











REPORT OVERVIEW

EMC Sustainability Report 2009

This EMC Sustainability Report 2009(hereinafter referred to as "Report," if necessary) is the first issue produced by us, the Korea Environmental Management Corporation ("EMC"). Having transparently disclosed information focusing on environmental performances through the White Paper on Environment since as early as 2005, we describes our so-far management activities in the Report in three aspects: economy, environment and society, which would meet various stakeholders' different needs. We'll continue to fulfill our commitments to the faithful disclosures of sustainability management("SM") performances to them.

Characteristics

This Report:

Meets global standards on the disclosures of SM performances since it has been written based on pieces of advice on reporting framework from experts by sector including economy, environment, and society; Identifies key issues through carrying out a materiality test to faithfully reflect stakeholders' principal interests and other considerations with great impacts on management activities;

Utilizes in identifying key issues the results of media analyses over four categorized topics, including economy, environment, society, and other generics which were covered in 2008 by the whole domestic media, such as broadcasts, dailies, journals, web media, etc.; and Benchmarks domestic and overseas similar high-performance organizations and seeks SM experts' reviews to collect opinions for making a report consistent with not only domestic but also global standards

Reporting Framework

The Report has been made in accordance with the GRI(Global Reporting Initiative) G3 Reporting Framework. For more details, see "GRI Index" as described in pages 82 to 86.

Scope & Period

The Report addresses the SM activities and performances of our headquarter and other offices including four river basin management offices and one regional office for the period ranging from Jan. 1 to Dec. 31, 2008. If there is, however, a need to show the past trends for a comparative purpose, data covering the previous periods are used. For some items, information for the period 2009 has been partially

• Note that the regional office in operation within the Gaeseong Industrial District in North Korea isn't dealt with in the Report.

Ouality Assurance

All information contained in the Report has been arranged by our subject matter experts("SMEs") engaging in SM, and then reviewed and confirmed on its quality by the management and the Ethical Management Committee, respectively. On top of that, the Report has been assured of its accuracy, completeness, and reliability from an independent external quality assurance agency(Korean Standards Association: KSA).

For More Details

The full Report is available at our website(www.emc.or.kr). For more detailed information, don't hesitate to contact us at +82 32 590 3112(Creation & Innovation Team, Administrative Management Dept.).

GRI Application Levels System





We, the EMC, hereby declare that this EMC Sustainability Report 2009 meets all requirements for obtaining an GRI REPORT GRI REPORT eligibility for Level A+ in accordance with the GRI Application Levels System, which fact has been assured of and confirmed on its quality by an external quality assurance agency.

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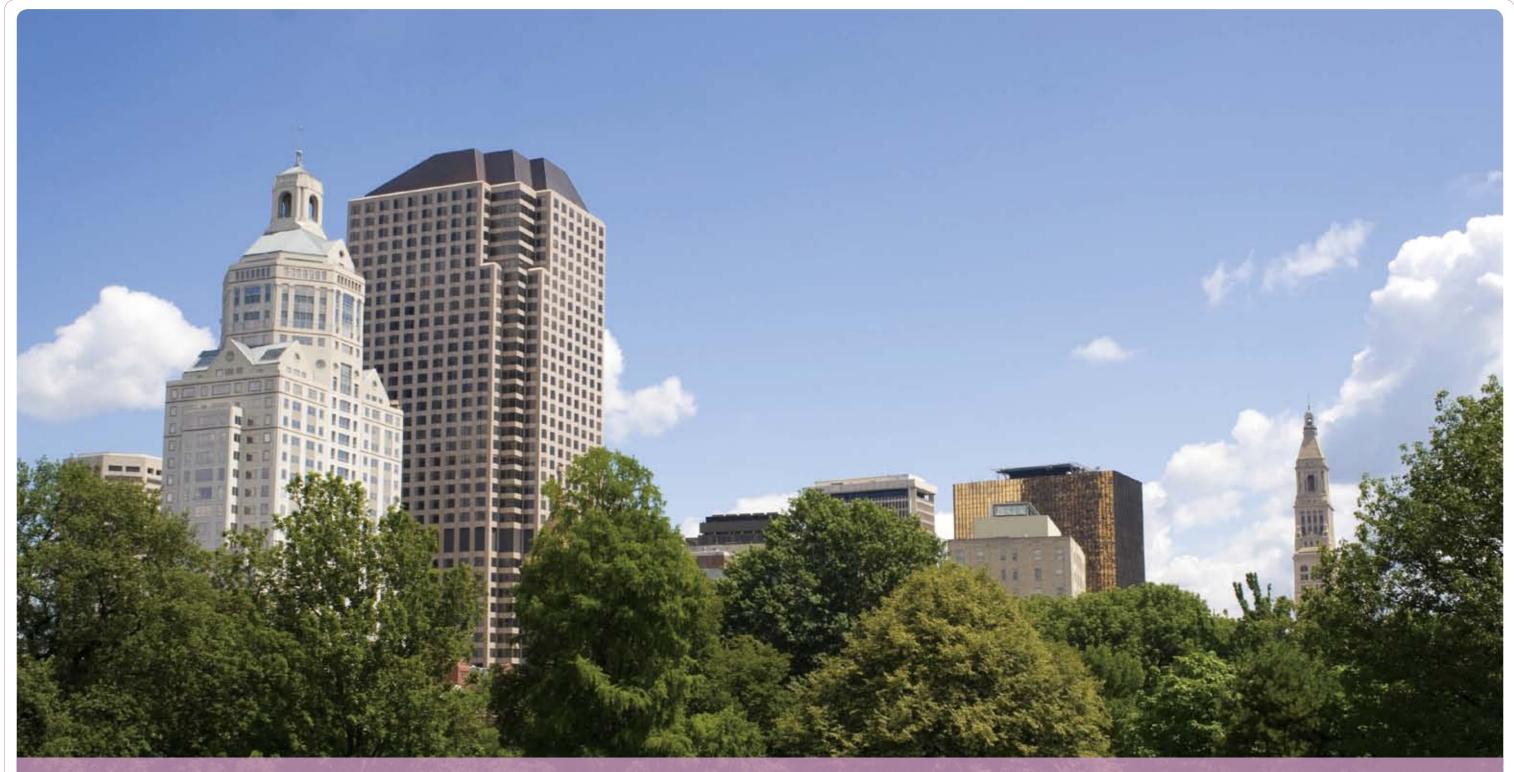
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For More Details

SOCIETY



Harmonious Co-Existence of Present & Future Generations

Sustainable development refers to a development that meets present generations' needs without compromising future ones' ability to meet their own needs.

We'll open our countless potential toward sustainability management through which man and nature can coexist on a harmonious axis of present and future generations.

INTRODUCTION

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CEO Message

Stakeholders'Involvemen

PROFILE SM SYSTEM ECONOMY ENVIRONMENT SOCIETY PEOPLE APPENDIX



"Today for Tomorrow"

Is EMC's Will to Pursue Sustainability Management & Promise to the Future Generations.

Initially introduced in 1972 in the first report of the Club of Rome titled, "The Limits to Growth," the term 'sustainable development ("SD")' appearing in 1987 in the Brundtland report titled, "Our Common Future," was defined as "development that meets the needs of the present generation without compromising the ability of the future generations to meet their own needs." As for now, the SD has rooted itself as a brand-new global paradigm over the whole sectors, including economy, society, environment, culture, etc., to such an extent that it is recognized as kind of a practical ideology humankind in the 21st century should pursue.

So called 'sustainability management ("SM")' has risen on the surface in the course of re-considering the conventional management approaches on a full scale in a situation where environmental and social issues came to be of great concern to management activities; actually, the SM is an indispensable factor required for preoccupying competitiveness in trends toward globalization like this.

We're pleased to disclose our so-far SM activities and performances to you, customers and other stakeholders giving everlasting concerns and supports to us, the EMC, through this first EMC Sustainability Report 2009.

Since its establishment in 1987 when it began operating environmental infrastructure in its initial stage, the EMC has efficiently led and implemented public environmental policies through operating air · water · noise monitoring networks, measuring · analyzing hazardous chemical substances, such as dioxin, investigating · purifying polluted soil, supporting an optimization of environmental infrastructure in terms of policy and installation, carrying out technological diagnoses · supports, building systems for adaptation to climate changes, and engaging in non-specific pollution management by river system (four mainstreams, including the Han River, the Yeongsan River, the Geum River and the Nakdong River), ecological restoration, and low carbonic emissions, all of which, in turn, enabled us to take a great leap toward the world's best environmental service provider

But those ever dazzling performance-oriented development cost us other precious values than growth itself, which is why we seat ourselves on so called "an inconvenient truth."

This is the very moment when, based on such self-awareness, we've got to outgrow performance-specific values for more important ones in trends toward globalization like this.

Will Attain the Acme of SM

Challenged by a shift to management paradigm in simultaneous pursuit of economic, environmental and social performances, we must secure sustainable competitiveness to serve and function as a going-concern. In such a situation, we've built SM systems based on the TBL(Triple Bottom Line) with an emphasis on economic efficiency, environmental healthiness, and social accountability, in which the present generation can co-exist with the future ones.

Of various management strategies, including innovative management, ethical management, accountability management, customer management, performance-oriented management, knowledge management, human resource management, etc., we think most highly of SM as kind of a value. We'll try our best to realize our vision and become a being all stakeholders of ours can rely on, through practically and continuously pursing SM.

Will Build a Foundation for the Future-Oriented Growth.

As a specialized environmental service provider, we'll spur ourselves to exploit promising industries to serve as kind of new engines for the future growth, such as CDM projects, including other projects for building systems for adaptation to climate changes and developing environmental energy, which would contribute to the globalization of domestic environmental industries; in 2008, we built a foundation for producing new engines for 'green growth' by re-organizing on a full scale our business portfolio and organizational structure with a focus on environmental media, based on the diagnoses of the organization and its workforce.

Will Implement the World's Best Environmental Management Systems.

Environment itself is why the EMC exists for what. Carrying with us the world's best workforce and systems, we've been recognized as a model organization that others may follow. We'll contribute to the conservation of not only domestic but also global environments through building the world's best environmental management system

Will Pursue a Social Leadership beyond Social Responsibilities.

We'll become a corporate citizen that can share our vision and values with all stakeholders through voluntarily communicating with them. Based on our recognition of strict ethical awareness and social responsibilities, and respects for diversity, we'll pursue people-oriented management; actually, our membership of UN Global Compact is the very expression of such pursuit.

Making the Report was kind of a meaningful opportunity for us all to retrospect our so-far project portfolio and management activities. We hope that the Report can be used as a means to continuous communications with various stakeholders.

Thank you,

Chairman Yang, Yong Woon



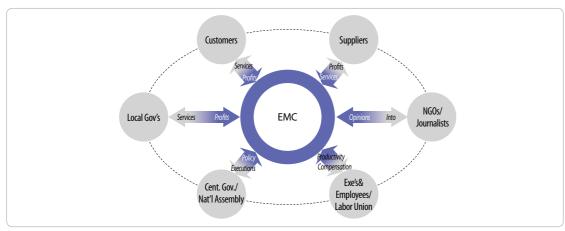
CEO Message Stakeholders' Involvement

Stakeholders' Involvement

We have pursued SM through actively reflecting stakeholders' opinions into management activities. In addition to that, we have put up and operated various communication channels to exchange continuous feedbacks with them, and held customized interviews with them to make up for some ineffectual channels.

Mapping Stakeholders

Stakeholders surrounding the EMC can be largely categorized into six groups, all of which have maintained mutually influential interrelations with the EMC according to their principal interests, including customer value management, mutual cooperation, environmental management, humane management, synergistic growth, contribution to communities, etc. .



Communication with Stakeholders

We has opened and operated various communication channels according to different stakeholders in order to implement a better management through informing them of and collecting their opinions about our management activities.

Stakeholders	Communication Channels		
Customers	Management Performance Report, Annual Report, Management Disclosures, Web Bulletin, Customer Proposal, integrity Survey, Communication with the Chairman, Customer Satisfaction Survey		
Suppliers	Seminar, Symposium, Customer Satisfaction Survey, Integrity Survey		
NGOs / Journalists	Symposium, Public Briefing, Civil Affairs Counseling		
Executives & Employees / Labor Union	Employee Satisfaction Survey, Joint Labor-Management Consultative Body, Ombudsr Program, Communication with the CEO, Always-Call Program, Employee Proposal, Recogni Surveys & Questionnaire Survey		
Central Government / Nat'l Assembly	Management Performance Report, Project Report, Annual Report, Seminar		
Local Governments	Seminar, Forum, Workshop		

- Customers: Include all organizations which the EMC supplies
 Executives & Employees/Labor Union: Include all executives, its services for. Their opinions are actively collected, as through Customer Survey or Customer Proposal.
- Suppliers: Include all suppliers joining projects related to the installation of environmental facilities, such as public agencies • Central Gov./Nat'l Assembly: Include governmental agencies, or any other service providers, with which casual Symposiums such as the Ministry of Environment ("MOE") with control over consequently, prevent a possible delay in projects underway.
- NGOs/Journalists: Include local residents, environmental management and projects should pursue. and other gatherings with those residents and organizations are held to hear their opinions, followed by press releases and media analyses to identify the movements of the press, all of which will be reflected into management activities.
- employees and labor union inside the EMC, of which various needs are identified through lots of on-/off-line channels to hear their opinions, and then reflected into management activities.
- are held to exchange opinions with them at any time and, us, the EMC, and the National Assembly, of which opinions are exchanged with us on a continuous basis to determine what our
- organizations, the press, etc. Public briefing, forums, seminars, Local Governments: Include local authorities for which seminars for public relations and technological exchanges are periodically held to carry out the existing projects or new ones.

Identification of Key Issues Most Concerning Stakeholders

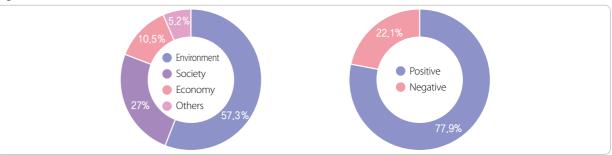
Key issues concerning our stakeholders were identified through media analyses and face-to-face interviews to make up for what communication channels always available might miss, so that they could be faithfully described in the Report.

Media Analyses

Based on media analyses involving domestic mass media outstanding as of 2008, including major dailies, economic dailies, environmental journals or magazines, web media, etc., how many news articles covering the EMC during the same time appeared and to what extent they were positive or negative toward the EMC, were surveyed by sector, including economy, environment, society, etc.

The results have it that, of 344 news articles in total covering the EMC, environmental ones amounted to 197, 57.3%, while economic and social sections occupied 93(27.0%) and 36(10.5%), respectively, with the remaining miscellaneous sections showing 18(5.2%), which suggest that they have the highest interests in our core business operation among others.

When it comes to positivity/negativity survey, 268 articles(77.9%) were found to be of positive tone. It means that they thought highly of our efforts toward environmental improvements and social contributions. On the contrary, issues, such as excessive governmental contributions, functioned as negative factors.



Interview with Stakeholders

Of our stakeholders that can grouped into six, representatives by group were chosen for interviews to identify key issues related to economic, environmental and social aspects. When it comes to interviewing with them, external experts paid a visit in person so as to hear their main interests or any other opinions.

Voy Issues Conserving Stalcoholders

TBL	Key Issues	Challenge
Economy	Securing the future growth potential in terms of economic sustainability	To actively exploit new business opportunities
,	Securing competitiveness in accordance with an increase in demands for international cooperation (as on CDM projects, climate changes, etc.), new renewable energy, soil, etc.	To invest in R&D for developing new technologies
	Exporting accumulated technologies related to water, air, water supply & sewage, etc., as to developing countries	To establish strategies to participated in overseas business opportunities
	Strengthening networks for heightening the standing and roles of the EMC so that it can have influences upon governmental policies	To initiatively and proactively develop issues to make policies
nvironment	Expanding the roles of the EMC through securing low-carbon technologies in a situation where South Korea will be forced to begin reducing carbon emissions in 2013	To secure and strengthen low-carbon technologies
	Actively disclosing to stakeholders what knowhow and competitiveness the EMC has accumulated for green growth and environmental conservation on a sustainable basis	To strengthen strategies for the active promotion of the EMC
	Hearing businesses' opinions with regard to the operation of TPLMS(Total Pollution Load Management System) to control air pollutants, providing related legal interpretations, and serving as a being that can represent them	To build environmental management systems that meet global standards
ociety	Expanding new growth potentials through taking excellent human resources, which, in turn, contribute to the reinforcement of competitiveness	To grant incentives to recruit R&D workforce
	Taking measures against imbalances in workforce structure & building education & training systems focusing on core competence	To build education and training system focusing on core competence
•	Expanding strategic activities for social contributions to secure their sustainability	To identify items for social contributions based on linkage to the business operation portfolio
	Enhancing communications with stakeholders & an understanding of the environment (air, water, soil, bio-diversity, etc.)	To facilitate communication with customers and NGOs

CEO Message Stakeholders'Involvemer

Materiality Test

PROFILE
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PEOPLE

Materiality Test

The important thing in making a sustainability report is that it should focus on key issues concerning stakeholders and any other ones highly affecting management activities. For the purpose, we selected those key issues in accordance with materiality test process after having formed subject matter experts ("SMEs") consisting of our own employees, which issues were necessarily addressed in the Report to provide more practical and feasible information to stakeholders.

Materiality Test Process

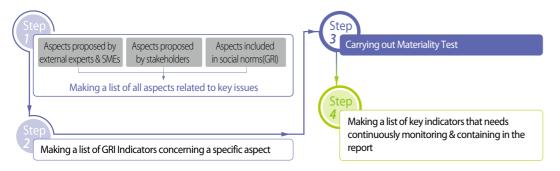
Materiality Test goes through four stages:

Stage 1 is a stage where a list of all aspects in relation to key issues proposed by external experts, SMEs, and other stakeholders is made;

Stage 2 is a stage where, based on the consideration of all aspects collected in Stage 1, the whole list of related GRI Indicators is referred to;

Stage 3 is a stage where Materiality Test is carried out through a workshop involving SMEs, based on the lists of the aspects and GRI Indicators identified in Stage 1 and Stage 2, respectively; and

Stage 4 is a stage where, based on aspects sorted out through the Materiality Test, a list of key indicators that needs continuously monitoring and containing in the Report, is made



Selecting & Reporting Key Issues

The Report contains in the following pages key issues selected through carrying out Materiality Test on SMEs and other employees working with the EMC:

Economic Issues	Environmental Issues	Social Issues	Labor Issues
1. Management Goals & Strategies (22.1%)	1. Climate Change Adaptation Systems	1. Ethical & Transparent Management (40.9%)	1. Efficient Human Resource Management
p.15~16	(31.3%) p.53~55	p.19~21, 64~65	(29.2%) p.69~70
2. Management Innovation (15.6%)	2. Development of Environment Energy	2. Public Policies & Compliance with Laws &	2. Welfare (21.4%)
p.30~31	(22.3%) p.56	Regulation(14.9%) p.12, 62~63	p.73~74
3. Development of New Technologies (15.6%)	3. Living Environment (12.4%)	3. Win-Win Management (14.4%)	3. Model Workforce & Personnel Principles
p.37	p.50~51	p.62~63	(14.4%) p.69
4. Business Diversification (10.7%)	4. Aquatic Environment (10.7%)	4. Socially Responsible Investments (12.4%)	4. Workforce Development (12.4%)
p.13, 34~35	p.39~42	p.28	p.71~72
5. Management Performance (9.9%)	5. Air Environment (8.7%)	5. Contribution to Communities (12.1%)	5. Cooperative Labor-Management (9.2%)
p.26~29	p.43~45	p.59~61	p.75~76
6. Customer Satisfaction Management (8.2%)	6. Resource Recycling (7.1%)	6. Fair Transactions with Suppliers (5.3%)	6. Protection of Human Rights & Respects for
p.32~34	p.49	p.63	Diversity (7.6%) p.68
7. Risk Management Ability (7.7%)	7. Conservation of Bio-Diversity (3.1%)		7. Communication for Treating Grievances
p.22~23	p.46		(2.4%) p.76
8. Transparent Governance (6.9%)	8. Hazardous Substance Management (2.8%)		8. Performance-Based Wage System (2.1%)
p.17~18	p.47		p.69~70
9. Creative Management (3.6%)	9. Waste Environment (1.6%)		9. Health & Safety (1.3%)
p.31	p.48~49		p.74



General
Organizational Operation Status
Business Operation Portfolio

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Organization Profile

The Environmental Management Corporation("EMC") is a non-profit public corporation established to prevent environmental pollutions and improve the environment in accordance with the EMC Act as of March, 1987. Pursuant to the "Act on Operation of Public Organizations," that specifies provisions on public organizations and their autonomous & responsible management, the EMC is considered as a semi-governmental organization subject to commissioned enforcement under the supervision of the Ministry of Environment.

General

The following shows the general status and corporate identity of the EMC as of December, 2008:

General Status as of December, 2008

Name	Environmental Management Corporation("EMC")
Headquarter	Located within the Environmental Research Complex, at Gyeongseo-dong, Seo-gu, Incheon (www.emc.or.kr)
Date of establishment	March 23, 1987
Reference Act of Establishment	Environmental Management Corporation Act (No. 3657)
No. of Workforce	1,058 (persons)
Total Assets	(KRW) 2 trillion 821 billion (decreased by (KRW) 265.5 billion compared with the previous year)
Budgets	(KRW) 1 trillion 521.2 billion (increased by (KRW) 372.1 billion compared with the previous year
Organizational Structure	Headquarter (5 offices 14 departments 2 bureau, 4 River Basin Management Offices, 2 Regional Offices

Corporate Identity

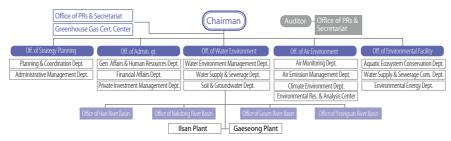


The symbolic mark consisting of three circles stands for three environmental elements: water, soil, and air.

The shape of a flying bird implies our ceaseless leap toward the future, while its counter-clockwise flight represents a will of return to the natural environment.

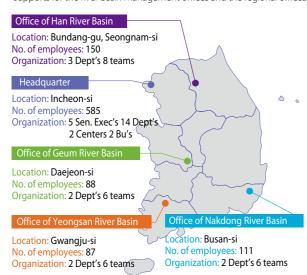
Organizational Operation Status

The EMC has been operated as a systematic structure focusing on field services to elastically respond to changes in management environment and strengthen responsible management systems.



It consists of the headquarter(5 offices, 14 departments, 2 bureaus, and 2 centers, including a chairman and an auditor), 4 river basin management offices installed at the four spheric coverages, and 2 regional offices.

The headquarter is responsible not just for enterprise-wide strategic & organizational management, personnel & financial management, and air monitoring, but also for supporting & managing the installation of public environmental infrastructure, including managerial supports for the river basin management offices and the regional offices.



Operated at the four spheric coverages: the Han River with coverage over the metropolitan capital area including Gyeonggi-do and Gangweon-do; the Geum River with coverage over Chungcheong-do; the Yeongsan River with coverage over Jeolla-do and Jeju-do; and the Nakdong River with coverage over Gyeongsang-do, the river basin management offices support environmental loan services, environmental monitoring networks, technologies related to environmental facilities including their diagnoses, environmental investigations and analyses, and the installation of public environmental infrastructure, for their respective coverages.

Two regional offices include the domestic water waste incineration plant in Goyang-si and the wastewater/waste treatment facility within Gaeseong Industrial Complex in North Korea. At the four spheric areas, there are the air monitoring centers under operation.

Business Operation Portfolio

Characteristics of & Prospects for Environmental Industries

In a situation where various efforts to conserve the global environment have been recently made all over the world, restrictions on international transactions against businesses short of meeting environment standards internationally accepted are getting stronger. Environmental industries generate their demands through external factors, such as environmental policies and regulation, rather than a mechanism between demands and supplies in them, which is why it's expected that their market will be largely expanded.

Domestic environmental industries, to put them in terms of scale, amounted to KRW 9 trillion and 19 trillion in 1993 and 2005, respectively; in 2010, they will be estimated at KRW 32 trillion, which would make the annual growth rate as high as 12.1% on the average. Actually, the figure corresponds to 2% of the market scale for the whole global environmental industries.

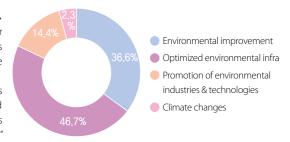
The so-far environmental industries have focused on services, facilities, resources, etc., provided in accordance with the type of pollutants concerning, as water, air, soil, waster, etc. But the UN Framework Convention on Climate Change effective as of 1992, the Kyoto Protocol adopted in 2005, and the Post-Kyoto Protocol effective beginning 2013 will avert their interests toward climate changes, green gas emission reductions, alternative energy, etc.

The EMC has readily respond to new environmental demands, as through building a Kyoto mechanism foundation to strengthen systems for adaptation to climate changes, training greenhouse gas experts, operating carbon point systems, promoting CDM(Clean Development Mechanism), furthering energy towns by spheric area, etc., all of which will be among the future core industries.

Business Operation Portfolio

Our business operation portfolio can be largely categorized into parts involving: \blacktriangle the inclusive improvement of the national environment; \blacktriangle optimized supports for public environmental infrastructure; \blacktriangle the promotion of environmental industries and technologies; and \blacktriangle the construction of systems for adaptation to climate changes, which, in turn, are sub-divided into 36 business units.

Of those parts belonging to our business operation portfolio, the first two ones occupied the majority as of 2008, with the first one amounting to 36.6% and the second to 46.7%. But, given the current trends in domestic and overseas environmental industries and the national environmental policy "Eco-Technopia 21" that is a project to develop the next-generation core environmental technologies, the last two parts will get more and more important.



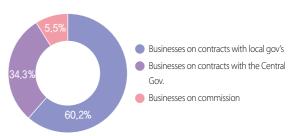
Share by each business unit

Clean SYSTMS Operation & Management (6.7%)	Operation & Management of Automated Noise Monitoring Networks (0.8%)	Supports for & Diagnoses of Environment Facility Technologies (4.8%)
Ambient Air TMS Management (4.6%)	Operation & Management of Automobile Exhaust Gas Computer Systems (0.4%)	Supports for Water Supply & Sewage Policies (3.2%)
Operation & Management of Automated Water Monitoring Networks (4.5%)	Malodorous Substance Test (0.3%)	Supports for Sewer Technologies (1.9%)
Operation & Management of Automated Air Monitoring Networks (3.5%)	BTL-Based Sewer Projects (10.9%)	Supports for Technologies related to Malodorous Substances (1.1%)
TMS Operation & Management for Establishments Discharging Water Pollutants (3.3%)	Supports for Installation of Water Supply & Sewer Facilities (7.9%)	Loan Services for Environmental Improvements (1.0%)
Polluted Soil Precision Investigation & Restoration (3.4%)	Implementation of Integrated Sewage Treatment System by River Basin (6.7%)	Implementation & Operation of Water Supply & Sewage Information System (0.6%)
Soil Pollution Survey (2.5%)	Sewer Rehabilitation Projects for the Han River System (5.0%)	WastewaterTreatment PerformanceTest (0.6%)
Sample Analyses (Polluted Soil Precision Investigation) (1.3%)	Supports for Installation of Waste Treatment Facilities (4.3%)	Supports for Local Water Supply Technologies (0.3%)
Examination of Environmental Gauges (2.5%)	Operation of Domestic Waste Treatment Plant (4.1%)	Improvements of Water Supply System (0.3%)
Investigation of Hazardous Substances from Incineration Facilities (1.3%)	Supports for Installation of WP Facilities (3.8%)	Supports for Water Improvement Policies (0.1%)
Installation & Operation of POPs Monitoring Networks (1.1%)	Supports for Private Investment on Environmental Facilities (2.6%)	International Cooperation & Technological Exchange (0.5%)
Investigation of POPs Emission (0.4%)	Water Supply Source Improvements (1.4%)	Supports for Conventions & Policies for Adaptation to Climate Changes (2.3%)

Based on ownership to businesses and their costs, they can be also grouped into: businesses on contract with the Central Government; businesses on contract with local governments; and businesses on commission.

Businesses on contract are subject to a contract entered into with the Central Government or local governments in relation to specific areas, while businesses on commission are carried out by the EMC in accordance with related individual laws and regulations.

Of them, the second one occupies the majority since the EMC has focused on supports for the construction of public environmental infrastructure.





The population amounting to about 3 billion will be expected to suffer from water shortage in 2015, with some 70% of the global population facing water stress in 2025.

Fresh water supply per capita will decrease by 1/3 in 25 years.

Deepened Water Shortage

UN. Water Development Report

Impacts of an increase global temperature by 1°C

Some 10% of all organisms to be extinct;
Population with water shortage amounting to 50 millions; and 0.3 million people to catch up with climate-related diseases

An increase in CO₂ in the atmosphere and, consequently, treatment costs (\$45 per one ton of CO₂)

Global Warming

Cambridge University, Press

1/3 of arable land in Asia corresponding 27% of China has been desertified. Population amounting to 9 hundred 20 million as of 2007 is suffering from a famine.

Desertification / Food Shortage UNEP(Desert & Desertification)

Mankind has been confronted with many challenges to overcome, as environmental destruction, global warming, natural resource depletion, water shortage, bio-diversity collapses, deepened gaps between the rich and the poor, abuses of human rights, etc., which is why the limit to growth will be followed without sustainable development.

The similar insight can be applied to management activities in businesses.

John Elkinton defines "sustainability management" (SM) as activities to make a balanced and integrated pursuit of business values based on triple bottom line involving economic efficiency, environmental healthiness and social responsibilities.

To survive those challenges as a going-concern in a shift to management paradigm in a simultaneous pursuit of economic, environmental, and social performances, businesses must secure sustainable competitiveness over others.

SM Strategies

The EMC has operated SM strategy systems as part of practical strategies to realize business philosophy and secure a foundation for future-oriented growth. Currently acting on SM strategies, the EMC introduced them in 2007, based on its considerations of inner and external management situations, including the CEO's firm will toward SM and the emotional sense of band among organizational constituents. In response to a sharp change in management environment, those strategies were partially modified and complemented in 2008, when core values were framed, along with a complementary measure in SM goals.

MISSION & VISION

Mission that is another name for the philosophy of incorporation and the purpose of existence, means the highest value that will be free from any change for ever. Having tried to realize its mission "to contribute to the sustainable conservation of global environment, together with mankind," the EMC will take a leap toward a being that can share values with all stakeholders.

Meaning a more concrete goal toward the future growth that the EMC will have to achieve, its vision is to become "the world's best environmental service provider" that developed countries could benchmark.

CORE VALUES

Core values serving as fundamental and permanent beliefs to realize and achieve mission and vision, refer to standards and principles that should be stuck to in the process of all organization activities, including decision making.

Mission	To contribute the sustainable conservation of global environment, together with mankind						
Vision		The	World's Best Enviro	nmental Service Provic	ler		
Core Values	Environmental Expertness	Environmental	Conservation	Green Growth		Environmental Services	
SM	Economic Efficiency		Environmental	ntal Healthiness		Social Accountability	
	To lead low-carbon green growth & strategies for adaptation to climate changes						
SM Goals	To secure a means that can serve for green growth	To secure a means that can serve as an engine for green growth manage for green growth		rowth management system	To obtain reliability through performing social responsibilities		
SM Strategies	Biz diversification (ex: exploitation of oversea markets) Providing efficient environmental consulting services Securing the rationality of distributing financial sources for green growth Development of new environmental technologies & New investment		emissions • Promoting the developmentally sustain • Building environmental	M to reduce greenhouse gas elopment & distribution of hable & friendly technologies I risk management system operation among global es	• Promo • Buildir	gic social contribution activities tion of transparent & ethical management ng customer satisfaction program ng globally competitive environmental experts	
Strategic Performance Management	BSC (Balanced Score Card)						

SUSTAINABILITY MANAGEMENT SYSTEM

Sustainability Management

environmental healthiness and social responsibilities.

Value We Couldn't Fail to Purs

In a situation where sustainability has emerged as a new paradigm

of practical ideology that man in the 21st century will have to pursue,

we'll outlive ourselves through a harmonious realization of economic efficiency,

Sustainability Management Strategy

Governance Structure 17

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Risk Management 22

SM SYSTEM

Sustainability Management Strategy Governance Structure

Ethical Management Risk Management

ECONOMY
ENVIRONMEN'
SOCIETY
PEOPLE

What SM Pursues

SM purses the provision of a comfortable environment to people by performing its own responsibilities and sticking to roles as a public organization through a harmonious balance among economic efficiency, social responsibilities, and environmental healthiness.

Diagnoses of SM Level

To derive out an optimized strategic orientation, we carried out the diagnoses of our SM level based on TBL(triple bottom line). For the purpose, EFQM-CSR and MB models as recommended by the UN Global Compact were used. As a result of the diagnoses, it's been found that other aspects than environmental healthiness didn't show so high level. Based on such findings, we established SM strategies.

• Framework for Diagnosing SM Level & Results of the Diagnoses

• Harriework for Dic	agriosing sivi Level & nesults of
Malcolm Baldrige	ISO 26000
EFQM+CSR	ISO 9001
	ISO 14001/18001
	AFTEN.
293	ISO
	SMI
1585	•
CDI	CICAAA

ltem	Category	Scale	Economic	Environmental	Social	Average
	Leadership	120	66	97	61	74.6
	SM Strategy Planning	85	55	66	52	57.6
	Focusing on Stakeholder	85	50	57	49	52.0
Drivers	Monitoring, Analyzing & Knowledge	90	34	39	34	35.6
	Focusing on Sustainable Human Resources	85	51	51	51	51.0
	Processes Management	85	45	62	45	50.6
Performance	Performance of SM	450	188	265	170	207.6
Total		1000	489	637	462	529.0

- EFQM(European Foundation for Quality Management)
- SIGMA(Sustainability Integrated Guideline for Management)

Economic SM Strategy

A key to economic SM is future growth potential. We plan to develop national environmental industries and strengthen the functions of public service through securing potentials for green growth. For the purpose, we'll exploit overseas markets, provide environmental consulting services, secure the rational distribution of financing sources, and development new environmental technologies through a concentrated selection of businesses, all of which would serve as a new growth engine.

Environmental SM Strategy

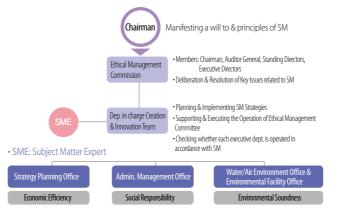
A key to environmental SM is environmental risk management. We won't only prevent environmental pollutions. We will also create new environmental values through building perfect systems to respond to a shift in trends to climate changes, CDM, and carbon emission trading.

Social SM Strategy

A key to social SM is strategic and social responsibilities. There is an increasing demand for the transparent and responsible management of public organizations, while it's getting more important to communicate with their stakeholders. For the purpose, we will focus our competences and resources not just on ethical & transparent management, social contribution, and customer satisfaction management. But we will also try our best to produce competitive workforce.

Creation & Innovation Team

For the purpose of enterprise-wide SM, five offices under the headquarter, including Office of Strategy Planning, Office of Administrative Management, Office of Water Environment, Office Air Environment, and Office of Environmental Facility, has been operated. To drive out SM on a systematical and integrated basis, we've maintained a team in charge of CSM (Corporate Sustainability Management) that would be in general charge of SM and make SM reports to disclose information to stakeholders. On top of that, 18 SMEs composed by activity area have been involved to promote SM.



Governance Structure

The ^rAct on the Operation of Public Organizations_a effective as of April, 2007, contains provisions on the basic operation of public organizations, and the establishment of autonomous management and responsible management systems. Pursuant to the same act where public organizations shall be divided into public corporations, semi-governmental organizations, and other public organizations, the EMC is considered as a semi-governmental organization as of 2008.

Directors

Composition & Operation of the BOD

The BOD is a supreme decision-making organization of the EMC which deliberates and decides its important issues, as about management goals, budgets & other financial events, business plans, etc. It currently has 4 standing and 7 non-standing directors, which will function to monitor and supervise management activities

An auditor and deputy executive directors aren't member of the BOD, but they can still participate in the BOD to state their opinions. The BOD decides such important issues as provided by the articles of association or other applicable laws, based on its basic management principles and related to its operations. Those issues are concerned mainly with social plans and goals, business plans, budgets, settlements, loans & bonds, investments, revision of the articles of association, establishment or revision of the EMC bylaws,

A regular BOD will be held once a month, with a temporary BOD held at the requests by one third of registered directors or subject to the chairman's authority.

When it comes to the method of resolutions, a motion for amendment requires the majority of registered directors to be present; and the majority of the registered directors' approval should vote for its final decision.

Standing	Yang, Yong Woon	Chairman of the BOD
Standing	Lee, Taek Kwan	Auditor
Standing	Jeon, Tae Bong	Executive Director of Strategy Planning Office
	Yoo, Man Sik	Executive Director of Administrative Management Office
	Kim, Sung Hwan	Executive Director of Water Environment Office
Deputy	Joo, Chang Han	Executive Director of Air Environment Office
	Kim, Young Jo	Executive Director of Environmental Facility Office
Non- Standing	Lee, Sang Eun	Professor of Environmental Engineering Dept., Ajou Univ.
	Leem, Sung Jin	Professor, Social Science, Jeonju Univ.

Moon, Mi Sook CEO of Golden Bridge

Kim, Gyu Ok

Song, Mee Wha Member of Seoul Metropolitan Council ('98~'02)

Lee, Seong Hoon Director General of Foreign Cooperation Bureau

Director General of Social Budget Bureau, Ministry of

Hong, Jun Seok Head of Environmental Policy Office, MOE

Strategy & Finance

Procedure for Appointing Directors

Chairman	Recommended by the Nominating Committee \Rightarrow Subject to the resolution of the Public Organ Operation Committee \Rightarrow Nominated by the MOE \Rightarrow Appointed by the President
Standing Auditor	Recommended by the Nominating Committee \Rightarrow Subject to the resolution of the Public Organ Operation Committee \Rightarrow Nominated by the MSF \Rightarrow Appointed by the President
Standing Director	Recommended by the Nominating Committee \Rightarrow Nominated by the Chairman \Rightarrow Appointed by the MOE
Deputy Director	Collection of opinions from related staffs \Rightarrow Appointed by the Chairman
Non-Standing Director	Recommended by the Nominating Committee \Rightarrow Subject to the resolution of the Public Organ Operation Committee \Rightarrow Appointed by Minister of the MSF

Authorities & Responsibility of the BOD

The most important managerial issues are be examined and decided by the BOD whose minutes of the proceedings are be disclosed for the promotion of transparency in management and the satisfaction of the public's rights to know.

With regrade to the number of directors, non-standing directors occupy the majority of directors, which aims to hold the management in check and promote the substantial discussion of internal issues.

The directors have duties to faithfully execute their roles as they are and to compensate for any possible losses or damages against the EMC, attributable to their negligence. Pursuant to the articles of association and the regulations of the BOD, a director with conflicted interests in agenda on the BOD, may not participate in voting.

We also introduced the integrity agreement program for all senior executives, all of which shall sign the integrity agreement.

SM SYSTEM

Governance Structure Ethical Management

Promotion of BOD Activities

We've made our utmost efforts to operate the BOD on a more practical and independent basis, lest that it function only formally. To promote its activities, we've reinforced followup measures and feedbacks on agenda at issue, and also carried out management performance

To encourage non-standing directors' involvement with management, we facilitate deeper discussions about agenda on the BOD through actively offering and disclosing management information and agenda in advance. Also, for a practical utilization of each member's specialities, we've selected and operated special programs they could involve themselves in, based on the consideration of their job and academical career and background.

Operations of the BOD

Year	No. of session	Agenda	Agenda Percentage of modified resolution	
2006	2006 21 31		7.4%	93.8%
2007	14	28	17.9%	92.7%
2008	15	28	17.9%	88.4%

- Resolutions by the BOD in 2008
- Final Statements 2007 (bill) & Statements of Retained Earning 2007 (bill)
- Business Plan on Waste Management of Gaeseong Industrial Complex (bill)
- Management Performance Evaluation of & Performance Improvement Plan for Semi-Governmental Organizations 2007 (bill)
- Revised Supplementary Budget 2008 (bill)
- Midterm Management Goals (bill)
- Partial Revision of Regulations on Personnel, Wages, Office Organization (bill)
- Business Plan & Budget 2009 (bill)

Compensation for Senior Executives

For the accomplishment of our mission and vision as we've cherished with us, a chairman shall sign management agreement with the Minister of Environment, in accordance with which he/she will be granted his/her own piece rate according to the results of performance

Standing directors, except for the chairman, shall sign management agreement with the chairman, in accordance with which they get their own piece rate according to the results of performance evaluation.

Non-standing directors may not be paid any piece rate; instead, a monthly salary pursuant to the regulations of the BOD.

Status of Senior Executives



Lee, Sang Eun



Non-Standing

Leem, Sung Jin



Jeon, Tae Bong

Non-Standing

Song, Mee Wha



of Administrative

Management Office

Yoo, Man Sik

Non-Standing

Moon, Mi Sook



Kim, Sung Hwan

Lee, Sung Hoon





of Air Environment Office

Facility Office Kim, Young Jo

Hong, Jun Seok

Joo, Chang Han



Ethical Management

We, the EMC, established a 2nd master plan for the practice of ethical management in 2008, which is called "2nd Wave," based on spiritual inter-personnel bonds. The main characteristics of the 2nd Wave lie in the fact that we've presented a consistent orientation toward ethical management to all members through defining five basic principles: leadership/competence, transparency, reliable relationship, social responsibilities. and global standards, which would serve to go beyond the existing passive concept, as of honesty and anti-corruption(so called "Negative System"), which is how we have developed an integrated model of ethical management focusing on so called "Positive

Vision & Strategic Goals

Our vision toward ethical management is to become a FGlobalized Enterprise which People Can Trust and Respect_a. To accomplish the vision, we've established and driven a 3-step road map, targeting 2010 in its accomplishment.

The 1st step (2008) was a spreading period for establishing ethical infrastructure; the 2nd step (2009) is a growth period when our goal is to settle a ethical culture; and the 3rd step (2010) is a complete period during which we will pursue an implementation of ethical management systems that can fit into global standards...

We've also created 5 basic principles based on so called "Core Value Chain" to accomplish the vision and, to put it into practice, established and driven 16 practical tasks per each basic principle.



Ethical Standards

To provide righteous standards on decision-making and create a healthy foundation for enterprise ethics, we've established enterprise-wide provisions on ethical management practices.

Pursuant to the Ethical Charter which serves as standards for the values and activities of each member, we've formalized and operated our own code of conduct.

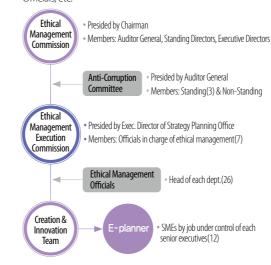
Ethical Charter	Serves as standards for the values and activities of each member; and manifestative implications (Established in '08)	
Provisions on Ethical Management Practices	Serves as higher class norms for systematical ethical management practices.	
Code of Conduct	Serves as practical standards for anti-corruption, transparency and fair business practices (Established in '07)	

To secure the practicality of internal ethical management practices, we provide several ethical standards, such as unit standards, detailed bylaws &

• Regulations on the Operation of Job Integrity Agreement('06); Practical Principles on Senior Executives' Integrity('05); Detailed Bylaws on the Protection of & Compensation for Whistle-blower with Public Interests('07); Guidelines to the Operation of Public Inspectors('08); Detailed Bylaws on the Self-Reporting of Indecent Practices('07); and Manual for Ethical Management Practices('07)

Organization & Roles of Ethical Management Committee

Ethical Management Committee is a supreme organization carrying out examinations & decision-makings about ethical management. It assumes decisionmaking functions where substantial policies about ethical management are decided. Creation & Innovation Team is a team that is responsible for general coordinations about ethical management concerned with the establishment, examination & evaluation of strategies, and the supports for policy decisions. We've also operated other driving organizations, including Practical Business Committee, Anti-Corruption Committee, Ethical Management Officials, COC Officials, etc.



CEO(Chairman)	Manifesting a will to & principles of ethical management
Ethical Management Comm.	Deliberation & resolution of key policies related to ethical Management
Ethical Mgt. Execution Comm.	Review of agenda to be under deliberation & Detailed execution planning
Ethical Management Bureau	Development of exec. strategies, assessment, & Supports for the team in charge exec
Anti-Corruption Committee	Checking the progress of anti-corruption & Developing anti-corruption programs
Ethical Management Officials	Ethical management planning for one's dept. & Checking how it's going
Code-of-Conduct Officials	Uncovering & handling cases of non-compliance with the code of conduct
Ethics Planner	Developing strategic challenges for five basic principles, including leadership & competence, transparency & integrity, social responsibilities, globalization, mind expansion, training & education, etc.

SM SYSTEM

Ethical Management

Ethical Management Program

Job Integrity Agreement

We've operated the Job Integrity Agreement program which is the first as ever operated by a public organ. Pursuant to the program,

all personnel shall sign the agreement when they sign an employment agreement to fulfill their duties, as related to the restriction on and prohibition of bribery, private recommendations/requests, intervention of interests, leakage of corporate secrets, sexual harassment, etc.

If some personnel violate the agreement, he/she, besides the penalties specified by laws, shall suffer additional punishments, such as forfeits/suspensions of his/her due piece rate, negative assessments recorded onto his/her career card, etc.



Whistle Blowing

We've operated the whistle-blowing program at the website to promote and facilitate internal whistle-blowing. The categories are divided into according to the content of or a person filing complaints: A Clean Complaint Center; A Fraud Complaint Center; A Flaud Ce Sub-Contract Complaint Center; and ▲Indecent Work Practices Self-Reporting Center. Not only own personnel but also external customers who happen to be aware of any frauds committed by our employees, can use the program. We've also encouraged internal whistle-blowing about any internal frauds by providing detailed rules on the protection of and compensation for whistle-blowers.

Ethical Risk Evaluation

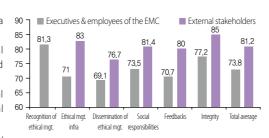
We've identified ethical risk factors in advance and developed a 90 ¬ ■ Executives & employees of the EMC systematic diagnosis model to diagnose their level.

Those diagnoses were carried out by an external professional organization for their reliability, involving internal executives(536) and 75 external stakeholders(141).

The diagnoses demonstrated very peculiar results where external stakeholders' performances were higher than those of internal 60 executives

When it comes to such items as briberies and illegal favors, they showed the highest score(91.0 pt), while ethical education infrastructure did the lowest(51.4 pt).

With regard to job items, jobs related to contracts(70.4 pt) demonstrated the lower score. compared with the total average(81.2 pt).



• Diagnoses of Ethical Risk 2008

	Participator	No. of Participator(s)	Items of Diagnoses	Score
	Executives	536	64 items over 6 sections	73.8
External Stakeholders		141	32 items over 5 sections	81.2

Ethical Management Education Program

We've also arranged developmental steps to reinforce each member' ethical competence and run educational programs customized in accordance with their social class and ability. We've recognized the importance of ethical management education for disseminating ethical awareness and defining its values; for the purpose, we've introduced individual education programs, as through a voluntary participation in them.

Expansion	Providing customized ethical education	Education Programs by Hierarchical Level		Education	Descriptions
(2008) Process & Outp	Providing differential education by hierarchical level	Ethical Sponsors (the management):	ethical leadership	Basic Special	Course for educating competences commonly required for the whole workforce Course for educating competences required in accordance with hierarchical structure (for example, leader or officials in charge)
Internalization (2009)	Widening options through providing various programs	Ethical Leaders (employees ranked Level 1 & 2):	semi ethical leadership		
Outcome	Producing the outcomes of ethical education Participating in autonomous education	E-Planners (employees ranked Level 3 & 4):	ethical competence course		
Maturation	Generating ethical outcomes through individual ethical competence management Implementing regular ethical education Fostering the next-generation executive leaders	Ethical Junior (employees ranked Level 5 & 6):	ethical management course	Autonomous	
(2010) Maintenance		Ethical Officials:	professional competence course	Autonomous	Course for educating autonomy through action programs by individual department

Ethical Management Appraisal. **Compensation System**

We've made institutional instruments to offer compensations and motives for ethical management practices through their evaluation; for the purpose, we've reflected the evaluation results about compliance with applicable rules, social contributions, transparency, social responsibilities, etc.

GFMIX Performance Indicators

Basic Principles	Performance Indicators	Weight
Leadership/competence	Hours of Completion of Ethical Management Education	40%
Transparency	No. of Cases of Whistle-Blowing	Addition of Score
Transparency	No. of Cases of Non-Compliance with the Code of Conduct	Cut in Score
Reliability	No. of Cases of Management Disclosures	5%
Social Responsibilities	Low-Carbon Emissions in Domestic Sector	5%
Social Responsibilities	Hours of Social Contributions	40%
Others	No. of Cases of Proposals as to Ethical Management	10%

Furthering Ethical Culture

Proclamation Ceremony for Ethical Management

We've recognized a new paradigm of corporate management, and, accordingly, determined ethical management as an utmost value to achieve our own management goals. To demonstrate our commitment to the value, we held a Ceremony of Proclamation for Ethical Labor-Mgt. Management to Realize Green Company as of Dec. 22nd, 2008. In the ceremony, we presented various events, such as ▲ Proclamation of Ethical Management by Representative of All Employees

Signing on Pledge of Ethical Management Practices by Chairman & Labor Union Leader

Launching Ethical Management Brand.

Specially, based on common wellacknowledged awareness by labor and management about the importance of ethical management, the ceremony contributed to the construction of a more developmental and initiative labor-management relationship by expressing an enterprise-wide will toward ethical management.





Producing Ethical Management Brand "(Green STEP)"

To promote the improvement of ethical management mind and the dissemination of ethical awareness among all members, we've developed an ethical management brand called "Green STEP," including brand identity(brand name, brand image, brand vision, with no brand costs incurred.

▲ Brand Mission *Green*

· To become a global enterprise that is ethically reliable & a leader toward new values.

▲ Brand Vision STEP

- · **S** (Sustainability: Sustainable Growth)
- T (Transparency: Transparent Enterprise)
- E (Equality: Fair Opportunities)
- P (Partnership: Cooperation with Stakeholders)

Green STEP "The EMC itself is What Ethical Management is." That's one small step for a man, one giant leap for mankind', said Nell A Armstrong when he landed the first step, not only to him but also to mankind, on the moon on the 20th day of July, 1969. Just as the nor small at that time came as a big hope itself to mankind, so the BMC has made its first 'green step' toward a globalized enterprise which gives hope to the people that they can rely on. A and values with all stakeholders, this is the very goal the EMC would ultimately "Global Reliable Ethical Enterprise in New-Paradigm"

Member of UN Global Compact

UN Global Compact is an agreement proposed by the former Secretary-General of the U.N., Kofi Annan, at the Global Economy Meeting in Davos, Switzerland in January, 1999. It consists of 10 principles over 4 areas about social responsibilities and enterprise transparency, including human rights, labor, environment, and anti-corruption. The compact is a management framework for seeking integrated management

We've declared a will toward our supports for and compliance with those 10 principles, joining UN Global Compact as of November 10, 2008. To realize a transparent and responsible management, we will faithfully disclose our compliance with the UN Global Compact Principles by the use of COP(Communication on Progress).



Human

1. Businesses should support and respect the protection of internationally proclaimed human rights.

2. Businesses should make sure they are not complicit in human rights abuses.



- 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
- 4. Businesses should uphold the elimination of all forms of forced and compulsory labour. 5. Businesses should uphold the effective abolition of child labour.
- 6. Businesses should uphold the elimination of discrimination in respect of employment and



- 7. Businesses should support a precautionary approach to environmental challenges. 8. Businesses should undertake initiatives to promote greater environmental responsibility.
- 9. Businesses should encourage the development and diffusion of environmentally friendly technologie



10. Businesses should work against corruption in all its forms, including extortion and bribery.

SM SYSTEM

Governance Structure
Ethical Management
Risk Management

ECONOMY
ENVIRONMENT
SOCIETY
PEOPLE

Risk Management

Corporate management activities are always accompanied by various risks. In such a situation, we've operated risk management systems to minimize and eliminate, in advance, primary risk factors, which would contribute to the management of sustainable development even under uncertainty in the managerial environment, and the enhancement of our own values. We've manage those risks by category in terms of decision-making, financial aspects and non-financial aspects.

Risk Management System

Our risk management systems are based on 5R model that would evolve around the chairman, involving daily management by each department ("1st management"), professional management by risk management department ("2nd management"), and decision-making management by the society ("3rd management"). For a more systematic and efficient implementation and operation, we've introduced by phase Enterprise-wide Risk Management Systems.



Risk Management Process

To effectively manage and respond to risks, we categorize those risks by cause in terms of decision-making, financial aspects and non-financial aspects.

Risk Management of Decision-Making Process

To examine and prevent possible risks related to important managerial or business issues and aim at reasonable decision-making, we have operated organizations for policy decision-making, such as Management Advisory Committee, Business Operation Committee, etc.

Financial Risk Management

We've managed financial information on a realtime basis. Through Management Information System, every member of the EMC shares such financial indicators, as related to budgets, contracts, capital flows, etc., which, in turn, would enable identifying and taking countermeasures against possible risks.

Non-Financial Risk Management

We've formed and operated various committees or commissions as part of a measure to minimize dangerous managerial risks by managing and analysing operational risks related to morality, human resources, labor-management relationship, etc.

• Status of Main Committees/Commissions/Council

Risk Management	Committee/Commission	Functions
Decision-Making Risk Management	Management Symposium	Diagnosing management activities & Discussing about current issues
	Business Operation Committee	Reviewing & advising on the feasibility of new business opportunities
	Management Advisory Committee	Establishing midterm/longterm master plans & Advising on key business operations
Financial Risk Management	Auditor Nominating Committee	Nominating an auditor in charge of accounting auditing
	Contract Deliberation Committee	Placing restrictions on fraudulent supplies & Deliberating on important contract provisions
	Procurement Committee	Deliberating on acquiring, selling, or discarding assets
Non-Financial Risk Management	Ethical Management Commission	Deciding or establishing · revising important policies and regulations on ethical management
	Regulation Deliberation Committee	Deliberating in advance on the establishment or revision · annulment
	Management Performance Committee	Deciding on management performance statements and evaluations
	Nominating Committee	Deliberating on and recommending candidates for senior executives
	Personnel Committee	Manpower demand & supply planning, recruiting, and promoting
	Ombudsman Committee	Deliberating on complaints from employees
	Anti-Corruption Committee	Diagnosing vulnerability to corruption & Securing measures against corruption
	Labor-Management Consultative Body	Discussing, as on welfare improvement, education - training, system improvement, etc.
-	Knowledge Deliberation Council	Deliberating on and executing knowledge · proposals & Analyzing their effects

Internal Control System

Internal control system means policies and processes established to accomplish our business goals. The system allows us to make our operations more effective, so that we can protect our human and physical assets against uncertainties and errors; it functions as a very important tool for our risk management.



Internal Audit System

The EMC is a public organization to execute its commitments and initiatives to national environmental policies, so that, different from other private companies, it pursues public benefits.

Internal Audit System is a system to audit and control management activities so that they can comply with our public interests by functioning as an organization independent of the CEO.

In daily auditing where important business issues are examined prior to an approval from a senior authority, we estimate and identify possible risks. In general auditing, we check and verify the reliability and rationality of business operations, including their compliance with internal bylaws.

We've introduced an e-audit system since 2006 to identify in weaker areas operational process status by step, and operated a program to evaluate integrity in terms of civil complaint process.

We've operated internal audit committee to derive out reasonable auditing results, which, in turn, are disclosed to all members of the EMC to prevent any repeated frauds.

Internal Audit Indicators

ltem	2006	2007	2008
Discrepancy notices(no. of cases)	76	66	65
Real-Time Audit(no. of cases)	535	759	870
Total (no. of cases)	3	2	4
Inclusive integrity (score)	-	9.12	8.89
Integrity in treating civil affairs (score)	93.6	93.7	92.2

Security Management

Facility Security | The principal office building of the EMC is controlled through fingerprint verification system that monitors entrances and exits by utilizing security instruments, such as CCTV or DVR, equipped with surveillance systems to monitor important assets operated on a 24-hour basis.

Document Security | We've introduced and operated electronic document systems, and built security USB systems to cut off any leakage of electronic documents.

We've also operated back-up & recovery systems to protect important DB data.

Information Security | To protect customers' privacy, we have:

- ▲ Built systems to intercept the carrying-in/-out of personal information on or via the website;
- ▲ Built systems to cut off harmful packets through fire wall and IPS;
- ▲ Introduced SSL VPN for expeditionary and external labors; and
- ▲ Built Network Approach Control System(NAC),

Which is how we've maintained the best information security systems.

Human Resource Management

To pre-monitor many risk factors that could occur at a workplace or during the personal life, we've run systems(ECP, EAP) to support all members. On top of that, we've operated many other supporting programs, such as CDP(Career Development Program) related to human resource management to minimize possible risks.

Safety & Disaster Management

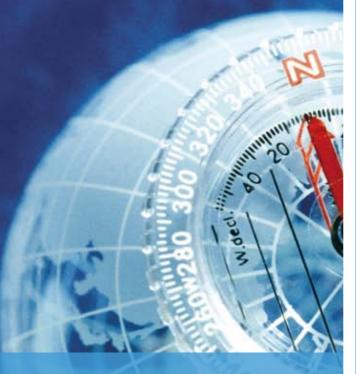
We've operated safety & disaster management systems to prevent safety accidents or natural disasters.

The 4th day of each month is designated as Safety's Day to prevent accidents or disasters, and we've carried out safety inspections and educations every half of a year.

We've also established all-inclusive anti-disaster measures and run disaster status management systems in preparation for possible natural disasters, pursuant to the General Act on Disaster & Safety Management. We've tried to minimize the risks of natural disasters against our key assets spread nationwide, including various environmental facilities, by establishing an emergency status center at the time when there have happened natural disasters, as due to floods and storms in the summer and snowfalls in the winter.

Beyond Change & Innovation

We've pursued a healthy growth through creative thinking beyond change and innovation. We'll make great contributions to the economy by generating new environmental values and leading a globalization of environmental industries.



ECONOMY

.25
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Business Operation Strategy

We, the EMC, have prepared and operated mid-long term business operation strategies, to cope with the rapidly changing management environment, and orient ourselves toward a right direction in business prospects.

Our business operation strategies will continue to be valid until 2012. External and internal factors that possibly emerge in driving out them, include people's needs related to environmental policies, national level in environmental industries, and changes in an environmental paradigm; and organizational culture, human resources, functions, stakeholders, future orientation in core business areas respectively.

• National needs in Environment Policies



Source: Environmental issues which people have in mind that need solving (questionnaire survey by the MOE as of Jan., 2007)

Given, especially, our being as we are that should function as kind of a public organ, we've focused our core competences on enhancements in external standings, public interests, and sustainable development, providing management strategies which would enable us to create new environmental values.

For business drive strategies, we picked up "Healthy & Pleasant Environmental Quality,; "Building Sustainable Water Use System,; and ^rEnhancing Adaptations to Climate Changes & Realizing Green Growth_a as business drive strategies. For management strategies, we adopted Reform on Organizational Culture for SM₄. On top of that, we've worked on 14 main strategic challenges.



Providing Healthy & Comfortable Environment

In a situation where the living environment is under degradation due to urbanization, growing energy uses and air pollutants, such as SOx/yellow sand, which cause noises, bad odors, hazardous substances, etc., we will try our best to make a living environment meeting people's needs for pleasant

Building Sustainable Water Use System

Since the World Conference on Water & Environment 1992, where Dubline 4 Principles (Conservation/Fairness/Ecology/Economy) were proposes, there have been lots of changes in awareness toward water. We'll endeavor to offer clean and safe water to people by the use of eco-friendly water management, as through effectively managing 4 major river systems, recovering the healthiness of aquatic ecosystems, restoring riparian ecosystems, groundwater management, etc.

Enhancing Ability to Adapt to Climate Changes & Realizing Green Growth through Low Carbon Emissions

To reduce carbon emissions which have became one of world's top agenda, we've operated and promoted greenhouse gas trading system, carbon point system and CDM projects, and we've acquired "Greenhouse Gas Certification from the UN. We'll try to heighten a national ability to adapt to climate changes that we can respond to Post-2012 Regime.

To accomplish a foundation for green growth through low carbon emissions, we've sought the development of energy optimization model(BAT). Based on the model, we'll pursue the achievement of goals to build 600 green villages until 2020 and to raise energy independence rate in rural communities to 40~50%.

CONOMY Business Operation Strategy Management Performance Management Innovation

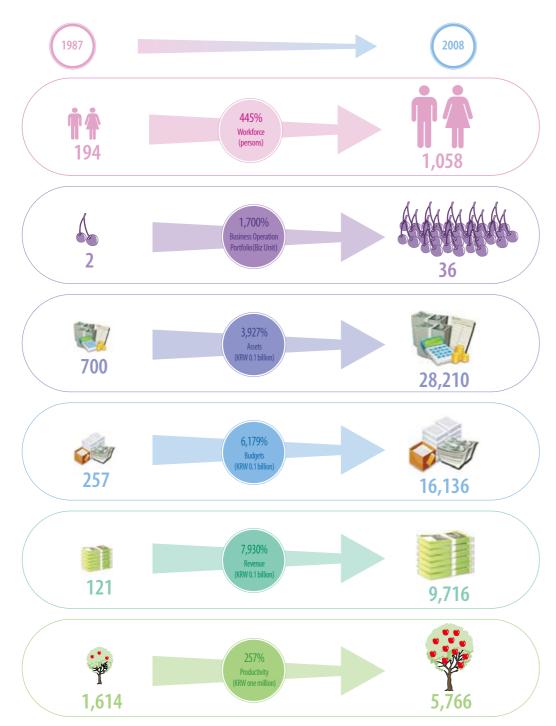
Customer Management Overseas Projects Technological Development

Management Performance

We've continued to grow since the time when we launched our business to operate 6 National Wastewater Treatment Plants and Environmental Pollution Prevention Fund in 1987.

Starting with only two business units at our earlier stage in business, we've expanded business areas so that they have encompassed 36 business units, as detailed in page 13 which expansion has accompanied a growth in the scale of assets, operation costs, sales, net income, etc.

We will be an enterprise that can always contribute to our country and economy through ceaselessly creating values and



Financial Performance

We've achieved promising financial performances in terms of growth, profitability and stability.

Specially, our sales have continued to increase thanks to an expansion in environmental industries, which is how we've maintained the stable financial structure. The following shows financial performance for the last 3 years. (For more details, you can have access to the website: Open Management -Management Disclosure):

Growth

We recorded (KRW) 971.6 billion in sales, with (KRW) 1521.7 billion in operation expenses in 2008, which means, respectively, 26.2% and 32.4% in growth rate, when compared to those for the same period of the previous year. Total assets have decreased for the last 3 months due to a decrease in cash and cash-equivalents in accordance with an increase in operations expenses incurred in relation to construction businesses on contract, and in the recovery of long-term loans receivable.

Profitability

The EMC is a nonprofit organization to put on its top list public interests among others, which is why the annual ratio of profits to sales or operation expenses is relatively low, compared to that of other public enterprises.

Net income in 2008 was (KRW) 13.1 billion, which suggests an increase by 54.1%, compared with the previous year, the best performance ever recorded since its establishment. It's due to the development and expansion of new businesses (related to technological diagnoses, supports, examination, assurance, etc.).

Stability

Based on stabilized cash flows, we've maintained stable debt & current ratio. Debt ratio showed an improvement of 27.7% in comparison to the previous year, while current ratio showed some decreases, but still stable. Ratio of total borrowings & bonds payable to total assets and debt ratio are relatively high, which is because the accounts related to loan businesses for the installation of environmental facilities are entered into the credit of B/S.







Business Operation Strategy

Management Performance Management Innovation Technological Development

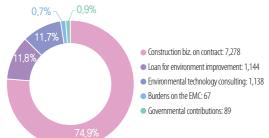
Generation & Distribution of Economic Values

Economic values produced in 2008 were, including total sales and non-operational gain, (KRW) 992.9 billion, 25.8% in growth rate, when compared with those of the previous year, which was attributed to the expansion of construction businesses on contract(increase by 30.9%).

Economic values distributed amounted to (KRW) 979.8, which means 25.5% in growth rate, when compared with those of the previous year; costs related to construction businesses on contract occupied the majority of expenses incurred, 75% in total corresponding to ((KRW) 727.8 billion).

Sales items consist of earnings from construction businesses

• Structure of Sales as of 2008 (Unit: (KRW) 100 millions)



- Construction biz on contract: 7 278. Loan for environment improvement: 1 144
- Burdens on the EMC: 67
- Governmental contributions: 89

• Creation & Distribution of Economic Values (Unit: (KRW) 100 millions)

Economic Values	2006	2007	2008
Economic Values Created	6,443	7,893	9,929
Sales	6,358	7,700	9,716
Non-Operational Gain	85	193	213
Economic Values Distributed	6,367	7,808	9,798
Operational Expenses	6,151	7,504	9,456
Administrative Expenses	131	163	165
Non-Operation Expenses	85	124	134
Corporate Taxes	=	17	43
Derivative Economic Values	76	85	131

on contract, fees from consulting and supporting services for environmental technologies, environmental reform loans, cost shares and governmental contributions.

Governmental contributions in 2008 were recorded at (KRW) 8.87 billion for 13 businesses related to climate change agreement

Those contributions are governmental subsidies whose amounts are based on actually-incurred costs(budget balances), reserved for supporting the business operations the EMC will driving out.

 Status of Governmental Contributions 		(Unit: (KRW) 100 millions)		
ltem	2006	2007	2008	
Governmental Contributions	83.5	89.1	88.7	

Flow of Economic Values among Stakeholders

We've distributed economic values equally among many stakeholders, including central government, local governments, suppliers, firms, local communities, creditors, employees, etc. Retained earnings will be reserved for investments in the future business opportunities as specified by the articles of association.



We will offer higher economic values to stakeholders through continuous expansion and growth by developing & diversifying new business opportunities, and improving profitability structure.

• Flow of Economic Values (Unit: (KRW) 100 millions)

Stakeholders	Economic Values	2006	2007	2008
	Wages	278	307	327
	Welfare	118	153	166
Employees	Performance-based	23	25	26
	Retirement	37	52	48
	Temporary workers	17	30	50
	Construction	4,324	5,557	7,278
Suppliers	Services	68	133	214
	Purchases	279	270	301
Cent. Gov./	Corporate Taxes	-	17	43
Local Gov's	Local Taxes	1.6	1.8	2.2
Businesses	Loans	1,069	1,057	1,133
Lender	Interests	57	119	120
Communities	Job Creation	6.8	9.8	11
EMC	Ordinary Expenses	88.6	76.4	78.8
EIVIC	Retained Earning	76	85	131
W. Davis attack	Total	6,443	7,893	9,929

* Reported on an accrual basis

Efforts to Improve Financial Healthiness

Mid-Term Financial Strategy Planning

We've established and operated mid-term financial strategy plans in order to minimize financial risks and maintain financial stability and healthiness, so that they can serve as risk management tools against adverse changes in financial conditions.

We've arranged detailed propulsive strategies to secure financial stability, profitability and growth. We've also formed and operated financial management portfolio, involving future investment plans, financing plans, reimbursement plans, etc., through the mid-term financial prospects.

Mid-Term Financial Prospects

We've maintained financial healthiness through stable financial structures and cash flows, which healthiness is expected to continue until 2011.

But it's also expected that the amount of sales in 2011 will reduce by 1.74%, compared with those of the previous year, due to a reduction in the scale of environmental rehabilitation loan services, along with the advanced reimbursements of loans receivable due from firms and local governments. In those possible situation, we're preparing proper measures, as through reducing interest rates on loan services.

Financing Plan

In a situation where fund requirements that have to be secured by the EMC until 2011, are projected to total up to KRW 3 trillion 960.7 billion, we've established and operated proper financing plans to procure those requirements in

The following table is based on expenditure budgets related to governmental contributions and businesses on contract with the Central Governments and other local governments, and on governmental commission, except for other businesses additionally incurred.

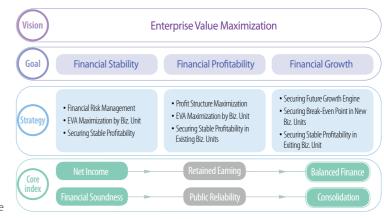
Reimbursement Plan

Borrowings refer to the ones reserved as kind of environmental improvement accounts for 10 business units engaging in promoting environmental industries or technological supports, which the EMC borrows from special accounting categorized into financial borrowings or environmental improvements, and then supports to local governments or firms on a long-term basis with low rate of

The balances in borrowings as of the end of 2008 amount to KRW 2 trillion 383.4 billion a decrease by KRW 147.8 billion(5.84%), compared with those of the previous year.

Credit Standing

We've acquired AAA in credit level, the best one that can be ever granted, for 4 consecutive years from domestic credit rating agencies.



• Financial Prospects			(Unit: (KRW)	100 millions, %
ltem	2008	2009	2010	2011
Sales	9,716	10,108	10,024	9,850
Net Income	131	154	153	150
Ratio of Net Income to Net Sales	1.35	1.52	1.53	1.52
Ratio of Liability to Equity	3,873	2,954	2,287	1,713
Current Ratio	292.65	217.10	157.41	182.29
Total Assets	28,210	26,504	24,385	21,246
Workforce (persons)	1,058	1,801	1,147	1,153

• Annual Financing Plans

(Unit: (KRW)	100 millions)
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ltem	Percentage (%)	2009	2010	2011
Businesses on contract with the Cent. Gov.	41.5	5,176	5,781	5,491
Businesses on governmental commission	1.9	247	254	262
Businesses on contract with local governments	52.5	7,142	7,356	6,271
Governmental contributions	0.8	106	109	112
Commission (fee)	0.7	94	96	99
Retained earning	2.6	327	337	347
Total	100	13,092	13,933	12,582

• Reimbursement Plans

(Unit: (KRW) 100 million)

ltem	2008	2009	2010	2011
Loans Reimbursed	2,744	1,716	2,273	3,290
Loans Payable	23,834	22,118	19,845	16,555



PROFILE SM SYSTEM

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Management Innovation

The McKinsey Report holds that the expected business life cycle with 90 years in 1953, has shortened to 22 in 1995, and that it's expected to be 18 years in 2018. Given such situation, management innovation isn't just a matter of choice, but a requirement to survive sharply-changing management environment and intense competitions.

We, the EMC, will try our best to realize a winning circulation for creating future values through an internal will and mind toward pursuing management innovation as part of business strategies, and, consequently, leading management activities based on such innovation.

Management Innovation Principles

We acquired Grade A in the part of five-step management in the Evaluation for Public Organs' Innovation 2007, which implies that our innovation activities have been already internalized, and that we've entered into a creative phase where visible performances are implemented. We directed our innovations to efficiency in 2008. For the purpose, we are driving related strategies in terms of four aspects: efficiency, performance, customer and reliability.



Identification of Challenges to Innovation

Challenges to innovation facing the EMC can be categorized management goal, innovative strategies, administrative management, and CS improvements, based on value chain mechanism, so that practical assignments can be derived out in accordance with 4 factors, including strategic drives and top-down initiatives.

Practical assignments derived out are verified in terms of suitability, feasibility and efficiency after they'd gone through FGI/FGD and town meeting by a innovation department and groups of InnoVisors by each department. Following through those steps, they're finally confirmed by the chairman.

We've derived and driven out 134 assignments in total, all of which will be evaluated in accordance with core success factors(CSF) and key performance indicators(KPI).

To secure the practicability of those innovative assignments, we've operated on-a-real-name-basis system evolving around sub-directors in charge of each assignment, and built a management system in terms of so called P(Plan) - D(Doing) - C(Check) - A(Act) where we evaluate how each assignment progresses at regular intervals to grant incentives and give feedbacks to each member.



 Longterm & Inclusive Assignments Focusing on Business Operation with Linkage to Midterm Management Goals (Strategic derive method)



• Assignments Focusing on Business Units with Linkage to Four Innovative Strategies (Middle up down method)



 Assignments for Improving Vulnerable Sectors and, consequently, the Efficiency of Administrative Management (Top down method)



 Improvement Assignments with Top Priority of Customer Satisfaction Assessment Factors By Biz. Unit (Rottom up method)

Innovative Activities

We've operated the creation and innovation team at the principal office that is specialized in charge of innovative initiatives. The team carries out not only innovative activities but also such activities as ethical management, knowledge management and sustainable management. In 2008, we re-organized the team so that its functions involve as far as heralding and spread strategic direction and mind, beyond innovative activities.

Each department maintains its own InnoVisor that will assist the department and its members find and manage detailed practical assignments and innovative activities.

We've also operated autonomous organizations to maintain standing and autonomous innovation systems, all of which go so far as to function as any specialized organization. Our representative autonomous organizations include Junior Board, Management Improvement TFT, Management Evaluation CoP, etc. When it comes to Junior Board having enjoyed the 9th anniversary since its beginning in 2004 and rooted itself as kind of our own innovative culture, as many as 101 members have participated in its activities, as to reduce job loads, improve personnel system and working environment, contribute to social interests, develop female workforce, etc.

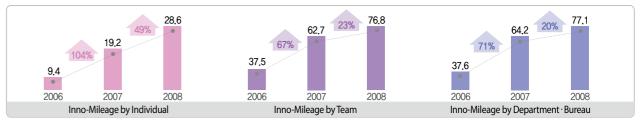


Inno-Mileage as a Program to Evaluate Innovation Performance

To strengthen self-leading innovative activities and promote performance-oriented innovative activities through linking innovation performance to compensation, we've introduced and operated Inno-Mileage, a program to evaluate innovation performance since 2006. Innovative activities (for example, learning activities for individuals and innovative assignments for teams) are carried out by each individual and team in accordance with 16 and 9 indicators for individuals and teams, respectively, as prescribed, and their performance expressed in index on a real-time basis are managed through innovation management system.

To give special favors(official commendations, monetary rewards, foreign training, etc.) based on such performance, we pick up innovation star and innovation team.

Given the effect to which we've emphasized individual innovative activities on an autonomous basis, the program is very inspirative and desirable; actually, performance has been on the rise.



Creative Knowledge Management

8,848 (Cases)
owledge/Proposals in total from or by workforce in 2008

10,001,278,698 (KRW)

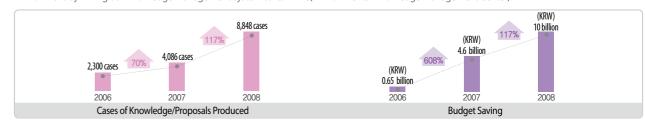
Economic values of proposals by workforce in 2008

Laster C. Thurow, an economist with Harvard University, defines the 3rd Future Industrial Society as a society based on knowledge in his literary work Building Wealth. We consider knowledge management as a very important tool for innovation, and encourage employees to enhance their knowledge competence.

For the purpose, we built a brand-new knowledge management system, e-KNOWsys, which contributed to the preparation of a systematic base to produce, share and spread new knowledge.

In 2008, we produced 8,848 cases of knowledge(7,460) and proposals(1,388), an increase by 116%, compared with those of the previous year. Especially, there was an increase by 182% in cases of proposals, compared with those of the previous year, which, if they should be converted to any economic values, would amount to about KRW 10 billion; actually, the year 2008 found a qualitative and quantitative growth in knowledge management.

We plan to build open knowledge networks to share knowledge with our stakeholders related to the environmental sector, based on our so-far accumulated internal knowledge competence. For the start, we've offered our qualitative and quantitative knowledge and information to the Ministry of Environment by linking our Knowledge Management System to its EKMC(Environmental Knowledge Management Center).



Compensation for Innovation Performance

It's difficult to expect any creative performance without appropriate compensations. We've encouraged our workforce to voluntarily engage in self-innovative activities through various incentives. We, for example, give inspirations to them by selecting an Innovative Star of the Year, a Knowledge Champion, a Best CoP, etc., and operating an educational program to learn advanced management systems.

To share and disseminate innovative activities, we've held the Best Practice Competition, the 8th anniversary since 2005, where 137 cases of good practices have been submitted, of which 39 was rewarded. We're disclosing and popularizing the best innovative activities by posting them on the website, and producing and distributing a collection of the best practices.

Year	Anniv.	Submission (case)	Adopted (case
2005	2	26	9
2006	3	57	12
2007	2	27	12
2008	1	27	6



CONOMY

Business Operation Strategy Management Performance Management Innovation

Customer Management

Technological Development

Customer Management

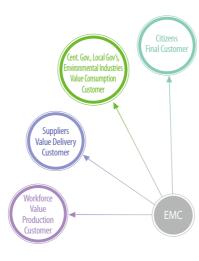
For our management policy, we've picked up "Customer-in-Top-Priority Management" to achieve customer satisfaction and produce customer values. For its practical implementation, we've made it our principle to provide differentiated services meeting customers' needs and two-way communication with customers, which principle all members of ours have shared and put in practice. We will try our best to establish customer management systems to satisfy customers' needs and wants.

Definition of Customer

Our social goal is to improve the quality of the national environment. Given the goal, our so called end customers are people themselves. But it's very rare for us to directly face them, which is attributable to the nature of our own being.

Accordingly, we divide customers into 3 types according to the flow of value creation, with our end customers put to a top priority: the first types of customers that produce values are internal executives and employees; the second ones that deliver values, our suppliers; and finally, the ones that consume values include the Central Government, local governments, other environmental industries.

Only satisfied internal customers' heart could impress external customers. Value production customers, internal executives and employees, are the contact point itself at which other types of customers can meet our services; actually, those services are kind of products we deliver. Composed by suppliers mainly engaging in construction, EIA service, and other environmental facilities, the value delivery customers deliver our products and services to the value consumption customers. The value consumption customers are the ones that we have frequent contacts with, including the Central Government, local governments, and other environmental industries. Relations with them are formed through environmental policy supports, businesses on contract with them, technological supports & diagnoses, etc.



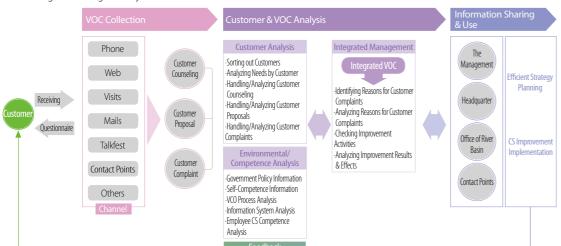
Channels to VOC (Voice of Customers)

To collect and analyse various opinions from various stakeholders, which, in turn, will be applied to our management activities, we've operated VOC Integrated Management System. Besides opinions from the Central Government, local governments, and suppliers, we collect other various opinions from local communities, NGOs, and others through on-/off-line channels, such as the website, social gatherings, customer satisfaction surveys, etc. Collected opinions are managed at the DB that could be utilized as kind of valuable assets. The cases of customers' opinions received in 2008 amounted to 339, which included Q&A's(48%), complaints(31%), etc. An average period spent in handling and processing them was 6.39 days, 0.9 day short of the standard period (7.29 days). We'll make efforts not to cause repeated complaints through intensively managing customers' opinions to heighten their satisfaction.

VOC Status

Item (case)	2006	2007	2008
Cyber Civil Affair	242	168	162
Voice of Customers	9	11	54
Word of Praise	28	67	67
Talk to Chairman	19	25	7
Customer Proposals	34	98	20
Workshop	12	23	29
Total	344	392	339

• VOC Integrated Management System



Customer Service Charter

To deliver customer-oriented administrative services that could touch customers' heart, we've established and operated service quality standards(Customer Service Charter) in 2004.

We revised the Customer Service Charter in 2008 through reflecting opinions from internal and external customers. which would help provide them with quality services meeting their needs.

We divided standards for delivering core services by 6 business units; 31 indicators increased to 51. And we reinforced systems to monitor and evaluate the performance by materializing and quantifying the targets.

We've monitored and evaluate compliance with the Customer Service Charter every half year. (For more details, please visit the website: Customers' Forum - Customer Charter - Data)

Customer Service Charter: Service Standards

Service Standards	Practice Criteria
Foreword	· EMC's management vision & customer priority management
Key Service Standards	Loan services for environmental improvements (6 indicators) Operation and management of monitoring networks (3 indicators) Supports for the installation of environmental facilities (5 indicators) Monitoring · Analyzing · Examining environmental pollutants (4 indicators) Supporting · Diagnosing environmental technologies (5 indicators) Other civil services (6 indicators)
Customer Service Standards	Attitude toward customer services (16 indicators) Customer participation & opinion offering (2 indicators) Correction of and compensation for wrong (2 indicators) Disclosures of customer satisfaction (1 indicator) Review of customer service standards & Disclosures of the results of such review (1 indicator)

Customer-Oriented Culture

We've driven out various activities to conserve the environment based on customers' participation. We've also held such various annual events as ^rEnvironmental Conservation Promotion Campaign_1, which aims at the cultivation of awareness toward environmental conservation; and ^rEnvironmental Conservation Poster Contest, in order to make students the future would-be leader in environmental conservation, aware of its importance To maintain two-way communication with our customers on a continuous basis, we've also provided information about our businesses and environmental technologies as well as various living information, as through a web-zine [Environmental Family_1, so that we could have communicated with as many as 35,499 customers in 2008, an increase by 217%, compared with those of the previous year.



nmental Conservation Promotion Campaign 2008: Grand Prize in the photo part



Promotion Campaign 2008: Grand Prize in the print media part



as a fine work in the print media part



Promotion Campaign 2008: Selected Campaign 2008: Accepted as a winning work in the print media part





Promotion Campaign 2008: Grand Prize in the poster part



Golden Prize in the photo part



Promotion Campaign 2008: Accepted as a winning work in the print media

Management Innovation Customer Management

Overseas Proiects Technological Development

Disclosures of Information

We've secured to stakeholders their rights to know through actively and transparently disclosing information they'd like to know; actually, not only information about our management activities and business operations have we disclosed but also information about our social contributions and ethical management in order to enhance an external trustworthiness and give a good image to stakeholders.

Disclosures of Management Activities

We've satisfied stakeholders' rights to know through transparently disclosing information about management activities. Since 2007, we've disclosed information about 31 items such as business performance, financial status, status of the BOD, public relation expenses incurred by senior executives, external assurance, etc. (For more details, please visit the website(www.emc.or.kr): Open Management -Management Disclosure) On top of that, we've introduced and operated an internal management disclosure system since 2008, which would secure to internal customers their rights of know.

Disclosure of Business Operation

We've introduced and operated various business information systems to make customers have an easy and effective access to the status of environmental business trends, information about our business operations, and related governmental policies.

Response to Applications for Information Disclosure

Upon a customer's requests for information disclosure, we'll transparently disclose related information, except for information subject to non-disclosure, pursuant to the FAct on Disclosing Information of Public Organs.

We received a total of 24 applications for information disclosures as of 2008, all of which, except for 2 applications, were completely and faithfully disclosed to the applicants in accordance with the same act.

Protection of Customer Information

We minimize the items of customers' personal information to be collected, if we have to collect them, based on objectives and reference laws in accordance with which we could do so. The person who can ever have access to such information is strictly limited to the one in charge.

For the purpose of security, we've introduced and operated IPS and systems to prevent any personal information leaks. We've also introduced I-Pin(virtual Resident Registration Number) services since 2007.

 Status of Rusing 	cc Informa	tion Systams

Business Area	URL
Environmental Conservation Promotion Campaign	http://www.emcpr.or.kr
Ethical Management	http://ethics.emc.or.kr
Real-Time Air Pollution Information System	http://www.airkorea.or.kr
CleanSYS Tele-Monitoring System	http://www.cleansys.or.kr
Total Air Pollution Load Management System	http://www.n-sky.or.kr
Total Air Pollution Load Survey System	http://ioa.n-sky.or.kr
Water Tele-Monitoring System	http://watertms.or.kr
Nakdong River Land Acquisition Information System	http://ndland.me.go.kr
Geum River Land Acquisition Information System	http://ggland.me.go.kr
Greenhouse Gas Management	http://ghgregistry.or.kr
Climate Change Information Services	http://www.gihoo.or.kr
Soil Groundwater Information System	http://www.sgis.or.kr
Water Supply & Wastewater Integrated Information System	http://info.waternow.go.kr
Water Supply Integrated Information System	http://www.waternow.go.kr
Waterworks Integrated Information System	http://wiis.waternow.go.kr
National Noise Information System	http://www.noiseinfo.or.kr
Carbon Point System	http://www.cpoint.or.kr
Non-Point Source Pollution Information System	http://nonpoint.me.go.kr
Automobile Environmental Industry	http://cleancar.or.kr

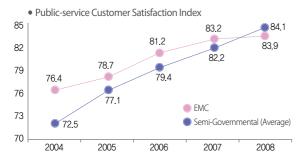
Customer Satisfaction

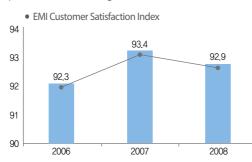
Customer satisfaction can be measured in two ways: PCSI(Public-service Customer Satisfaction Index) and EMI CSI(EMI Customer Satisfaction Index)

In 2008, we were given 83.9 marks in PCSI, an increase by 0.7 point, when compared with those of the previous year. We've steadily improved on the index for 5 consecutive years, but still short of the average among 77 semi-governmental organs(84.1). To put them by business unit, we were given 97.8 marks in the operation & management of incineration plants, the best ever given to us in 2008 in accordance with PCSI, while, when it comes to the certification of vehicle noises & carbon emissions, it recorded the worst marks, 67.2.

We've carried out an EMI CSI survey by team every year. Survey items totals up to 7, including job fairness, progressiveness, communication, etc. In 2008, we were given 92.9 marks in EMI CSI, a decrease by 0.5 point, when compared with those of the previous year.

We've disclosed the results of EMI CSI surveys and other details to internal and external customers, which, in turn, are actively reflected into customer satisfaction management policies, as through deriving out CS improvements and challenges.





Overseas Projects

We've exploited overseas markets by driving out various cooperation projects and reinforcing internal competences through advanced environmental technologies and project experiences. Especially, we'll strengthen competitiveness in the global environmental markets by expand ing cooperation networks and disseminating our advanced environmental technologies to developing countries, and make an effort to maintain a sustainable green growth by leading the supports for environmental technologies at a global scale.

Environmental Technologies with Global Recognition

We've engaged in improving environmental pollution, as due to wastewater, wastes and air pollutants, in order to maintain sustainable development and heighten the quality of life in the developing countries, and providing environmental consulting services to help seek any improvement measures through identifying the status of environmental pollution and diagnosing environmental facilities. In addition to that, we've invited officials involved with environmental policies and facilities in those developing countries to environmental technology training in South Korea, which is how we spread our excellence in environmental technologies to exploit business opportunities related to the environmental sector overseas.



Country	Project Project
China	- Supporting technologies to build air monitoring network systems
	- Strengthening an ability to treat industrial wastewater (dispatching related experts; invitation training; a joint study on leachate and culture wastewater treatment methods)
Vietnam	· Preliminary survey on the air monitoring of the northern area (field survey; precision test of measuring devices; a master plan for building air monitoring networks)
vietriairi	- Preliminary survey on the environmental management of home-industry villages (status of environmental pollution & survey of available pollution treatments)
	- Strengthening an ability to manage the safety of drinkable water (status survey & analysis of the safety of drinkable water & identification of methods for its improvements)
The Philippines	· F/S on water supply rehabilitation project
ndonesia	· F/S on waster treatment project (Preliminary F/S on waste management status)
Laos	· Technical review of the F/S on the improvements of wastewater facilities & drainageway
Sri Lanka	· Inviting public officials involved with the environmental sector & Dispatching related experts (preliminary F/S on project development)
Uzbekistan	· Preliminary survey on technological developments for desalinizing agricultural discharge (identifying water management policies · schemes · status; arranging a master plan for technological developments)
Pakistan	Preliminary Field Survey on Solid Waste Development Project in Punjab Province
Keyna	· Inviting public officials involved with the environmental sector & Dispatching related experts (preliminary F/S on project development)
Mozambique	· Inviting public officials involved with the environmental sector & Dispatching related experts (preliminary F/S on project development)
Tunisia	- Building ozone monitoring networks (ozone monitoring networks & invitation training)
Cambodia	· Master plan for the environmental improvements (policy analysis; pollutant analysis; establishing a master plan to improve how to treat pollutants)
Turkmenistan	· Building a green water park (furthering an ecological river & an ecological park through wastewater treatment facilities & water recycling facilities)
Azerbaijan	· Master plan for the environmental improvements (policy analysis; pollutant analysis; establishing a master plan to improve how to treat pollutants)
Jordan	Building & Supervising water monitoring networks (supervising the construction of automated water monitoring center & TMS; dispatching related experts; invitation training)
Egypt	· Inviting public officials involved with the environmental sector & Dispatching related experts (preliminary F/S on project development)

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Building Global Networks through Technological Cooperation

We've made efforts to strengthen technological competence by bench-marking advanced environmental technologies and entering into MOUs for a technological cooperation, if necessary. We've also built global networks by holding seminars and workshops on a regular basis to exchange information with various experts, participating in joint projects, and continuously providing technological training programs, and reinforced core competence to exploit overseas business opportunities.

Country	Technological Cooperation
Japan	• Environmental Restoration and Conservation Agency (exchanging information/data & experts; holding a regular meeting on an annual basis) • Institute for Global Environmental Strategies (exchanging technologies & technologies related to climate changes; technological training & education) • Pipeline Quality System Association (exchanging technologies & information to diagnose sewer; technological training & education)
the USA	Pennsylvania Department of Environmental Protection (exchanging technologies, data, information, etc.; joint research; cooperative projects) World Bank (entering into a trust fund management convention for spreading environmental knowledge) Wayne County, Michigan (exchanging environmental technologies, experts, etc.) King County, Washington (exchanging information related to wastewater treatments; joint research, etc.) Orange County (exchanging information; joint research; technological training; hosting seminars) University of Wisconsin (technological training)
Australia	• Environmental Biotechnology Institute (exchanging information related to environmental technologies, experts, etc.; joint research; cooperative projects) • CH2M Hill (exchanges technologies related to polluted soil restroation, industrial waste treatments, water treatments, etc.)
Vietnam	 Environmental Technology Institute (exchanging information related to environmental technologies, experts, etc.; joint research; cooperative projects) Environmental Administration (exchanging information related to environmental technologies, experts, etc.; joint research; cooperative projects) Ba Ria-Vung Tau People's Committee (exchanging information related to environmental technologies; mutual invitation through seminars & workshops; technological supports; supports for environmental cooperation) Ha Noi People's Committee (environmental cooperation, as on water/air management, waste treatments; exchanging environmental education programs)
the Netherlands	· Netherlands Measurement Institute (technological training & education related to vapor recovery systems)
Germany	 Durag Group (exchanging technologies to localize measuring instruments) KIST Europe (exchanging engineering experts; technological training & education) Siemens (exchanging information, including technological supports and advice, etc.)
the UK	· British Standards Institute (exchanging technologies/information related to climate changes)
China	· Qingdao/Liaoning (exchanging policies and technologies related to CleanSys)
Tanzania	· Capital area (F/S on Water Supply & Sewer Rehabilitation in Dodoma, Tanzania)
Thailand	· Asian Institute of Technology (exchanging technological experts; joint research; technological training & education)
the Philippines	Subic Bay Metropolitan Authority (technological training related to soil pollution restoration)

EMC's Global Initiative



Entering into a convention on environmental improvemental project with Azerbaijan



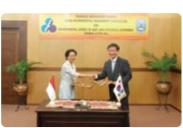
 Working Group Meeting with Environmental Restoration and Conservation Agency, Japan



• Technological Training & Education in the Netherlands



Preliminary Survey on Water Monitoring Hzbekistar



• Entering into Technological Convention with Indonesia

Technological Development

We've pursed technological innovations on an all-inclusive basis through making continuous investments on a technological competitiveness and development and entering into an MOU, in order to achieve our vision, which is to become 'A World's Best Environmental Service Provider'.

Intellectual Properties

We've applied for 17 patents related to environmental technologies, among which we achieved 12 patents, while 5 are still pending. Specially, in 2008, we achieved a patent on on-line data retrievement systems for CleanSYS, which suggests that not only the excellence of CleanSYS had been globally recognized but also a stable framework for operating CleanSYS had been secured. We also have patents on systems to reduce offensive odors pending. Based on those efforts to secure competitiveness, we'll try our best to become the world's best environmental service provider by widening our own environmental technologies.

• Status of Intellectual Property Registration by Year	

Division	′04	′05	′06	′07	′08	′09
special permission	2	1	2	3	1	3

• Status of Intellectual Properties

Date	Name of Patent
Jun., 2004	Advanced Treatment System by the use of Porous Membrane
Aug., 2004	Wastewater Treatment Controller
Apr., 2005	Dioxin Removal System Equipped with Reagent Recycling Unit
Jan., 2006	Method to Manufacture Manganese Alloy Steel by the use of Incineration Ash & Alloy Steel Particles
Feb., 2006	Incineration Ash Treatment by the use of Corktop Slag Method
Apr., 2007	Sedimentation Sludge Concentration Gauge for Wastewater Treatment Basin
Aug., 2007	Sludge Constration Gauge for Wastewater Treatment Basin
Dec., 2007	CleanSYS Wireless Transceiver Controller
Nov., 2008	CleanSYS Web Data Collector
Dec., 2008	CleanSYS Wireless Transceiver Controller
Mar., 2009	Crane Control Room Equipped with Automated Washer for Waste Incinerator
Apr., 2009	CleanSYS

Distribution of Advanced Environmental Technologies

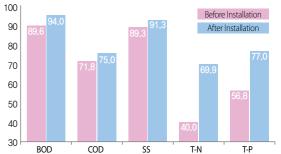
We've given some incentives to firms which adopt new environmental technologies, or expand and distribute excellent environmental technologies. We've also induced the development and introduction of new environmental technologies by introducing items to evaluate performances related to low carbon emissions, such as whether they use environment-friendly engineering methods, environment-friendly materials, low-carbon energy, methods to reduce energy consumptions, etc. On top of that, we've granted a company with new environmental technologies favors on public tender, as by giving an extra point corresponding to 2/100. In 2008, we contributed to improving the quality and efficiency of constructions to install environmental facilities through applying 25 cases of new environmental technologies to those construction.

Application of New Environmental Technologies to Environmental Facility Projects (2008)
 (Unit: no. of cases, no. of projects)

		•		, ,	
	New F	Project	Project Underway		
Facility	New Technologies ("NT")	Projects with application of NT	New Technologies ("NT")	Projects with application of NT	
Environmental Energy Facilities	3	4	-	-	
Sewage Treatment Facilities	2	2	7	9	
Wastewater Treatment Facilities	2	2	5	3	
Sewer Facilities	-	-	6	6	

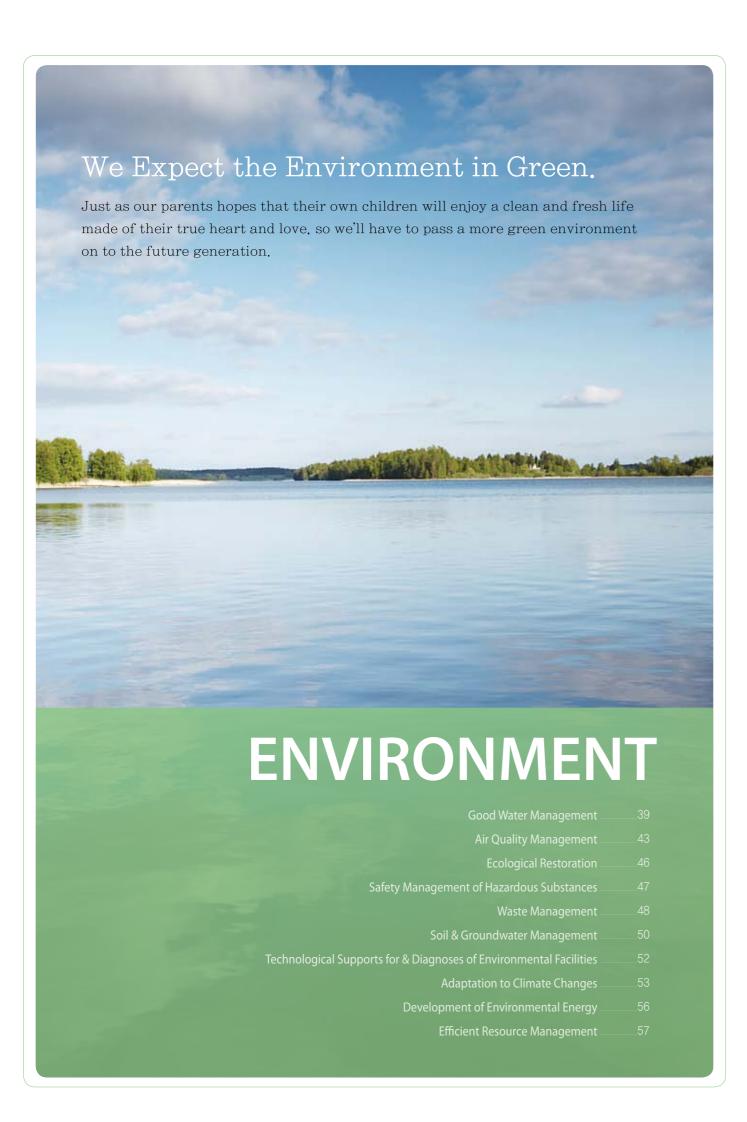
To promote the sharing and dissemination of environmental technologies, we've held technology workshops where various environmental issues, as about environmental energy, water supply, ecological restoration, etc., are addressed. Various stakeholders, including governmental agencies, domestic & overseas environmental industries, university institutes, etc., have participated in the workshops to exchange information and promote environmental technologies, as through presenting themes, technologies, cases, etc.

Application of ACS Method in Cheongju Wastewater Treatment Plant



• International Workshop for Environmental Energy Technologies 2008





Good Water Management

Even though national water environment policies have taken different shapes starting from ^rAll-Inclusive Plan to Supply Clean Water_J in 1993 to ^rMaster Plan on Water Environment_J put into force as of now, their basic goal hasn't been changed: that is, to maintain clean and fresh water environment. We've driven out various water improvement projects and activities with the aim of building sustainable water use systems linked to the Master Plan on Water Environment.

• Status of National Master Plans on Water Policies

Plan			Orientation of Main Policies
All-Inclusive Plan to Supply Clean Water	1993 to 1997	(KRW) 15 trillion 900 billion	Water conservation, water resource protection, enhanced water supply in coverage rate
Integrated Plan on the Integrated Water Management of the Four Largest River Systems	1996 to 2005	(KRW) 26 trillion 900 billion	Water improvement, water supply & sewer coverage for integrated area (65% and 80%, respectively), water reserve rate (9%)
Master Plan on Water Environment	2006 to 2015	(KRW) 32 trillion 700 billion	Improved aquatic ecology healthiness, riparian ecology belt exploitation, and other six policy challenges

Automated Water Monitoring Networks

We've installed and operated Automated Water Monitoring Networks to monitor water pollution with a linkage to all-inclusive water management plans for 4 major river systems, including the Han River, the Geum River, the Yeongsan River, and the Nakdong River.

Data on 16 measuring items are collected on a real-time basis (at intervals of 5 minutes) through those networks installed at 52 sites in total cross the 4 major river systems, so that, if specific data come to exceed given thresholds, early warning systems are triggered, which would enable quick responses.

When an water pollution accident happened in 2008, it could be notified immediately thanks to the networks, which contributed to the prevention of any secondary pollution.

• Status of early warning against water pollution (2008)

Station	Date of Water Pollution	Item at issue
Miho River Gauging Station	2008. 1.13	TOC, VOCs
Uiam Lake Gauging Station	2008.7.8	pH,TOC
Yangpyeong Gauging Station	2008. 8.19	рН

Operation Rate of Automated Water Monitoring Networks

Operation Rate	97.6%	98.4%	98.9%

Yangpyeong Gauging Station at the Han River System



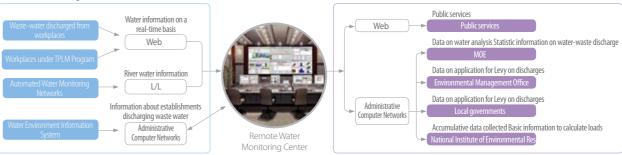


Water Tele-Monitoring Control Center

The root cause of water pollution is discharged pollutants. We've built TMS(Tele-Monitoring System) for the purpose of effectively manage water pollutants discharged from workplaces and changing the existing measuring method in which discharged water quality is manually measured, to an automated monitoring method. In 2008, we completed the installation of TMSs at targeting workplaces.

We've contributed to a reduction in pollution by monitoring and managing water pollutants from 345 workplaces across the country, including large-scale public sewage disposal plants, wastewater treatment plants and other workplaces with more than 2,000m³ in daily wastewater discharged. When it comes to a method for supervising and monitoring workplaces with regard to water pollution, we've changed the method on a paying-a-visit-to-a-workplace basis to the one on a water-tele-monitoring basis, which helped enhance efficiency and transparency in such supervision & monitoring. In 2009, we plan to expand to 2-step TMSs for 260 facilities, including small-scale public sewage disposal plants and other workpalces categorized as Type 2, which would help prevent water pollution accidents and improve the reliability of water management through reasonably imposing emission charges.

Water Tele-Monitoring Control Center



Good Water Management Air Quality Management Ecological Restoration Safety Management of Hazardous

Substances Waste Management Soil & Groundwater Management Technological Supports for & Diagnoses of Environmental Facilitie Adaptation to Climate Changes Development of Environmental Energy Efficient Resource Management

Water Improvement through Sewer Rehabilitation

There are so called green factories under the ground although they're invisible; actually, they are the very sewers arranged by the EMC to protect soil and water from domestic and industrial wastewater. If they are damaged or loosened, there will happen sewage and wastewater leaks, which, in turn, would contaminate soil. Sewer rehabilitation means activities to install, repair and improve sewers over the entire processes, including planning, survey, design and construction to facilitate the conveyance of sewage and wastewater.



Sewer Expansion Projects at the Dam Upstream

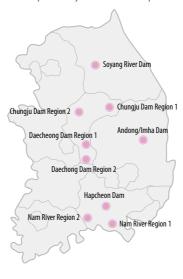
We've driven out a project for expanding and improving sewage systems upstream of multi-propose dams to protect the source of water supply and make sewage systems available to more people. Targeting the area(28 cities & counties) upstream of 7 multi-purpose dams across the country, including Soyang River Dam, the project started in 2004. During the project, investments corresponding to KRW 1.5 trillion will continued to be made until it's been completed in 2011.

As for now, the project is about 44% in progress rate. It's expected that sewer coverage for applicable area will increase from 27% to 75% in 2011 when the project will have been completed, which, in turn, will contribute to protecting the source of water supply. On top of that, building a system for integrating environmental facilities by river basin with ET and IT combined would enable the efficient management and technological development of sewer systems through their integrated management.

• Sewer Expansion Projects at the Dam Upstream & Annual Project Progress Status

ltone	Project Overview	Annual Project Progress Status			
	Project Overview				
Target Sites (no. of sites)	538	54	54	129	
Length of Pipeline(Km)	1,719	171	173	412	
Project Costs (KRW 100 millions)	15,104	990	1,710	2,534	

Sewer Expansion Project Sites at the Dam Upstream



Pilot Projects for the Sewer Rehabilitation at the Han River System

Even though there has been an effort to improve the water quality of Paldang Lake serving as the source of drinking water for 24 million residents in the capital area, its pollution has getting more and more degraded, which is attributable to the surrounding polluted rivers, sewage and wastewater discharged from recreational facilities sprung up like so many mushrooms after a rain, and pollutants drained from the surrounding farmland illegally furthered. To

protect and improve the source of water supply withdrawn from the lake, • Project Sites for the Sewer Rehabilitation at the Han River System the EMC has driven out a sewer rehabilitation project targeting 9 cities and counties around Paldang Lake designated as special areas. Starting in 2001, the project is 67.3% in progress rate, and scheduled to finish in December, 2010.

• Pilot Projects for the Sewer Rehabilitation at the Han River System

Project Sites Guri-si, Gwangju-si, Namyangju-si, Yongin-si, Icheon-si, Hanam-si, Gapyeong-gun, Yangpyeong-gun, Yeoju-gur			
Project Period	Feb. 2001 to Dec. 2010		
Project Scale	Length of pipeline (1,528Km), drainage facilities(7,800 sites)		
Project Costs	(KRW) 1 trillion 140 billion		



When it comes to the average quality of water flowing in applicable 32 sewage treatment plants, it's increased by 52%(92mg/l/ in 2003 to 140mg/l in 2007); actually, the water quality of Paldang Lake has been remarkably improved, so that marsh snails and moroco oxycephalus inhabiting very clean water graded 1 in water quality can be observed int the Sangok River, Hanam-si.

BTL-Based Sewer Rehabilitation Project

In South Korea, sewer coverage amounts to 87.1% as of 2007, lower than that of England, Germany, and Netherlands, but still higher than that of the OECD members. The sewer coverage for rural areas(45.7%) is much lower than that for urban areas(91.5).

We have carried out BTL-based sewer rehabilitation project by attracting private capitals since 2005. But the project were driven out by not district unit but smallscale unit, which was why the quality of sewers had been poor, and, resultingly, it hadn't worked well. To solve such problems, we induced investments and initiatives from private sectors for local governments with difficulty in financing, so that we can build efficient management systems, promote local economies, and contribute to an increase in employment.

The project show 47% in progress rate as of 2008. In 2013 when it will be completed, it's expected that national sewer coverage will amount to 91%, with 64% for rural areas.

• BTL-Based Sewer Rehabilitation Projects

Project Period	Mar. 2005 to Dec. 013
Project Scale	Length of pipeline (3,873Km)
Project Costs	(KRW) 2 trillion 891 billion

• BTL-Based Sewer Rehabilitation Project Areas Boeun-gun Okcheon-gur Jeonju-si) Jeonaeup-si Damyang-gu Stage 1 (17) Stage 2 (9) Stage 3 (2)

Supports for Installing Water Treatment Facilities

Wastewater treatment plants to treat wastewater discharged from industrial complexes, buffer storage facilities to prevent hazardous substances, such as phenol, from flowing into a river, and excreta treatment plants installed to support livestock farming constitute environmental infrastructure aiming to enhance competitiveness of firms and agricultural sectors through reducing environmental costs, and protect river systems. On top of that, the environmental infrastructure includes such sewage systems as wastewater treatment plants and sewers, to treat domestic, municipal and industrial wastewater or excreta discharged from various economic sectors before it have flowed into public water body, and supply clean and fresh water to people. Based on advanced technologies and expertness related to environmental sectors, we've supported the Central Government and local governments which have difficulty in securing skilled and experienced experts that have operated water treatment plants, by giving services to assist them with their policies on various licenses or approvals, and their installation of environmental facilities over the entire process, including planning, design, construction, and follow-up.

Status of Supports for Installing Wastewater Treatment Plant (1993 to 2008)

3				
Plant	No. of Site	Installed Capacity (m³/day)	Project Costs ((KRW) 100 millions)	
Wastewater Treatment Plants	28	917,800	5,921	
Livestock Night-Soil Treatment Plants	9	1,020	651	
Buffer Storage Facilities	6	157,100	986	

• Advanced Treatment Facilities of Wastewater Treatment Plant at the National Industrial Complex in Yeosu



Status of Supports for Installing Sewage Treatment Plant (1996 to 2008)

status of supports for instanning servinge meannerity faint (1550 to 2000)				
Plant	No. of Site	Installed Capacity (m³/day)	Project Costs ((KRW) 100 millions)	
Sewage Treatment Plants	56	911,000	11,562	
Rehabilitation of Individual Sewers	16	730	5,112	
Deodorization Facility for Sewage Treatment Plants	1	300,000	110	

• Haebo Sewage Treatment Plant in Hampyeong-gun



INTRODUCTION PROFILE SM SYSTEM ECONOMY

ENVIRONMENTGood Water Management

Air Quality Management
Ecological Restoration
Safety Management of Hazardous
Substances
Waste Management
Soil & Groundwater Management
Technological Supports for &
Diagnoses of Environmental Faciliti
Adaptation to Climate Changes

Development of Environmental Energy

Efficient Resource Management

SOCIETY PEOPLE APPENDI

Supports for Water Supply & Sewage Policies

There have been a shift in water management policy from supply-oriented to demand-oriented due to various reasons, including polluted sources of water supply, limitation to water resources development, and different coverage with water supply & sewage systems among areas. Along with such shift, it is urgently required to more scientifically systematize water management.

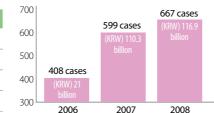
The EMC has been supporting national polices on water supply & sewer systems efficiently by supporting local governments, as through reviewing the suitability of their master plan for water supply & sewer system rehabilitation and giving technological assistance with their projects to install environmental infrastructure.

Actually, in 2008, we gave 667 cases of supports in policies and technological parts, during which we could save national budgets by KRW 116.9 billion, as through proposing alternative approaches and optimal design for unnecessary facilities, eliminating overlapped investments, and calculating proper capacity.

We've, domestically first, acquired a certification for quality & environmental management systems (ISO9001/14001) in the part of policies on water supply & sewer systems; actually, we've proposed the optimized polices through supporting systems consisting of related experts.

• Status of Supports for Water Supply & Sewage Policies and Technologies & Budget Savings

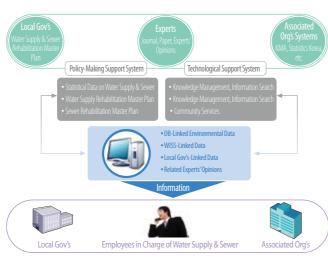
Item	2006	2007	2008
Master Plan on Water Supply & Sewer (no. of cases)	98	103	193
Supports for Environmental Infrastructure (no. of cases)	139	211	219
Others (including discussion about financing sources, no. of cases)	171	285	255
Budget Savings (KRW 100 millions)	210	1,103	1,169



Water Supply & Sewage Information Systems

We've, since 2006, built and operated water supply and sewage information systems(http://info.waternow.go.kr) to implement a systematical information base for water supply and sewage, and provide information for policy-making, such as statistical data related to water supply & sewer systems, or mater plans for water supply & sewer rehabilitation.

Water supply & sewage information systems consist of policy-making support system and technological support system, which provide basic data for policy-making about water supply and sewer systems. It's expected that they will serve to timely give technological supports to solve problems about the operation of water supply & sewer systems by making it possible to build a collaborative system through sharing information among users.



Wastewater Discharge & Treatment

Wastewater corresponding to 3,059 tons was discharged in 2008. Laboratory wastewater is generated, as by the Environmental Analysis Research Center engaging in analyzing and monitoring hazardous substance, such as dioxin, while cooling wastewater, renewable wastewater boiler blow down water is discharged in the process of operating domestic waste incineration plants. We've handled wastewater discharged in accordance with strict standards on its treatment. When it comes to laboratory wastewater generated by the center, it's treated through the wastewater treatment plant joint-run by the Environmental Research Complex and the EMC.

Wastewater generated from domestic waste incineration plants is treated in a physiochemical way by their own wastewater treatment plants, whose improved facilities and management skills have helped lower the generation of wastewater, with a decrease in generated

• Wastewater Discharge

(Unit: Ton)

amount by 23.5%, when compared with the previous year.

All wastewater generated by the EMC has been so controlled under an allowable emission specified by the Act on the Conservation of Water Quality & Aquatic Ecosystems.

 Wastewater Discharge 			(Unit: Ton)
	2006	2007	2008
Environmental Analysis Research Center	3	4	2
Domestic Waste Incineration Treatment Plant	4,113	3,774	3,057

Air Quality Management

It's judged that air pollution at issue in South Korea has partially improved owing to a reduction in the emission of primary pollutants. However, when compared with developed countries, sulfurous acid gas emitted per energy used in South Korea is four times as much as in Japan. In a situation where the quality of the atmospheric environment as actually sensed by people is short of their high expectations, we've made various efforts to improve air quality by setting a goal ^rto secure a visual ranging from Namsan to the offing of Incheon_a on a clean day.

Tele-Monitoring System: CleanSYS

CleanSYS refers to a tele-monitoring system to monitor all pollutants coming from factories' chimney on a real-time basis. The system has been controlled by each control center on a regional basis: Capital Area, Jungbu Area, Honam Area, and Yeongnam Area.

CleanSYS can measure 7 pollutants, including dust, sulfur oxides, nitrogen oxides, carbon monoxide, hydrogen chloride, fluorine compounds, ammonia, and other three items, including oxygen, water flow, temperature. Each control center receives data on a real-time basis through sensors attached to chimneys, so that it sends an alerting signal if pollutants reaches 80% of an allowable amount in density, and a warning signal if they exceed the given amount.

Collected data include two types of groups: the first data group consists of 5-minute data that refers to data yet to be used as administrative data, and the other contains 30-min data to be used as administrative data. All data collected are sent through each regional control center to the integrated control center, which, in turn, are serviced via the web to the Ministry of Environment, local governments, and other workplaces.

Data Collection System System Wired (L/L) Wireds (CDMA) Web Web Web Web Capital Area Control Center in Incheon Workplace Web Cities & Provinces with Integrated Control Center Ulsan Luridediction Uniformatical Control Center in Daejeon Cities & Provinces with Luridediction

CleanSYS Control Center at the Capital Area



There are 7,059 measuring instruments(sensors) attached to 1,280 chimney of 506 workplaces across the country as of 2008, from which we monitor, through our control center, the status of air pollutant emissions.

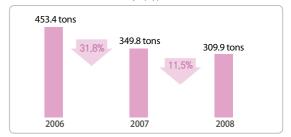
Air pollutants emitted from workplaces monitored under CleanSYS are on the steady decrease. In 2008, air pollutant emissions per chimney were estimated at 309.9 ton, a decrease by 11.5% and 31.8%, compared with the years 2007 and 2006, respectively, which suggests that CleanSYS has contributed to reducing air pollutants. and, resultingly, improving air quality.

CleanSYS has gone as far as competitive in terms of global standards.; actually, it was selected by the Government as one of Top 10 Innovative Brands in 2006, and acquired ISO9001 Quality Management Certification in 2007. Based on such superiority, we've play a role of technological bridge, as through entering into MOUs with German companies, Siemens Corp. and Durag Group. Also, we've strengthened supports for raising the localization rate of environmental measuring instruments.

Workplace Equipped with CleanSYS & Air Pollutant Emissions

ltem	2006	2007	2008
Workplace (no. of sites)	379	462	506
Chimney Equipped with CleanSYS (no. of units)	892	1,123	1,280
Total Emission (ton)	404,468	392,930	396,705
Emission per Chimney (ton)	453.4	349.9	309.9

Air Pollutant Emissions Per Chimney Equipped with CleanSYS



Good Water Management

Air Quality Management Ecological Restoration Safety Management of Hazardous Substances Waste Management Soil & Groundwater Management

Technological Supports for & Diagnoses of Environmental Facilitie Adaptation to Climate Changes Development of Environmental Energy

Efficient Resource Management

Total Air Pollution Load Management (TLM)

The capital area in South Korea is, in terms of air quality, among the lowest group of OECD members, so that its improvements is estimated to require social costs corresponding to KRW 10 trillion on an annual basis. The EMC has adopted TLM system as part of efforts to improve the air quality of the capital area.

TLM system that replaces the existing management focusing on density(ppm, mg/m³) refers to a system where each workplace shall emit air pollutants within total air pollution loads allowable to them. A workplace whose emissions exceed the amount allowable will be levied so called "non-compliance charge," while a workplace whose emissions get short of the amount allowable could trade the remainder of allowables in accordance with emission trading system, which is how it's possible to reduce air pollutants and greenhouse gases.

As a result of operating TLM control systems, managing air pollutant emissions, giving technological supports to workplaces, and executing TLM system, we could reduce 57% and 54% in NOx and SOx, respectively, compared with total air pollution loads allowable in 2008.

•	Area Subject to TLM					
		Sub-Area				
	Seoul	Entire sub-area				
Incheon Ungjin-gun(entire sub-area exc		Ungjin-gun(entire sub-area except for Yeongheung-myeon, Ungjin-gun)				
	Gyeonggi-do (including 24 cities)	Suweon, Seongnam, Goyang, Bucheon, Anyang, Yongin, Pyeongtaek, Gwangmyeong, Siheung, Gunpo, Hwaseong, Guri, Gimpo, Hanam, Uiwang, Osan, Ansan, Gwacheon, Dongducheon, Icheon, Yangju, Paju, Uijeongbu, Namyangju				

ltem	Total	NOx	SOx
Workplace Subject to TLM (no. of workplace)	164	105	59
Quota (ton)	88,166	65,307	22,859
Emissions (ton)	38,499	28,081	10,418
Reduction Rate (%)	56.3	57.0	54.4

Improving Indoor Air Quality

As environmental disorders such as asthma and atopy sharply increase, indoor air quality has become very important issues. Actually, to emphasize the importance of indoor air quality, WHO declared "the Right to Healthy Indoor Air" in 2005.

To identify the causes of air pollution and propose scientific methods to remove them, we have operated automated air monitoring networks in 8 multiplex facilities, such as subway, underground shopping centers, terminals, nursery institutions, hospitals, libraries, and harbor facilities.

• Status of Indoor Air Monitoring

		3						
	Groups of		Element Subject to Monitoring					
Facilitie	Facilities	Site	Total	Dust	CO ₂	CO	NO ₂	O ₃
2006	2	6	16	6	3	2	5	-
2007	4	8	20	6	7	1	6	-
2008	5	12	15	4	8	-	=	3



Examining Vapor Recovery Systems

Containing very hazardous organic hydrocarbon, oil vapor refers to volatile organic compounds(VOCs) originating while oil products are handled, as at gas stations, shipping facilities, oil tanks, etc.

We've monitored facilities to recover oil vapor for the purpose of reducing volatile organic compounds which would affect public health.

There are about 350 gas stations equipped with vapor recovery systems across the country as of 2008. It turned out that they showed a reduction in the total amount of hydrocarbon by 92.6% on the average, compared with those not equipped with vapor recovery systems.

Change in Concent	(Unit: mg/ℓ)			
Item Drivers Gas Stati			Oil Feeding Holes	Manhole
Before	17.2	3.1	4,629	1,896

		Drivers	Gas Station	Oil Feeding Holes	Manhole	
	Before Installation	17.2	3.1	4,629	1,896	
-	After nstallation	2.8	0.1	364	97.6	
-	Reduction Rate (%)	83.7	96.8	92.1	97.6	

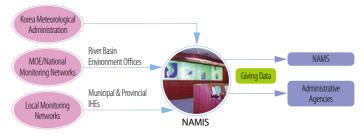
Donga Daily as of Jan. 7, 2009

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Ambient Air Pollution Monitoring Networks

We've installed and operated various air pollution monitoring networks to identify the status of air pollution and climatological & ecological changes. We've built and operated, since 2004, so called National Ambient Monitoring Information System(NAMIS) to identify the status of air pollution across the country and reflect the results into polices on air conservation.

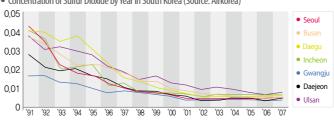
• Structure of National Ambient Air Pollution Monitoring Networks



Website of AirKore System



• Concentration of Sulfur Dioxide by Year in South Korea (Source: Airkorea)



NAMIS collects a huge amount of data on air pollution; they amount to as many as about 340 million cases, as containing data on dust, ozone, etc. Collected data are statistically processed, verified and analyzed, and then provided for the Government and its associated institute, local governments, and other public organ, so that they can be used as basic data for national policies on air environment.

There are lots of interests in information with direct influences on public health, as about Asian Dust happening mainly in the spring or ozone frequently occurring in the summer.

Having disclosed information about the air pollution of 16 World Cup stadia since April, 2002, we've built and operated AirKorea, an ambient air pollution real-time monitoring system, to satisfy people's rights to know, since 2006.

Based on data from NAMIS, Airkorea provides information about 5 atmosphere environmental substances, including dust, ozone, carbon monoxide, sulfurous acid gas, and nitrogen dioxide, by the use of CAI(Comprehensive Air-quality Index) on a real-time basis. It's possible to identify the status of and information about air quality at the website(www.airkorea. or.kr) at any time.

Efforts to improve air quality can be shown in the form of data. It turned out that the air density of SO₂ and NOx has significantly improved; especially, SO₂ density for Ulsan Industrial Complex has decreased 30%, from 0.01ppm in 1997 to 0.007ppm in 2007.

Emission & Treatment of Air Pollutants

We've operated a domestic waste incineration plant in Goyang-si where such air pollutants SOx and NOx during the cineration are generated. We've stably managed air pollutants, as through improving CleanSYS facilities and applying SNCR or FGR for reducing nitrogen oxides.

In 2008, air pollutant emissions decreased to 59.1tons by 10.8%, compared with those of the previous year. When it comes to NOx that is one of substances subject to TLM system in the capital area, its emissions decreased to 47.152tons, a reduction by 5.56%, when compared with 49.928 tons, the very amount allowable in accordance with the system,

With regard to the density of air pollutants emitted into air, it turned out that their emissions lied within the limits allowable in accordance with related laws.

Air Pollutant Emissions

Pollutants	Emission (ton)		Emissions	Average Concentration of Emissions			
	2006	2007	2008	Allowable	2006	2007	2008
Dioxin	-	-	-	0.1ng-TEQ/Sm³	-	-	-
Dusts	0.04	0.03	0.02	30mg/Sm³	1.97	1.20	0.8
SOx	0.51	1.14	0.94	30ppm	0.35	0.67	0.6
NOx	47.9	56.8	48.2	80ppm	45.9	47.7	41.0
СО	3.78	8.04	9.01	50ppm	5.9	11.1	12.0
HCI	0.84	0.24	0.93	30ppm	0.9	0.26	1.0

Air Quality Management **Ecological Restoration**

Safety Management of Hazardou Substances

Waste Management Soil & Groundwater Management Technological Supports for & Diagnoses of Environmental Facilitie Adaptation to Climate Changes Development of Environmental Energy Efficient Resource Management

Ecological Restoration

We've made various efforts to conserve ecosystems, as through restoring and afforesting natural river systems by outgrowing the past development-oriented activities involving water improvement or landscaping.

Reducing Non-Point Source Pollution

Non-point source pollution refers to the place from which various kinds of pollutants originate, along with rainwater, including roads, mountain area, arable land, construction sites, etc. It occupies 22~37% of pollution loads attributable to the 4 major river systems. We've engaged in activities to install in the Han River, the Geum River, the Yeongsan River, and the Nakdong River, natural-type and apparatus-type facilities for reducing non-point source pollution, such as artificial wetland and reservoirs, and improve their water quality.

• Status of Projects to Reduce Non-Point Source Pollution

ltem	2006	2007	2008
No. of Project Sites	6	4	9
Project Costs (KRW 100 millions)	38	107	166





Ecological Restoration of Riparian Buffer Zone

We've driven out activities for the ecological restoration of the riparian buffer zone with 4,386,000m² in area upstream of the Nakdong River dam basin, which is the area of high bio-diversity.

We've acquired by step and afforest land corresponding to the riparian buffer zone to limit the moving-in, as of factories or restaurants that could discharge water pollutants, which would serve as a

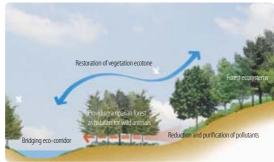
buffer zone to neutralize pollution.

Such riparian buffer zone would function as habitats for wild and aquatic vegetation and animals, and reduce variability in water flow through stabilizing forest slope and minimizing land erosions.

Status of Projects for Ecological Restoration of Rinarian Ruffer Zone

	Status of Frojects for Et	ono great riestoration	or impariant barrer 2	J.1.C
		2006	2007	2008
	Project Area (m²)	2,876	131,214	336,962
	Project Costs (KRW 100 millions)	10	26	64





Eco-River Restoration

Eco-river restoration refers to activities designed to restore damaged river systems caused by develop-oriented activities such as irrigation

To help recover ecological health, we've engaged in eco-river restoration since 2007 through securing technological diversity. We've participated in 53 cases of design activities, along with 9 cases of activities to establish master plans. Currently, we've driven eco-river projects in three local government.

Status of Projects for Eco-River Restoration as of 2008

ltem	Sangok River in Hanam	Odae River in Pyeongchang						
Length (Km)	8.8	20	3					
Project Costs (KRW 100 millions)	215	120	130					
Project Completion	2012	2012	2011					

Status of Projects for Eco-River Restoration as of 2008



Safety Management of Hazardous Substances

Selected as the domestically-first certified dioxin measurement & analysis organ in 1988, we've made various efforts to safely manage hazardous substances. As part of the nation-wide activities to comply with Stockholm Convention, we've efficiently managed hazardous substances through safely controlling persistent organic pollutants (POPs), and monitoring and analyzing other hazardous pollutants.

National POPs Monitoring Networks

With Stockholm Convention on Persistent Organic Pollutants effective as of 2001, there's been international efforts to prevent and minimize the use of 12 types of POPs, including dioxin. As one of members with the convention, South Korea has also joint such efforts by establishing and implementing nationalwide plans to decrease POPs.

We've managed POPs pollution in a nation-wide way by building and operating the national POPs monitoring networks to monitor and analyze POPs in terms of air, water and land by selecting various sample sites across the country in 2008.

In 2008, we examined and analysed 603 samples collected by the use of the networks, and carried out field surveys and sample tests on about 200 pollutant-discharging facilities to identify the source and amount of pollutants, along with surveys on 1,472 facilities to calculate the amount of pollutants they discharged.

• Status of National POPs Emission Monitoring as of 2008

Item	No. of Site Sampled	Measuring Frequency
Air	37	4 times(4 seasons)
Water	36	Twice (Summer/Winter)
Soil	57	Once (Spring)
Sedimentation	30	Once (Falll)



POPs Emission Source/Rate Survey



Hazardous Substance Management

To safely and efficiently manage various hazardous substances, we were designated as a legal organ to monitor and analyze

In 2008, we monitored and analysed 12,182 hazardous substances, such as dioxin, which is how we have supported the national management of hazardous substances, and led environmental researches and analyses.

nalysis	(Unit: no.	of cases)
2006	2007	2008
335	355	373
288	210	484
9	4	11
46	45	45
-	-	11,269
	2006 335 288 9	2006 2007 335 355 288 210 9 4

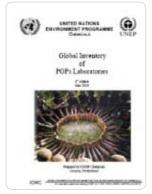
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• Certificate of the USA National Institute of Standards and Technology



UNEP Certification



Good Water Management Air Quality Management Ecological Restoration Safety Management of Hazardous

Substances Waste Management

Soil & Groundwater Management Technological Supports for & Diagnoses of Environmental Facilitie Adaptation to Climate Changes Development of Environmental Energy Efficient Resource Management

Waste Management

Wastes are inevitably generated during the daily life and other economic activities. There's been many efforts to reduce and properly treat them. In 2006, nation-wide domestic wastes totalled up to 48,844 tons(per day), occupying 14.8% of total wastes. But, thanks to a decrease in food wastes, and established recycling practices and trash-sorting systems, they've decreased since 2005. When it comes to waste treatment, recycling rate has been on the increase, while incineration or landfill rate amounted to as high as 43.2% as of 2007, which is why we need an environmentally-safe and technicallyappropriate waste treatment facilities.

• Domestic Waste: Status of Amount Generated & Disposals

ltem	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Amount Generated (ton/day)	44,583	45,614	46,438	48,499	49,902	50,736	50,007	48,398	48,844	50,346
Landfill (%)	56.2	51.6	47.0	43.3	41.5	40.3	36.4	27.7	25.8	23.6
Incineration (%)	8.9	10.3	11.7	13.6	14.5	14.5	14.4	16.0	17.0	18.6
Recycling (%)	34.9	38.1	41.3	43.1	44.0	45.2	49.2	56.3	57.2	57.8

Waste Disposal Facilities

Based on a high level of expertness and technologies related to waste disposal facilities, we've supported the Central Government and local governments through an involvement with the entire process(feasibility study, master plan, design, construction, follow-up, etc.) for installing them.

We've safely and cleanly installed 70 facilities, such as domestic waste landfill/incineration facilities, food water treatment facilities, sewage sludge treatment facilities and landfill-gas resource recovery & recycling facilities. And we've contributed to national policies on waste

• Status of Supports for Installing Waste Disposal Facilities (1993 to 2008)

Item	No. of Sites	Total Installed Capacity	Project Costs (KRW 100 millions)
Landfill	35	4,791,219 tons	2,586
Incinerating	22	1,333 tons/day	4,528
Food Treatment	3	45 tons/day	55
Sewage Sludge	4	350 tons/day	456
Landfill Gas 5		5,030kw/hour	161

• Air View: Domestic Waste Incineration Plant To be completed as of Dec., 2009



management and environmental conservation by properly re-treating about 330 thousand tons of wastes through the rehabilitation and restoration to make up for the past insanitary and unhygienic landfill activities.

Agenda on national waste management policies can be prioritized as: Prevention or Reduction, Reuse, Recycling, Energy Recovery, Incineration and Landfill.

We'll try our best to heighten the quality of waste disposal facilities, so that a resource-recycling society can be established. In the past, waste disposal facilities were recognized as disgusting ones related to NIMBY syndrome.

To eliminate negative images toward them, we've tried various communications with local communities, as through inducing residents' participation and holding public hearings as well as providing perfect services related to their planning, design,

• Air View: Domestic Waste Incineration Plant & Convenience Facilities in Yangju



We've given many supports to share with local residents as well as to install environmentally and technically safe waste disposal facilities. We've built eco-friendly parks around waste disposal facilities where local residents can engage in recreational activities or rest, along with such various convenience facilities as swimming pools, health clubs, indoor golf links, basketball courts, scuba diving pools, etc.

Domestic Waste Incineration Plant

We have operated a domestic waste disposal plant(Ilsan Regional Office) in Goyang-si to properly treat domestic wastes.

Since its start-up in 1995, the Office has contributed to the conservation of a local environment by properly treating domestic waste.

It acquired ISO14001 Environmental Management System Certification in 2001. When it comes to the density of dioxin emitted by the Office, it has recorded "zero" 6 times in a row; actually, it can be said to serve as kind of a standard model for domestic waste incineration facilities.

Even though its facilities have been dilapidated, the Office has treated increasing loads of wastes, with treatment costs per tons on the decrease. It's been optimized in managing air pollutant emissions, as through securing conditions for a stable combustion base on improved OFA(Over Fire Air) and applying such technologies for reducing nitrogen oxides as SNCR(Selective Non-Catalytic Reduction) and FGR(Flue Gas Reduction) to field practices.

Given the fact that the service life of a waster incineration plant is 15 years on the average, it is difficult to maintain an optimal operation of the current facilities with their dilapidation so much under way any longer, which is why we began working on installing alternative facilities with their completion in February, 2010. We applied to their installation an advanced pyrolysis-gasification-melting process in place of the existing stalker method, in terms of environmental conservation and resource recovery & recycling; it served as an opportunity to upgrade domestic technologies for installing waste incineration facilities.





Ilsan Regional Office



• Status of Ilsan Regional Office

_			
	2006	2007	2008
Waste Treatments (ton)	63,904	69,774	73,580
Unit Treatment Costs per ton (KRW)	64,078	55,075	49,940
Surplus Heat Energy Sold (Gcal)	114,306	130,440	128,887
Selling Price (KRW 100 millions)	15.5	18.1	20.3

• Status of Alternative Energy Facility

Incineration Method	Pyrolysis-gasification-melting process
Treatment Capacity	300 tons/day (150tons×2units)
Project Costs	KRW 119 billion
Project Period	′06.5~′10.2
Operation Personnel	33 (persons)

Status of Waste Disposals

Activities for installing environmental facilities inevitably cause a huge amount of construction wastes; actually, the year 2008 found some 1.7 million tons. Of them, we recycled about 85.1% by properly and legally treating them, as through recycling, crushing, landfill, incineration, etc.

Status of wastes from activities for installing environmental facilities as of 2008

Status of wastes from activities for installing environmental facilities as of 2000								
ltem								
пеш	Generated	Recycling	Crushing	Incineration	Landfill			
Ascon wastes	681,864	561,470	120,395	-	-			
Concrete wastes	1,004,542	760,040	244,502	=	=			
Construction Wastes	144	42	61	40	=			
Construction Sludge	4,424	1,417	16	=	2,990			
Mixed Construction Waste	7,350	2,475	351	1,524	3,000			

Domestic waste disposal facilities produce fly ashes classified as "specified wastes" and bottom ashes materials as "normal wastes." Of 12,725 tons produced as of 2008, fly ashes occupied 2,731 tons, with bottom ashes, 9,994 tons, all of which were legally treated legally at the authorized waste incineration plants in Gunsan and the Sudokwon Landfill Site Management Corp.

• Status of construction waste disposals as of 2008



• Status of specified wastes from Ilsan Regional Office:

ltem	2006	2007	2008
Amt. of wastes	10,677	12,805	12,725

Air Quality Management Ecological Restoration Safety Management of Hazardous Substances

Waste Management Soil & Groundwater Management Technological Supports for & Adaptation to Climate Changes Development of Environmental Energy

Efficient Resource Management

Soil & Groundwater Management

If soil has been contaminated by hazardous substances, its original function to serve as a living base for organisms may be damaged, and, consequently, have bad impacts on not only ecosystems but also people's health and living environment by polluting groundwater and crops on a long-term basis because their mobility is very low. In addition to that, once soil's been contaminated, it is very hard to be self-purified; actually, it would take much more time and expenses to purify and restore than polluted air or water. So, we've driven out various activities through linkage to governmental policies for protecting soil and water from its pollution, and purifying polluted or contaminated soil and water.

Precision Investigation of Soil Pollution

Investigation of Soil Environment & Pollution

We've engaged in activities to investigate soil environment for 25 national and general industrial complexes across the country; in 2008, we carried out the investigation of soil environment for 577 workplaces over 4 industrial complexes, including Korea Export-Import National Industrial Complex.

Currently, we've been working on the investigation of soil pollution for facilities designated for soil pollution management, such as manufacturing/storage facilities for oil products or any other poisonous substances, oil pipelines, etc.; in 2008, we carried out the investigation of soil pollution for about 793 facilities.

Based on the results, we enforced workplaces exceeding limits allowable to soil and groundwater pollution to take measures for its purification and restoration, which is how we've contributed to the protection of soil and groudwater for vulnerable areas from its

Status of Soil Environment for Industrial Complexes

•			
Items	2006	2007	2008
No. of workplace investigated	124	439	577
No. of workplace with given limits exceeded	22	30	32
	No. of workplace investigated	No. of workplace investigated 124	No. of workplace investigated 124 439

 Status of Soil Pollution Investigation for Facilities Designated for Soil Pollution Management 								
Items	2006	2007	2008					
N. CC dist. I. of a l								

No. of facilities investigated 1,371 1,068 No. of facilities with given limits exceeded

Precision Investigation of Soil Pollution for Closed Metal Mine Sites

There are about 1,000 closed metal mines across the country, from which acid mine drainage and heavy-metal wastes have severe impacts on public health and the environment by causing soil erosions and losses.

In response to such situation, we carried out the precision investigation of 100 closed metal mine sites across the country to identify the status of soil pollution. As a result, it was found that, of them, 92% were among the areas with limits allowable in soil or water exceeded, and that 87 needed restoring. We've prioritized activities to prevent soil pollution based on the investigation results, so that we can continue to drive them out, together with the Ministry of Environment, Ministry of Knowledge Economy, and the Ministry for Food, Agriculture, Forestry and Fisheries.

Area	Gyeong gi	Gang weon	Chung nam	Chung buk	Jeon nam	Jeon buk	Gyeong nam	Gyeong buk	In cheon	Dae gu
No. of Sites	13	11	16	11	7	8	13	19	1	1
No. of Sites to need restoring	8	7	9	4	7	5	13	13	1	1

Soil & Groundwater Information System(SGIS)

Since 2006, we've built and operated SGIS(www.sgis.or.kr) to share pieces of information about soil and groundwater in an all-inclusive way, and apply them for identifying, purifying and restoring pollution. In 2008, we upgraded SGIS to a portal system through integrating into WEB GIS services.

We believe that SGIS will be helpful to make people share governmental policies through systematically managing, processing and promoting information, and satisfying people's rights to know.

• Closed Metal Mine Sites on Precision Investigation as of 2008



WEB GIS-based Information System



Soil Purification on Contract/Commission

We've contributed to the restoration of soil healthiness by engaging in soil purification; in 2008, we purified, by the use of land farming and soil flushing, soil used by Weonju □□□ POL(Petroleum, Oils and Lubricants) Corps, which had been contaminated by pollutants, such as TPH and BTEX, so that we could lowered the concentration of those

• Summary drawings of soil contamination refinement(left) and purification of underground water(righ





pollutants under 500mg/kg, a allowable limit as provided for "Area Ga" in accordance with the Act on Environmental Conservation. Actually, this case can be said to be a exemplar one for soil

We've engaged in a project-on-commission with he Ministry of National Defense and the Headquarter of the Army to purify soil and groundwater at the eight U.S. bases to be returned to the Government of South Korea in accordance with LPP(Land Partnership Plan), and the 7 oil reservoirs for TKP(Trans-Korea Pipelines) that were arranged by the US Army in Korea in 1970 and then closed in 2005. Having participated in a competitive bid to select an eligible business for the project together other competitors, we were selected as an eligible one, which suggested that our technologies related to soil purification had been recognized. It's expected that 2011, the year when the project will have been completed, will find South Korea more healthy.

Status of LPP & TKP Project

- States of ETT & THE PROJECT						
	LPP Soil Purification Project	TKP Soil Purification Project				
Projet Scope	Purification of soil and groundwater at the 8 US bases to be returned	Purification of soil and groundwater at the 7 closed oil reservoirs for TKP				
Project Period	February, 2008 to 2012	March, 2008 to December, 2011				
Project Costs	KRW 93.4 billion	KRW 18.2 billion				

National Groundwater Monitoring Networks

To provide basic data for making policies on groundwater conservation by identifying the status of nation-wide groundwater quality and its trends, we picked up three and ten sites for installing water monitoring networks and pollution monitoring networks, respectively, in Ulsan, Pohang, Gyeongju, Yeongcheon, and Yangsan in 2008, with a plan to secure up to 4,000 sites for NGMNs(National Groundwater Monitoring Networks). Once they've been built, it will be possible to manage groundwater quality on a geologically and geographically customized basis, and identify the reasons and causes for pollution in groundwater.

Offensive Odors

With an increase in people's needs for a pleasant environment, the part of offensive odors came to be subject to not the Act on the Conservation of Air Environment provides, but the Act on the Prevention of Offensive Odors separately enacted as of February, 2005. In a situation where most of workplaces exposed to offensive odors neither can afford to secure technologies to prevent or reduce them, nor do feel a need to do so, we've

offered them technological supports

• Technological Supports for Removing Offensive Odors needed to remove offensive odors for nothing since 2006, which enabled thos workplaces not only to reduce relate costs but also to solve civil complaints resulting from offensive odors.

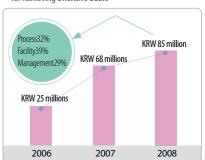
se	ltem	2006	2007	2008
ed	No. of workplace supported	60	115	135

Status of Closed Oil Reservoirs for TKP





• Cost Savings in Workplaces Given Technological Supports for Removing Offensive Odors



ENVIRONMENT

Good Water Management Air Quality Management Ecological Restoration Safety Management of Hazardous Substances

Waste Management
Soil & Groundwater Management
Technological Supports for &
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Adaptation to Climate Changes
Development of Environmental Energy
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SOCIETY PEOPLE APPENDIX

Supports for Environmental Facility Technologies

We've promoted an optimal operation of facilities to prevent an environmental pollution for workplaces and public environmental infrastructure across the country through giving technological supports for and diagnosing them.

Supports for Technologies Related to Environmental Facilities

We've given technological supports for installing environmental facilities to workplaces in lack of technological competences related to the environmental sector, so that they can self-improve environmental technologies, enhance their awareness toward an environmental conservation, prevent & reduce an environmental pollution caused during the business process, and realize an efficient operation of facilities to prevent an environmental pollution.

Facilities eligible for such supports include: \blacktriangle facilities that apply for the said supports since they lack in technological competences related to the environmental sector or want to prevent and reduce an environmental pollution; or \blacktriangle facilities that apply for the said supports in accordance with an order from an authority with jurisdiction since they haven't complied with standards as provided by the Environment Act more than three times within the last 2 years. If they've been determined as eligible for the supports, they'll be given supports, as related to water, air, noise, oscillation, wastes, offensive odors, etc., through each office of river basin on a regional and autonomous basis, with the help of external experts, if necessary.

Technological supports include causative analyses, proposals for improvements, methods for an optimal operation &

management, etc. Their results are notified within 30 days after the field technological supports have been completed.

Within 6 days after the foregoing notice, follow-up services in relation to those results notified will be given.

• Supports for Technologies Related to Environmental Facilities (Unit: case of support)					
Office of River Basin	2006	2007	2008		
Office of Han River Basin	178	149	221		
Office of Yeongsan River Basin	125	130	151		
Office of Nakdong River basin	128	119	127		

Technical Diagnoses of Public Environmental Facilities

The ^rAct on the Development of & Supports for Environmental Technologies_a provides in Article 13 that public environmental facilities shall be regularly diagnosed on their operation and management for preventing their failures and enhancing their process efficiency.

There are 613 public environmental facilities across the country as of 2007. We've provided optimal conditions for operating them through reviewing and analyzing their operation records, checking their status, and carrying out a field survey of operation factors and pollution loads by process.

Technological diagnosis services that started in 1995 have been applied to 1,138 public environmental facilities so far, with 97 facilities added to in 2008; actually, service activities have been on the increase.

Furthermore, the last 3-year service activities contributed to an efficient operation of public environmental facilities by reducing energy use corresponding to KRW 1.62 billion.

We've encouraged workplaces to voluntarily improve technological diagnosis facilities and their operation practices by giving incentives to them through evaluating their operational management. We've also gained favorable comment from workers engaging in operating public environmental facilities by giving awards and carrying out ecological inquiry to 8

facilities. We've tried our best to develop new technological diagnosis services, including diagnostic methods, so that we can perform them more efficiently. In 2008, we developed methods to measure offensive odors from area sources and properly maintain water treatment facilities through modelling piping network analysis, and technologies to reduce ecological toxicity, which would contribute to an efficient management of impacts on aquatic ecosystems.

• Diagnosis Services for Public Environmental Facilities

		2006	2007		2008
Facilities serviced		50	68		97
• Energy Savings for the Last 3 Years ('05 to'07) (Unit: KRW 100 millions					
ltem		Sewage Treatment Plant		Excreta Treatment Plant	
		No. of Case	Cost Savings	No. of Cas	ses Cost Savings
Change in Contract Power		16	0.8	7	0.2
Facility Improvement		30	9.5	1	=
Operation Method Improve	ment	28	4.9	11	1
Total		74	15.2	19	1.2

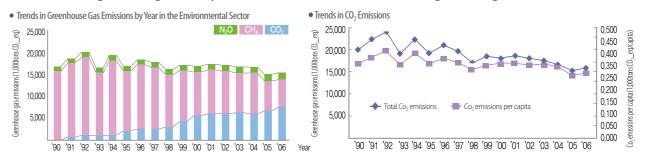
Adaptations to Climate Changes

In a situation where an emission of greenhouse gases has been continuously increased since the Industrial Revolution, which, in turn, have severely affected the global climate system through rising sea level, flooding, desertification, ecological changes, etc., the UN has recognized a need for global efforts to respond to such climate changes by adopting UNFCCC. Becoming a member in 1993 with signing on the Kyoto Protocols in 2002, South Korea has made and submitted a national report about nation-wide greenhouse gases every year,

Making Environmental Greenhouse Gas Inventories

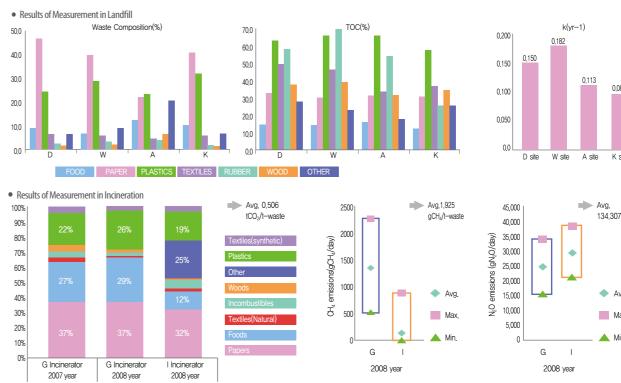
Pursuant to the UNFCCC, South Korea has a duty to make inventories about national greenhouse gas emissions and absorptions on an annual basis, which is why we, the EMC, have made the same inventories about the environmental sector based on the IPCC Guideline. In 2006, the national emissions of greenhouse gas amounted to 599.5 million tons in CO_2 , an increase by 0.9%, compared with those of the previous year, of which those corresponding to environmental greenhouse gas were calculated subject to an application of GWP to the emissions of CO_2 , CH_4 , and N_2O , respectively, showing 15.36 million tons in CO_2 -eq, corresponding to 2.56% of total emissions. Emissions per capita amounted to 0.318 ton in CO_2 -eq, a reduction by 9.7%, compared with those in 1990.

The environmental greenhouse gas inventory serves as a useful tool to reduce environmental greenhouse gas.



Development of Greenhouse Gas Emission Factor for Environmental Infrastructure

We've developed greenhouse gas emission factor and input variables through carrying out a field survey of waste landfill and incineration facilities currently used, so as to calculate greenhouse gas emissions from environmental infrastructure. We plan to continue to improve reliability to use them as basic data for enhancing the accuracy of statistics on national greenhouse gas emissions.



INTRODUCTION PROFILE SM SYSTEM ECONOMY

ENVIRONMENTGood Water Management

Air Quality Management
Ecological Restoration
Safety Management of Hazardous
Substances
Waste Management
Soil & Groundwater Management
Technological Supports for &
Diagnoses of Environmental Facilities
Adaptation to Climate Changes
Development of Environmental Energy
Efficient Resource Management

SOCIETY
PEOPLE
APPENDIX

Building Base for Complying with Kyoto Mechanism

We've built a base for complying with the Kyoto Mechanism so as to cost-effectively reduce greenhouse gas, in accordance with which we've driven out various activities, as to investigate and research greenhouse gas emission trading systems and their operation methods, carry out a feasibility study on & verify CDM projects, and monitor greenhouse gas emissions from workplaces.

Greenhouse Gas Emission Trading Systems

Greenhouse gas emission trading systems are known as a policy tool to cost-effectively reduce greenhouse gas, which is why developed countries have introduced and operated them; actually, South Korea is also considering to adopt the systems.

Accordingly, we've assisted the Government make policies on designing institutions and arranging guidelines for their introduction, through forming TFT specialized for them.

Clean Development Mechanism Project

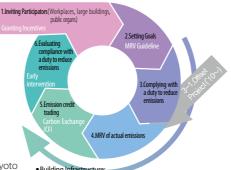
The Clean Development Mechanism (CDM) is an arrangement under the Kyoto Protocol allowing industrialized countries with a greenhouse gas reduction commitment (called Annex A countries) to invest in projects that reduce emissions in developing countries as an alternative to more expensive emission reductions in their own countries. A crucial feature of an approved CDM carbon project is that it has established that the planned reductions would not occur without the additional incentive provided by emission reductions credits. The CDM allows net global greenhouse gas emissions to be reduced at a much lower global cost by financing emissions reduction projects in developing countries where costs are lower than in industrialized countries. However, in recent years, criticism against the mechanism has increased. For supporting national CDM policies, we've engaged in such activities as supports for DNA Review with the MOE, operation of a national society for CDM research, and development of CDM methodologies, We've also promoted CDM projects by operating overseas online support systems.

Designated Operation Entity

International carbon markets have been enlarged since the Kyoto Mechanism. About 5,000 cases of projects related to CDM are globally under way, and South Korea has also driven out 60 cases. We were designated as an operation entity from the UN CDM Executive Board as of April 15, 2008, which was finally confirmed as of March 25, 2009. Since then, we've provided such services as feasibility studies, verification and certification on domestic and foreign CDM projects.

There are 26 DOEs worldwide, including four domestic DOEs, and we've provided services related to GS CDM Label given to a environmentally sustainable business.

Process for Greenhouse Gas Emission Trading System



Sectors Certified & Assured in accordance with Int'l

Registry, carbon exchange, assurance agencies, expert training, MRV Guideline, etc.

(CDM Certification Agencies
ı	Energy industries
-	Energy distribution
ı	Energy demand
I	Manufacturing industries
(Chemical industries
(Construction
-	Transport
I	Mining/Mineral production
١	Waste handling and disposal
-	Afforestation and reforestation

Selecting Climate-Change Specialized Graduate Schools & Support Business

In accordance with the prosperous activities related to international climate changes, we have designated and supported climate-change specialized graduate schools to broaden an educational foundation and to train experts.

Graduates from a climate-change specialized school receives research funds, job offer and any other administrative supports that would

contribute to an enhancement of national competitiveness.

Appointed Year	Name of School		
2006	Keimyung Univ.	Countermeasure to Reduce Greenhouse Gas Emissions	
	Korea Univ.	Evaluation of & Adaptation to Climate Change Impacts	
	Seoul National Univ.	Statistics on Greenhouse Gas Emissions	
2008	A-joo Univ.	Management Strategies for Climate Change Industries	
Jungang Univ.		Carbon Markets & International Negotiation	

Appointed Year	Name of School	Area
2009	Kyungsung Univ.	Policies on Greenhouse Gas Reductions
	Seoul Industrial	Management Strategy for Climate-
	Univ.	Change Industries
	Fwha Womans Univ.	Evaluating & Monitoring Climate Change
	LVVIId VVOITIdIIS OTIIV.	Impacts
	Cheonnam Univ	Carbon Markets & International
	CHEOTHAITI OTIIV.	Negotiation
	Hanlim Univ.	Statistics on Greenhouse Gas emissions

Agriculture

Practical Activities for Realizing Low Carbon Society

Operation of Carbon Points System(www.cpoint.or.kr)

According to the IPCC fourth report issued as of 2007, it's been found that non-industrial sectors, including, domestic sector, commercial sector, industrial sector, etc., have the highest potentials for reductions in greenhouse gas emissions among others, which is why we've introduced Carbon Point Systems to extend their reduction policies to such non-industrial sectors.

Carbon Point Systems are an arrangement to invite all people to participate in activities to reduce greenhouse gases emissions by granting incentives for such reductions on a voluntary basis.

Starting as part of a pilot project with local governments' involvements in Oct, 2008, Carbon Point Systems were officially put into practice as of July 1, 2009; currently, 134 local governments have participated in the project.

On top of that, the number of individuals and organizations having joined the project through the web site(www.cpoint.or.kr) amounts to 31,270; and still, on the increase.

We plan to promote the carbon emission trading market, together all local governments, where carbon credits accumulated through reducing carbon emissions can be traded. Also, we will faithfully disclose the performance related to carbon emission reductions through operating Carbon Point Systems.

Campaigns for Home Carbon Emission Reductions

We have conducted carbon emission reduction campaigns not only at the workplace but also at home. All employees who participated in the campaigns are supposed to join activities to reduce electricity and water uses, and are evaluated in their performance.

943 employees in total participated in the campaigns; their performance was evaluated by comparing the amount of usage for 4 months -July to October in 2008-with that for the same period of the previous year.

The campaigns for home carbon emission reductions enabled a decrease by 3.3% in water usage and a decrease by 0.9% in electricity usage.

Given water supply uses in Seoul and electricity uses cross the country(water: +0.2% and electricity: +4.4%, respectively) for the same period, it turned out that they turned out to be successful.

• Performance of Home Campaigns for Carbon Emission Reductions in 2008

	Reduction	Reduction	Carbon Emissions	Carbon Points	Benefits
Electricity	6,820KWh	0.9%	2,892KgCO ₂	3,971,000point	Benefits corresponding to thos
Water	1,838m³	3.3%	1,079KgCO ₂		36pine trees

Exchange & Cooperation Programs for Low Carbon Society

We entered into an agreement with Seoul News to drive out a cooperation program for low carbon society in December, 2008.

Pursuant to the program, both organizations shall engage in joint investigations and researches for developing technologies to reduce greenhouse gas emissions and use recycled energy in order to adapt to climate changes.



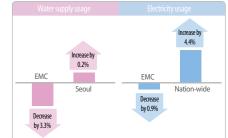
Carbon Point Website



Declaration of Low Carbon Emissions



• Comparison of Water & Electricity Uses





Good Water Management Air Quality Management Ecological Restoration Safety Management of Hazardous Substances Waste Management

Soil & Groundwater Management Technological Supports for & Adaptation to Climate Changes Development of Environmental Energ Efficient Resource Management

Development of Environmental Energy

The world's been confronted with environmental and resource crises due to climate changes and high oil price. Environmental energy plays an important role in deciding national competitiveness under such crises that could threaten human beings' existence itself, which is why a transformation of waste resource and biomass into energy has been a must

Orientations

Our core business area has shifted from waste treatment plants(incineration, landfill, etc.) to environmental energy developments. Announcing the year 2008 as the First year for building a foundation for environmental energy business, we've established TPM strategies for technological initiatives (T: technology), policy supports(P: policy) and market promotion(M: market).

"We are Leading the Eco-energy Society"

Vision	Globalized Enterprise Leading Eco-Energy Industries
Strategy	Customer-oriented + Performance-oriented
Action Plan	T(Technology): Technological Development through Exchanging Information P(Policy): Policy Supports through Memorializing the Government
	M(Market): Market Exploitation through Exchanging Technologies

Technological Initiatives

New renewable energy technologies in South Korea are 45 to 68% in level, compared with those of developed countries; especially, when it comes to such environmental energy sectors as waste resources and biomass, they're just at the stage of research or verification. The Government has drived out the Eco-STAR Project(2008 to 2014), a project to develop the next-generation environmental technologies, to secure environmentally-friendly energy(waste, reduce greenhouse gas emissions(Non-CO₂), and promote CDM projects. We've participated in developing combination systems to treat organic wastes and bio-gas generation systems as kind of an entity with general responsibilities for the project. We've been working on the installation of Pilot Plant(3 tons/ day) by selecting optimal energy production processes and developing methodologies for CDM projects, which would contribute to the development of technologies put to a commercial use. On top of that, we plan to work on developing basic and verified technologies related to environmental sectors, as through building fuel cell generation system using bio-gas, in 2009. We will be able to provide the best available technologies and systems for driving out environmental energy projects such as the construction of environmental energy towns and low-carbon green towns.

Policy Supports

Conflicts among governmental departments, or absence of legal and financial support systems is an obstacle to environmental energy businesses.

We've focused on furthering policy foundation for Best model by method to produce energy by the use of organic wastes and wastewater environmental energy businesses, as through forming & operating channels to policy supports, helping the Government make policies, and engaging in various researches and other service activities.

Research & Service Activities related to Environmental Energy

Master plan and feasibility study on the utilization of LFG from landfill facilities in the capital area as vehicle fuel

Feasibility study on energetic independence of public sewage systems in preparation for climate changes

Technologies and applications for treating waste drinking water on the ground Standards on & configurations of energy products by the use of organic wastes Feasibility study on producing energy by the use of LFG from landfill facilities of local governments. Development of a pilot model of low carbon green village

Master plan on adaptation to climate changes in Weonju-si, Gangweon-do Feasibility study on the development of environmental energy town by area

Market Promotion

In a situation where the scale of green markets is expected to get beyond those for IT and BT in the future, we've contributed to the promotion of environmental energy markets by providing Test Bed to share policy orientations and technological developments. We've tried to realize national policies for low-carbon green growth by successfully applying our so-far accumulated technologies and experiences to projects for installing such environmental energy facilities, as biomass energy facilities and generation facilities by the use of incineration heat.

• Status of Environmental Energy Generation Business

Items	Total Installed Capacity	2007	2008	2009
Biomass energy	120tons/day	-	-	1
Sewer Sludge energy	435tons/day	-	4	2
Generation by the use of Incineration Heat from Heat in Surplus during Incineration	470kw/h	-	1	1
Landfill Gas Generation	5,030kw/h	1	0	4

Efficient Resource Management

IPCC(Intergovernmental Panel on Climate Change) attributed to global warming to the anthropogenic use of fossil fuels, and prospected that such global warming will continue in the 21st century.

In a situation where mankind faces resource and environmental crises such as global warming caused by climate changes and resource and energy depletions, this is the time when an efficient use of resources is most required. We've made efforts to build a sustainable resource-cycling society through efficient resource management.

Energy Use & Reuse

In 2008, high oil price at a global scale made us try to build an efficient and systematic base for energy rationalization. We've heightened energy efficiency by spreading high-efficient equipments and powersaving office devices, and tried to encourage our employees to reduce carbon emissions at their home and by each department.

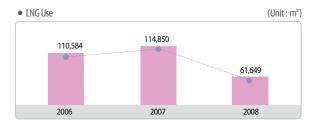
Most of fuels and electricity energy used in the EMC are used for offices and domestic waste incineration plants. In 2008, we used LNG and electricity corresponding to 61,649 m³ and 8,002 Mw, respectively, a decrease by 46.3% in fuel uses, and by 0.99% in electricity uses, which was attributable to all members' awareness toward a use of highefficient equipments and devices, and power saving.

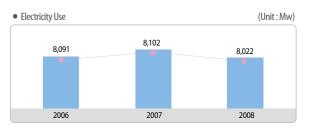
At the Domestic Waste Incineration Plant in Goyang-si have we collected waste heat produced during the waste incineration to

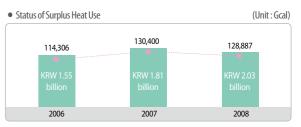
In 2008, we collected and sold surplus heat corresponding to 128,887Gcal, KRW 2.03 billion in economic value. Having focused our business competence on the development of environmental energy, we plan to increase the reuse rate of all resources on a long-term basis.

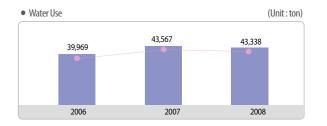
Water Use

Most of water used in the EMC is used as domestic water or for incineration facilities. In 2008, we used water corresponding to 43,338 tons, a decrease by 0.52%, compared with that of the previous year; actually, such performance is relatively lower than that for reduced energy use. For reference, there was no water reuse in 2008.







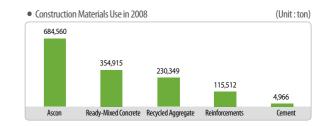


Construction Materials Use

We use lots of construction materials that are used for our activities to support the installation of environmental facilities.

In 2008, we used construction materials corresponding to 1,390,322 tons, most of which were occupied, as by ascon and reay-mixed concrete used for sewer rehabilitation projects.

Since the quantity of construction materials used varies according to construction sites or processes by year, their annual comparison won't be covered in here.



The EMC Will Become a Happy Smile on the Face of Society.

We dream of becoming a happy virus that spreads happiness all over people's heart. We will make a good being that can share our happiness with others, which, in turn, would become a bigger one, based on a social leadership.



SOCIETY

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Share Management

We've clarified social contributions as our management principle social contributions by performing our social responsibilities and duties as a public organization. As part of that, we present detailed practices through the Ethical Charter and the Regulations on Ethical Management Practices. Also, we formed EMC Volunteer, a social volunteer group with a slogan "Giving Back," to systematically drive out social activities on a continuous basis.

1,222 persons

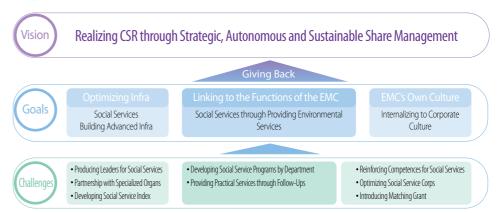
Numbers of employees that participated in Social Contribution Activities as of 2008 KRW 42 millions

Amount of social contributions b employees as of 2008.

6,616hrs

Time of social services by employees on a voluntary basis a

Strategies for Enterprise-Wide Social Contribution Activities



Operation of Social Service Corps

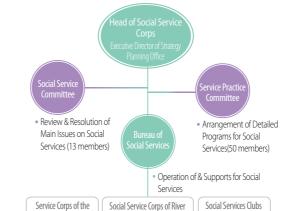
Composition of Social Service Corps

Since December, 2006 when we formed the Social Service Corps to start social service activities in an enterprise-wide way, we've performed our social responsibilities and duties. Along with a slogan "Giving Back", it tries to make a beautiful society.

With the launch of the Social Service Corps, individual and sporadic social service activities became more systematic.

Our social service corps that are separately operated by 4 river basin offices, including the headquarter, are generally managed by Service Committee. The Social Service Committee is composed of 20 members, including the





head: 4 executive members from each department(chiefs), 2 from labor union, 1 as a representative of female employees, and 13 social workers. The committee deliberate and decide important issues about social services.

Consisting of members from the headquarter and the river basin offices, the Service Practice Committee whose members manage service activities in their own department, develops service programs and items.

The General Affairs and Human Resources Department in charge of social service activities, functions as the Bureau of Social Services, manages environmental share fund, and unifies the activities that are operated and practiced by the headquarter and the river basin offices

In addition to activities focusing on monetary contributions, as to social welfare organizations, the Social Service Corps carries out activities where all employees can participate in and experience environmental protection and local community programs. With regard to that, we've also disclosed information about monthly activities on the company intranet, which can be available on the website(ethics. emc.or.kr).

INTRODUCTION
PROFILE
SM SYSTEM
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FNVIRONMENT

SOCIETY

Share Management

Win-Win Management
Transparent Management

PEOPLE APPENDIX

EMC Volunteer Fund

"Cheonmi Manmi," starting since December 2006, is a campaign where every employee voluntarily transfer contributions ranging from (KRW) one thousand to (KRW) ten thousand deducted from their salary, directly into the EMC Volunteer Fund. As of 2008, 878 employees participated in the campaign, with 83% in participation, which has made the amount of the found KRW 47.88 millions. On top of that, we've raised funds through mileage on corporate credit cards, and donations of various prize money or bonus. Currently, we consider to introduce Matching Grant system.

Social Service Activities

Supports for the Isolated

We've periodically driven out supporting activities through forming a connection with social welfare facilities. In 2008, we contributed KRW 30.44 million to 16 social welfare facilities, such as elderly/child care facilities.

Social Services through Employees' Participation

We've encouraged social services which employees can participate in and experience in person, beyond simple donations. For the purpose, we've reflected the performance of social services into their evaluation by introducing ethical index.

As of 2008, 1,222 employees participated in many service programs, such as Giving Love's Briquet & Kimchi, Bathing Services, Meal Delivery Services for children going without a meal, Blood Donations, Informatization Education Service for foreign migrant works, etc.

• Forming a Connection with Social Service Entities

Through forming a connection with social service groups, such as NGOs, we've promoted social service activities. We've also expanded such connected activities to the World Vision, the Dail Community, the Community Chest of Korea, etc. The "Health-Insurance Premium Support Project for Lower Class" involving the Community Chest of Korea, the National Health Insurance Corporation makes a good example.

Returning Environment-Related Technical Know-How to Society

We've made efforts to perform our social responsibilities as a public organ, as through returning environment-related technical know-how to society, which is consistent with our social goals and functions. In May, 2008, we dispatched professional workforce to areas infected with Al(278 area spreading over 6 cities, including Jeongeup-si) to prevent soil contamination and exterminate offensive odors. We've also improved the quality of drinking water in the rural area, such as Yeongweol, as through free technological supports for small-scale water supply systems. On top of that, we've performed other various types of social service activities, as in Taean that had suffered from oil-spilling.











Performance of Social Service Activities

Our so-far outstanding social service activities are recognized by various organizations from which we're given various prizes; especially, in December, 2008, our social service team appeared on a TV program called FKBS We Love Agriculture₄.

• Award Portfolio Related to Social Service Activities

- /twuiui	of tiolio ficiated to Social Service fictivities	
2007.8	Won Grand Prize in the part of Social Services, Beautiful Korean Enterprise	Yeonhap News, Newsys
2007.12	Was selected as the Best Social Organization in Seo-gu, Incheon-si	Seo-gu District Office, Incheon
2008.8	Worn Special Prize in the part of Social Services, Korea Social Services	Korean Journalist Forum
2008.12	Won Grand Prize in the section of Social Services, Beautiful Korean Enterprise	Hankook Ilbo

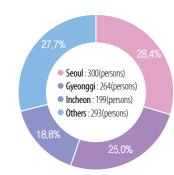
Supports for Local Communities

Since we moved the headquarter from Seoul to Incheon in July, 2008, we've contributed to the development of local communities; the rate our employees' reside in Incheon increased from 3% to 18.9%(199 families). We've also operated various programs that could benefit all members, based on our awareness toward a harmonious coexistence with local communities and businesses. We will continue to grow together with them.

Various Exchange Programs with Local Communities

We've promoted various types of social services, such as supports for lower classes in local communities, and environmental protection activities in collaboration with local governments, local welfare groups, and any other related organizations. We've also contributed funds that will be used for the management of the handicapped's welfare facilities, supports for elderly/child care facilities, etc., along with providing non-financial supports, such as holding parties or drawing portraits for olders.

A program called "On-the-Field Learning with Children", which has been held on the 4th Saturday of every month, won us so called the "Excellent Program" from Incheon-si, in 2008. We've made efforts to spread an environmental awareness through environmental education programs to volunteers of the Volunteer Center. And we've also led in furthering a pleasant environment through cleaning activities on paths up a mountain or side walks.





Convenience Facilities for Local Residents

Environmental Research Complex within which the EMC is located, serves as kind of a park where the family and children can play and rest every weekend. We also open sports facilities inside the complex every weekend, such as soccer field and tennis court, to provide health and leisure to local residents. In order for visitors to the EMC not to feel uncomfortable, we've run shuttle buses.

One-Company-to-One-Village Campaign

We've supported rural area through a campaign, so called "One-Company-to-One-Village," to promote exchanges between the urban area and the rural area, and support an agricultural development. Since, in June, 2005, we entered into One-Company-to-One-Village relationships with Gaekhyeon Village, Paju-gun, and, in November, 2007, with Deilgol Village, Yeongweol-gun, we've engaged into various supportive activities, as through arranging a direct trading of agricultural products, and supporting helping hands for agricultural activities and environmental and information educations for elementary schools.

Since 2005 when we started those supports, we've contributed KRW 25.3 million's worth, as through giving related products, and mobilized 1,170 supportive hands, as to help with agricultural activities and joint-hold local events, etc.

Supports for Areas near Environmental Infrastructure

We've operated about 100 construction sites in relation to activities to build environmental infrastructure. Pursuant to the project plan to carry out those activities, we've worked on a thorough impact assessment over construction-to-follow-up stages. We've also had interests in local concerns by enhancing communication and building partnership-based relations with local communities; in 2008, we hired 97 local residents, and supported scholarships corresponding to KRW 10 millions, along with 220 helping hands.

• EIA in 2008

ltem	No. of EIA
Review of Pre-EIA	18
EIA	6
Review of Post-EIA	4
Public Hearing	11

Share Management Win-Win Management Transparent Management

Win-Win Management

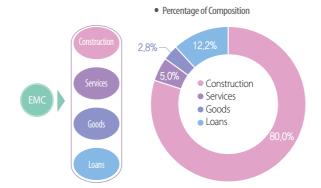
For us, suppliers are not only a contractual relationship, but also a partner for a sustainable coexistence. We've made various systematic and institutional efforts to build a fair and transparent relationship with them over the entire contractual process, and had lots of interests in supportive policies for small-/medium-sized enterprises.

Relations with Suppliers

Relations with suppliers can be divided into three part: construction, services, goods and loans.

As 2008, relations with them in terms of financial aspects amount to KRW 1 trillion, most of which construction part occupied, 80% in total:

ltem	Construction	Services	Goods	Financing
Amt. (KRW 0,1 billion)	8,600	540	301	1,313
Percentage(%)	80.0	5.0	2.8	12.2



Transparent Contractual System

Transparent Bidding & Contract Process

For all cases of contracts with more than KRW 20 million in the amount of procurement, we call for public tender. For procurement with more than KRW 0.1 million and less than KRW 20 million, we can select a supplier based on a comparison of price offered. Cases

of construction contracts with more than KRW 30 billion or goods with more than KRW 50 million shall be subject to a separate supply contract based on a thorough transparency.

When it comes to contracts ad libitum, we've strictly followed the Contract Act. With regard to price negotiations during the contracts ad libitum, we've adopted contracting by not an on-a-pay-a-visitbasis negotiation but an e-negotiation.

 Status of Contract Ad Libitum 			
ltem	2006	2007	2008
Contract ad libitum/total (no. of case)	100/320	68/285	36/218
Percentage(%)	31.3	23.9	16.5

Expansion of E-Bidding

We modified a bidding method for "Contract by Negotiation" from direct bidding to electronic bidding as of July, 2008. In this way, we've called for all bids to be based on electronic bidding, exception for simultaneous bidding with technology/price separated. Along with the expansion of electronic bidding, the efficiency of the procurement department in charge of contracting have got enhanced, so that possible frauds could be prevented.

E-Contracting System

To reduce social costs generated during the contracting and expand a base for e-commerce, we've introduced and operated e-contracting

In 2008, E-contracting rate increased to 99.5%, compared with 44.9% in 2007, which suggests that those systems have been rooted.

Since the EMC is located at a place difficult to get to in person, it's believed that the e-contracting systems brought convenience to customers, along with a decrease in social costs.

E-Contracting System

	2007		2008		
ltem	E-Contract (no. of case)	Percentage (%)	E-Contract (no. of case)	Percentage (%)	
Goods	62	59.6	33	100	
Services	54	35.8	155	99	
Construction	12	40.1	29	100	

* Goods: Limited to the case with more than KRW 5 million

Hearing & Reflecting Supplier's Opinion

To increase transparency during the contracting, we've reformed our routine systems and practices by hearing and reflecting suppliers' opinions. For example, there has been complaints from suppliers that the Project Session related to bidding causes costs and inconveniences to them, which is why we decided to abolish it.

We'll be always open to suppliers' reasonable requests or opinions.

Integrity Contracting System

We've operated Integrity Contracting System since 2002 to eradicate unfair practices, such as illegal prearranged bidding, bribery, etc., during bidding, contracting, or post-contracting. We made sure that only suppliers having submitted the Written Compliance with Integrity Contract could participate in bidding; actually, we exchange the written compliance with a supplier during the contracting.

In addition to that, we've adopted and applied "Special Notes to Integrity Contract Bidding" and "Special Terms & Conditions on Integrity Contract Performance" since 2006, which provide limitations to bidding, contract termination, contract cancellation, etc., in case that a supplier has violated them.

Policies on the Protection of & Supports for Small-/Medium-Sized Enterprises

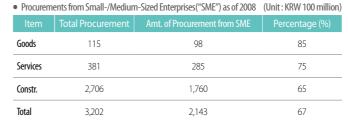
Expansion of Small-/Medium-Sized Enterprises' Participation & Fair Sub-Contract Management

To expand opportunities for bidding for small-/medium-sized enterprises, we've restricted participation per company to 50% in package bid for a largescale construction, and made it compulsory for small-/medium-sized enterprises to participate. We've also limited the participation of a consortium consisting of large enterprises alone to relieve a polarization of construction industries through encouraging a fair competition.

We've protected the rights of sub-contractors in accordance with the Basic Act on Construction Industries and the Act on Fair Sub-Contract. For the purpose, we made sure that any modified construction shall be notified of a sub-contractor within 7 days, with a notice of cash in advance within 15 days, by the supervisor, not to cause any disadvantage to the sub-contractor.

Prioritized Procurement from Small-/Medium-Enterprises

To offer realistic supports to small-/medium-sized enterprises, we've procured their products among others. The department in charge of procurement has made efforts to expand those practices through holding a explanatory session for public procurements. As a result, the rate of procurement from small-/medium-sized enterprises increased from 56% in 2007 to 67% in 2008. We'll expand the practices in an enterprise-wide way.





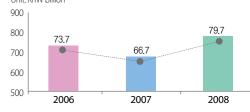
Financial Supports for Small-/Medium-Sized Enterprises

• Financial Supports for Environmental Improvement Fund

We've financially supported the environmental improvement fund with a low rate of interests to small-/medium-sized enterprises that want to install facilities to prevent environmental pollution.

Unit: KRW billion

• Amt. of Loans to Private Enterprises



		2006	2007	2008
Large	No. of enterprises	11	12	9
Enterprises	Amt. (KRW 100 millions)	164	131	117
S&E	No. of enterprises	123	157	193
Enterprises	Amt. (KRW 100 millions)	572	536	680

Proritized Loans to Small-/Medium-Sized Enterprises

We've executed proritized loans from the environmental improvement fund to small-/medium-sized enterprises.

As a result, the execution rate of the environmental improvement fund amounted to 85%, contributing largely to promoting the installation of facilities to prevent environmental pollution in small-/medium-sized enterprises.

Fair Trading

We've never violated the Act on Unfair Competition & Anti-Trust during the reporting period.

Win-Win Management Transparent Management

Transparent Management

A realization of a clean company without any corruption is the greatest theme to every public organization aim for. We've complied with the OECD Anti-Bribery Convention and operated many anti-corruption practices. In this way, in 2008, we had no occurrence of corruption incidents. The transparency level evaluated from government showed a great improvement, which suggests that our efforts to prevent corruption and irregularity is now bearing its fruits.

Policies on Corruption Incidents

We've dealt with corruption incidents very rigorously. When it comes to corruptions corresponding to a category of "strictly prohibited," such as bribery with money and entertainment, a person who has possibly committed such action is excluded from

every type of prize and punished by the forfeit of piece rate, suspension of payment, cancellation of prize, etc.

We found one case of violation in 2006, and 2 in 2007; we punished responsible persons in accordance with related regulations on punishment. Also, the Ethical Management Committee has given 100 hours of social services, displaying its intention to eradicate those corruptive actions. By this way, we had found no violations in 2008.

 Status of Punishmen 	ts in Non-Complia	ince with COC
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Year	No. of & Reason for Punishment	Punishment
2008	-	-
2007	Monetary reception (1) Reception of valuable stocks(1)	Suspended from office Reprimanded
2006	Usurpation of Public Money(1)	Dismissed(criminal suit)

Efforts for Anti-Corruption

Internal Whistle-Blowing

We've operated whistle-blowing system to prevent possible frauds through the settlement of healthy reporting culture. The system is web-based to secure a whistle-blower's anonymity.

Especially, in 2007, we established the "Bylaws on the Protection and Compensation of Whistle-Blower, to reinforce the level of compensation for a whistle-blower. Every process from register to punishment are standardized and the whistle-blower has access to

Its divided into 4 categories as Clean Denunciation, Irregularity Denunciation, Illegal Sub-Contract Denunciation and Self-Denunciation of Bad Work. Everyone can apply for it at our website (ethics.emc.or.kr).

Violation of COC & Corporate Ethics, Cases of Illegal Contracting, Improper Practices, etc.

oloyees/People Office of Audit & Inspection Written Notice to Whistle-Blower or Tipper of Reception

Verification & Investigation within Given Days by Case Received

Taking Measures within Given Days after Receiving Report from COC

Prohibition of Political Activities

Our 54th article of Human Resource Regulation is prohibiting the political exercise of employees and according to prohibition of political donation, we haven't ever politically donated.

Education Programs for Integrity Improvement

We are running cyber, invited and entrusted education to improve our transparency and create a company-wide sympathy on realization of clean company. We are also offering many informations such as national/international tendency on ethical management, position of officials, etc.

In 2008, 1,879 personnel participated on education program. The course time per each employee is 4.8 hours, which means 7% of total.

Self-Examination of Corruption Level

We are running self-examination to be aware of existent danger of corruption in group or individual

In 2008, the result was 1.38 for individual and 3.17 for group, showing that it's in safe level. The result of examination is saved as Raw data for management of ethical risk. We are managing those data more safely, index-izing it.

• Results of Self-Examination of Corruption Level in 2008



Reinforcement of Transparency in Construction

The support project for installation of environmental installation is the main project of the company that occupies 47% of workforce and 58% of budget. Therefore, the improvement of transparency on this project is colligated to the transparency of whole company. We've made efforts to break irrational traditions of construction industries, leading it into improvement of construction quality.

Transparency Workshop for Superintendents of Construction

We have 93 construction fields of environmental installation and there's 350 superintendents in the field. So it's true that the risk management of the head office isn't too strong

To overcome this situation, we are holding twice on a year a Transparency Workshop with Chairman, Auditor and General Manager. In 2008, 301 superintendents participated on the Workshop.

Expansion of Private Participation

• Ceremony of appointment for Honored Audits

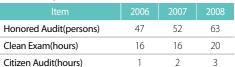
To assure our transparency, we are expanding private participation such as local residents, private specialists and NGO into deliberation of changes on project and permit on

Also we are hiring external experts on the internal audit, fortifying public supervision and recognition of clean work.









Participation of Citizen Audit on Internal Audit



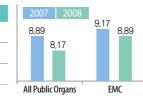
Integrity

We are measuring our clean level in two ways: the clean level investigation by Anti-Corruption & Civil Rights Commission and the clean level investigation for process of real-time complaint by our own.

In 2008, we had obtained good evaluation from Anti-Corruption & Civil Rights Commission, with 8.89 points. Due to new method of evaluation, in this year we had 0.28 point of decrease. But it means increased clean level in realistic terms, because the average decrease level was 0.72, bigger than our decreasing rate. Therefore, our position on ranking for organization's type increased highly from 22nd position in 2007(40 organizations) to 9th(38 organizations).

Result of Integrity Evaluation of Public Organizations

ricourt of integrity Evaluation o	result of integrity Evaluation of Labite organizations				
ltem	2007	2008			
Clean Index of EMC	9.17	8.89			
Total Organization's Clean Index	8.89	8.17			
Our Clean Position	22/40	9/38			



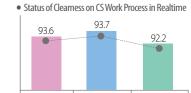
• Integrity Index in 2008

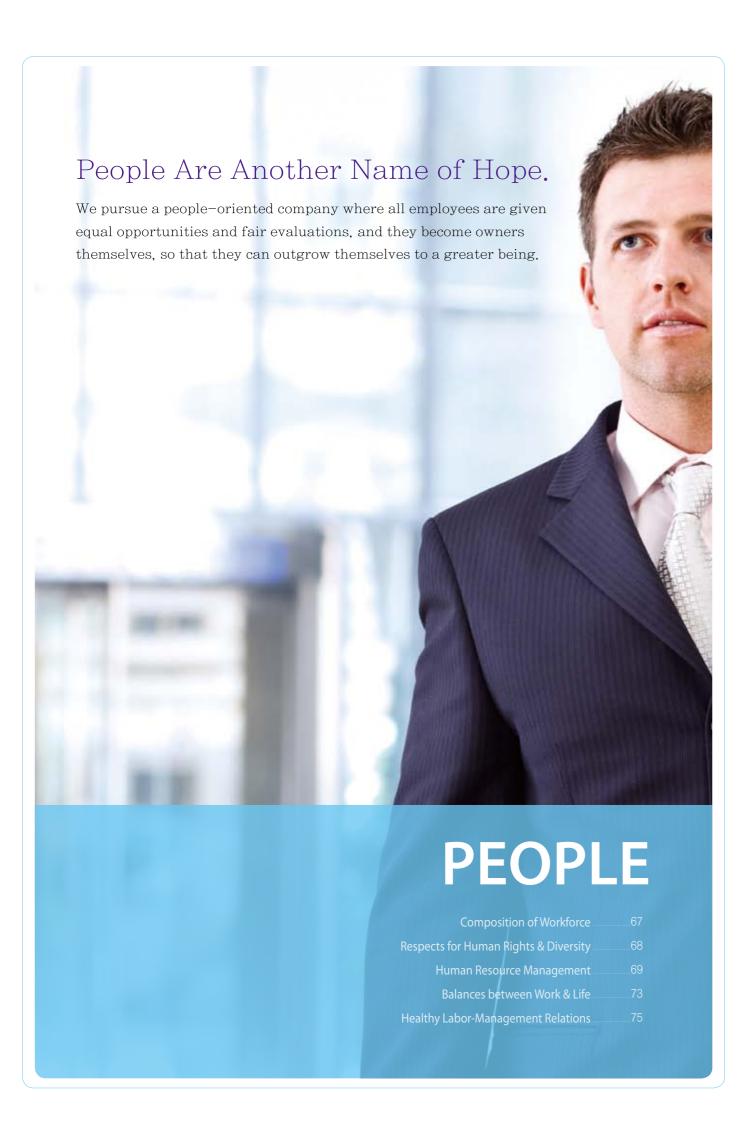
EMC	Total	Comparison
9.58	9.10	+0.48
8.07	7.88	+0.19
8.53	8.30	+0.23
	9.58 8.07	EMC Total 9.58 9.10 8.07 7.88

Every customer who visit us are evaluating our clearness on work process.

Each client access to exclusive network to evaluate clearness, fairness and fastness. The result is indexized to be managed by us.

In 2008, the average score was 92.2 and it's excellent, but with decrease of 1.5 point in comparison to the previous year.





Composition of Workforce

Open Employment

Our employment system is based on open competition tests. Special employment is only reserved for people eligible for employment protection or when it's required by related laws. We abolished any employment limitations by age, academic background, specialty, etc. to realize the goals of open employment system focusing on one's abilities. To assume our social responsibilities, we've also realized a principle of social equality by allocating a specific quota for employment to women, local workers, works with a major in science or engineer, the handicapped, etc.

Employment Status

As of 2008, the number of our employees number increased to 1,058, including 5 senior executives, showing a increase by 18 employees(1.7%). On top of that, we maintained 296 workers on a temporary basis.

Female workers amount to 135, occupying 12.8% of total workers, which suggests that their employments are on the increase. We recruited 47 workers in 2008. a large decrease compared with the previous year; however, it's expected that the future recruitments will increase along with an expanding green-growth industries and an increasing environmental demands. An increase in entry-level employees has reduced average age and working years for all employees. But the turnover rate was 1.4%, which suggests a stable employment

We've satisfied the legally-required rate in employment for women, the handicapped, local workers, and workers with a major in science and engineering who occupies the largest part of all employees.

ltem	2006	2007	2008
Employees	913	1,040	1,058
Workers on a temporary basis (person, percentage)	191(20.9%)	197(18.9%)	296(28.0%)
Female employees (person, percentage)	100(11.0%)	129(12.4%)	135(12.8%)
Entry-level employees (person)	123	171	47
Job creation rate (percentage)	6.7	13.9	1.7
Average working years (year)	8.7	8.3	8.9
Average age (year)	38.3	37.6	38.1
Turnovers (persons)	58	42	14
Average turnover rate per year (percentage)	6.4	4.0	1.3
Handicapped (person, percentage)	24(2.6%)	23(2.2%)	28(2.6%)
Local graduate employees (person, percentage)	525(57.5%)	608(58.5%)	622(58.8%)
Employees with a major in science or engineering (person, percentage)	765(83.8%)	884(85.0%)	905(85.5%)
Retired workers (person)	6	7	8

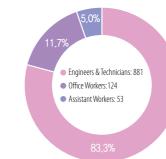
Job creation rate={(No. of total employees for the year-No. of total employees for the previous year)/No. of employees for the previous year}x100

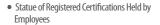
Average turnover rate per year=(No. of turnovers per year/No. of all employees per year)x100 (retired employees excluded) The status of local workers is based on graduates from local universities

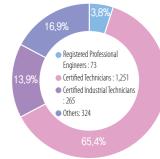
Status of Human Resources

We've largely maintained 3 job groups: office workers/ knowledge & technology workers/assisting works. To put them in terms of work groups, technology workers, including those engaging environmental, civil, and mechanic works, occupy the most part of workers, 881. We've operated 8 types of grades in employment, in which system entry-level employees with 6-in-Grade(director); actually, it takes about 18 years to make it to 1-in-Grade, beginning with 6-in-Grade. All employees whose average wages, as of 2008, amounted to KRW 47.96 millions, are subject to the same wage system. The amount of minimum wage for entry-level employees is KRW 27.15 millions in 2008, which suggests 2.87 times as many as that of legal minimum wage, KRW 9.45 millions per year (KRW 3.77 thousand per hour on a basis of 209 hours per month). The number of registered certifications held by all employees totalled up to 1,913, 1.81 per employee.

• Workforce by Job Group







• Status of Employees in Grade & Average Wage

ltem	Senior Executives	1-in- Grade	2-in- Grade	3-in- Grade	4-in- Grade	5-in- Grade	6-in- Grade	7-in- Grade
No. of Employees	7	28	77	169	255	264	233	25
Amt. of Wage (KRW Mil.)	93	76	66	56	47	36	31	33

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Respects for Human Rights & Diversity

We've had respects for human rights and rejected any types of discriminations against gender, region, religion, politics, or social background. All employees will be given equal opportunities. We've pursued the protection of socially vulnerables and their rights.

Efforts to Protect Human Rights

We specified in Ethical Charter that we will try to "respect all executives and employees' own personality, and have no discrimination among them and give fair opportunities and evaluations to them." On top of that, we've complied with the ILO Conventions (NO. 111 of the Convention of the Elimination of All Forms in Employment) to secure all employees' competence and remove any kinds of special favors. We've operated the Sexual Harrassment Ombudsman Committee (SHOC; 6 members) in order to prevent any occurrences of sexual harrassment; actually, we've maintained two Sexual Harrassment Officials (SHO), as at the headquarter, river basin offices, etc. (12 in total).

Every employee has to take educational programs for the prevention of sexual harrassment. When it comes to the SHOC members and SHOs, they have to follow courses given by specialized institutes, such as the Korean Institute for Gender Equality Promotion and Education, which would contribute to the protection of female employees' human rights.

Gender Equality

We've eliminated any discriminative actions in employment, promotion, job operation, etc., which is why we've focused on enhancing the female employment rate each year. As of 2008, the number of female employees amounted to 135(12.8%), a relatively lower rate compared with other public organization, which is attributable of the nature of activities we engage. But, when it comes to office workers, we recorded 29.3% in female employment rate; actually, their employment has been on the increase for the last 3 years.

Every employee, irregardless of their gender, is subject to the same wage system in accordance with the "Principle of Same Wage for the Same Work Value". We have no discriminative elements in promotion or award.

However, for the purpose of gender equality, we've operated preferential policy for female employees, which isn't, generally, considered as a gender discrimination.

Protection for Maternity

We've operated various systems for the protection of maternity in accordance with the Act on Gender Equity in Employment, which is specified, as in our regulations on employment, personnel, collective bargaining, etc. To protect maternity, we've granted 3 months of paid maternity leave, temporary retirement for nurturing at one's own requests, break rooms for maternity protection, etc.

We've also paid nurture allowances (for female employees with a child under 6 years) since 2007, in response to an advance toward a low birth/aging society; especially, we installed nurturing facilities to offer a safe protection to them and their children.

Status of Female Employees

ltem	2006	2007	2008
Female employees (person)	100	129	135
Rate of female employees (%)	11.0	12.4	12.8
Female entry-level employees (person)	21	31	11
Female managers (persons)	5	9	12
Rate of female managers (%)	0.55	0.87	1.13

• Status of Maternity Protection System

status or maternity i rotection system					
	2006		2008		
Maternity Allowances (KRW millions)	-	369	408		
Nurturing Allowances (person)	-	344	342		
Maternity leaves (person)	2	9	5		
Nurturing leaves (person)	-	3	5		

Prohibition of Children Labors & Forced Labors

We don't employ those under 15 years in age (and under 18 years in age for those who attend a middle school in according with the Elementary & Middle School Education Act) in accordance with Articles 64 & 70 of the Labour Standard Act, which is why there happen no children labors at the EMC. Also, all employees have to sign an employment agreement with their own free will, pursuant to our regulations on employments, which is why any forced labors couldn't be found.

Respects for Diversity

We've made efforts toward a socially equal employment to protect various social classes.

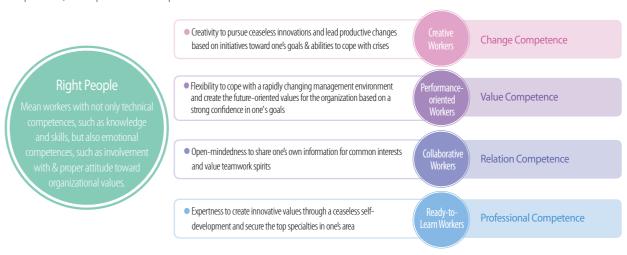
	Handicapped		Local Graduates	Sci-Engin.
2006	1	21	71	106
2007	-	31	109	158
2008	2	11	27	36
Total	3	63	207	300

Human Resource Management

In a situation where corporate competitiveness n mega trends toward informatization and globalization in the 21st century depends on core talented workers, we've solidified a base for sustainable growth by securing global talents that will lead future environmental industries, based on a personnel principle focusing on performance.

Competency Model

We've maintained a competency model to identify desirable employees others can benchmark. Our ultimate competency model is concerned with "Right People," which means qualified people with such not only technical competences, such as knowledge and skills, but also emotional competences, such as conformity with organizational values and attitude suitable for an organization. To implement the purpose, we've demand all employees equipped with: A creative and innovative competences; A performance-/value-oriented competences; A cooperative and relational competences; and A professional competences.



Principles of Human Resources Management

To produce human resources suitable for an organization and give motives to them, more objective and fair personnel principles are required. We've operated basic principles: ▲human resources management focusing on performance and competences; ▲Transparency and efficiency in personnel operation; ▲ and maximization of employees' values through competence development

Human Resources Management Focusing on Performance

For human resources management focusing on competences and performance, objective evaluations and differential compensations are required. For the purpose, we've introduced Multi-Faceted Evaluation System in 2002, which would help secure fairness and objectiveness in evaluating performance.

To objectively manage performance, we've built and operated BSC Performance Management System, and applied annual on-a-basis-of-performance wage system to executive officials (1-in-Grade & 2-in-Grade).

Actually, we've enhanced employees' receptiveness through human resources management focusing on competences and performance.

Transparent & Efficient Human Resources Management

We've operated Mutual-Agreement-Based Job-Positioning System where job positioning by a department chief of his/her members is based on their mutual agreement before they've been actually positioned at a specific job. We've also maintained job rotation system based on the consideration of works one want to be positioned at, compensation, working conditions, career, etc. To develop and reinforce individuals' career and specialities, we've established CDP(career development program), and, thereby, proposed career paths to employees.

Maximization of Employees' Values through Competence Development

To encourage employees to purse their self-development and competences, we've operated educational programs by competence based on a survey to identify educational demands, which is carried out on an annual basis.

In 2008, we newly established education and training systems that were divided by organization, job hierarchy and job competence through competence model analysis

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Reasonability in Human Resources Management

We've operated a reasonable human resources management system through kind of life-cycle, ranging from entrance to retirement, in order to systematically culture the competences of groups and individuals, and, thereby, bring a harmonious coexistence between organizational productivity and individual competitiveness.

Our reasonable human resources management systems are consistently and organically involved with:

- ▲Recruitment; ▲Selection; ▲Placement; ▲Training;
- ▲ Promotion & Succession; and ▲ Retirement.

• Building organizational & individual evaluation · Building systems to develop workers meeting individual and organizational needs Disinterested and objective evaluation Training and education in accordance with CDP Operating job posting system Building performance-/competence-oriented · Job rotation based on one's preference Strategic compensations based on performance Inh incentives

Recruitment & Selection

No limitations are allowed against gender, age, academic background, specialties during the recruitment. Bute we give specific extra credits to those with good language skills or any other official registered certification to realize recruitment focusing on competence and ability. We've also introduced essay-type tests and presentation tests to verify applicants' liberal knowledge and ability to solve problems, and improved fairness, as through carrying out blind interviews and inviting external experts to participate in those interviews.

Job Placement & Job Positing Management

Entry-level employees are placed to a specific department based on the • Satisfaction of Employees in Positioning considerations of works they want to engage in, areas they're good at, and their 5point | Unit:mark educational performance after they have completed some education and training courses during the given period. Periodical job re-positioning occurs twice per year: February and August. Partial job re-positioning. if necessary, are sometimes carried out. When it comes to job positioning, we focus on one's career paths and works 2point he/she want to engage in. We've also enhanced employees' satisfaction, as through mutual-agreement-based job-positioning system and job rotation system.

With regard to positions which require experiences and special knowledge, we've introduced and operated job posting system.

2006

Evaluation & Promotion

We've evaluated individual performance once per year for the purpose of job performance management, on a multi-faceted basis. To minimize possible errors during the evaluation, we go through a review by the Personnel Committee and the Evaluation Adjustment Committee.



Education & Competence Development

We've made efforts to reinforce employees' competences by establishing strategies and education programs for culturing human resources; especially, in 2008, we built a base for systematically managing and developing those competences, through deriving out required competences by the use of competence modelling.

Retirement management

As of 2008, the number of retirees was 22, of which 8 retired under the age limit; for the future 3 years, additional 25 employees will have retired. We grant will-be retirees 90-day leave in recognition of their distinguished services, so that they can prepare and plan a post-retirement life. In addition to that, we support such services as asset management design, business start-up consulting, and other outplacement services.

• Status of Retirees & Will-be Retirees

Item	2006	2007	2008
Retirees (person)	6	7	8

MILL Date ()					
Will-be Retirees (persons) 11 10 4	Vill-be Retirees (persons)	11	10	4	

Qualified & Competent Human Resources

Based on the thinking that human resources functions as a growth drive and enterprise-wide competitiveness to create the future environmental values, we've built and reinforced a base for sustainable development through a variety of systematic human resources programs.

Human Resources Education Systems

We've worked on competence-based human resources management by building competence model(common competence, leadership competence, job competence) and implemented FEMC Talent Rearing System, in order to rear talented human resources which conform with organizational values and goals

For the purpose, we've operated educational programs based on three types of competences: common competence, leadership competence, job

On top of that, we've defined the types of experts in related to 33 job groups required for our sustainable development, based on management strategies and job analyses by hierarchical function, and developed and proposed career paths by measuring individuals' current competences, which would help satisfy their desire for growth and create a voluntary and efficient educational environment.

- Core competence to realize mission and vision
- Competence all workers have to commonly secure • Used to set personnel vision & model workers



- Competence that has to be secured by hierarchical role • Offering competence required by 4-level hierarchical role
- through mapping job positions with leadership levels



- Knowledge, attitude and skills required for job engagements
- Offering 71 types of competences through job competency modeling after identifying 33 jobs by the use of job grouping

Organization for Rearing Talents

To culture talented and competent human resources and heighten their developmental efficiency and expertise, we've operated educational systems that fit into each function and role. Human Resources Team is in charge of general affairs related to employees' education, including establishment and operation of enterprise-wide educational systems, competence analyses, educational performance management & evaluation, etc. Creation & Innovation Team engages in the education of strategic management processes, such as 6-sigma, TRIZ, CSM, CM, etc.

When it comes to other field operation teams, they operate their own education to determine key performance indicators and required job competences, and secure those competences through job analyses by each



- Human resource strategies, competency analysis
- Enterprise-wide education programs
- Combined analysis and evaluation of achievements

- Operation of strategic management education
- Linkage to the evaluation of innovative performance



- Identification of required competences through job analyses of field operation teams in charge
- Self-education planning and execution



We've established education plans for the current year by analyzing the performance of education and training programs and identifying employees' needs. Annual educational programs derived out through reflecting such needs, including demands from each field operation teams, are conclusively confirmed by the Chairman.

Since 2008, we've operated a system to complete given educational courses. In accordance with the system, all employees have to establish selfdevelopment plan, containing education period, curricula, methods, etc., and then complete courses which can serve their own purpose, among about 3,500 educational programs provided by the EMC, as through reading communication, attending, the web, etc. Their results and progresses are managed through MIS; actually, they're used as a basis for evaluation, promotion and job positioning.

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Educational Training Program

We've operated 598 educational courses that are designed on a basis of common competence, leadership competence, and job competence, in accordance with competence modelling.

• Educational Programs that Fit into Needs by Competence

ltem			Con	nmon	Compe	etence			Lea	adershi	ip Competence					Job	Comp	etence	<u> </u>			
Item	Ва	sic Cou	irses		Ac	dvance	d Cour	rses	Basic Cou	ırses	Advanced Courses		Bas	ic Cou	rses			Adv	anced	Cours	ses	
Environmental Biz									CFO.)rgans	Management Mind											
Leader									Leadership Course	Public (Setting Vision						Ħ				95	
(the Management)									conise	urse for							/ironm				rsCour	
Value Creation			80					_	Advanced	Advanced Manager Course for Public Organs	Setting & Sharing Goals	6			1		Course on Educational Institutions Specialized for Environment				Overseas Training & Master's/Doctor's Course	
Leader (Staffs in Grade 1	ment	ucation	ore Válu	ation	5			ducation	Manager Leadership	ced Mar	Setting Vision	Educati					cialize				, Master	8
to 2)	Ethical Management	nentEd	lizing (Expertise Education	Educati			tation	Course	Advan	Leadership Training	guage	99	dno.	ourse		55	cation	ලි		sining 8	A Cour
Performance-	Ethical	Sexual Harassment Education	Sharing & Internalizing Core Values	Expertis	Creativity Education			Customer-Orientation Education	Intermediate		Planning	-oreign Language Education	Basic Environment Course	Common Course by Job Group	Internal Auditor Course		stitutio	Communication	n-Company Education & CoP		rseas Tr	Domestic Doctor's Course / MBA Course
Oriented Leader (Staffs in Grade 3		Sexual	naring 8		5			Custom	Manager Leadership		Solving Problems	Forei	ronme	ourse by	emal A		ional		y Educa		Š	's Cours
to 4)			S						Course		Systematic Thinking		sic Envi	non Cc	Ĕ		Educat	Syber & Reading	mban	5		Doctor
Self-									Self-		Self-Management		ä	Com		for inistration	use on	Cyber 8	<u>=</u>			mestic
Development (Staffs in Grade 5									Leadership Course		Teamwork-Oriented					Basic Course for Environmental Administration	S					2
to 6)									2.2000		Improvement Awareness					Ba Environm						

Educational Achievements

6,409 persons

32.02 hours

KRW **8.85** millions

No. of attendant at educational programs in 2008

Time of trainings per person in 200

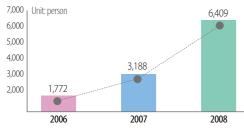
Every employee is required to attend educational courses during the given period in accordance with the Self-Development System since 2008, which is used as a basis for promotion, and attributable to an applicable department chief's commitment.

In 2008, 6,409 employees participated in various educational programs, which implies an increase by 101% when compared with the previous year.

Education is the most valuable investment for the future. We've systematically established the mid-/long-term educational plans, such as experts' programs, educational courses by work type, by expanding investments in educational costs.

In 2008, investment in educational programs amounted to KRW 880 millions with an increase by 23% when compared with the previous year, which corresponds to KRW 0.88 per employee, an increase by 31%, when compared with the previous year; actually, those educational and costs amount to 1.51% of total wages.

• Number of Participators



• Educational & Training Costs

0.9 Unit: KRW billion 0.885

0.702

0.6 0.368

Operation of Self-Initiative Learning Groups

We've encouraged employees to participate in Community of Practice(CoP); especially, in 2007, we opened CoP communities at Knowledge Management System, which aimed to build a systematic abase for carrying out learning activities on-line and share learning performance. As a result, activities related to CoP has substantially increased.

CoP Activities

Division	2006		2008
CoP Opening (no. of openings)	79	90	125
CoP Participants (no. of participants)	842	1,626	2,868
Performance Postings (no. of postings)	-	5,189	3,790
Hits on Postings (no. of hits)	-	37,898	31,766
Visits to Communities (no. of visits)	-	40,828	68,516

Balances between Work & Life

The creativity and competitivity of employees emerge from harmony between their life and work. EMC is running various types of welfare and WLB program for their healthy and happy life. Also through family-friendly management, we are making efforts to not only improve employees' life, but also family's life.

Benefits and Welfare

We are running "Life support welfare program" that fits to life cycle of each employees. We are supporting in many forms of benefits and welfare such as life settlement, education, medical/health, work environment, etc.

Benefits & Welfare

Items	Contents
Legal Welfare Benefits	• 4 legal insurances(national pension, health insurance, employment insurance, industrial disaster insurance)
Life Stability Benefits	• Loans for life settlement(household economy) • Loan for house expenses through agreement with a financial organization(Shinhan Bank)
Education	• Supports for education cost of sons in middle/high school and loan for tuition fees for university students • Self-potential development
Medical/health	Medical check-ups every year Group disaster insurance for employees
Working Life	* Dormitory for employees * Shuttle Bus * Support for clubs * Uniform supply
Welfare Facilities	Nurture equipment inside of company Leisure equipment Sport equipment(health club, soccer field, tennis court, ping-pong tables)
Flexible Benefits	Composed of items such as culture activities, family-friendly, leisure, health management, self-development, etc.

Supports for Welfare

The benefits and welfare cost per each person was KRW 2.44 millions in 2008, which means 11.7% of increase compared to the previous year. We also paid KRW 3.34 billion as legal benefits and welfare and KRW 1.47 billion for welfare device and work environment support.

Flexible Benefits Program

We introduced and now running Flexible Benefits Program since 2006, in order to improve existent benefits program offered unilaterally from company into an efficient program with manifest of employees' needs.

This is a system that reconsider employees' satisfier, making them choose freely in certain extent.

In 2008, the flexible benefit expenses amounted to KRW 1.7 million per employee, and in KRW 1.68 billions in total. This means 13.3% of increase and only applies to regular employees.

	Items of Flexible Benefits Program
Essential	Group disaster insurance for employees
Selective	Health check-up and treatment, self-development, family-friendly, leisure, health care, culture life, books, etc.

Internal Work Welfare Fund

We established and now running the Internal Work Welfare Fund since 2005, in order to grow our employees' real earnings and inspire the work and group consciousness.

The Internal Work Welfare Fund is composed by corporative profit(under 5% of gross profit) to be used as fund for life settlement and increase of welfare of employees.

The deposited amount in 2008 was KRW 4.65 millions, and total amount, KRW 13.39 millions.

Retirement Fund

We are managing retirement fund supply account to guarantee our employees' stable living. In accordance to group agreement and law on guarantee of employees's retirement fund, we are adjusting the retirement fund every year.

Beside it, in order to complement weakness of actual retirement fund system and provide for their old age, we are examining introduction of retirement pension system.

Therefore a TFT of company-labour was formed in October 2008 and, according to consult result, we will introduce retirement pension system in 2nd period of 2009.

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Family-Friendly Management





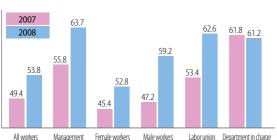


We introduced, since 2007, Family Friendly Management, in order to promote self-development and support household affairs, besides change of traditional family role-model such as increase of double-income couples. Therefore, we are running various family care programs such as children environmental experience, family proposal, invitation for new employees' parents, aptitude tests for employees' children, etc.

Specially, in 2008, we are running many supportive policies such as maternity allowance, installation of nursery school and resting room for maternity protection in order to live a life where work and family harmonize each other. We are making efforts to not only for individual development but also for development of group performance, through the work & life balance.



Win-Win Management for the EMC, its Employees, and Society



We are studying for family-friendly index every year in order to recognize and activate the level of family friendly management. We are studying by many classes to perform an objective study. In 2008, the study performance was 53.8 points, increasing 4.4 points(8.9%) compared to the previous year.

The satisfaction of management was higher (63.7 pts) and the women labour's satisfaction was lowest (52.8 pts).

Looking for items, the observance of maternity protection law(62 pts) and women hiring policy(69 pts) part were higher and management of differentiated family care program(42 pts) and management of flexible work time(42 pts) was lowest.

Safety Health

Industrial Safety Health Committee

The group agreement and established rule is establishing matters about safety health and we are running Industrial safety Health Committee with same members of labour-company to decide and resolve important matters of safety health.

Safety Health Program

We are continuously running program against occurrence of safety health. We are establishing detailed plans for safety management every year and set 4th day of each month as safety health inspection day, to improve problems found through safety inspection.

Also to recognize the safety consciousness of employees, we are running safety health education program periodically. Specially, if there's any change on work perform or positioning on dangerous work, we run a special safety health program in advance.

Activities on Safety Health

According to Industrial Safety Health Law, we examine work environmental of each work places more than once for a week. We also perform periodical legal health checkups and supply suitable safety equipment. Also we set the whole office building of the company as non-smoking area, to make a better place to work.

Status and types of Industrial Accidents

We had 7 industrial accidents in last 3 years, and no operational accidents.

• Status of Industrial Accidents

Status of industrial / icelac	110		
Items	2006	2007	2008
No. of occurrences	3	1	3
Rate(%)	0.32	0.09	0.28



Healthy Labor-Management Relations

We guarantee three rights of labour(right of organization, collective bargaining right and collective action right) throughly and also observe the related laws national/internationally, labour principle guaranteed by National Labor Law, ILO and UN Global Compact. We also comply every result of negotiation. In this way, we assure the formation of labour union and free right to associate.

Status of Labour Union

The Labour Union was formed in July 1996 to improve labour right and maintenance and innovation of work condition of every employee. It belongs to Public Traffic Service Union of Korean Confederation of Trade Unions.

It's composed of 24 divisions including head office, local offices and work places, with general assembly, great chamber, operational committee, commercial affairs committee and financial audits.

According to group agreement signed by labour and company, we are running Union Shop system where the employee become an Union Member automatically when enters to the company. Therefore, every employee under the 3rd grade are joined to labour union and its number was, in 2008, 882 employees(83%).

The negotiation for group agreement is once in 2 years and the agreement for salary, in 1 year. The predecessors in office are Chairman and Chief Vice-Chairman.

Status of Labour Union

ltem	Subjects
Joined Employees	882(Join Rate 83.3%)
Predecessors in Office	2 employees
Higher Authority	Public Traffic Service Union of Korean Confederation of Trade Unions

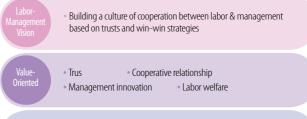
Status of Participating Employees in Labour Union

	. ,		
ltem	2006	2007	2008
Actual(persons)	914	1,040	1,058
Participating Employees (persons)	754	868	882
Join Rate(%)	82.5	83.4	83.3

Strategic Labour-Management Relationship

We recognize that the building of healthy labour-company relationship is fundamental precondition for sustainable development and fortification of competitiveness. So, we drove the project of ^FVision by 2015₄, which aim to build an establishment of developing labour-company relationship. We are driving 21 detailed practice program in 3 major strategy areas thinking on our social objective and actual labour-company relationship environment, setting the future central value of labour-company relationship as reliable relationship, cooperative relationship, aim to innovation and happiness of employees.

We systematized it by build of reliability and settlement of labour-company pathfinding roadmap for systemic execution of $^{\Gamma}$ Vision by 2015 $_{J}$ \rightarrow Participation and stabilizing period \rightarrow coexistence/respect period. Also to assure feasibility of strategic subjects execution, we are planning to operate inspection and feedback in 4 steps until 2015.

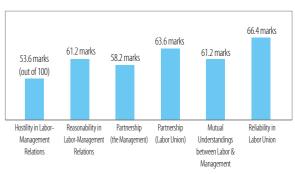








We had run a survey for employees' consciousness about our labour-company relationship. After its analysis, we could find out that our employees are evaluating our labour-company relationship as normal level.



Balances between Work & Life

Healthy Labor-Management Relatio

Open Channel

Operation of Labour-Company Council

EMC is operating Labour-Company Council composed by 7 personnels from each of labour and company, assuming its function as official dialogue channel between labour-company, in order to promote common interests of labour-company and increase of employees' rights.

The Council is periodically meeting, once per a quarter year, to discuss about essential pending questions and disputed points between labour-company such as work condition, improvement of welfare, division of profit, employee education, prevention of labourer dispute or matters about evaluation/health/

The result of discussion is publicized on company's intranet, reconsidering the reliable relationship between employees and company, beside feedbacks about the members of community.

The Council, in this way, is creating a basis for cooperative labour-company relationship preventing motives of disagreement entire labour-company in advance through sharing and understanding about pending questions of company.

Results of Labour-Management Council's Operation in 2008

ltem	Numbers	Agreed	Agree Rate(%)
Improvement of HR system	18	17	94
HR/Labourer	17	17	100
Benefits	12	12	100
Work Condition	3	3	100
Others	4	4	100
Total	54	53	98

The improvement of HR system is the operational performance of Labour-

• Principal agendas executed by Labour-Company Councils in 2008

- Improvement of individual evaluation about dispatched workers from external organization
- Improvement of Honored Retirement System
- Establishment of Plan for Support System to Customized Education by Capacity and Self-Development
- Support on use of vacation days in addition to promotion of annual paid
- Formation and operation of Labour-Company Joint Committee for introduction of Retirement Pension System

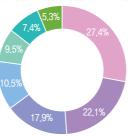
ECP - Ombudsman Committee

We are operating ECP to increase the competitiveness with well settlement and increase of • Ombudsman Committee Performance concentration on work of employees hearing and solving the problems that can occur in workplace. Ombudsman Committee is composed by 2 members from company(Chief of Planning & Coordination Department, Chief of General Affairs and Human Resources Department) and 1 member from labour(Chief Vice-Chairman). This committee should announce the result within 10 days from the application.

In 2008, we had 55 cases registered and 54 cases were • Ombudsman Committee solved, with 1 in pending yet.

The most common motives to seek Ombudsman Committee is matters such as HR, health, work on related place, work cycle, education, self-development and problem with their boss.

Year	Occurrence		Solution Rate
2006	10	10	100
2007	30	28	90
2008	55	54	98



- Working in a place with connections available to one: 26cases
- Personnel: 21cases Job rotation: 17cases
- Conflicts with one's superior: 10cases
- Self-development: 9cases
- Health: 7cases Others:5cases

Labour-Company Communication

We recognize deeply that the labour-company relationship is something for union and cooperation, but not for conflict. So we promoted many activities to activate labour-company communication, in 2008.

• Labour-Company Joint Ceremony of Ethical Management Proclamation

In December 22nd of 2008, the labour-company, recognizing that the ethical management is the essential competitiveness for the sustainable development, held the Labour-Company Joint Ceremony of Ethical Management Proclamation in order to settle the globalstandard enterprise ethical culture. In this event, we promised that always be a clean and social-concerning company.

Operation of Labour-Company Joint HR System Improvement Committee

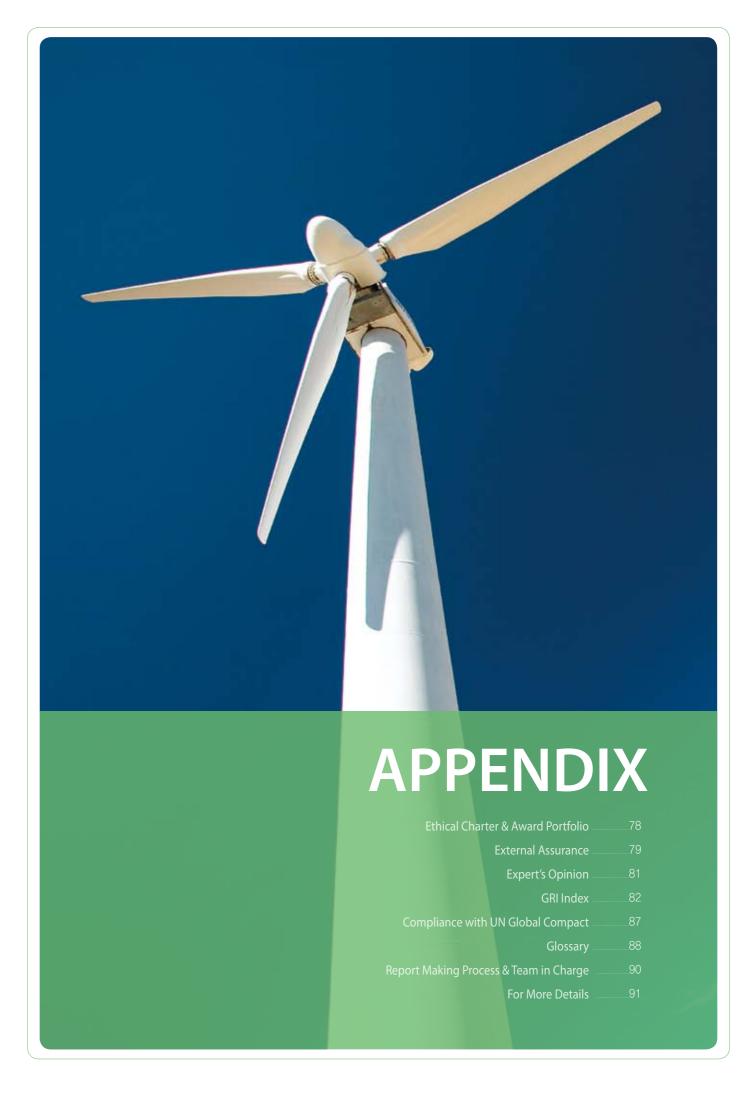
In order to attend the needs to improve and reform the general matters of HR system, we formed a HR System Improvement Committee with participation of 10 representatives of labour-company. They conducted 18 agendas through joint study during 4 months and 17 was agreed by labour-company.

Labour-Company Reconciliation Festival

We are holding Labour-Company Reconciliation Festival each year since 2001, in order to create a sense of unity between members and labour-company. We recognize, through this event, the reliable relationship between various different classes.

Status of Labour Conflicts

We have signed, since 2000, the group agreement on no labor conflicts during 8 years.



INTRODUCTION
PROFILE
SM SYSTEM
ECONOMY
ENVIRONMENT
SOCIETY
PEOPLE

APPENDIX

Ethical Charter & Award Portfolio
External Assurance
Expert's Opinion

GRI Index Compliance with UN Global Compac Glossary Report Making Process & Team in Charge

Ethical Charter

We, the EMC, are a public organization seeking to improve people's quality of life and conserve the national environment. We're to jump on a being to enhance public interests and perform social responsibilities through globalizing environmental services and accomplishing sustainable growth, and becoming an enterprise respected and trusted by people based on the realization of a fair and transparent management in accordance with our own ethical values. For the purpose, we hereby establish and promise to comply with this Ethical Charter providing reference standards on right acts and values all executives and employees should stick to:

We'll try to:

- Maintain community relationships with all stakeholders to share our vision and core values and enjoy mutuallyprosperous open society;
- Honestly and fairly engage in our duties based on a high level of ethical values, and take leading initiatives toward anticorruption and transparency;
- Think and act in customers' shoes, and give happiness and pleasure to customers;
- Respect all executives and employees' own personality, and have no discrimination among them and give fair opportunities and evaluations to them;
- Participate in social activities as a social member, and contribute to the development of our own country and local communities;
- Serve as a being where labor-management relations are based on mutual trusts and harmonies so as to exploit a winwin situation; and
- Enhance our global standing as the world's best enterprise that can lead the future environment through ethical management in accordance with global standards.

Award Portfolio

Date	Awards	Awarded by:
Aug., 2006	Was nominated as the Most Excellent Public Organ in Balanced Personnel Index	Civil Service Commission
Oct., 2006	CleanSYS: Was selected as One of 10 Governmental Innovative Brands	Ministry of Public Administration and Securit
Dec., 2006	Was selected as the Most Excellent Organ in the Evaluation of Innovation Performance in 2006	Ministry of Environment
Aug., 2007	Was nominated as a Beautiful Enterprise; Won the Grand Prize in the part of Social Contributions	Yeonhap News, Newsis
Dec., 2007	Was selected as the Excellent Organ in the Evaluation of Official Disciplines & Anti- Corruption in 2007	Ministry of Environment
Apr., 2008	Was selected as the Most Excellent Organ in Youth Employment in 2007	Ministry of Labour
Apr., 2008	Acquired CDM-AE	UNFCCC CDM EB
Jun., 2008	Acquired Laboratory of Excellence Degree from Analytical Products Group (based on data on the measurement & analysis of hazardous substances)	APG(the USA)
Jun., 2008	Won the Special Prize in the part of Social Contributions,	Korean Journalist Forum
Oct., 2008	Won Excellent Thesis Prize on a system to inform air pollution on a real-time basis	KOSAE
Oct., 2008	Was nominated as a Beautiful Enterprise; Won the Grand Prize in the part of Voluntary Services	Hankook Daily
Nov., 2008	Acquired Laboratory of Excellence from Analytical Products Group (based on data on the automated measurement of water quality)	APG(the USA)
Nov., 2008	Was selected as an Excellent Organ in the part of Precision Measurement at Korea Precision Industry Technology Competition	Ministry of Knowledge and Economy

Assurance Report

To the readers of the "2009 Sustainability Report" of Environmental Management Corporation:

Introduction

Korean Standards Association(hereinafter "KSA") has received an independent assurance request from Environmental Management Corporation (hereinafter "EMC") for its 2009 Sustainability Report(hereinafter "Report"). The responsibility of preparing the Report lies with EMC; KSA is responsible for offering an assurance opinion on the Report.

As an agency dealing with environmental services, EMC pursues a future-oriented growth foundation for the globalization of Korea's environmental industry while leading major national environmental policies. EMC promotes various activities as a member of the UN Global Compact and steadily consolidates sharing management with communities, win-win management with partner firms, and transparent management as a public agency.

KSA submits this independent assurance Report on the report based on the adequate verification of evidence of the preparation process, data on the contents, achievements, and relevant system vis-a-vis the report prepared by EMC.

Assurance Scope

KSA has carried out assurance focusing on internal systems and activities for sustainability management along with field verification by sampling the head office of EMC, 4 river basin offices, and 1 business entity based on the entire contents of the report and as of fiscal year 2008.

● For the assurance of financial information, KSA has compared whether the information matches the 2008 accounting audit report.

Assurance Standards

KSA has performed assurance according to KSA's sustainability report assurance system developed based on the latest 2008 version of AA1000 Assurance Standard' and GRI Sustainability Reporting Guideline (G3)

Assurance Methods

KSA has conducted assurance using the following methods:

- Study of media and Internet data/material citing the sustainability of EMC and public agencies during the report period
- Field visit including visit to the head office
- Review of the system and process used to improve sustainability management achievements and prepare the report
- Tracking and Reviewing internal documents and basic data
- Interview with the personnel in charge of sustainability management and issue administrator

Independence

KSA has no interest in profiting from EMC's business activities beyond providing third party assurance services for the report. KSA has no biased opinion on any stakeholder at EMC.

Assurance Results and Opinions

KSA has confirmed that the Report presents EMC's sustainability management activities without material errors or bias with regard to the contents of the report through assurance activities. All important assurance results have been included in the assurance report, with additional details of the assurance results and recommendations submitted to EMC.

Materiality

EMC has identified sustainability management-related issues through the proposals of external experts, subject matter experts (internal experts), and stakeholders, media survey, interviews with stakeholders, and important social norms (GRI G3, etc.), drawn up important issues that stakeholders are interested in through the materiality test, and included all these in the report without omission. Ideally, materiality test should be conducted in the unit of indicator; KSA recommends reviewing the strategy and reporting the direction in the internal sustainability management process according to the importance of issues drawn up as a result of the materiality test

External Assurance Expert's Opinion

Compliance with UN Global Compact Report Making Process & Team in Charge

Completeness

EMC continuously carries out improvement activities on the important issues drawn up through the materiality test process; it constantly monitors the relevant performances and reports such in a balanced manner.

KSA recommends managing and systemizing individual issues with quantified indices, if possible, and operating them as part of the internal management system to implement and report important sustainability issues more perfectly and uniformly. In the process, active consideration of the stakeholders'engagement process and assessment of their engagement quality can be used as methods.

Responsiveness

EMC reflects important sustainability issues on the organization's policy and activities and responds to stakeholders' concerns.

KSA recommends the followings for the practical implementation of sustainability management activities and to respond to sustainability issues:

- Evaluate and report objectives and performance trends in association with individual activities and performances with sustainable strategies and performance management.
- Guide various engagement methods and offer opportunities so that stakeholders can be engaged when establishing EMC's policies, strategies, and plans related to important issues.
- -Consider stakeholders' easy access and use of the information regarding EMC's sustainability management activities and responsiveness.

Opinion by Field and Opportunity for Improvement

Sustainability Management System

EMC establishes sustainability management strategies to achieve its mission of "contributing to sustainable global environmental conservation along with mankind" and vision of "the world's top environmental service agency"; it implements concrete execution programs by putting together subject matter experts by field to form an organization in charge of sustainability management under the Ethical Management Commission. EMC also executes step-by-step basic plans for ethical management practice by establishing ethical management visions, strategic objectives, and basic objectives.

Sharing EMC's direction and objectives and describing past and present achievements as well as future short-term and mid-term objectives regarding the relevant issues are important when implementing and reporting sustainability management.

Economic Performances

EMC continuously implements performance improvement through creative knowledge management, customer management that places importance on various customer voices and communications, and technology development activities to acquire competitiveness in the international environmental markets.

Association with the process to draw up and assess important sustainable issues is expected through various communications with customers in the future.

Environmental Performances

Its various businesses and efforts enable EMC to lead major environmental policies and pursue environmental improvement including environmental improvement in each field, facilities installation support, and technology diagnosis/support such as national measurement network, harmful chemical substances measurement analysis and research, Non-point source pollution management and ecology restoration, optimization of public environmental facilities, response to climate change, environmental energy, and resources

The vision and efforts of EMC to minimize environmental problems and impacts by field as they arise during the operation and business processes of EMC's head office, river basin headquarters, and business entity and reporting of environmental performance required.

Social Performances and Employees

EMC conducts various activities for corruption prevention and manages communities and partner firms through transparent management, sharing management, and win-win management. EMC's efforts to uphold the rights of individual employees and respect their diversity and to come up with a promotion system for appropriate talented personnel as well as a workplace where work and life are harmonized are highly evaluated.

Ideally, a community contribution activity program should be operated in association with the process of identifying major stakeholders, which will be allowed to be engaged.

GRI Report

KSA has confirmed that this Report contains all or part of the values of the GRI indicators as recorded in the GRI Index (Appendix).





Expert's Opinion



Lee, Hong-Min Representative Consultant of Human Equation Ph.D. in Business Administration

In a situation where sustainable management has emerged as kind of a requirement for an enterprise to survive a global competition, it's judged that the EMC has tried its harmonious efforts to realize sustainable development in an economical and environmental way and perform social responsibilities in according with so called "Triple Bottom Line" which reflects an integration of economic, environmental and social concerns in terms of mutual relationships with stakeholders.

To achieve "Sustainable Environmental Conservation" which is a goal set when it was established, the EMC has adopted management goals to ▲offer a healthy and pleasant environment; ▲build a sustainable water usage system; ▲enhance an ability to adapt to climate changes; ▲ and innovate an organizational culture on a sustainable basis. Based on such management goals, it's led national environmental policies as an organization specialized for environmental services with cutting-edge technologies and professionals.

Especially, as all members have been showing their leadership from environmental, social and economic aspects in securing accountability and transparency, the EMC has driven out its management activities to enhance enterprise values as it is, through integrated strategies and risk management.

It's judged that, in order to realize a sustainable management goal FA Being to Lead Green Growth through Low Carbon Emissions & Adaptation to Climate Changes, the EMC has secured external reliability by expanding its dynamic power for green growth, implementing green growth management system and performing social responsibilities.

In addition to that, the EMC has fully performed duties to disclose the status of sustainable management in accordance with GRI(Global Reporting Initiative) G3 guidelines, as by diagnosing the level of sustainable management, inviting stakeholders' participation, and deriving out main reporting issues.

It has endeavored to increase stakeholders' values through various communication activities that invite principal stakeholders' participation in the report-making process. And it's very commendable to have derived out important aspects related to sustainability management through interviewing with its stakeholders, including the Central Government, external customers(local governments & firms), suppliers, NGOs and internal customers.

It also carried out Materiality Test to select important issues disclosed in this report, secure fairness and feasibility in selecting those issues, and reflect them into the report.

Given all considerations as mentioned above, it's judged that this Sustainability Report has fully disclosed important information about "stakeholders map" to promote their participation, and handled principal issues selected in accordance with Materiality Test, which is why those issues can be said to be highly material. On top of that, the EMC is very high in completeness in that it's built and operated systems to effectively identify, monitor and manage issues related to sustainability management. And it can be said that it's been well equipped with responsiveness because it's properly responded to demands from stakeholders through encouraging their participation.

With all those commendable performances, I'd like to propose some improvements that EMC will have to achieve on the report:

First, there is a need to propose detailed strategies that can form two axes, publicity and profitability, based on their integration into technological cooperation or economic performance linked to governmental policies;

Second, there is a need to present detailed efforts and methodologies to improve low performance indicators or any other negative aspects; and Third, there is a need to continuously and systematically drive out social activities in an enterprise-wide way by focusing on the EMC's own specialized competence.

I believe that, if the EMC reflects those recommendations into the future reports, they will serve as a precious guide to achieving its own vision.

For More Details

Ethical Charter & Award Portfolio External Assurance Expert's Opinion GRI Index

Compliance with UN Global Compact Glossary Report Making Process & Team in Charge

GRI Index

	●: Disclosed ●: Disclosed	sed Partially O: Not Disclosed	N/A: No	ot Applicab
	Strategy & Analysis	STATUS OF EMC DISCLOSURE	REPORTING LEVEL	MORE INFO
Strat	tegy & Analysis			
1.1	Statement from the most senior decision maker of the organization (e.g., CEO, chairman, or any other equivalent senior positions) about the relevance of sustainability to the organization and its strategy	CEO's Message	•	6-7
1.2	Description of key impacts, risks, and opportunities	SM Management Strategies	•	15-16
Orga	anizational Profile			
2.1	Name of organization	Organization Profile: General	•	12
2.2	Primary brands, products, and/or services	Business Operation Portfolio	•	13
2.3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures	Organizational Operation Status	•	12
2.4	Location of organization's headquarters	Organizational Operation Status	•	12
2.5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report	Overseas Businesses (Projects)	•	35-36
2.6	Nature of ownership and legal form	Governance Structure	•	17
2.7	Markets served	Business Operation Portfolio	•	13
2.8	Scale of the reporting organization	Organization Profile	•	12
2.9	Significant changes during the reporting period regarding size, structure, or ownership	Organization Profile	•	12
2.10	Awards received in the reporting period	Award Portfolio	•	78
Repo	ort Parameters			
3.1	Reporting period	Report Information (Reporting period)	•	2
3.2	Date of the most recent previous report	(N/A since this report is the first issue)	N/A	-
3.3	Reporting cycle	Report Information	•	2
3.4	Contact point for questions regarding the report or its contents	Report Information(Additional Data)	•	2
3.5	Process for defining report contents	Stakeholders' Participation; Materiality Test	•	8-11
3.6	Boundary of the report	Report Information(scope)	•	2
3.7	State any specific limitations on the scope or boundary of the report	Report Information	•	2
	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations,	Report Information(scope)		2
3.8	and other entities that can significantly affect comparability from period to period and/or between organizations	neport illiorriation(scope)	•	2
3.8	* ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' ' '	Report Information(assurance)	•	2
	between organizations Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other		• N/A	
3.9	between organizations Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report Explanation of the effect of any re-statements of information provided in earlier reports,	Report Information(assurance)	N/A	
3.9	between organizations Data measurement techniques and the bases of calculations, including assumptions and techniques underlying estimations applied to the compilation of the Indicators and other information in the report Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such restatement Significant changes from previous reporting periods in the scope, boundary, or	Report Information(assurance) (N/A since this report is the first issue)		

	Strategy & Analysis	STATUS OF EMC DISCLOSURE	REPORTING LEVEL	MORE INFO
Gov	ernance, 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	SM Organization, Composition of BOD	•	16, 17-18
4.2	Indicate whether the Chair of the highest governance body is also an executive officer	Composition of BOD	•	17
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	Composition of BOD	•	17
4.4	Me chanisms for shareholders and employees to provide recommendations or direction to the highest governance body	isms for shareholders and employees to provide recommendations or direction to the highest governance body Labor-Management Communication		76
4.5	Linkage between compensation for members of the highest governance body, senior managers, and executives	n compensation for members of the highest governance body, senior managers, and executives Senior Executives' Appraisal & Compensation		18
4.6	Processes in place for the highest governance body to ensure that the conflicts of interest are avoided	Non-Executive Directors' Participation in Management	•	17
4.7	ocess for determining the qualifications d expertise of the members of the highest governance body for guiding the organization's strategy on Activation of the BOD onomic, environmental, and social topics		•	18
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	SM Strategies; Business Strategies; Ethical Charter		15, 25, 78
4.9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance	Composition & Operation of the BOD	•	17
4.10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance=	Activation of the BOD; Performance Evaluation & Compensation (Senior Executives)	•	18
4.11	Explanation of whether and how the precautionary approach or principle is addressed by the organization	Risk Management	•	22-23
4.12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses	UNGC	•	21
4.13	Memberships in associations (such as industry associations) and/or national/international advocacy organizations	UNGC, DOE	•	21,54
4.14	List of stakeholder groups engaged by the organization	Stakeholders' Participation	•	9
4.15	Basis for identification and selection of stakeholders with whom to engage	Stakeholders' Participation	•	9
4.16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group	Stakeholders' Participation	•	9
4.17	Key topics and concerns that have been raised through stakeholder engagement, and ways how the organization has responded to those key topics and concerns	Stakeholders' Participation; Materiality Test	•	8-10
Fcor	nomic Performance Indicators			
EC1	Direct economic values generated and distributed, (revenues, operating costs, employee compensation, donations and other community investments, retained earnings, payments to capital providers and governments, etc.)	Creation of Economic Values	•	28
EC2	Financial implications & other risks, and opportunities for an organization's activities due to climate change	Adaptation to Climate Changes	•	53-55
EC3	Coverage of an organization's defined benefit plan obligations	Operation of Retirement Funds	0	73
EC4	Significant financial assistances received from the Government	Status of Governmental Contributions	•	28
EC5	Ratios of standard entry-level wage to local minimum wage at the significant locations of operation	Legal Minimum Wage for Newly Recruited Employees	•	67
EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation	Relations with Suppliers; Supply Contract System	•	62
EC7	Procedures for local hiring and proportion of senior management hired from the local community at the significant locations of operation	Employment of Local Residents; Respect for Human Right & Diversity	•	61,68
EC8	Development and impact of infrastructure investments and services provided primarily for public benefits through commercial, in-kind, or pro bono	Goals of the EMC's Establishment; Share Management	•	12, 59-61
EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts	Financial Performance; Flow of Economic Values	•	28-29

APPENDIX

Ethical Charter & Award Portfolio External Assurance Expert's Opinion

GRI Index

Compliance with UN Global Compact Glossary Report Making Process & Team in Charge For More Details

	Strategy & Analysis	STATUS OF EMC DISCLOSURE	REPORTING LEVEL	MORE INFO
Envir	ronmental Performance Indicators			
EN1	Materials used by weight or volume	Construction Materials Use	•	57
EN2	Percentage of materials used that are recycled input materials	Waste Recycling; Energy Use & Reuse	•	49,57
EN3	Direct energy consumption by primary energy source	Energy Use	•	57
EN4	Indirect energy consumption by primary source	Energy Use	•	57
EN5	Energy saved due to conservation and efficiency improvements	Low Carbon Emission Businesses; Energy Use	•	55,57
EN6	Initiatives to provide energy-efficient or renewable energy-based products and services, and reductions in energy requirements as a result of those initiatives	Development of Environmental Energy; Installation of Environmental Facilities	•	56
EN7	Initiatives to reduce indirect energy consumption and reductions achieved	Utilities Usage Reduction; Energy Use & Reuse	•	55,57
EN8	Total water withdrawal by source	Water Use	•	57
EN9	Water sources significantly affected by withdrawal of water	Water Use	•	57
EN10	Percentage and total volume of water recycled and reused.	Water Use	•	57
EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Restoration of Natural Ecosystem; Restoration of Soil Groundwater	•	46, 51
EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Operation of Water Monitoring Networks; Conservation of Natural Ecosystem; Operation of Groundwater Monitoring Networks	•	39, 46, 5
EN13	Habitats protected or restored	Restoration of Riparian Buffer zone; Restoration of Eco-Rivers	•	46
EN14	Strategies, current actions, and future plans for managing impacts on biodiversity	Restoration of Natural Ecosystem	•	46
EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	Rehabilitation off Han River Systems; Restoration of Natural Ecosystem	•	40,46
EN16	Total direct and indirect greenhouse gas emissions by weight.	Greenhouse Gas Inventory; Low Carbon Emission Businesses	•	53,55
EN17	Other relevant indirect greenhouse gas emissions by weight	Low Carbon Emission Businesses; Energy Use	•	55, 57
EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved	Adaptations to Climate Changes	•	53-55
EN19	Emissions of ozone-depleting substances by weight	Improvement of Air Quality	•	43-45
EN20	NOx, SOx, and other significant air emissions by type and weight	Emissions & Treatments of Air Pollutants	•	45
EN21	Total water discharge by quality and destination	Emission & Treatments of Wastewater	•	42
EN22	Total weight of waste by type and disposal method	Emission & Treatments of Wastes	•	49
EN23	Total number and volume of significant spills	Safety Management of Hazardous Substances (No cases of discharges reported)	•	47
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	(No cases of overseas carrying–out reported)	N/A	-
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	(No area affected by the emission of wastewater)	N/A	42
EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation $\frac{1}{2} \left(\frac{1}{2} - \frac{1}{2} \right) = \frac{1}{2} \left(\frac{1}{2} - \frac{1}{2} \right) = $	Environmental Performance	•	38-57
EN27	Percentage of products sold and their packaging materials that are reclaimed by category	Construction Waste Recycling	•	49
EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	(No legal violations reported)	N/A	-
EN29	Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	Status of Local Offices; Changes in Residence Rate in according with the Relocation of the Head Office	•	12,61
EN30	Total environmental protection expenditures and investments by type	Creation & Distribution of Economic Values	•	28

	Strategy & Analysis	STATUS OF EMC DISCLOSURE	REPORTING LEVEL	MORE INFO
Perfo	ormance Indicators for Labor Practices & Decent Work			
LA1	Total workforce by employment type, employment contract, and region	Composition of Workforce; Respect for Human rights & Diversity	•	67, 68
LA2	Total number and rate of employee turnover by age group, gender, and region	Status of Workforce	•	67
LA3	Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations	Labor Welfare	•	73
LA4	Percentage of employees covered by collective bargaining agreements	Status of Labour Union	•	75
LA5	Minimum notice period(s) regarding significant operational changes, including whether it is specified in collective agreements	Healthy Labour–Management Relations	•	75-76
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	Operation of Industrial Safety Health Committee	•	74
LA7	Rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities by region	Types of Industrial Accidents	•	74
LA8	Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases	Labor Welfare	•	73
LA9	Health and safety topics covered in formal agreements with trade unions. Health and safety topics covered in formal agreements with trade unions	Safety Health	•	74
LA10	Average hours of training per year per employee by employee category	Educational Training Programs	•	72
LA11	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Retirement Management: Educational Training Programs	•	70, 72
LA12	Percentage of employees receiving regular performance and career development reviews	Performance Evaluation; Job Training Systems	•	70, 72
LA13	Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity	Composition of the BOD; Status of Workforce; Respect for Diversity	•	17, 67, 68
LA14	Ratio of basic salary of men to women by employee category	Gender Equality	•	68
Perfo	ormance Indicators for Human Rights			
HR1	Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening	(No legal violations against human rights)	0	-
HR2	Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken	(No legal violations against human rights)	0	-
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	Efforts to Protect Human Rights	•	68
HR4	Total number of incidents of discrimination and actions taken	(N/A)	N/A	-
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	Freedom of Association & Collective Bargaining	•	75
HR6	Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor	Prohibition of Children Labor	•	68
HR7	Operations identified as having significant risk for incidents of forced or forced labor, and measures taken to contribute to the elimination of forced or forced labor	Prohibition of Forced Labor	•	68
HR8	Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations	Efforts to Protect Human Rights	•	68
HR9	Total number of incidents of violations involving rights of indigenous people and actions taken	(No legal violations against human rights)	0	-

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Ethical Charter & Award Portfolio

	Strategy & Analysis	STATUS OF EMC DISCLOSURE	REPORTING LEVEL	MORE IN
Socia	al Performance Indicators			
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	EIA	•	61
SO2	Percentage and total number of business units analyzed for risks related to corruption	Anti-Corruption Policies	•	64
SO3	Percentage of employees trained in organization's anti-corruption policies and procedures	Job Integrity Education	•	64
SO4	Actions taken in response to incidents of corruption	Status of Punishments on Violators of the Code of Conduct	•	64
SO5	Public policy positions and participation in public policy development and lobbying	Adoption of Public Policies as a Public Organization	•	12
SO6	Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country	Prohibition of Political Activities	•	64
SO7	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	Fair Trading	•	63
SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	(N/A)	N/A	-
Perfo	ormance Indicators for Product Responsibility			
PR1	Life cycle stages in which health and safety impacts of products and services are assessed for improvement, and percentage of significant products and services categories subject to such procedures	Protection of Customers' Privacy	•	23
	Total number of incidents of non-compliance with regulations and voluntary			
PR2	codes concerning health and safety impacts of products and services, by type of outcomes	(No legal violations reported)	N/A	-
PR2 PR3	codes concerning health and safety impacts of products and services, by type	(No legal violations reported) Operation of Business Information Access System	N/A	34
	codes concerning health and safety impacts of products and services, by type of outcomes Type of product and service information required by procedures, and percentage of significant products and services subject to such information		N/A • N/A	34
PR3	codes concerning health and safety impacts of products and services, by type of outcomes Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of	Operation of Business Information Access System	•	34
PR3 PR4	codes concerning health and safety impacts of products and services, by type of outcomes Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes Practices related to customer satisfaction, including results of surveys	Operation of Business Information Access System (No legal violations reported)	•	-
PR3 PR4 PR5	codes concerning health and safety impacts of products and services, by type of outcomes Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes Practices related to customer satisfaction, including results of surveys measuring customer satisfaction Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and	Operation of Business Information Access System (No legal violations reported) Collection of VOC; Customer Satisfaction Survey	N/A	-
PR3 PR4 PR5	codes concerning health and safety impacts of products and services, by type of outcomes Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes Practices related to customer satisfaction, including results of surveys measuring customer satisfaction Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising,	Operation of Business Information Access System (No legal violations reported) Collection of VOC; Customer Satisfaction Survey (N/A)	N/A N/A	-

Compliance with UN Global Compact

We, the EMC, joined the UN Global Compact in November 2008 in order to jump on a sustainable enterprise that recognizes and perform social responsibilities. We hereby disclose our compliance with the Global Compact Principles by the use of COP(Communication on Progress) as follows:





COP(Communication on Progress): Commitment to Global Compact Principles

COP(Commu	nication on Progress): Commitmen	t to Global Compact Principles	• : Applicable	(iiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiiii
CATEGORY	GLOBAL COMPACT PRINCIPLE	PERFORMANCE INDICATORS	GRI G3: SELF-RATING	MORE INFO
Human Rights	Businesses should support and respect the protection of internationally proclaimed human rights.	No Discrimination on Employments & Occupations Human Rights Education; Ethical Management Education Gender Equality; Maternity Protection Policies Education & Policies to Prevent Sexual Harrassment –Sexual Harrassment Ombudsman Committee, SHOC Officials	 OHR1 OHR2 HR3 HR4 HR8 HR9 	20 68
	Businesses should make sure they are not complicit in human rights abuses.	Efforts to Protect Human Rights Collective Bargaining	©HR1 ©HR2 ●HR8	68 75
	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.	Forming Labor Union in 1997(882 memebers) (83,2% of workforce joined) Occurrences of Labor Disputes	HR5LA4LA5	75–76
Labay Standarda	Businesses should uphold the elimination of all forms of forced and compulsory labour.	Compliance with Labor Standard Laws & ILO Compliance with Collective Agreement; Prohibition of Children Labor	●HR7	68
Labor Standards	5. Businesses should uphold the effective abolition of child labour.	Compliance with Labor Standard Laws & ILO Compliance with Collective Agreement; Prohibition of Forced Labor	●HR6	68
	Businesses should uphold the elimination of discrimination in respect of employment and occupation.	 Open Employment (no restrictions on age, academic background, one's major) Principle of Same-Wage-on-Same-Value of Labor Respect for Diversity, Policies to Protect Socially Vulnerables 	⊚HR4	67 68 68
	7. Businesses should support a precautionary approach to environmental challenges.	SM Strategies Mid-/Long-term Business Strategies	●4.8	15 25
Environment	8. Businesses should undertake initiatives to promote greater environmental responsibility.	 Good Water Management Improvement of Air Quality Restoration of Natural Ecosystem Safety Management of Hazardous Substances Wastes Management; Soil Groundwater Management Development of Environmental Energy Building Systems to Adapt to Climate Changes 	• EN2 • EN5 • EN6 • EN7 • EN7 • EN10 • EN10 • EN13 • EN30	38–57
	Businesses should encourage the development and diffusion of environmentally friendly technologies	Expenses & Investments on Environmental Protection Support for Environmental Policies & Technologies Activities to Prevent Global Warming Development of New Environmental Technologies	●EN2 ●EN10 ●EN5 ●EN18 ●EN6 ●EN26 ●EN7 ●EN27	28 38–57
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	 Job Integrity Agreement Program; Ethical Education Whistle-Blowing System; Corruption Risk Diagnoses; Ethical Education Transparent Contract System; Job Integrity Survey 	• SO2 • SO3 • SO4	63 64–65

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Brundtland Report

World Commission on Environment and Development (a UN-sponsored body) Report which proposes a 'global agenda for change' and specifies how sustainable development can be achieved. Titled 'Our Common Future', it was published in 1987, and is named after the then chairman of the commission, Dr. Gro Harlem Brundtland, a former Prime Minister of Norway.

UN Global Compact

First announced by the then UN Secretary-General Kofi Annan in an address to The World Economic Forum in 1999, which is a United Nations initiative launched in July, 2000, to encourage businesses worldwide to adopt sustainable and socially responsible policies, and to report on their implementation. The Global Compact is a principle based framework for businesses, starting ten principles in the areas of human rights, labour, the environment and anti-corruption.

Good Water

Status of water where all items, including items as specified by human health protection standards, such as lead and cadmium pursuant to new Standards on Water Quality Environment, meet given criteria. It means water where marsh snails can live.

• Riverine Eco-belt

One of eight challenges as specified by the Water Environment Master Plan which attempts to ameliorate the functions of water body protection and the health of water eco-systems by furthering an eco-belt which acquired land around the source of water supply will be developed as by linking its water body and riparian buffer zone.

• BTL(Build Transfer Lease)

Private investment system where a private sector invests on public facilities, which, in turn, the government takes by lease.

• Rights to Healthy Indoor Air

WHO adopted, in May 2000, a statements that demands to consider indoor air in terms of not medium management, but human being's fundamental rights` as stated in the United Nation's Charter.

• NAMIS(National Ambient Air Monitoring Information System)

System built to collect and manage data about air pollutants, such as micro-dusts and ozone, which are offered to administrative organs for their uses in atmospheric environmental policies. The system has been operated and managed by the EMC since 2004.

Asian Dust

Asian dust may cause, besides bad effects on human body such as respiratory diseases and impediments to the growth of farm products, damage to super-precision industries, such as semi-conductors. The quantity of NO3 produced by asian dust corresponds to that produced by 300 thousand cars driving along 5.000km in distance.

Comprehensive Air-quality Index

Index to show atmosphere pollution developed considering harmfulness to human body in according with air pollution and atmospheric environmental standards, in order to offer a guide to prevent damages from air pollution. The index is divided into 6 steps, where higher is the number of step, indicates that the air pollution status is worse.

Riparian buffer zone

Zone with 1,000km² in area as designated and announced across the country to conserve the source of water supply. The zone is categorized into 4 major river systems: Han River System, Nakdong River System, Geum River System and Yeongsan/Seomjin River System.

• ISO/IEC17025

International standards on general requirements for the competence of testing and calibration laboratories. Domestic peer certification in accordance with the ISO/IEC17025 Standard is given through KOLAS, which certification can be internationally acknowledged.

POPs(Persistent Organic Pollutants)

12 persistent organic compounds which have been selected as they by Stockholm Convention that are resistant to environmental degradation through chemical, biological, and photolytic processes, which is why they have been observed to persist in the environment, to be capable of long-range transport, bio-accumulate in human and animal tissue, bio-magnify in food chains, and to have potential significant impacts on human health and the environment. They include dioxin, furan, PCBs, HCB, aldrin, endrin, dieldrin, toxaphene, mirex, heptachlor, chlordane and DDT.

GS(Gold Standard) CDM Label

Project which gives a label to a CDM project with a high level of environmental healthiness and sustainability with a label. Emission rights are valued as higher than general CDM projects.

• Pyrolysis Gasification Melting Method

Cutting-edge incineration method where neither hazardous substances such as dioxin nor their incinerated ashes are not emitted, by compressing and carbonizing wastes under a low level of oxygen, and then melting them in high temperature over 1,600°C, so that carbonized gas reacts with pure oxygen to be transformed into compound gas usable as energy source.

• Soil Groundwater Information System

System through which customers can have access to information about soil & groundwater pollution by the use of a map. It can be used to make restoration plans and identify soil & groundwater pollution through sharing related information with other organizations.

Land Partnership Plan

Plan in which South the US Army will merge land spread across the country it's used as its base and training field, and then return it to the Korean Government until 2011, which, in turn, will offer the army new land as its base. The plan prescribes that, before the return, both parties shall carry out an environmental pollution survey, and that, if the results of the survey have revealed that the US Army is responsible for any pollution, the army shall remedy such pollution at its own expenses.

Biomass Energy

Energy obtained through the pyrolysis or fermentation of biomass. Brazil has extracted alcohol from sugarcanes and mandiocas that can be used as fuels for cars. USA has researched on the production of methane from big sea weeds a.k.a. 'kelp'. Biomass energy can be categorized into local energy in that it's an type of energy with local characteristics.

Kyoto Protocol

Protocol to the United Nations Framework Convention on Climate Change (UNFCCC or FCCC); that is, an international environmental treaty with the goal of achieving the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. The protocol was initially adopted for use on December 11, 1997 in Kyoto, Japan, and entered into force on February 16, 2005.

• IPCC(Intergovernmental Panel on Climate Change)

Scientific intergovernmental body tasked to evaluate the risk of climate change caused by human activity. The panel was established in 1988 by the World Meteorological Organization (WMO) and the United Nations Environment Programme(UNEP), two organizations of the United Nations.

• GRI(Global Reporting Initiative)

Network-based organization that has pioneered the development of the world's most widely used sustainability reporting framework and is committed to its continuous improvement and application worldwide. In order to ensure the highest degree of technical quality, credibility, and relevance, the reporting framework is developed through a consensus-seeking process with participants drawn globally from business, civil society, labor, and professional institutions.

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Report-Making Process & Team in Charge

The EMC has operated a task force team(TFT) consisting of subject matter experts(SMEs) in accordance with the master plan made to publish the report as of April, 2009. Creation & Innovation Team, which is a team exclusively responsible for sustainability management that decides all consideration related to the report, including reporting framework, level of disclosure, and report contents, etc. SMEs have mad applicable contents for the report, based on data and information offered by each departments. The report has been assured of its reliability by an external assurance agency, and finally confirmed in accordance with the resolution of Ethical Management Committee after it had been reviewed by the management.

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Chung, Eui Jin

SM Subject Matter Experts



Deputy General Manager



Assistant Manager Kwon, Suna Hee



Assistant Manager Yoo, Won Jae

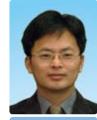


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For More Details

The full report written in two versions(Korean & English) is available in PDF format at the website (www.emc.or.kr). Don't hesitate to contact us for more details on our SM(sustainability management) activities and performances. We, the EMC as a going concern, appreciate stakeholders' sheer interests in those activities and performances.

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Readers' opinions

To produce the best report ever, we are willing to strain our own ears to follow up your opinions. All you have to do is send the following by fax or mail after having filled it in:

1. I am or work with	a(n):						
① EMC's supplier	② EMC	③ Local resident	④ NGO	⑤ Academic institute			
6 Central or local go	overnment	⑦ Journalist	® None of these	e choices ()		
2. I came in contact	with the report	at or via:					
① EMC's website	② Newspape	r/Magazine ③	Web search 4 E	EMC			
⑤ None of these ch	oices ()					
3. In the report, the s	section I'm most	t interested in is:					
① Introduction	② SM System	③ Economy	④ Environment	⑤ Society			
6 People	⑦ None of the	se choices ()				
4. In the report, the s	section with a n	eed to be comple	mented with some a	additional contents is:			
① Introduction	② SM System	③ Economy	4 Environment	⑤ Society			
© People	7 None of these	e choices ()				
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