out the direction of improvement, achieve enterprise-wide expansion under the leadership of the CEO and conduct activities to promote voluntary safety culture in the field. Based on diversified activities in the field where a strong determination by the management is shared with regard to safety, the company is raising awareness and expertise through ongoing education while inducing voluntary activities in the field. As a result of the survey on the level of perception on our safety culture conducted by DNV in 2010, KOGAS saw its level of perception on safety culture increase (Level 4.1) compared to 2009 (Level 3.6), and this performance has been confirmed.

In particular, KOGAS is continuously conducting education and training in order to develop experts in the EHSQ sector that lays the foundation for raising employees' awareness about perceptions on safety and emerging as a global specialist. In addition, the company has established a road map on mid-to-long-term EHSQ education and training in order to develop sectoral experts by applying a differentiated education system by job, stage and obligation while introducing a safety-oriented corporate culture by developing safety regulations befitting KOGAS through the use of case studies on excellent safety management companies.

EHSQ education road map

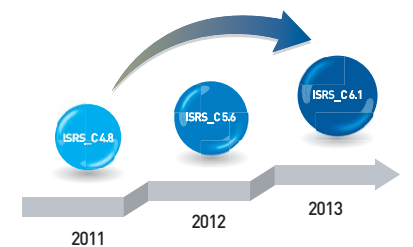


Category	Purpose	Detailed objectives	Subject	Education process
Level of safety culture (Software)	Organization adoption and earlier electrification	Learning corporate EHSQ culture by experience	Not more than 2 years of employment Grade-6 or lower	<ul style="list-style-type: none"> EHSQ education for new employees Education on management of laws and regulations on EHSQ
	Enhancement of specialized competence	<ul style="list-style-type: none"> Promotion of perceptions on participation in safety Enhancement of specialized competence based on EHSQ culture by area 	3 to 10 years of employment Grade 5 to 3	<ul style="list-style-type: none"> Education on management of laws and regulations on EHSQ EHSQ education by job
	Enhancement of EHSQ leadership competence	Improvement of awareness of safety on the part of the management	Not less than 11 years of employment Grade-2 or higher	<ul style="list-style-type: none"> Safety Leadership Program (SLT) Education on personnel responsible for safety and health management Management supervisor education

Cyber safety education



Short-term roles to enhance the safety culture



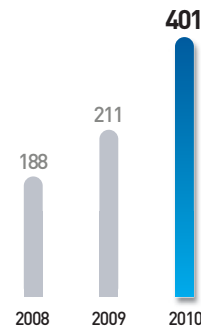
Crisis-based management

Establishment of a system to generate risk factors (hazard & risk)

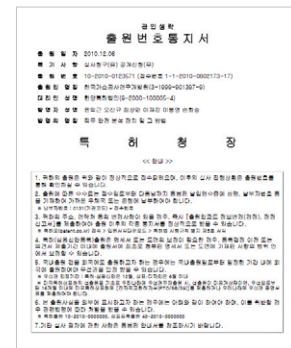
KOGAS makes ongoing efforts to define the risk factors of our gas facilities with measures to reduce risks and apply them to the field. The company established a five-year-plan to conduct risk evaluation on facilities and conducts activities to define gas facility-related crises that might be caused by climate change. (earthquakes, tidal waves, damage from storm and flood, wild fires, landslides etc.).

KOGAS established a database on risk factors related to 6,000 works through the use of job safety analysis data that has been accumulated for the past 10 years in an effort to define risks that field workers might face in the field in advance and effectively share countermeasures before allowing them to be shared by employees and linked with the work permission system. The company shares information with workers through the use of the Tool Box Meeting (TBM) in an effort to prevent these accidents before they occur. This system has led to enterprise-wide shared risk factors and improved safety based on essential safety management items designated through the generation of risk factors that had been overlooked during individual job safety analysis (JSA) and offers suggestion concerning the degree of danger.

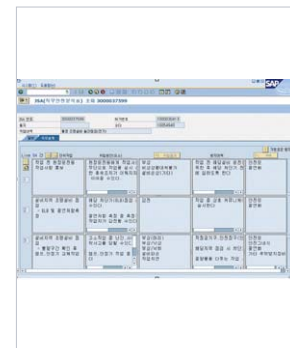
- The current status of discovery of Near Misses by year



- Patent application data



- Risk factor inventory system



- Work permission system



Prevention of actual accidents through the facilitation of the Near Miss

KOGAS is making efforts to explore and share Near Misses experienced by employees in the field. Near Misses occurring in the field might result in large-scale accidents causing a great deal of damage, and it manifests risk factors, so it provides a very important opportunity with regard to safety management in the field. In 2010, the company discovered a total of 401 cases, up 90% (190 cases) from a year ago and rectified potential dangerous situations. The company also rewarded excellent cases and provided education on pertinent Near Misses to all employees.

Establishment of an effective disaster response system

Unification of an enterprise-wide crisis management system

KOGAS has established an enterprise-wide crisis management system to conduct unified management of various managerial crises as well as emergencies in the field. It has also come up with regulations, procedures and an action manual by level. Through this, the company subdivided responses according to situational characteristics and minimized possible confusion by unifying the enterprise-wide response process.

The current state of response to earthquakes and tidal waves

KOGAS production and supply facilities reflect earthquake-proof design in order to continue to supply gas even if earthquakes occur. As an example we have the Samcheok Terminal under construction on the eastern coast of Korea. The company immediately determines the current state of earthquake action through the use of an internal earthquake detection system (5 production Terminals & 101 supply management offices) while preventing gas leaks caused by an earthquake by rapidly blocking sections in affected areas.

- The current status of earthquake-proof design in production bases (Pyeongtaek, Incheon & Tongyeong)

Category	Seismic force [g]	Scale (Richter)	Remarks
Storage Tank	0.2	6.5	US-NRC
Central Control Room	0.2	6.5	"
Substation	0.11	5.7	Construction law

• 0.15g is applied to Storage Tank and Central Control Room in accordance with the City Gas Business Act, but it was upgraded to 0.2g through the application of earthquake-proof standards [US-NRC] that is identical to those used in nuclear power plants.
• The US-NRC Earthquake-Proof Design Standards [6.5] are the same as 6.8 in earthquake-proof standards in accordance with the City Gas Business Act.

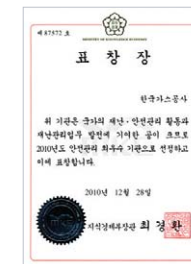
- The current state of earthquake-proof design in pipes, supply management offices

Category	Seismic force [g]	Scale (Richter)	Remarks
Main pipes	0.22	6.7	City Gas Business Act
Management office [diffusion tower and facility device base]	0.154	6.2	"
Control office [Monostat Room, Controller Room]	0.22	6.7	Construction law

Disaster management system in the field and enhancement of competence

KOGAS makes various efforts to successfully support national functions and protect public life and property in terms of hardware and software. The company established a video conference network connecting the HQ and 12 sites and a disaster situation room for immediately reporting disasters and rapidly proliferating situations during large-scale disasters by linking the earthquake detection system to the national safety management system. In addition, the company maintains disaster response capability by conducting various practical training sessions including virtual accident training, random training and reporting system inspection drills. KOGAS established and implemented safety management measures to successfully support the G20 Summit in Seoul and respond to crises related to provocations by the North Korean Military on Yeonpyeong Island while contributing to fulfilling its social responsibility by proliferating the advanced KOGAS disaster management system to other institutions (KOGAS honorably made presentations on its excellent disaster response to the Ministry of Public Administration and Safety and the Ministry of Knowledge Economy). As a result, the company was highly recognized for its excellent disaster management system and received the Presidential Award and Minister Awards (the Ministry of Knowledge Economy and the Ministry of Public Administration and Safety)

- Knowledge Economy Minister Award



- Public Administration and Security Award



- Presidential Award



- Disaster Response & Security Training



- Related Institutions Joint Virtual Accidents Training

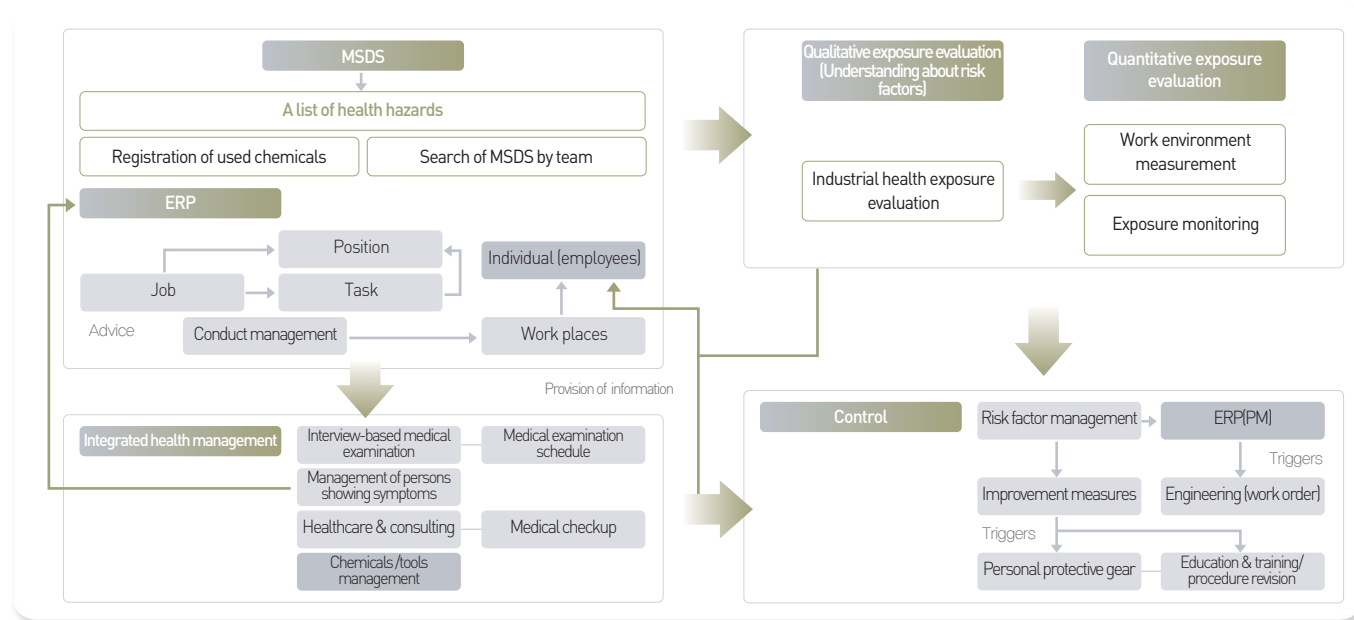


Training name	2008	2009	2010
Korea safety training	1	1	1
Related institutions joint training	23	11	25
Internal disaster response training	57	87	102
Random training	46	59	55
Reporting system check training	22	34	41
Total	149	192	224

Healthcare activities to maintain healthy work places

Establishment of a health management system

KOGAS defines health-related risk factors in the field to create a pleasant working environment and establish a health management system that can prevent industrial disaster and occupational diseases by improving the health of all employees. This system, expected to be completed in 2011, will contribute to creating a pleasant and healthy office culture by systematically managing personal safety and health based on health management, GHS MSDS, health exposure evaluations and PPE.



Operation of the Occupational Safety & Health Committee

KOGAS is doing its utmost to help its employees lead a safe and healthy life at work. The company held 48 Occupational Safety & Health Committee Meetings in 2010 in an effort to smoothly narrow the gaps between labor and management while generating reasonable solutions, and no industrial accident has thus occurred. KOGAS is endeavoring to secure a safe work place and a guarantee of employee health.

Non-smoking KOGAS work places

KOGAS has continuously pushed for an enterprise-wide non-smoking campaign since 2009. The company conducted an anti-smoking campaign in the HQ and 12 work places while holding a non-smoking clinic in connection with local health centers. In addition, it motivated employees to voluntarily participate in the campaign by rewarding excellent performers and providing individual incentives. A total of 254 employees took part in an anti-smoking clinic in 2010, and 71 employees succeeded in quitting smoking (28%). The rate of smoking in KOGAS that was 38.9% was reduced to 35.8%. The company has plans to proliferate the anti-smoking culture in 2011.

Anti-smoking clinic



KOGAS warm-heartedly accompanies the general public

In order to reciprocate the general public's full support for the company's growth as a global energy provider and essential role in developing overseas resources, KOGAS listens to what customers have to say and endeavors to create a beautiful world by warm-heartedly assisting the underprivileged. Based on its business sites located in 13 cities and towns nationwide, KOGAS is conducting social contribution activities for the local community especially helping the underprivileged take part in a healthy society on the back of understanding and cooperation of social workers and local governments. The company is doing its best to enhance the rights of future generations through environmental protection, cultural enrichment, and scholarship projects so that it can warm-heartedly assist the general public.

KOGAS is sharing a happy world not only by providing clean and convenient natural gas to the public but also by sharing energy in a reliable manner. The company designated expansion of its beautiful sharing culture as a core strategy inside and outside the company in an effort to nurture representative social contribution projects in consideration of the characteristics of business, and to increase social contribution activities to satisfy the need of local community and raise employees' awareness on social contribution.

The company is pursuing its great vision of a global KOGAS based on the "Onnuri" Project aimed to support energy, medicine and scholarships for the underprivileged and the KOGAS "Hope" Project that enhances the rights of future generations through preserved cultural assets and improved air conditions. Furthermore, the company has concentrated on unifying the local community by the 'Eoullim' project and has designed 'Volunteer 5up' project to raise employees' awareness and participation. KOGAS' social contribution activities are systematically conducted through record management system and social contribution project review committees.

- KOGAS Social Contribution System



Social Contribution System

- Social Contribution Organization & Decision-making



Listening closely

KOGAS conducted a survey on 57 specialized institutions and social welfare facilities with which it maintains diversified cooperative relationships for the purpose of advanced social contribution activities (November 2010). The company paved the way for customized social contribution activities by clearly understanding our stakeholders' requests and making the most of feedback.

Awareness of social contribution activities by KOGAS

Of all the social contribution activities pursued by KOGAS, primary and direct activities such as support for social welfare facilities (33%), reduction in city gas fees (25%) and scholarships for youths (13%) are well known. The recognition of the Blue Sky Project to protect the rights of the environment for future generations and the Onnuri Project initiated as a representative social contribution of the company are continuously growing.

Distinction	Social welfare support facilities	Reduction in city gas fees	1-person-and-1-village relationship	Scholarship	Others
2008	32%	15%	15%	11%	27%
2009	32%	25%	10%	12%	21%
2010	33%	22%	10%	13%	

*The high recognition of reduced gas fees is believed to stem from the fact that the reduced gas fee system that was introduced in 2009 for social welfare facilities and basic livelihood security recipients has entered maturity.

Requests with regard to the city gas business

Regarding the natural gas business, reduction in fees for the underprivileged and social welfare facilities accounted for the highest portion (53%). In addition, support for not-yet-in-service areas for natural gas (20%) and free inspections on gas facilities (19%) turned out to be highly requested. Of these, reduced fees for the underprivileged including basic livelihood security recipients started in 2009.

Distinction	Reduction in city gas fees for the underprivileged and welfare facilities	Support for pipe-laying costs for not-yet-in-service areas	Free of charge inspection on gas facilities	Others
2009	39%	20%	24%	17%
2010	52%	20%	19%	9%

*The fact that the rate of requests for reduced city gas fees has drastically soared indicates that many are satisfied with the reduced gas fee system that was introduced for the underprivileged in 2009, and relatively fewer requests for support for pipe-laying costs for not-yet-in-service areas are believed to stem from an increased understanding on the City Gas Management System of the general public.

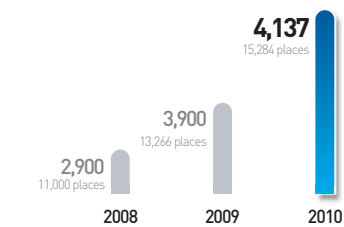
Areas in which KOGAS needs to focus

Areas in which KOGAS needs to focus include support for business in the local community (30%), support for heating fees for the underprivileged (22%), and reduction in city gas fees (15%), enhancement of volunteer activities (14%), environmental protection activities (10%) and expansion of scholarships (6%)

Distinction	Support for business in the local community	Reduction in city gas fees	Support for heating fees for the underprivileged	Enhancement of volunteer activities	Environmental protection activities	Others
2009	32%	26%	-	19%	10%	13%
2010	30%	15%	22%	14%	10%	

*Support for heating fees for the underprivileged was cited as an area that needs to receive intensified assistance in the future as a growing number of people have developed an interest in the Onnuri Project, an energy welfare support project that has been pursued in consideration of the characteristics of our energy company since 2010.

Gas Rate Discounts to Charities
(Unit: KRW million)



Gas Rate Discounts for Charities

As part of our initiatives to support the stable livelihoods of the socially underprivileged classes, KOGAS has offered gas rate discounts to charities since July 2001. Applying the lowest industrial gas rate, the company reduced the gas bills of 15,284 charities (facilities for handicapped, children and the aged), saving them KRW 4.1 billion in 2010.

Reduced city gas fees applied to the underprivileged

In an effort to help the financially-distressed, such as welfare beneficiaries, the physically challenged and person of merit and nationally meritorious persons, KOGAS has been providing discounts on gas bills since January 2009. In 2010, the program provided KRW 22.5 billion in discounts to 556 thousand households. To ensure a warm winter for welfare security recipients and those in low-income brackets, the company introduced a 'suspended service system for the winter' to households in arrears from 2005.

Scale of support of fees by year

	2009	2010	2011 (expected)
	15.4 billion won	26.6 billion won	45.8 billion won

Creation of social jobs for the underprivileged - the Onnuri Project (Energy welfare support for the underprivileged)

In consideration of the characteristics of an energy provider, KOGAS initiated the Onnuri Project to help improve heating efficiency in social welfare facilities mostly used by people in the low-income bracket, the handicapped, and the aged and this is based on flooring construction, wall insulation and replacement of windows and doors. The project also supports 3-month-long heating fees to low income households using kerosene, LPG and briquettes.

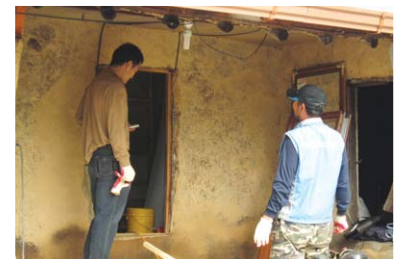
*The Onnuri Project : As a KOGAS's representative social contribution project, it aimed to help people lead warm-hearted lives.

The project aims to replace outdated boilers, windows and doors used in 850 houses of welfare security recipients and those in low income brackets and in 71 facilities for the aged in 13 cities and towns while supporting them in the purchase of kerosene, briquettes and LPG prior to the onset of winter. The project resolved heating problems in the short-term by supporting heating costs for those in low income brackets while increasing asset values and saving energy in the mid-to-long-term through insulation construction and improved heat efficiency. It also created 389 social jobs through house repair and creating a self-supported community. As a result of a SROI (Social Return on Investment) analysis based on global standard reporting standards, it turned out to lead to high ROI. KOGAS will continue to take the initiative in creating social jobs for the underprivileged and supporting energy welfare.

A health protector for the underprivileged - the KOGAS Health & Sharing Project

Since 2008, KOGAS started supporting charges for cataract operations for the underprivileged in cooperation with Community chest of Korea in an effort to help out the poor alienated with medical benefits. Despite the advent of an aging society and an era of public health insurance, the company has given new hope and dreams to 61 youths and children by pushing for a project to support handicapped children and youths in cooperation with Bundang Seoul National University Hospital.

KOGAS warm-heartedly assists the underprivileged



Dreams Come True, the Hope Project



The blue sky for future generations - the 'BLUE SKY PROJECT' (The campaign to improve the quality of air in metropolitan cities)



The BLUE SKY PROJECT is an environmental protection campaign conducted along with civic groups and local governments in an effort to give back a blue sky to growing children by improving the quality of air in metropolitan cities. Launched in 2005 in collaboration with Green Korea United in Daejeon, the project involves the annual measurement and analysis of city air pollution, broadcasting campaigns and an environmental education program at the Blue Sky School for young people. In 2010, KOGAS installed residents-participatory bike roads along with Daejeong Metropolitan City and introduced a photovoltaic power generator to the town library in order to reduce carbon dioxide emissions, and this has been highly recognized as an excellent low-carbon green-growth project.

Scholarship Program

Dedicated to educational equality, KOGAS runs a scholarship program. In 2010, the company delivered scholarships worth KRW 250 million to 156 high school students selected by the directors' recommendations and reviews. KOGAS conducted the project to improve the educational environment in 39 child care centers for children in the low income bracket in 13 areas nationwide by providing educational devices and tailored facilities based on KOGAS Clean Zone Project. Now kids from low income families can learn in more pleasant educational environments. We are dedicated to delivering hope to our next generation and KOGAS will continue its education projects in the future.

1 Cultural Asset, 1 Company Campaign

KOGAS has been engaged in various cultural asset protection activities from fire disaster safety check-ups in order to protect the nation's cultural assets since the fire at the Naksan temple. In 2010, a total of 281 KOGAS employees participated in activities such as gas facility safety check-ups and the donation of fire extinguishers at 38 cultural heritage sites. Also, the company revised its site plot plan at its 4th terminal construction site in Samcheok, in order to preserve an ancient mud rampart that had been excavated at the site.



Growing together with the local community



KOGAS is conducting various activities to enhance a sense of closeness with the local community centering on HQs and local work places. The company is operating the KOGAS Academy to satisfy local residents' cultural demand while conducting social contribution projects going beyond regions, generations and classes.

In addition, the company endeavors to get closer to the local community by conducting sisterhood volunteer activities including free meals, book-sharing and blood donations and voluntary participation on the part of employees while providing continuous support to 16 rural areas, 12 schools and 2 military units.

The Gas Science Museum, an open-minded cultural and educational space

Many people are unfamiliar with convenient, inexpensive and clean natural gas. The Gas Science Museum aims to help those understand about natural gas through audio-visual exhibits on a series of processes ranging from production, transport and supply and this enables growing children to realize the importance of energy and is emerging as a precious educational attraction alongside regional tourism resources. In addition to the Incheon Gas Science Museum, small PR centers have been established in Pyeongtaek and Tongyoung to provide local residents with an opportunity to get closer to KOGAS.

In particular, the company supports those facing difficulties in visiting the Gas Science Museum by providing a means of transportation so that more people can visit.

- Gas Science Museum Visitors (Unit: persons)

2008	2009	2010
101,362	61,075	23,721

*Rapid reduction in the number of visitors in the wake of closing for reasons of H1N1 and remodeling of the Gas Science Museum

Accumulation of happiness along with the local community



[Interview]



Expectations on KOGAS volunteer activities with the Social Contribution Information Center of Korea National Council on Social Welfare
Chief Myeong-ji Seo

Regarding the Onnuri Project, an energy welfare support project for the poor pursued by KOGAS, I received applications from low income households and welfare facilities for the underprivileged nationwide and paid a visit to the field while directly participating along with experts in selecting recipients for benefits. Watching the KOGAS employees conduct volunteer activities by transporting materials to house repair sites and delivering briquettes, I was deeply touched by KOGAS employees' sincerity and enthusiasm for helping others. In particular, I felt that they were strongly determined to contribute to developing our local communities. I hope that KOGAS will give deep thought into a variety of social issues while conducting its rewarding social contribution activities for the underprivileged and future generations.

Global Social Contributions Activities

KOGAS sponsors the East Timor Youth Soccer Team stars of the film, 'Barefoot Dream'



KOGAS supports the East Timor Youth Soccer Team that starred in the film 'Barefoot Dream' touching the hearts of many Koreans and to give hope to East Timor, one of the poorest countries in the world. Since 2007 when KOGAS sponsored the East Timor Youth Soccer Team, they visited Korea to participate in an international friendly soccer match. KOGAS has continuously conducted activities to support youth teams.

- Sponsoring East Timor Youth Soccer Team

Distinction	Period	Personnel	Contents
2008	25 Aug ~ 23 Sept	25	Support for domestic off-season training
2009	6 Sept ~ 9 Sept	23	Support for overseas off-season training
2010	29 Sept ~ 20 Nov	51	Support for participation in U-17 & U-21 Matches

Inviting Vietnamese Children with Heart Disease to Seoul

KOGAS supports Vietnamese children who received a free heart operation under the sponsorship of the Milal Heart Foundation and the Yeouido Full Gospel Church. This project aims to deliver gifts to children before they go back home and help them visit such cultural complex facilities as Lotte World, 63 Building and Coex. It has emerged as a representative global social contribution activity conducted by the company. KOGAS fulfills its social responsibility as a global citizen through volunteer activities twice or more every year in cooperation with Paik Hospital.

Add happiness, the Volunteer 5up Campaign

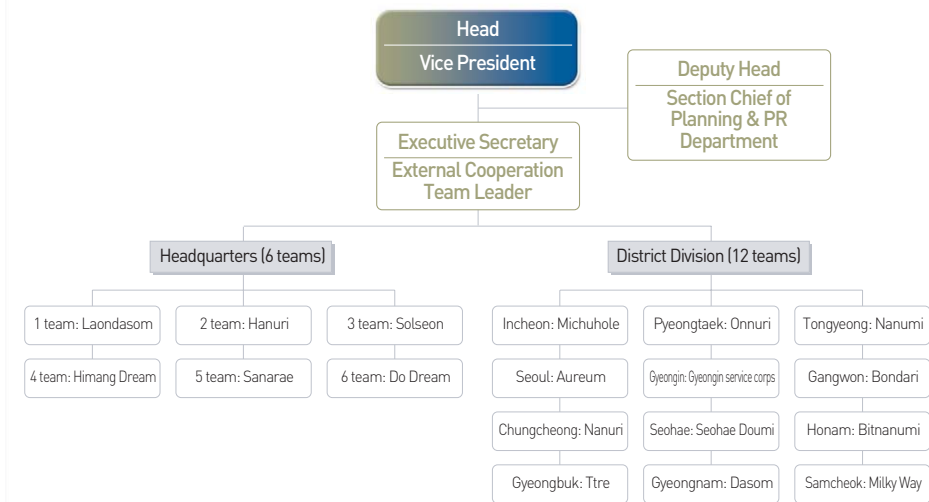
The Volunteer 5up Campaign is KOGAS employees' commitment to helping others by increasing per-capita hours of volunteer activities and the number of personnel taking part in charity by 5% or more.

Sowing the Seeds of Happiness, the KOGAS Volunteer Service Corps

KOGAS Volunteer Service Corps takes the central stage of KOGAS social contribution activities. KOGAS Volunteer Service Corps, human energy crisscrossing every corner of society with 36.5°... warmth, enters others' lives to share with others not only through financial support but also through warm-hearted volunteer activities that sow the seeds of happiness. Many adults have recently faced difficulties in dealing with their children belonging to the M (Mobile) Generation and N (Net) Generation and KOGAS employees are making various attempts to help their children grow into warm-hearted intellectuals who do not only study hard but also help the underprivileged around them by having them take part in family volunteer activities during weekends. The company makes these efforts to share with others through social contribution activities supported by labor and management.



- KOGAS Volunteer Corps Organization



Matching Grant Program

KOGAS' employees donate a certain amount of money from their salary and change under KRW 1,000 in their salary every month, KOGAS uses it for disaster relief and charity funds for the poor at year end. The company also conducts a Matching Grant Program matching the same amount of money as our employees' donations. The company collected 40 million won (2,027 participants) to help the poor at the year end on the back of cooperation between labor and management and added the same amount of money to increase the amount to 89 million won hence emerging as an excellent charitable donor.

- Volunteer 5up Campaign¹⁾ Performance

Distinction	2008	2009	2010
Cheongyeon Fund participants (persons)	1,631	1,543	2,104
Sponsorship	Group	54 places	66 places
	Individual	86	144
Accumulated No. of Volunteers	4,670	4,788	3,270
Per Capita Volunteer Hours		5.46	11.14
Social contribution costs	3.5 billion won	3.7 billion won	3.8 billion won

¹⁾The number of employees participating in the Cheongyeon Fund soared from the participation of the District Divisions but the accumulative number of participants in social contribution activities was somewhat reduced as a result of strategic social contribution projects and a growing number of employees dispatched to overseas projects.

²⁾The per-capita hours of volunteer activities conducted by employees drastically increased from a year ago due to changes in operational standards for the per-capita social contribution mileage system and the conversion of the amount given to the Cheongyeon Fund into the hours of volunteer activities.

¹⁾ The Volunteer 5up Campaign : aims to increase the number of participants in the Cheongyeon Fund (employees' donation) and their hours of participation in volunteer activities by 5% or more from the previous year.



Appendix



Investment company (KOGAS-Tech) performance

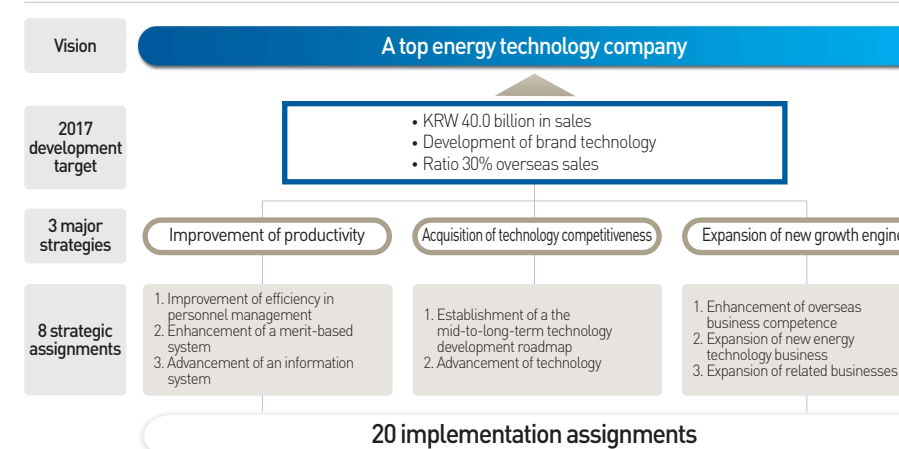
The current status of KOGAS-Tech

Name of company	KOGAS-Tech (Korea Gas Technology Corporation)
CEO	Gang, Gi-chang
Date of foundation	May 27, 1993
HQ	839, Bongsan-dong, Yuseong-gu, Daejeon
Main business	<ol style="list-style-type: none"> 1. Gas facility checks and service 2. Gas facility improvement & maintenance and related works 3. Safety checks on gas pipe network and maintenance 4. Plant-related engineering service and plant facility maintenance
Employees	1,002 persons (Jan. 7, 2011)
Financial status	Capital : 10.6 billion won Equity ownership : 100%

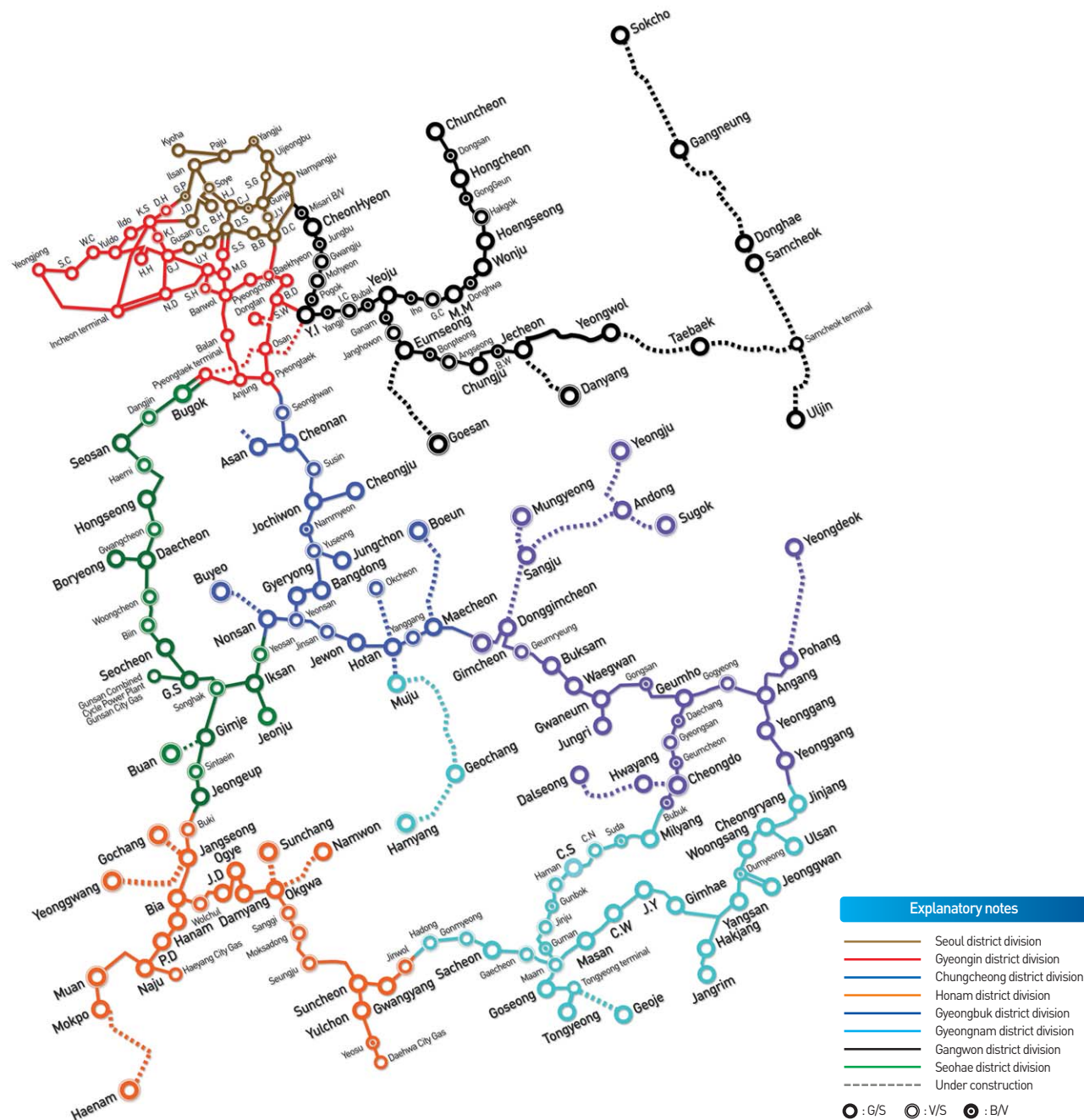
Management performance

Business division		Unit	2008	2009	2010
Finance	Sales	KRW 100 million	1,478	1,627	1,467
	Net profit during the term	KRW 100 million	70	94	120
	Current ratio	%	240.1	278.3	199.5
	Debt ratio	%	65.0	51.8	50.3
Management	Sales per person	KRW 1 million	147.4	163.2	147.2
	Added value per person	KRW 1 million	75.5	82.3	87.8
	Labor cost per person	KRW 1 million	60.1	60.7	62.4
Quality of maintenance	Suspension of gas supply	Number of cases	0	0	0
	Pipe damage Performance	Number of cases	1	0	0
Education & training	Facility repair	Number of cases	5,900	3,438	3,104
	Investment in education & training	KRW 1 million	1,149	1,715	1,713
	Ratio of investment /sales	%	0.8	1.05	1.17
Growth engine	Sales in overseas business	KRW 1 million	3,958	8,819	10,448
	Ratio of investment in R&D	KRW 1 million	568	530	436
	Ratio of investment /Sales	%	0.4	0.3	0.3
Credit rating	Korea Investors Service		P-AA-	P-AA-	P-AA-
	Korea Ratings		P-AA-	P-AA-	P-AA-
	Korea Enterprise Data				AA-

KOGAS-Tech Strategy System



Natural gas piping diagram



Assurance Statement

Messrs. KOGAS stakeholders

Korea Productivity Center (‘Verifier’ hereinafter) hereby submits a third party’s verifying opinions at the request of KOGAS with regard to its 2010 Sustainable Management Report (‘Report’ hereinafter)

Responsibility and independence

KOGAS is responsible for the information and opinions described in the report. The verifier is responsible for verifying opinions included in the report and has not participated in establishing the report as an independent verifying institution and formed no relationships that might interrupt this independence.

Verifying standards

This verification has been conducted based on AA1000AS (2008) standards in accordance with Type 1 Verification and at a moderate level of verification. Appropriateness has been checked in accordance with AA1000APS (2008) verification principles with regard to inclusivity, materiality and responsiveness. In addition, it has been checked if the report complies with GRI G3 Guidelines. The verification does not include credibility of data in the report in accordance with the verification standards above. In addition, field verification has been conducted on the HQ in Seoul on a limited basis, and work places and research centers have not been included. Accordingly, if additional verification procedures follow, the results may differ.

Limitations

The verification does not include credibility of data in the report in accordance with the verification standards above. In addition, field verification has been conducted on the HQ in Seoul on a limited basis, and work places and research centers have not been included. Accordingly, if additional verification procedures follow, the results may differ.

Methods of verification

The report has been verified by applying the following methods.

1. The appropriateness of selection of main issues and technologies dealt with in the report through media research and benchmarking analyses has been examined.
2. Satisfaction with requirements for GRI application level A has been confirmed through examination on the rate of reporting on each indicator of GRI G3 Guidelines and technical methods.
3. Compliance with principles of reported contents and quality has been confirmed based on GRI G3 Guidelines.
4. The appropriateness of descriptions within the report and expressive errors has been compared with other sources based on the analysis.
5. A basis for main data and information has been checked through field verification on the HQ in Seoul, and internal processes and systems have been

examined.

Result of verification

The verifier has confirmed that the report has sincerely and fairly reflected KOGAS sustainable management activities and performances. The verifier has also confirmed that the verification has satisfied requirements for GRI application level A as announced by KOGAS.

1. Inclusivity : Stakeholders’ participation

Through the verification, it has been confirmed that KOGAS has divided stakeholders into internal members, shareholders, investors, customers and local communities and that it has determined stakeholders’ interest through the use of various means of communications. In order to collect opinions from stakeholders, diversified activities to share information by stakeholder have been conducted through various channels including partners’ meetings, IR activities for shareholders and investors and the labor management council. In particular, the scope of customers has been expanded to include final consumers and communications with customers and have been expertly enhanced through the use of various online and offline communication channels including a customer support system and VOC channels. The company is advised to establish more systematic stakeholder-participating channels to continuously manage and report stakeholders’ participatory process and performances in the future.

2. Materiality : Selection of and report on main issues

In an effort to select information that affects corporate sustainability and in which stakeholders have interest, KOGAS has proactively reflected core issues generated based on information and experiences accumulated in the course of publishing previous reports in the report. In the process, it has been confirmed that sustainability issues have been selected through research including media analysis, sustainable management in the industry and global sustainability standards. The same questionnaire survey on stakeholders as last year is judged to be excellent as it has consecutively compared the importance of core issues selected by KOGAS from the past. However, the selected issues are confined to energy security, vision for sustainable management, strategy, environmental performances and contributions to economic development, and they are considered to have limitations in determining the diversified issues related to KOGAS sustainability. It is advised that to manage stakeholders there should be more systematic and continuous examination of important issues and performances so that these more detailed and diversified issues can be generated and fully reflected in the report.

3. Responsiveness : Organizational responses to issues

In 2010, KOGAS reconfirmed its vision for sustainable management, strategies and performances and analyzed the internal and external environment to adjust the strategic system while re-examining internal objectives and performances

for the purpose of responding to issues of such global sustainable management indices as DJSI and ISO26000. KOGAS is conducting various activities to appropriately respond to core issues of sustainable management, and it has been confirmed that these efforts have been reflected as core economic, environmental and social performances in the report. In particular, it is highly evaluated that the company has laid the foundation for implementation of sustainable management by linking assignments selected by sector with business strategies based on a sustainable management strategy system. The company is recommended to disclose mid-to-long-term response strategies through the report in addition to the results of responses to more diversified issues generated through global sustainability standards and overseas benchmarking examples in the future.

Recommendations

The verifier highly evaluates the various efforts that KOGAS has made to enhance sustainability and suggests the following to issue its report and improve the level of sustainable management.

1. The company is advised to establish more systematic stakeholder participating channels to generate diversified issues related to sustainable management and file a report on these issues in connection with KOGAS sustainable management performances.
2. The company is advised to clearly define materiality evaluation standards and select core issues through a prioritization process before describing pertinent issues in the report.
3. The company is advised to systematically establish mid-to-long-term sustainable management plans and objectives by sector in terms of economy, environment and society in order to continuously advance the sustainable management system.
4. Various indices developed to measure sustainable management can be managed enterprise-wide and systematically improve the level of sustainable management in connection with financial performances.
5. The company is advised to establish an enterprise-wide integration system aimed to manage the performance index related to more diversified sustainable management and use it when filing a report in the future.

July 2011
President Choi, Dong-gyu
with the Korea Productivity Center

Dong-gyu Choi



Since its foundation in 1957, the Korea Productivity Center has taken the initiative in nurturing talented industrial personnel as a specialized training center and consultancy equipped with accumulated know-how. In particular,

The Korea Productivity Center established the Sustainable Management Center to support implementation of sustainable management while pushing for improved sustainability in the entire industry. Since 2009, the company has announced DJSI Korea in cooperation with Dow Jones Indexes in the U.S. and SAM in Switzerland while providing support to enable domestic companies to compare and improve their level of sustainability from objective perspectives in consideration of advanced foreign companies.

The Sustainable Management Center of Korea Productivity Center is a verifier certified by Accountability, an institution that establishes global international standards AA1000 for stakeholder participation and verification and qualified to conduct verification on an independent basis. In addition, the Verifying Committee consists of experts who have accumulated experience in consulting and verification on sustainable management and who have completed specialized training.

Head of Center
Kim, Dong-su *D.S. Kim*

Expert Advisor
Park, Tae-ho *Tae-ho Park*

Researcher
Park, Ju-mi *Ju-mi Park*

Researcher
Hong, A-ram *A-ram Hong*

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	4.11	Explanation of how the precautionary approach or principle is addressed by the organization	Comprehensive management company-wide	31
	4.12	Externally developed initiatives to which the organization subscribes or endorses	Compliance with the UN Global Compact ILO, etc.	99
	4.13	Memberships in associations and/or national/international advocacy organizations	KBCSD and other associations	99
	4.14	List of stakeholder groups engaged by the organization	Stakeholder survey and communication	25
	4.15	Basis for identification and selection of stakeholders with whom to engage	Materiality test and stakeholder communication	22
	4.16	Approaches to stakeholder engagement, including type	Stakeholder communication	25
	4.17	Key topics and concerns of stakeholders and the organization's response	Reflecting the results of stakeholder surveys in the report	24

	GRI No.	GRI Content	Report Content	Page
Economic Performance	EC1	Economic value generated and distributed	Value distribution by stakeholder group	50
	EC2	Financial implications and other risks and opportunities due to climate change	KOGAS strategic green growth	60
	EC3	Coverage of the organization's defined benefit plan obligations	Fair welfare benefits and new corporate pension program	72
	EC4	Significant financial assistance received from government	No remark	-
	EC5	Range of ratios of standard entry level wage compared to local minimum wage	The entry level wage of regular staff compared to the legal minimum wage	72
	EC6	Policy, practices, and proportion of spending on locally-based suppliers	Purchase practices from local enterprises and SMEs	76
	EC7	Procedures for local hiring and proportion of senior management hired from the local community	Main business activities are confined to the Korean peninsula although its core business is confined to Korea, company plans to hire locals for overseas resources development projects (Iraq etc.) in 2011.	8
	EC8	Infrastructure investments and services provided primarily for public benefit	Expanding the pipelines to not-yet-in service areas and various social contributions	49,83
	EC9	Indirect economic impacts, including the extent of these impacts	Economic impact by stakeholder group	50
Environmental Performance	EN1	Materials used by weight or volume	Import and sales of LNG	38
	EN2	Percentage of recycled input materials used	Initiatives to minimize fugitive emissions such as vent recovery, etc.	61
	EN3	Direct energy consumption by primary energy source	Direct energy consumption [4,562TOE]	60
	EN4	Indirect energy consumption by primary energy source	Indirect energy consumption [5,636TOE]	60
	EN5	Energy saved due to conservation and efficiency improvements	Reflection of the rate of growth in sales Energy reduced compared to the previous year	60
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	Applications for renewable energy such as solar power generation	61
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved	Replacing incandescent lighting with LED lighting	61
	EN8	Total water withdrawal by source	Amount of water used in 2010	56
	EN9	Water sources significantly affected by withdrawal of water	Water supply system	56
	EN10	Percentage and total volume of water recycled and reused	Treatment of sewage and industrial wastewater	56
	EN11	Land of protected areas and areas of high biodiversity value outside protected areas	Measures taken to protect the environment of the construction site for LNG Terminal in Samcheok	54
	EN12	Description of significant impacts of business activities on biodiversity	Environmental impact assessment before the project	54
	EN13	Habitats protected or restored	No remark	-
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	No remark	-
	EN15	Number of IUCN Red List species and national conservation list species by level of extinction risk	Not applicable	-
	EN16	Total direct and indirect greenhouse gas emissions by weight	Total amount of greenhouse gas emissions	60
	EN17	Other relevant indirect greenhouse gas emissions by weight	Total amount of Scope 2 emissions	60
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	Greenhouse gas reduction project (green growth initiative)	58-61
	EN19	Emissions of ozone-depleting substances by weight	No remark	-
	EN20	NOx, SOx and other significant air emissions by type and weight	NOx emissions	53
	EN21	Total water discharge by quality and destination	Wastewater treatment & water quality analysis	53
	EN22	Total weight of waste by type and disposal method	Waste amount	53
	EN23	Total number and volume of significant spillages	Use of hazardous chemical substances (no leakage or spill)	57
EN24	Weight of waste deemed hazardous under the terms of the Basel Convention Annex and percentage of transported waste shipped internationally	Not applicable	-	
EN25	Identity, size, protected status and biodiversity value of bodies of water and related habitats significantly affected by KOGAS' s discharge of water and runoff	Not applicable	-	
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	The eco-friendliness of natural gas, environmental declaration of products	14,57	
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Not applicable	-	
EN28	Cases of non-compliance with environmental laws and regulations	No cases of non-compliance	55	
EN29	Environmental impacts of transporting products and other goods and materials and transporting members of the workforce	No significant environmental impact	-	
EN30	Total environmental protection expenditures and investments by type	Environmental expenses	55	

	GRI No.	GRI Content	Report Content	Page
Social Performance-Labor Practices & Decent Work	LA1	Total workforce by employment type, employment contract, and region	Workforce & temporary workers	64
	LA2	Total number and rate of employee turnover by age group, gender, and region	Service years	64
	LA3	Benefits provided to full-time employees only	No discrimination between regular and temporary workers	64
	LA4	Percentage of employees covered by collective bargaining agreements	Union membership against total workforce (88.2%)	71
	LA5	Minimum notice period regarding significant operational changes	Labor-management council (quarterly), collective agreement	71
	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees	OHS Committee (equal number of representatives from both sides)	71
	LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region	Yearly industrial accident outbreaks	78
	LA8	Training, counseling, prevention, and risk-control programs to assist workforce members, their families, or community members regarding serious diseases	Health management	82
	LA9	Health and safety topics covered in formal agreements with trade unions	Operating OHS Committee	71
	LA10	Average per capita training hours per year by employment status	Annual average training hours: 101 hours	67
	LA11	Programs for lifelong learning and continued employability of employees, to assist them in managing career endings	Comprehensive HRD programs	68
	LA12	Number of employees receiving regular performance and career development reviews	Evaluation and promotion	66
	LA13	Composition and breakdown of BOD and workforce	BOD members	17
	LA14	Ratio of basic salary of men to women by employment status	Executives' payment (no discrimination)	51,64
Social Performance-Human Rights	HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	Compliance with government regulations	-
	HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	Compliance with government regulations	-
	HR3	Total hours of employee training on policies and procedures concerning aspects of human rights	Trainings on human rights as well as ethical education	28
	HR4	Total number of incidents of discrimination and actions taken	No discrimination issues	-
	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk	Win-win partnership	71
	HR6	Measures taken to contribute to the elimination of child labor	Compliance with ILO-related agreement	71
	HR7	Measures taken to contribute to the elimination of forced or compulsory labor	Compliance with ILO-related agreement	71
	HR8	Number of security personnel training in KOGAS' policies and procedures concerning aspects of human rights	Periodic education on security personnel	-
	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	Underground issues were raised over the Myanmar Project	42
Social Performance-Society	S01	Programs that assess and manage the impact of operations on communities	Sharing information prior to such meetings as community hearings on new projects	54
	S02	Percentage and total number of business units analyzed for risks related to corruption	Special lectures on contract and construction	28,30
	S03	Percentage of employees trained in KOGAS' anti-corruption policies and procedures	Ethical education program on the workforce	29
	S04	Actions taken in response to incidents of corruption	Anti-corruption system [No remark]	30
	S05	Public policy positions and participation in public policy development and lobbying	Responding to the nation's public policy as a public corporation (Climate change, green growth, employment and social contribution)	54,58,62
	S06	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	Prohibition on political activities (Prohibited in accordance with laws)	28
	S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No legal actions for anti-competitive behavior, anti-trust and monopoly practices	-
	S08	Fines and total number of non-monetary sanctions for non-compliance with laws and regulations	No cases of violation or fines	-
Social Performance-Product Responsibility	PR1	Life cycle stages in which health and safety impacts of products and services are assessed	Characteristically clean natural gas	14
	PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services	No cases of breaches	-
	PR3	Type of product and service information required by procedures	Providing product MSDS	82
	PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling	Not applicable	-
	PR5	Practices related to customer satisfaction, including customer satisfaction survey results	Customer satisfaction survey results conducted by the government	73-75
	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications	Practice customer satisfaction (Not applicable)	73
	PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications	No incident of violation	-
	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	No cases of substantiated complaints	-
	PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	No incident of legal violation	-

Glossary

BOO (Build Own Operate)

A project where the builder owns and operates the plant

CDP (Carbon Disclosure Project)

A global project that collects and analyzes greenhouse gas emission databases of global companies on behalf of global investors and financial institutions

CNG (Compressed Natural Gas)

Natural gas being compressed to be utilized as a vehicle fuel at normal temperature(14.5°C ~ 15.5°C)

DJSI Korea

A spin-off of the Dow Jones Sustainability Index that enlists only Korean companies

DME (Di-Methyl Ether)

Dimethyl Ether (DME) is an organic compound with the formula CH₃OCH₃. Produced by synthesizing CO and H₂ gas extracted from natural gas, coal and biomass materials, it can replace LP gas.

EAP (Employee Assistance Program)

A program to assist employees with health and welfare issues as well as private life issues that could undermine work efficiency. The program includes counseling, diagnosis and hospital referrals for employees and their families.

Fuel Cell

A fuel cell is a highly efficient and environmentally-friendly electrochemical device that combines hydrogen and oxygen to produce electricity and heat

GH (Gas Hydrate)

Also known as Methane Hydrate, a crystalline compound with an isometric ice lattice containing cages that incorporate small guest gas molecules; they are stable at moderate pressure and low temperature

GHG (Green House Gas)

Gas that absorbs part of the sun's rays (infrared radiation), such as carbon dioxide (CO₂), nitrous oxide (N₂O), methane (CH₄), tropospheric ozone (O₃) and sulfur hexafluoride (SF₆), contributing to the greenhouse effect

Global Compact

A global voluntary initiative under the United Nations by corporate citizens that provides the framework for the ten principles of corporate compliances in the four categories of human rights, labor, environment and anti-corruption

GTL (Gas To Liquid)

A chemical refinery process to convert natural gas or other gaseous hydrocarbons into longer-chain hydrocarbons such as gasoline, diesel, naphtha, wax or methanol fuels

KOSMOS

An integrated information management system of KOGAS for operating and controlling the production and sharing of documents, accounting and management information

LCA(Product Life Cycle Assessment)

A Life Cycle Assessment (LCA) is a systematic evaluation of the environmental aspects of a product or service system through all stages of its life cycle

Low Carbon Green Growth

A government-driven national development paradigm aimed at sustainable growth without greenhouse gases and environmental pollution, while creating new growth engines and jobs from green technologies and clean energy sources

NEP (New Excellent Product)

A certificate awarded by the government for technologies first developed in Korea or products that use such technologies. The certificate is accompanied by support in the initial market-building of the product and promotion of further technological developments

PNG (Pipeline Natural Gas)

PNG is a pipeline system for transporting natural gas from a production site without the need for a liquefying process

Self Sufficiency

This is the percentage of dividing the volume of resources developed by domestic companies by the annual imported volume. The calculation is based on the equity held by Korean companies of the total

production from overseas fields.

SMV(Submerged Combustion Vaporizer)

SMVs are heat exchangers that heat water through the combustion of fuel in the water. Using tubes installed in the water, the LNG is pumped into the tubes to be gasified.

Spot Market

Apart from the typical long-term contracts of LNG trading, surpluses from production sites can be sold by the cargo unit on the spot market.

TDR (Turn Down Ratio)

TDR indicates the gap ratio in demand for natural gas between winter and summer

Tcf (Trillion Cubic Feet)

The volume of a cube equal to one trillion cubic feet

TOE (Tonne of Oil Equivalent)

A standardized unit of caloric value generated from the combustion of different energy sources converting into that of 1 ton of crude oil, 1kg of crude oil is converted into 10,000kcal basis, 1 TOE is equivalent to 42GJ or 107kcal

Unconventional Gas

Categorized into coal bed methane (CBM) or coal seam gas (CSG), shale gas, tight gas or gas hydrate according to the constituent of the layer containing gases.

Requiring different technologies to develop from the conventional gas field, these fields have been neglected for economic reasons. However, technological development and rising oil prices have brought them into the spotlight

Vent

To release natural gas into the air for the purpose of repairing facilities and/or emergencies

Awards

Sector	Awards	Organization
Sustainability Management	*Selected as a Sustainable Management and Leader Company (3 domestic companies among 44 foreign)	UN PRI
	*Joined DJSI Korea for 2 years in a row (Listed on DJSI Korea & as an excellent company in the gas sector)	Korea Productivity Center
	*Sustainable Management Society President Award (Social Responsibility Management Award)	Ministry of Knowledge Economy
	*2010 Global CSR Award (Grand Prize, Selected as East Asia 30 and Korea CSR 30)	The Hankyoreh Newspaper
	*Selected as one of the world's most admired company(6 th →4 th in the energy sector)	Fortune
Environmental Performance	*The 7 th Lohas Management Award (Excellency Awards in the energy, chemicals and heavy industries sectors)	Environment Foundation
	*Received Appreciation Plaque in the 10th anniversary of Energy Citizens' Solidarity	Energy Citizens Solidarity
Social Performance	*Social Contribution Activity Merit (Minister Award, Honam District Division)	Ministry of Public Administration & Security
	*Personnel Management Award of 2010 Korea Management Award	KMAC
Safety Management	*Korea Safety Award (Presidential Award, Incheon District Division)	The Kyunghyang Shinmun (NEMA)
	*2010 National Base System Disaster Management Evaluation (Excellent Institution Award)	Ministry of Public Administration & Security
	*2010 Crisis & Disaster Safety Management Award (Excellent Institution Award)	Ministry of Knowledge Economy

Associations

Sustainable Management Associations	Activities
UN Global Compact	Compliance with global Code of Ethics & COP reporting
UNGC Korea Network	Regional network activities of the Global Compact
Business Institute for Sustainable Development	Working-level activities for sustainable management
The Korea Business Council for Sustainable Development	CEO group activities in relation to sustainable management
B.E.S.T. Forum & B.E.S.T CEO Club	CEO and working-level activities for the practice of ethical management
The Council for the Korean Pact on Anti-corruption and Transparency	CEO activities for the practice of ethical management in the public sector

The current status of publication KOGAS Sustainable Management Report



For more information on KOGAS...

Corporate Overview	http://www.kogas.or.kr
Management Disclosure	http://www.kogas.or.kr/kogas_kr/html/notice/notice_submain.jsp
Sustainability Management	http://www.kogas.or.kr/kogas_kr/html/open/open_01.jsp
Ethical Management	http://www.kogas.or.kr/moral/
Safety & Environmental Management	http://www.kogas.or.kr/kogas_kr/html/open/open_21.jsp
Social Contribution	http://www.kogas.or.kr/kogas_kr/html/open/open_27.jsp
Gas Science Museum	http://www.kogas.or.kr/museum_in/kr/00_main/main.jsp
Bidding Info	http://bid.kogas.or.kr/supplier
R&D Division	http://www.kogas.or.kr/kogas_kr/html/about/about_17.jsp



KOGAS sincerely hopes that Busan will be able to host the 2018 WGC.

The venue for the World Gas Conference(WGC) in 2018 will be determined in Dubrovnik, Croatia on October 06, 2011.