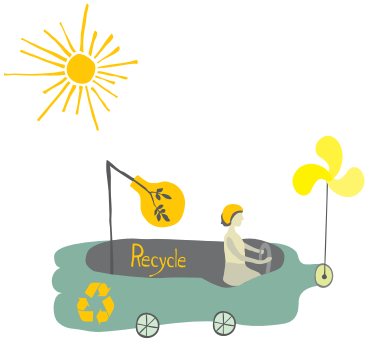
KOMIPO
Sustainability Report 2011



always ...ing

Adding our efforts and technology to resources presented by nature, we at KOMIPO create energy for future growth. With a passion that yearns for a better tomorrow, KOMIPO is always '..ing'.

beyond the border
No.1 THERMAL POWER COMPANY
KOMIPO

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Purpose of this Report

This Sustainability Report 2011 is KOMIPO's third edition report. This report is aimed to analyze direct and indirect influence on Korea economy, society and environment exerted by KOMIPO generating electricity for 12.4% (as of Dec. 2010) of domestic electricity production. And this also intends to deliver KOMIPO's efforts and outcomes transparently to all interested parties. Through this report, we analyze the current surroundings of our company to utilize opportunities and respond to risk factors in order to lay a stronger foundation for sustainable growth as a more trusted and respected organization.

Contents of the Report

This report focuses on the main factors of sustainable management as identified in the ISO26000 standard, namely economic, social and environmental. It aims to promote effective communications with stakeholders by specifically focusing on key sustainability issues and outcomes over the past two years. Based on materiality tests, the report is focused on the major issues the stakeholders are most interested.

Guidelines and Credibility

This report has been prepared in conformity with the revised G3.1 guidelines of 2011 and the G3 guidelines from the Global Reporting Initiative, while also complying with the standards of the BEST Sustainability Reporting Guidelines of Korea. The accuracy, objectivity and credibility of the report have been verified by the Institute for Industrial Policy Studies.

Reporting Period

This report presents sustainability performance and activities of the past 2 years, from January 1st 2009, to December 31st, 2010. With regard to quantitative outcomes, data from the past 3 to 4 years since 2007 has been included to show time series trends, while performance from 2011 may be partially included in discussion of qualitative outcomes and activities. This is the third edition report after its first publication in 2006, and is published biannually.

Objects and Units of the Report

This report covers KOMIPO's headquarters and its 7 organizational units: Boryeong Thermal Power Site Division, Incheon Thermal Power Site Division, Seoul Thermal Power Plant, Seocheon Thermal Power Plant, Jeju Thermal Power Plant, HaengBok Combined Heat and Power Plant and Shin Boryeong Thermal Power Plant Construction Site Office. The reference currency is US Dollar and ton, kg, kl and m^2, KW are used as the reference for quantitative data. All other units are expressed in numbers.

Additional Information

For more information, refer to the company website or contact the department in charge.

Websites for Additional Information

The following is a list of the websites presented within the report. These websites provide more specific information on the compiled content of this report.

Alio System
www.alio.go.kr

KOMIPO Official Website
www.komipo.co.kr

KOMIPO Website for Corporate Social Responsibility
www.komipo.co.kr/csr/

KOMIPO Website Supporting Mid-small Sized Enterprises
www.komipo.co.kr/JUNGSO/index.html

KOMIPO Website for Ethical Management
www.komipo.co.kr/MORAL_NEW/index.htm

KOMIPO Website for Environmental Management
http://seoul.komipo.net:8888/index.jsp

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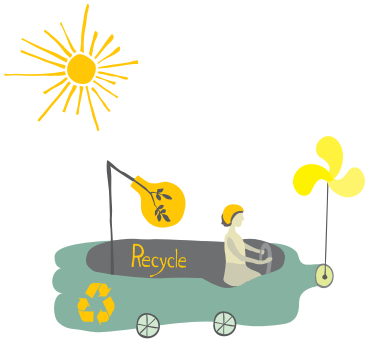

KOMIPO
Sustainability Report 2011

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"Dealing with rapidly changing business environment, KOMIPO holds up its end as a global company beyond domestic electricity industry's limits. We keep doing our best to be the world No.1 thermal power company, becoming a symbol of hopes and lights and sharing with a society by following New Vision 2011."

Dear Shareholders!

10 years have passed since the establishment of our corporation in 2001. During the decade, we have strived for the national prosperity and the affluent life for people by generating and supplying high quality electricity as the company essential duty.

In 2011, KOMIPO has entered an era of change. Our transition into a market-oriented public enterprise has inevitably put us in more fierce competition, while the rising costs due to skyrocketing international oil and natural resource prices have created a harsher management environment. There is steadily growing expectations for the public corporation to fulfill its social responsibilities in order to realize the public interest, signaling the need for new initiative. To respond to this rapidly changing management environment, and to rebuild itself as the world's best power generation company that fulfills its responsibilities as a global corporation, KOMIPO came to establish its new vision in February 2011.

The new vision, 'Beyond the Border, No.1 Thermal Power Company' symbolizes KOMIPO's aspiration to become a power plant corporation surging beyond South Korea and Asia to pioneer into the world market. Being No. 1 for KOMIPO means that we strive to hold the best economic, environmental and social values for sustainable management.

First, as the principle value of the corporation, KOMIPO has focused on making sustainable growth possible. We aim to become Korea's No.1 power generation company by 2020 by achieving a total facility capacity of 30,000MW and the facility capacity of 1,600 MW in new and renewable energy. We also aim to be Asia's No.1 by realizing 50% of our business overseas and 6% in ROIC; and World No.1 through accomplishing 45% thermal efficiency rate and 72% in facility usage rate.

Second, KOMIPO has concentrated our efforts domestically and abroad on Clean Development Mechanism (CDM) to act in accordance with the Government's "Low-Carbon Green-Growth" policy. This is part of our effort to pass down the beauty of nature and abundance in life to future generations and promote harmonized growth for the environment and humankind. Domestically, we have promoted consistent securing of Certified Emission Reductions through the RDF combined heat and power plant in Iksan and large-scale wind power projects in Gangwon and Jeju regions, fuel cells, photovoltaic power and tidal power. Our commitment for CDM projects extends abroad through hydro power in Wampu and Lampung regions of Indonesia and wind power in Namibia and the US.

Third, KOMIPO is fully committed to fulfilling its corporate social responsibility. Since 2004, our social volunteer group has been formed to practice the management of sharing and has been carrying out active contributions for the benefit of socially vulnerable groups. This year, KOMIPO will support eyesight surgery for local residents living near its power plants as another way of delivering light in the world, and fulfill its role as an eco-friendly energy company by operating the '1 company 1 village river maintenance' project and a scuba diving volunteer group. Also, as a global corporation, it will promote the enhancement of the educational environment for children by constructing an elementary school in the local district of the Tanjung Jati power plant in Indonesia.

The new vision promoted by KOMIPO cannot be completed by simply increasing its index of growth. We strongly believe that the new vision will be realized through mutual trust and communication with our employees and shareholders. During the past 10 years, KOMIPO has accomplished significant results against many obstacles. It has also strengthened capabilities to overcome the challenges of the current ever-changing management environment and other adversities. KOMIPO strives to grow to be a global corporation by not only fulfilling its original role of providing a stable electricity supply as a power generation company, but also observing its social responsibilities.

We cordially ask for your continued interest and support.

Thank you.

KOMIPO President & CEO Nam In-suk

Business Status

Korea Midland Power Co., Ltd was incorporated through the restructuring of the electricity industry in April 2001. With its objective to develop power generation resources and a stable supply of electricity, KOMIPO currently operates total 5 power plants including Boryeong Thermal Power Site Division. As of late 2010, KOMIPO now accounts for 12% of the total domestic power generation capacity, possessing 9,398MW facility in Korea. and has 2,146 employees at its domestic and overseas worksites.

Boryeong Thermal Power Site Division

Groundbreaking ceremony of the Wampu Hydro Electric Power Plant

Company Profile

Sales Revenue 2010
USD 4.24 billion

Total Assets 2010
USD 4.50 billion

Domestic Credit Rating
AAA

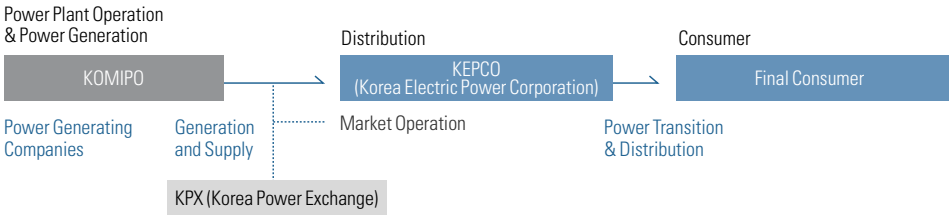
Company Profile & Business Overview 2010

| As of Dec. 31, 2010 |

Name	Korea Midland Power Co., Ltd.
CEO & President	Nam In-suk
Date Established	Apr. 2, 2001
Address	512 Yeongdong-daero, Gangnam-gu, Seoul, Republic of Korea
Major Businesses	Development of electric power resources, power generation and subsidiary enterprises
Business Sites As of Jul. 1, 2011	Boryeong Thermal Power Site Division, Incheon Thermal Power Site Division, Seoul Thermal Power Plant, Seocheon Thermal Power Plant, Jeju Thermal Power Plant, HaengBok Combined Heat &Power Plant Construction Office, Shin Boryeong Thermal Power Plant Construction Site Office

Sales Revenue	4.24 billion
Operating Profit	197 million
Net Profit	114 million
Total Assets	4.50 billion
Liabilities	2.23 billion
Capital	2.26 billion
Overseas Credit Rating	A at S&P, A1 at Moody's
Domestic Credit Rating	AAA
Facility Capacity	8,398MW _as of Jul. 1, 2011

Structure of the Electricity Market | Korea electricity market structure is composed of power generation, supply to customers and trading market connecting these 2 factors.



Category	Main Functions
KEPCO	- Construction and operation of power transition & distribution facilities - Buying & selling electricity
KPX	- Operation of electricity exchange market - Stable operation of electricity system

Seoul Thermal Power Plant Acheving
30 years of Operation with Zero Injuries

Nominated for the Power Awards

Boryeong Thermal Power Unit 3 Reaching 4,000 Days of Long Term
Trouble-Free Operation

History of Sustainable Management

Prior to Launch as a Separate Company

Jan. 1898 Hansung Electric Co.,
Korea's First Electric Power Company, Foundation

Jul. 1961 Korea Electric Power Co. (KEPCO) Establishment by Merging Choseon, Kyungseong, and Namsun Electric Companies

Jan. 1982 Renamed Korea Electric Power Corporation (KEPCO)

Dec. 2000 Enacted the Laws to Restructure the Korean Electricity Industry

2001

Apr. 2001 Korea Midland Power Co., Ltd. (KOMIPO) Foundation

Nov. 2001 Received Presidential Prize at Corporate Innovation Awards

2009

Jan. 2009 Test operation Contract for UAE Shuweihat S2 Project

May. 2009 Boryeong Thermal Power Plant Awarded 'Coal-fired Top Plant Award 2010' at the USA Power Awards

Jun. 2009 Completion of Boryeong Thermal Power Plant Unit 7,8 and Opening of Boryeong Energy World

Sep. 2009 Completion of Boryeong Small Hydro Power Plant Unit 1,2

Nov. 2009 Completion of Jeju Internal Combustion Power Plant Unit 2, Zero Rate for Major Accidents Over 27years at Jeju Thermal Power Plant

Dec. 2009 Completion of Incheon Combined-cycle Power Plant Unit 2

2010

Mar. 2010 Conclusion of Financing for Indonesia Cirebon Power Plant

Jun. 2010 Obtained Contract for Indonesia Tanjung Jati Power Plant O&M

Jun. 2010 Completion of Procedures to Improve Performance and Prolong Lifespan at the Boryeong Thermal Power Units 1, 2

Jul. 2010 Signing of the EPC Contract for Malaysia POIC combined heat and power

Oct. 2010 Boryeong Thermal Power Unit 3 Reaches 4,000 Days of Long Term Trouble Free Operation

Dec. 2010 Seoul Thermal Power Plant's 80th Anniversary and 30 Years of Injuries-free Operation

Dec. 2010 Grand Completion of Hyundai 'Green Power' Power Plant

2011

Jan. 2011 Signing of the Wind Power Joint Development Agreement in Namibia, Africa

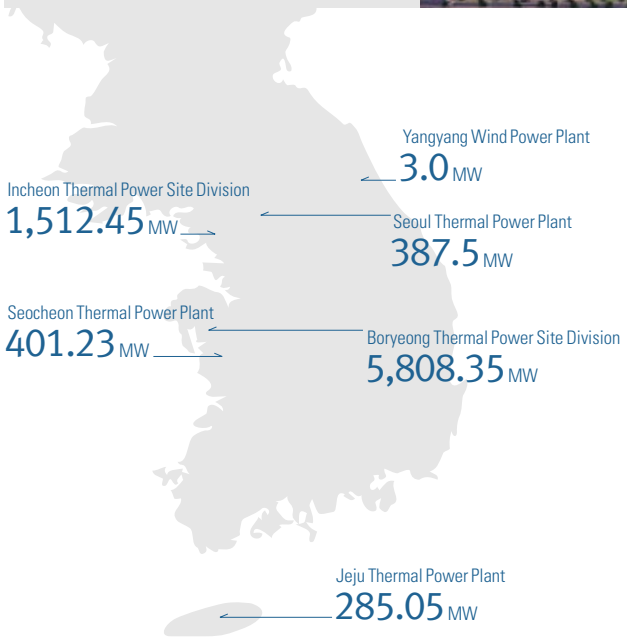
Feb. 2011 Declaration of New Vision 2020

Mar. 2011 Shareholders Agreement for O&M in Indonesian Tanjung Jati

Apr. 2011 The 10th Anniversary of KOMIPO foundation

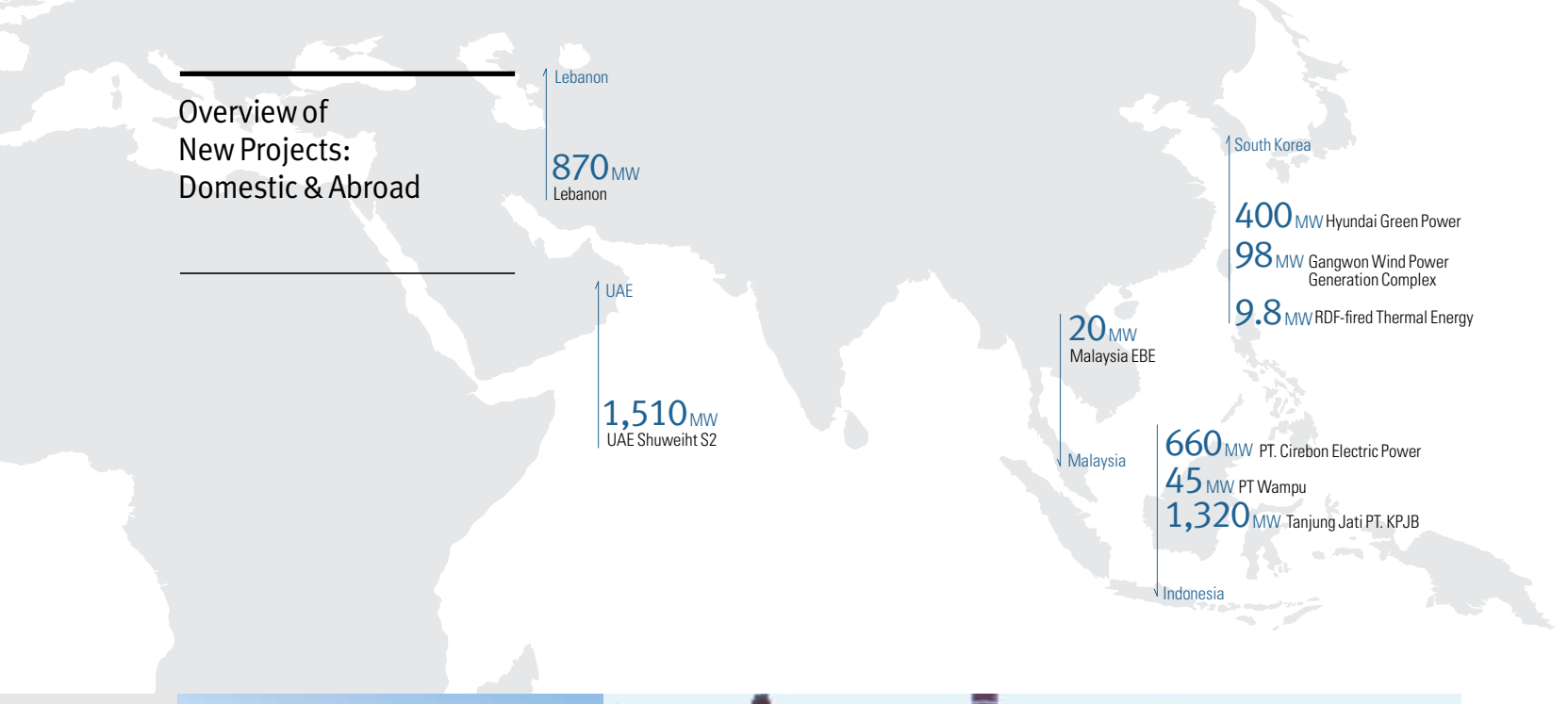
Overview of Domestic Electricity Industry

1. Boryeong Thermal Power Site Division
2. Incheon Thermal Power Site Division
3. Seoul Thermal Power Plant
4. Seocheon Thermal Power Plant
5. Jeju Thermal Power Plant
6. YangYang Wind Power Plant



Business Site	Location	Overview of Facilities	Capacity(MW)
Boryeong Thermal Power Site Division	Boryeong-si, Chungcheongnam-do	Boryeong Thermal P/P #1~#8	4,000
		Boryeong C.C. P/P #1~#4	1,800
		Boryeong Small Hydro Power #1~#6	7.50
		Boryeong Solar PV #1, #2	0.55
		Boryeong Fuel Cells	0.30
Incheon Thermal Power Site Division	Seo-gu, Incheon	Incheon Thermal P/P #1, #2	500
		Incheon C.C. P/P #1, #2	1,012.45
Seoul Thermal Power Plant	Mapo-gu, Seoul	Seoul Thermal P/P #4, #5	387.50
Seocheon Thermal Power Plant	Seocheon-gun, Chungcheongnam-do	Seocheon Thermal P/P #1, #2	400
		Seocheon Solar PV #1, #2	1.23
Jeju Thermal Power Plant	Jeju-si, Jeju	Jeju Thermal P/P #2, #3	150
		Jeju GT #3	55
		Jeju Internal Combustion #1, #2	80
		Jeju Thermal Solar PV	0.05
Yangyang Wind Power Plant	Yangyang-gun, Gangwon	Yangyang Wind P/P #1, #2	3.00

Overview of New Projects: Domestic & Abroad



1

2

3

4

1. Gangwon Wind Power Plant
2. Tanjung Jati PT. KPJB
3. PT. Cirebon Electric Power
4. Hyundai Green Power

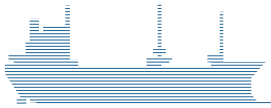
New Project Overview		Location	Project Term	Capacity(MW)
Hyundai Green Power	Hyundai Steel Byproduct Gas Power generation	Dangjin-gun, Chungcheongnam-do	Operation : Jan. 2011~Dec. 2035	400
Gangwon Wind Power Generation Complex	15% of Share Investment	Pyeongchang-gun, Gangwon-do	Operation : Sep. 2006 ~ Aug. 2035	98
RDF Thermal Energy	Iksan second industrial complex	Iksan-si, Jeollabuk-do	Construction : Jun. 2010 ~ Jan. 2012 Operation : 30 years since completion	9.8
Lebanon	Diesel Combined-Cycle Plant	Lebanon	Operation : Mar. 2006 ~ Feb. 2011	870
PT. Cirebon Electric Power	Coal-fired power plant	Indonesia	Construction : May. 2008 ~ Aug. 2011 Operation: 30 years since completion	660
PT Wampu	Hydro Power Plant	Indonesia	Construction : Dec. 2010 ~ Jun. 2013 Operation: 30 years since completion	45
Tanjung Jati PT. KPJB	Coal-fired Power Plant	Indonesia	Construction : Jul. 2010 ~ Jan. 2012 Operation: 22 years since completion	1,320
UAE Shuweiht 52	Combined-Gas Comissioned for trial operations	UAE	Trial Operation : Jan.2010 ~ Nov.2011	1,510
Malaysia EBE	Combined-Heat Plant	Malaysia	Construction : Jul. 2010 ~ Aug. 2012 Operation: 22 years since completion	20

3 Main Features of Sustainable Management

KOMIPO promotes sustainable management based on its corporate mission to place human and nature first in leading the development of the energy industry. As a leader in the power generation industry with its stable supply of electricity, KOMIPO continues to stride forward beyond the domestic arena and Asia to become a pioneer in the global market.

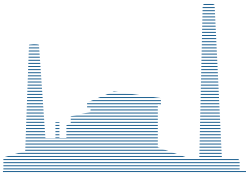
Overseas Projects

KOMIPO is actively pioneering the overseas market with its cutting-edge power plant operation and technology knowhow. KOMIPO has been making a great leap to be an international energy company by providing various professional services ranging from plant construction, O&M to technology consulting.



Resource Development and Fuel Procurement

In response to the aggravation of business circumstances, such as growing recession in domestic power generation market, KOMIPO has been seeking new engines of growth by establishing strategies for new business projects and diversifying development of resources and procurement of fuel. Such effort has helped the company to expand its capacity for sustainability.



Domestic Power Plants Construction

As the leader and the stable supplier in the power generation industry, KOMIPO has been taking initiative to create future growth engines through the construction of new power plants in the forms of thermal, combined-cycle, pumped storage, internal combustion, combined heat power, small hydro power, wind power and solar PV.

Bird's eye view of Ganghwa tidal power site

Overseas Projects

Q1

Why have business overseas projects gained greater importance?

After 2020, it is predicted that the growth rate of demand for domestic electricity will drop to below 1%, while power generation using fossil fuels (coal, petroleum, etc.) will gradually decrease and dependency on nuclear power and renewable resource energy will continue to increase. In comparison to other power generating companies, KOMIPO lacks competitiveness due to its vast possession of outdated power generating facilities. Business projects are actively being pursued abroad as a solution to overcome such shortcomings and improve the current business environment.

Q2

What has been currently accomplished overseas?

The following shows current projects abroad underway, led by dispatched KOMIPO employees.

Nation	Name of Project	Facility Capacity	Cost(USD)	Current Status
Indonesia	Cirebon Thermal Power Plant	660(MW)	850 million	Concluded the procurement of funds (Mar. 2010)
	Operation of the Tanjung Jati Power Plant	1,320(MW)	400 million	Secured the contract (Oct. 2010)
	Wampu Hydro Power Plant	45(MW)	180 million	Concluded the agreement to purchase electricity (Apr. 2011)
UAE	Shuweihat S2 Commissioned Trial Operation Business	1,510(MW)	3,400 million	Secured the contract (Jan. 2009)

Cirebon Thermal Power Generation Project

Tanjung Jati Power Plant Operation

Wampu Hydro Power Plant

UAE Power Plant

Q3

Which factors take priority when KOMIPO initiates overseas projects?

The most considered factor when taking on projects abroad is profitability. However, creating jobs through businesses and joint advancement with domestic corporations are also equally important points to be considered. The main equipment supplier of the Cirebon project is Doosan Heavy Industries, while Daewoo Engineering is participating in the Wampu project. Therefore, KOMIPO actively pursues the overseas projects in which direct participation in management is possible as a shareholder through investments, and is developing and carrying out projects to commercialize power plant operation methods and related technologies.

Q4

What is the long term vision of KOMIPO regarding overseas projects?

KOMIPO declared its new corporate vision in February 2011. 'Beyond the border No.1 Thermal Power Company' entails going beyond the domestic arena and Asia to pioneer in the world market, and being domestic No.1 in terms of capacity, Asia No.1 in terms of business, and World No.1 in terms of power generation technologies. Following this vision, KOMIPO has coordinated a business portfolio focusing on long-term expansion abroad, stemming from current domestic projects. In the course of realizing this plan, KOMIPO will step forward as a global power generation company, operating 15,000MW abroad.

Q5

Then, what are the KOMIPO's driving strategies to pursue overseas projects?

The specific promotion strategy for abroad projects to realize the dream of becoming the "No.1 Thermal Power Company" is as follow. The first is expansion of obtaining contracts. KOMIPO aims to run a local office in every continent by 2020 by securing the overseas position in its Indonesia Project in order to use this position as a step for expanding the company's foreign projects. The second is building a project support system. KOMIPO plans to hold a regular meeting with foreign offices' CEOs for information exchange and technical support for the goal of efficiently dealing with changes of foreign situation. The third is reinforcement of marketing capacity. By increasing contact opportunities with related businesses through participation in foreign power generation trade fairs and exhibitions, advertisement activities will be strengthened to create business opportunities abroad. Also, the power generation company will raise its status through a foreign important figure invitation and pursuing joint projects with developing countries.

Resource Development and Procurement of Energy Supplies

Q1

How much fuel does KOMIPO use to generate electricity?

The amount of fuel used to generate electricity takes up to 70% of total expenditure. Fuel for power generation is purchased based on diverse analysis of the market and prediction of demand for electricity. The following shows the types and amount of fuel used.

Sector	Fuel Type
Boryeong Thermal	Bituminous Coal
Boryeong Combined-Cycle	LNG
Seocheon Thermal	Bituminous Coal, Anthracite Coal, Oil
Seoul Thermal	LNG
Incheon Thermal, Incheon Combined-Cycle	LNG
Jeju Thermal	Oil

| As of 2010 |

Bituminous Coal	13,991	thousand tons
Anthracite Coal	671	thousand tons
LNG	2,500	thousand tons
Oil	321	kl

Q2

How is fuel for power generation transported, and which country is bituminous coal imported from?

In the case of Boryeong Thermal, bituminous coal is transported from abroad via ship. The anthracite coal used at Seocheon Thermal is transported via ship and train. Oil is also transported via ship, while LNG is supplied through pipelines. The greater part of bituminous coal used by KOMIPO is imported from Australia and Indonesia. In addition, imports are made from regions such as China, Russia, Canada, Republic of South Africa, the United States and Colombia.

Q3

What efforts are being made on critical matters such as efficient purchase of fuels and reduction of fuel costs?

A master plan has been drawn up to reconsider the efficiency of the overall process (purchase, transport, storage management) in acquiring fuel. Benchmarking of global corporations is used to develop new purchasing techniques, while experts in each field have been appointed to a panel in order to actively undertake an innovation program to increase competitiveness in acquiring bituminous coal (TDR). Based on the competitive technology acquired from power plant operation, Boryeong Thermal has reduced the fuel expense by expanding the standard scale of combustible bituminous coal, while Seocheon Thermal has cut the fuel expense by minimizing the use of oil through securing bituminous coal optimal for the facilities. Also, domestic transportation cost has been decreased by optimizing the bituminous coal shipping portfolio for Boryeong Thermal and developing an alternative port to reduce cargo costs for Seocheon Thermal.

Q4

What steps have been made for LNG purchase?

According to Korea gas business enhancement policy, KOMIPO has been preparing to import a portion of LNG directly from abroad which being purchased from Korea Gas Corporation. In order to successfully realize direct acquisition of LNG, KOMIPO has strengthened the cooperation with domestic and foreign energy companies in order to secure LNG suppliers. Negotiations are underway with supplying companies with the goal of concluding an LNG direct acquisition agreement within 2011, while an LNG infrastructure use contract is being sought with related companies.

Q5

What projects and activities are being taken place to develop overseas resources?

The company has pursued foreign resource development projects for a stable supply of bituminous coal and making a provision for increasing price. Annual 625,000 tons of bituminous coal has been procured through joint investments with domestic companies such as KEPCO and KORES in the form of share investment at Australian Mulaven Coal Mines in 2008. Also, overseas resource development projects have been pursued too in Indonesia and Russia.

Domestic Power Plant Construction

Q1

What is the significance of constructing power plants in the electricity industry, and what has been the role of KOMIPO in this area?

Securing the capacity to supply electricity has emerged as an imperative issue due to increase in demand for electricity accompanied by rise in standard of living. Meanwhile, no short-term solution exists in the event of electricity shortage due to the lengthy amount of time required to construct a power plant. From a mid to long term perspective, power plant construction must proceed without complications through accurate prediction of future electricity demand. Currently, KOMIPO possesses facilities with the capacity to supply approximately 11% of domestic electricity. It is also is striving to fulfill the needs of customers according to the government's energy supply plan by meeting the ever increasing demand for electricity through power plant construction.

Q2

What are KOMIPO's main strategies in carrying out power plant construction projects?

While the capacity of facilities is of a similar level to other power generating companies, KOMIPO faces disadvantageous management environment due to its possession of outdated and high cost power plants. To address this problem, a midterm development plan of power resources over 5 years was established in 2009 to resolutely close down outdated power generation facilities. A mass-scale structural enhancement was also implemented by constructing lower-cost, higher-efficiency power plants. This resulted in a reduction of outdated facilities (of over 20 years operation) from 39.3% of total capacity in late 2007 to 27.2% in late June 2011, an improvement of 12.1%. In addition, Shin Boryeong Unit 1 and 2 and the Haengbok combined-heat power plant construction are in their preparatory stages. By the end of this year, the scale of power plants in construction stage is expected to reach the capacity of 2,965 MW which is the biggest among domestic thermal power plant companies.

[Unit : MW, %, %p]

Company Name	As of late Dec. 2007			As of late Jun. 2011			Fluctuation (F-C)
	Total Capacity (A)	Worn-Out Facilities (Over 20 years)		Total Capacity (D)	Outdated Facilities (Over 20 years)		
		Capacity (B)	Shares (C=B/A)		Capacity (E)	Shares (F=E/D)	
KOMIPO	7,499	2,948	39.3	8,398	2,288	27.2	△12.1
KOSEP	6,598	1,974	29.9	8,375	1,974	23.6	△6.3
KWP	7,682	1,400	18.2	8,404	1,400	16.7	△1.5
KOSPO	7,366	400	5.4	9,238	400	4.3	△1.1
EWP	8,801	2,300	26.1	8,812	2,300	26.1	-
Total	37,946	9,022	23.8	43,227	8,362	19.3	△4.4

* This standard is subject to exempting the pumped storage facilities transferred to Korea Hydro and Nuclear Power Corporation from the Thermal power plant as of 1st January 2011.

Q3

What are the main features of construction projects pursued by KOMIPO?

KOMIPO's current projects are characterized by existing within the same category, namely the shift towards low cost power generation. For example, KOMIPO is currently pursuing the construction project of the Incheon Combined-cycle Unit 3 in which the outdated facilities of Incheon Thermal Unit 3 and 4 are being closed down in order to transfer the combined facility Unit 1 operating at Boryeong to the same location. Being the first project of its kind in the world, the transfer project of large-scale power generation facilities is providing new opportunities for construction of new power generation facilities in Boryeong. Meanwhile, construction of the Shin Boryeong Unit 1 and 2 is currently being carried out as a low cost large scale power generation facility.

Construction of the Shin Boryeong Unit 1, 2

Construction of the Incheon Combined Unit 3

Q4

Which construction project is most significant to KOMIPO?

Recently, in terms of construction projects, power generation companies have been concentrating their efforts in securing low cost bituminous coal power plants for profitability, Also, Shin Boryeong Unit 1.2, which is reflected in the government's 5th Basic Electricity Demand & Supply Plan, is in its preparatory stages to start construction. Shin Boryeong Unit 1.2 will be constructed to the capacity of 1,000 MW as the largest domestic thermal power plant and expected to take on the role of frontrunner for exporting abroad after its successful commercialization as a model project promoted by the Government's R&D policy measures. On the other hand, the construction of the Seoul Combined Power Plant, which is in its planning stages, will be the first large-scale power plant to be constructed underground in the world. After its completion, it will be a new landmark displaying the co-existence of energy and culture with the creation of a nature park on the above ground.

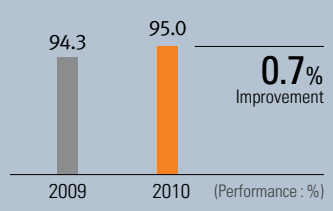
신성장의 가치로 새로운 미래를

A New Future with the Value of New Growth

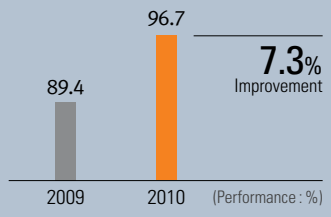
Governance Structure & Sustainable Management

Vision	Heightening management efficiency through advancement of the governance structure
Strategy	Operating a Board of Directors that meets the needs of the management environment, expanding the non-standing directors' support program
Issue	Strategy for sustainable management, Communication with stakeholders
Performances	Composing a Sustainable Management Committee within the Board of Directors, Increasing satisfaction in the non-standing director support program
Plan	Vitalization of the Non-standing director policy proposals, Development of non-standing director capabilities
Management Team	Strategy & Planning Team

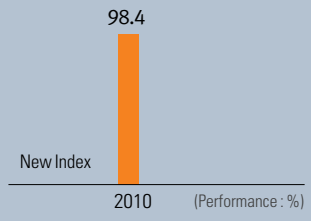
Evaluation of Management of the Board of Directors



Evaluation of Activities of the Board of Directors

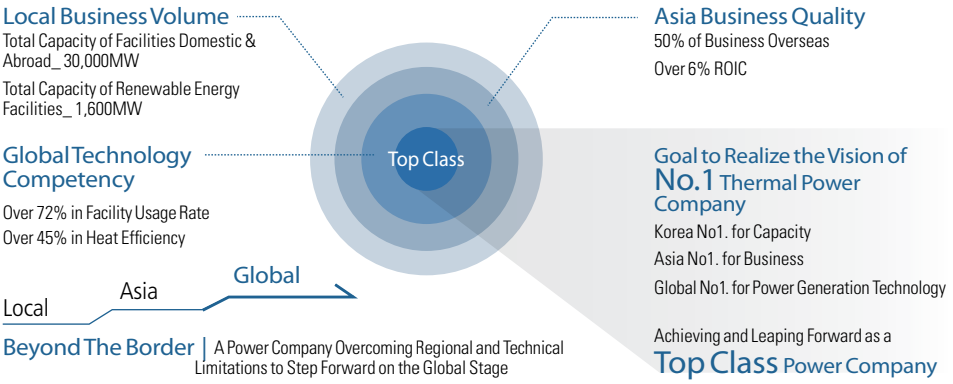


Support for the Board of Directors



Corporate Vision

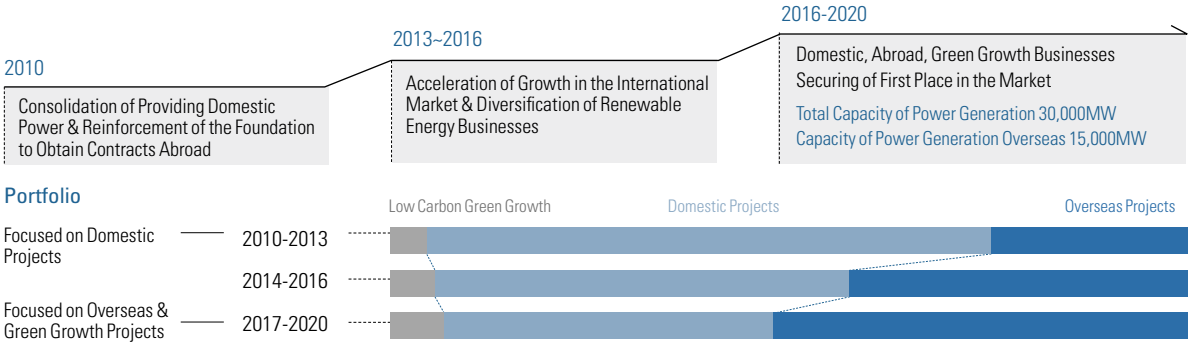
KOMIPO strives to realize the corporate ideology of "putting humankind and nature first, leading the way in the development of the energy industry" and has set its vision for the next decade as "Beyond the Border, No.1 Thermal Power Company". We aim to become No.1 in Korea for capacity, No.1 in Asia for business and No.1 in the World for power generating technology by 2020.



Vision Framework

Mission	Putting Humankind and Nature First, Leading the Way in the Development of the Energy Industry			
Vision	beyond the border No.1 THERMAL POWER COMPANY			
Vision Goal	Korea No.1 - Total Facility Capacity 30,000MW - Facility Capacity of Renewable Resources 1.600 MW	Asia No.1 - 50% of Business Overseas - Over 6% ROIC		Global No.1 - Facility Usage Rates 72% - Heat Efficiency 45%
Mid& long-Term Strategic Goal	Securing of Leadership in Domestic Power Generation	Diversification of Fields in the International Market	Green Growth	Establishing Global Management Systems
Mid & long-Term Strategic Challenge	- Procurement of new power generation facilities - Securing dominance in the competition to procure fuel - Consistent innovation of O&M - Successful advancement into wholesale business of LNG power generating	- Expansion in the domain of winning contracts overseas - Capacity to create business profits - Construction of a business support framework - Reinforcement of marketing capabilities in creating business	- Selection & concentration on core strategic industries - Selective development of potential business projects - Successful carrying out of Solar PV - Capability to respond to climate change	- Fostering global talent - Constructing efficient R&D capabilities - Strategic Financial Management - Building a foundation for Sustainable Management

Mid & Long-term Roadmap for Realization of the Vision | KOMIPO has established a long term portfolio changing its current course from domestic businesses to overseas and green growth businesses to promote the company's sustainable growth and eco-friendly business activities.



Governance Structure

The board of directors builds an advanced governance structure by encouraging non-standing directors participating in management for rational decision making system with disclosure of decision making processes and results, operating non-standing director meeting and subcommittee within the board of directors.

Shareholders and Composition of Shares

In accordance with the government's electricity industry restructuring plan, KOMIPO was established as a spinoff of KEPCO in 2001, and KEPCO holds 100% of shares. In January 2011, KOMIPO was designated as a "market oriented public enterprise" by the government, fulfilling the role and functions of a public enterprise.

Composition of the Board of Directors

The company's Articles of Incorporation stipulate that there be more than three and less than fifteen directors, of which more than half must be non-standing directors. In accordance with the articles, the chairperson of the board must be an elected non-standing director from among the existing non-standing directors. Currently, a total of 7 directors exist including the chairperson, with 4 non-standing directors and 3 executive directors including the CEO. The board of directors operates according to the rights and obligations of directors and boards, determined by the Commercial Act and the Act on the Management of Public Institutions of the Republic of Korea, and by the Company Regulations regarding the Articles of Incorporation and the operation of the board members.

Member Composition of Board of Directors

Name	Expertise of Area	Status	Profile
Nam In-suk	Administration	President & CEO	Chief of Korea Agency for Technology and Standards
Chung Chang-kil	Electricity	Management Planning Div. Vice President	Director of Planning Department
Lee Jae-koo	Electricity	Power Business Div. Vice President	Director of Boryeong Thermal Power Site Division
Jang Young-jin	Electricity	Non-standing Director	KEPCO Power Business Div. Vice President
Cho Sung-pyo	Civil Engineering	Non-standing Director	Head of the KHNP Radioactive Waste Technology Center
Choi Ki-sung	Administration	Non-standing Director	Representative of the Inter-Korean Red Cross Talks
Song Jae-kwon	Administration	Non-standing Director	Chief of the Presidential Security Service

Internal members: 3 persons / External members: 4 persons (electricity, administration, etc.) / Chairperson: elected non-standing director

Sustainable Management Committee

Chairman: President

Members of the Committee: 6 members including management planning division & power business division vice presidents, and 4 non-standing directors

Sub Committee

Committee	Chairman	Members
Management Strategy	Director Choi Ki-sung	2 persons
Ethical Management	Director Song Jae-kwon	2 persons
Environmental Management	Director Cho Sung-pyo	2 persons

Appointment of President and Board of Directors

According to the Act on the Management of Public Institutions, Board Directors are appointed by recommendation of the Committee for the Recommendation of Board Directors composed of external figures and non-standing directors, and are reviewed by the Committee for Management of Public Institutions. Meanwhile, the CEO & President is appointed by the President of South Korea, under recommendation of the Minister of Knowledge Economy. Non-standing Directors are appointed by the Minister of Strategy & Finance, who selects members through an impartial and professional deliberation process.

Improvement of the Management of the Board of Directors and Expansion of the Roles of Non-standing Directors

A systematic support framework is being established for non-standing directors through orientations and on-site visits for newly appointed non-standing directors, designation of Board Supporters to support the management activities of non-standing directors, operation of an exclusive website and provision of management information. The function of policy deliberation has been reinforced by installing a sustainable management committee within the Board of Directors. Such a support framework and operation system for board directors allows non-standing directors to fulfill their roles as overall supervisors of management activities by deliberating and making decisions on the establishment and implementation of management goals, budgets, operation plans and investment plans, through regular and provisional board meetings.

Inspection of the Worksite by Non-standing Directors

Exclusive Website for Non-standing Directors

The Board of Directors Organization

Board of Directors		
Sustainable Management Committee	President Recommendation Committee	Auditors' Committee (planned)
Management Strategy Subcommittee	Management Strategy, Deliberation of Budget and Investments, Sustainability Report	
Ethical Management Subcommittee	Transparent Management, Cooperation with Local Communities, Labor-Management Cooperation, Social Contribution etc.	
Environmental Management Subcommittee	Environmental Management, Response to Climate Change	
Non-Standing Director Meeting	The Board of Directors Secretariat	

Support System	Control	Decision Making	Reinforcing the Capabilities of Non-Standing Directors
	- Operation of the Non-standing Director meeting - Reinforcement of Articles of the Corporation and regulations of the Board of Directors - Regular Report on Business Results	- Committees operation within the board of directors - Pre-explanation of integrated non-standing Directors - Operation of Board Supporters	- Provides management information & education opportunities - On-site inspection of the electricity industry - Evaluation & feedback of activities & support
	The Board of Directors Secretariat, The Board of Directors Website, Company Intranet VPN, Recommendations for the Board of Directors Operation		
Evaluation System	Operation of the Board of Directors	Board of Directors Activities	Support for Board of Directors
	- Performance dealing with agenda - Evaluation of operation performance	- Participation rates in the board of directors, etc, - Evaluation of working activities	- Provision of opportunities for on-site management - Satisfaction of Board of Directors

Efforts to Improve Performance of the Board of Directors

The performance evaluation system of the board of directors is focused on the three main areas of operation, activities and support. Operation performance of the Board of Directors, degree of participation by individual non-standing directors, and support to the company and satisfaction of non-standing directors are evaluated to comprehensively assess their contributions to performance improvement.

Evaluation Categories	Subsection	Performance 2009		Performance 2010		Note
Management Evaluation of the Board of Directors (30%)	Number of times hosted	10	94.3	12	95.0	
	Operation of subcommittees	5		5		
	Non-standing Director Meeting	-		8		
Activity Evaluation of the Board of Directors (40%)	Attendance of Board of Directors(%)	95	89.4	100	96.7	
	Attendance in Work-related Activities(%)	85		80		
	Rate of Modifications process(%)	12.1		19.2		
	Self evaluation(%)	85		85		Surveys of non-standing directors
Support Evaluation of the Board of Directors (30%)	Prior explanation of items(%)	100	-	100	98.4	Rate of Prior Explanation
	Satisfaction with support(%)	80		86.3		Surveys of non-standing directors
	Provision of opportunities for on-site management	4		5		On-site inspection

Performance evaluation of the CEO involves management assessments from the government in the three categories of leadership and responsible management; efficient management; and main projects. Management contracts are concluded with the Minister of Knowledge and Economy, according to the Evaluation Manual for Management Performance by Public Institutions provided by the Ministry of Strategy and Finance. Standing Directors conclude management contracts with the CEO and undergo a performance evaluation according to an internal assessment system.

Sustainable Management Issues

Defining and Communicating with Stakeholders | As expectations for corporate social responsibility rise, corporate social responsibility is no longer a matter of choice for the growth and development of the company. Stakeholders are categorized into 6 groups according to the main economic, social or environmental influence they have on the management activities of the company, namely: employees, the government & KEPCO, members of the local community, environmental groups, partner companies and customers.

Categories of Stakeholders

Main Issues and Communication Channels with Stakeholders | KOMIPO provides an array of communication channels on the main issues of the company, in order to consistently build trust with stakeholders. Collected shareholder opinions are reflected in actual management practices and the following shows the main results.

Category	Main Issues	Communication Channels
Employees	Welfare of employees, Balance of work and life	Management philosophy lectures by the CEO, Website
	Fostering of talent, Stabilization of employment	Labor-management Council, Ombudsman system
Government/KEPCO/ Shareholders	Financial performance, Price competitiveness	General meeting of shareholders, Board of directors
	Sustainable management strategy, Communication with stakeholders	Company presentations, Parliamentary Inspection
Local Society	Social contribution, Contribution to the development of the local Community	Roundtable discussions with local residents, Councils for local development, etc
Environmental Groups	Environmental management system, Response to climate change	Website, Environmental newsletters, etc
Partner Companies	Support for win-win cooperation, Fair trading relations with partner companies	Roundtable discussions with partner companies, Satisfaction Survey, etc
Customers	Transparent management, Stable supply of electricity	Public announcements, Sustainability report, etc

Interviews with Stakeholders

KOMIPO Sustainable Management Report 2011

Social

Shin Dong-woo
NANO inc. CEO

KOMIPO has reaped a common good for both shareholders and society in creating company profits as a public enterprise. During the past decade, it has created positive performance with unique supports and long-term win-win cooperation for joint growth. I strongly believe that KOMIPO can become a model of sustainable management required in this era, by showing that pursuing the vision for the common wealth for last decade turned out KOMIPO's assets and profits.

Environment

Ha Ji-won
Member of the Presidential Committee on Green Growth,
Chief Executive of Ecomom Korea

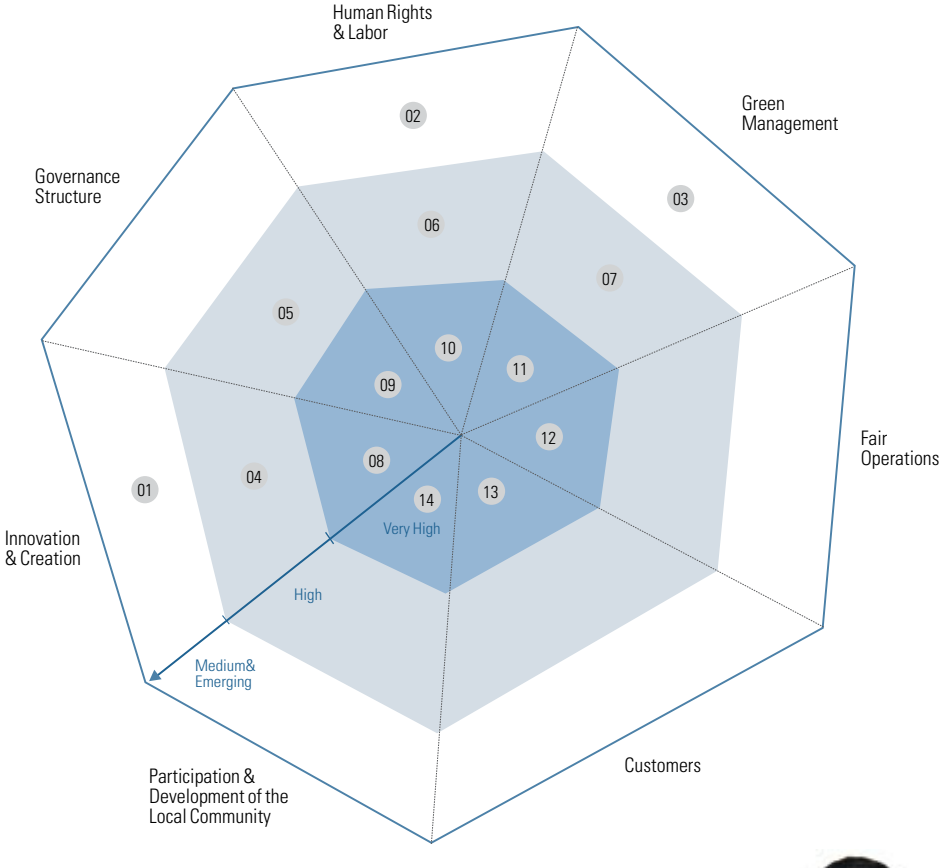
For a public enterprise to accomplish sustainable growth, it is essential to consider economic, social and environment issues. KOMIPO will definitely become a respected public enterprise carrying out a positive role for Korea and local communities with activities such as making a park for people on the place created by Seoul Thermal Power Plant Underground Installing, concentrating its efforts on new&renewable energy and operating various social contribution programs about the environment.

Materiality Test Results

A materiality test is a method of analyzing main issues for stakeholders in order to identify the issues of greatest interest to stake holders, and then use this analysis to identify priority issues for the organization.

KOMIPO aims to utilize the Sustainability Report 2011 as a means to analyze and report the major sustainable management issues of interest to its stakeholders and prioritize them. To such ends, main issues have been identified through the <IPS Materiality Test™> in seven steps. The 30 main economical, social and environmental issues that KOMIPO faced over the past 2 years will be examined through analyzing KOMIPO's internal policy, direct and indirect economical effects, regulations and laws, examination of internal and external issues on shareholders' participation and their interview, benchmarking of outstanding international power companies, researching on media coverage on KOMIPO and identifying major sustainable management issues of KOMIPO's TFT. This materiality test will focus on issues that have the greatest significance in terms of sustainability and communicate with shareholders and reflect them in KOMIPO's future strategies and policies.

KOMIPO Materiality Test 2010



Medium & Emerging

- 01 Innovative Management, Credibility
- 02 Labor-Management Relations
- 03 Construction of Eco-Friendly Low Cost Energy, Response to Environmental Hazards

High

- 04 CEO Leadership, Risk Management, Expansion of Domestic Businesses, R&D
- 05 Corporate Governance Structure
- 06 Safety in the Workplace, Fair Treatment
- 07 Preserving the Environment, Reduction of Emission of Environment Pollutants, Renewable Energy

Very High

- 08 Financial Performance, Price Competitiveness
- 09 Communication with Stakeholders, Sustainable Management Strategy
- 10 Welfare of Employees, Balancing Work & Life Fostering Talent, Job Security
- 11 Environmental Management System, Response to Climate Change
- 12 Transparent Management, Support for Win-win Cooperation, Fair Relations with Cooperating Companies
- 13 Stable Supply Electricity
- 14 Social Contribution, Contribution to the Development of the Local Community

Economy

Lee Myung-whan
IBS Consulting. CEO

Based on its past performance in pioneering of new markets abroad, KOMIPO is creating opportunities to vitalize the markets of developing countries by actively expanding business abroad and promoting business. KOMIPO needs to reduce the risks it faces by putting efforts to improve on its declining productivity due to aging facilities, and reinforce its core capabilities by focusing on eco-friendly and renewable energy resources. KOMIPO also should expand its domain in both domestic and overseas market by consistently exploring new markets and securing new engines of growth, while reinforcing its capability for procuring international financing in order to jointly increase profitability and growth.

인재와 인권이 존중되는 일터

A Workplace Appreciating Talent and Respecting Human Rights

Human Rights & Labor

Vision | Creating a great place to work through effective human resource management

Strategy | Fostering global talents and mutual trust in labor-management relations, A workplace free from safety hazards

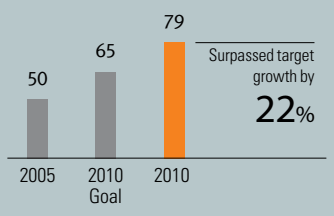
Issue | Equal Employment and Job Security, Developing talent, Securing labor-management relations founded on trust, Employee welfare / work - life balance

Performances | Certification as a family friendly company, Nominated as one of the best workplace, The best labor-management culture company

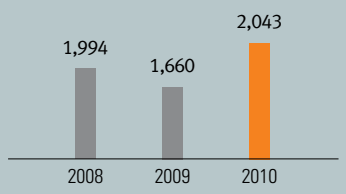
Plan | Creating an advanced labor-management culture, Retirement pension system

Management Team | Labor Relations Team, Organization & Human Resources Team

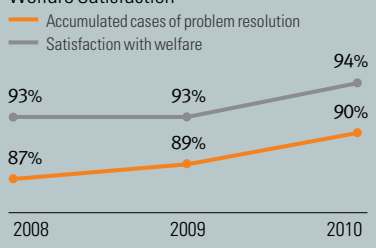
GWP Index (Unit_Point)



Investment on Trainning per Employee (Unit_USD)



Welfare Satisfaction



HR Management
Practicing Social Equity

Gender Equality

KOMIPO provides equal opportunities for its organizational members to fully perform their potential and talents regardless of gender. From the course of hiring to education and promotion, any discriminatory factors are eliminated to allow employees to maximize their performance and realize their potential through their work. Through the adoption of a female employment target system, we attempt to increase the entry of female into the job market and we are striving to provide a stable workplace through resolution of employee complaints and enhancement of working environments. This has resulted in a growing trend of female employment for the past 3 years, with a total of 161 female employees constituting 7.5% of the total workforce as of late 2010.

Employment Status

Category	2008	2009	2010
Number of Employees(Persons)	2,268	2,208	2146
Female Employees(Persons)	161(7.1%)	160(7.25%)	161(7.5%)
Work Transfer Rate due to Child Birth	0%	0%	0%
Average Consecutive Working Years(Years)	15.5	16.2	16.8

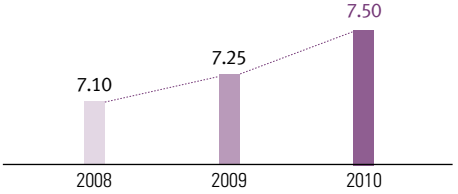
Ratio of newly-employed female workers(2001-2010): 16.3%

Preferential Treatment to Female Employees

1. Adoption of a Female Employment Target System
2. Resolution of Employee Complaints
   Elimination of long distance work sites for employers married within the company
3. Enhancement of the Working Environment
   Child-nursing facilities installed at every worksite

Women Employment Rate

| Unit : % |



Ratio of newly-employed female workers(2001-2010): 16.3%

Expansion of Employment for the Socially Marginalized

Through methods of affirmative action in the form of separate recruitment and bonus points in the case of new recruitment, the physically-challenged have been employed as a priority, at above 2.6% from 2008 to 2010, which surpasses the government's obligatory employment level of 2.3% (standard requirement for public institutions.) All discriminatory factors in the designation, deployment, transfer and promotion process have been strictly eliminated, in order to remove any potential discomforts or disadvantages for the physically-challenged. In the assignment of positions, the degree of the disability, personal aptitudes or desired duties are considered to provide optimal positions, while more satisfactory working environment are being fostered through prioritized granting of residence, education and training opportunities. Also, according to the "protection guidelines for foreign workers", KOMIPO ensures no unfair treatment in the employment and working environment of foreign workers within KOMIPO and its related investment agencies and partner companies..

Wang Hui China (Born in 1982)

Wang Hui majored in Engineering in China and started working in a boiler manufacturing firm in Korea. Her work skills as well as good knowledge in Korean language and culture were well recognized when she was hired to work at Hyundai Green Power in September 2007 until September 2010. The boilers used at Hyundai Green Power are manufactured in China, allowing Wang Hui to do duties related to managing technicians at the boiler manufacturing company (CWPC). Her expertise in boilers was well demonstrated in her work performance while she also took on a role as an interpreter during meetings and in her management duties. We anticipate that her close relationships with colleagues will also result in great business network for KOMIPO in the future.

Model Employee & Talent Cultivation System

Model Employee

To realize its corporate vision of "Beyond the border No.1 Thermal Power Company", KOMIPO has identified four major strategies, namely: procurement of leadership in domestic power generation industry; diversification of overseas business areas abroad; low carbon green growth; and construction of a global management system. Also, to implement these 4 major strategies, and to reflect requirements for fostering talent, we set the goal for model employee as "Excellent Value Creators"(experts who can create new values for the organization) and by setting the 3 following subcategories of talent, which express the strong will of KOMIPO to foster global talent well balanced with expertise.

Model Employee of KOMIPO

Goal of Talent Cultivation	'Excellent Value Creator' Experts creating new values for the organization		
Model Employee	Open-minded employees constructing a culture of mutual respect through trust and harmony	Creative employees pioneering a new future with passion and expertise	Proactive employees leading change and innovation not being tied to the present

Talent Cultivation Strategy

To realize talent according to our ideal representation, a systematic education program has been established and has been implemented for all of our employees. Education categories have been divided into common capabilities, leadership, global capability and professional duties, and by matching with required capabilities according to employees' rank, we allow employees to steadily progress in required capabilities at each stage of promotion.

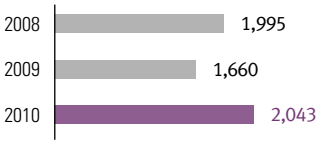
Category	Common Capabilities			Leadership			Global		Professional Duties	
1st Rank				CEO Course	1st and 2nd Rank Promotion Course					
2nd Rank				Organizational Leadership Course		Interdisciplinary Courses at Domestic Universities				
3rd Rank	Liberal Arts Lectures	Vitalization of the Organization	Self-Development Course	Middle Manager Leadership Course	New Manager Leadership Course				Power Plant Education Center, V Academy, Boryeong Training Center, Education at Korea Power Exchange	
4th Rank				Self Leadership Course			Overseas Business Academy	Advanced Overseas Business Courses		Cyber Education on Duties
New Employees				New Recruitment Training Course	Third Year of Employment Course					

Professional Spirit of All Employees

To foster experts leading the future electricity industry, customized self development opportunities are broadened through the separate operation of power plant training groups, internal MBA courses, and evening graduate schools. Also, through the 'change & innovation expert education' program, participated by all levels of the employees, changes in the rigid corporate culture is being sought through smooth communication across ranks. Additionally, through consistent increase in investments on training, we are increasing the capabilities of all employees.

Investments on Training per Employee

| Unit: USD |



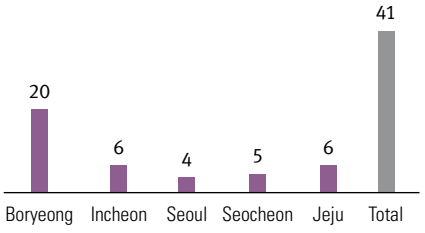
Number of Employees Received Professional Training

| Unit : Persons |

Category	2008	2009	2010	Total
Internal MBA Courses	Prior to establishment	36	14	50
Advanced Management Course	21	53	37	111
Change & Innovation Expert	Prior to establishment	Prior to establishment	601	601
Advanced Power Generation Course	582	400	193	1,175
Advanced Labor-Management Relations Course	77	82	19	178
Support for Acquisition of Professional Licenses	30	28	32	90
Evening Graduate School Course	5	4	5	14

Size of Training Groups per Power Plant

| Unit: Persons |

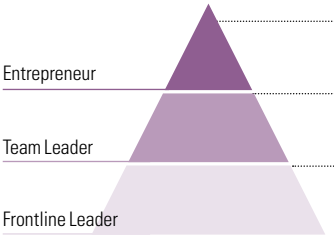


Overview of Training Groups for all Power Plants

Operating Cycle
Two months training groups for shift workers at power plants are formed every two years
Training Group Activities to Develop Experts
Strengthening expertise with education for high ranking employees
Benchmarking research of advanced overseas electricity companies
Acquisition of professional knowledge for machinery and control systems

Fostering Global Leaders

KOMIPO carries out leadership education tailored to all ranks of its workforce, with the goal of fostering global leaders and core talents of next generation. Each year, KOMIPO operates 'Advanced overseas business courses', the 'Overseas business Academy' and the 'Overseas business Workshop' to enhance the global mindset of all its employees and establish a pool of professional workforce for overseas businesses.



Rank	Leadership Education Curriculum and number of employees completed per rank (2010)
1 (Vice President)	- New Manager Leadership Course / 52 Persons
2 (General Manager)	- General Manager Course / 100 Persons - Appointed General Manager Course / 41 Persons
3 (Senior Manager)	- Appointed Senior Manager Course / 69 Persons - Senior Manager Course / 261 Persons - Newly Employed Basic Manager Course / 127 Persons

Number of Professionally Trained Employees for Business Overseas

| Unit : Persons |

Course	2008	2009	2010	Total
Advanced Overseas Business Course	Prior to establishment	9	18	27
Overseas Business Academy	36	44	83	163
Overseas Business Workshop	90	87	127	304

Training for all employees to adapt to change
Communication education for high ranking employees

Oh Eui-heon
Boryeong T/P Site Div., Management Support Office, General Affairs & Planning Team

Indonesia, the Center of KOMIPO's Business Abroad

Indonesia poses an attractive market for power generation with potential for great development in the energy industry, as only 55% of the total population has electricity. With its ample natural resources such as oil and coal, it also poses diverse business opportunities especially for renewable energy business having the largest tropical forest in South East Asia. By taking the advanced overseas business course, I was able to grasp a greater understanding of power generation businesses in Indonesia and around the world, and was able to learn courses dealing with difficult foreign financial procurement techniques and methods of international contracts that are hard to come by in Korea. Indonesia is being recognized for its great potential for development next to BRICS countries. I am proud of my company's successful operation of electricity projects in such place. Go, KOMIPO!

Labor Management Relations Based on Trust and Mutual Respect

Status of Labor Union

The labor union of KOMIPO was founded as the Korea Power Plant Industry Union, and originally took the form of a Union Shop. But, after the allowance of multiple labor unions since July 2011, it is now composed of three labor unions, including Korea Power Plant Industry Union, KOMIPO Labor Union, and KOMIPO Public Labor Union.

Current Composition of Labor Unions

| As of Aug. 2011 |

Name of Labor Union	Date Established	No. of Members	Form	Higher Authority	Subordinate Organizations
Korea Power Plant Industry Union	Jul. 24, 2001	431	Industry-Specific	Korea Confederation of Trade Unions	Seoul, Boryeong, Incheon, Seocheon, Jeju branches (total of 5 branches)
KOMIPO Labor Union	Jul. 25, 2011	961	Company-Specific	none	Headquarters, Boryeong, Incheon, Seoul, Seocheon, Jeju, Haengbok City, Shin Boryeong (total of 8 branches)
KOMIPO Public Labor Union	Aug. 8, 2011	5	Company-Specific	none	No organization
Total	1,423Persons (including 26 non members)				

Strategy for Labor-Management Culture

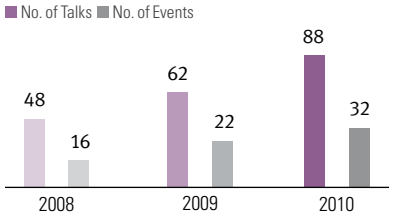
With KOMIPO's vision for the "realization of an advanced labor-management culture of trust and mutual respect", and in order to realize its four major target goals, 23 main issues have been selected to promote sustainable growth through work-life balance for all its associated employees, along with the development of a labor-management roadmap until 2015.

Mission	Realizing an Advanced Labor-Management Culture of Trust and Mutual Respect			
Promoted Goals	A rational Labor-Management Culture	A Labor-Management Culture of Trust	A Labor-Management Culture of Innovation	Advancement of remuneration Management
Strategy Challenges	- Promotion of advancement of labor-management relations - Establishment of management rights and authority over human resources - Strengthening of expertise in labor management	- Activation of communication - Consolidation of a cooperative labor-management relationship - Open management of voluntary participation	- Strengthening of innovative activities in the workplace - Reconsideration of company values and guaranteeing quality of life - Joint social responsibility of labor and management	- Construction of a remuneration framework based on capability and performance - Realization of a family friendly company - Customized life-long remuneration framework

Diverse Communication Channels for Labor-Management

Every two years, KOMIPO's labor union and five GENCOs agree on a collective bargaining process that defines employees' union activities, working conditions and other issues, while hosting a Labor-Management Cooperation Council composed of 8 committee members (each from labor unions and management). The goal of the council is to improve the understanding and cooperation of labor unions in main management issues of the company and operate diverse channels of communication for the enhancement of employees' well-being and working conditions.

Number of Labor-Management Talks & Unity Events



Labor-Management Communication Channels

Year-round Channels	Union-Management Cooperation Council	Increasing profitability for both labor and management (per quarter)
	Union-Management Roundtable Discussions	Collecting opinion and sharing of information
	Meeting on Industrial Health & Safety	Joint industrial health & safety activities (per quarter)
	Presentation of Management Issues	Sharing understanding and awareness of management conditions (per half-year)
	Strategy Meeting Jointly Held for Labor & Management	Discussion on company's current agenda and seeking solutions (every month)
Provisional Channels	Special Union-Management Council	Practical labor-management negotiations on the current agenda
	Management Vitalization Conversations	Operation of individual programs per work-site (all year)
	Management Bulletin Board	Disclosure of management information in response to changes in the management environment
	Rainbow Chatroom (3P world)	Conversations through 3P World Website (all year)
	Conversations with Part Time & Full Time Employees	Communication & mutual exchange with employees from different departments

Management Strategy Meeting Jointly Opened to Labor & Management

"I am confident that the common efforts of labor and management on the current management agenda will be well worthwhile."

CEO

"Above all else, the Union will stand by the company, listening attentively to its difficult managing environment, and join forces to solve such issues."

Labor Union Committee Leader

Expansion of Trusting Labor-Management Culture

To accomplish a competitive organizational culture through labor-management cooperation, KOMIPO strives to create trusting labor-management culture through the operation of various communication channels, programs for the enhancement of GWP (Great Work Place) index, and a variety of unity events for both parties. As a result, KOMIPO received official recognition from diverse institutions for achieving excellence in labor-management relations.

Labor Management Related Awards	Year Awarded
Fortune Magazine Awards "Best Korean Company to Work" in the category of public enterprise	2010
Three certificates awarded (biggest number for power plants in the electricity industry), by The Ministry of Employment & Labor "Excellence in Labor-Management Culture" Awards	2006 : Seocheon Thermal
	2008 : Jeju Thermal
	2009 : Seoul Thermal
Certification of AA Standard in the 'Best Family Friendly Company' awards presented by the Ministry of Gender Equality & Family	2009

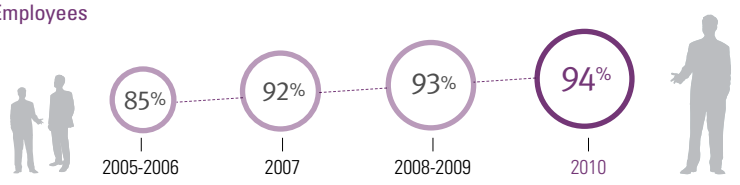
1. Fortune Magazine Award, "Best Korean Company to Work" in the public enterprise criteria
2. In recognition of contribution to Labor-Management Cooperation, 5th-level Order of Industrial Service Merit was awarded to the Chairman of the Jeju Branch
3. Award Ceremony for the Best Family Friendly Company Certificate

A Welfare System with Work-Life Balance

Enhancement of Welfare Satisfaction of Employees

To form a pleasant corporate culture and enhance employee satisfaction, surveys of have been carried out in the area of welfare since 2005. Based on the survey results, opinions have been collected and factors for improvement have been reflected to improve employee satisfaction.

Welfare Satisfaction of Employees



Employee Welfare and Services Program

A systematic employee welfare and services are provided to create a "work-life balance in corporate culture". For practical enhancement of the benefit package, a recipient-oriented welfare system is under operation.

System	Main Contents of Operation
Stabilization of Residence and Life	Providing company residence, Housing and lifestyle loans
	Operation of dormitories for university students (children of employees working away from the capital
Child Care Support	Support for expenses on child-care
	English & Science Camps for employee's children, Opening of the Boryeong "One Heart World"
	Subsidy for university tuition
Company Funds	Subsidy for life events (congratulations and condolences), Group insurance coverage
	Relief fund for natural disasters
Family-Friendly Welfare	Training Centers (Sokcho, Suanbo, Muju and Jeju)
	Discount benefits for summer resorts & condominiums
	Nursing facilities in workplace
Selective Welfare System	Personalized choices of souvenirs, Cultural activities
Support for Self Development	Subsidies for language training fees, Reading and internet training
Support for Medical Welfare	Tailored medical welfare agreements with hospitals
Operation of a Vacation System	Vacations for long-term employees, Annual holidays, Self-development and celebration or condolence events

Kim Jai-sik
Power Generation Department, Green Management Team, Senior Manager

My performance has improved through communicating with my children

Jaesik Kim, the Senior Manager of the Green Management Team, Power Generation Department is one of the first generation of child care leave takers. Although the Act on Equal Gender Employment allowing men to take child care leave was revised in 1995, paid child care leave initiated by the government was only introduced in 2001. In 2001, two married men claimed child care leave, and Kim Jaesik followed suit the following year. Kim recounts that "due to the lack of awareness of the policy within the company, everybody was surprised when I declared childcare leave". With both parents working at Choongcheong-namdo, Boryeong, Mr. Kim started to feel remoteness from his child when he had to leave his child with his parents during the week, only to meet her on weekends. His second daughter was born when his wife moved her workplace to Daejeon, and Mr. Kim resolved to take child-care leave instead of his wife. However, the process was far from easy. He had to persuade his superior for three months, and gain support from his colleagues. When he finally gained permission for child care leave, Mr. Kim could finally take his elder daughter to the nursery each morning and play with his children in the park. He felt strong sense of connection with his children seeing how happy they were. Mr. Kim talks of how he "worried that there may be discrimination before taking leave, but no such thing happened." and added that employees who have given their all at the workplace can reap the benefits of supporting one's family and better dedicating themselves to work after returning from child care leave.

Safety & Health

Under the corporate ideology of 'putting humankind and nature first, leading the way in development of the energy industry', and its safe management vision of 'World Class in Safety', three main strategies for safety are consistently being pursued under the goal of achieving 'three zeros' of zero disasters, zero accidents and zero injuries.

Vision Framework

Mission	Vision 2015 World Class in Safety		
Goal	'Three Zeros' of Zero Disasters, Zero Accidents and Zero Injuries.		
Strategy	Advanced Enhancement of Safety Awareness	Optimization of a Network Response System to Natural Disasters	Securing of Facility Safety and Realization of Zero Disasters
Implementation Plans	- Construction of an advanced system - Internalization of safety and health education	- Strengthening of capacity to respond to disasters - Internalization of a disaster safety management system	- Securing of safety in power generation, Civil engineering and construction facilities - Creation of a pleasant working environment

Construction of an Advanced Safety Management System

Work efficiency was enhanced by constructing an integrated Web environment management system for disasters, safety and health, which discloses, shares and exchanges safety related information. This system has been improved and complemented through the acquisition of KOSHA18001 and a program of workplace safety certificates and consistent follow-up management. Also, construction and promotion of the OHSAS18001, which observes international standards, contributes to the enhancement of external ratings in safety management and overseas business, in keeping with KOMIPO's global status.

Certification of KOSHA 18001

Worksite	Boryeong Thermal	Incheon Thermal	Seoul Thermal	Seocheon Thermal	Jeju Thermal
First Certificate	Jun. 9, 2004	Dec. 15,. 2003	Nov. 29, 2002	Sep. 22, 2003	Dec. 13, 2003
Follow-Up Management	Jun. 9, 2010	May. 19, 2010	May. 07, 2010	Jul. 16, 2010	May. 25, 2010

Also, having concluded an agreement for the construction of a 'Certification System for Diagnosis of disaster prevention safety and workplace safety' jointly with Korea Certification Association, and having operated comprehensive diagnosis in the field of disaster prevention safety throughout power plants such as Boryeong Thermal, KOMIPO has acquired a Safety-Zone Certificate, and is consistently evaluated on follow-up management. This result is from being recognized for our efforts to improve operation management of firefighting equipment and our ability to respond to natural disasters. Particularly, the construction of an integrated disaster prevention center in 2009 is the first such case by a power generating company, and is accompanied by the operation of a round the clock expert disaster prevention manager to build the foundation for autonomous disaster prevention administration and speedy and systematic situation control.

Current Status of Certificate of Workplace Safety

Worksite	Boryeong Thermal	Incheon Thermal	Seoul Thermal	Seocheon Thermal	Jeju Thermal
First Certificate	Jan. 2, 2008	Jan. 2, 2008	Oct. 18, 2007	Jan. 2, 2008	Jan. 2, 2008
Follow-Up Management	Feb. 17, 2009	Feb. 12, 2009	Feb. 24, 2009	Mar. 04, 2009	Mar. 10, 2009

Integrated System for Safety & Health Management in the event of natural disasters

Integrated Disaster Prevention Center at Boryeong Thermal

Operation & Construction of a Natural Disaster Safety Management System

According to the Framework Act on Disasters and Safety Management and other legislations, a National Security/Emergency Preparedness Plan and Framework Act for Disaster, Health and Safety Management have been established throughout the company along with the production and implementation of a risk response manual for each type of disaster to prepare for natural disasters including meteorological disasters and power plant mishaps. In particular, given the type of natural disaster that may occur at power plants, an onsite action manual and an SMS emergency message system for the protection of all employees during emergency situations has been developed. The quarterly implementation of company initiated onsite training and biannual response training involving the management level helps KOMIPO to fulfill its practical, work-site centered and systematic disaster management responsibilities.

Response Training to Natural Disasters

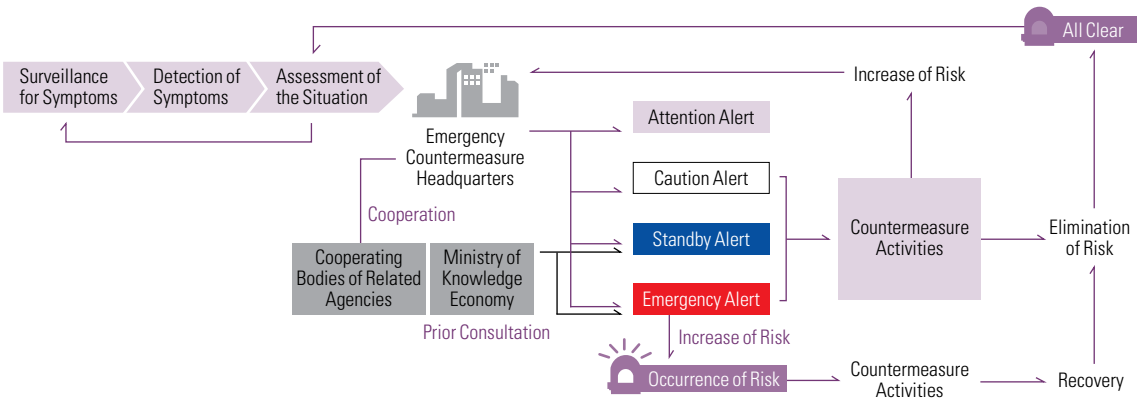
Name of Manual	Type of Risk
Response to Risk of Damage from Storms or Floods	Damage or flooding of power generation facilities due to storms or floods
	Destruction of architecture, Civil engineering or construction facilities due to snow storms
Response to Risk of Earthquake Disasters	Subsidence or destruction of facility foundations due to earthquakes
	Subsidence or loss of facilities due to tsunamis
Response to Risk of Electricity Related Hazards	Natural disasters, sudden increase in demand, breakdown of electricity, labor strikes etc.
	Shortage of electricity supply due to social factors

Response training for toxic chemical leakage

Response training for fires

Response training for disaster prevention at sea

Organizational Chart of Risk Management



SMS System for Issuing Emergency Alarm

Response System for Emergency Alarm

Type	Work Duties of Employees
White (Caution)	Maintaining normal work duties, Checking of employees' whereabouts and identification of the situation by related workers
Green (Standby)	Emergency shifts for over half of employees from related departments at the headquarters and related worksite
Red (Emergency)	Emergency shifts for all employees from related departments at the headquarters and related worksite

Current Status of Safety Hazards & Zero Accidents

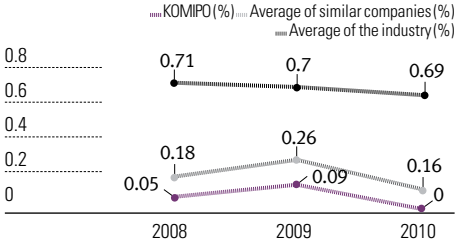
To reinforce firm awareness of safety through 'First, compliance to safety regulations, Second, safe work', and achieve zero human accidents, a three strikes out safety system has been adopted in 2009. This system revises the company guidelines for the activation and consolidation of the system and strictly manages any violations of the safety code by reflecting any incidences in the company's internal evaluation system index, thus building a foundation for the establishment of a World Class, Safety First company culture.

No. of Days with Zero Accidents

As of Dec. 31, 2010

Worksite	Date Established	Number of Days with Zero Accidents
Boryeong Thermal	Oct 16. 2007	1,172
Incheon Thermal	Aug 13. 2009	506
Seoul Thermal	Nov 07. 1980	11,005
Seocheon Thermal	Aug 01. 2009	518
Jeju Thermal	Jan 01. 1983	10,220

Status of Industrial Accident Rate



Operation of the Industrial Safety & Health Committee

KOMIPO complies with the related act and treaties to regulate the management of safety and enhancement of health of its employees. The Korea Occupational Safety and Health Agency has published management standards as of July 18th 2003 and it has been hosted each quarter in 5 power plants including Boryeong Thermal. KOMIPO has resolved to actively operate the Framework Act on the Management of Disasters and Safety, with inspection of causes of industrial disasters and countermeasure to prevent re-occurrence, establishment of an enhancement plan for safety & health, intensive discussions on factors related to prevention measures for workers in potentially harmful environments, and assessment of working environments and factors related to health check-ups for employees.

Health Care Program | Regular health check-up programs are carried out for employees, and a computer-based health management system follows and monitors brain and cardiovascular disease and diabetes cases as preventive measures for work-related illnesses. Labor-management negotiations determine the timing for the assessments of work environments in each power plant, while inspections of noise pollution, dust and heavy metals in the worksites are measured under the scrutiny of the labor union. Improvement plans are established based on the results of these assessments and submitted to the Korea Occupational Safety & Health Agency.

Carrying out Health Check-ups

Type of Health Check-up	Cycle	Subjects
General Health Check-up	Once every year	Office workers and all employees exempting those subject to special health check-ups
Special Health Check-up	Once every year	Employees working in hazardous environments, employees dealing with chemical substances
Health Check-Up Prior to Assignment	All round the year	Employees who have transferred work duties (newly recruited employees subject to special health check-ups)
Specialized Blood Inspection	Once every two years	All Employees

Assessing the Work Environment

Harmful Factors	Cycle	Subjects
Noise pollution, dust, etc.	Twice every year	Work sites dealing with work shifts and bituminous coal
Certain chemical substances and organic solvents	Once every year	Worksites with laboratory workers and workers handling organic solvents

Main Health Care Activities in 2010

Investigation of harmful factors on work duties related to musculoskeletal disorders, and reinforcement of health programs through specialized agencies - Preventive education for musculoskeletal disorders, stretching competitions, fitness measurement etc.	Operation of family health care programs for health enhancement for employees' families - Family health check-ups, quit smoking clinics, vaccinations etc.
Internalization of general and specialized health check-up's, management of employees with past medical complications, and operation of health programs	Installation and operation of automated blood pressure devices and oxygen generators within the main control room of power plants
Additional chest X-ray diagnosis for special health check-ups	Company initiated emergency relief and cardiopulmonary resuscitation education (including partner businesses)
Provision of heated jackets in the winter and cooling jackets in the summer for power plant employees	

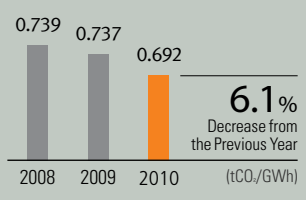
미래의 성장에너지를 만들어가는

Creating Future Energy for Growth

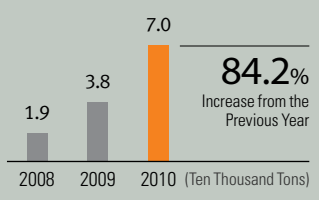
Green Management

Vision	A world class company that puts nature and humankind first
Strategy	Management of eco-friendly power plants, Reinforcement of capacity to respond to climate changes
Issue	Responding to climate changes, Environmental management system
Performances	Construction of electronic greenhouse gas emissions management system, Designation of green companies for all worksites, Construction of green management system
Plan	Leaping forward to become ECO Global Top 10 in Energy Utility Industry by 2015
Management Team	Green Management Team

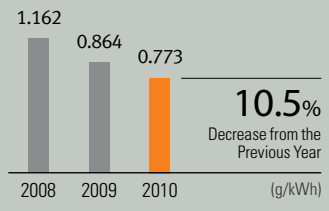
Emissions per GWh



Possession of Carbon Emission Rights



Emissions of Air Polluting Substances



Green Management System

Green Management Vision & Goal

To progress towards becoming a world class company that puts nature and humankind first, KOMIPO established a mid-long term environmental management promotion strategy (ECO-2015) with the goal of becoming an ECO Global Top 10 in the Energy Utility Industry by 2015. Action plans have been designated and carried out in four areas, with 47 target goals, including expansion as an environmentally-friendly company, the operation of environmentally friendly power plants, reinforcing capacity to respond to climate changes, and strengthening partnerships with stakeholders.

Green Management Vision	A World Class Company Putting Nature and humankind First			
Green Management Goal	ECO Global Top 10 in Energy Utility Industry			
Promotion Strategy	Expansion as an Environmentally Friendly Company	Operation of Environmentally Friendly Power Plants	Reinforcement of Capability to Respond to Climate Changes	Strengthening of Partnerships with Stakeholders
Specific Promotion Strategy	- Strengthening organizational promotion of environmental management - Consolidation and development of an integrated environmental management system - Sustainable promotion of innovative environmental management activities - Reinforcement of an emergency response system - Construction of an environmentally friendly company culture	- Efficient use of resources - Minimization of emissions of air polluting substances - Consistent promotions of innovative environmental management - Recycling of resources and minimization of waste disposal - Green innovation of power plants	- Strengthening of the capability to respond to climate change - Voluntary greenhouse gas reduction efforts - Active creation of new revenue opportunities related to climate change	- Efforts to prevent environmental complaints - Expansion of ecosystem protection program - Reinforcement of external cooperation
Action Plans (47)	16 in 5 areas	15 in 5 areas	7 in 3 areas	9 in 3 areas

ECO-GT10 in Energy Utility Industry: Enhancing the environmental management capacity of our company to top ten in the world in energy utility industries by 2015, green management measures are displayed on the company website : (www.komipo.co.kr)

Performance of Green Management Goals

Specific Promotion Performance

Promotion Strategy	Promotion Performance	Subject	Term of Promotion
Expansion and Development of Environmentally Friendly Management	Establishment of an environmental performance evaluation system services	All worksites	2009
	Maintenance of a green company throughout all worksites	All worksites	~2010
	Support for certification of ISO14001 environmental management system for partner companies	Partner Companies	2008~2010
Operation of an Environmentally Friendly Power Plant	Installation of optimized environmental pollution prevention utilities (de-sulphurization and de-nitrification facilities)	All worksites	~2010
	Diagnosis of functions of air environment utilities	All worksites	2008~2010
	Construction of a digital waste transfer system	All worksites	2009
	Promotion of countermeasures to prevent dust from coal depots and coal dust	Boryeong	2010
	Conclusion of MOU to recycle reclaimed coal ash in Saemangeum	Seocheon	2009
	Promotion of zero use of harmful chemical substances (Hydrazine)	Incheon	2010
	Promotion of start-up fuel use utilizing fuel by-products	Boryeong	2010

Promotion Strategy	Promotion Performance	Subject	Term of Promotion
Reinforcement of Capacity to Respond to Climate Change	Establishment of greenhouse gas emission reduction targets by 2020 and countermeasures for the mid-long term treaty on climate change	All worksites	2009
	Fostering climate change experts	All worksites	2008~2010
	Promotion of securing of UN Carbon Emission Rights	Wind Power etc.	2010
	Promotion of greenhouse gas reduction plans for sewage sludge combustion	Boryeong	2010
	Participation in model carbon emission rights trading	Boryeong	2008~2009
	Establishment of a greenhouse gas emission rate management system (ISO 14064) throughout the company	All worksites	2009~2010
Strengthening Partnerships with Stakeholders	Carrying out of 1 worksite-1 river (mountains, rivers) nurturing campaigns	All worksites	2008~2010
	Support for increase of income projects for surrounding areas of power plants	All worksites	2008~2010
	Resolution of public complaints concerning compensation for fishery industry damage in the Boryeong port	Boryeong	2009
	Environmental Monitoring Citizen Group	Boryeong, Seocheon	2008~2010

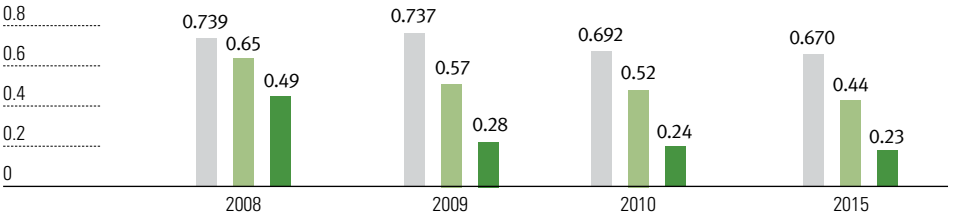
Green Management System

Performance of Green Management Goals

Performance and Goals in Main Indexes for Green Management

Category		Performance			Goal
Main Index		2008	2009	2010	2015
Minimization of Emission of Air Polluting Substances	Emission of SOx (g/kWh)	0.49	0.28	0.24	0.23
	Emission of NOx (g/kWh)	0.65	0.57	0.52	0.44
	Emission of dust (g/kWh)	0.022	0.014	0.013	0.013
Minimization of Emission of Water Polluting Substances	Rate of recycling of the water supply (%)	88.7	81.4	87.2	93.0
	Emission of COD (g/GWh)	27.7	35.1	29.5	13.0
	Emission of SS (g/GWh)	14.7	19.4	16.2	10.0
Recycling of Resources	Rate of coal ash recycling (%)	69.7	55.8	57.5	75.0
	Rate of desulphurized gypsum recycling (%)	100	100	85	100
Response to Climate Change	Emission of CO_2 ($kgCO_2$/kWh)	0.739	0.737	0.692	0.670

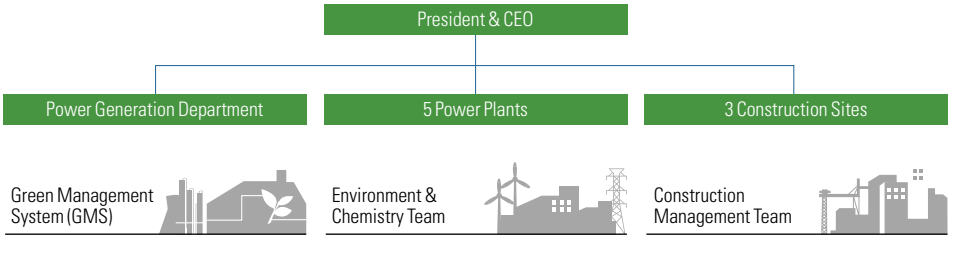
Minimization of Emissions of Air Polluting Substances



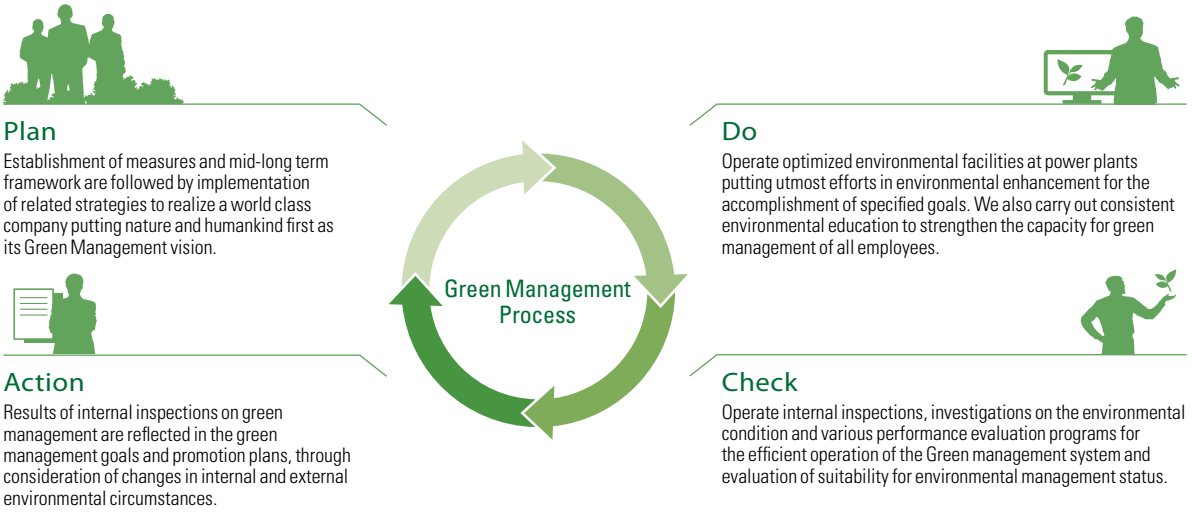
Green Management System

System & Organization | Since the company-wide certification of ISO 14001 in 2004, all employees have been involved with promotion of consistent environmental enhancement. As a result, KOMIPO has received optimal results in all follow up inspections carried out each year, maintaining its certification of ISO 14001. Also, KOMIPO has succeeded in expansionary transition to a more modern system of green management, by adding an energy resources management system, a greenhouse gas management system and social responsibility in the field of environmental management to the existing energy management system in 2011. The Green Management System of KOMIPO is in operation under the systematic process of 'Plan, Do, Check, Action' centered on the green management team at the headquarters (1Team Manager, 6Team Members) and teams that carry out green management at each worksite.

Organizational Chart of Green Management System



Flow Chart of Green Management System



Emergency Response System for Environmental Hazards

The utmost efforts are being made through preventive measures in order to achieve zero environmental accidents. An emergency response system, disaster prevention countermeasure organizations and emergency contact networks with related agencies have been established, and are operated to speedily respond in case of environmental accident . Also, case-by-case scenarios have been established to ensure effective responses according to the type of environmental accident through educational training at least once each year.

Disaster Prevention Training 1_ Training to respond to oil leakage, operated under the disaster prevention of oil leakage scenario

Disaster Prevention Training 2_ Training to respond to leakage of toxic substances, operated under the preparation for toxic substance leakage scenario

Inspection & Training of Green Management

Inspection of Green Management | Each year, a green management evaluation is carried out to minimize potential risks through evaluation of the suitability and effective operation and management of the green management system. In particular, inspections of environment related technology at power plants and internal evaluation systems are jointly carried out to achieve improvements in especially vulnerable environmental fields, along with active maintenance of green management. The results of green management evaluations are given prompt and appropriate assessment or, further enhanced by reflecting the issue in the mid-long term green management goals and annual green management targets and promotion plans.

Type	Auditing Agency	Subject Power Plant	Miscellaneous
Follow up Inspection of green companies	Ministry of the Environment	All worksites	Once every year
Follow up Inspection of green management systems	Korea Standards Association	All worksites	Once every year
Internal diagnosis of green management system	Internal Auditing	All worksites	Once every year
Investigations on the actual conditions of environmental management	Internal Auditing	All worksites	Once every year
Internal evaluation of environmental management	Internal Auditing	All worksites	Once every year
Inspections by external agencies	Local Governments, Environmental Offices	All worksites	All year round

Green Management Education | A wide range of education programs are in operation to increase awareness and strengthen capabilities for green management. Regular basic knowledge education on green management is carried out for all employees and partner companies, and KOMIPO actively encourages participation in classes at the Korea Power Learning Institute to nurture job capabilities in respective fields. Additionally, for acquisition of advanced green management techniques and specialized knowledge in each field, domestic and international specialized agencies are commissioned to educate and develop leaders for green management.

Category	Green Management Education Programs	No. of Employees Educated		
		2008	2009	2010
Basic Education (Headquarters & Worksites)	· Trends in domestic and international environmental policy · Lectures by invited speakers · Environmental vision and measures · Promotion plans for Eco-2015	All Employees	All Employees	All Employees
Job Training (Korea Power Learning Institute)	· Power generation water treatment duties · Environmental assessment duties · Air environment duties · Desulfurization facilities duties · Water quality environment duties · Combustion management duties	14	14	21
Commissioned Education by Specialized Agencies	· Education abroad in the field of environmental technology (educational agencies under APTI, EPA of the US) · Education for ISO14001 inspectors · Commissioned education by TMS on Chimney Inspection · Education regarding response to climate change treaties	36	33	44

Green Management Accounting

Establishment of a Green Management Accounting System | To efficiently calculate the cost of green management, a green management accounting system has been established and is under the consolidated operation with e-KOMIPO system which is an enterprise resource planning (ERP) of KOMIPO, providing real time calculations of costs related to green management such as pre and post-treatment activity costs and operation costs for environmental facilities. This system supports speedy decision making concerning company management and help to reinforce the transparency of green management information.

Investment in Green Management | KOMIPO actively strives for the realization of a green management mindset through optimum installation and maintenance of environmental facilities and consistent investment throughout all power plants in technology development related to reducing environmental impact. Green management costs can be generally categorized into installation costs, operation costs and technology development costs. Installation and repair costs are included in installation costs, while electricity, water, chemical, human resource and waste disposal costs are included in operation costs. Research and development costs and education costs are included in technology development costs.

| Unit: thousand USD |

Category		2008	2009	2010
Environmental Facility Installation Costs		110,286	105,423	8,817
Environmental Facility Operation Costs		44,949	61,151	53,555
Environmental Facility Development Costs	Research and Development Costs	1,364	2,440	1,537
	Education Costs	25	10	27
	Misc Costs	616	727	561
	Subtotal	2,005	3,117	2,125
Total		157,240	169,751	64,497

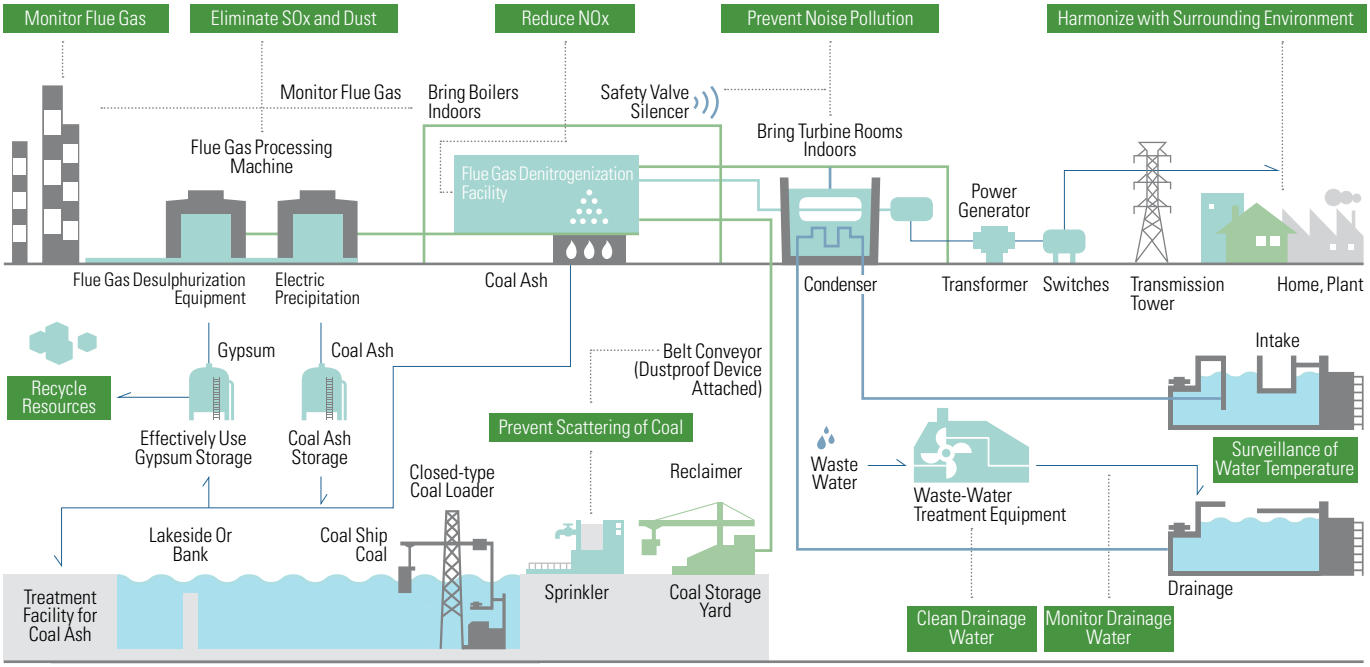
*2008, 2009 Recorded high investments due to new installation of environmental facilities at Boryeong Thermal, while investment decreased in 2010 due to no new construction of power plants. *Misc costs include the total costs of inspecting environmental impacts on the surrounding areas due to the construction and operation of power plants. *From 2011, Performance data on costs regarding green product purchases will be calculated and displayed.

Operation and Performance of Green Management

Environmentally Friendly Power Generation Process

Environmentally harmful substances produced at thermal power plants can be divided into two categories: dust from the combustion process of power generation fuels, and water waste from sulfur oxides and nitrogen oxides created from water used in power generation. To minimize the amount of waste disposed, KOMIPO has optimal environmental pollution prevention facilities installed which is being operated efficiently, leading the way to create pleasant environment.

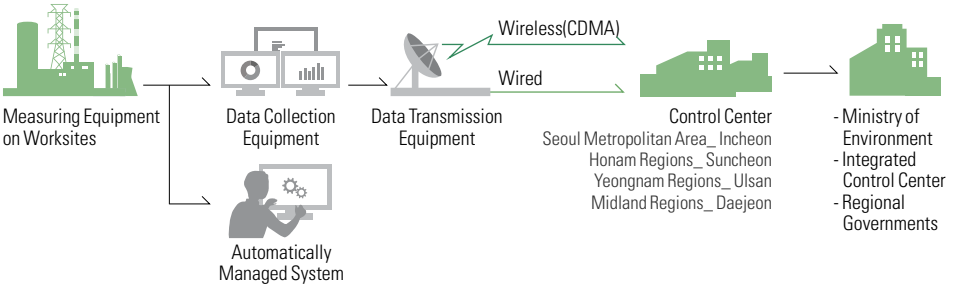
Environmental Preservation Activities by Power Plants



Management of Emission Reduction

Tele-Monitoring System (TMS) | To consistently reduce air and water polluting substances created through power plant operations, environmental pollution prevention facilities are under operation. The installation and operation of a Tele-monitoring System for real time measurements and monitor of the density of pollutants allows round the clock monitoring of emissions through online transferring of information on the emission density to the control center and company surveillance system. To enhance transparency, data regarding TMS measurement criteria is disclosed to stakeholders through the Korea Environment Management Corporation, administrative agencies and the company website. Also, an electronic waste-level transfer system is used to improve the transparency for waste treatment, while a management system for greenhouse gas emissions is in operation reflecting KOMIPO's commitment to deal with the most important issues of the 21st Century.

Tele-Monitoring System



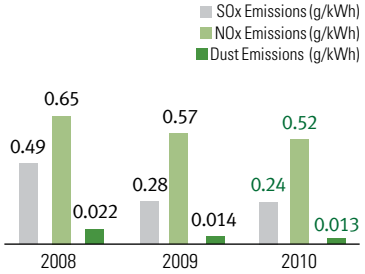
Operation and Performance of Green Management

Air Quality Control

Air pollutants from the power plant include substances such as sulfur oxides, nitrogen oxides and dust. To minimize the air pollutant emissions, optimized air pollution prevention facilities are installed in existing and new power generating facilities mainly on coal power plants, while Seoul and Incheon Thermal use eco-friendly LNG as their main resource for fuel in order to fundamentally prevent the emission of pollutants. Also, KOMIPO was the first power company to establish a systematic function diagnosis system for air pollution prevention facilities since 2008. As a result of such efforts, the rate of air polluting substances emitted each year per production unit have steadily decreased, with decreases of 50% for SOx, 14% for NOx and 38% for dust decrease in 2010 compared to the emission rate per production unit in 2008.

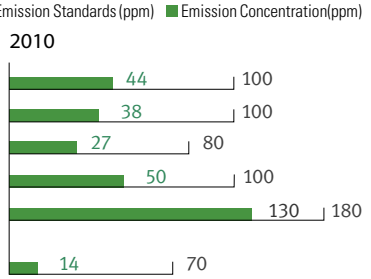
Legal regulation on the emission of air polluting substances is managed according to emission concentration. The 2010 air pollutant emission concentration records per power plant showed that influence on the environmental impact due to the operation of power plants was minimized through emitting a substantially lower concentration of Sox, NOx and dust throughout all power plants compared to the emission standards.

Emission Rates of Air Polluting Substances



Sulphur Oxides (SOx)

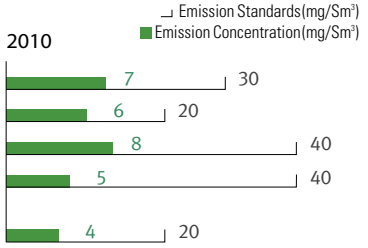
		Emission Standards	Emission Concentration 2008	2009	2010	Prevention Facilities
Boryeong	1~2	100	146	52	44	Desulfurization Facilities
	3~6	100	43	38	38	
	7~8	80	28	38	27	
Seocheon	1~2	100	58	63	50	
Jeju	2~3	180	137	122	130	Use of low sulfur oil
	Internal Combustion	70	12	12	14	Desulfurization Facilities



* Less than 0.3% Sulphur

Dust

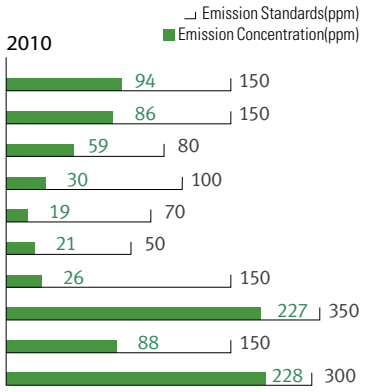
		Emission Standards	Emission Concentration 2008	2009	2010	Prevention Facilities
Boryeong	1~6	30	11	10	7	Electric Precipitation
	7~8	20	5	5	6	
Seocheon	1~2	40	10	9	8	
Jeju	2~3	40	5	6	5	
	Internal Combustion	20	4	5	4	



* Use of the eco-friendly fuel, LNG in Boryeong Combined Thermal, Incheon Thermal and Seoul Thermal guarantees zero emissions of SOx and dust.

Nitrogen Oxide (NOx)

		Emission Standards	Emission Concentration 2008	2009	2010	Prevention Facilities
Boryeong	1~2	150	202	134	94	LNB+SCR
	3~6	150	80	87	86	
	7~8	80	46	57	59	
	Combined	100	30	41	30	LNB
Incheon	1~2	70	12	15	19	LNB+SCR
	Combined	50	19	21	21	LNB
Seoul	4~5	150	17	33	26	SCR
Seocheon	1~2	350	214	217	227	LNB+OFA
Jeju	2~3	150	131	123	88	
	Internal combustion	300	178	230	228	SCR



Water Quality Control

Waste water is produced from power plants through boiler water quality management processes, pure water production and operation of desulfurization facilities. For it optimal disposal, comprehensive waste water treatment facilities and desulfurization waste water treatment facilities are in operation in all power plants. In addition, Biological Waste Water Treatment" and "Waste Water Treatment using evaporation and condensation" is installed using cutting-edge technologies for intensive waste water treatment and operated at Boryeong and Seocheon Thermal. Establishment of a zero-discharge system of waste water also further ensures control of the cleanliness of water resources.

Water Quality Control through Comprehensive Waste Water Treatment Facilities

Category	PH				COD (mg/l)				SS (mg/l)			
	Emission Standards	Emission Concentration			Emission Standards	Emission Concentration			Emission Standards	Emission Concentration		
		2008	2009	2010		2008	2009	2010		2008	2009	2010
Boryeong	5.8~8.6	6.9	6.9	6.7	50	3	2	4	40	3	3	3
Incheon	5.8~8.6	7.2	7.3	7.3	130	9	6	11	120	3	3	4
Seoul	5.8~8.6	6.9	6.7	6.8	90	4	4	3	80	3	3	2
Seocheon	5.8~8.6	7.2	7.4	7.3	130	4	4	8	120	4	2	1
Jeju	5.8~8.6	7.0	6.9	6.9	50	5	5	5	40	2	3	4

Water Usage Management

Water usage at thermal power plants includes water used for power generation, desulfurization, and drinking water. For the efficient use of industrial water resources and increase in re-cycling of water supply, KOMIPO is promoting the realization of zero leakage, identification of power plants in need of re-use and process enhancement measures, and construction of a zero-discharge system of waste water. As a result, re-cycling of the water supply was increased to 87% in 2010 from 37% in 2000. Moreover, for development of new waste water treatment technologies, the Pilot Plant with 'eco-friendly high-efficiency desalination facilities' has been in operation at Incheon Thermal, the first of its kind in Korea, while future practical use of the facilities is expected to contribute greatly to further reduce the water usage.

Drained Water_ includes all water discharged from the operation of electricity production including steam-condensed water, recycled water at water demineralizing facilities, sample water, etc. Water with suitable quality is recycled as raw water or filtered water prior to the waste water treatment process, while the rest of the water is re-cycled by being treated in facilities such as reverse osmosis water and activated carbon filters, etc in the waste water treatment process.

Uesd

Category	Rate of Power Generated	Rate of Water Used	Usage Rate per GRW	Drained Water Recycling Ratio
2008	41,756(GWh)	6,157(thousand tons)	147.5(ton/GWh)	88.7(%)
2009	45,745(GWh)	7,762(thousand tons)	169.7(ton/GWh)	51.4(%)
2010	55,724(GWh)	8,125(thousand tons)	145.8(ton/GWh)	87.2(%)

Control of Chemical Substances

At the power plants, specialized chemical substances are used to prevent the corrosion of power plant facilities for general production and waste disposal, while high efficiency coagulants that provide greater effects with smaller amounts of chemicals are used to reduce rates of chemical substances. In addition, a non-injection deoxidant system to suppress the use of harmful substances and treatment techniques using oxygen have been adopted and implemented. Also, testing and verification for zero-hydrazine, a representative harmful chemical substance, are on its way for general application to all worksites throughout the power plant for the first time in Korea. While the annual use of chemical substance is increasing due to an increase in the use of Ammonia for the elimination of Nitrogen Oxides, the increase in usage rate is lower compared to the increase in power generation, reflecting a progressive reduction in the use of chemical substances.

Performance in Use of Chemical Substances

Category	2008	2009	2010
Amount of Power Generated (GWh)	41,756	45,745	55,724
Amount used (tons)	11,230	12,492	14,001
Per GWh (ton/GWh)	0.27	0.27	0.25

Operation and Performance of Green Management

Waste and By-Products of Power Generation

Approximately 30 types of waste are produced by power plants, including waste oil, discarded heat insulation materials and waste synthetic resins. Efforts are being made to minimize impact on the environment with an aim to recycle all recyclable wastes and consign any unrecyclable waste to specialized agencies for treatment. Other than aforementioned wastes, coal ash and desulfurized gypsum are produced as by-products of power plant operations. Coal ash produced from the combustion process of coal is recycled for use in major construction materials such as ready-mixed cement and as raw material for cement, while desulfurized gypsum produced from desulfurization facilities is re-cycled 100% as the main ingredient for gypsum boards. A great amount of effort is made for consistent increase of waste recycle through diversification of markets, promotion of research and development and discovery of alternative uses, such as recycling reclaimed coal ash in Saemangeum (an area of reclaimed land), developing fertilizers made from coal ash and other researches on high value-added and high mass recycling.

Waste Generated and Recycled per Year

| Unit : Tons |

Category		2008	2009	2010
Amount of Waste Generated	Worksites in General	5,777	6,717	6,750
	Designated	740	840	2,877
	Total	6,517	7,557	9,627
Amount of Waste Generated per GWh (Tons/GWh)		0.16	0.17	0.18
Amount of Waste Recycled		2,425	3,088	4,584
Amount of Waste Treated Automatically or through Consignment		4,092	4,471	5,043

Coal Ash and Desulfurized Gypsum Recycled

| Unit : Thousand tons |

Category		2008	2009	2010
Coal Ash	Amount Generated	1,309	1,597	1,688
	Amount Recycled	913	891	971
	Rate Recycled (%)	69.7	55.8	57.5
Desulfurization Plaster	Amount Generated	263	357	386
	Amount Recycled	274	357	327

Noise Pollution and Soil

As measures to control the noise pollution under the level of regulated standards, various machinery are built indoors to deal with the noise from the power plants and noise reduction machines and soundproof walls have been installed and is in operation. Also, to prevent soil pollution due to oil leakage from power generation fuels, protective walls are installed to contain the oil storage tanks and regular measurement of contamination rates prevents exposure of soil to the oil storage tank, resulting in zero cases of oil leakage.

Results of Noise Pollution Measurements

| Unit : dB(A) |

Category	Region	Regulated rate	2008	2009	2010
Boryeong	Industrial	50	36	37	37
Incheon	Industrial	50	40	42	43
Seoul	Green Belt	50	48	48	48
Seocheon	Industrial	50	36	34	37
Jeju	Industrial	50	32	35	37

Results of Inspections of Soil Contamination

Category	Subject of Inspection	Date of Inspection	Inspection location points	Inspected criteria	Results of Inspection	Inspecting Agency
Boryeong Thermal	Diesel storage tank unit 4	08-16-2010	10 worksites	TPH*	Optimal	Natural Environment Research Institute
Incheon Thermal	Heavy Oil and diesel tank unit 9	11-18-2010	2 worksites	TPH*	Optimal	Korea Soil Environmental Research Center
Seoul Thermal	Diesel tank unit 1	09-29-2007	1 worksites	TPH*	Optimal	Korea NDE
Seocheon Thermal	Heavy Oil and diesel tank unit 6	11-29-2010	16 worksites	TPH*	Optimal	Natural Environment Research Institute
Jeju Thermal	Heavy Oil and diesel tank unit 11	-	-	-	-	Subject to exemption of inspection

*Total Petroleum Hydro Carbon: total amount of hydrocarbons found in crude oil

Environment Preservation Activities

Assessment of Impact on the Environment | To minimize the environmental impact by construction and operation of power plants, an environmental impact assessment is carried out according to Article 25 of the Environmental Impact Assessment Act. Consultation results from the assessment have been implemented, and results of the assessment and implementation are reported annually to the related government agency. The assessment provides the results on the biodiversity and the locations, capacity and detailed results of habitats according to the requirements of the information disclosure system. Additionally, it shows that no species of animal or plant are threatened to extinction due to the influence of the business activities of KOMIPO.

Current Status of Environmental Impact Assessments

Category	Research Agency	Researched Criteria	Research Cycle	Problems	Time Period of Environmental Impact Assessment
Boryeong Thermal Unit 7 & 8	Seoyeong Engineering co.,ltd	Land and marine wildlife, Marine water and sediment quality, Air quality, Water quality, Noise pollution·vibration	Once every quarter	None	Mar. 2005 ~ Dec. 2013
Incheon Combined Unit 1	Green Environment co.,ltd	Marine wildlife, Marine water quality, Air quality Marine sediments, Marine physics	semi-annual Unit 1 Once every year		Apr. 2003 ~ Jun. 2010
Incheon Combined Unit 2 & 3	Green Environment co.,ltd	Land and marine wildlife, Marine water and sediments quality, Air quality, Geological terrain, Noise pollution, Soil, Environmentally friendly circulation of resources	Once every quarter		Jun. 2007~ Dec. 2012
Jeju Internal Internal Combustion	Sinsung E&C co.,ltd	Eco-system of marine and land, Noise pollution·vibration, Marine water quality, Air quality, Exploration by satellite	semi-annual Jeju Combustion Once every year		Jun. 2004 ~ Jun. 2010 (completion of combustion unit 1) Jun. 2009~Jun. 2014(internal combustion unit 2)

*Period of Environmental Impact Assessment: 5 years from completion of construction

The environmental impact assessment in every quarter and semi-annually include the inspection of ecosystem for marine and land animals as well as plants. This allows KOMIPO examine not only the influence of the construction and operation of its power plants on the local economy and stakeholders, but also its influence on species of marine and land plants and animals. Such data provides a valuable foundation for an effective control of environmental impact factors such as air, water, noise and vibration pollution in the event of construction and operation of power plants.

Love the Environment Activities | As a practice of environmental care, an array of environmental preservation programs are carried out, such as Caring for 1 river (mountain, ocean) per 1 company, feeding wild animals, and creating habitats for wild birds, as activities to preserve the eco-system. Also, Love the Environment Essay Contests, 1 day environment classes, and promotion of environment preservation awareness events take place for residents of the local community and visitors on field trip to the power plant.

External Evaluation (Certification/Awards)

To leap forward as the ECO Global Top 10 in the Energy Utility Industry by 2015, a mid-long term master plan (ECO-2015) has been established and implemented with detailed strategies. Following the master plan, Boryeong Thermal and Boryeong municipality and Incheon Thermal and Incheon municipality have concluded voluntary environmental management agreements, to establish and follow more strict standards than the national environmental standards as self-initiated efforts for reduction of environmental contamination. Also, through active efforts made by each worksite for environment enhancement, KOMIPO has accomplished the outstanding achievement of consecutive nomination for a green company throughout all of its worksites. Moreover, in addition to the pre-existing environmental management system, construction of a green management system including greenhouse gases, energy, natural resources, social responsibility in the field of the environment and performance management systems has received external authentication. KOMIPO's achievement in environmental management has been recognized by external environmental agencies through nomination for a variety of environment related awards.

Republic of Korea Green Management Grand Prize

External Certification& Awards

Category	Name of Power Plant	Renewal Date	Effective Date	Notes
Demonstrated certification of Green Management System (First certification)	Headquarters and all worksites	07-10-2011	07-09-2013	Korea Standards Association
Certification of ISO 14001	Headquarters and all worksites	09-07-2004	09-06-2013	Korea Standards Association
Designation as a Green Company	Boryeong Thermal	04-14-2010	04-19-2015	First awarded in Feb. 09, 2007/2nd Consecutive Nomination
	Incheon Thermal	11-22-2007	11-21-2012	First awarded in Feb. 05, 1996/5th Consecutive Nomination
	Seoul Thermal	03-30-2011	03-29-2016	First awarded in Apr. 21, 2007/3rd Consecutive Nomination
	Seocheon Thermal	02-08-2011	02-07-2016	First awarded in Jan.15, 2008/2nd Consecutive Nomination
	Jeju Thermal	04-01-2006	03-31-2011	First awarded in Mar. 21, 2003/2nd Consecutive Nomination
Awarded by the Minister of Environment at the outstanding environmentally friendly corporation case presentation seminar	Jeju Thermal	07-02-2009	-	Environmentally Friendly Companies Council
Grand Prize for Leading Company for Circulation of Resources*	Seocheon Thermal	09-05-2009	-	Ministry of the Environment
Award of Excellence by Seoul City on the 15th World Environment Day	Seoul Thermal	06-08-2010	-	Seoul City
Designated by the municipal leader of Jeju Special Self-Governing Province as a worksite of excellence for environmentally friendly management	Jeju Thermal	12-20-2010	-	Jeju Special Self-Governing Province
Minister of the Environment Award for Clean SYS excellence in worksite management	Boryeong Thermal	11-04-2010	11-03-2012	Ministry of the Environment

*Maximization of recycling by using coal ash as an energy resource

Responding to the Treaty for Climate Change

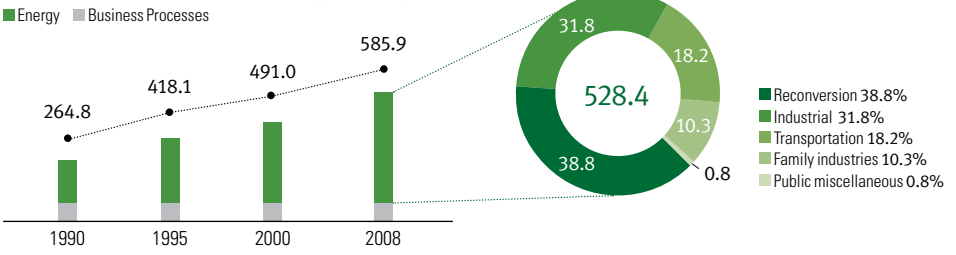
With the Kyoto Protocol in February 16th, 2005 coming into effect, there will be full-fledged greenhouse gas reduction activities by industrialized countries. To begin its commitment starting 2013, Korean government is currently implementing comprehensive countermeasures such as operation of a countermeasure committee for the treaty on climate change, establishment of greenhouse gas emission rate statistics and greenhouse gas reduction research and development. In tune with government policies, KOMIPO has taken the initiative to reduce greenhouse gases by establishing greenhouse gas emission statistics for its power generation facilities. Research and development have also been carried out to secure carbon reduction technologies and renewable energy businesses such as wind power, small hydro power and fuel cells.

Current Status of Greenhouse Gas Emissions

Total domestic emission of greenhouse gases in the field of energy and industrial processes in 2008 recorded approximately 590 million tons, increasing approximately 1.6% from the previous year. Such data reflects a relative slowing down in the increase rate, with a 4.5% average yearly increase since 1990, but only 2.9% increase from the previous year, resulting from restrictions of energy consumption caused by low national economic growth and rises in oil prices due to stagnation in the economy. Power Generation (reconversion) accounts for approximately 34% (as of 2008) of total domestic greenhouse gas emission rates, with 2 hundred million tons of emissions.

CO_2 Emissions in the Domestic Energy Industry

| Unit : Million tCO_2e |



Category	Amount of Emissions (million tCO_2e)	Market Share(%)	Increase from the Previous Year (%)
Reconversion	201.1	38.8	5.9
Industrial	165.0	31.8	2.7
Transportation	94.6	18.2	▲4.2
Family Industries	53.5	10.3	▲1.8
Public Miscellaneous	4.2	0.8	▲6.3
Total	518.4	100	2.0
KOMIPO	30.6	5.9	-

The approximately 15% increase of CO2 emissions due to increases in the amount of power generated can be seen as a relatively slow increase, considering the 22% increase in the amount of energy generated and 6.1% decrease in emission rates per GWh from the previous year. This has resulted from increase in use of eco-friendly fuels and operation of renewable energy power generation facilities such as Yangyang wind power, Boryeong small Hydro and Boryeong and Seocheon Solar PV. Diverse renewable energy businesses, such as offshore wind energy, tidal energy, fuel cells and organic resource derived fuels, combustion of sewage sludge are being developed. Once these projects yield tangible results, KOMIPO will lead low carbon green growth by significantly reducing emission rates per GWh and promising reductions in total emission rates of greenhouse gases.

Current Status of Annual CO_2 Emissions by KOMIPO

Category	2008	2009	2010	Rate of Increase Compared to 2009(%)
Amount of Power Generated (GWh)	41,756	45,745	55,724	21.8
Amount of CO_2 Emissions (thousand tCO_2)	30,225	33,163	38,036	14.7
Amount of Emissions per (tCO_2/GWh)	0.739	0.737	0.692	▲6.1

Mid-Long Term Promotion Strategies to Respond to UNFCCC Treaties for Climate Change

KOMIPO practices reductions in greenhouse gas emissions by actively participating in the "low carbon green growth policy", the new paradigm for national development, and has established a "Master Plan for Responding to Climate Change" in August 2010, designating 3 major promotion strategies and 12 core tasks to respond to climate change.

Mission	Realization of an Advance Power Generating Company Leading Low Carbon and Green Growth		
Goal	- 10% Reduction of Greenhouse Gas Emissions per KRW (compared to BAU by 2020) - Expansion of renewable energy use domestically and abroad, and compliance with the degree of RPS		
Strategy	Construction of a Carbon Management System	Reduction of Greenhouse Gases	Responding to Climate Change
Promotion Plan	- Establishment and Operation of greenhouse gas reduction goals - Construction of a greenhouse gas inventory system - Expansion of registered CDM projects through renewable energy businesses - Optimal management of registered amount of Carbon Emission Rights - Developing climate change experts and the pool of human resources - Building external partnerships to respond to climate changes	- Strategic response to Renewable Energy RPS - Establishment of plans and operation of performance enhancement - Operation of pilot project of target management systems throughout all worksites	- Application and securing of new technologies to respond to climate changes - Development of green energy as new engines of growth - Development and application of technologies on greenhouse gas reduction

Promotion Performance of Policies Responding to Climate change

Power generation business being a major source of greenhouse gas emissions, achieving greenhouse gas and air pollution reduction are of critical importance. The following shows the up-to-date achievements on the 3 major promotion strategies in detail.

Promotion Performance of Responding to Climate Change Policy

Promoted Tasks	Accomplishments
Establishment of Foundation for a Carbon Management System to Respond to Climate Change	Construction of a greenhouse gas inventory system in tune with ERP
	Establishment of a mid-long term climate change master plan
	Construction of an environmental performance evaluation and comprehensive environmental system
Enhancement of Energy Efficiency and Development of Greenhouse Gas Reduction Technologies	Reduction of 760 thousand tons per year through enhancing efficiency by adopting the Boryeong Unit 1 & 2 high efficiency turbine
	Commercialization and technological development of high efficiency mass scale ultra pressure coal-fired power plant
	Development of 144 MW of renewable energy facilities such as Boryeong Hydro Power, Yangyang Wind Power
Registration in International CDM Projects and Domestic Greenhouse Gas Reduction Businesses	Registered performance of CDM project_ annual reduction of 31,955 tons of CO_2 through businesses including Gangwon Wind Power, Yangyang Wind Power
	Registered performance of domestic greenhouse gas reduction businesses_ annual reduction of 5,768 tons of CO_2 including Jeju power plant

Gangwon Wind Power Complex

Seocheon Thermal Solar PV

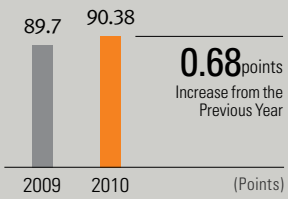
공정하고 투명하게 함께하는 동반자

A Companion with Fairness and Transparency

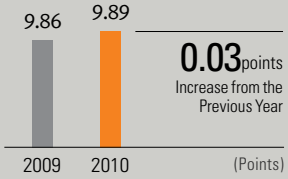
Fair Business

Vision	Mutual Growth with small and medium-sized firms
Strategy	Fostering small and medium sized businesses as a small giant, Becoming a leading company of ethical management
Issue	Fair trading with partner cooperating companies, Support for win-win cooperation, Transparent management
Performances	KOMIPO-BEST Win-win cooperation company system
Plan	Promotion of mutual growth through on-going win-win cooperation, Carrying out diverse ethical realization programs
Management Team	Shared Growth Team, Strategy & Planning Team

Level of Ethical Awareness

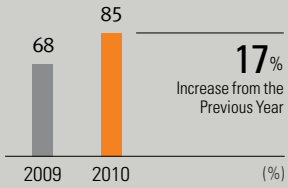


Level of Integrity



Evaluation on Power Generating Companies by KEPCO with research agencies Total_ 10points

Level of SMEs' Satisfaction



Promotion Strategies and Organizations for Mutual Growth

Promotion Strategies for Mutual Growth

As a public enterprise, KOMIPO leads the win-win growth policy for sustainable development for the national economy and enhances the competitiveness of the power generation industry with small and middle sized companies. The power generation company promotes business partners to be a small giant with the best technology competitiveness and the strong survival techniques in order to supply stable electricity and to be over the competition in and outside countries along with small and middle size companies.

Mission	KOMIPO Developing through Mutual Growth with Small and Medium Sized Businesses			
Goal	Strengthening Capacity of SMEs	Realization of Mutual Growth within the Entire Company		Securing Competence in Power Generating Industries Overseas
Strategy	Expansion of Awareness on Mutual Growth	Establishment of Fair Trade Regulations	Enhancement of Technology and Productivity	Pioneering Markets Abroad
Promotion Plan	- Reflecting Management Strategies - Providing Management Information - Support for Innovative Management	- Fair Trade Regulations - Expansion of Joint Purchase of Products - Protection of SMEs Technology	- Enhancement of Technological Competitiveness - Activation of Technology Transfer - Reinforcing HR and Education	- Support for Export Road Shows - Brand Globalization - Enhancing Export Competitiveness

Organizations Promoting Mutual Growth

As the head of the Committee for Mutual Growth, the CEO is the final decision maker in mutual growth policy. Shared Growth Team which is regular team composed of 7 members including team director carries out mutual growth policies for SMEs such as product purchase, business support and R&D. CEOs from SMEs and professors participate in the Committee for Mutual Growth as advisors to help set the course for mutual growth policies and support projects.

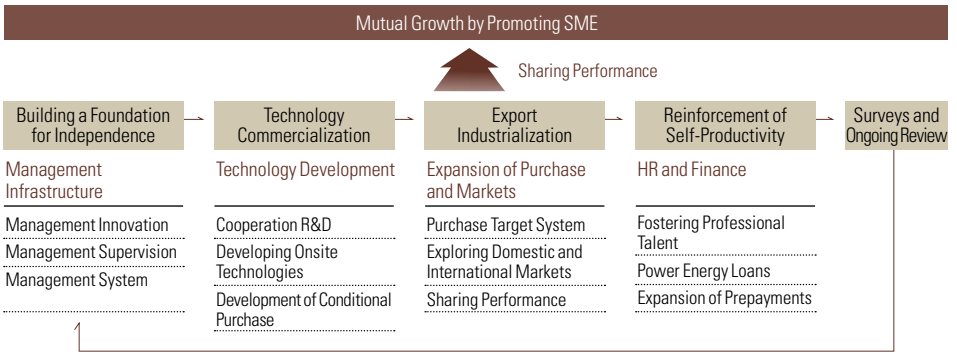
Headquarter	Worksites
Head of the Committee for Mutual Growth (CEO)	Head of the Committee for Mutual Growth at each Worksite (Head of Worksites)
Committee Members: Vice Presidents at the headquarter, External Experts at worksites (Professors, Government Officials), CEOs from SMEs *Auditor: Shared Growth Team Director	Committee Members : All General Managers at worksites Auditor: General Manager of a group for win-win cooperation.
Shared Growth Team	Purchase Support Manager

Organization Supporting Small and Medium Size Companies and Expansion of Functions

	General Support 2003 - 2005	Win-win Cooperation 2006-2009	Cooperation & Mutual Growth 2010 and onwards
Organization	· First ever establishment of this type of organization by a power generating company	· Integration of research and development	· Expansion in support for small and medium size companies · Establishment of shared growth team
Function	· Purchase presentation at worksites · Support for maintenance of worn-down facilities	· Research and development on conditional purchase products · Carrying out business for supporting exports	· Concentrated support for markets abroad · Innovative management and fair trade
Support System	· Website · Bidding information system · Development of supporting programs	· Integration system for mid-term support · Management system for affiliates · Fostering of KOMIPO-BEST companies	· Support for exports specialization · Establishment of a management system · Mutual growth agreements

Mutual Growth Support System

To nurture small and medium businesses, progressive support projects have been set, such as support for management infrastructure, technology commercialization, export industrialization and reinforcement of self-sustainability. Analysis on the result of the support and surveys are re-reflected in the support plans. Also, by designating business partners of excellence as KOMIPO-BEST win-win cooperation businesses, long-term concentrated fostering is established, while a small and medium enterprise management system is operated for support and communication. Realization of such policies is spearheaded by conclusion of mutual growth agreements with small and medium size companies.



KOMIPO-BEST Win-Win Cooperation System

KOMIPO-BEST is a program nurturing total 50 partner companies of excellence with selective and concentrated supports to have strong competencies from 2008 to 2017. In 2008, ten companies were designated as the first generation of the program with USD 2.5 million of management finance support, USD 31.5 million of product purchases. This achieved an increase of USD 45.1 million and 45% in sales, creating 12,000 jobs on the year, enhanced management capabilities and diversified profit structure. In 2010, another 10 companies were designated as the second generation of the program, this time focusing on concentrated support for joint R&D, joint adventure of business abroad, exports and information-orientation. Also, by hosting a Future Management Forum each year, KOMIPO negotiates the course of its mutual growth with small and medium sized businesses.

KOMIPO-BEST Win-Win Cooperation Operation

First Generation				Second Generation			
1	NANO Co., Ltd	6	Samhyeon CNS Co., Ltd	1	Daeyoung C&E Co., Ltd	6	Shinheung Co., Ltd
2	Daeyang Rollent Co., Ltd	7	Hanjin Engineering Co.,Ltd.	2	DOWON Tech Co., Ltd	7	Jeil TNI Co., Ltd
3	Se Woon T&S Co., Ltd	8	Itechnet Co., Ltd.	3	Morgan Korea Ltd	8	CW-Hydro Co., Ltd
4	Sam Young Fil-tech Co., Ltd	9	KGCRANES Co., Ltd	4	B&F Technology Inc.	9	Turbolink Co., Ltd
5	EnTech Engineering, Inc.,	10	Sehwa Ens Tech Co., Ltd	5	SUNG IL Co., Ltd (SIM)	10	Turbopowertech Co., Ltd

Small and Medium-Sized Company Support Project System

'Management systems for support SMEs and SMEs support website' are operated to systematically support R&D, management innovation and expansion of markets, providing information and resolve difficulties.

Affiliate Management System (http://crm.komipo.co.kr:7060/emInApp/)	Integrated SME Support System (http://58.227.22.120/servlet/mainSvl)	SME Support (www.komipo.co.kr/JUNGSO)
Registration and maintenance of power generating facilities equipment and maintenance firms	Purchase of SME products, sharing and management of R&D information.	Providing information for support projects, notifications, bidding information, registration of complaints, collecting opinions etc

Win-win Cooperation Business Agreement Ceremony

In the aim of increasing mutual trust and continuing cooperative relationships with SMEs, KOMIPO has concluded various agreements and fulfilled these commitments. Agreements have been concluded to carry out support projects and a Win-Win cooperation supporter agreement has been finalized to dispatch a power generation expert to provide management consulting. Also, for mutual growth through fair trade with affiliates, KOMIPO has concluded fair trade agreements and has hosted a win-win cooperation advancement competition to designate and support 280 companies in their exports.

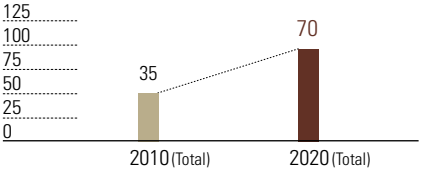
Promotion Activities for Mutual Growth

Support for Affiliates in Technology Development and Management Innovation

As the first among the domestic power generation companies, KOMIPO has started the SMEs support program with the purpose of strengthening SMEs technology innovation and capacities since 2003. The related fields has been various from R&D to localized joint technology development, establishment of ISO 14000 ,ISO 9000 and ERP, technology exchange for international standard certification and win-win cooperation workshops etc. KOMIPO has spent USD 35.1 million so far for these support programs for management innovation. Also, KOMIPO has a plan to support USD 70.2 million additionally linked with its management strategies for management innovation and technology development and so on by 2020.

Support Performance of 2001-2010

| Unit : USD million |



Business Presentations of Outstanding SMEs Products

By giving chances to SMEs having a 1:1 consulting meeting with KOMIPO purchasing support manager regarding their newly developed technology products, KOMIPO opens opportunities to have a contract with SMEs. Total 11 purchasing support managers at the headquarter and worksites are designated for technology development, sales information, support projects, construction information, problems at the plants and help SME to broaden markets.

Consultation Seminars for Purchase of SME Products

Performance of Purchase Consultations in 2010

Date	Participating Companies	Consultation Performance	Subject Worksite
13 ~ 30. Apr	113 companies	USD 3.7 million	Boryeong, Incheon, Seoul, Seocheon, Jeju Thermal
31. Aug ~ 2. Sep	66 companies	USD 2.3 million	

Purchase of SME Products

Purchases from SMEs have recorded a rate of over 70% each year, exceeding the legal requirements of 50% and total USD 1,054 million of products have been purchased in the past ten years. Each year, KOMIPO also exceeds the legal requirement of 10% for technology development products purchase. KOMIPO aims to purchase USD 1,756 million of SME products by 2020, providing opportunities to heighten their self-sustainability.

Purchase Performance of SME Products

| Unit : USD million |

Category	2008	2009	2010	Total
Total Purchased Cost	122.5	206.4	140.7	469.6
SME Products	80.9	156.3	99.7	336.9
Rate of Purchase (%)	66.1	75.7	71	71.74

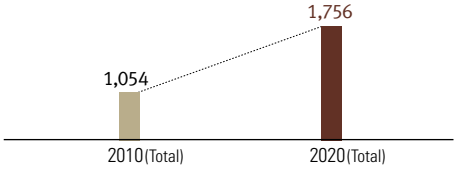
Purchase of Developed Technology Products

| Unit : USD million |

Category	2008	2009	2010	Total
SME Products	41.4	94.1	45.2	180.7
R&D Products	4.1	15.1	6.1	25.4
Purchase Ratio (%)	9.9	16.0	13.5	14.0

Purchase of SME Products

| Unit : USD million |



- Outstanding SMEs Products (NEP, NET, GS, certification of performance, etc)
- Successful Products of Joint Research (designated development products)
- Products from Companies with Female Leaders, Products from Social Enterprises, etc

Mutual Growth Promotion Activities

Support for SMEs to Expand into the International Market

To help small and medium sized companies to expand their business into international markets, KOMIPO supports participations in international trade fairs. Also by jointly participating with SMEs in promising export markets abroad, KOMIPO has been establishing social networks with electricity authorities and businesses including international trade fairs, registration as an overseas vendor and consultation with buyers.

Exhibitions · Roadshows	No. of Applicants (companies)	Consultation Performance (USD million)
SWEET2010	8	105
Smart Grid EXPO	45	642
SIEF*	40	2
Middle East Roadshow	15	239
Power-GEN India	20	97

*SIEF:Seoul International Electric Fair

Exhibitions · Roadshows	No. of Applicants (companies)	Consultation Performance (USD million)
Trade Delegation	17	208
Far East Roadshow	12	8
Middle East Roadshow	12	84
US Exhibition	21	200
Total	190	1,585

Africa Exports Financial Road Show

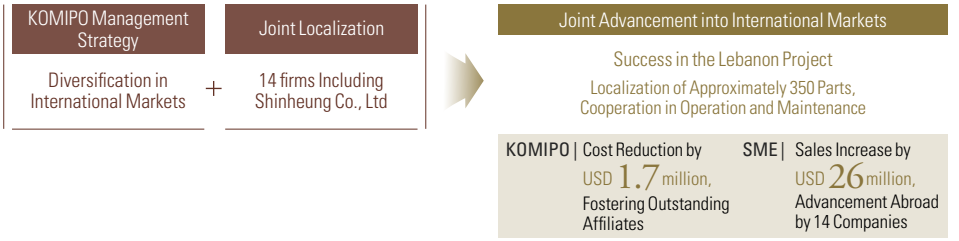
Export Road Show Consultation

Middle East Financial Export Road Show

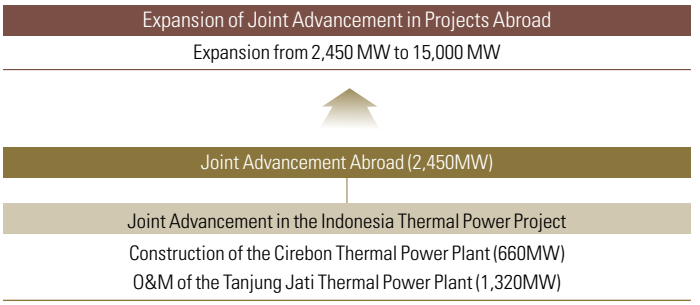
Joint Advancement into the International Market

KOMIPO had entered Lebanon Combined-cycle Plant O&M project with 14 SMEs and localized 350 components. As a result, sales of participating SMEs' increased by USD 26 million and KOMIPO was able to successfully reduce costs by USD 1.7 million. In the future, KOMIPO plans to once again involve SMEs in the Thermal Power Generation Project in Indonesia. Also, it plans to heighten the synergy effect on growth by jointly advancing with SMEs into power plant construction, O&M projects in approximately 10 countries abroad.

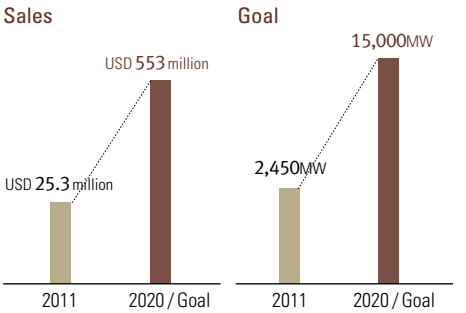
Performance of Joint Advancement into International Markets in Tune with Management Strategy



Future Plans to Advance Abroad



KOMIPO Projects Abroad



SME Support Programs

KOMIPO promotes mutual growth through cooperation and support in not only development of technology and purchase of products of SMEs but also in all fields from human resources to management. Also, KOMIPO shares successful reductions in production costs of items procured by the company with SMEs, and promotes joint advancement with SMEs in existing projects in the overseas market, in its efforts to grow together in the global arena.

Support for Technological Development

Project 01 Support for SME Cooperation R&D

Financial Support for localization of equipment and development of new products

Support_ within 75% of development costs (up to USD 439,000 maximum), 3 years of purchase guarantee once selected as a designated product

Project 02 Support for Onsite Technology Development

Joint Technology development on on-site problems

Support_ Support for technology development and prototype technology, and covering all development costs

Project 03 Support for Development of New Products Guaranteed for Purchase

Supported by the Small and Medium Business Administration, guaranteed purchase for a fixed period of successfully developed products

Support_ Up to 75% of Development costs (up to USD 439,000 maximum, development term of 2 years)

Project 04 Support for Technology Development through Joint Private and Governmental Investment

Joint support of Small and Medium Business Administration and KOMIPO and guaranteed purchase for a fixed time by KOMIPO in the event of successful development

Support_ Within 75% of development costs (up to USD 87,000, development term of 3 years)

Project 05 Support for Deposit System of Technology Protection

Deposit of core SME technology for a set period to protect technology and enhance SMEs competitiveness.

Support_ Conclusion of agreement with participating companies and agencies and KOMIPO, and supporting of related costs

Project 06 Support Business to Share Profits

Sharing of profits by 50:50 for the amount of production costs saved when reduction of production costs is achieved from items procured by KOMIPO

Support_ Support to reduce production costs for partner companies through technology and management innovation

Project 07 Relocation of Possessed Technology

Commercialization of manufactured products by relocating the non-exclusive license of technologies possessed (property rights etc) of KOMIPO

Support_ possessed technologies relocated at a cost and support for technology

Support for Expansion of Markets

Project 01 Prioritized Purchase of Products Certified as New Technologies

Over 20% of purchase costs for mandatorily purchased from Products certified as New Technologies is mandatorily purchased each year

Support_ Official notice of prioritized purchase sent to all worksites, support for product advertisement

Project 02 Designation and Prioritized Purchase of Selected Development Products

First ever domestically produced products or localized products of technology adopted from abroad, industrial property rights or products certified as new technology are designated as selected development products

Support_ Prioritized purchase for 3 years

Project 03 Support to Enter Products in Domestic and International Exhibitions

Support for costs to exhibit products in domestic and international exhibitions and export consultation

Support_ Up to USD 4,390 for domestic exhibitions and USD 8,780 for overseas ones.

Project 04 Support For Global Marketing

Sector	Project Profile	Type of support
Registration of overseas vendors	Support for discovering ordering sites, agency for application registration	Up to 75% (Maximum USD 4,390)
Overseas citizens' network	Support for exports through market research by local consulting company	Up to 75% (Maximum USD 8,780)
Global branding	Support for brand consulting and development of brand marketing	Up to 75% (Maximum USD 8,780)
Online marketing	Register as a priority in search engines and organization of homepage	Up to 75% (Maximum USD 4,390)
Manufacturing of overseas promotion materials	Support for English homepage and manufacturing of English promotion materials	Up to 75% (Maximum USD 2,630)

Project 05 Dispatching Delegations to Pioneer

Open class for SMEs with outstanding products to participate in export consultations or product presentations at foreign countries with high prospects for exports

Support_ Invitation costs for buyers, rental costs for export consultations, promotion costs etc

Project 06 Overview Presentation for Outstanding SME Products

Hosting of overview presentation and consultation with purchase management division by touring worksites with NEP certified or outstanding SME products

Support_ Presentation of Outstanding SME products, providing 1:1 consultation opportunities with purchase division directors at all power plants

Project 07 Operation of a Purchase Support Management System

Through unification of managing office at the headquarters and worksites, enhancement of efficiency in company support duties

Support_ consultation for problems of SMEs and support of activities to promote purchase of outstanding products

SME Support Programs

Support for Management Innovation

Project 01 Designation and Concentrated Support for KOMIPO-BEST Win-win Cooperation Company

Designation of 10 outstanding SMEs on alternate years until 2017 to award certificates of recognition and concentrate support, and foster as a small giant.

Support_ Visit partner companies to supervise technology and provide information, prioritize supported businesses

Project 02 Support for Establishment of an Informatization

Construction of information management systems such as ERP, setting up and support of unit business system

Support_ Up to 75% of establishment costs (Maximum USD 26,300)

Project 03 Support for Certification of New Technologies and Acquisition of Industrial Property Rights

Support for the construction of information management systems such as ERP, and of unit business systems

Support_ Up to 75% of certification costs (Maximum USD 4,390)

Project 04 Support for Establishment of an Environmental Management System

Support for establishment of an environmental management system including ISO and acquisition of environmental certification marks

Support_ Up to 75% of certification costs (Maximum USD 4,390)

Project 05 Support for Establishment of Quality Certification and Safe Management

Support for quality related activities such as acquisition of quality and safety related certification such as ISO and KOSHA, and standardization of work duties to enhance quality and productivity of SME products

Support_ Up to 75% of certification costs (Maximum USD 4,390)

Project 06 Clean Work Place Support Project

Improvement in operation facilities and working environments of SMEs suffering from deficient working or manufacturing environments to enhance productivity and improve working conditions

Support_ Up to 75% of costs for Safety facilities, environment improvement facilities, operation enhancement facilities (Maximum USD 8,780)

Project 07 Support for Acquisition of International Standard Certifications

Support for costs for certification under international standards such as CE of Europe and NRTL of the US, consulting for acquiring certification, and supervision fee and related costs, to build a foundation for SMEs in markets abroad.

Support_ Up to 75% of acquisition costs (Maximum USD 6,146)

Project 08 Onsite Management by KOMIPO CEO

Onsite visits by KOMIPO CEO to partner companies to consult win-win cooperation and mutual growth measures, and to search for practical support measures

Support_ Introduction of KOMIPO support policy and receiving problems and complaints of SMEs

Project 09 SME Win-Win Cooperation Workshop

Presentation of government policy and outstanding case examples, providing information on KOMIPO construction and projects abroad

Support_ all costs of interaction of technology and workshop participation

Project 10 Discovering and Rewarding Outstanding Cases of Win-Win Cooperation

Promotion of mutual growth by discovering outstanding examples of win-win cooperation of SMEs and KOMIPO

Support_ Financial support for advertisement and necessities for outstanding partners, awarding trophies of gratitude

Support for Human Resources and Finance

Project 01 Support for Win-win Cooperation Supporters HR

Passing down expert technology of power generating facilities possessed by quality masters hands and retired employees of KOMIPO

Support_ Visits by quality mater hands to partners, providing information and technology consulting, retired employee may reside at companies for management consulting (50% of total income, support of 1,317 USD per month)

Project 02 Support to Foster Technological Experts in Small and Medium Private Maintenance Companies

Education on power generation for small scale maintenance companies and support for acquisition of power generation maintenance licenses

Support_ Partial support of Power Learning Institute training costs

Project 03 Customized SME Technology Education Support Projects

Carrying out customized technology and quality education for SME employees

Support_ free education support

Project 04 Power Energy Loan

Providing loans to SMEs based on digital contracts

Support_ loans of up to 80% of down payments

Project 05 Public Purchase Loans

Loaning production costs based on contracts with SMEs that have concluded delivery contracts

Support_ Loans of up to 80% of down payments

Promoting Transparent Contracts

For the promotion of sound contract processes, KOMIPO has consistently strived to secure transparency in the process of signing contracts, expanding operation of online bidding for customer satisfaction and minimizing the number of private contracts, and has speedily revised and managed the internal contract regulations to comply with its transfer into a market-oriented public company.

Reducing Private Contracts and Increasing Online Purchases

Private contracts are operated on a exceedingly limited scale, and include various private contracts for SMEs, purchases of New Excellent Products, contracts for the routine maintenance of generation facilities signed with Korea Electric Power KPS(Korea Plant Service) and agreement for software develop and manufacture by Korea Electric Power Data Network. KOMIPO has maintained a trend of progressively reducing the proportion of its private contracts each year, and consistently strives to maintain the rate of electronic bidding above 96~98% and to reduce the rate of private contracts to enhance the transparency and fairness of its contracts.

Current Status of Concluded Contracts

Category	Total Contracts		Electronic Bidding		Private Contracts	
	Amount(USD million)	No. of Contracts	Amount(USD million)	No. of Contracts	Amount(USD million)	No. of Contracts
2008	509.7	1,250	249.5	1,210(96.8%)	207.5	196 (15.7%)
2009	301.3	1,530	288.6	1,481 (96.8%)	46	150 (9.8%)
2010	361.5	1,369	164.8	1,336 (97.6%)	34.9	139 (10.2%)

Exempting contracts from international bidding or negotiations from the total number of contracts

Revision of Contract Regulations to Secure Fairness

Credibility of contracts has been enhanced by alleviating bidding participation requirements and by lowering entry barriers by actively reflecting the revised content of accounting regulations of 「Screening standards」 and Public Procurement Service 「Product Purchase Screening Standards」; by abolishing the Joint guarantor system for public enterprise; by lowering the ratio of deposits; and by expanding those subject to exemption of contract deposits.

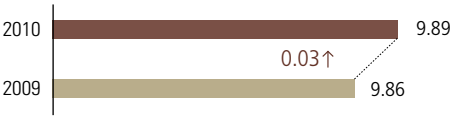
Category	Subject To Improvement	Improved Performance
Quality Screening Standards for Human Resources and Product Purchase	Lowering barriers and bidding participation qualifications by downscaling allotted points for fulfillment capabilities	70 points → 45 points for more than USD 0.88 million 50 points → 30 points for less than USD 0.88 million
	Evaluation of the state of management for product purchase	Financial Ratio Analysis → Credibility Ratings
	Up scaling of comprehensive average points for final successful bidders	Over 75 points → Over 85 points
	Purchase of equipment on condition of installation	Fixed Prices → Modified according to changes in prices
Contract Regulations	Elimination of the Joint guarantor system for public enterprise and downscaling of the contract deposit rate	20%→ 15% of contract payment
	Expansion of those subject to exemption of contract deposit	Contract Payment: USD 26,300 → USD 43,900

System to Ensure Integrity Pact

KOMIPO operates a Integrity Pact System to realize its promise to abolish any corrupt acts that may occur in the contract process such as price-fixing or acceptance of bribery or red-carpet treatment. KOMIPO requires companies to mandatorily submit a Pledge of Integrity Performance for the contract when applying for bidding and clearly states the content of the contract clause that 'annulment of the contract due to violation of the Integrity Pact' when submitting the Integrity Pact at the time of concluding the contract, thus striving for joint compliance with partner companies and itself to jointly enhance credibility of fulfilling contracts and heighten transparency. Also to stabilize Integrity Pact, integrity surveys are carried out each year to evaluate prevention of bribes or red-carpet treatment, standards and procedures of work duties, fairness of business processes and easiness in filing formal complaints.

Integrity Rating

| Unit : points |



Realization of Transparency Through Ethical Management

KOMIPO has found hope for sustainable management through ethical management. As the most basic means of communication with customers, stakeholders and our society, ethical management will pave the way to a happier future.

Demonstration of Integrity and Ethical Leadership by the CEO

CEO Nam In-suk took the pledge of integrity management in 2010, and has demonstrated ethical leadership by carrying out the KOMIPO's integrity obligation conformity pledge for all high-level employees. Also, by participating in the ethical management SM Forum CEO Pledge for 7 consecutive years since 2005, he has led the way in corporate social responsibility and its realization.

Employee

- Active Engagement in Ethical Leadership by the Management
- Participation in Realization of Ethics by All Workers

Government

- Compliance with Government Guidelines
- Active Fulfillment of Corporate Social Responsibility as a Public Enterprise

Partners

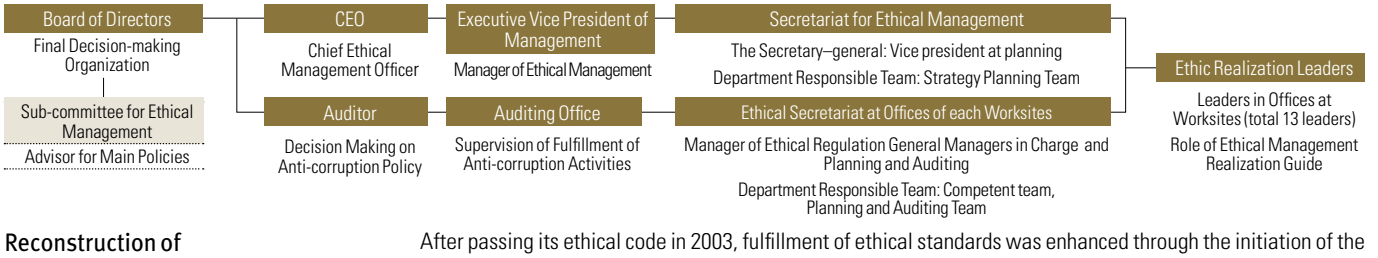
- Fair and Transparent Work Fulfillment
- Establishing Trust through Win-win Cooperation

Community

- Transparent Disclosure of Management Information
- Expansion of Support for Community
- Promotion of Low Carbon Green Management

Ethical Management Organizations

Ethical realization activities have unfolded through operation of a managing office for promotion of ethical management throughout the company, construction of a systematic infrastructure, education and promotion of ethical management, and expansion to external agencies. Both preemptive measures and diagnosis, and follow-up measures and activities are carried out regarding unethical acts. In particular a subcommittee for ethical management has been established within the Board of Directors to rigorously carry out the function of ethical management strategy development and advisory roles for main policies, and for the securing of promotion and implementation of sustainable ethical management throughout the company.



Reconstruction of Ethical Standards

After passing its ethical code in 2003, fulfillment of ethical standards was enhanced through the initiation of the company regulation code in 2005 and the regular maintenance and supplementation of the system, as a channel to propose guidelines for action and to reflect opinions of employees. In 2010, the procedure for notification standards of external lectures and meetings was established, and standards were elaborated to reflect the recommendations of the Anti-corruption and Civil Right Commission on code of conduct, such as those related to events of congratulation or condolences. Also, mandatory education on action standards is carried out twice annually for better understanding and realization of ethical standards by all employees, while an 'intensive ethical standards system' is operated online on the company website.

Sustained Monitoring

To confirm and supervise the proper operation of ethical management, regular ethical management monitoring for customers is carried out. To support sustained improvement of the evaluation results, rigorous feedback is carried out and incentive for ethical performance is reinforced in tune with internal evaluation. The standard of awareness of ethical management is diagnosed for all employees, while the results of the evaluation are utilized to enhance systematic factors and for the direction of future ethical management promotion. A system of round the clock feedback is operated to analyze and improve fields more prone to corruption through integrity monitoring of partner companies, and to designate and operate the satisfaction index and its responsible organization.

A Transparent Communication Policy

Various open channels of communication are provided, including conversations with the CEO and the Rainbow Conversation Room, to create an open debating culture and provide opportunities to all employees to participate in management. In addition, Rainbow meetings with the CEO and Lunchbox Meetings with the management level for open communication develop mutual trust and create a organizational culture of vitality through transparent sharing of management content related to the company in general. Also, through the round the clock operation of an ethical hotline for all partner companies(and their employees) and internal and external stakeholders, transparency of communication has been enhanced.

Operation of Reporting System

In striving to prevent inequality, KOMIPO passed whistle-blower protection and compensation procedure guidelines in 2006 regarding violators of ethical regulations and operates an internal inequality reporting system. To support whistle blowing, the limit of compensation provisions was increased in 2009 to USD 1.76 million the highest level among domestic public institutions, and measures were revised to guaranteed absolute confidentiality of whistle blowers and contents of the report and to ensure there are no disadvantages as the result of reporting. KOMIPO also discovers model employees and cases of integrity by operating a website (cyber "Sinmungo") available to all internal and external stakeholders, which also receives any public complaints related to unethical acts by the company. In addition, an internal tip-off reporting system for unethical practices is used to mobilize an array of reporting systems for simultaneous online and offline reception of comments

Management of Ethical Risk

KOMIPO initiates improvement through preemptive identification of ethical risk that may occur in daily work duties or personal life by designating a total of 112 ethics mentors in all divisions and teams. In the case that an employee recognizes ethical risk, support for ethical counseling in any form desired by the employee is issued and counseling or improvement records are separately recorded as cases in ethical mentoring records to share as educational resources. Also, unethical acts are prevented beforehand through regular ethical fulfillment check-up activities by ethical practice leaders from each office or worksite. The auditing office operates concentrated improvement of areas prone to corruption through self-initiated integrity monitoring.

Operation of Ethical Management Education

To consolidate an ethical culture for employees, various customized ethical management educational courses and programs are operated. Mandatory ethical mini-lectures by the division director are carried out for five minutes before meetings start at each department, to practice ethical management in daily life. External commissioned education, invited lectures by external experts and ethical VOD education are provided according to different work duties, while mandatory fulfillment of ethical management is required especially of employees with new work duties or promotions, and newly recruited employees. For high-level senior employees above team director rank, a reinforced integrity ethical leadership course (over 5 hours) is mandatory. For partner companies, opportunities for ethical management education are being expanded and round table talks on work duties for win-win cooperation is utilized to search for further ways to support ethical management.

Performance of Ethical Education in 2010

Subject	Name of Education Course	Sessions
High-ranking Employees	Ethical Leadership Education	3
Newly Deployed or Promoted Employees	Special Education on Transparent Management	9
All Employees	Ethical Awareness in Power Plant	12
	Invited Speaker Special Ethics Lectures	4
	Worksite Educational Tours	7
	5 Minute Mini-Ethics Special Lectures	At all times
	Prevention of Sexual Harassment Education	1
Newly Recruited Employees	Introduction Course to Ethical Management (At time of employment)	1
Partner Companies	Ethical Management Education	4

Program	Specialization of Ethical Education	Enhancement of Voluntary Ethical Awareness	Activation of Lateral Ethical Communication
Performance	· Transparency training according to rank and work duties · 5 minute mini lectures before starting work duties · VOD on ethical awareness power plants · Operation of an intensive ethics system	· Realization of ethics in all seasons –Designation and carrying out of 1 ethical act per employee –Designation and operation of ethic themes for each organization (→ Internal feedback based on consistent enhancement and supervision) · Open call competitions for realization experiences, sharing case examples	· Ethics mentor consultation service –52 times per team or organizational group · Ethics speeches within teams –Before morning meetings · Designation and implementation of ethical themes for each organization –Jun. 2, every year

Cases of Improvement of Ethical Standards

Upon discovery of any occurrences of violations of ethical standards, the ethical management team or the auditing office is immediately notified, and decisions on correction measures are made by the auditing office. Countermeasures are strongly required to prevent any reoccurrence of cases of the same nature, while strict measures are operated including joint responsibility by the person in charge. By enacting the 'Operation Regulation on Employee Duty to Integrity Contracts' (Dec. 2006), integrity obligations and responsibility for violations are clearly stipulated in the case of board members, contributing to the consolidation of ethical and transparent management.

Ethical Regulation Enhancement Cases in 2010

Category	No. of Cases	Improvement Measures
Unethical Acts	1	Strengthening transparency education, improving security of documents, strict application of circulated work duties
Negligence	1	HR Measures, Reinforcement of Management Responsibility
Disruption of Order in the Workplace	2	HR Measures, Implementation of education
Insufficient Maintenance of Data	1	Establishment and operation of countermeasures for electronic document management
Management of Irresponsibility	3	Implementation of of service management education and HR Measures

신뢰와 소통으로 만들어가는 고객감동

Inspiring Customers with Trust and Communication

Customers

Vision | Enhancing customer satisfaction through stable supply of electricity

Strategy | Expansion of new power supplies and infrastructure to meet electricity demand,
Efficient management of electricity generating systems, Customer-oriented power supply management

Issue | Steady provision of electricity

Performances | Improve price competitiveness through procuring reliability in power generation facility,
Develop power supply related employees, Response to customer feedback

Plan | Continuous gathering of customer feedback, Management of power facilities for stable electricity supply

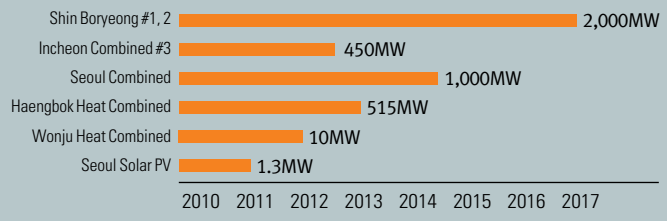
Management Team | Power Planning and Trading Team

Current Status of Accomplishment of Long-Term Trouble Free Service

| as of the end of 2010 |

Category	Trouble-free Service(days)	Category	Trouble-free Service(days)
Boryeong#3	4,000	Boryeong ST#3	500
Boryeong#4	1,500	Boryeong GT#1	500
Boryeong#1	1,000	Boryeong GT#6	500
Boryeong#8	500	Incheon ST#1	500
		Incheon GT#1	500

Promotion Road Map for New Construction



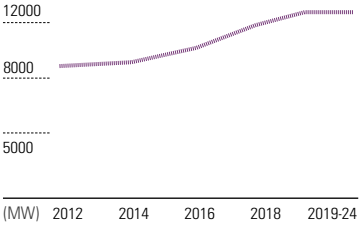
Stable Electricity Supply

Stabilization of National Electricity Supply and Demand

Balancing simultaneous production and consumption of electricity is critical as electricity characteristically cannot be stored. Thus, to prevent the event of electricity shortage it is of great importance to accurately predict future demand of electricity and construct power generation facilities at the appropriate time. KOMIPO leads the way in stable supply of electricity through consistent procurement of power generation facilities and enhancement of performance of existing facilities pursuant to the government's Basic Plan for Long Term Electricity Supply and Demand to stabilize national supply and demand of electricity and secure future engines of growth.

Construction of the Largest Power Generation Facility Among Domestic Power Companies I Recently, for stable supply of electricity to meet skyrocketing demand, construction plans are underway to complete new power plants of approximately 2000MW capacity at Seoul Combined Units 1 and 2 by 2014. Also, pursuant to the 5th Basic Plan for Long Term Electricity Supply and Demand to be established by 2024, KOMIPO strives to target timely construction of power generation facilities by reflecting plans to secure the greatest number of power generation facilities among domestic power generation companies, exempting nuclear energy. (4,265 MW of new power generation facilities constructed by 2024, not including new and renewable energy)

Capacity of Power Generation Facilities



Plans for Construction and Closedown of Power Plants Reflected in the 5th Basic Plan of Long Term Electricity Supply and Demand

Construction Plans for Power Plant Facilities

Name of Power Generator	Date of Construction	Facility Capacity
Incheon Combined Unit 3	Dec.31, 2012	450(MW)
Haengbok Dosi Heat Combined	Nov. 30, 2013	515(MW)
Seoul Combined Unit 1.2	Dec. 31, 2014	1,000(MW)
Shin Boryeong Unit 1	Jun. 30, 2016	1,000(MW)
Shin Boryeong Unit 2	Jun. 30, 2017	1,000(MW)
Gunjang IGCC	Dec. 31, 2019	300(MW)

Exempting renewable resource facilities

Closedown Plans for Power Generation Facilities

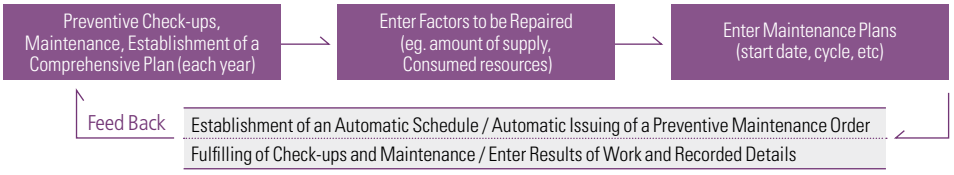
Name of Power Generator	Date of Discontinuance	Facility Capacity
Boryeong Combined Unit 4	Sep. 01, 2011	450(MW)
Jeju GT Unit 3	Jan. 01, 2013	55(MW)
Boryeong Combined Unit 3	Oct. 01, 2013	450(MW)
Seoul Thermal Unit 4.5	Dec. 01, 2014	387.5(MW)

Securing Reliability of Power Generation Facilities

Standard measures for preventive check-ups and maintenance | random breakdown → transfer of preventive maintenance → prevention of breakdown → increase reliability of facilities

Designation standard for preventive maintenance criteria | responding to records of maintenance(breakdown records etc), Recommendations of manufacturing companies, major machinery that may impact operations

Implementation of Scientific Facilities Management I Although limitations exist in the 100% prevention of breakdowns in the case of mass-scale power generation facilities that are composed of countless parts, an array of facility reliability procurement measures are operated to minimize breakdowns. Foremost, based on the systematic and scientific facility maintenance management system (e-komipo) and the real-time operation information system, e-P&I system preventive check-ups and repairs are carried out, while preventive power generation facility management is carried out by systematic management and statistical analysis of repaired parts, breakdowns and repair records.



Performance Enhancement and Life-span Management I Systematic life-span management plan is carried out according to the life-span management plan for power generation plants for aging facilities subject to long term use, while repairing and performance enhancement is carried out according to the results of the diagnosis. All efforts are being made for the safe operation of facilities by operating preemptive prevention repair and regular check-ups for other facilities prone to breakdown. For the first time domestically, comprehensive performance enhancement and life-span extension construction has been carried out on Boryeong Thermal 1 and 2 with thermal capacity of 500MW, and this was reported at an international symposium as an outstanding case of performance enhancement.

Expected Impact of Performance Enhancement of Facilities and Life-span Extension Construction of Boryeong Thermal #1,2,

Life-span Extension of Boryeong Thermal 1.2. (Jul. 2009)		Successful Supply of Electricity in Summer		International Recognition of Performance Enhancement Technology
Life-span Extension : over 10 years		Reduction of 300 thousand tons of CO_2		Presented as a Company of Excellence at Power Gen Asia(Nov. 2010 Singapore)
Increasing Efficiency : 1.44%p increase	Safe Operations	Reduction of Fuel Costs : USD 11.8 million	Performance	Awarded the Asian Power Award

Fostering Core Technological Experts I KOMIPO supports acquisition of cutting-edge technology and fostering core technological experts by dispatching the highest number of technological experts among domestic power generation companies to the Electricity Research Institute. Also, KOMIPO constantly strives to secure the highest technological capacity among power generation companies, through operation of a virtual simulator at the Boryeong Education Center that matches almost 100% of the company's facilities and functions, customized expert education courses in the Power Learning Institute and academic education for overseas business.

Domestic and Overseas Deployment of Technicians in 2010

Category	Field	No. of People	Category	Field	No. of People
Hyundai Green Power	Maintenance, Operation	24	Malaysia POIC	Operation	5
Iksan Sang-gong Energy	Operation	4	UAE Samsung	Demonstrated operation	12
Indonesia Cirebon	Maintenance, Operation	15	Indonesia Tanjung Jati	Maintenance, Operation	13
Indonesia Wampu	Operation	4	Electricity Research Institute	Expert	6
Lebanon	Maintenance, Operation	10	Total		93

Major Achievements I The first Korean standard type coal-fired Boryeong Unit 3 has been the first in the world to achieve 4,000 days of consecutive trouble free service (17 Dec. 1998 ~ 7 Oct. 2010 certified by the Korea Power Exchange). Also, Boryeong 1 and 2, the first mass-scale coal-fired thermal power to be operated domestically, won the Asia Power Award in 2010 for 2 criteria (technological, environmental sector) in terms of performance enhancement and life-span extension. These achievements contribute to the great accomplishment made by KOMIPO in the domestic and international power generation industry.

Awarded Asian Power Awards

Official Certification of 4,000 days of consecutive trouble free service by Boryeong Unit 3

Enhancement of National Competitiveness through Securing of Price Competitiveness

As a country totally dependent on import of a majority of its fuel (coal, oil, LNG, etc), it is of critical importance for South Korea to improve national competitiveness through the stable and economical introduction of fuels for stable supply of electricity and cheap supply of electricity for the public. For such ends, KOMIPO is expanding development of bituminous coal resources abroad, is purchasing bituminous coal strategically and securing stable purchase, is operating economical shipments and improved cargo facilities, and setting strategic and operational goals for direct imports of LNG to be used for power generation.

Strategic Goals			Operational Goal	
Name of Strategic Goal	KPI		Name of Operational Goal	KPI
Securing competitive advantage on fuel procurement	Unit price for calorie of bituminous coal	→	_ Expansion of resource development for bituminous coal abroad _ Strategic and stable purchase of bituminous coal _ Operation of economical shipments and improvement of cargo facilities	_ Self-development rate _ Unit price of purchasing Global Coal _ Rate of transportation costs among unit price for procurement
Successful advancement in sale of LNG used for power generation	Shares in the power generation LNG market (amount imported)	→	_ Contracts to introduce price competitive LNG _ Construction of basic LNG import infrastructure _ Advancement into the LNG wholesale market	_ Unit price of imported LNG _ Construction of LNG receiving facilities _ Revenue from market shares

Customer Communication

Customer Policy

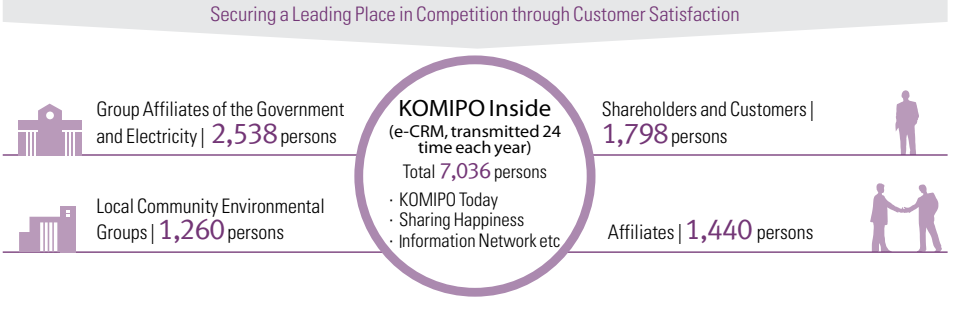
Customers can be defined as organizations or individuals that are greatly influenced by the management activities of the company and those that influence the accomplishment of its strategic goals. Accordingly, judgment and decision making by the CEO and employees are determined with customers as the standard. The customers of power generation industry differ from those of most other industries-they hardly ever have face to face contact with end-users. However, KOMIPO operates a policy of highest priority for customers through providing high quality and low cost electricity as a national public service industry.

Direction of Promotion for Customer Communication

KOMIPO identifies customer needs through a diverse range of channels such as customer satisfaction surveys, and reflects customer needs in major policies of the company, as the best mean of communication.

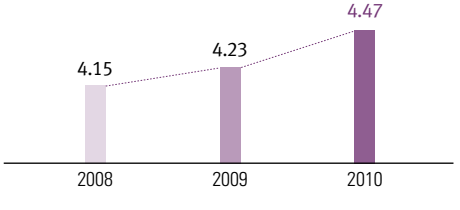
Methods to Identify Customer Needs		Method of Process	Contents
Customer Satisfaction Survey	Customer Survey	Commissioned surveys to external expert agencies	TCSI, Quality of electricity, Price, Corporate image, VOC responses
	Transparency Survey	Power generation company management evaluation (evaluating agency: KEPCO)	Sensory integrity, Potential integrity, Experience of corruption, Behavior/attitudes
	ARS Customer Service Survey	Commissioned research to external expert agencies (annually)	Rapid reception, Phone etiquette, Kindness, Ringing off, etc.
	Internal Customer Satisfaction Survey	Intranet Pop-up surveys	Satisfaction level of company employees with HQ departments
On-line	Website Live-Poll	Live-poll on the official website	Customer opinions on key issues
	E-mail Satisfaction Survey	Transmitting KOMIPO Inside e-mails (to customers that have agreed to receiving mail)	Evaluate, Receive feedback on e-mails
	Website: Voice of the Customer	Q&As, free opinions, corruption reports, etc. on Webpage	Transfer questions and/or reports to relevant department(s)
Database Information	Database Creation for Customer Complaints	Saving and applying the e-CRM system	Concentrate on unsatisfactory issues
	Management of Complaint Records	Constructing complaint records management system	Management of complaint records by type, complaint, area
	Time-Series Analysis	Quantifying customer satisfaction index	Improvement trends, Change in satisfaction index
Off-line 1:1 Customer Information	Listening to Customer Opinions	Held jointly with work duties	Receive opinions from face-to-face customers and process them
	Meetings with Major Customers	Periodical implementation after establishing annual plan	Meet with residents who live near Power Plants and SME personnel

KOMIPO Inside Operation System

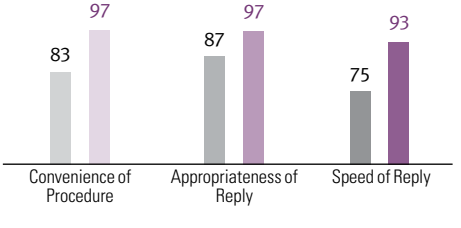


Increase of User Satisfaction (5 points total)

| Unit : points |



Satisfaction Survey Results of Request for Information



나눔이 또 다른 나눔으로 이어지는

Sharing that Leads to More Sharing

Local Community Participation and Development

Vision | A national company coexisting with local communities

Strategy | Stronger local and global social contribution activities representing company's traits

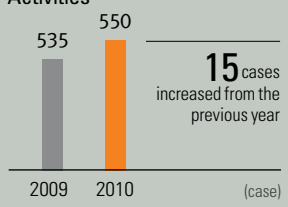
Issue | Contributions to local communities and its development

Performances | Establishment of infrastructure for communal development,
Ceremonial opening of energy world, Participation into Official Development Assistance

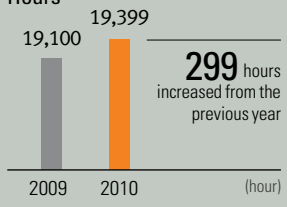
Plan | Commence "Light of Hope Sea of life", Strengthen partnerships with local communities

Management Team | Strategy & Planning Team

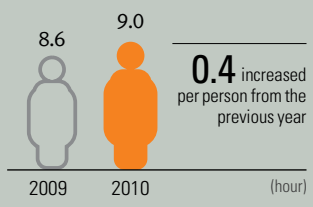
Number of Social Contribution Activities



Social Contribution Activity Hours



Voluntary Hours per Person



Social Contribution Activities

Community Service Foundations

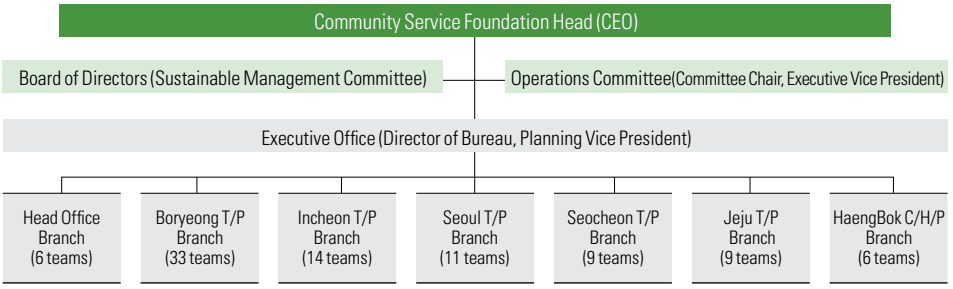
KOMIPO puts equal value on the goals of community development and entrepreneurial growth. Through effective communication with the local community, we have developed and systematic social contributions to aid those. Under the slogan of "Hope through love, smiles through sharing.", We have founded KOMIPO Community Service Foundation. With 7 branches(head office included) and 88 communal service groups playing their role successfully, the foundation has reached out actively in mainly five areas of society such as culture and arts, scholastic education, environmental protection, disaster relief and social welfare.

| Social Contribution Slogan |

Foundation	Jul. 2004
Slogan	Hope Through Love, Smiles Through Sharing
Organization	7 Branch offices, 88 Community service groups, 1622 Persons
Activity Group	Community service groups, Associations, Employee Family members
Financial Sources	Sharing funds(Deduction from employee monthly paycheck)
Field of Activity	Culture and arts, Scholastic education, Environmental protection, Disaster relief, Social welfare

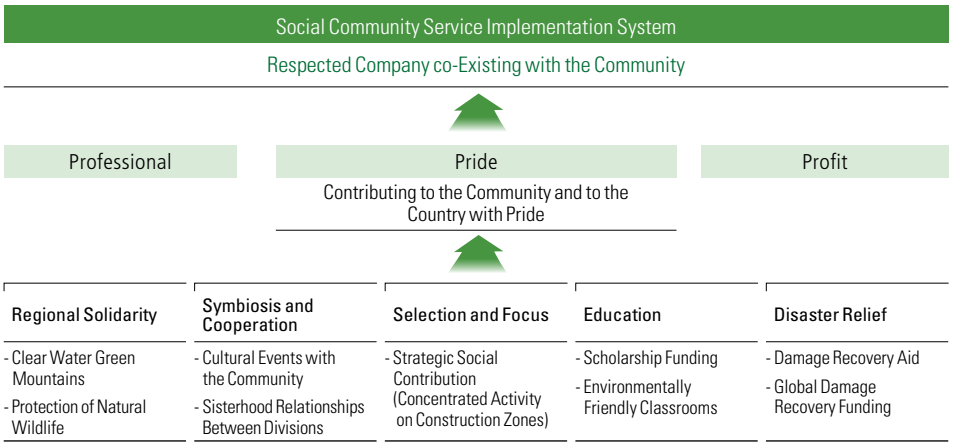
Social Contribution Slogan_The image of putting one's arms around each other and the image of the heart represents living together with our neighbors. In addition, the yellow and orange symbolize the creation of a warm and loving society through social contributions.

Organization Chart of the Community Service Foundation



Community Service Foundation's Achievements

Under the motto of "Respected company co-existing with the community" KOMIPO is increasing infrastructural and financial aid so that social contribution becomes a natural and essence characteristic of our company. Through our community service website (www.komipo.co.kr/csr), we encourage employee to participate in by sharing community service achievements and needs. In addition, we are increasing our matching grant up to 3 times for the "Sharing Fund", the voluntary funding raised by employees.



Hope Plus Savings Account Project

The Hope plus Savings Account is a business which a small income earner saves USD 176 and an additional USD 263 is added when done so. This KOMIPO has participated in the business since its introduction to nation wide by means of helping and supporting disadvantaged people to accumulate money and boost their work morale. Since 2008, USD 79,000 has been donated(USD 237,000/ 3years accumulated) to help the self reliance of the disadvantaged in Korea.

Fence of Love Project

To support the children of low income families and prevent the inheritance of poverty we, KOMIPO, have established sisterhood relationships with 12 Community Children Support Groups and are managing various educational programs such as building remodeling projects, English education programs and field trips to historic and cultural sites as well as art museums.

GwangHye-si-won Cherry Blossoms Festival

Love Houses Built by Employees Themselves

KOMIPO employees have visited senior citizens' old and worn out facilities nearby the power plants and not only repaired and remodeled the facilities but also voluntarily built a Love House accommodation over 3 weeks. Even though it is constructed from containers, the house was carefully made by employees with their expert knowledge for construction and electricity so that these senior citizens who live alone can live comfortably and free from worries about monthly rent. Currently 3 Love Houses have been finished.

Opening and Sponsoring Regional Community Events

Seoul thermal P/P has launched "GwangHye-si-won Cherry Blossoms Festival" during the blossoming season and Boryeong Thermal power has launched "Hooray Boryeong Culture Festival" and "Madangnori Performance" to create a sense of unity with the local community and its members. KOMIPO is also supporting various local festivals such as the Boryeong Mud Festival and Jeju Black Sand Festival.

Eco-friendly Experience Class

Eco-friendly Experience Classes

Seoul Thermal Power has been managing a "Summer Vacation Eco-friendly Experience Classes" for elementary students since 2004. It held its 7th session in 2010 and opened for 3 days with about 200 students. we have taught children the value and preciousness of electricity and the necessity of energy conservation, the driving role of our future. Through these various educational experiences and practices, we have put an effort to inspire a sense of electricity conservation and environmental preservation.

Employee Talent Community Service

KOMIPO's intra-corporation clubs and associations are volunteering their talents to contribute to the expansion of Sharing Culture. Examples are an employees' band performing for the elderly in "Parents' day Celebration Performances"; the scuba diving group's "Cleaning Up Our Oceans Project" or culture loving group's "Discovery of Plant Habitats Threatened by Extinction"; and the bike club's "Bike Repairing Event."

Kim Byung-ki

Seoul Thermal Power Plant, General Affairs Team, Manager (Leader of Club Steam band)

Employee Talent Community Service

Our team prepared a meaningful performance for Parents' day. Not only was it significant but new to us to see our elders having such a good time. Steam band is continuously participating in visiting performances to community welfare centers in Mapo-gu and Young Deung Po-gu as well as other regional events. We hope to create more opportunities for community service. To do so we'll have to practice more vigorously. We hope that our band can be of some sort of hope and comfort to those who are suffering from difficulty and loneliness.

Light of Hope Sea of Life

"World Made of Light"

We are currently promoting "Light of Hope, Sea of Life" as a specialized community service project that reflects both our company's business traits and natural resources. Just like we provide "Light" to the world as eco-friendly energy specialized company, we hope also to provide "light" to neighbors through our social contribution projects.

- Eyesight Recovery Surgery and Hearing Aid Support
- Establishment of Indonesia KOMPIO Elementary School
- Aiding of Nearby Multicultural Families
- Creation of Overseas Medical Community Services.
- Orchestra Performance (Disabled Children's)

Light of Hope | Sea of Life

- 1 Business Unit Looking After 1 Stream
- Project for Preservation of Marine Fisheries Resources
- Management of Scuba Diving Community Service Team
- Project for Beautification of Ocean Near Communities
- Vitalizing of Talent Community Services for Fishery Communities

Project for Protection and Preservation of Marine Fisheries Resources

As a characteristic trait, oceans surrounding power plants have water temperatures suitable for fish to grow well and KOMIPO is currently discharging young fish into nearby seas to maintain and obtain various types of fish species. Also, KOMIPO provides food for migrant birds during the bitterly cold winter seasons.

Eyesight Recovery Surgery and Hearing Aid Support

To give back light to those with failing hearing or sight, KOMIPO is currently working with the Korean National Red Cross to aid 60 low income families providing them with eyesight recovery surgery and hearing aid support.

Management of Scuba Diving Community Service

To vitalize talent community service and fully utilize company resources KOMIPO manages 2 teams of scuba diving community services (fully comprised of employees) to eradicate starfish and operate children's scuba diving experience courses.

Establishment of Elementary Schools in Indonesia

In 2011 in accordance with our establishment of the Tanjung Jati Power Plant, KOMIPO is currently (in the form of a public private partnership) establishing an elementary school in the nearby area to fulfill our global social responsibility. Through this we will not only provide Indonesia with stable electricity but also contribute to the regional community.

01

02

03

04

05

01. Protection of marine wildlife
02. Orchestra performance
03. Eyesight recovery surgery and hearing aid support.
04. Building of elementary school in Indonesia
05. Scuba diving community service team

Domestic and International Development Projects

Official Development Assistance Project Participation

Since 2004, KOMIPO has actively participated in Official Development Assistance(ODA) including dispatching workers with electrical expertise to help in the reconstruction of Iraq. In January 2010, KOMIPO signed a Memorandum of Understanding for Assistance and Cooperation to developing countries for Energy and Electrical expertise Areas and are assisting them on a full scale. Developing countries currently have difficulties from lack of electrical infrastructure with following their economic development and KOMIPO strengthens cooperation in the area of electrical expertise through teaching electrical skills and performing feasibility study of power plant construction sites.

| Unit : USD |

Year	Country	Area	Entrepreneurial Content	Working Expenses
2009	Iraq	Education	Thermal power plant construction and operation education (Government officials in Erbil, Iraq)	33,100
	Iraq	Education	Hydro power plant construction and operation education (Central government officials in Iraq)	33,280
	Lao PDR	Technical Consultation	Preliminary Inspection for Dam Construction in Vientiane	8,960
	Tajikistan	Technical Consultation	Preliminary Feasibility Test for Small Hydro Power Plant Construction in Tajikistan	4,480
2010	Iraq	Education	Hydro power plant building and management education (Central government officials for waterpower plants in Iraq)	45,920
	Ethiopia	Education	Ethiopia electricity technology (Electricity related government officials in Ethiopia)	46,360
	Tanzania	Education	Energy development (Tanzania renewable energy related workers)	39,950
	Lao PDR	Technical Consultation	Preliminary Feasibility Test for Irrigation Dam Construction in Hin Hup Province, Vientiane	9,220
	Cote d'Ivoire	Technical Consultation	Preliminary Feasibility Test for Hydro Power Plant Construction in Sasandra River	41,620
	Philippines	Technical Consultation	Preliminary Feasibility Test for Irrigation Dam Construction in Isabella and Bukidnon	10,620

Signing of the ODA Business Cooperation Contract

Practical Education of Electrical Technological Skills performed for Developing Countries.

Opening of Energy World

Boryeong Thermal Power Plant, the nation's biggest thermal power plant, opened Energy World in June 2009 in an area of 17,000m^2 with 2 stories above ground, gross area of 5,640m^2, as means of promoting how electricity is created and used. Energy World is open to visitors of all ages and is designed to learn about the electricity industry in a friendly and easy way. It is currently a regional landmark.

Expansion of Entry Road into Boryeong Thermal Power

On Oct. 15, 2010, construction of the Boryeong T/P Entry Road had been finished since its start 3 years ago. The construction expanded the 7.5 km road into a 2.5m width two lane road including a farm road. KOMIPO contributed USD 14 million to this project. Also, a new entry road to the nearby elementary school had been built, along with the establishment of walking paths and safety guard rails to ensure safety for children.

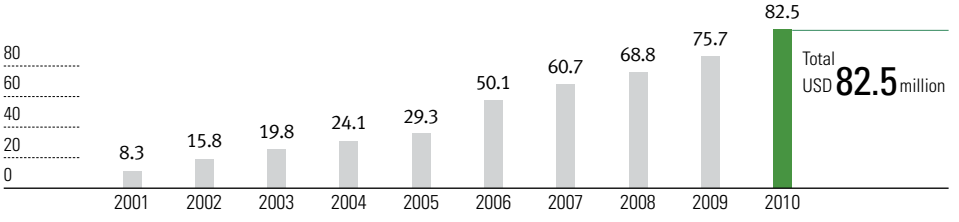
Energy World Opening

Expansion of Entry road into Boryeong Thermal Power

Assistance to Areas Nearby Power Plants

KOMIPO implements surrounding area support projects by the law for areas nearby power plants to create infrastructure for regional development. Also, according to the Amendment of Local Tax Act in Mar. 2011, KOMIPO will pay an estimated USD 7.2 million every year as a regional resource facility tax (0.0125 cent per 1kWh) which will be contributed to financial expansion for local government.

Support for Surrounding Regions | Unit : USD million |



According to each years performance

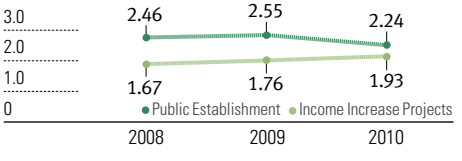
Public Infrastructure and Income Enhancement Projects

We build infrastructures in power plants surrounding areas for revitalizing local economies through asphalts pavement works, purchase of agricultural materials and machines, community hall construction, local bus service running, maintenance of water supply system, establishment of social welfare facilities.

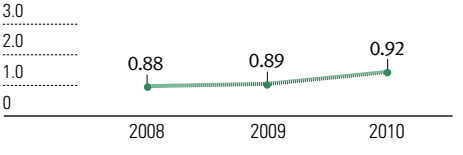
Electricity Bill Subsidiary Program

Since 2006, KOMIPO has implemented an Electricity Charge Subsidiary Program within a 5 km radius of Boryeong T/P so that residents of the local community can feel the benefits from KOMIPO's power plant management. A survey in Dec. 2010 showed that the Electricity Bill Subsidiary Program was the most satisfactory project among all of the company contribution projects.

Public Infrastructure and Income Enhancement Projects | Unit : USD million |



Financial Support for Electricity Fees | Unit : USD million |



Small Scale Public Facilities Project

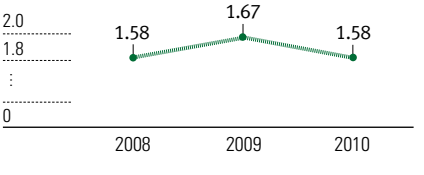
Among all power plants including ones belong to other electricity generation companies in Korea, Boryeong Thermal Power Plant is the only one implementing Public Facilities Project of USD 263,000 every year. By providing stuff for the local community, heating charges in winter and English education, the Thermal Power Plant strengthens the bonds with the residents as well as responding frequently to any community complaints they may have.

Cultivating Talented Individuals in Local Communities

KOMIPO nurtures students in power plants surrounding areas with scholarships and educational facilities as a means to improve the educational environment as well as to provide a base for individuals to develop.

Dongbaek Drawing Contest

Financial Support for Education | Unit : USD million |



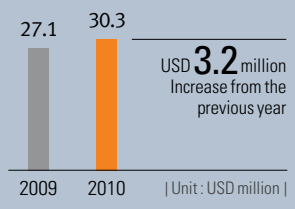
발상의 전환 관점의 다양화

Switching of Thinking Diversification of Perspective

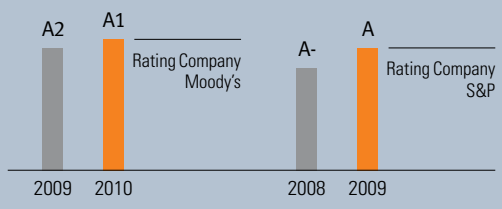
Innovation & Creation

Vision	Improve productivity through sustainable creation activities
Strategy	Efficient operation of generation facilities, Secure future growth potential, Improvement of work process
Issue	Financial achievement, Price competitiveness
Performances	Adoption of Six sigma, Secure financial strength, Application of intellectual properties
Plan	Technology development related to power generation, Elimination of future uncertainty with accurate financial forecast
Management Team	Finance & Budget Team, Shared Growth Team

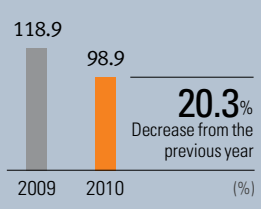
Six Sigma Performance Profit



Credit Rating



Debt Ratio



Efforts for Management Innovation

KOMIPO promotes management innovation activities to help it play a dominant role in the domestic & overseas power generation industry. Especially, the 6 Sigma system adopted in 2009 as a companywide management innovation tool is being a great help in addressing longterm issues and cultivating innovation capability by utilizing statistical tools. KOMIPO has redefined its vision to 'Beyond the Border, No.1 Thermal Power Company' and is moving quickly towards becoming a world class firm in terms of management capability and is promoting improvement activities by harnessing the unlimited innovative efforts of all its employees.

Quality Improvement Team Activity

A total of 101 quality improvement teams are being operated in 5 business sites and the headquarter, where each of the improvement teams address 1~2 themes yearly and boast outstanding achievements such as being awarded with the President's Award for 10 consecutive years in the National Quality Circle Competition. In 2010, the improvement team at Jeju Thermal Power Plant was honored to be awarded gold prize at the President's Award as well as 2 gold prizes, 3 silver prizes and 1 bronze prize with the subject of "Operation Cost Reduction by Improving De-sulfurization Facility Process at Internal Combustion". KOMIPO also encourages quality improvement activities through providing rewards and overseas training programs towards outstanding teams.

Activity Performance of Quality Improvement Team

Classification	2009	2010
No. of Themes Addressed	190 issues	189 issues
Effect of Activity	US $ 41.4 million	US $ 24.7 million
National Quality Circle Competition	Gold Prize : 1 team	Gold Prize : 2 teams
No. of Awarded Teams	Silver Prize: 2 teams, Bronze Award :1 team	Silver Prize : 3 teams, Bronze Prize : 1 team

Innovation Proposal Activity

Through the Innovation Proposal System, which is being operated for efficient management of power generation facilities and work process improvement through creative ideas from employees, 1500 ~ 2000 proposals are considered every year, divided into general on-site improvement proposals and strategic proposals that require the company's strategic decision. In case that a submitted proposal has a big positive impact on the company's management, Idea Prize and rewards are provided after discussion of Innovation Performance Measurement Committee and Innovation Performance deliberation committee. In 2010, a total of USD 17,100 prize money was given for 6 proposals on Idea Prizes which are the 1st grade dealing with "Optimum Air-fuel Ratio Technology Development for Low Grade Coal Combustion of Boryeong Thermal Power Plant Unit 7,8" and 2 2nd grade, 6 3rd grade.

Quality Management Team award

Innovation Proposal Performance Contest

6 Sigma Activity

The 6 Sigma system has been adopted as an objective to solve long term chronic problems and utilize new management innovation techniques. Having gone through the adoption period in 2009, KOMIPO has in 2010 focused on expanding the 6 Sigma culture throughout the company, and in 2011, KOMIPO is striving to secure independent driving potential by fostering Master Black Belts. Furthermore, the company has also renamed the 6 Sigma into Komipo-WAVE (Work Actively for Valuable Enjoyment) to improve the atmosphere as to innovation. KOMIPO has addressed 72 tasks during 2 years, attained financial performance of USD 57.4 million including expected performance, and of this, USD 46,000 was awarded as reward money.

In 2010, a total of 601 employees mastered KOMIPO's CAT (Change Agent Training) fostering program, which is carried out to promote awareness of innovation, and all employees are expected to master the program by 2011. The company is continuously consolidating the foundation for achieving its vision through training courses for reinforcement of teamwork and formation of mutual trust.

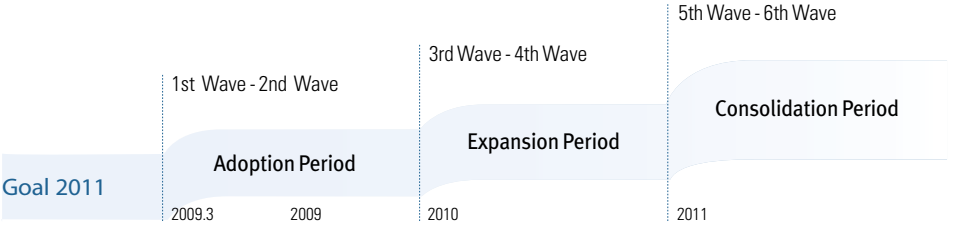
Innovation Proposal Activity Performance

Classification	2009	2010
Task Implementation	32 issues	40 issues
Amount of Compensation	USD 27.1 million	USD 30.3 million
Black Belt	20 Persons	29 Persons
Green Belt	12 Persons	11 Persons

6 Sigma Activity Performance

Classification	2009	2010
No. of Proposals	1,682	1,423
No. of Selected	979	688
No. of Enforced	908	608
Outcome of Compensation	USD 40,600	USD 31,900

Management Improvement activity by Adopting 6 Sigma Management



Fostered Talent	34 persons	+	90 persons (Total)	+	195 persons (Total)
Implementing Method	Specialized Agency Consulting		Specialized Agency + Independently Solved		Independently Solved
Task Implementation	34 Trial Tasks (Focusing on BB)		56 tasks (BB+GB)		105 tasks (MBB+BB+GB)

6 Sigma Performance Reporting Competition

All-Employees Change Innovation Training

Renewable Energy Business

KOMIPO sets its vision to overleap to energy as a top class company endeavoring to achieve a total capacity of 1600MW in new and renewable energy by the year 2020.

Domestic Plans for New and Renewable Energy Business Development

KOMIPO, based on its plans for investment plans according to the type of new and renewable energy source, namely "Select & Concentrate", plans to actively respond to the government's Renewable Portfolio Standard (RPS) to be enforced from year 2012. In the short term, the company will concentrate on high productivity project development including wind power generation and RDF generation, in the medium term it will focus on biomass and fuel cell generation linked with group energy business, and it will promote large scale power development such as tidal power generation, tidal current power generation and onshore wind power generation as its long term plan. Furthermore, KOMIPO also plans to joint-develop over 10MW scale of large-unit solar power and wind power resources through strategic collaboration with provincial governments and the private sector, and for this positive collaboration has already been initiated by signing MOU contract with the provincial governments of Jeonlanamdo, Gyeonggido and Choongcheondo provinces regarding new and renewable energy development. KOMIPO will not stop implementing resource investigation for continuous discovery of natural new and renewable energy sources and securing good resources under its principle, "Securing of resources comes before business development".

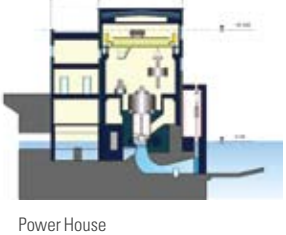
Overseas Plans for New and Renewable Energy Business Development

KOMIPO's overseas new and renewable energy development business, is planned to be carried out based on development priorities, rather than focusing on development capacity, with a goal of genuine effectiveness, by means of selective investment that carefully considers business stability and profitability.

In particular, the recently completed PPA of KOMIPO's 45MW hydraulic power generation plant of Wampu, Indonesia, is a successful example of performance-oriented project that enables not only electric power sales profit by exploiting a hydraulic resource but also creation of added value through CDM business which is a leader in the power generation business.

Status Diagram of Indonesia Wampu Hydro Power Project

Wampu Dam



Power House

Facility capacity 45MW (15MW x 3 units) An eco-friendly conduit type generation plant without a submerged spot

New and Renewable Energy Business

Ongoing Renewable Energy Business

In order to actively respond to global warming and the government's RPS Policy, KOMIPO is leading the green energy business by establishing "2020 New Management Strategy Vision" which aims to expand a total of 1,600MW renewable energy facilities by investing USD 1.76 billion by 2020. Based on KOMIPO's experience and technology of developing Yangyang Wind Power Generation Plant 3MW as the very first of its kind in the power generation business, it is promoting 140MW capacity of offshore wind power plants in Jeju, Gangwon and Jeonlanamdo regions, along with joint development of onshore wind power generation business of the West Coast (2.5GW) and Jeju (200MW) regions.

Solar Power Generation

Bird's eye view of Yeosu Expo

Seoul (1.3MW), Yeosu Expo (2MW), Jeju Univ. (1MW)

KOMIPO consistently promotes various solar power generation business exploiting buildings and vacant lots. The successful completion of eco-friendly Yeosu Solar Power (2MW) facility within Yeosu Int'l Expo exhibition hall is expected to contribute greatly to boost the image of KOMIPO as a leader in supplying clean energy to 8 million domestic and foreign visitors through the synergic effect of Energy Experiencing Park and state-of- the art solar power generation facility.

Refuse Derived Fuel (RDF)

Wonjoo RDF production plant

Wonjoo (10MW)

Processing Stage of RDF Wood Pellet | Wonjoo Refuse Derived Fuel (RDF) production plant, which is jointly executed through government support and collaboration with POSCO will become the future role model of refuse energy development.

Refuse Derived Fuel (RDF)

Bird's eye view of Iksan RDF plant

Iksan (10MW)

Bird's Eye View of Iksan RDF Plant | Iksan RDF business is located within the Iksan Industrial Complex, providing high quality electric power by mixing Refuse Derived Fuel (RDF) which is new and renewable energy. It also provides low cost steam to neighboring companies in financial difficulty by constructing a 9.8MW new and renewable energy power plant.

Ganghwa Tidal Power

Bird's eye view of Ganghwa tidal power site

Additionally, with the goal of commercial operation, KOMIPO is implementing Gangwha Tidal Power Plant business to be completed in 2017, by composing a consortium with Incheon Metropolitan City, Gangwha District Office and Daewoo Construction. The expected yearly generation capacity is 1,556GWh, which equals capable amount for providing 30,000 households, or 43% of the total in Incheon Metropolitan City, for 1 year.

Hyundai By-Product Gas

Site view of Hyundai by-product gas generation plant

400MW

KOMIPO has jointly established Hyundai Green Power Co. Ltd. with Hyundai Steel and is operating a power plant utilizing the by-product gas generated from Hyundai Steel. The by-product gas power plant is a type of renewable energy facility exclusively developed and currently run by KOMIPO, and is expected to contribute greatly to the company's fulfillment of RPS in the future.

Fuel Cell

300kW fuel cell facility, a joint project with Doosan Heavy Industries

Despite fuel cells' economic feasibility being low relative to other renewable energy sources, the gap is being reduced by consistent technology development, and it is highlighting its merits of over 90% user efficiency. As KOMIPO forecasts that fuel cells will take up a major role as a renewable energy source in the future, the company is striving to secure core technology and price competitiveness through 300kW experimental R&D with Doosan Heavy Industries.

Technology Development for Growth of the Power Generation Industry

With its R&D vision of 'Securing new future growth potential', KOMIPO is planning to secure technology competitiveness to become a leader in the global power generation market of 2020. With this aim, KOMIPO will invest a total of USD 111 million by 2014 to secure 10 core technologies in the major 3 categories of 「Next Generation Thermal Power Generation」, 「Responding to Climate Change」 and 「Renewable Energy」, including improvement of facility reliability, digital automatic control technology, environment pollution prevention technology and renewable energy technology.

To facilitate this process, KOMIPO created in July 2005 a '10 year R&D plan' as its R&D road map. The company has further promoted systematic R&D by establishing a 'Mid term 5 year R&D strategy' in December 2009. This mid-term strategy was developed to help the company respond quickly to rapid environmental and technological changes in the domestic & overseas power generation industry.

Year	Low Carbon Green Development Technology	High Efficiency Generation Technology	Technology Development for Clean New Power Generation
2009	- 0.1MW CCS Technology Development - Localization of 500MW Desulfurization Facility	- 500MW Steam Turbine Performance Improvement - Diagnosis & Life Cycle Evaluation During Pauses in Generator Operation	- MW Class Fuel Cell - Generation of Landfill Gas MGT
2010	- 10MW CCS Technology Development	- Localization of Boryeong Complex High-temperature Components	- USC Generation System Development
2011	- 300kW Fuel Cell Localization - Fly Ash Recycling Technology Development	- Localization of Incheon Complex Fixed Wing Performance - Standard Thermal Power 500MW Performance Improvement	- IGCC Management Technology Development - Generation Facility Danger Level Evaluation

In conjunction with an implementation plan, KOMIPO is developing an optimal portfolio that takes into account the long research time and high cost required for fundamental and applied R&D in the power generation field. In addition, KOMIPO is also carrying out joint R&D with research institutes suited to the characteristics of each research project.

New Power Generation Technology & Development on Greenhouse Gas Reduction Technology

As of April 2011, KOMIPO is involved in 25 government-sponsored national research projects, including the '1000MW Ultra Super-Critical Thermal Power Plant Commercialization Technology Development' project and the 'CO2 Capture Technology Development through Chilled Ammonia Post-combustion 10MW Class' project. In addition, KOMIPO is currently conducting 90 other research projects, including 5 in-house implementation studies, 58 projects in collaboration with small and medium sized companies, and 2 academic-industrial joint research projects. KOMIPO is also participating in joint R&D with the US Electric Power Research Institute (EPRI) and the International Energy Agency's Clean Coal Center (IEA-CCC) to secure advanced technologies. KOMIPO is focusing on future-oriented core technology development, through collaborative research on new technologies for new generation and clean thermal power generation, including Integrated Gasification Combined Cycle (IGCC) generation, Carbon Capture & Storage (CCS), Oxy-Fuel Combustion technology and Ultra Super-Critical generation.

R&D Outcomes

KOMIPO has invested a total of USD 76million on R&D and talent fostering during the last 3 years (2008-2010), and completed a total of 99 national policy and in-house research projects. Through these efforts, KOMIPO has significantly enhanced its competitiveness by asserting intellectual property rights over a total of 200 of its intellectual assets, including 53 core technologies of the power generation industry, such as performance diagnosis technology, and 6 cases of renewable energy technology development. KOMIPO has also transferred intellectual property rights over a total of 24 intellectual assets either for fees or gratis to hoping small and medium sized companies. KOMIPO is anticipating a cost reduction effect from its major R&D outcomes totalling USD 28.4 million and a foreign currency substitution effect of USD 50 million, including a yearly maintenance cost reduction of USD 3.3million from its development of a localizing Turbine Tilting Pad Bearing (KEPRI) system and a USD 7.2 million purchasing cost reduction through its localization of the Complex Generator Rotator Coil technology.

Currently Ongoing Key Tasks

1 | Korea's very first '10MW RDF (Refuse Derived Fuel) cogeneration plant system'
2 | '1000MW Ultra Super-Critical Thermal Power generation commercialization technology development'
3 | Korea's very first and largest '10MW class chilled ammonia CO2 collection facility (200 Ton/day) development'

Intellectual Property Rights

Through ongoing R&D, KOMIPO is dedicated to safeguarding its intellectual property. With the advance of the knowledge economy, this intellectual property is increasingly recognized as a valuable intangible asset for both the company and the nation as a whole. Accordingly, as of July 2011, KOMIPO had acquired intellectual property rights to a total of 117 intellectual assets, including 88 patents and 29 utility models. In addition, it had applications pending for a further 57 patents and 26 utility models. Also as of July 2011, KOMIPO had granted non-exclusive licenses (either for fees or gratis) for 30 of its intellectual assets, including its turbine digital control system technology, to 25 promising small and medium sized companies. This is both greatly contributing to commercialization of its technologies and also supporting small and medium sized companies at the same time.

Application Status of Intellectual Asset

| End of Jul. 2011, No. of assets registered/applied for |

Classification	~2008	2009	2010	2011	Net
Patent	66 / 10	10 / 11	8 / 28	4 / 8	88 / 57
Utility Model	20 / 12	0 / 0	7 / 11	2 / 3	29 / 26
Total	86 / 22	10 / 11	15 / 39	6 / 11	117 / 83

Status of Intellectual Asset Technology Transfer to Small and Medium Sized Companies for Commercialization

| Jul. 2011 |

	Name Of Intellectual Asset
Patent	Multi-Relay Testing Device
	Valve Wrench Hand Improvement
	Fixing Apparatus of Vibration Detecting Displacement Sensor for Vertical-type Pumps
	Dispersion-type Multi-channel Signal Analysis System
	Sound Absorbing Device
	Gas Turbine Exhaust Duct Non-Metallic Insulation Mat
Utility Model	Conveyor Belt Cleaning Device with Automatic Waste Water Discharge Outlet
	Transparent Insulating Protection Cover for Electric Conductor Connection Points
	Gas Turbine Rear Part Temperature Device Utility
	Portable Page-phone Testing Device
Know-how	Small Ocean Hydro Power Generation System using Warm Water from Steam Power Plant
	Long Distance Pipe Ultrasonic Technology
	Digital Turbine Control System Technology
	Acquisition Technique for Digital Radiation Transmission of Images from Boiler Tube Welding Points

Outstanding Example of Utilizing Intellectual Assets

Utility Model 118299	Gas Turbine Temperature Measuring Device Utility
Details	This structural improvement of the sensor that detects gas turbine rear part temperature is an outstanding example how R&D contributes to generation cost reduction through localization. This asset not only brought about a dramatic reduction in repair time but also achieved sales increases of USD 1.14 million with 10 cases of commercialization through technology transfer to small and medium sized companies(Hanwool Index).

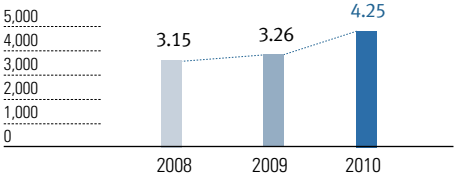
Financial Performance & Mid to Long Term Prospects

Financial Performance

KOMIPO has achieved remarkably profitable and stable financial performance since its establishment in 2001. In particular, the company has maintained a steady increase in sales as it provides electric power to respond to increases in power consumption. KOMIPO achieved sales of 53,256 Gwh in 2010 and recorded a total profit of USD 4.25 billion, which represented a 30.2% increase from the previous year. The company realized a net income of USD 114.3 million for the year. Although difficulties were expected as the domestic economy in 2010 underwent economic recession, following energy price hikes from the previous year, in fact operating profits and current net income have continued to increase throughout the past 3 years. KOMIPO is showing excellent health in its financial structure, in terms of profitability ratio, debt to equity ratio, interest coverage ratio, EBITDA ratio, sales figures, and operating profit to sales ratio.

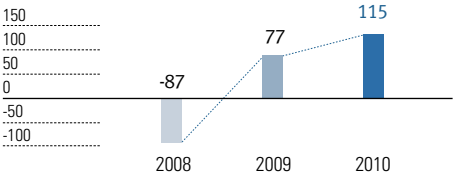
Sales Figures

| Unit : USD billion |



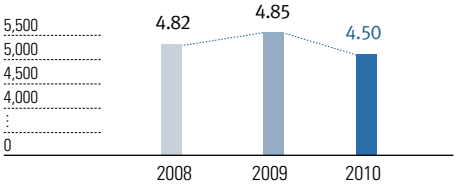
Current Net Income

| Unit : USD million |



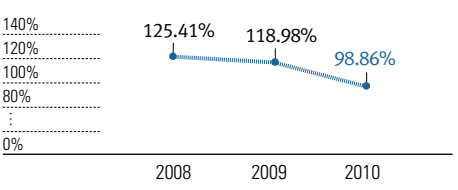
Total Assets

| Unit : USD billion |



Debt Ratio

| Unit : % |



2008-2010 Financial Statements

| Unit : USD million |

Classification		2008	2009	2010
Income Statement	Sales Amount	3,152	3,262	4,249
	Cost of Sales	3,202	3,092	4,010
	Gross Profit on Sales	Δ50	170	239
	Sales, General, and Administrative (SG&A) Expenses	44	39	42
	Operating Profit	Δ94	131	197
	Non-operating Profit and Loss	Δ24	Δ44	Δ63
	Ordinary Profit	Δ118	87	134
	Income Tax Expenses	Δ31	10	19
	Current Net Income	Δ87	77	115
Statement of Position	Cash Equivalent	60	129	115
	Other Liquid Assets	739	836	712
	Investment Assets	119	174	180
	Property and Equipment	3,519	3,464	3,341
	Intangible Assets	45	50	43
	Other Assets	337	204	109
	Total Assets	4,819	4,857	4,500
	Current Liabilities	728	873	1,046
	Debentures	1,665	1,492	1,022
	Long-term Borrowings	108	108	20
	Other Fixed Liabilities	180	194	148
	Total Liabilities	2,681	2,667	2,236
	Total Capital	2,138	2,190	2,264

2008-2010 Major Financial Ratio

Classification	2008	2009	2010
EBITDA (USD million)	Δ9.0	13.7	20.4
EBITDA Ratio	Δ2.84%	4.20%	4.81%
Operating Profit to Sales Ratio	Δ3.00%	4.01%	4.63%
Net Income to Sales Ratio	Δ2.75%	2.33%	2.69%
Debt Ratio	125.41%	118.98%	98.86%
Interest Coverage Ratio	Δ4	2	2

Long Term Financial Forecast

To actively prepare for an unpredictable future, KOMIPO established in December 2010 its 'Mid to Long Term Prospects' consisting of 4 scenarios (see table below). Updated scenarios are drawn up each year to reflect market changes. To comply with its 5th Basic Plan for Electricity Supply & Demand and the government's 6th Public Institutions Advancement Plan, KOMIPO has established its 10th Mid to Long Term Financial Prospects (2011~2020) Plan. This plan reflects the company's changed financial status following the transfer of its Yangyang pumped storage power plant assets to Korea Hydro & Nuclear Power.

Financial Prospect Scenarios

Classification	Explanation	Feasibility
Scenario 1	Has the highest feasibility, due to the 5th Basic Plan for Electricity Supply and Demand, and KOMIPO's expansion business.	Feasibility increases from scenario 4 to scenario 1
Scenario 2	Scenario 1 + Promoting Business	
Scenario 3	Scenario 2 + Development Business	
Scenario 4	Scenario 3 + Examination Business	

The 10th Mid to Long Term Financial Strategy was established based on KOMIPO's 5th Basic Plan for Electricity Supply& Demand. The strategy provides a road map for creating future growth engines by actively promoting renewable energy business that fulfills IFRS accounting standards and asset revaluation. Major aspects of the strategy include construction of the new Boryeong units 1 and 2, new domestic & overseas business and "green" growth. As a result of the strategy, a sudden rise of debt is anticipated, because approximately USD 6.34 billion of external funds is expected to be required by 2016 to expand new facilities. However, this will be followed by a gradual fall after 2017, which will ensure sound financial health with the goal of a debt ratio under 100% by 2020.

Long Term Financial Prospects

| Unit : USD million |

Year		2011	2013	2015	2017	2020
Sales		3,939.9	4,343.4	4,663.6	4,970.4	5,443.8
Profit and Loss Summary	Profit	3,956.5	4,403.7	4,826.9	5,274.7	5,866
	Cost	3,838.2	4,215.5	4,582.4	5,083	5,596
	Net Profit	118.4	188.2	244.5	191.7	270
Debit and Credit Summary	Assets	4,753.7	7,264.3	8,652.9	9,020.8	8,594.2
	Liabilities	2,167.4	4,392.8	5,435.2	5,559.3	4,620.7
	Capital	2,586.3	2,871.5	3,217.7	3,461.5	3,973.5
Investment Ratio		503.6	1,630.4	966.5	582.7	515.4

Financial Structure Improvement Methods

Maximize Profits
- Expand high profitability facilities such as new Boryeong units 1 and 2.
- Diversify domestic & overseas power generation business to prepare for slowdown in demand.
- Enhance existing facility usage and profitability.

Cost Reduction
- Economical procurement of fuel such as Seocheon bituminous coal co-combustion, etc.
- Fortify consistent financial management through financial monitoring, etc.

Acquire Financing
- Diversify borrowings portfolio for risk dispersion.
- Reinforce analysis and forecast through ERM.

Strengthen Investment Analysis
- Secure business profitability through investment business deliberation reinforcement.
- Analyze investment validity and prevent redundant investments.
- Operate investment ratio cap and coordinate business in accordance with financial goals.

Road Map to Financial Structure Improvement

Retrenchment ('11~'13)	Financial Stabilization ('14 ~'15)	Continuous Growth ('16~)
Strengthen Risk Management	Implement Consistent Financial Stabilization Strategy	Maintain Stable Financial Structure
Execute Budget Retrenchment, Emergency Management	Consistently Strengthen Financial Management Including Financial Monitoring, Etc.	Seek to Secure New Growth Engines Including Overseas Business, Business Diversification, Etc.
Reinforce Investment Business Deliberation		

External Credit Ratings & Investment Activities

Changes in Credit Rating

KOMIPO has an 'AAA' credit rating from the 3 major domestic credit raters, an 'A' rating from S&P and an 'A1' rating from Moody's. It has achieved an astonishing performance in its credit rating from S&P's, improving from 'A-' to 'A' in December 2008, in spite of the financial crisis, while its Moody's credit rating rose from A2 to A1 in April 2010. The company has the same level of overseas credit rating as the South Korean government. These outstanding credit ratings have allowed KOMIPO to consolidate support from friendly investors in domestic & overseas fund markets. As a result, it is in a good position to obtain funds in a timely manner to cover any financial shortages.

Domestic & Overseas IR Activities

Through active IR activities, KOMIPO has attained an advantageous financing situation and achieved a base of friendly investors in domestic & overseas fund markets. Various forms of IR activities are being developed to fulfill transparent corporate management through timely provision of KOMIPO's major management information.

1 **Strengthen Company Investment Attractiveness Targeting Overseas Investors**
Attract investment targeting overseas agencies and hold annual inspection of successful

2 **Host Domestic IR Sessions**
Hold IR session in Yeouido for invited investors
Target_ App. 50 participants from 22 domestic & overseas institutional investors including banks and securities companies

3 **Newly Established 'Q and A' Corner of the KOMIPO Website provides Real-time IR, Investors' Visits and Investment Attraction Activities**

Low Interest Loan Financing & Systematic FX Management

In 2008, in a first among Asian companies, KOMIPO issued USD 300 million of foreign bonds at a low-rate of 4.96%. KOMIPO saved USD 1.6 million on interest expenses by financing USD 88 million using RUF (mid to long term commercial paper) method and taking advantage of interest differentials in swap markets. At the start the economic crisis in the first half of 2009, USD 176 million of the company's debenture was issued at a reduced rate of 4.41% (down from 5.48%) through delay of the issue date after financing short term borrowings. In the second half of 2009, an extra USD 14.8 million of annual financing expense was saved by issuing s low-rate company debentures through early issue before the rise in interest rates. Additionally, the company endeavored to construct a healthy financial structure as it decreased its debt ratio in 2010 by 20% from 118.9% to 98.9%, by repaying USD 379 million of loans through self financing. It also improved its Won-to-foreign currency debt ratio from 52% to 64% by repaying Yen currency debts.

In the face of increasing volatility in exchange rates since the global economic crisis, which is hindering FX risk management, KOMIPO has revised its FX risk management guidelines to effectively manage its exchange position through the adoption of bituminous coal and by implementing hedge plans involving an 'FX Risk Management Committee' composed of internal and external experts. Also, the company is fully committed to systematic FX risk management through prompt assessment of exposure levels and hedging against these, utilizing an ERP system and tailoring its response to each exchange rate scenario.

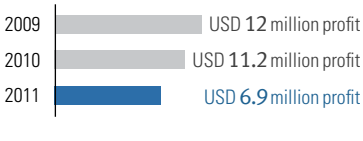
Average Interest Rate on Loans

2010 Interest Rate
5.25% From the previous year

2009 Interest Rate
5.26% From the previous year

2008 Interest Rate
5.20%

Foreign Exchange Risk Management Committee's Performance Dealing with each Scenario

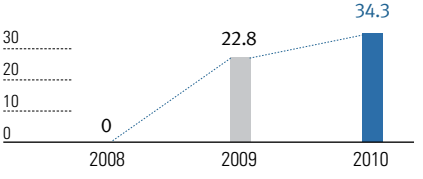


Dealing with each Scenario		Exchange Risk Response Method
Sudden Rise of Exchange Rate	Short Term Borrowings	Carry out short term borrowings for the time being then realize exchange differential when exchange rate drops
Increase of Exchange Rate, 1% ↑ Relative to B/L	Stop-Loss Futures Trading	When analysis of sudden increase indicates an ongoing upward trend, repay (stop-loss) and purchase forward exchange as soon as short term borrowings are redeemed
Increase of Exchange Rate, within 1 % Relative to B/L	Futures, Spot Trading	Determine the scale of exchange risk exposure (shipment quantity of exporting country) in real time and purchase forward exchange
Steady Exchange Rate	Spot Purchasing	Monitor daily and weekly exchange rate fluctuation trends to pinpoint the right time for purchasing
Decrease of Exchange Rate	Natural Hedge	Delay purchasing until fuel payment date and in case of falling trend review on executing usanc

Distribution of Economic Value

Dividends | At the end of 2010, KOMIPO's accumulated earnings were USD 114 million, showing a 50.4% increase over 2009. USD 34 million of dividends was resolved through a shareholders' meeting held in March 2011. This corresponds to 25.5% of the par value where USD 1.12 per share was given out as a dividend.

Dividend Status | Unit : USD million |



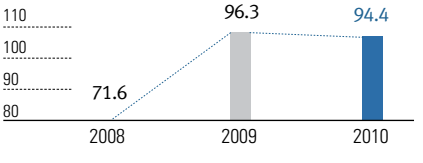
Tax Payments | KOMIPO paid USD 48.4 million in tax during 2010, including USD 44.2 million billion for VAT, USD 7.4 million for local taxes, and USD 0.44 million for other taxes. This represents a large increase relative to the previous year.

Corporate Tax Payment Record | Unit : USD million |

Year	Corporate Tax	VAT	Local tax	Others	Total
2008	49.3	Δ8.9	13.7	0.8	55.0
2009	Δ0.8	Δ4.7	8.5	0.35	3.3
2010	Δ3.6	44.2	7.4	0.44	48.3

Interest | The amount paid by KOMIPO as interest to creditors totalled USD 71.6 million in 2008, USD 96.3 million in 2009 and USD 94.4 million in 2010. Though interest expenses increased due to borrowing for the construction of Boryeong units 7 and 8 in 2008, they are now on the decrease due to recent low-interest refinancing and repayments made from company funds.

Interest Expenses | Unit : USD million |



Appendix

The Institute for Industrial Policy Studies, the 3rd party assurance agency for this Report, confirms that the KOMIPO Sustainability Report 2011 has sufficiently fulfilled all requirements needed for an A+ level in accordance with the following GRI G3 guideline Application Levels System.

GRI Application Levels System

Standard Disclosures	C	C+	B	B+	A	A+
G3 Profile Disclosures	Report on 1.1 2.1-1.10 3.1-3.8, 3.10-3.12 4.1-4.4, 4.14-4.15	Report Externally Assured	Report on all criteria listed for Level C 1.2 3.9, 3.13 4.5-4.13, 4.16-4.17	Report Externally Assured	Same as requirement for Level B	Report Externally Assured
G3 Management Approach Disclosures	Not Required		Management Approach Disclosures for each Indicator Category		Management Approach Disclosures for each Indicator Category	
G3 Performance Indicators & Sector Supplement Performance Indicators	Report on a minimum of 10 Performance Indicators, including at least one form each of Economic, Social and Environmental		Report on a minimum of 20 Performance Indicators, at least one form each of Economic, Environmental, Human Right, Labor, Society, Product Responsibility		Report on each core G3 and Sector Supplement* Indicator with due regard to the Materiality Principle by either : a_ reporting on the Indicator or b_ explaining the reason for its omission.	

*Sector supplement in final version

2009~2010 Awards & Prizes

2009.4	4th RFIS/USN Industrialization _ Minister of Knowledge Economy's Award	2010.6	Seoul City Environment _ Environmental Protection 'Excellent Prize'
2009.5	2008 Power Awards _ Coal-Power Station 'Prize of the year'	2010.11	9th Korea Safety Grand Prize _ Minister of Public Administration & Security's Award
2009.10	LOHAS Management Grand Prize _ Special Prize	2010.11	36th National Quality Management Competition _ President's Award
2009.12	Very Best Agency for Safety Management _ Minister of Knowledge Economy's Award	2010.12	Good Enterprise to Work 2010 _ Main Prize in Public Sector

Status of Association & Commission Membership

· Edison Electric Institute	· Energy Economy Institute	· Environment Conservation Association
· Ethical Management Forum	· Korea Electric Association	· Korea Atmosphere Environment Institute
· UN Global Compact Korea Institute	· Korea Structural Diagnosis Institute	· Korea Wastes Institute
· Ethical Management CEO	· Korea Standards Association	· Sustainability Management Association
· Korea Productivity Center	· Korea CCS Association	· Climate Energy Measure Forum
· Thermal Power Policy Council	· Korea New and Renewable Energy Association	

71 Awards and Prizes
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74 GRI Content Index
78 Code of Ethics
80 UN Global Compact Practice
81 Reader's opinion

3rd Party Assurance Statement

To the Management of the KOMIPO Sustainability Report 2011 | The Institute for Industrial Policy Studies (The Auditor) was asked by the Korea Midland Power Co., Ltd.(KOMIPO) to audit the Sustainability Report 2011 (The Report) and provides the third-party assurance on its contents as follows.

Responsibilities and Objectives | All responsibility for the setting and management of The Report's sustainability management targets, and for the collection, presentation and maintenance of all information and opinions within The Report, lie with KOMIPO. The objective of our auditing is to check whether The Report contains any material misstatement or bias, to assess its information collection process, and to offer opinions on how the quality of the report might be improved.

Independence | The Auditor has no relationship with KOMIPO regarding any of its for-profit operations and activities. As The Auditor was not involved in the preparation of any part of The Report and only suggested opinion. The Auditor has achieved auditing work with independence and autonomy

Criteria | The Auditor reviewed The Report using the following reporting guidelines:

1) AA1000Assurance Standard(2008)
2) The BEST Sustainability Reporting Guidelines
3) GRI G3 Sustainability Reporting Guidelines

Type and Level | The auditing of The Report was conducted using the Type 1 and Moderate level criteria from the AA1000 AS (2008) guidelines. In order to assess The Report according to the Type 1 criterion, The Auditor reviewed the conformity of data to this criterion, and on the basis of 3 principles (Inclusiveness, Materiality, Responsiveness) from AA1000 AS(2008), assessed KOMIPO's notification processes, reporting system and performance management methods. Examination of the reliability of the supplied data was not included in the auditing, because The Auditor was confident that the report could be verified to a Moderate level as having a minimal likelihood of containing errors, based on available evidence and from selective interviews conducted with people in charge of each performance area.

Scope and Method | The Auditor conducted the review using the process outlined below, by first, reviewing the Completeness, Materiality, and Responsiveness of The Report, and second, confirming its indicator- fulfillment level for GRI/ BEST Sustainability Reporting Guidelines.

- Performance data collecting system and suitability of report process were assessed for each area
- Financial data stated in the Report was reconciled against the audited Annual Report
- On-site reviews were conducted at the Headquarter office (Aug. 9, 2011, Aug. 12, 2011)
- Application level was conducted to assess the conformity of The Report's GRI/ BEST
- Sustainability Reporting with GRI/ BEST Sustainability Reporting Guidelines
- Sources and management of publicized data were reviewed
- Response system regarding important issues was evaluated
- Interviews were conducted with persons in charge of each performance area

Limitations |

- Limited interviews with persons responsible for each performance area and for performance data, and limited review of data conformity
- Limited on-site reviews at the Headquarter office
- Limited assessment carried out on the basis of data and publicized information during the relevant reporting period
- No assessment of credibility on performance data reliability

1. AA 1000 AS (Assurance Standard) : This assurance standard of sustainability management reporting was developed in 1999 by U.K-based Social accountability management related institute, Accountability, a nonprofit organization that enhances social and ethical accounting, auditing and reporting quality and promotes overall organization performance and accountability. The new version revised in 2008 is being applied from the year 2010.

2. The BEST Sustainability Reporting Guidelines: The Sustainability Reporting and auditing Guidelines were jointly developed by the Ministry of Knowledge and Economy (MKE),the Korea Chamber of Commerce and Industry (KCCI), and the Institute for Industrial Policy Studies (IPS), at a 2006 Ethical management SM Forum aimed at encouraging the expansion of Sustainability Reporting through domestic business. The guidelines provide for five levels of reporting rigor (Level 1 ~ 5).

3. The GRI G3 Guidelines: The Sustainability Reporting Guidelines were jointly developed by the Coalition for Environmentally Responsible Economies (CERES) and UNEP in 1997. The newly revised G3.1 version was launched in March 2011, adding Human Rights, Gender and Local Community to the original G3 from October 2006. The 4th revised version is planned to be launched in 2013.

Recommendation | Based on the above auditing scope, method and the presented assessment guidelines, The Auditor did not find The Report to contain any material misstatements or bias. The material findings of The Auditor are included herein, and detailed review results and follow-up recommendations have been submitted to the management of KOMIPO.

Inclusivity_
Has KOMIPO developed appropriate strategies and processes to encourage participation by stakeholders?

The Auditor confirmed that KOMIPO has recognized the importance of stakeholders' participation for sustainability management and has endeavored to build up processes to facilitate such participation, and overall is actively pursuing sustainability management as a priority. Moreover, in order to implement sustainability management, KOMIPO has been actively collecting stakeholders' opinions in order to identify key sustainability management issues. for that. In particular, The Auditor positively evaluated highly the following points:

- Management of participation channels that can collect all types of stakeholders' opinions, including labor-management committees, board of directors at the general meeting of stockholders, community meetings & progress committee meetings, websites, environment newsletters and public relations activities.
- Through interviews with stakeholders from economic, social and environmental fields, KOMIPO collected and publicized stakeholders' opinions on the necessity for sustainability management.

However, we suggest that in future, the practical applicability of stakeholders' opinions could be enhanced by further developing and implementing across-the-company participation processes for all stakeholders.

Materiality_
Does The Report address information of greatest materiality to KOMIPO and its stakeholders in economic, social, environmental fields?

The Auditor does not believe that KOMIPO has omitted or excluded any information of greatest significance to its stakeholders. The Auditor confirms that KOMIPO analyzed media reviews, expert interviews, industry benchmarking, stakeholders' questionnaires, company policy, company's direct/indirect economic effects, regulations and laws, in order to identify major issues and addressed these in The Report. In particular, The Auditor evaluated highly the following points:

· Carrying out of more diverse and systematic materiality assessment compared to the previous year's report , in order to identify major issues of importance
· The Report faithfully addressed the most important 15 issues among the identified major issues

However, we suggest that future reports present more concrete criteria for determining the priority order of major issues identified in the materiality assessment, and that they organize their results more chronologically to indicate trends in existing and new issues.

Responsiveness_
Does The Report respond appropriately to stakeholders' requests and interests?

The Auditor confirmed that KOMIPO prepared communication channels with all stakeholders and identified stakeholders' key concerns and tried to respond to these concerns through sustainability management. In particular, The Auditor evaluated highly the following points.

· Responsiveness to stakeholders 'requests and concerns by publicizing information related to stakeholders' key concerns through diverse websites (social contribution exclusive homepage, environmental management homepage, etc.)
· Establishing vision and strategy for all stakeholders through DMA, and reporting in a manner that allows for easy understanding of performance related to each issue.

However, The Auditor recommends that KOMIPO establish more diverse communication channels with all stakeholders and report information not just from stakeholder interviews, but also regarding performance status and plans, in order to enhance responsiveness

BEST Fulfillment Ratio_ Relative to the BEST Guidelines, and in view of the level of reporting rigor and depth of information provided, The Auditor finds The Report fulfilled 93.91% of The Reporting requirements necessary to qualify for a Level 4, 'consolidation' type, among Levels 1 ~ 5.

Recommendations

The Auditor found positively that the KOMIPO Sustainability Management Report 2011: (1) strengthened the level of explanation of the company's business activity by presenting major data on domestic electric power status and new business domestically and abroad;(2) explained its sustainability management direction by presenting medium- and long-term roadmaps for vision achievement; and (3) reported 3 highlights for KOMIPO's sustainability management in Q & A form to aid understanding by stakeholders. However, we recommend that future reports consider the following recommendations:

· Standardize of core performance indicators according to economic, social and environmental area and systematization of collection and management of performance data
· Establish a comprehensive stakeholder panel to identify new major issues for KOMIPO
· Publicize concrete examples of how practices reflect stakeholders' participation
· Maximize value through increased publication of reports on core issues and reports that differentiate KOMIPO
· Balance performance information according to economic, environmental and social area, and also report on negative

Eligibility of Auditing Agency | The auditor requested by KOMIPO, the Institute for Industrial Policy Studies (IPS), was established in 1993 and has accumulated broad expertise in the areas of ethical management, social responsibility management and sustainability management as a professional institute since 2002. "The Auditor" is composed of professors from Korea's top universities and practitioners with professional accreditation and extensive experience in sustainability management, having majoring in overall business management, accounting and environmental science etc.

Aug. 22, 2011 President, the Institute for Industrial Policy Studies, Jae Eun, Kim

AA1000 Licensed Assurance Provider 000-24 IPS

GRI Index

● Reported ◐ Partially reported ○ Not reported ◇ N/A

	Category	GRI Index	Indicators	Reporting level	Page	Note
Profile	Vision and strategy	1.1	Statement from the most senior decision-maker of the organization	●	2~3	A_1
		1.2	Description of key impacts, risks, and opportunities	●	8~11	A_2
	Organizational profile	2.1	Name of the organization	●	4	A_3
		2.2	Primary brands, products, and/or services	●	6, 7	A_4
		2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	●	4	A_5
		2.4	Location of organization's headquarters	●	5, 7	A_7
		2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	●	5, 7	A_7
		2.6	Nature of ownership and legal form	●	14, 15	A_8
		2.7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries)	●	4	A_9
		2.8	Scale of the reporting organization, including: * Number of employees; * Net sales (for private sector organizations) or net revenues (for public sector organizations);	●	4	A_10
		2.9	Significant changes during the reporting period regarding size, structure, or ownership	●	Inner Cover	B_8
		2.10	Awards received in the reporting period	●	71	CO8
	Report parameters	3.1	Reporting period for information provided	●	Inner Cover	B_3
		3.2	Date of most recent previous report (if any)	●	Inner Cover	B_8
		3.3	Reporting cycle (annual, biennial, etc.)	●	Inner Cover	B_6
		3.4	Contact point for questions regarding the report or its contents	●	Inner Cover	B_9
		3.5	Process for defining report content	●	Inner Cover	B_4
		3.6	Boundary of the report	●	Inner Cover	B-1
		3.7	State any specific limitations on the scope or boundary of the report	●	Inner Cover	B-2
		3.8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations	●	4~7	A_6
		3.9	Data measurement techniques and the bases of calculations	●	Inner Cover	-
		3.10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement	●	Inner Cover	-
		3.11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report	●	Inner Cover	B_5
		3.12	Table identifying the location of the Standard Disclosures in the report	●	74~77	B_10
		3.13	Policy and current practice with regard to seeking external assurance for the report	●	Inner Cover, 72-73	B_7
	Governance, commitments, and engagement	4.1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight	●	14, 15	GR1
		4.2	Indicate whether the Chair of the highest governance body is also an executive officer	●	14, 15	GR1 GR3
		4.3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members	●	14	GR2
		4.4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body	●	48~49	GR12
		4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance	●	15	GR7
		4.6	Process in place for the highest governance body to ensure conflicts of interest are avoided	●	14	GR13
		4.7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics	●	14	GR4
		4.8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation	●	12	-
		4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance	●	15	GR5
		4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance	●	14~16	GR6
		4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	●	32, 49, 70	GR11
		4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	●	80	GR10
		4.13	Memberships in association advocacy organizations in which the organization	●	71	A_11
		4.14	List of stakeholder groups engaged by the organization	●	16, 17	C_1,C_2
		4.15	Basis for identification and selection of stakeholders with whom to engage	●	16	C_1

● Reported ◐ Partially reported ○ Not reported ◇ N/A

	Category	GRI Index	Indicators	Reporting level	Page	Note
		4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	●	16	C_2
		4.17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting	●	16, 17	C_3
Economic		EC	Disclosure on Management Approach	●	160	-
	Economic performance	EC1	Direct economic value generated and distributed, including revenues, operating costs, employees compensations, donations and other community investment, retained earnings, and payments to capital providers and governments	●	67, 70	EC1
		EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	●	38~39	EC2
		EC3	Coverage of the organization's defined benefit plan obligations	○		EC3
		EC4	Significant financial assistance received from government	●	63~64	EC5
	Market presence	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation	◐	19	EM4
		EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	◐	19	EC4
		EC7	Procedures for local hiring and proportion of senior management hired from the local community at locations of significant operation	◐	19	EC4
	Indirect economic impacts	EC8	Development and impact of infrastructure investment and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement	●	54~57, 58, 59	EC6
		EC9	Understanding and describing significant indirect economic impact, including the extent of impacts	●	70	EC7
Environmental	Materials	EN	Disclosure on Management Approach	●	28	-
		EN1	Materials used by weight or volume	●		EV10
	Energy	EN2	Percentage of materials used that are recycled input materials	●	10	EV11
		EN3	Direct energy consumption by primary energy source.	●	30, 36	EV7
		EN4	Indirect energy consumption by primary source	◐	10	EV8
		EN5	Energy saved due to conservation and efficiency improvements	●	10, 35	EV5
		EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives	●	30, 36	EV5
		EN7	Initiatives to reduce indirect energy consumption and reductions achieved	●	30, 36	EV5, EV25
	Water	EN8	Total water withdrawal by source	●	30, 36	EV9
		EN9	Water sources significantly affected by withdrawal of water	◐	35	EV20
		EN10	Percentage and total volume of water recycled and reused	●	37	EV18
	Biodiversity	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	●	35	EV22
		EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	●	36~37	EV22, EV26
		EN13	Habitats protected or restored.	●	36~37	EV27
		EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	●	37	EV6,EV26
		EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	●	36~37	EV28
	Emissions, effluents and waste	EN16	Total direct and indirect greenhouse gas emissions by weight	●	37	EV12
		EN17	Other relevant indirect greenhouse gas emissions by weight	●	38	EV13
		EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	●	38	EV4
		EN19	Emissions of ozone-depleting substances by weight	●	30, 34	EV14
		EN20	NOx, SOx, and other significant air emissions by type and weight	●	38	EV15
		EN21	Total water discharge by quality and destination	●	34	EV17
		EN22	Total weight of waste by type and disposal method	●	35	EV16
		EN23	Total number and volume of significant spills	●	36	EV21
		EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	●	35	EV29
		EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff	◐	36	EV19
	Products and services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation	●	35	EV23
		EN27	Percentage of products sold and their packaging materials that are reclaimed by category	◇	33	EV24
	Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	●	37	EV31
	Transport	EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce	○		EV30
	Overall	EN30	Total environmental protection expenditures and investments by type	●	32	EV1

GRI Index

● Reported ◐ Partially reported ○ Not reported ◇ N/A

	Category	GRI Index	Indicators	Reporting level	Page	Note
Social _ Labor Practices and Decent Work	Employment	LA	Disclosure on Management Approach	●	18	-
		LA1	Total workforce by employment type, employment contract, and region	◐	19	EM1
		LA2	Total number and rate of employee turnover by age group, gender, and region	●	19	EM5
		LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	●	24	EM20
	Labor/ management relations	LA4	Percentage of employees covered by collective bargaining agreements	●	22~23	EM12
		LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	●	22	EM13
	Occupational health and safety	LA6	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	●	27	EM14
		LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	◐	27	EM19
		LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	●	27	EM18
		LA9	Health and safety topics covered in formal agreements with trade unions	●	27	EM15
	Training and education	LA10	Average hours of training per year per employee by employee category	●	20~21	EM27
		LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	●	20~21	EM28
		LA12	Percentage of employees receiving regular performance and career development reviews	●	14, 19	EM29
	Diversity and equal opportunity	LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	●	19	EM2
		LA14	Ratio of basic salary of men to women by employee category	●	66,67	EM3
Social_ Human Rights	Diversity, equal opportunity, Non-discrimination	HR	Disclosure on Management Approach	●	18	-
		HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	●	47	PN2
		HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	●	47	PN3
		HR3	Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	◐	49	EM30
		HR4	Total number of incidents of discrimination and actions taken	●	19	EM7
	Freedom of association and collective bargaining	HR5	Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights	◐	22~23	EM8
	Child labor	HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	●	78~79	EM9
	Forced and compulsory labor	HR7	Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor	●	78~79	EM10
	Security practices	HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	○	-	EM31
	Indigenous rights	HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	◇	-	CO2
Social_ Society	Community	SO	Disclosure on Management Approach	●	54	-
		SO1	Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting	◐	55	CO2
	Corruption	SO2	Percentage and total number of business units analyzed for risks related to corruption	●	78~79	CO5
		SO3	Percentage of employees trained in organization's anti-corruption policies and procedures.	●	78~79	CO5
	Public policy	SO4	Actions taken in response to incidents of corruption	●	78~79	CO5
		SO5	Public policy positions and participation in public policy development and lobbying	●	78~79	CO6
	Anti-competitive behavior	SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	●	78~79	CO7
		SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	◐	47	CS3
	Compliance	SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	◇	-	CO9
Social_ Product Responsibility	Customer health and safety	PR	Disclosure on Management Approach	●	50	-
		PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	●	26~27	CS4
		PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	●	27	CS11
	Product and service labelling	PR3	Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements	●	53	CS5
		PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	◇	-	CS12
		PR5	Practices related to customer satisfaction, including results of surveys measuring customer satisfaction	●	53	CS9

● Reported ◐ Partially reported ○ Not reported ◇ N/A

	Category	GRI Index	Indicators	Reporting level	Page	Note
	Marketing communications	PR6	Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship	◇	-	-
		PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes	◇	-	-
	Customer privacy	PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	●	49	-
		PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	◇	-	-

GRI Supplement Index

Profile	Organizational profile	EU1	Net energy output broken down by primary energy source and by regulatory regime	●	4, 6~7	-
		EU2	Number of residential, industrial, institutional and commercial customer accounts	◇	-	-
		EU3	Length of above and underground transmission and distribution lines by regulatory regime	◇	-	-
		EU4	"Allocation of CO2e emissions allowances or equivalent, broken down by carbon trading framework."	◇	-	-
Economic	Availability and reliability	EU5	Management approach to ensure short and long-term electricity availability and reliability	●	3, 5, 7, 11	-
	Demand-side management	EU6	Demand-side management programs including residential, commercial, institutional and industrial programs	●	51, 63~64	-
	R&D	EU7	Research and development activity and expenditure aimed at providing reliable electricity and promoting sustainable development	●	65	-
	Plant decommissioning	EU8	Provisions for decommissioning of nuclear power sites	◇	-	-
	Availability and reliability	EU9	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	●	63~64	-
	Demand-side management	EU10	Estimated capacity (MW) saved through demand-side management programs	●	51	-
		EU11	Estimated energy (MWh) saved through demand-side management programs, broken down by residential, commercial, institutional and industrial customers	●	63~64	-
	System Efficiency	EU12	Average generation efficiency of thermal plants by energy source and regulatory regime	●	6, 7	-
		EU13	Transmission and distribution losses as a percentage of total energy	◇	-	-
Environmental	Biodiversity	EU14	Biodiversity of offset habitats compared to the biodiversity of the affected areas	●	36~37	-
Social	Employment	EU15	Processes and processes to ensure the availability of a skilled workforce	●	20~21	-
		EU16	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance activities	○	-	-
		EU17	Percentage of contractor and subcontractor employees that have undergone relevant health and safety training	○	-	-
		EU18	Stakeholder participation in the decision making process related to energy planning and infrastructure development	●	16, 17	-
	Community	EU19	Approach to managing the impacts of displacement	◇	-	-
		EU20	Contingency planning measures, disaster/emergency management plan and training programs, and recovery/restoration plans	●	26~27	-
	Disaster/ Emergency planning&response	EU21	Number of people physically or economically displaced and compensation, broken down by type of project	○	-	-
	Community	EU22	Programs, including those in partnership with government, to improve or maintain access to electricity and customer support services	●	49,63-64,69	-
		EU23	Practices to address language, cultural, low literacy and disability related barriers to accessing and safely using electricity and customer support services	●	58	-
	Access	EU24	Number of injuries and fatalities to the public involving company assets, including legal judgments, settlements and pending legal cases of diseases	○	-	-
	Provision of information	EU25	Percentage of population unserved in licensed distribution or service areas	◇	-	-
		EU26	Number of residential disconnections for non-payment, broken down by duration of disconnection and by regulatory regime	◇	-	-
	Public health and safety	EU27	Power outage frequency	◇	-	-
	Access	EU28	Average power outage duration	◇	-	-
		EU29	Average plant availability factor by energy source and by regulatory regime	●	6~7	-

Code of Ethics

Chapter 1. KOMIPO's Social Responsibilities

Article 1 (Commitment to Sound Corporate Activities)

1. We will renew our corporate culture through transparent management and contribute to the promotion of a market economy through free and fair competition.
2. We will reject nepotism based on regional, academic, or bloodties and operate the organization under the principle of free and fair competition.
3. We will be a dependable and reliable corporation that divides its profits in a fair and reasonable manner.

Article 2 (Commitment to Community)

1. We will return a reasonable portion of our corporate profits to society and contribute to the social and cultural development of the community.
2. We will develop a sense of shared commitment between the company and the community by developing and supporting various pathways of exchange with it.

Article 3 (Commitment to Environmental Preservation)

1. We will devise pre- and post-measures to address environmental problems associated with the power generation business and try our utmost to prevent environmental contamination and protect nature.
2. We will strictly observe national and local government environmentally related laws and standards and be an environmentally friendly corporation.

Chapter 2. Duties Towards Customers and Affiliates

Article 4 (Customer-oriented Management)

1. We will make the satisfaction of middle- and end-users our first priority when evaluating our corporate activities.
2. We will do our best to supply high-quality electricity at a reasonable price and always give our customers honest and truthful information.
3. We will sincerely listen to our customers, expedite any claims, and notify them of the results.

Article 5 (Fair trade with Affiliates_ Revised: 2009.08.03)

1. We will build an equal partnership with our associates and affiliates through honest and fair trading.(Revised:2009.08.03)
2. We will provide equal opportunities to qualified associates and affiliates and trade with them using fair procedures. (Revised: 2009.08.03)
3. We will not carry out any unfair practices, such as passing on costs by using our dominant market position.(Revised:2009.08.03)

Chapter 3. Liabilities Towards Shareholders and Investors

Article 6 (Protecting Shareholders' Interests)

1. We will endeavor to protect our shareholders' interests through reasonable investments and efficient management.
2. We will strive to win proper evaluations through positive PR activities.

Article 7 (Transparent Management)

1. We will disclose information on our current operational status and future prospects to shareholders and other stakeholders.
2. We will outline the company's financial status and show our accounting in an open and transparent manner in accordance with all related laws and regulations and generally-accepted accounting practices.
3. We will make every effort to guarantee the rights of shareholders by providing them with relevant information and opportunities to participate in major decisions.

Article 8 (Protection of Company Property and Information)

1. We will not appropriate company property for our own use.
2. We will not cause harm to the company by divulging trade secrets, such as management or technological information.
3. Other information obtained at work will not be divulged without prior permission or approval, and will only be used for decision-making or to further work processes at the company.

Chapter 4. Relationship of the Company and Its Employees

Paragraph 1 Duties of Employees

Article 9 (Respecting People)

1. We will respect each employee's dignity and value and work to improve the quality of their lives.
2. We will respect the private lives of individuals and try to solve any and all problems that our employees may have.
3. We will be generous in assessing the best efforts of every employee.

Article 10 (FairTreatment)

1. We will encourage our employees' creativity and give them fair opportunities based on their abilities and talents.
2. We will reject regional, academic, or blood ties and operate the organization under the principle of free and fair competition

Article 11 (Support for Self-development)

1. We will fully support the development of our employees' abilities.
2. We will provide our employees with optimal working conditions so they can express their creativity and talents to the utmost.

Article 12 (Improving the Working Environment)

1. We will develop a pleasant corporate environment so that our employees will feel good about their work and their work-place.
2. We will provide healthy working conditions and an environment that ensures our employees' health and safety.

Paragraph 2 Employees' Duties to the Company

Article 13 (Fair Work Requirements)

1. Employees will collaborate with other individuals and departments to achieve the common goals of the company.
2. Employees will abide by all laws and company regulations.
3. Employees will make the company's profitability their first priority within ethical boundaries when they and the company have a conflict of interest.(Revised: 2009.08.03)
4. Employees will not offer or accept unreasonable requests, money, other articles, or entertainments relating to their work. (Revised: 2009.08.03)

Article 14 (Sound Attitudes)

1. Employees will take the lead in establishing sound ethical standards in the organization by performing their duties in an honest and transparent manner.
2. Employees will protect the company's reputation and their own by always behaving in a reasonable and responsible manner.
3. Employees will be honest and sincere in their private lives.

Article 15 (Self-development)

1. Employees will endeavor to become true professionals in their work.
2. Employees will contribute to the company's development through innovation and work improvements.

Article 16 (Working Environment and Safety)

1. Employees will maintain a pleasant work environment by keeping their surroundings neat and well-organized.
2. Employees will strictly observe all safety regulations to prevent accidents.

Paragraph 3 Relationships between Employees

Article 17 (Promoting Comradeship)

1. Employees will develop a sense of unity and comradeship by treating each other with trust and respect.
2. Employees will not tolerate or adopt any wrongdoing by their coworkers, but will instead confront them at a proper time, thereby promoting the development of the company and its workers.

Article 18 (Prohibition Against the Giving of Money, Articles, and Other Transactions between Employees)

1. Except for socially-accepted cases, employees shall not give or receive money or entertainments.
2. Excessive personal closeness or exchanges will not be allowed, other than those regarding work duties.

Chapter 5. Harmony between Labor and management

Article 19 (Harmonious Labor-Management Relations)

1. Both labor and management will create a productive relationship based on mutual trust and harmony.
2. Both labor and management will develop efficient communications channels to eliminate any possible conflicts in advance.

Article 20 (Duty of the Company and Employees)

1. The company will develop and implement programs to improve the quality of life of its employees, such as creating a cultural environment and expanded social welfare facilities.
2. The employees will try to achieve a sense of balance between the organization and the individual and contribute to the development of both parties.

This code shall be implemented on the day of proclamation.

Supplementary provision (2009.08.03)

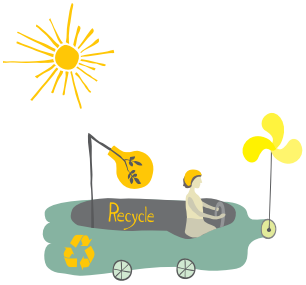
This code shall be implemented on the day of proclamation.

UN Global Compact Implementation

KOMIPO has complied with the 10 principles of UN Global Compact since joining in 2006 and annually submits COP (Communication on Progress). Hereafter, the company will continue to bring happy future to our society by fulfilling social responsibilities as a world business citizen according to international ethical standards.

Classification	Principles	Related Codes and Policies	Performance Outcome
Human Rights	1. Companies shall support and respect protection of internationally proclaimed human rights	· Ethics charter (Respect each individual's dignity and values) · Ethics code Article 9 (Respect each individuals) · Rules of employment Article 10 (Respect subordinates' personality) · Collective agreement Chapter 8 (Protect human rights & personal information)	· Training in human rights self-development · Managers' leadership training · Family friendly management · Supports foreign workers and international couples, multicultural family etc.
	2. Companies shall make sure that they are not complicit in human rights abuses	· Conduct code Article 23 (Manage just and transparent acquisition of information) · Foreign worker protection guideline Article 12/ Article 4 (Prohibit any abuse/Protect privacy)	· Carries out sexual harassment prevention training · Runs internal corruption reporting center · Guarantees the right to legal defense when disciplined
Labor	3. Companies shall uphold the freedom of association and the effective recognition of the right to collective bargaining	·Collective agreement Chapter 13/ Chapter 14 (Safeguard rights to collective bargaining and strikes) ·Foreign worker protection guideline Article 10 (Uphold the freedom of association and collective bargaining)	· Runs work hour exemption system · Multi-labor union system
	4. Companies shall uphold the elimination of all forms of forced and compulsory labor	·Collective agreement Chapter 7 / Chapter 8 (Observe work hours, need employees' agreement for overtime works, prohibit overtime works for pregnant employees) ·Ethics code Article 12 (Improving the working environment) ·Detailed rules of implementing remuneration regulation (Pay reasonable wages)	· Runs grievance committee · Carries out 40 hr-work-week · Provides extra payment for overtime, holiday, night hour work
	5. Companies shall uphold the effective abolition of child labor	· Foreign worker protection guideline (Prohibit child labor) · Observes laws prohibiting child and forced labor and all related laws in Labor Standard Law and International Labor Organization regulations	· Has set up Sisterhood relationship with child centers(8 places) · Deploys children's human rights protection activities such as running Children's Science and English Camp
	6. Companies shall uphold the elimination of discrimination in employment and occupation	·Ethics code Article 10 (Fair treatment) ·Collective agreement Chapter 5 / Chapter 6 / Chapter 9 (Fair treatment/ Equal pay for both genders/ Gender equality) ·Employment code Article 5 (Fair treatment) ·HR management code Article 2 (Basic principles of HR management: Fair treatment & management) ·Foreign worker protection guideline Article 1 (Principles of nondiscrimination and equality of opportunity)	· Abolished employment discrimination based on age/academic background · Carries out youth internship program · Bans any discrimination in regular retirements/ other retirements/dismissals · Secures equal opportunity in training/promotion/relocation · Runs self-reporting system
Environment	7. Companies shall support a precautionary approach to environmental challenges	· Environmental vision and strategy (The first class company that puts the environment and people first) · ECO 2015 mid to long term environmental strategy (Established promotion strategies to move quickly towards becoming one of the world's top 10 environmental management energy companies) · Ethics code Article 3 (A commitment to preserve the environment)	·Published promotional/educational booklets on the Climate Change Convention. ·Expanded eco-preservation program ·Runs environment committee
	8. Companies shall undertake initiatives to promote environmental responsibility	· Environmental vision and strategy / Ethics code Article 3 · ECO 2015 mid to long term environmental strategy · Mid to long term master plan responding to climate change (4 main promotion strategies established to decrease by 10% greenhouse gas emission sources by 2020)	· Organized T/F team to respond to the Climate Change Convention at corporate level. · ERP linked greenhouse gas emission statistical analysis system constructed · Climate change expert nurturing training · Release environmental information
	9. Companies shall encourage development and diffusion of environmentally friendly technologies	· Environmental vision and strategy / Ethics code Article 3 · ECO 2015 mid to long term environmental strategy · Mid to long term master plan responding to climate change	· Promoted international CDM business · Carried out CCS(Greenhouse gas reduction technology) development · Promoted IGCC(Integrated Gasification Combined Cycle) utilization · Constructed environmentally friendly facility (desulfurization, denitrification)
Anti Corruption	10. Companies shall work against corruption in all its forms, including extortion and bribery	· Ethics charter / Ethics code / Conduct code · Executives' occupational integrity pact management regulation(Responsible for staff's avoidance of corruption in their duties and for dealing with violations) · Behavioral guides for duty related persons (Detailed behavioral standards of incorrupt ethics on duty related persons that employees shall abide by) · Behavioral guides on contract tasks with overseas companies (Behavioral standards that employees shall abide by to enhance transparency and justice of contracting tasks with foreign companies.) · Internal reporter protection·compensation handling guides / Corporate card management guides	· Abidance commitment of executive employees' incorrupt duties · Consistent ethics training implemented including special training of incorrupt ethics by employee positions, and 5 mins. of special lectures on ethics in meetings, etc. · Designates and operates ethics mentors by teams · Runs internal irrationality report center, reporting board, ethics hotline, gift return center · Runs internal accounting control · Evaluation and clean card system

Readers' Questionnaire



We appreciate your cooperation.

If you have any questions or opinions, please send them via fax to 070 -7511-1046
or by e-mail to sustainable@komipo.co.kr

Readers' Questionnaire for KOMIPO Sustainability Report 2011
KOMIPO intended to outline its sustainability management activities in this report.
To make improvements to its contents, readers' opinions are welcomed.
Your opinions will be reflected in future reports.

1. What is your relationship with KOMIPO?
__Investor/Shareholder __Cooperating Companies __Local resident __Member of NGO
__Industrial sector __Academic sector __Government official __Employee of KOMIPO
__Other (please specify:)

2. What is your overall evaluation of this report? __Good __Moderate __Bad

3. Was this report easy to understand? __Good __Moderate __Bad

4. What did you think of the amount of information that this report contains?
__Too much __Moderate __Not enough

5. Which aspect do you think is the most successful?
__Contents, editing and structure __Level of contents __Various data __Design

6. Which section interested you the most?
__Introduction __Economy section __Environment section __Society section

7. Which section do you think needs improvement?
__Introduction __Economy section __Environment section __Society section

8. Please share any ideas you have on this report. Thank you.

KOMIPO Sustainability Report

This report can be downloaded from the KOMIPO website.
Contact the following numbers for further inquiries or details about sustainability or this report.

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