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Sustainability Report 2008



**KOREA DISTRICT HEATING CORP.**

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KOREA DISTRICT HEATING CORP.



# Energy Designer, KDHC

Sustainability Report 2008



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# Contents

CEO's Message	02
Material Issues by Stakeholder	04
<b>Happy Energy Happy Life</b>	
Four Seasons of Happy Energy	
<b>Introduction</b>	
KDHC Profile	14
Corporate Sustainability Management	21
Ethics Management	24
Innovation Management	29
<b>Corporate Value</b>	
Economy	35
Special Story Advancing as a comprehensive energy provider	36
<b>Environmental Value</b>	
Environment	45
Special Story Green energy that benefits future generations and the earth	46
<b>Stakeholder Value</b>	
Special Story Planting the seed of hope in children	56
Customers	57
Employees	62
Partners	70
Communities	75
<b>Appendix</b>	
Global Compact Practice	81
Third Party Assurance Statement	82
GRI Index	84
Memberships in Associations	87
TF Team Introduction	88
Survey of Readers' Opinions	89

### ● GRI G3 Guideline Application Level

KDHC is publicly announcing that this sustainability report has been created in the direction of satisfying all requirements of level A+, among the GRI report application level indicators. The third-party organization that inspected this report confirmed that it should be categorized as "A+" according to the G3 Guideline application levels.



## About this report

### ● Reporting Principles

This report has been prepared in accordance with the Global Reporting Initiative (GRI) G3 Guidelines and BSR (B.E.S.T. Sustainability Reporting) Guidelines. Information related to the various indicators contained in the G3 and BSR Guidelines can be found in the BSR/GRI G3 Guidelines Index in the Appendix.

### ● Reporting Scope and Period

This report covers the period beginning on January 1, 2007, and ending on December 31, 2007. It also includes various aspects of performance between 2005 and 2008 when necessary. Akin to our first sustainability report, the reporting scope includes the head office, branches, and business sites across Korea. The 14 KDHC branch names and their locations are provided in this report. In some instances, we have cited information from the previous report since no major change related to our business occurred during the reporting period.

### ● Reporting Objective

This report is intended to convey our vision, strategies, and activities for sustainability management in an open, honest, and transparent manner. It is also intended to serve as a medium for gathering stakeholders' opinions to improve our management activities and forward our mission of achieving sustainable growth. This is the second sustainability report issued by KDHC, following the first edition published in March 2008. We plan to publish the report annually going forward.

### ● Assurance

The information and data contained herein have been verified by a third party to ensure their reliability and accuracy. The currency unit is the Korean won (KRW), and all figures have been entered in their relevant units.

If you need additional information or have any questions, please contact us at the following:

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# Striving to foster a clean and caring company

Korea District Heating Corporation President and CEO Chung, Seung Il



Taking into consideration our economic, social and environmental responsibilities, KDHC is exploring new businesses that combine public service and profit generation to drive sustainable growth together with our stakeholders.

Korea District Heating Corporation (KDHC) has been providing economical, pleasant and convenient district heating services for the past 23 years. During that time, we also contributed to developing the Korean economy by promoting efficient energy usage and clean air. We are pursuing further evolution into a global leader in environmentally friendly energy. This report, the second sustainability report issued by KDHC, was prepared to share information on our performance to date and our blueprint for the future with our stakeholders.

In line with our policy of meeting our economic, social and environmental responsibilities, our vision for sustainability management is to shape KDHC into the "most environmentally friendly energy company." In addition to our traditional business scope of district heating, we are exploring new businesses that combine public service and profit generation such as district cooling, electricity, new and renewable energy, and overseas opportunities. Our aim is to realize sustainable growth for KDHC and all our stakeholders. With that in mind, we have identified the major stakeholder groups and adopted strategies that reflect diverse stakeholder views.

First, a key priority at KDHC is promoting happiness for all customers. We are constantly seeking ways to satisfy customer needs and regard customer satisfaction as a major factor for competitiveness. Our mission is to "go beyond customer delight to provide creative customer satisfaction."

To maintain intimate ties with customers, KDHC collects customer opinions via online and offline channels and makes every effort to reflect those views in company policies. We also do our best to ensure easy access to our services and conduct customer satisfaction surveys on an annual basis.

For three consecutive years through 2006, KDHC was recognized for excellence in the government customer satisfaction index survey. We are working ceaselessly to protect customers' rights and interests and deliver customer delight.

Second, KDHC promotes an open mind and open management to maintain a vibrant workforce. All employees are given equal opportunity for education and promotion, taking into account their



- KDHC was founded in November 1985 to provide the public with efficient district heating service. Our goal is to enhance the public good via energy conservation and environmental preservation.

individual traits and capabilities. We offer a selective benefits plan and training programs to cater to the wide ranging needs of our personnel.

Third, we recognize suppliers and contractors as partners for growth and pursue win-win cooperation for mutual advancement. We work closely with our partner firms for the delivery of safe and clean energy to customers, and abide by fair bidding practices to build trust.

To uphold transparent dealings with our partners, we adopted an electronic contract system and stringent selection criteria. Moreover, we introduced the integrity pact as a means of rooting out unfair trade practices.

Fourth, we take an active interest in safeguarding the interests of local communities. We extend support to the less privileged in society, offer education to resolve the gap between urban and rural communities, promote culture and arts, and carry out activities to protect the environment.

Fifth, we implement management practices that harmonize with nature. In 1996, KDHC became the first public enterprise to acquire environmental management certification. We implemented a companywide environmental management system and established environmental objectives. To minimize our footprint, we are working to protect air, water and soil quality and reducing the emission of greenhouse gases to counter global warming.

KDHC will expand district heating and cooling services, develop new technologies, and diversify into new fields such as electricity, and new and renewable energy, guided by our goal of evolving into a comprehensive energy company.

Our target is to supply heating and cooling for 2 million households throughout Korea and generate annual revenue of KRW2.6 trillion by 2015. As a public enterprise, we are also dedicated to fulfilling our responsibilities to society. As a clean and caring company, we will do our utmost to gain respect and trust from the public and deliver happiness to customers.

# Material Issues by Stakeholder



## ECONOMY

Credit rating “AAA” for 4 consecutive years

### District heating supply

As of the end of 2007, KDHC provided heat to 944,000 households across the nation, representing 59% of market share. The company plans to expand the heating service to two million households by 2015.

### Transparent accounting policy and system

After we introduced an internal accounting management system to enhance the transparency and reliability of accounting practice in December 2006, we began to heighten the accounting transparency by initiating the operation of new system in 2007. The system is expected to help us meet the global standard.

### Financial stability

KDHC obtained a loan which is being used for the purpose of rationalizing energy usage through a loan program that constitutes a part of the Korean government’s “energy and support policy.” We received an AAA rating from Korea Ratings for four consecutive years from 2004 and an A2 rating from the global credit rating agency Moody’s. Our solid external credibility provides us with a strong basis for raising required capital.

### Expansion into new businesses and markets

KDHC is growing new businesses such as district cooling, electricity and renewable energy, expanding the geographical scope of heating services, and making preparations for entry into overseas markets.

## ENVIRONMENT

Expansion of new and renewable energy business

### Expansion of district cooling and new and renewable energy services

KDHC is expanding new and renewable energy business through solar heating system, solar photovoltaic power generation, biomass combined heat and power plants (CHPs), treated sewage heat recovery system, and smokestack heat recovery system.

### Expansion of clean energy usage

KDHC is increasing its use of clean energy sources, such as LNG and unutilized energy, as fuels for heat supply. In addition, we are continuously developing new technologies and equipment to minimize our environmental impact.

### Response to global warming and green growth

We have introduced various measures to respond to the global climate pact and counter global warming. In 2006, we became the first public enterprise to set up a greenhouse gas inventory for official verification of emission levels. Efforts are continuing at KDHC to uncover and adopt greenhouse gas reduction technologies to pursue green growth, and we have been participating in a carbon neutral program with 14 energy-related organizations since 2008.

## CUSTOMERS

90.8 points at PCSI (Public-service Customer Satisfaction Index)

### Improvement of VOC system

Consultations with customers recorded 358 cases while suggestions from customers surged from 28 to 50 in 2007. In order to strengthen the communication with customers, we check VOCs(Voice of Customers) once a quarter. Going forward, we plan to enhance the VOC system, thus better reflecting customers’ opinions in our management.

### Reflecting customer satisfaction index into corporate management

Our Public-service Customer Satisfaction Index(PCSI) was over 90 points for two consecutive years with 90.8 points in 2007. We will grasp the customer needs through the regular customer satisfaction survey and reflect the results in our management.

### Providing information for enhancing customer convenience

We provide a wealth of information such as instructions on cooling and heating facilities and general information on heating and cooling. We plan to provide more diverse and useful information to customers, thereby enhancing their convenience.

## EMPLOYEES

Fun-filled workplace

### Providing equal employment opportunities

KDHC has been implementing the “social equity-based employment” program since 2006 to ensure equal employment opportunity. That year, 55 of the 109 new recruits were hired based on those practices. The following year, 34 of the 71 new recruits were employed under that concept.

### Employment benefits and education

KDHC strives to create a pleasant and welcoming workplace by offering employees a wide range of employment benefits and educational programs.

### “Win-Win” relationship between labor and management

KDHC is committed to developing a positive, “win-win” relationship between labor and management. We have had no labor disputes for the past 13 years.

KDHC strives for open communication with stakeholders by identifying and addressing the issues that affect our business and have significant social impact. We focused our reporting on 22 of the most material issues relevant to our sustainability management strategy and tasks.

PARTNERS COMMUNITIES



Co-prosperity with partners

**Supporting SMEs**

KDHC carries out a number of SME(Small- and Medium-size Enterprise) support programs for mutual prosperity. In 2007, we engaged in a variety of new product development with guaranteed purchase and R&D support projects and expanded the ratio of green products and products made by the disabled to 90.3% and 57.6% of our total purchasing amount.

**Establishing transparent partnership**

KDHC utilizes an electronic contracting system to ensure transparent relationships with its partners through the execution of fair contract procedures. This enables us to computerize all the processes from bidding and contracting to post-management, enhancing the openness of contract processes.

**Communications with partners**

KDHC strengthens partnership with the partners through partner satisfaction surveys and frequent communication. We engaged in public opinion polls to measure corruption levels in 2004, assessed partners' grievances in 2005, and conducted integrity and satisfaction level surveys in 2006. We convened two gatherings for material suppliers and non-destructive inspection service providers in 2007.



Social contribution by Happiness Sharing Club

**Specialized community programs**

KDHC engages in a variety of community activities, all of which mirror their unique characteristics. These include human resource development and support of facilities for providing meals at the village in abandoned mines.

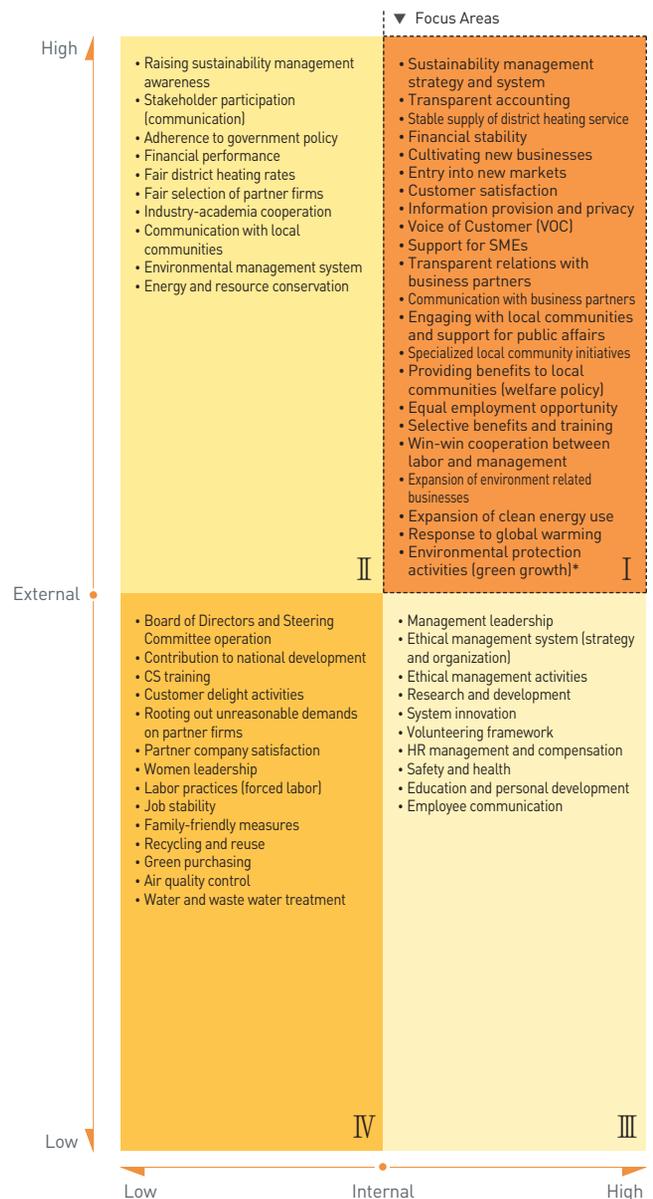
**Cooperation with communities and our support**

KDHC is sharing happiness and joy through the activities of its Happiness Sharing Club.

**Energy welfare policy that promotes sharing**

KDHC subsidizes heat charges for rental apartments and institutions that contain a significant number of low-income earners or the physically-challenged. We will expand the beneficiaries.

Materiality Matrix



\* Issues under 'I' are major issues. This report contains information on performance activities related to these issues.



# Happy Energy





# Happy Life





*KDHC energy represents  
hope, happiness, trust and love.*

Just as the seasons come and go,  
the energy we provide  
creates hope and happiness  
and instills trust and love.



*Spring*

Energy of hope that sows the seeds of dreams in spring





# Summer

Energy of happiness that cools the summer heat



# Four Seasons of Happy Energy



## *Autumn*

Energy of trust that harvests the bounties of fall





# *Winter*

Energy of love that promotes sharing to make winters warm



# Introduction

## Happy energy

for all to enjoy

KDHC is lighting the world with energy. We picture a world where everyone wears a happy smile. Energy that connects hearts and spreads warmth – that is the vision of happy energy.

## 4 consecutive years

*Named excellent public enterprise in ethics management survey by the Ministry of Commerce, Industry and Energy (currently Ministry of Knowledge Economy) 3 categories in 2006*  
▶ 4 categories in 2007

## 5 consecutive years

*Received grand prize at Customer Satisfaction Management Awards (first among public enterprises)*

## Level 6 innovation

*Received the highest grade in the government's assessment of innovation in public enterprises*



## Spirit of KDHC

The spirit of KDHC reflects its commitment to creating true value and serving the customers. We strive to develop technologies, further our know-how, and foster a creative climate where people willingly embrace the future. We are fostering a workplace where "one is all and all is one" with labor-management harmony characterized by a strong sense of ownership and rational mindset. Powered by the dedication of everyone at KDHC, we aspire to being a future-oriented company that creates new energy.

### Certification and Awards

- January 2007** Ranked 1<sup>st</sup> among organizations under the Minister of Commerce, Industry and Energy in the 2006 government customer certification index survey
- May 2007** KDHC head office and 12 branches received Korea Service Quality (SQ) certification (first among public enterprises)
- June 2007** Received the Minister of Commerce, Industry and Energy Prize at 2007 National Environmental Management Awards
- July 2007** Received plaque of appreciation from the Minister of Patriots and Veterans Affairs
- October 2007** Received grand prize at 2007 Customer Satisfaction Management Awards (5th consecutive year)
- October 2007** Received the Minister of Commerce, Industry and Energy Prize at 2007 Service Quality Innovation Promotion Contest
- November 2007** Certified for excellence in human resources development
- November 2007** Named excellent public enterprise in ethics management survey (sponsored by the Ministry of Commerce, Industry and Energy and the Korea Chamber of Commerce and Industry, organized by the Institute for Industrial Policy Studies) (4th consecutive year)



# KDHC Profile

In the wake of two-time oil crises in the 1970's, the importance of energy-saving was raised. In addition, the pattern of energy consumption was changed by the increase in income levels in the 1980s. These changes raised the need of policies on energy and atmospheric environment. The Korea District Heating Corporation (KDHC) was founded in November 1985 to effectively handle these issues as well as save energy, reduce environmental pollution, and enhance the convenience of people's lives.

## Organization

KDHC has 5 headquarters, 13 divisions(offices), and 14 branches. Its horizontal organization structure is designed to respond to the needs of customers in an effective manner and cope with changes of business environment through smooth communications. The structure enables the company to provide its customers with a safe and efficient heat supply and high-quality service through the speedy and accurate exchange of information between its head office and each branch.

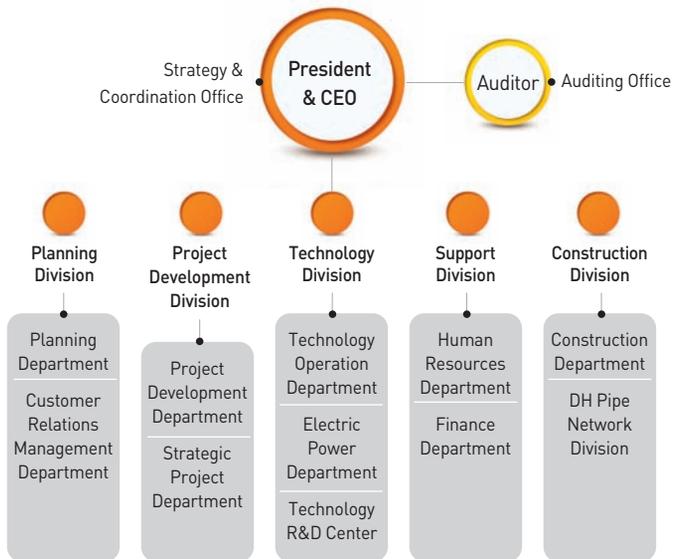
KDHC Head Office



### KDHC snapshot (As of the end of 2007)

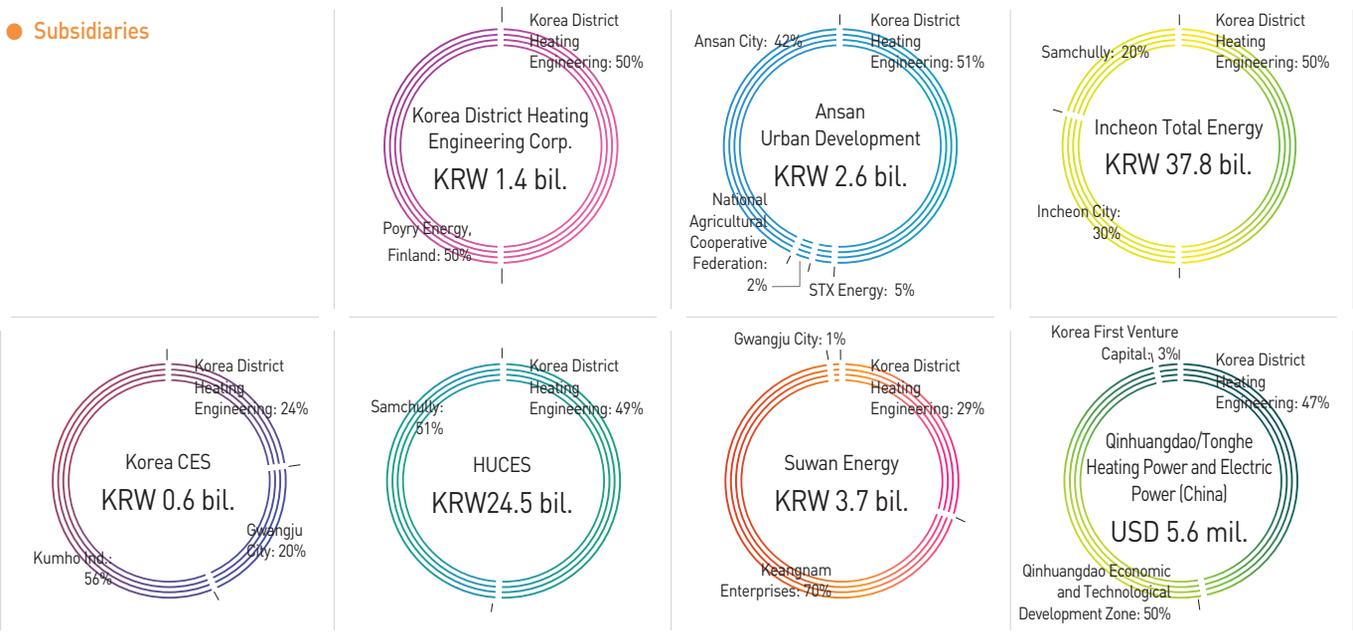
President & CEO	Chung, Seung Il (inauguration on August 27, 2008)
Established	November 1, 1985
Legal Basis	Integrated Energy Business Act Chapter 6, Article 29
Legal Duties	<ul style="list-style-type: none"> <li>- Production, distribution, and sale of integrated energy</li> <li>- Installation and operation of integrated energy supply facilities</li> <li>- Research, technology development and supplementary businesses for integrated energy service</li> <li>- Other businesses as entrusted to it by the central and local governments</li> </ul>
No. of Employees	1,116
Assets	KRW 1,998.5 billion
Capital Stock	KRW 43.4 billion
Sales	KRW 686.2 billion
Head Office	186 Bundang-dong, Bundang-gu, Seongnam City, Gyeonggi-do, Korea

### ● Organizational chart



\* Branches: Jungang, Bundang, Goyang, Gangnam, Daegu, Suwon, Cheongju, Gimhae, Yangsan, Sangam, Yongin, Hwaseong, Paju, Pangyo

● Subsidiaries



**Subsidiaries**

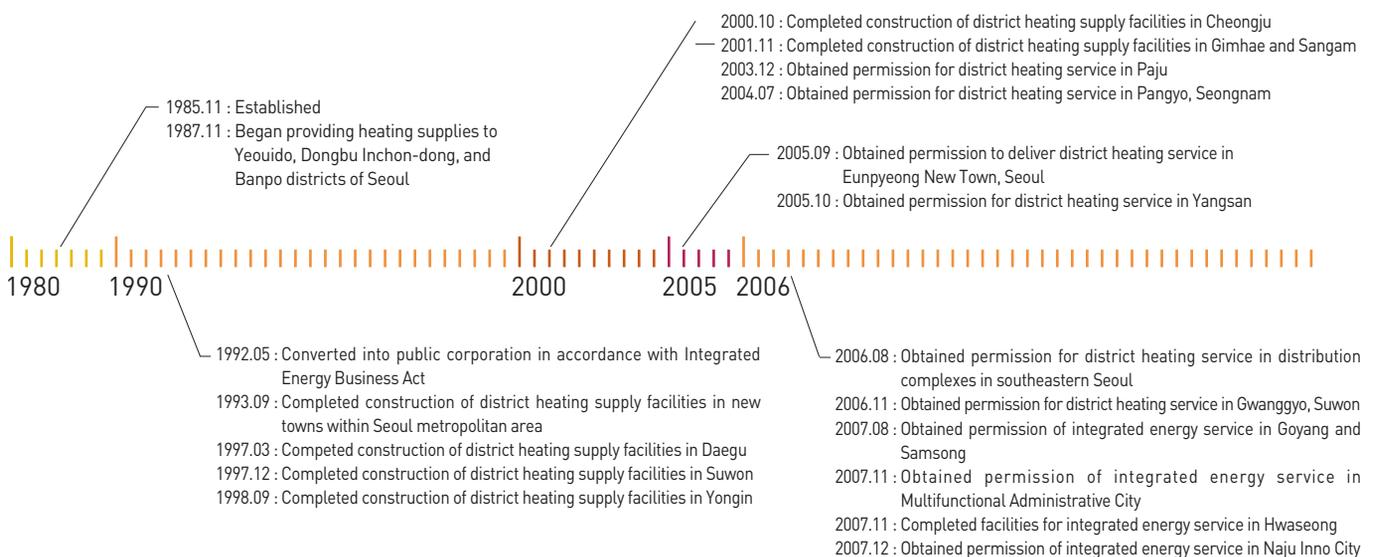
As of the end of 2007, KDHC holds stakes of seven companies including Korea District Heating Engineering Corp. which specializes in heat supply facilities. In 2007, we invested in Suwan Energy that supplies integrated energy to Suwan district and Hanam district in Gyeonggi-do.

**Growth Path**

Since its inception, KDHC has grown robustly through business diversification into electrical power and cooling. Moreover, the company as a public enterprise has committed to fulfilling its social and environmental responsibilities.

▼ Main business ▼

- **Korea District Heating Engineering**  
Designing and inspection of district heating and cooling facilities
- **Ansan Urban Development**  
Supply of district heating and cooling to Ansan and Gojan new towns
- **Incheon Total Energy**  
Supply of integrated energy to Songdo new town, Incheon
- **Korea CES**  
Supply of district heating and cooling to Sangmu new town, Gwangju
- **HUCES**  
Supply of integrated energy to Homaesil District, Suwon
- **Suwan Energy**  
Supply of integrated energy to Suwan/Hanam District, Gwangju
- **Qinhuangdao/Tonghe Heating Power and Electric Power (China)**  
Supply of heat and electricity to Qinhuangdao Economic and Technological Development Zone



## Major Businesses

### Integrated Energy

Integrated energy service refers to the supply of 'heat' or 'heat and electricity' produced by large-scale energy production facilities such as combined heat and power plants, peak load boilers, and resources recovery facilities to users including apartment houses, buildings, and commercial districts. It is an advanced energy supply system contributing to energy savings and reduction in environmental pollution.

### Benefits of Integrated Energy Business

- **Energy Saving** The integrated energy business reduces energy by approximately 22% compared to conventional energy services through improvement in efficiency by combined heat and power generation. It also reduces air pollutants such as sulfur oxides(SOx), nitrogen oxides(NOx), and dust by about 24% and greenhouse gases by some 38% through energy savings and high-efficiency pollution prevention facilities.
- **Comfort and Convenience** Under the district heating system, users no longer need to install individual heat generation facilities (such as boilers) in each household or apartment complex, resulting in safer and cleaner environments. This also enables users to maintain constant indoor temperatures 24/7.
- **Economic Efficiency** Integrated energy business also contributes to the stabilization of people's lives through lower heating bills levied according to the used amount.
- **Environment-friendliness** The district cooling service uses the heat of district heating service. This means that the service is environmentally friendly since it does not use substances including. It also lessens peak-hour loads for electric power during the summer.

### District Heating and Cooling Service

It is the service that supplies heat for heating, hot water, and cooling to a variety of buildings such as houses and commercial buildings in certain areas(large-scale building sites). As of the end of 2007, KDHC supplies heating to 944,000 apartment houses and 1,831 buildings and cooling to 270 buildings through 14 branches across the country. A total of 1.6 million houses (11% of total nation's houses) are supplied with heat by district heating system nationwide. Of them, the company is in charge of 944,000 houses, posting market share of 59%.

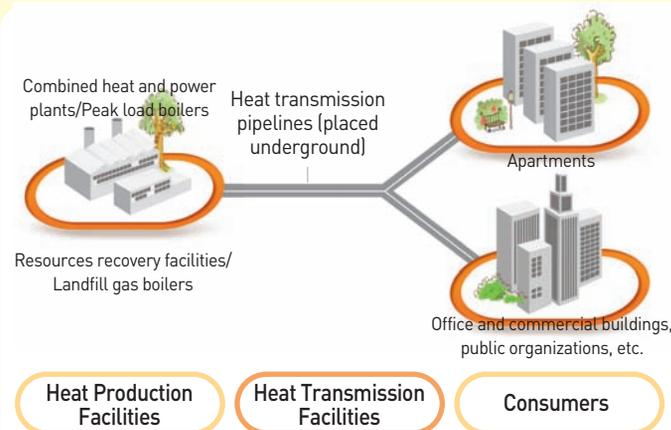
### Electricity Business

Sales of electricity produced by combined heat and power plants(CHPs) to the electric power market or direct sales of electricity to users in district heating supply areas. As of the end of 2007, KDHC sells electricity produced in Daegu, Suwon, Cheongju and Hwaseong to the Korea Power Exchange. We expect this business to expand gradually following the construction of mid- to large-sized CHPs in Paju, Pangyo, Samsung and Gwanggyo.

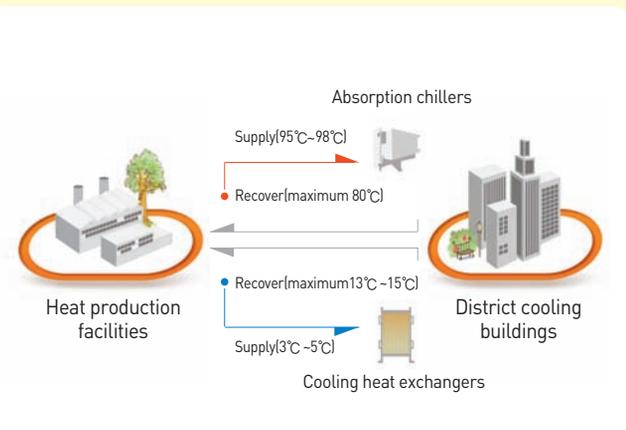
### New and Renewable Energy Business

Since the company contracted an agreement on its participation in new and renewable energy supplies with the Ministry of Commerce, Industry, and Energy(currently Ministry of Knowledge Economy) in July 2005, it has increased investments in such areas as photovoltaic power, solar heat, and biomass. In 2007, it utilized new and renewable energy including incineration heat, landfill gases and solar heat for about 13% of its heat production, 1% point higher from a year earlier.

#### Integrated energy mechanisms



#### District cooling mechanisms



## Major Facilities

KDHC's key facilities can be divided into 'heat supply facilities' that produce, transport, and deliver energy to customers and 'environmentally-friendly facilities' that are designed to minimize the volume of environmental pollutants generated in the process of production and transportation.

### Heat Supply Facilities

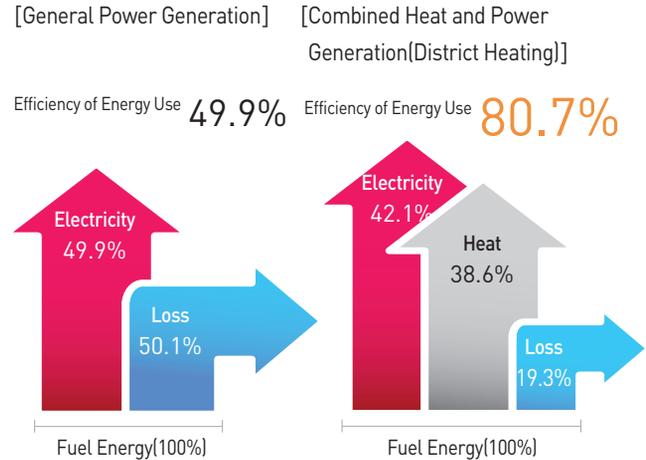
- **Combined heat and power plant** It is high energy efficient facility that produces electricity and heat simultaneously while the conventional power generation facility produces only electricity.
- **Heat exchanger** It generates hot water by utilizing the steam produced in the process of electricity production at combined heat and power plants and peak load boilers.
- **Heat accumulator** It is used to store surplus heat when demand is low and discharge it when necessary, thereby enabling the flexible operation of heat production facilities. It also help to maintain an appropriate level of pressure in the system's pipelines and is used as an emergency heat source.
- **Heat transmission pipeline** It transmits heat from heat-production facilities to heat-using ones. Consisting of supply and recovery lines, it is preinsulated to prevent heat loss during transmission.

### Environmentally-friendly Facilities

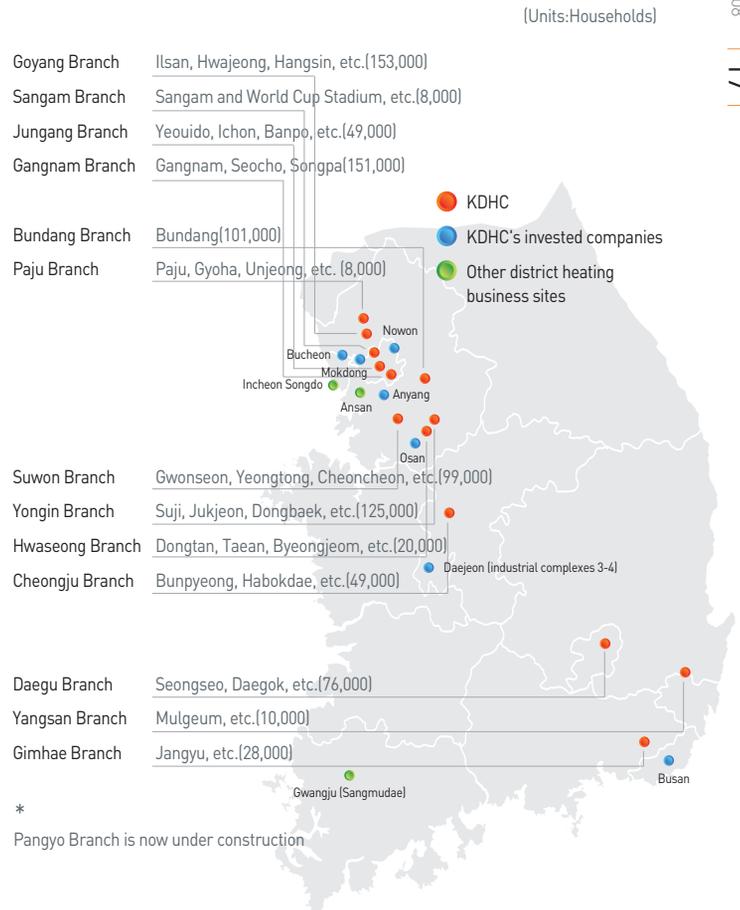
KDHC operates a broad array of facilities to prevent environmental pollution; their major function is to remove or reduce air pollutants such as nitrogen oxides and sulfur oxides. We also operate a monitoring system to manage such pollutants by measuring the amount of emissions in real-time while transmitting the results to the government's environmental control center every five minutes and every thirty minutes.



### Efficiency of energy usage by combined heat and power generation



### Distribution of district heating



## Corporate Governance

KDHC's corporate governance is designed to satisfy the public interest. It is in line with the company's mission which specifies enhancement of the convenience of people's lives, saving energy, and reduction in environmental pollution through efficient operation of integrated energy business.

### Shareholders

Paid-in capital of KDHC remained unchanged at KRW 43.4 billion as of the end of 2007. Shares were not listed and owned by the Korean Government, the Korean Electric Power Corporation, the Korea Energy Management Corporation, and the Seoul Metropolitan Government. Shareholders and their ownership were not changed over the year. They can make revisions to the company's articles of incorporation, decide on the appointment of directors, and approve the settlement of accounts at the general shareholders' meeting.

### ● Corporate governance structure

(Units: KRW million, %)



### Board of Directors

The board of directors(BOD) is the company's top decision-making body. It decides on all matters concerning the company's operations, exclusive of those within the purview of the general shareholders' meeting and the auditors. The BOD reviews and decides on management goals, the budget, and the issuance of corporate bonds, as per Korean law and the company's articles of incorporation.

It consists of four standing directors including the President & CEO and five non-standing directors. The company ensures rational decision-making process and transparent management by filling the majority of BOD seats with non-standing directors. To increase objectivity and transparency when selecting standing and non-standing directors, the appointment process includes taking nominations from the Candidate Recommendation Committee, which is comprised of outside experts, and resolution of the Public Enterprise Operation Committee.

The BOD held twelve meetings in 2007, dealing with a total of 51 agendas and reports. Compensation for the President & CEO, auditor, and standing directors comprises base salaries, incentives, and retirement grants and is decided on by the BOD. The incentives are calculated based on performance evaluations. Reappointment of non-standing directors is determined by evaluating their job performance and results.

### Executives

Executives, namely the President & CEO and representatives of five divisions, exercises the duties entrusted by the BOD. Important issues that require immediate decisions are determined in advance by gathering the opinions of employees and holding management meetings. These procedures help the company to maintain harmony and consistency among sectors and allow each department to pursue its works in a more efficient and speedy manner.



### BOD operation

Category	2005	2006	2007
No. of meetings held	11	11	12
No. of agendas*	40	45	51
Participation rate of non-standing directors (%)	96.4	96.4	93.3

\*

Other agenda for normal reporting are excluded

### Screening criteria for director candidates

Category	Screening Criteria
Presidential Candidates	<ol style="list-style-type: none"> <li>1. Ability to determine and achieve corporate goals</li> <li>2. Ability to manage organizations and companies</li> <li>3. Knowledge and understanding of management, the Korean economy, and the energy sector</li> <li>4. Ability to lead a public service enterprise</li> <li>5. Suitable personality for the role</li> </ol>
Standing Director Candidates	<ol style="list-style-type: none"> <li>1. Expertise and experience in the integrated energy industry</li> <li>2. Innovative thinking to cope with rapidly changing operating environment</li> <li>3. Leadership and ability to direct external operations</li> <li>4. Set a good example as a manager through high-level qualifications and sense of ethics</li> </ol>
Non-standing Director Candidates	<ol style="list-style-type: none"> <li>1. Understanding of the energy industry</li> <li>2. Expertise and competency in management and the economy</li> <li>3. Willingness to improve levels of management transparency and efficiency</li> <li>4. Sound awareness of ethics and responsibilities</li> </ol>

### Auditor

The auditor monitors the company's internal operations. He or she is tasked with participating in general shareholders' meetings, examining agendas and documents that the directors have submitted, and stating whether they violate Korean laws, ordinances or the company's articles of incorporation or include wrong or unreasonable matters. When a director has broken or is expected to break the law, the auditor must report it to the BOD. The auditor conducts audits more than once a year according to a pre-determined schedule and carries out extraordinary ones when deemed necessary.

### Committee

KDHC operates a variety of committees; Management Innovation Committee, Open Public Enterprise Committee, Ethics Management Committee, Environmental Management Committee, and Sliding Scale Fuel Cost Verification Committee. These bodies deal with key issues and improve systems relating to the company's sustainable development. To ensure transparency, each committee must include both non-standing directors and stakeholder representatives.

- **Management Innovation Committee** Established in July 2004, the committee is made up of a chairman, advisors, and standing and non-standing members. It devises management innovation plans and analyzes the results. In addition, the committee has the role of evaluation and compensation on innovative projects and tasks. In 2007, the committee was held two times and decided on "innovation target" and "compensation of outstanding innovation projects."

Sixth BOD meeting in 2008





01



02



03

01. Sliding Scale Fuel Cost Verification Committee  
02. Management Innovation Committee  
03. The 2nd Open Public Enterprise Committee

● **Open Public Enterprise Committee** This committee was established in June 2000 to evaluate the company's service improvement programs including customer facilities management and offer advice on service improvement plans and managerial transparency. Comprising ten members, including representatives of customers, consumer group leaders, and energy specialists, the committee holds quarterly meeting and acts as a communications channel between KDHC and its customers.

● **Ethics Management Committee** Established in July 2003 to heighten the awareness of ethical management, the committee sets up plans for ethical management, monitors the results, and improves ethical management-related systems. Led by the President & CEO, it is composed of standing and non-standing directors, the heads of relevant divisions and departments, and representatives of employees. It held three meetings in 2007 and resolved several proposals including "plan to enhance the integrity for sustainable partnership."

● **Environmental Management Committee** Established in October 1995, the committee is tasked with carrying out studies and inspections of the company's environmental systems at its head office and eight branches. Led by the head of the Technology Operation Department, it consists of branch managers and the heads of each department, office, and team. It holds one meeting a year usually in January or February.

● **Sliding Scale Fuel Cost Verification Committee** The committee was established to ensure that the company observes relevant laws, ordinances, and regulations regarding the adjustment of heating charges and supply in accordance with the sliding scale fuel cost calculator and verify the accuracy of such computations. Consisting of specialists recommended by energy organizations, accounting firms and consumer groups, it protects consumer rights and interests by guaranteeing objectivity and transparency in the company's rate adjustment processes. The committee was convened four times in 2007.

**Risk management activities**

Category	Risk	Causes	Management Activities
Internal risk	Risk of lessening in competitiveness of human resources	Declines in efficiency following personnel management and the segmentation of organizations	Introduce multilateral evaluation mechanism, Increase employee training
	Risk of information loss	Hacking due to advances in IT	Build information firewalls, Strengthen information security and inspections
	Risk of loss of property and life	Fires in and damage to facilities	Increase education on safety management, Develop fire-fighting facilities, Carry insurance
	Liquidity risk	Increases in new investments and borrowing costs	Create advanced financial forecasting systems, Create internal accounting management systems(plan)
External risk	Risk of loss due to lawsuits	Conflicts of interest at time of entering into projects	Hire in-house lawyers and utilize legal advisors, Develop regulations on the transaction of legal proceedings
	Risk of decrease in operational competitiveness	Advancement of small-sized combined heat and power plant technologies	Strengthen capabilities (including establishing new organizations to carry forward new areas of interest)

- Corporate Sustainability Management
- Ethics Management
- Innovation Management

# Corporate Sustainability Management

## Strategies and Tasks for Sustainability Management

KDHC tries to keep expanding integrated energy business. Instead of focusing on the new housing development area, it seeks to create new demand and revitalize new and renewable energy business while entering into the overseas integrated energy services in order to secure energy sources stably. Moreover, as a public enterprise, KDHC exerts its utmost to make a happier world based on social contribution, environment-friendly management and trust.

### Sustainability management structure



- **Value Creation Management**
  - Manage for intrinsic values (Business Management Team)
  - Improve corporate efficiency (Innovation Team)
  - Manage business environment (Strategy & Coordination Team)
- **Environmentally Friendly Management**
  - Develop environmentally friendly energy (New and Renewable Energy Team)
  - Recognize global responsibilities (Environment Department)
  - Create environmentally construction systems(Construction Team)
- **Social Responsibility Management**
  - Fulfill social responsibilities (PR Team)
  - Manage for customer satisfaction (Customer Relations Management Division)
  - Increase ethical awareness (Auditing Office, Innovation Team)

### Organization for Sustainability Management

Our sustainability management organization features the horizontal structure in order to quickly respond to changes in business environment. The organization is in charge of three areas; value creation management, social responsibility management, and environment-friendly management. Each area depends upon efficient and effective networking between operating divisions, while the Strategy & Coordination Team plays an overall advisory role and is tasked with coordination. Final decisions are made after in-depth reviews and are reflected in its operational strategies and tasks.

### Sustainability Management Strategies



- Corporate Sustainability Management
- Ethics Management
- Innovation Management

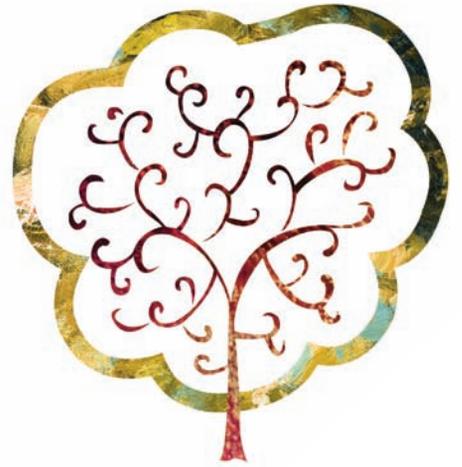
### Strategic Tasks for Sustainability Management

KDHC creates annual tasks to fulfill its sustainability management strategies. These encompass eight areas.



#### Strategic tasks for sustainability management

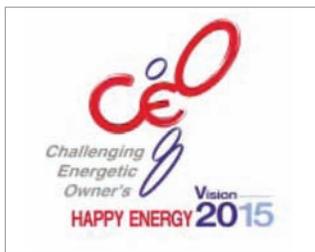
Strategy	Strategic Tasks
Set up strategic business scheme	Advance integrated energy business
	Diversify integrated energy business
	Expand district integrated energy business
	Augment demand in existing service areas
Explore new green markets	Launch overseas businesses
	Pursue CDM and CHP
	Secure early lead in new and renewable energy via tie-up with integrated energy business
Promote performance-oriented innovation	Secure demand for cooling service via review of district cooling policy
	Overhaul internal promotion scheme
	Introduce open employment process
	Expand multi-dimensional innovation assessment for greater emphasis on performance and ability in HR management
Establish core technology scheme	Set up computerized HR system for strategic HR management
	Derive 10 core competencies to devise specialized training program
	Set up heating supply system via creation of heating pipeline network connected to Seoul metropolitan area
	Provide optimal supply of connected heating service
	Implement integrated operating system
	Build technology data infrastructure
Pursue creative customer satisfaction	Make R&D investment for technology accumulation
	Diversify research projects to technology, system and policy
	Reinforce position as leader in customer satisfaction
	Strengthen customer service capability
	Carry out differentiated customer satisfaction activities
	Rationalize tariff scheme
Foster progressive organizational culture	Set up customer-oriented organization in response to changes in the business environment
	Build integrated customer information system to enhance customer service
	Foster self-initiated learning culture via system for continued learning
	Trust management
Fulfill social responsibility	Select unique values for progressive organizational culture
	Create an inspiring workplace and respect youthful culture
	Carry out organizational culture initiatives and training
	Minimize environmental impact
Adopt global management system	Implement social equity-based employment program
	Advocate image as a company that emphasizes social contribution
	Execute basic strategy for social contribution
	Introduce advanced environmental management system
	Introduce sustainability management system
	Realize strategy-focused organization(SFO) via BSC upgrade
Set up integrated management system to boost mid/long-term execution capability	
Reinforce innovation activities that produce results and develop unique innovation brand	
Establish globally recognized ethical management system	



### Sustainability Management Philosophy

The "CEO Mind" forms the basis of our corporate sustainability management strategies. It also reflects our determination to be a leader in the environmentally friendly energy field.

- **CEO Mind** This reflects the spirit of the KDHC family and our desire to become a world-class company. It is an acronym for "Challenging Mind," "Energetic Mind," and "Owner's Mind," meaning that all employees think and act like CEO.
- **Happy Energy Happy Life** It is our corporate philosophy, under which KDHC will do its utmost to make a happy energy world.
- **Vision 2015** This encompasses our desire to become the "Best Environment-Friendly Energy Company" and includes our mid- to long-term goals to grow to a company generating KRW 2.5 trillion in sales and supplying heat to 2 million houses.



Sustainability Management Philosophy

CEO Mind special class



#### ▼ CEO Mind ▼



# Ethics Management

## Ethics Management at KDHC

Corporate ethics is an essential element for a company's sustainable growth. As the business continues to grow both at home and abroad, we try to establish advanced ethical management system. We joined the UN Global Compact and observe its ten principles in the areas of human rights, labor, the environment and anti-corruption. At KDHC, we engage in a host of social contribution activities to fulfill our responsibilities as a public enterprise. In addition, we are strengthening our efforts to stress the need for ethics management within the organization by linking the behavior of our employees to their evaluation and compensation. We have also formulated a Code of Ethics that serves as the standard for our employees' judgments and behavior while distributing guidebook on ethics management. In order to enhance the practice of ethics management, we adopt, pursue, and evaluate tasks for it on a divisional level every year. We also operate a company-wide ethics management network.

### ● Company-wide ethics management structure



## Background

Under the CEO's strong belief on ethics management stating "we will become a respected company in the 21st century through continued social responsibility and fair and transparent management," KDHC recognizes the necessity of ethical management stricter than that of private companies and is carrying it out in a systematic manner.

Our ethics management system was set up primarily for three main reasons. Firstly, we aim to "foster a clean corporate image and corporate culture." KDHC has upheld a culture free of corruption and built an image as a socially-friendly public enterprise that gives priority to the customer and environment. But as we grew in size, we recognized the need for measures to ensure that our employees maintain a high level of ethical awareness. Secondly, "increased demand on public enterprises to meet their social responsibilities" heightened the need for contribution to society and the domestic energy environment. Lastly, ethical management is vital to "enhance corporate competitiveness," as trust and integrity are the source of competitive edge to drive sustainable development.



## Ethics Management System

Our ethics management goal is to create an "energy company realizing sustainable growth with trust as our asset." Based on high ethical awareness and effective implementation, we promote our core values of fairness, transparency, prudence, integrity and responsibility to protect the interests of our customers, the environment and local communities.

### Organization in Charge

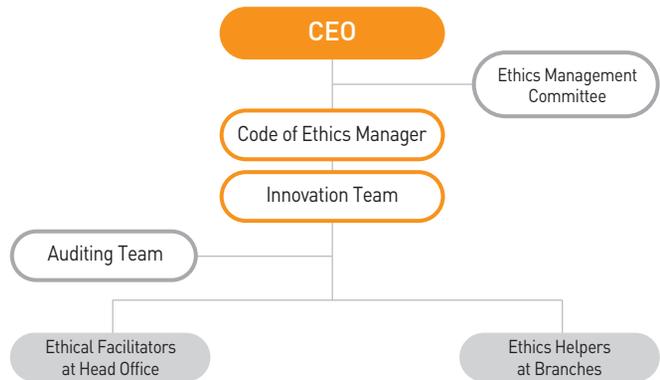
Ethics management is conducted by the ethics organization which is composed of the Ethics Management Committee, the Code of Ethics Managers, the Innovation Team, the Auditing Team, and Ethical Facilitators at head office and each branch. Set up in July 2003, the Ethics Management Committee draws up action plans, reviews progress and decides on measures to enhance the related system. The committee is chaired by the CEO while the auditor serves as the advisor. Other committee members include standing and non-standing directors and employee representatives from various ranks.

In principle, the committee meets once a quarter. It held three meetings in 2007. Consultations on issues and the operation of the Code of Ethics are carried out by the heads of the ethics management and auditing departments. The Innovation Team and the Auditing Team deal with corruption, audits, and inspection, as well as activities within their own operational areas. These include an internal reporting program that issues reports and makes decisions on remuneration and other matters when instances of corruption occur. In addition, the ethical facilitators help to resolve problematical ethical situations and disseminate information on ethics management throughout the company.

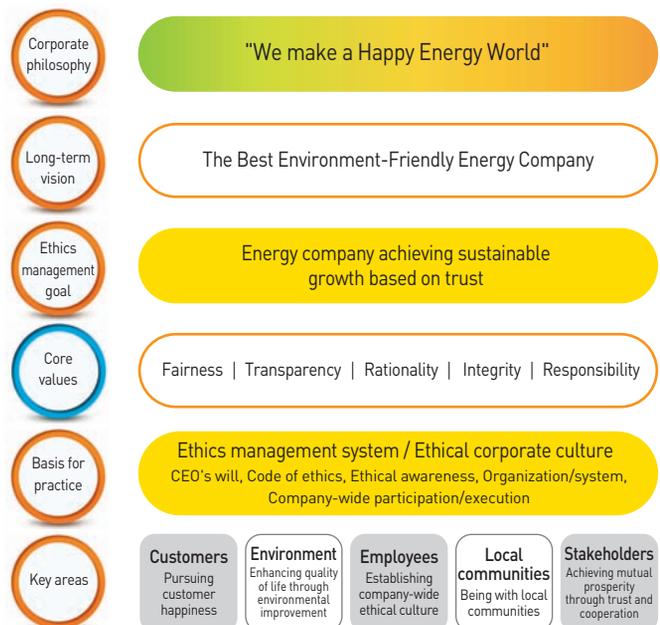
Ethics Management Committee



### Organizational chart



### Ethics management structure



## Ethics Management Standard

We set up ethical standards for all our employees. Its function is to improve the ethical underpinnings of our corporate activities and forward the realization of our corporate vision.

### Charter of Ethics

As the basic principle for ethics management, Charter of Ethics aims to create a transparent corporate culture, stick to the orders in the market, observe the rules and regulations both at home and abroad, and pursue co-prosperity with stakeholders through the high standard ethical values, an adherence to fair business practices, and the prevention of corruption.

Informal gathering on ethics management



### Code of Ethics

The Code of Ethics was drawn up to set forth guidelines for proper decision-making and judgment that are in line with the Charter of Ethics. It is organized into seven chapters and 32 articles. To view the entire text of the Code of Ethics, please refer to the KDHC website ([www.kdhc.co.kr](http://www.kdhc.co.kr)).

### Code of Conduct and Implementation Guidelines

Beyond work regulations and control to prevent wrongdoing, these prescribe standards for ethical behavior that all our employees must obey in relation to our stakeholders such as customers, employees, shareholders, communities, and partners. Further examples of and commentaries on ethical dilemmas in the form of Q&As (including the rationale behind ethics management, explanations of the Code of Conduct, and checklists for ethical behavior) are available on our in-house Intranet, Nanbang Sawu. We also run ethical awareness self-checks on a weekly basis.

#### ▼ Structure of Code of Ethics ▼

- Chapter 1. General Rules
- Chapter 2. Basic Ethics of Employees
- Chapter 3. Ethics for Customers
- Chapter 4. Ethics for Competitors and Partner Companies
- Chapter 5. Basic Ethics for Employees
- Chapter 6. Ethics for Country and Society
- Chapter 7. Supplementary Rules

## Charter of Ethics

**Korea District Heating Corporation** is an integrated energy provider that has contributed to increasing public benefit and spurring national development by protecting the environment and conserving energy. We will maintain a high level of ethics, adhere to laws and regulations, and carry out sustainability management to become a global energy company that grows with local communities. We will realize our corporate mission by upholding a challenging mind, energetic mind, and owner's mind. Based on high ethical values, we will conduct our business activities with an honest and fair approach and lead efforts to prevent corruption and foster a clean culture.

- We will provide the highest level of energy and service to customers to realize customer satisfaction.
- We will adhere to domestic and overseas laws and regulations, promote free market competition, and pursue mutual development with all stakeholders.
- We will respect each individual, refrain from discrimination, provide equal opportunity and conduct fair evaluation, and strive to enhance employee's well-being and quality of life.
- As a corporate citizen, we will engage in social contribution activities and constantly create new value to contribute to advancing the nation and society.
- We will respect all life and practice environmental management to promote a clean environment and living conditions.

# Ethics Management Performance and Activities

## Strategic Ethics Management Activities

In July 2005, KDHC set up a strategic model to grow to a leading energy company based on trust. According to the three phase model(phase 1. consolidating the foundations for practical participation, phase 2. encouraging voluntary participation, phase 3. spreading participation), the company has conducted a variety of activities related to the three phases of implementation. In addition, we formulated our sustainability management strategy in 2007, under which we reexamined our ethics management strategy and action plans. According to our companywide ethics management system, we decide on annual tasks for the CEO, employees, customers, business partners and local communities. In 2007, we carried out 35 ethics management tasks that were selected considering their level of urgency and importance.

## Joining the Global Compact

KDHC expressed its stance of supporting and adhering to the UN Global Compact in a letter sent to the UN Secretary General by the CEO in May 2007. Two months later, KDHC was registered as a founding member of Global Compact Korea Network. In an interview with the press given at the time of joining the Global Compact, the CEO said, "Businesses should contribute to society. In particular, there is special emphasis on the social responsibility of public enterprises. We will take this occasion to enhance credibility of KDHC in and outside of Korea." As part of our commitment to the UN Global Compact, we invited representatives of 39 partner firms on October 12 and signed a sustainability management cooperation pact, which is intended to spread awareness of corporate responsibility to the society and environment. Subsequently, we organized a workshop for 143 employees of 131 partner companies. We plan to hold annual workshops for partner company staff to review progress and ensure effective implementation of the pact.

### ● Strategic model for master plan



## Engagement and Action

KDHC is a participant of BEST Forum (inaugurated by Korean corporations and individuals with an interest in ethics management), BEST CEO Club (gathering of CEOs committed to ethics), and the Council for the Korean Pact on Anti-Corruption and Transparency (association of public enterprises). All KDHC employees signed an "ethics pact" in January, while senior managers and executives additionally signed an "integrity pact" in March. Five months later in August, newly appointed heads of each of the headquarters signed a pledge assuring integrity in carrying out their duties which explicitly stated their obligations and disciplinary measures for violations. That pledge became mandatory under company regulations in December. New recruits receive special lectures on ethics given by the CEO upon joining KDHC, and an individual's capabilities, performance and ethical behavior are taken into account when deciding on promotions. We have also instituted a "one strike and you're out" rule for attempts to use bribery for purposes of career advancement.

01. Signing ceremony on sustainability management cooperation pact

02. Signing ceremony of CEOs at BEST Forum



01



02



03

### Observance of Regulations and Agreements

KDHC treats all its employees with dignity and respect, strictly following its own internal rules and all employee-related regulations in Korea's labor laws and ordinances including the Labor Standards Act and International Labor Organization (ILO) conventions. Accordingly, we have never violated any laws or regulations concerning child labor and forced labor. Moreover, we also prohibit illegal donations to political parties, politicians, and candidates for election.

### Promoting Ethical Culture

A total of newly elected 31 ethics helpers and the Innovation Team operate the help line that offers consultations and advice when ethical dilemmas occur. In 2007, we consulted with three employees on these matters. In addition, we offer a weekly self-awareness checking program on our Intranet to enhance our employees' understanding of ethics management issues.

Moreover, we have posted an online guidebook as ethical standard for decision-making and behavior on the Intranet in order for employees to utilize it. The guidebook was initially enacted in 2006 and amended in December 2007 to provide updated information.

Divisional ethics debates led by ethics helpers



### Education on Ethics

We spent a total of KRW 91 million for the training programs in 2007. 31 ethics helpers received training, and participated in external seminars including the BEST Forum to enhance ethical awareness.

'Man of Ethics Award' and 'Award of Excellence' were given to four employees who made a substantial contribution to ethics management. With respect to senior management, subjects of the executive integrity evaluation were expanded from division heads and above in 2006 to include team leaders in 2007. Moreover, we are spreading the importance of ethics management to our business partners through various meetings, the mandatory integrity pact and greater use of electronic procurement. Ethics is also an important evaluation criteria when assessing the performance of KDHC subsidiaries.

#### Ethics education

Action Plans	Progress with Implementation
Monthly lectures by outside experts	• Total lecture time of four hours on sustainability management targeting all employees in March and October
CEO lecture	• Attendance by 117 employees in April and October
Ethics education for management	• One-hour lecture on sustainability management for 20 individuals
Internal ethics education	• 25 in-house courses attended by 655 individuals
Cyber ethics education	• 17-hour cyber training program taken by 179 employees newly recruited in '06 and '07 - "Ethics management, a determinant of corporate survival"
Ethics helper training program	• Four-hour session on the leadership role and responsibility of ethics helpers
Ethics management expert training program	• Participation in SMP (sustainability management program) for a two-month period
Touring ethics lectures	• Two-hour lectures on ethics given by outside experts at seven branches
Divisional ethics debates led by ethics helpers	• Two hours of debate aimed at boosting integrity
Outside training on ethics management	• Participation in workshops organized by BEST Forum, Council for the Korean Pact on Anti-Corruption and Transparency, etc.
Ethics education for business partners	• Education for totally 227 individuals over 12 sessions

### Observance of ILO conventions

Category	ILO Conventions	Observance by KDHC
Article 16	Employers shall be required to ensure that, so far as is reasonably practicable, the workplaces, machinery, equipment, and processes under their control are safe and without risk to health.	<ul style="list-style-type: none"> <li>• Provide protective equipment, including safety protection tools</li> <li>• Eliminate factors that can damage the musculoskeletal system</li> <li>• Improve work environment and conduct biannual medical check-ups of at-risk workers according to results of work-related surveys</li> </ul>
Article 18	Employers shall be required to provide, where necessary, for measures to deal with emergencies and accidents, including adequate first-aid arrangements.	<ul style="list-style-type: none"> <li>• Appoint safety managers and health managers at each branch</li> <li>• Conduct job training for health and safety managers</li> <li>• Provide all necessary medical supplies</li> </ul>
Article 19	Mutual cooperation between workers and employers in regard to occupational health and safety	<ul style="list-style-type: none"> <li>• Scheduled to establish an occupational safety and health committee                             <ul style="list-style-type: none"> <li>-Establish cooperative safety and health management system(after September 2007)</li> </ul> </li> <li>• Conduct occupational health and safety-related training (from September 2007)                             <ul style="list-style-type: none"> <li>-Targets: Safety managers, health managers, and other applicants (3-month course)</li> </ul> </li> <li>• Provide workers with information on occupational health and safety through in-house Intranet</li> </ul>

# Innovation Management

## Innovation Leadership

KDHC established innovation management system to help it to survive in the business environment featuring ever-intensifying competition due to market entry of the private operators. We define innovation as "developing a competitive company by creating more efficient and valuable businesses." Recognizing innovation as constituting an essential element for management, we have set innovation goals and strategies that apply to all areas including HRD, organization, and operations.

### CEO's Innovation Philosophy

The CEO has decided on marathon innovation as the new innovation keyword for the purpose of producing results through continued improvement. The CEO's innovation keyword, which is newly set each year, is intended to communicate the CEO's innovation philosophy to all members of KDHC and serves as the basis for innovation activities. Innovation can be likened to a marathon in the sense that ongoing change and improvement is crucial for success, regardless of past performance. Guided by this performance-oriented principle, KDHC is striving to create results that we can share with the public.

CEO Mind education - experiencing foreshore



### CEO's Innovation Guideline

CEO's innovation guideline puts an emphasis on innovation in three ways; entity innovation, performance innovation, and culture innovation. Entity innovation means basic innovation based on clear definition of innovation and strategies. Performance innovation represents evaluation and compensation on innovative performance while culture innovation signifies moving away from passive attitude.

#### CEO's innovation guideline

Category	Details
Entity Innovation	<ul style="list-style-type: none"> <li>Defining innovation clearly; establishing targets, directions, strategies, and methods</li> <li>Building strong organization, forming common recognition among employees, innovation by all the employees</li> <li>Breaking away from stereotypes and changing thought processes to achieve true rather than superficial innovation</li> </ul>
Performance Innovation	<ul style="list-style-type: none"> <li>Encouraging, evaluating, and compensating for substantive innovation performances</li> <li>Building cycle of 'good performances ► evaluations ► compensation'</li> <li>Abandoning egalitarian principles that are not based on one's performance within an organization</li> </ul>
Culture Innovation	<ul style="list-style-type: none"> <li>Moving away from passive attitude and negative side of culture in public enterprise</li> <li>Shifting to CEO Mind from 'just follow' culture</li> </ul>

### CEO's Efforts for Innovation

The CEO monitors innovation activities that are in progress through various means including assessment of innovation levels in the organization and monthly innovation meetings. Frequent open debates related to major policy decisions are held to gather employees' views, while "Open Talks Time", a program for direct dialogue with employees, is used to identify obstacles to innovation. These measures provide backing for effective implementation of innovation activities. Meanwhile, senior officials conduct innovation lectures and convey innovation messages to employees. They also hold monthly innovation forums to cultivate a learning environment and share their knowledge.

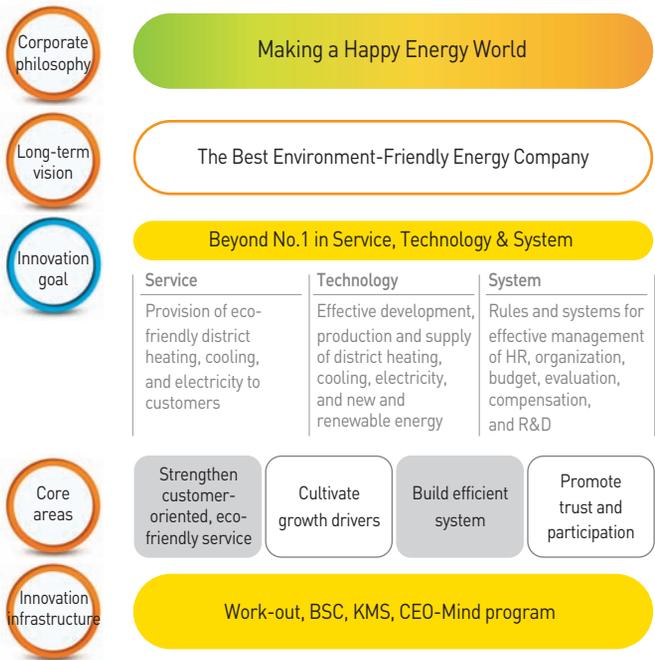
## Goal and Strategies

KDHC is committed to becoming an integrated energy provider that deploys innovation to lead the energy industry. To achieve our vision, we have set “Beyond No.1 in Service, Technology & System” as our innovation goal. We believe that we have to win the race against ourselves, rather than beating the competition, to become an unrivaled energy company. Through our innovation efforts, we intend to produce tangible results that can be shared with the public. As our corporate philosophy states, we aspire to creating a “happy energy world” as a company respected and trusted by society.

### Strategies and Action

To set up a performance-oriented system for sustainable innovation and to achieve our innovation goals, we have adopted the following four innovation strategies: provide customer-oriented, environmentally friendly service; cultivate growth drivers; enhance efficiency; and foster a culture of trust and participation. Depending on the priority level, we then selected and implemented 94 innovation tasks. These tasks enhanced management efficiency and resulted in KRW35.5 billion in cost savings.

### Innovation goal and directions

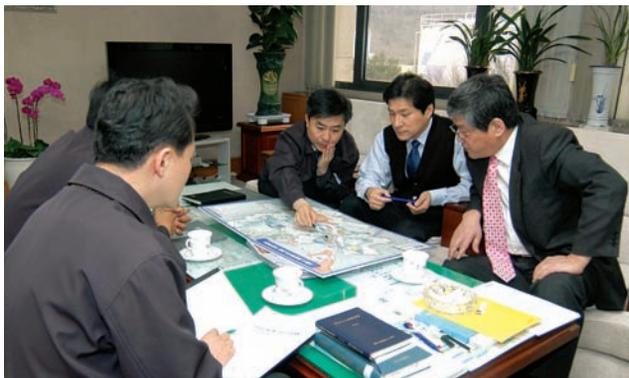


### Innovation strategies and tasks

Innovation goal	Innovation strategies	Innovation tasks
Beyond No.1 in Service, Technology & System	<ul style="list-style-type: none"> <li>Strengthen customer-oriented, eco-friendly service</li> <li>Cultivate growth drivers</li> <li>Build efficient system</li> <li>Promote trust and participation</li> </ul>	<ul style="list-style-type: none"> <li>17 tasks (eg, expand supply of district heating, ABC customer satisfaction service)</li> <li>16 tasks (eg, dehumidifying cooling, new and renewable energy CDM project)</li> <li>41 tasks (eg, independent profit system, integrated operating system)</li> <li>20 tasks (eg, sustainability management, social equity-based employment)</li> </ul>

01. Meeting on innovation led by division head

02. Wind generator in the Sky Park



● Innovation network organization



## Innovation Organization

KDHC is committed to developing a network-style innovation organization to guarantee that innovative thinking will be encouraged at all its worksites. We strengthen the authority and capability of innovation organization by operating the Management Innovation Committee, which is the top decision-making body for the pursuit of innovation (chairman: CEO) and the Innovation Team under the CEO. In addition, we operate two types of innovation organization; regular top-down innovation organization and bottom-up project innovation organization that have practical roles and responsibilities by organizational unit, enabling us to drive proactive innovation.

▼ Innovation organization activities ▼

**Top-down regular organizations**

- 126 onsite change managers
- 64 top-down tasks
- KRW24.2 billion in economic effect

**Bottom-up project organizations**

- Task execution by 169 persons
- 30 bottom-up tasks
- KRW11.3 billion in economic effect

### Support for Onsite Innovation Organizations

KDHC has introduced a wide range of support measures for smooth execution of innovation activities at work sites. Review of innovation levels and onsite discussions enable identification of hurdles to innovation, while the organization overseeing innovation provides related consulting and budgets. Surveys are conducted on the support extended and the feedback received is used to ensure that support measures effectively spur innovation.

## Innovation Management Structure

We developed an IT system called the "Innovation Corner" and tasked it with monitoring our innovation activities in real time. Its duties range from planning innovation tasks to managing their progress and evaluating the results. Online evaluation on innovation tasks are conducted by our experts. Adding to that, various incentives have been introduced to encourage innovation. For example, outstanding innovation results are recognized during our management innovation contest and extra points are given in employee evaluations.

### Innovation Monitoring

For methodical monitoring and assessment of innovation during each phase of implementation, we have set up a system comprising the following stages: 「task identification ► implementation and review ► evaluation ► compensation and dissemination ► feedback」. The entire monitoring process is carried out using the Innovation Corner. Additionally, half-yearly online surveys are conducted to periodically review and gain feedback on innovation activities.

▼ Innovation monitoring and evaluation system ▼



### Innovation Incentives

As a means of motivating employees to pursue innovation, KDHC has set up a system linking performance with rewards: 「Incentive ▶ performance and evaluation ▶ compensation ▶ satisfaction assessment」. Along with prize money, non-monetary incentives are offered including additional points in employee evaluations and recognition. In August 2006, we adopted a new innovation compensation scheme called policy tracking, which aims to raise innovation policy quality. Under this scheme, special incentives were awarded for exemplary cases of innovation.

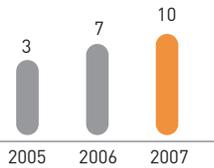
#### ▼ Policy Tracking Awards ▼

- Project to utilize diseased pine trees
- Social equity-based employment program
- Support for Yemi Elementary School

#### Rewards for

#### Innovation

(Unit: Cases)



### Programs to address shortcomings

Weakness	Improvement Measures	Learning Program	Result
Management Leadership	<ul style="list-style-type: none"> <li>• Discussion, case studies</li> <li>• Tailored training to address weakness</li> </ul>	'Innovation Forum'(20 executives) Team Leader-Advanced (18 persons) Team Leader- Intermediate (28 persons)	<ul style="list-style-type: none"> <li>• Stronger leadership and innovation activity among executives (lectures, CoP activities, social contribution, etc.)</li> <li>• Satisfaction on education and skill building: 89%</li> <li>• Potential contribution to work duties: 90%</li> <li>• Provided vision, coaching, performance assessment, etc.</li> </ul>
Problem-Solving	<ul style="list-style-type: none"> <li>• Selective training based on individual competency</li> </ul>	Education by rank, training by outside experts Work-out technique training (210 persons) Innovation specialist program (26 persons) CoP leader program (31 persons)	<ul style="list-style-type: none"> <li>• 357 persons took part in 11 courses</li> <li>• Addressed individual shortcomings</li> <li>• Solved onsite problems using innovation techniques (30 tasks) to save KRW11.3 billion in costs</li> <li>• Strengthened skills of innovation specialists to consultant levels</li> <li>• Boosted problem-solving and learning CoP</li> <li>• 23 in 2006 ▶ 49 in 2007</li> </ul>
Self-Innovation	<ul style="list-style-type: none"> <li>• Self-led change management</li> </ul>	CEO-Mind program (change management, teamwork training) e-Learning innovation program	<ul style="list-style-type: none"> <li>• Participation by entire workforce (99.3%, 905 persons)</li> <li>• Satisfaction in personal change: 92%</li> <li>• 950 persons took part in 130 courses</li> <li>• Process achievement improvement: 87%</li> </ul>

## Strengthening Innovation Capability

To drive continued performance and innovation, efforts are made to constantly upgrade the innovation capability of all individuals at KDHC including the CEO. KDHC has set up diverse channels to identify innovation ideas and created a culture that encourages the adoption and execution of such ideas. We have also established a systematic framework for learning to help employees cultivate their skills.

### Education for Capability Improvement

We identify core capabilities required to achieve our innovation goals and our areas of weakness via analysis of the traits of a model KDHC employee and innovation capabilities. Through such review, we can pinpoint management leadership, self-innovation and other skills that should be included in innovation training. Along with our tailored training programs, we offer learning based on advanced work-out techniques to boost problem-solving skills among our workforce.

### Innovation Ideas and Task Identification

We have set up an innovation idea identification and management system to gather innovation ideas from internal and external sources and facilitate execution to produce results. We have an internal identification process in which senior management take part and a framework for proposals from the CEO and employees. Two-way communication with the CEO on major policy formulation and listening to the opinions of outside experts are other ways in which we come up with ideas for innovation.

## Learning Organizations

KDHC has introduced tailored learning programs targeting all employees to establish a sustainable innovation system and produce results through learning. The problem-solving learning scheme involves solving work-out tasks via regular online and offline activities, while the research-type learning scheme supports discovery of innovation tasks based on continuous learning of selected subjects per department. In 2007, the maiden year of the learning organizations at KDHC, 761 people took part in activities in 49 learning groups.

### Learning organization achievements

	Problem-solving	Learning
Activity	<ul style="list-style-type: none"> <li>Resolving work-out tasks</li> <li>Regular offline meetings and constant online activities</li> </ul>	<ul style="list-style-type: none"> <li>Identifying and pursuing innovation tasks</li> <li>Research and learning on selected topics</li> </ul>
Structure	TFT comprising related experts	Unit set up per department
Leader	26 innovation specialists (facilitators)	34 innovation masters
Composition	20 groups (281 persons)	29 groups (480 persons)

## Innovation Results

### No.1 Service

The number of households receiving heating service from KDHC increased by 68,000 in 2007 compared to 2006. In addition, improved VOC (Voice of Customer) activities led to an increase in the same-day customer response rate by 24%p to 94%. The KDHC head office and 12 branches received the Korea Service Quality certification from the Ministry of Commerce, Industry and Energy(MOCIE, currently MKE), becoming the first public enterprise to achieve the feat. KDHC also ranked first among organizations under MOCIE in the government customer satisfaction index survey and received the grand prize at the Customer Satisfaction Management Awards sponsored by KMAC for five consecutive years.

## Unrivaled Technology

We have developed the world's first dehumidifying cooling equipment that uses heat generated from district heating. Upon widespread use of the equipment, we expect a reduction in summer peak energy consumption that is equivalent to the power produced by a single large power generator. We are also fulfilling our responsibility related to climate change through registered CDM (Clean Development Mechanism) projects. In the new and renewable energy segment, we have obtained two related business licenses. We have also acquired seven patents for district heating technology.

## Sustainability System

With respect to human resources and ethics management, which serve as the foundation for sustainability management, KDHC received the Best HRD (Human Resources Development) certification jointly bestowed by four government bodies including the Ministry of Education and Human Resources Development (currently the Ministry of Education, Science and Technology). We were also named an excellent public enterprise in the MOCIE ethics management survey for four years in a row. Efforts are continuously made to maintain a culture encouraging sustainability management, which is indicated in the rise in training participation rate (2006: 518% ▶ 2007: 620%) and the boost in learning activities (2006: 240 persons in 23 groups ▶ 2007: 761 persons in 49 groups).



### Channels of participation

	Channel	Employee participation
Internal innovation tasks	Strategic tasks	38 strategic tasks selected through management workshop (40 persons) and debate
	Work-out tasks	Uncovered tasks through pre-meetings per dept. (850 persons)
	Daily 30% Up & Down tasks	Uncovered 26 onsite improvement tasks through dept. workshops (250 persons)
Internal proposals	CEO proposals	Derived 69 CEO directives through policy suggestions and innovation monitoring
	Idea · execution proposal	Work-related proposals implemented after assessment by knowledge experts (74 persons)
Policy suggestion	Open debate forum	Collected employees' opinions on major policies. 350 participants for 16 topics
	Policy sharing forum, participation forum CEO meeting program	Venue for open communication among employees, 140 opinions presented and shared Monthly meeting between CEO and employees
Customer suggestions, outside ideas	VOC	Handled consumer consultations (352 cases) and customer grievances (31 cases)
	Implementation details	48 customer proposals received via the KDHC website, mail and fax. Three proposals were selected after review by the relevant depts. and the CS Management Committee
	Suggestions from the public and win-win cooperation	Public Idea Contest (Nov: 185 ideas), Heating Pipe Exposition (Sept: 26 ideas), Construction Design VE Contest (Dec: 78 ideas) Sustainability management cooperation pact and workshop (participation by 131 partner firms)

### Implementation of customer proposals

	Proposal	Implementation Details
Description	Webzine promotion	New function added to enable online submissions for newsletter quiz via the company homepage
	Homepage customer convenience service	Function added to the company homepage allowing customers to see the difference in charges between the uniform tariff scheme based on the past one-year usage and progressive seasonal tariff scheme
	Homepage data revision	Information on working capital loans and facility loans on the company homepage

# Corporate Value

## Active Energy

for a sustainable future

Our sincere desire for a sustainable future is expressed in active energy. Our vision is more than a slogan. It is the bridge from the present to our future. KDHC's active energy conveys our dedication and passion toward achieving our future vision and goal.

KRW 713.4 billion

*Value created in 2007*

2,672 km

*Length of heating pipe network*

59%

*Market share*

# ECONOMY

## Vision and Strategy

### Vision

The Best Environment-Friendly Energy Company

### Mission

Value management to increase energy supply to communities

### Strategy and Task

#### Innovation of management system

Operating strategic management system, Operating internal accounting management system, Maximizing operational efficiency

#### Expansion and growth

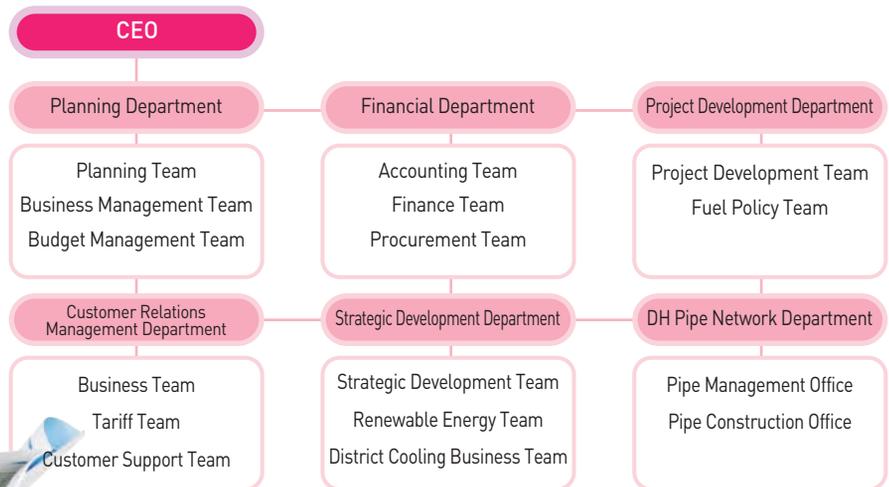
Responding to the change in business environment, Developing new and renewable energy, Expanding integrated energy service

#### Specialization and diversification

R&D investment, Globalizing the integrated energy business, Building efficient heating supply system

KDHC has enjoyed continuous growth for the past twenty years since it began to supply heat energy in 1988. As an energy company to serve the public, we will continue to create value and distribute energy with fairness in order to realize energy welfare for all. To realize our vision of becoming "The Best Environmentally-Friendly Energy Company," we established a mission of pursuing "value management to increase energy supply to communities." Our strategy for laying the foundation to sustainable growth involves management system innovation, expansion, specialization and diversification. By continuing to develop district cooling and heating services as well as new and renewable energy services, we will provide a stable and sustainable source of energy to support the country and national economy.

## Organization



## 1. Economic Performance : Completion of Hwaseong CHP



# Advancing as a comprehensive Energy Provider

### Completed 500MW combined heat & power plant (CHP) in new town near Seoul

1. Reference business plan ('03.7.2) submitted to request approval for change in Hwaseong Dongtan community energy supply system (CES)

2. Cost of reducing pollutant emissions was calculated by multiplying social marginal cost and reduction

- Marginal cost : Applied price index from Ministry of Environment's "Economic Feasibility Study of Special Measures to Improve Air Quality in Seoul Area (Korea Environment Institute' 03)" and "Emissions Trading Scheme According to Article 17 of the Kyoto Protocol to the UN Framework Convention on Climate Change"

- Reduction: Reference business plan ('03.7.2) submitted to request approval for change in Hwaseong Dongtan CES

In a first for a Korean CES provider, KDHC celebrated the completion of a 512MW CHP in a ceremony at Hwaseong branch on November 14, 2008.

The event was attended by some 100 dignitaries, representatives of construction companies and local communities including chairman of the National Assembly's Knowledge Economy Committee, Deputy Minister of Knowledge Economy, Daewoo Engineering & Construction CEO, CEO of POSCO E&C, and the president of Mitsubishi Heavy Industries. The Hwaseong CHP is capable of generating 512MW and 396Gcal/h heat output. Total costs for the construction which took approximately 20 months to complete was KRW440 billion. Producing both heat and electric power, the CHP is able to supply heating to 100,000 households. Along with annual fuel cost savings of KRW103.6 billion<sup>[1]</sup>, the new facility is expected to save an additional KRW12 billion<sup>[2]</sup> annually by reducing pollutant emissions.

In a speech at the event, KDHC CEO Chung Seung Il said that the start of operations at Hwaseong CHP has provided the platform for KDHC to make the transition from a district heating specialist to a comprehensive energy provider. He also revealed plans for the company to expand its business into district cooling and heating services, electricity service and new, renewable energy services to fuel low-carbon, earth-positive growth. Awards were also presented during the ceremony, including the Order of Industrial Service Merit to Lee Jong-gap, head of Construction Headquarters. Nine employees from KDHC and partner firms received Industrial Service Medals, President's Commendation and Prime Minister's Commendation.

# Major Economic Performance

## Business Performance

### Created and Shared Value

In 2007, KDHC generated revenue of KRW713.4 billion through the production, transportation and distribution of integrated energy, related businesses, electricity and interest income. Net profit for the year amounted to KRW15.0 billion. A part of the income we generate are invested to expand the supply of integrated energy service and to conduct training and R&D. Profits are also used toward employee compensation and interest payment to our creditors, and distributed to our stakeholders, which include local communities, the government, local governing bodies, shareholders and our business partners.

### Financial results

Category	2005	2006	2007
Income	577.7	638.9	713.4
Expenses	548.3	607.5	698.4
Net income before income taxes	29.4	31.4	15.0

Performance-oriented company - KDHC that is financially sound



### Summary financial statements

(Unit: KRW billion)

Category	2005	2006	2007
Current Assets	345.7	472.5	507.2
Non-current Assets	1,029.1	1,277.1	1,491.3
Total Assets	1,374.8	1,749.6	1,998.5
Current Liabilities	155.3	156.0	180.1
Non-current Liabilities	543.8	886.1	1,099.3
Total Liabilities	699.1	1,042.1	12,79.4
Capital Stock	43.4	43.4	43.4
Retained Earnings	632.3	662.4	6,75.7
Capital Adjustment	1.7	-	-
Total Shareholders' Equity	675.7	707.5	719.1
Total Liabilities and Shareholders' Equity	1,374.8	1,749.6	1,998.5
Sales	562.3	6,13.4	686.2
Operating Income	43.3	41.2	33.3
Net Income Before Income Taxes	29.5	29.0	15.1
Net Income	29.4	31.4	15.0

### Value distribution

KRW **713.4** billion

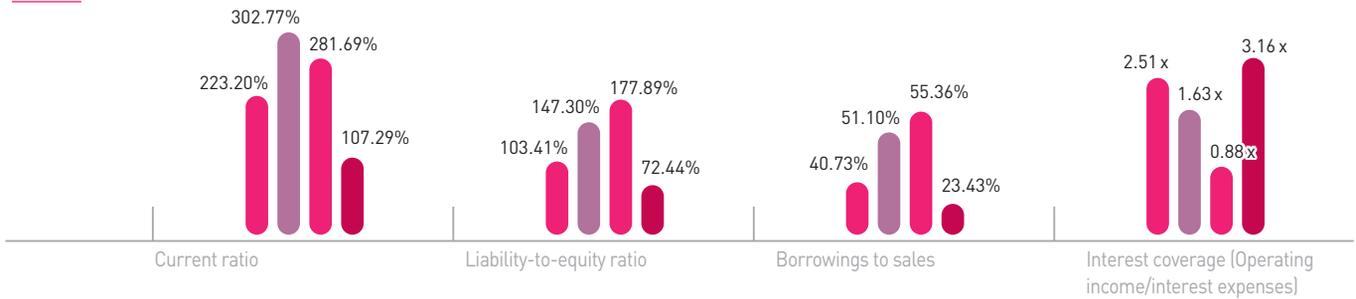




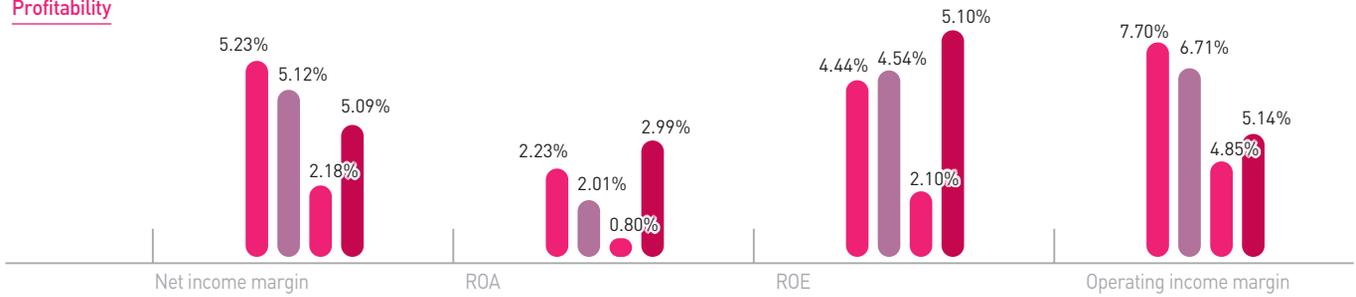
Major financial ratios

● 2005 ● 2006 ● 2007 ● Industry(Electricity, gas and steam) average in 2007

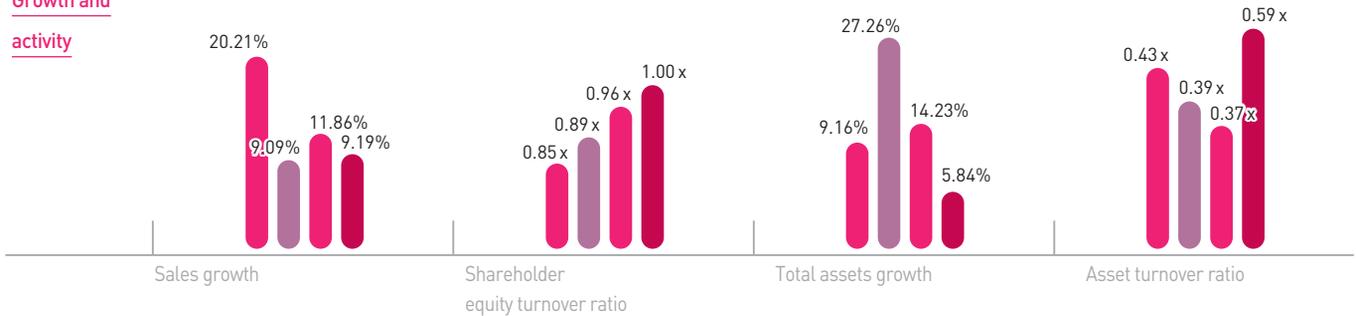
Stability



Profitability



Growth and activity



## Operating Performance by Business

### District Heating

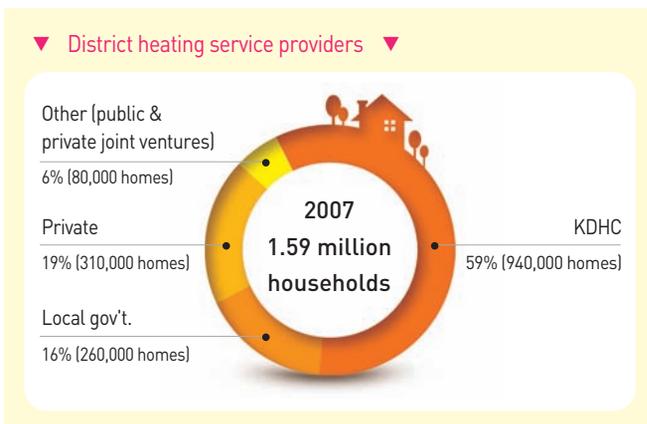
As of the end of 2007, district heating is provided to 1.59 million households, or 11.5% of the total number of households in the country. Among them, we provide the service to 944,000 households through our 13 branches throughout the nation, representing approximately 59% market share. Going forward, we plan to explore new demand with the target of two million households by 2015. We have built a series of pipelines to ensure a stable supply of district heating. These pipes, which have been installed throughout the country, are 2,672km in length, equivalent to almost three round trips from Seoul to Busan, accounting for 59% of the nation's heating network. One of these networks is located in the metropolitan areas from Paju to Hwaseong, heightening both the efficiency and volume of supply in the Seoul metropolitan region. We try to our utmost to deliver heat in an economical and stable way through technological development, process improvement, and efficient maintenance.

**3. Warm water-driven district cooling:** Produce cold water using waste heat from electricity generation at combined heat and power plants by using absorption chillers.

**4. Direct cold-water supply:** Produce cold water more economically by using waste heat from combined heat and power plants and thermal storage from late-night electricity. It is supplied through pipes to buildings in heavily-populated areas.

### District Cooling

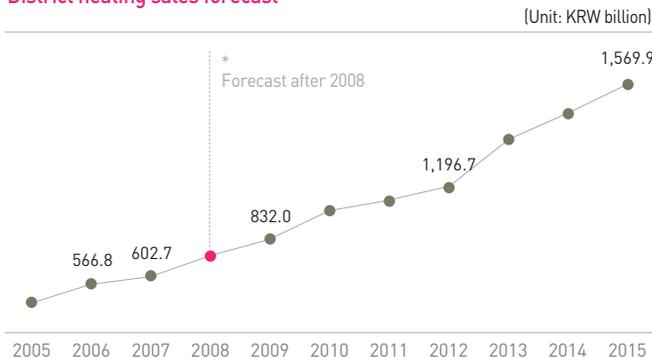
We began commercial district cooling service in 1993. As of the end of 2007, we supply cooling to 273 buildings through warm water-driven district cooling<sup>(3)</sup> system. The system generated substitute effect of KRW 38.9 billion in 2007 by making new power plant unnecessary. In addition, it is an environment-friendly and energy-efficient system while enabling us to control demand and supply of gases in the peak summer season. Moreover, we also introduced more economical system, so-called direct cold-water supply<sup>(4)</sup> system that uses waste heat from power generation and thermal storage from late-night electricity. The system supplies district cooling to the Sangam Digital Media City, Garden 5, and KINTEX. Going forward, we will expand the service to houses including apartments by developing the highly efficient absorption chillers. We plan to increase the sales proportion of district cooling to 10% from the current 1% by 2015. This plan is in line with our effort to respond to global warming and meet government policies.



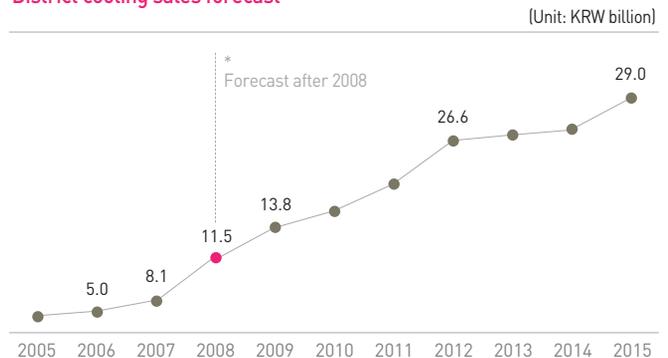
### Supply of district heating

Category	2005	2006	2007
Household (thousand)	825	877	944
Commercial use	1,142	1,157	1,167
Public use	654	658	664

### District heating sales forecast



### District cooling sales forecast



- 5. **New energy:** An alternative to fossil fuels, new energy refers to energy sources that are not renewable but employ new technologies (fuel cell, coal-to-liquid, hydrogen energy)
- 6. **Renewable energy:** Renewable energy is generated from a flowing form of renewable energy, such as sunlight. It also implies sustainability in the environmental, economic and social aspects. (solar heat, solar photovoltaic power generation, bio-mass, wind power, small hydro power, geothermal heat, ocean energy, waste-to-energy)

### Electricity

We first produced electricity amounting to 85,000 MWh at our Daegu branch in 1997. The magnitude of the production has increased substantially to reach 738,000 MWh in 2007, 8.7 times larger than the initial production. Currently, we produce electricity at Daegu, Suwon, Cheongju, and Hwaseong branches and plan to expand this production by building mid- to large-sized combined heat and power plants(CHPs) in Hwaseong, Pangyo, and Gwanggyo. By 2011, when these facilities are expected to be completed, sales should grow by CAGR 49%, accounting for about 38% of the company's total sales.

#### CHP business

Location	Capacity	Year of scheduled completion
Paju	554MWh + 397G/h	2010
Pangyo	146MWh + 126G/h	2010
Gwanggyo	141MWh + 146G/h	2011

### New and Renewable Energy

KDHC has been actively developing and pursuing applications of new and renewable energy sources<sup>(5)(6)</sup> to proactively respond to the changing energy environment in the face of global warming, unstable demand and supply of fossil fuels, and to achieve low-carbon growth. As of 2007, we operated and pursued new and renewable sources of energy using incineration heat, solar light, solar heat, landfill-gas(LFG), woodchip, heat pump and refuse derived fuel (RDF). Our goal is to supply 15% of our total energy production with new and renewable energy sources by 2016.

### Electricity sales forecast



### New and renewable energy supply forecast



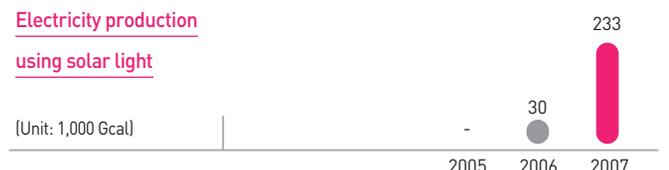
### Heat production using incinerator



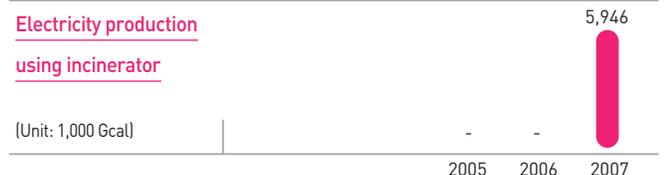
### Heat production using LFG



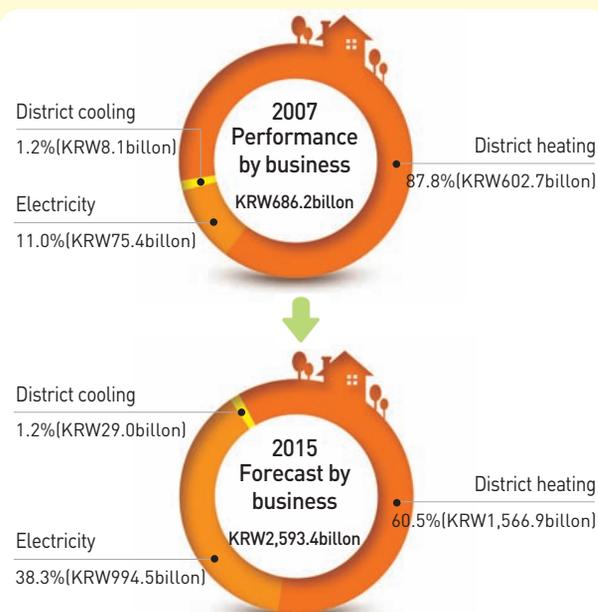
### Electricity production using solar light



### Electricity production using incinerator



### Performance and forecast by business



# Enhancement of Management Efficiency

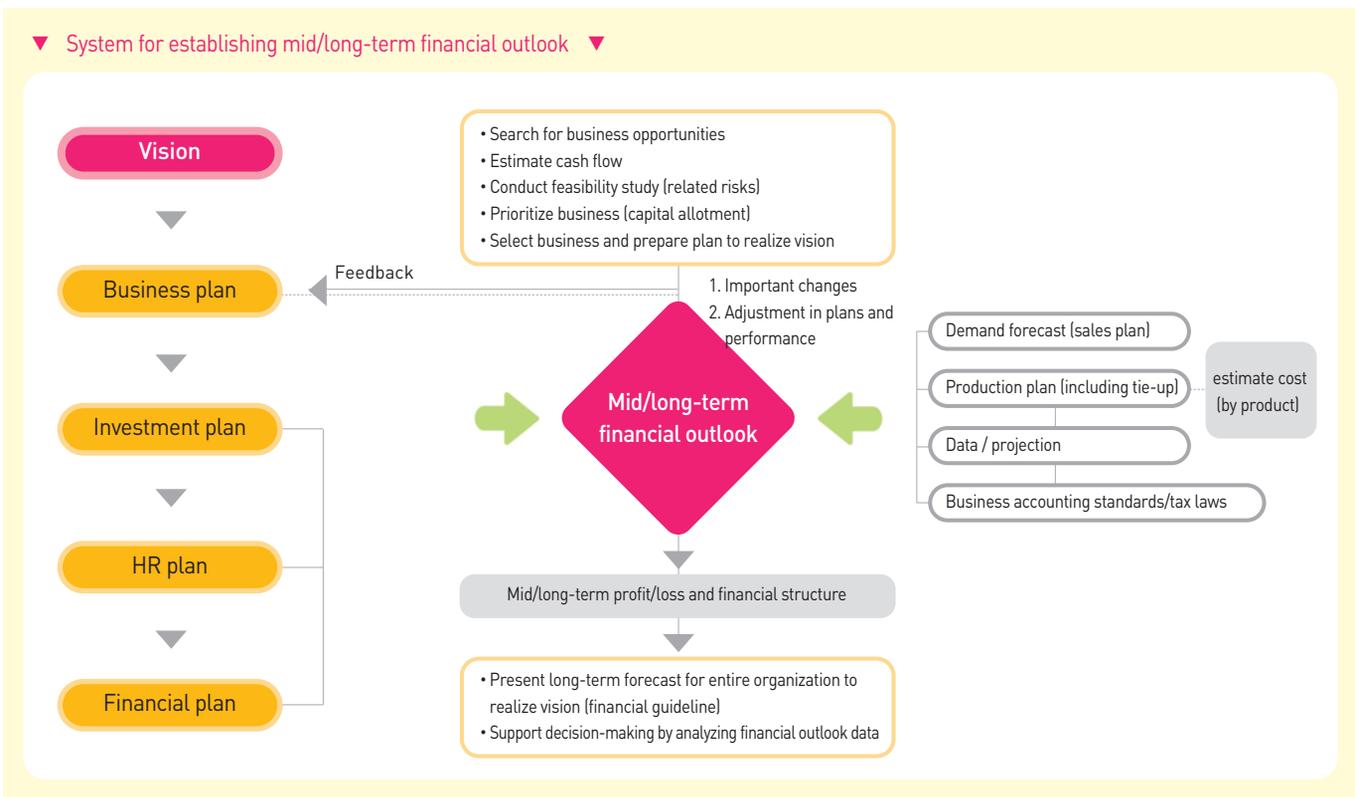
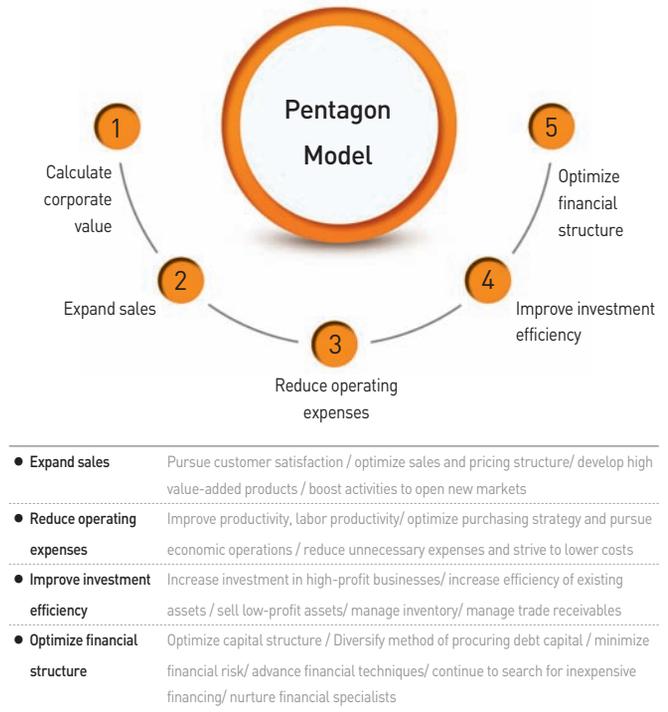
## Introduction and Operation of VBM

Based on SEM(Strategic Enterprise Management) system introduced in 2006, we have enhanced IT-based evaluation system. VBM(Value Based Management) was introduced during the period. Value management refers to the management that focuses on efficiency of invested capital rather than sales growth or profits on the income statement. With the VBM, we continue to enhance corporate value through improving overall systems including EVA(Economic Value Added) evaluation system.

## Setting up Mid- to Long-term Financial Plan

We established a mid- to long-term financial forecasting plan for 2007. The plan aims at accurate forecast on mid- to long-term financial status, reflecting internal and external business environment as well as the current financial situation. The forecast includes mid- to long-term plans such as overall business, investment, human resources and financing. The system functions as a financial information tool that provides essential data for our vision management and value-oriented management strategies. It has also proved to be invaluable in assisting with decision-making on individual businesses from both an integrated and a long-term perspective.

## Framework for maximizing corporate value



### Internal Accounting Management System

We devised an internal accounting management system in 2006 with the help of an outside professional organization. The system was introduced to cope with a rising demand for more transparent management and to strengthen our competitiveness by increasing our openness and reliability. In 2007, we operated internal control assessment and certification system. The system is an extremely effective tool for detecting errors, forgeries, damages, and other problems that can arise from the computation of financial information so that it can help us secure a global standard level of transparency in our accounting operations. The transparency and reliability of our public notice materials and data have also been augmented through improvements to our financial reports-related self-control functions.

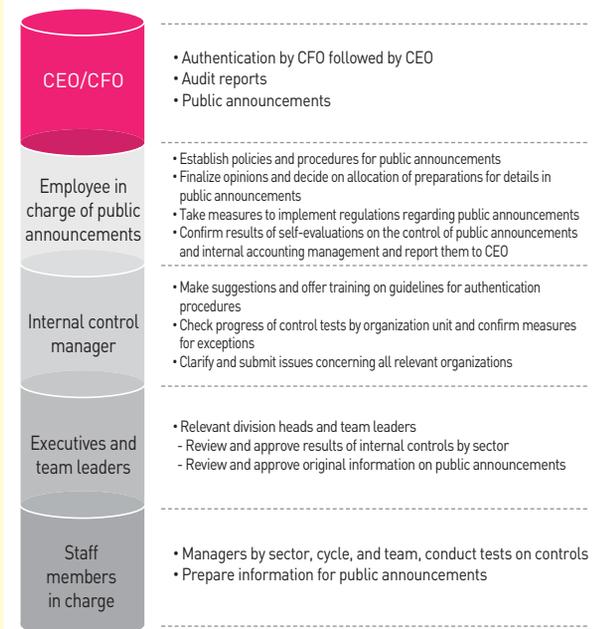
In order to guarantee the operational integrity of internal control system, we select and evaluate core control activities on a regular basis and bring in outside auditors to conduct additional verifications.

### Organization Centered On Future Growth Driver

In 2007, KDHC conducted a reorganization to build a foundation for future growth and improve organizational efficiency. This allowed us to reinforce our organizational capabilities in order to diversify and enhance our existing business structure which centered on heat supply. Newly created divisions included the Electricity Department to oversee electricity transactions and direct sale of electricity; the Cooling Business Team to spearhead expansion of our district cooling service; and the Overseas Business Department to systematically pursue overseas initiatives.

Additionally, the Project Development Department and Strategic Project Department were re-hauled to create synergies in project development. Through these efforts, KDHC is now equipped with a strategic business system to expand into new, environmentally-friendly endeavors.

#### Internal control evaluation and authentication structure



### Results of reorganization

Division	Item	2006	2007	Change(increase/decrease)
Project Development Division	Permission for new projects (no. of projects, no. of households)	3 / 70,000	3 / 216,000	+146,000
Strategic Project Division	CES service	4	3	-1
	Gov't permission for CDM	1	1	-
	New and renewable energy (Biomass)	2	3	+1
	Return on RPA investment	93%	64%	-29%
	District cooling service(no.)	250	270	+20
Electricity Division	Sale of electricity (1,000 Mwh)	464	754	+290
Strategic Management Office	Innovation stage	5th stage	6th stage	+1stage
R&D Office	No. of internally developed projects	8	8	-
	No. of self-developed research projects	19	19	-
Customer Service Team	Customer satisfaction(PCSI) of state-run institutions	91.4 points	90.8 points	Overall best company in customer satisfaction
	KDHC CSI	86.9 points	84.5 points	-
	Handling of appeals within one day	70%	93%	-

\* Awarded "Overall Best Company in Customer Satisfaction" among state-run institutions

## Efforts for Sustainable Growth

### Stable Fund-raising

Funds for construction investments are partly raised through the Energy Efficiency Improvement Project of the Special Account for Energy and Resources Projects that the Korean government has been promoting. However, in 2005, new investment for the construction of mid- to large-sized power plants to expand the volume and distribution of community cooling and heating made us raise much more funds beyond borrowings from the Special Energy Account. This change in funding situation serves as a momentum for us to establish more efficient and long-term fund-raising plan based on estimation of annual capital required until 2015. We have received high credit ratings from domestic and international credit rating agencies. Domestic agency, the Korea Investors Service has rated our credit as AAA for four consecutive years. Moreover, Moody's has given us A2, the same rating level of our country. The high credit ratings helped us raise fund at extremely favorable conditions. Consequently, we were able to successfully borrow KRW 200 billion in 2007 on two separate occasions.

KDHC equipped with specialized technologies and talented human resources.



### Enhancing R&D Capability

KDHC keeps strengthening R&D capabilities in the area of integrated energy for the purpose of efficient energy use and air quality improvement. R&D investment increased 23.6%(CAGR) during the four years up to 2007.

The proportion of R&D investment out of total sales rose to 1.43% in 2007. Moreover, we established the KDHC Technology Institute to secure core technologies and conduct research more systematically and efficiently in 2007. Thanks to these R&D efforts and activities, we could register eight patents and two utility model rights in 2007, thereby increasing the number of total intellectual properties (including copy rights) to 93. In order to improve the competitiveness and professionalism of our integrated energy-related technologies, we hire and foster high-caliber R&D specialists and support research into promising new business models.

#### R&D status

(Unit: KRW million)

Year	2005	2006	2007
R&D expenses	6,937	7,858	9,794
Sales	562,303	613,441	686,212
R&D expenses to sales	1.23%	1.28%	1.43%
No. of R&D projects	49	52	65

#### ▼ Intellectual property assets (93) ▼



Intellectual property rights: 59



Trademark rights: 11



Utility models: 3



Domestic patents: 20



# Environmental Value

## Green energy

for a prosperous earth

Green energy represents our efforts to preserve a clean earth for prosperous living and future generations.

75,000<sub>Ton</sub>

*CO<sub>2</sub> reduction through CDM project*

KRW 471 million

*Profits from environmental benefits*

## 3 initiatives

*Registration and management of initiatives to reduce greenhouse gas emissions*

# ENVIRONMENT

## Vision and Strategy

- Vision** The Best Environment-Friendly Energy Company
- Mission** Establish environmentally friendly management system
- Strategy and Task**
  - Introduce advanced environmental management system**  
Expand scope of environmental management system/Pursue the whole course of evaluations/Increase green purchasing/Augment level of environmental education and training
  - Minimize environmental impacts**  
Minimize emissions of environmental pollutants/Operate internal control guidelines/Expand resources recycling/Replace hazardous chemical substances
  - Adhere to UNFCCC recommendations through business diversification**  
Continue to expand district heating and cooling supply/Expand new and renewable energy service/Participate in registered greenhouse gas reduction project/Participate in CDM project

We have also developed an organization that is exclusively charged with environmental management to practice environmentally friendly management. It operates in linkage with the Environment Department at head office and environment managers and departments at each branch to ensure that our environmental management guidelines and systems are delivered efficiently and effectively.

## Organization



\* Introduction of environmental management system at Gimhae, Yangsan, and Sangam branches is scheduled in 2008.





## Green energy that benefits future generations and the earth

< Overview of Bundang solar heating system >

Collector area 1,069m<sup>2</sup> | Solar heat collection volume 500Gcal/year | Start of operations Feb. 2007  
Solar heat from supply district is supplied to Bundang, Seongnam via connection to district heating source system

### Completion of Shinan photovoltaic power system secures strategic advantage

In November 2007, we finished construction of a new photovoltaic power plant in Jeung-do, Shinan, Jeollanamdo Province. This raised our total photovoltaic power capacity to 900kW, including that from our existing photovoltaic power system in Daegu (completed in September 2006). We have secured a strategic advantage in a highly promising renewable energy source and at the same time, increased the ratio of clean energy which requires no fuel cost and emits no environmental pollutants such as exhaust gas and waste heat. Additionally, it has reinforced our response to the United Nations Framework Convention on Climate Change (UNFCC) and Renewable Portfolio Standard (RPS).

KDHC also installed Korea's largest solar heat facility at Bundang branch in February 2007. We thereby secured a leading industry position by using solar heat energy to supply heating to the Bundang area by linking collected solar heat with the district heating source system. Other projects include the "Resource Recycling Energy System Project" which produces electricity and heat by turning waste into fuel in Gwangju Jeonnam Innovation City; and the "Project to Connect Unused Energy to Community Energy" which links heat from sewage water to CES. We continue to play a pioneering role in reducing energy use and CO<sub>2</sub>, the main culprit behind global warming, by discovering and expanding the supply of new and renewable energy sources such as solar energy and wind power.

# Environmentally Friendly Management

## Implementing Environmentally Friendly Management

KDHC has formulated environmental policy to carry out environmentally friendly management. This represents our commitment and efforts toward saving energy, minimizing discharge of pollutants, complying with environmental regulations, supplying clean and safe heat, and evaluating our environmental management.

We published environmental report in 2005 and 2006. Since 2007, we have been publishing sustainability reports to inform our stakeholders including the Korean government, local governments, and customers about our efforts towards environmentally friendly management in a transparent manner.



## Environmental Policy

KDHC is a public enterprise that was founded under the Integrated Energy Business Act to save energy, improve the environment, and better people's lives through the efficient provision of district cooling and heating services. All our employees are committed to the following environmental policies:

- Improve the environment and save energy through the continuous expansion of district cooling and heating services
- Minimize emissions of pollutants by identifying environmental impacts from all processes, services, and activities
- Observe all environmental laws and regulations and develop and carry out strict in-house guidelines to adhere to their demands
- Supply customers with clean and safe heat and top-quality service
- Evaluate environmental performance regularly and disclose results to internal and external stakeholders upon request

Delivering on these policies requires the voluntary participation of all our employees. We are committed to becoming Korea's most trusted energy company and preserving the environment.

President & CEO Chung, Seung Il

1. **Environmental accounting:** A standardized procedure to calculate costs and benefits generated by minimizing environmental impacts. Used as an instrument to deliver reliable environmental information to stakeholders.
2. Post management activities include expenses (e.g., depreciation and operational) for the maintenance of environmental facilities. Preventive activities include environmental management and R&D.
3. Stakeholder activities include external activities as well as PR expenses and legal expenses such as environmental charges.
4. Environmental benefits refer to profits generated from the sale of desulfurization plasters and cost reductions from recycling wastewater and energy savings.

## Advanced Environmental Management System

KDHC works hard to translate its environmentally friendly management policies into action. For example, we were the first public enterprise to participate in the initial model certification process for the ISO 14001 environmental management system, which was organized by the Ministry of Commerce, Industry, and Energy's National Industrial Technology Institute (now the Korean Agency for Technology and Standards) in February 1995. In December 1996, we obtained an ISO 14001 from an external certification agency, and operate it at our head office and eight branches. The environmental management system is scheduled to be introduced at three branches (Gimhae, Yangsan, and Sangam) in late 2008. Moreover, we have also established eight environmental goals and 18 detailed objectives, all of which are based on our environmental policies and mid- to long-term strategies. In addition, we have developed manuals on and procedures for environmental management and its associated body of laws and regulations. Our institutional business management program includes environmental accounting<sup>(1)</sup>, environmental impacts evaluations, the encouragement of environmentally friendly product purchasing, and continuous training in environmental issues. Our in-house guidelines for air and water quality control are stricter than those required by the Clean Air Conservation Act and the Water Quality Conservation Act.

### Environmental Accounting

KDHC carries out environmental accounting to satisfy the increasing demands of stakeholders and conducts environmental management in a transparent manner. In addition, we calculate our environment-related expenses in accordance with the environmental management procedure manual.

#### Environmental accounting expenses

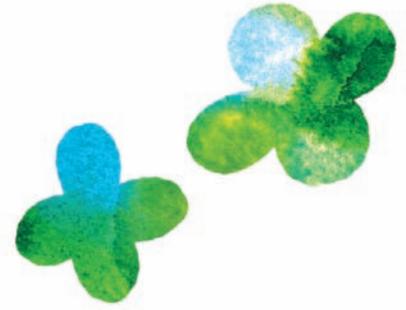
(Unit: KRW million)

Category		2005	2006	2007
Environmental costs	Post-management activities <sup>(2)</sup>	6,144	6,850	7,975
	Preventive activities	5,519	6,968	7,018
	Stakeholder activities <sup>(3)</sup>	36	49	29
	Total	14,436	16,862	19,857
Environmental benefits <sup>(4)</sup>	Environmental profits	37	39	37
	Cost savings	-	318	434
	Total	37	357	471

\* Cost savings in the category of environmental benefits have been calculated beginning with 2006 results

### Environmental goals and results

Environmental goals	Detailed objectives	Unit	2005	2006	2007
Expand distribution of district cooling and heating	Expand heat supply	Thousand households	829	877	944
	Develop new businesses	Thousand households	42	48	67
	Promote new and renewable energy businesses	-	3 cases	5 cases	1 cases
Reduce generation and discharge of living wastes	Collect domestic wastes separately	kg/person · day	115.4	117.9	115.1
	Minimize generation of food wastes	g/person · day	25	21	19.5
Minimize emissions of pollutants	Plan to construct facilities for chrome yellow reduction	-	-	-	Under design
	Establish total pollutant emissions system	-	-	Completed	-
	Consider environmental impacts and harmfulness when using chemicals	-	-	Completed	-
	Seek methods to minimize volume of waste water	-	-	Under research	Under research
	Establish GHG reduction inventory	-	-	-	Reported
	Purchase high-efficiency computer supplies	-	-	Purchases	Purchases
	Observe in-house control guidelines	Properly manage guidelines for in-house control	-	Observed guidelines	Observed guidelines
Encourage users to save energy	Provide guidelines on heat usage methods	Persons	712	729	795
	Assess post-inspections	Case	1	1	1
Strengthen environmental management	Publish environmental report	-	Published	Published	Published
	Add to environmental awareness among employees	Carry out environmental education and training	Occasions	2	2
Improve image	Deploy environmentally friendly PR	Occasions	200	502	222
	Use energy-saving methods and enter into environmentally friendly businesses	Persons	1,265	1,510	1,000



### In-house Environmental Inspection and Post Management Inspection

We carry out annual in-house environmental inspections based on the ISO 14001 to minimize environmental risks by evaluating our environmental management system and the appropriateness of our environmental management processes. Moreover, we received post-management inspection and renewal inspection from outside institutions. Although we are not obliged to receive an environmental impact assessment according to the Integrated Energy Supply Act, we conduct our own studies every three years to review the direct/indirect impact of our business on the environment, and to ensure the smooth operations of our environmental management system.

### Green Purchasing

All of our branches receive guidelines on saving resources and purchasing earth-positive products that reduce environmental pollution. We have also consolidated the results of our green purchases for improved management. We are committed to the purchase of environmentally friendly products, and have developed a manual regarding our processes for doing so. It states that we give priority to environmentally friendly products when placing orders through contracts. Furthermore, we offer training to our contract managers to attain the purchasing target of green products. This information is contained in our contract management procedures so that all suppliers of environmentally friendly products can participate in our biddings.

Evaluation of environmental management system for National Environmental Management Awards



We also add points to our screening criteria for environmentally friendly certificates and are working towards consolidating all our green purchases. As a result, purchasing amount of environmentally friendly products is on the rise every year.

### Education and Training in Environmental Issues

KDHC carries out a broad array of educational programs to raise environmental awareness among environmental managers, employees, local communities, and customers. We hold regular business education sessions to strengthen the capabilities of our environmental managers, and offer extra training by outside professional organizations. In addition, we conduct technological and environmental training targeting the managers of user facilities and offer advice on better heat usage through facilities safety checks and technical guidance. By sharing objectives, strategies and operational knowhow between the head office and branches through such training opportunities, we are striving to produce a stable and economic supply of heat that has minimal impact on the environment.

Category	Participants in environmental training (Unit: No. of participants)		
	2005	2006	2007
In-house education	712	729	795
Outside education	28	34	55
Total	740	763	850

### Environmental inspection

Category	Details
In-house environmental inspections	• Compliance with environmental management system regulations
	• Management of environmental goal/detailed goal and results
	• Training for emergency situations, management of educational plan and results
Post-management inspections (Renewed evaluation)	• Understanding of environmental management system, etc
	• Compliance with environmental management system regulations
	• Training results, progress toward meeting environmental goal/detailed goal
	• Environmental documents, environmental impact assessment
	• In-house environmental inspection and execution of recommendations made in previous follow-up management review

### Environmentally friendly purchasing results

Year	Total purchasing amount (A)		Environmentally friendly products (B)		Percentage (% B/A)	
	Volume	Amount(KRW thousand)	Volume	Amount(KRW thousand)	Volume	Amount
2005	18,925	668,724	7,598	207,220	40.15	30.99
2006	17,522	901,777	5,389	721,423	30.76	80.00
2007	39,871	1,020,054	38,882	920,606	97.52	90.25

- 5. TMS(Tele-Monitoring System): A surveillance system that automatically monitors the volume of emissions of pollutants and transfers this information to the environment control center for further management.
- 6. Low NOx Burner: An apparatus that reduces the generation of nitrogen oxide(NOx) by adjusting the concentration of oxygen and the temperature of the flame
- 7. SCR (Selective Catalytic Reduction): A facility that reduces the level of NOx in combustion gases
- 8. Electrostatic precipitator: A device that reduces the volume of dust generated from exhaust facilities
- 9. Desulfurization plant: A facility that reduces the amount of SOx generated from exhaust facilities

## Minimizing Environmental Impacts

### Air Quality

● **Expanding use of clean energy** We reduce the volume of Low Sulfur Waxy Residue(LSWR) and B-C oil while expanding the use of clean fuels such as LNG(Liquefied Natural Gas) and LFG(Landfill Gas). Our usage of LSWR has been reduced to 33.9% in 2007 from about 51.8% in 2005, while that of LNG rose to 38.1% in 2007 from 17.2% in 2005. We also strive to expand the production and use of renewable energy. KDHC is steadily increasing the application ratio of clean energy and expanding the use of new and renewable energy sources through efforts such as generating heat by using heat from incinerators operated by local governments and LFG, in addition to recovery of solar heat and photovoltaic power systems.

● **Managing air pollutants** KDHC has installed TMS<sup>[5]</sup> that measures the volume of emissions of pollutants in real-time at its branches in Bundang, Goyang, Daegu, Suwon, Cheongju, Yongin, and Hwaseong. All pollutants that have been discharged into the air from CHPs and peak load boilers are measured, with the results being transferred to the Environmental Management Corporation and our head office. We operate a variety of facilities to reduce the volume of air pollutants, including low NOx burners<sup>[6]</sup>, selective catalytic reduction(SCR)<sup>[7]</sup>, electrostatic precipitators<sup>[8]</sup>, and desulfurization plants<sup>[9]</sup>. In addition, our in-house control guidelines are stricter than the government's own environmental standards. Our Hwaseong branch is researching ways to reduce the yellow plumes which may be caused by incomplete combustion when the CHP's gas turbine is in operation or standby mode. Toward this end, we installed a facility to reduce yellow plumes in October 2008. We expect to see an improvement in air quality and our image as an environmentally-friendly company.

### Power usage and production

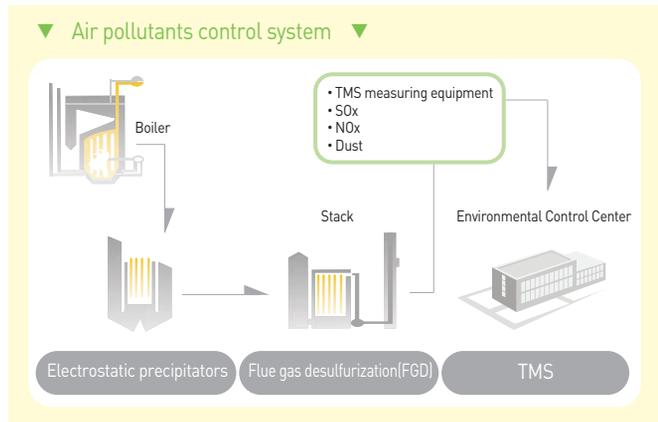
Category	Unit	2005	2006	2007	
Power usage volume	In-house consumption	MWh	71,713	67,932	82,655
	Delivery from KEPCO	MWh	131,359	125,849	132,727
	Total	MWh	203,072	193,781	215,382
Production volume	Heat	Gcal	10,928,732	10,366,210	10,601,906
	Electricity	MWh	545,356	532,244	820,798
	Total	Gcal	11,397,738	10,823,940	11,307,792

\* Heat production includes cold water production

\*\* Total production (Gcal): Heat production (Gcal) + Electricity production (MWh) x 0.86

### Energy production and air pollutant emission

Category	Unit	2005	2006	2007	
Energy production	(1,000 Gcal)	11,398	10,825	11,308	
Emissions	SOx	ton	1,771	1,585	1,239
	NOx	ton	3,634	3,371	3,229
	Dust	ton	59	55	49
	Total	ton	5,464	5,011	4,507



### Fuel usage trend

Category	2005		2006		2007	
	Volume of usage (1,000 TOE)	Percentage (%)	Volume of usage (1,000 TOE)	Percentage (%)	Volume of usage (1,000 TOE)	Percentage (%)
Boiler Kerosene	17	3.0	18	3.3	10	1.7
LFG	9	1.6	13	2.4	28	4.6
LNG	100	17.3	112	20.4	231	38.1
B-C	152	26.3	142	25.9	132	21.7
LSWR	299	51.8	263	48.0	206	33.9
Total	577	100.0	548	100.0	607	100.0

### Soil Management

KDHC carefully manages its facilities and installations to prevent soil contamination caused by oil leakages from its fuel storage facilities. According to the Soil Environment Conservation Act, LSWR, B-C, and gasoline tanks are all classified as facilities that could potentially cause soil contamination. To prevent such contamination, seven of our branches that are equipped with these tank facilities are inspected for their soil contamination levels by outside authorities every other year. We have never had an accident caused by fuel leakages since the launch of these inspections.

### Water Quality

- Managing water pollutants** Wastewater is generated during operations for boilers, pure and soft water production, and the operation of desulfurization plants. We have installed treatment facilities to treat wastewater using physical and chemical methods. The facilities are located at seven branches (Gangnam, Daegu, Suwon, Cheongju, Yongin, Yangsan and Hwaseong) while other branches outsource treatment to local governments and KEPCO plants. KDHC is committed to recycling its water resources to prevent the emission of water pollutants and adhere to related regulations. An example is our using water emitted from the boilers at Bundang Combined Cycle Power Plant (a power generation subsidiary of KEPCO) as circulating water for our district heating and discharged water to cool our boilers. Meanwhile, we are conducting a feasibility study into installing recycling facilities at our Daegu branch for discharged wastewater.

- Optimizing water resources** The volume of water usage has been on the rise due to the expansion of our businesses, resulting in increase in volume of wastewater. Going forward, we plan to reduce the generation of wastewater by introducing pure water production facilities, such as reverse osmosis(RO) and electro dialysis(ED). In the meantime, we introduce basic unit conception in order to manage water usage and wastewater more effectively.

### Legal limits and KDHC guidelines for environmental management

#### \* Air quality

Category	Facility	Branch	Unit	Legal standard	In-house standard
SOx	CHP	Daegu, Suwon	ppm	150(4)	135(4)
	PLB	Bundang, Goyang,	ppm	180(4)	135(4)
		Suwon, Yongin, Daegu			
CHP, PLB	Cheongju	ppm	50(4)	45(4)	
NOx	PLB	Bundang, Goyang, Suwon, Yongin	ppm	250(4)	225(4)
	CHP, PLB	Daegu, Cheongju	ppm	250(4)	225(4)
	CHP	Suwon(Gyeonggi-do ordinance)	ppm	100(4)	90(4)
	G/T	Hwaseong	ppm	50(13)	45(13)
Dust	PLB(100t/h)	Bundang, Goyang	mg/Sm <sup>3</sup>	50(4)	30(4)
	PLB(200t/h)	Suwon, Yongin, Daegu	mg/Sm <sup>3</sup>	30(4)	30(4)
	CHP	Daegu, Suwon	mg/Sm <sup>3</sup>	50(4)	30(4)
	CHP, PLB	Cheongju	mg/Sm <sup>3</sup>	25(4)	22.5(4)

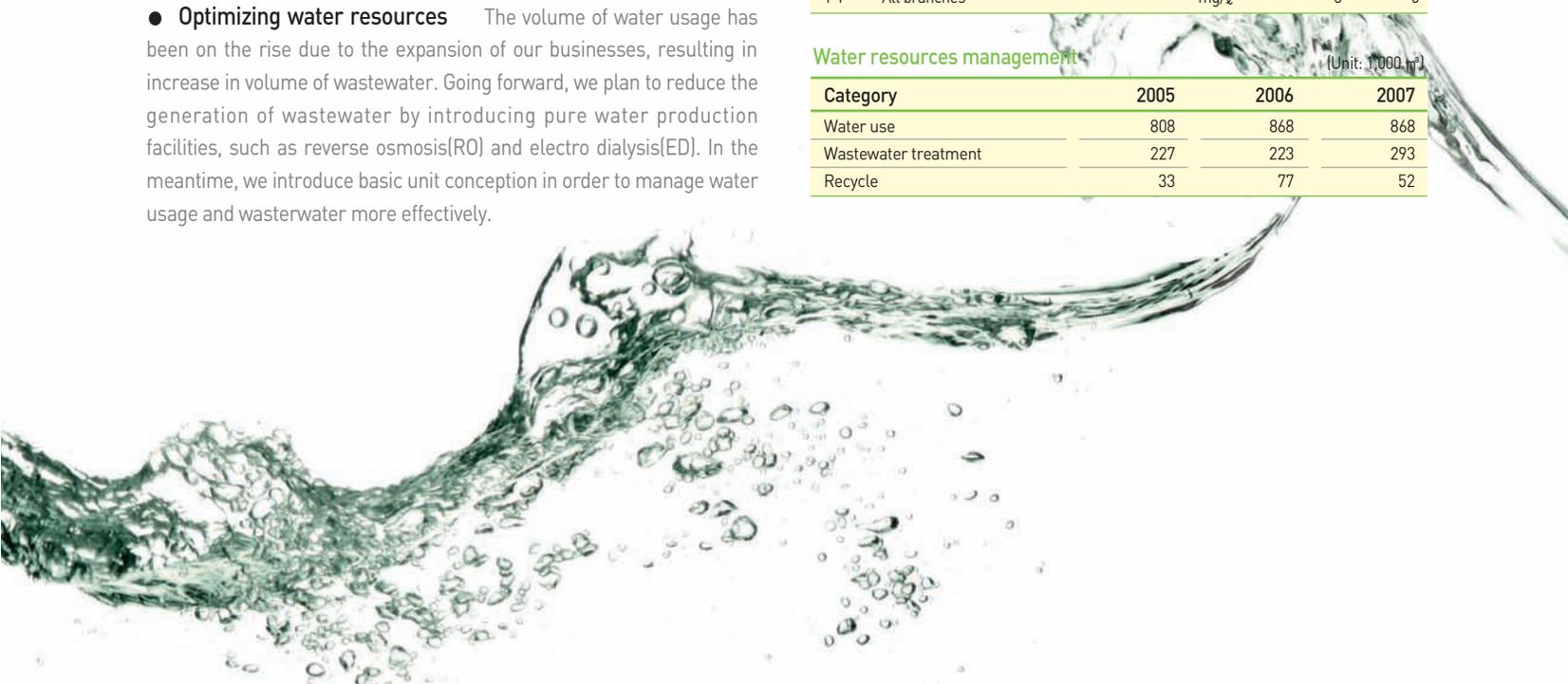
#### \* Water quality

Category	Branch	Unit	Legal standard	In-house standard
COD	Gangnam, Yongin, Chenogju, Hwaseong, Yangsan	mg/l	130	20
	Suwon	mg/l	90	20
	Daegu	mg/l	40	20
SS	Gangnam, Yongin, Chenogju, Hwaseong, Yangsan	mg/l	120	20
	Suwon	mg/l	80	20
	Daegu	-	30	20
pH	All branches	mg/l	5.8-8.6	6.5-8.0
N-H	All branches	mg/l	5	1.5
T-N	All branches	mg/l	60	40
T-P	All branches	mg/l	8	6

### Water resources management

(Unit: 1,000 m<sup>3</sup>)

Category	2005	2006	2007
Water use	808	868	868
Wastewater treatment	227	223	293
Recycle	33	77	52



### In-house Guidelines for Environmental Management

- **Formulation of In-house Guidelines for Environmental Management** In order to minimize our volume of emissions of environmental pollutants, KDHC has established a series of in-house guidelines for pollutants control that are stricter than those contained in the Clean Air Conservation Act and the Water Quality Conservation Act. These help us to forward our commitment to improving the environment and also reduce the number of environmentally-related civil petitions.
- **Eco-design** KDHC has introduced a series of state-of-the-art engineering methods and designs to minimize noise and vibrations and the generation of air pollutants during the construction of new power plant facilities. Our design guidelines, which are even stricter than those required by the Clean Air Conservation Act, reduce the level of noise and vibrations during construction by applying vibration and noise control methodologies. We also use environmentally friendly materials. In the meantime, we establish our own standard on NOx emission at 20~25ppm, much stricter than the legal standard of 50ppm for the facilities at Paju plant and Pangyo plant, which are now under construction.

### Recycling Wastes and Byproducts

Wastes generated by KDHC include dust that is created after the combustion of heavy oil, sludge<sup>(10)</sup> that comes from waste water treatment processes, and waste oil, waste heat insulating materials, and waste synthetic resins that are produced during facility repairs and maintenance. We treat these wastes according to the requirements of the Wastes Control Act. For example, plasters that are byproducts of dust and desulfurization plants are completely recycled. In 2007, 345 tons of dust that had been generated at our branches was recovered and reused as auxiliary fuel for cement manufacturing. Desulfurization plasters are entirely sold outside.

#### Dust generation and recycling

Category	2005	2006	2007
Dust generation (ton)	1,177	564	345
Dust recycling (ton)	86	564	345
Recycling ratio (%)	8	100	100

#### Desulfurization plaster generation and recycling

Category	2005	2006	2007
Desulfurization plaster generation (ton)	6,842	6,520	4,381
Desulfurization plaster recycling (ton)	6,842	6,520	4,381
Recycling ratio (%)	100	100	100

## Adhering to UNFCCC Recommendations through Business Diversification

### Expansion of District Cooling Supply

District cooling provides a certain area with a bundled supply of hot or cold water produced in an economical manner from large heat production facilities. KDHC's district cooling system uses electric alternative energy including the waste heat from CHPs to raise the utilization efficiency of CHPs and provide relief for electricity shortages during the summer season. In addition, our district cooling uses water as a refrigerant instead of greenhouse gases (such as CFCs). This improves the atmospheric environment by protecting the ozone layer.

### Expanding New and Renewable Energy Business

KDHC is entering into a variety of new and renewable businesses, including solar heat systems, solar photovoltaic power generation, and biomass CHPs. Operation of Shinan solar photovoltaic power generation facilities is expected to reduce greenhouse gases by 827 TC CO<sub>2</sub> ton annually. Additionally, we have initiated work on building new and renewable energy facilities to produce woodchips from nematode-infested pinewood. Commercial operations are slated to begin in 2009. Other projects in progress include constructing facilities to recover heat energy from treated sewage which is discharged into rivers and use it for district heating. Our efforts to explore unused energy sources also involve pursuing the construction of facilities to effectively recover heat energy lost from smokestacks.

### Efforts towards Greenhouse Gas Reductions

District heating provides a supply of low-carbon energy by utilizing unused energy sources such as waste heat from incinerators and surplus heat from power generators to produce heat. It is characterized by low levels of greenhouse gas emission per unit of output. The greenhouse gas reduction initiative is led by the Ministry of Knowledge Economy and is intended to promote less emission and encourage voluntary reduction efforts by the corporate sector. KDHC is carrying out three such projects, including those utilizing incineration heat and wood biomass.

Greenhouse gas (CO<sub>2</sub>) emissions



\* Source: KDHC greenhouse gas inventory report

11. CDM(Clean Development Mechanism): A program developed by the UN CDM that allows advanced industrialized countries to conduct greenhouse gas reduction projects and/or purchase credits from developing countries to achieve their own reduction targets.

The incineration heat project involves recovering heat generated from trash incinerators run by local governments to provide district heating. Through this project, our Yongin branch and Bundang branch are curtailing greenhouse gases by 7,503 tons and 25,704 tons, respectively, each year. With the wood biomass project, woodchips from nematode-infested pinewood are used in place of fossil fuel. The Daegu branch is expected to curb greenhouse gases by 22,145 tons annually through this endeavor.

### Participation in CDM<sup>(11)</sup>

In an effort to slash greenhouse gas emission, KDHC is expanding the use of renewable energy sources (eg, photovoltaics, waste wood, landfill gas) and eco-friendly LNG. This is in line with the Clean Development Mechanism (CDM) under the Kyoto Protocol. The CDM Executive Board has given its approval for the Gangnam branch's LNG fuel conversion project (April 2007) and the landfill gas project in Bangcheon-ri, Daegu, (August 2007). Work is underway to register the solar photovoltaic power plant in Daegu and Shinan, LFG project in Daegu, wood biomass CHP in Daegu, and LNG CHP in Hwaseong as CDM projects.

The LNG fuel conversion project operated by the Gangnam branch improves the atmospheric environment by replacing LSWR boilers with LNG ones and reduces 35,000 tons of greenhouse gases per annum. A similar LFG utilization program by the Daegu branch utilizes LFG from the Bangcheon-ri landfill in Daegu, leading to a reduction of around 405,000 tons of greenhouse gases annually.

### Carbon Neutral Program

As part of our dedication to the government's initiative to reduce greenhouse gases, KDHC declared its goal of becoming carbon neutral in September 2008 together with 14 energy-related organizations and received the carbon neutral mark from the Ministry of Knowledge Economy. The carbon neutral program aims to achieve net zero carbon emissions. To offset the greenhouse gases produced at major events hosted by KDHC, we planted 522 camellia trees in Shinheungri, Jeju-do. Going forward, we plan to expand the program's application to other company events.

## Environmentally Friendly Activities

### Publicizing Environmentally friendly Projects and Realizing Energy Savings

KDHC provides information on its environmentally friendly businesses and offers training in energy savings. These activities include TV and billboard advertisements, corporate newsletters, and printed PR materials. We also encourage energy savings by telling our customers about energy saving methods during our inspection visits. We have also organized an energy savings promotion committee to operate heat supply facilities and provide leadership in energy savings. For example, we have put energy conservation into practice at work by saving power for office equipment and dimming our lights. Other efforts include a "no driving one day a week" program, car pools, commuter buses, and purchasing hybrid vehicles for business use.

### Environmental Conservation with Communities

KDHC is engaging in a "one branch-one river improvement" campaign to care for the local environment and preserve sensitive ecosystems. In addition, we translate our care for the environment into community-based action through environmental cleanup activities near our branches and in at-risk areas

#### Environment-related activities

Category	2005	2006	2007
PR on environmentally friendly businesses(times)	200	502	222
Education in energy savings(persons)	1,265	1,510	1,000

KDHC with local communities



# Stakeholder Value

## Trustworthy energy

for open relationships

KDHC has a diverse range of stakeholders. The key to mutual prosperity for all our stakeholders lies in having an open, communicative relationship. Our ears and hearts remain open to your opinions.

4,685

*No. of free checkups of heat supply facilities for customers*

250%

*Increase in average training hours per employee in 2007 vs 2005*

90.8

*PCSI(Public-service Customer Satisfaction Index) for KDHC*

47%

*Social equity-based employment*

# 47,799 Households

*No. of households covered by reduced heating cost project for energy welfare*

# 89%

*Ratio of SMEs among partner firms in 2007*

# 13,392 Hours

*Hours of volunteer activities in 2007*

# 90%

*Ratio of green purchasing in 2007*





## Planting the seed of hope in children

### The far-reaching effects of a little interest and support

The day was January 26, 2008, and the venue, the international conference room of the Federation of Korean Industries (FKI) in Seoul. The event was the 13th Republic of Korea Student English Speech Contest hosted by the World Association for Art of Exchange Organization. Nervousness showed on the faces of each of the 85 students who came from around the country while they awaited the final results. Yemi Elementary School was called out five times, winning the best prize in each grade and overall grand prize. This feat followed two former wins at the YWCA-hosted National English Speaking Contest in February 2007. Yemi Elementary School was covered in major dailies and on TV, in addition to being mentioned at the presentation of best innovation practices by the Ministry of Planning and Budget (now Ministry of Strategy and Finance).

Yemi-ri, Jeongseon-gun in Gangwondo Province. Yemi Elementary School is the only educational institute in this former mining town. The total number of students is 70. With no private academy in sight, English proved to be the most challenging subject for students to learn.

KDHC forged a sisterhood relationship with Yemi Elementary School in March 2006 as part of an agreement with Jeongseon-gun on sponsoring talents. The company also formed the Yemi Guardian Angel Group comprising employees to extend greater educational support. The Yemi Guardian Angels oversaw a variety of events for the children who lacked on-site learning, including access to cultural events, scientific experiments and PC networks. The area on which they concentrated most was a native English education program. With their support, students received lessons from a native English teacher twice a week and attended English camps during holidays. The volunteer activities were born out of a desire to give the opportunity of learning to children who craved knowledge but lacked a suitable environment and to nurture talents of the future. The Yemi Guardian Angels have planted seeds of hope in these children and plan to continue growing them.



# CUSTOMERS

## Vision and Strategy

### Vision

The Best Environment-Friendly Energy Company

### Mission

Creative customer satisfaction that goes beyond customer satisfaction

### Strategy and Task

#### Long-term strategy

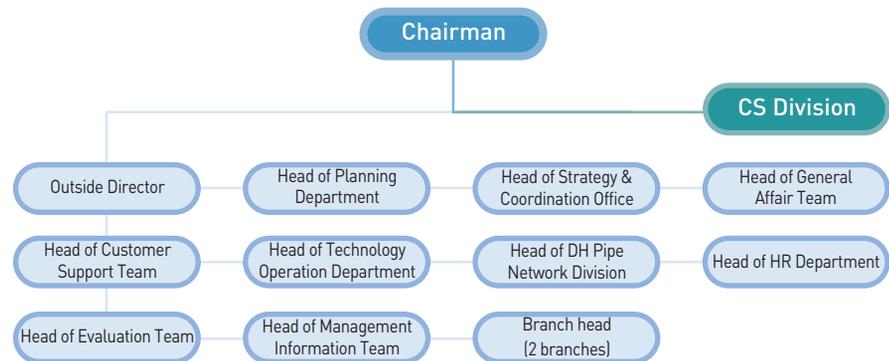
- Service: No.1
- System: Customer happiness management system
- People: Eco planner (employees), Eco consultant (machine room supervisors)

#### Short-term strategy

- Build a customer-oriented service system
- Upgrade service quality
- Conduct emotional marketing
- Identify and nurture key CD capabilities
- Enhance management of customer relations and customer experience

To fulfill our mission of "Creative customer satisfaction that goes beyond customer satisfaction," KDHC has established three strategies: build a customer-oriented marketing strategy; pursue brand enhancement and differentiation; and reinforce customer services. In particular, we are employing diverse VOC systems to identify customer needs and reflect them in our policy.

## Organization



The CS Management Committee is tasked with CS management. The committee, which is led by the head of the Planning Division, is composed of the outside directors, 12 heads of each department including the head of the Planning Department, and the branch managers. It is in charge of CS management policies and conducting a variety of activities to enhance customer satisfaction.



- Customers
- Employees
- Partners
- Communities

# Customer Satisfaction

## Building Customer-oriented Corporate Culture

On the firm belief that customer satisfaction is the source of competitiveness, we strive to provide customers with differentiated values as well as clean and pleasant living environment. In the meantime, both present and potential customers are categorized in our target customers.

### Charter of Customer Service

KDHC does its utmost to create convenient and comfortable values for our customers by providing the best services to them. We formulated a Charter of Customer Service outlining standards for product and service quality, and improvement of quality of customer life. Moreover, we established service implementation standards in order to fulfill the charter. We check whether the standards are implemented well on a quarterly basis, reflect the results in our management and disclose the information on the company's homepage two times a year.

The service implementation standards provide detailed guidance in eight areas including attitude towards customers, protection of customer information, collection and handling of customer requests, fair tariffs, and compensation for errors.

### Charter of customer service in practice

Service implementation standards	Goal	Result	Ratio
Reply to opinions and enquiries within 1 business day	100%	93%	93%
Reply to appeals and suggestions within 5 business days	100%	96%	96%
Protection of customer information	0 leaks	0 leaks	100%
Telephone manners (inspect employees' telephone etiquette regarding customers)	95.1 points	96.6 points	98.4%
Management disclosure	36 timely disclosures	36 timely disclosures	100%
Collect stakeholder opinions when starting new business	Collected	Collected	100%
Provide free training for energy managers of customer facilities	500 persons	795 persons	159%
Provide free checkups of customer facilities	4,685	4,685	100%
Maintain lower heating charges than those for LNG central heating	Maintained	Maintained	100%
Disclose Charter of Customer Service (on/offline)	Disclosed	Disclosed	100%
Conduct quarterly service performance surveys and disclose to customers (twice)	Disclosed	Disclosed	100%
Conduct CSI surveys	88.2 points	84.5 points	95.8%
Maintain quality of district heating/cooling (temperature/pressure)	Maintained	Maintained	100%
Install equipment at key branches to detect temperature/pressure	113	113	100%
Conduct safety checks of heat source and heating pipe system	2,868	2,868	100%
Conduct maintenance works on heat supply facilities during off-peak demand season (Mar.15~Nov. 15)	64	64	100%
Give notice 5 days before suspension of heating service for maintenance works	188	188	100%
Reward energy-saving customers	18 persons in 62 complexes	18 persons in 62 complexes	100%
Hold presentation on district heating to customers who request participation or to new occupants of less than 1 year	100%	100%	100%
Send bills 20 days before the payment deadline of every month	100%	100%	100%
Use telemetering once a year to calculate heat consumption	100%	100%	100%

\* Implementation rate of service standards: 99.2%

## KDHC Charter of Customer Service

All of us at KDHC pledge the following to foster greater happiness among our customers by promoting a comfortable living environment.

- We will provide a safe and stable supply of quality heating services.
- We will always respect customer opinions and consider the customer's point-of-view in the way we think and act.
- We will strive to deliver services that exceed our customer's expectations.
- We will ensure our customers do not experience difficulties in receiving district cooling/heating services.
- We will work to preserve and improve our environment in addition to making efforts to save energy to enhance the quality of life for our customers.
- We will fulfill our social responsibility and aim to protect our customers' interests by pursuing sustainability management.

## Customer Satisfaction Strategies

### Customer Satisfaction Survey

KDHC conducts customer satisfaction survey twice a year. Sponsored by the company and the government, they are designed to garner information on customer needs. In 2007, we obtained 90.8 points of the public service customer service index by the government, representing our unwavering status as an excellent CS organization among the nation's public enterprises. We disclose the result and its details while reflecting them in our CS policies.

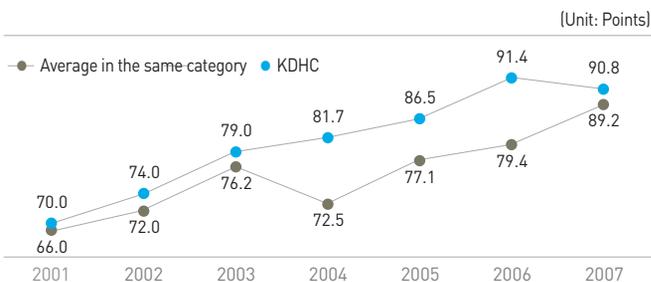
### Protection of Customer Information

Customer information is managed according to information management rule and customer information collection plan. Information management rule deals with such issues as the protection of and access to individual information and the prevention of leakage whereas heat supply regulation specifies customer information security. We prohibit blanket access to customer information and authorize each employee to access the information in different levels. In addition, we operate information protection systems such as customer real name authentication. Moreover, we have designated the first Tuesday of each month as the Information Security Check Day and immediately fix any problems that may have arisen. Because of our dedication to customer information security, we have never received any privacy-related complaint.

### Results of PCSI surveys by the government

Category	2005	2006	2007
No. of organizations	77	80	25
Average points of total organizations	77.1	79.4	89.2
Average points of same category*	77.6	83.2	86.0
KDHC	86.5	91.4	90.8
Our own survey	84.4	86.9	84.5

\* '01-'03: Public enterprise, '04-'06: State-run organization, '07: Public enterprise



## Enhancing Corporate Image

### Providing Information

We operate customized homepage by customer group so that customers can easily access any information effectively. Since 2006, we have extended the scope of information disclosed to directors' business expenses, CSI survey results, annual evaluation reports by the government, and data on our social contributions and ethics management. Since 2006, we have utilized information corners, homepages, and "Alio," an integrated management system for public institutions, to disclose management information including business results and financial statements. In addition, information regarding district heating such as heat charges and directions for optimal heating operations is offered to our customers in a booklet titled "Understanding District Heating."

Moreover, we provide information on energy-saving methods and the proper operation of heating equipment through public service advertising. We also comply with all regulations regarding advertising and have never violated them.

#### Operating customized homepages

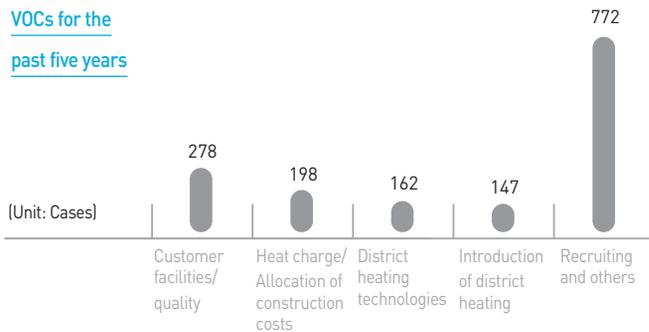
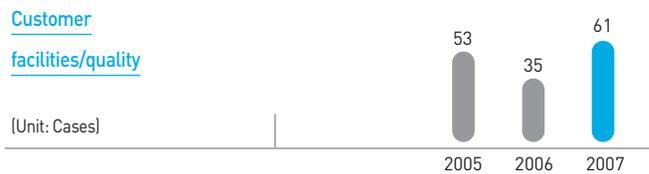
- **Homepage for children** Quiz at "Energy class corner," etc. ([www.kdhc.co.kr/chd](http://www.kdhc.co.kr/chd))
- **Homepage for branches** Provide information on and notices of events by branch, etc.
- **Homepage for customer facilities** Inquire about charges, share information ([www.kdhc.co.kr/mmg](http://www.kdhc.co.kr/mmg))
- **English-language homepage** Raise profile as advanced district heating service provider([www.kdhc.co.kr/eng](http://www.kdhc.co.kr/eng))
- **Web-mail system** Enhance two-way communications between KDHC and customers



Ad\_ Happy energy in the city

- Customers
- Employees
- Partners
- Communities

Main VOCs by year



## Vitalizing Customer Relations

### On-line VOC

All of our employees including top management are dedicated to listening to the voice of customers (VOCs). Customers can raise issues through such on-line channels as "sinmungo" (an alerting device) and our customer consultation corners or choose off-line ones, such as the Open Public Enterprise Committee and the Open CS Promotion Committee. Every opinion is shared among our employees so that they can be reflected in our policies.

In 2007, we strengthened communications with customers by conducting VOC checks quarterly instead of annually. We also shortened the processing period of customer suggestions to less than 15 days from the previous 30 days. To further our commitment to transparency in our operations, we disclosed all VOC communications on our homepage. As a result of these efforts, ratio of less than 24-hour replies to customer messages rose to 93% in 2007 from 70% in 2006.



On-line consultation at homepage

▼ Cases of VOC improvement ▼





● **VOC Status** Most of VOCs received on-line over the past five years from 2003 to 2007 are about the customer facilities/quality, heat charges and the allocation of construction costs (excluding recruiting). Among them, customer facilities-related cases have been noticeably reduced due to continuous training for managers of customer facilities. Meanwhile, the number of VOCs increased in 2007 due to introduction of new services including inspections of the quality of heating water. We have been operating the Sliding Scale Fuel Cost Assurance Committee since September 2006 to enhance the objectivity and transparency of our billings and resolve heat charge-related VOC. Additionally, we have introduced limits for rate adjustments, giving our customers notice well in advance to increase their acceptance. We have made a series of improvements to our technological standards to better deal with VOC enquiries relating to increases in heating temperatures and are examining ways to systemize the management of customer facilities. In addition, we are expanding technical trainings and educations for the managers in charge of facilities and have instituted small-scale education on a regional basis. We have also reduced the number of customer complaints by increasing the frequency of inspections of our machinery room facilities and offering the operators more technical guidance. Separately, we are operating on-line CS center on our homepage, which is composed of diverse sections such as customer consultation, customer suggestion, and cyber sinmungo. This allows us to deal with customer inquiries and suggestions, civil petitions, and reports of work-related irregularities and corruption in a more efficient manner. In 2007, a total of 50 suggestions were submitted, surging from the previous year's 28 suggestions. We provide customers with SMS replies detailing the entire process from receipt through to completion.

**Onsite CS Activities**

We are improving the satisfaction level of our service quality and operating facilities more efficiently through the constant management of heating water quality and the proper operation of standards for heat-using facilities. In order to deal with problems regarding heat usage, we have conducted free inspections and safety checks of 4,685 machinery rooms and 52,545 facilities. We have expanded the number of CS organizations in which customers can participate. Other measures include PR activities to help residents understand the rationale behind rate hikes, reinforcing the advisory capability of the Open Public Enterprise Committee, operating the Open CS Promotion Committee on the branch level, and gathering opinions from our housewife monitors regarding our overall CS activities. In addition, we have implemented an 'Honorary Heat Pipe Supervisor' program that allows residents to participate in such activities as process control, quality control, and safety supervision.

● **Customer Safety** KDHC places top priority on customer safety and strives to ensure safe and stable heat supply. We established company-wide safety management system while conducting various activities such as operation of disaster control center, examining and repairing of facilities, intensive safety management and disaster-free campaign according to the annual plan. We also operate a rapid response system to deal with emergencies. As a result of these efforts, we have been able to provide services for the past seven years without a suspension in heat supply caused by problems at heat production and supply facilities. There have been no civil petitions and we have never violated any regulations relating to customer safety and health.

01. Bundang branch    02. Cheongju branch    03. Yongin branch



01



02



03

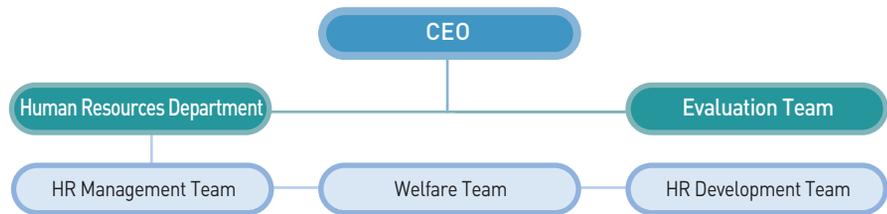
# EMPLOYEES

## Vision and Strategy

- Vision** The Best Environment-Friendly Company
- Mission** Maximize corporate value through optimal utilization of human resources
- Strategy and Task**
  - Ability-and performance-based personnel management**
    - Reform promotion and hiring system, Reorganize worker evaluation system, Hire HR specialists
  - Practice balanced hiring**
    - Redefine job duties, Continue social equity-based employment program, Hire top-quality workers
  - Foster global-standard workers**
    - Foster highly-qualified professionals to drive the company's future, Create self-directed learning culture, Identify ten core capabilities and put them into practice

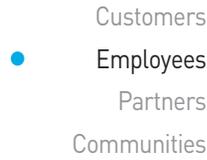
KDHC aims to maximize its corporate value through the optimal utilization of its human resources. To this end, we have developed the following three strategies: Establish fair performance evaluation- and ability-based personnel management; Hire and develop high quality workers; Foster global-standard professionals.

## Organization



We provide our workers with educational programs that fit with their capabilities and offer them a wide range of employment benefits. This is done to equip our core human resources with the technologies and knowledge that will help us survive in a rapidly changing operational environment. These programs are led by the HR Management Team, Welfare Team, and HR Development Team, under the supervision of the Human Resources Department. The Evaluation Team is tasked with carrying out employee evaluations to identify core capabilities and accomplishments.





- 1. **Job creation rate** = No. of employees in a certain year - No. of employees in the preceding year / No. of employees in the preceding year X 100
- 2. **Turnover rate** = Monthly average number of separations - Monthly average number of employees X 100

# Employees

## Balanced Hiring

### Employment Status

KDHC has 1,104 employees, including five directors as of the end of 2007. Of all, 1,099 employees, 99.5% of all, are full-time workers. Although the ratio of males(995 persons) is high(90.1%), we are gradually increasing the number of female employees to ensure a more balanced mix of human resources. As a result, our average female employment rate stood at 9.9% in 2007, exceeding the industry average of 7.8%. Our job creation rate<sup>[1]</sup> reached 6.5%, with 73 people being hired in 2007. We operate an employment target program for those from rural communities and are concentrating on hiring science and engineering majors. Our turnover rate<sup>[2]</sup> and average length of continuous service stood at 0.45% and ten years and seven months, respectively in 2007.

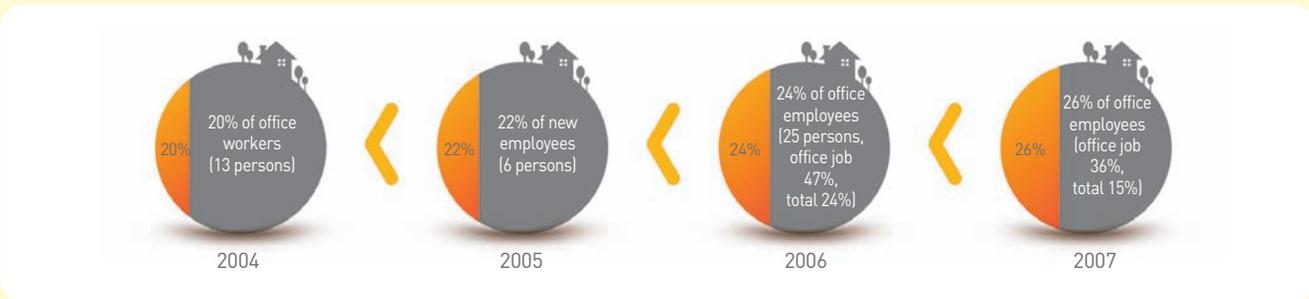
### Employment status

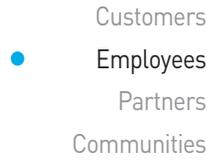
Category		2005	2006	2007
	No. of directors	4	4	5
	No. of employees	945	1,038	1,099
	No. of total employees	949	1,042	1,104
Gender	Male	873	942	995
	Female	76	100	109
Employment type	Full-Time	944	1,036	1,099
	Contract	5	6	5
By job group	General	18	52	55
	Office workers	225	246	249
	Technical workers	697	734	786
	Average service period	10.0 years	10.0 years	10.7 years
Appointment	No. of new appointments	29	109	73
	Job creation rate	2.0%	9.8%	6.5%
Separation from service	Turnover rate	0.94%	0.48%	0.45%



\* Based on current number of employees (1,116 full-time employees). Executives, contract and wage peak system workers have been excluded from the number of employees by job group.

### Female employment program





3. According to regulations on the treatment of people who have been injured helping others in danger but whose usual employment does not require them to do so.

### Providing Equality of Opportunity

In accordance with its Code of Ethics, KDHC treats all its employees equally in terms of education and promotions according to their abilities and qualifications. All of them are evaluated fairly and compensated on the basis of their accomplishments. We also guarantee equal opportunities for promotions by forbidding discrimination by reason of educational background, gender, age, religion, and physical impairments. When hiring, we endeavor to offer equal opportunities to all. We abolished academic requirements as a condition for employment in 2004, age in 2005, and language proficiency in 2006. Our effort for social equity-based employment was sustained in 2007. The human rights of our employees are of paramount importance to us: we adhere to ILO regulations prohibiting child and forced labor and observe all international standards relating to workers.

### Social Equity-based Employment Program

In 2006, we became the first company in Korea to introduce the social equity-based employment program in 2006. It applies to those who have been injured helping others<sup>[3]</sup>, performed good deeds in society, belong to a low-income bracket, come from rural communities, are differently-abled, or are physically-challenged military veterans. Once again in 2007, we met the nation's statutory employment rate by hiring three differently-abled persons and 13 injured military veterans. In 2007, we expanded the program to cover the surviving family members of those who died while saving the lives of others and organ donors. We simultaneously proceed with regular hiring and social equity-based hiring. In this way, we are preventing redundancy, ensuring fair hiring practices and doing our best to meet our social obligation as a public enterprise.

### Wage Peak System

We have utilized the wage peak system since June in 2006, for the first time as the Ministry of Knowledge Economy-affiliated organizations. It has resulted in significant labor savings and increased employment opportunities.

#### Social equity-based employment program in 2007

Category	Social equity-based employment							Open employment, etc.	Total
	People who have been injured helping others	People of good deeds	People of low-income brackets	People from rural areas	Physically challenged	Physically-challenged military veterans	Sub-total		
No. of new hires	1	2	2	13	3	13	34	37	71

## Nurturing Personnel based on Ability and Performance

### Performance-based Personnel System

We employ a multi-evaluation system to establish a capability- and performance-based personnel management structure. Through it, we attempt to build objectivity, fairness, and transparency into all our personnel management activities.

In addition, we run a "grade and position separation" system to ensure the development of a performance-based personnel culture. Introduced in 2006, it has since been expanded to include all positions of team leaders and higher. This has enabled the performance-based operation of organizations, helped to create a competitive working atmosphere, and ensured the fairness and transparency of our personnel management activities.

#### Grade and position separation system

	2006	2007
Positions	114 positions	119 positions
Classification standard	Based on relative influence such as business performance and vision, degree of difficulty, work volume	Added work volume related to external organizations, importance of cooperative ties

### Nurturing Global Talents

KDHC recognizes the importance of reinforcing the capabilities of employees. As a result, we have developed a self-directed learning culture by introducing the principle of competition into our human resources program while operating various training programs by phase. To begin with, we encourage spirited but well-meaning competition among employees by giving extra points towards promotions to workers with excellent training records. In addition, we offer a wide variety of educational programs to equip high-quality human resources with the technologies and knowledge needed to prosper in a knowledge-based, future-oriented society.

We operate a series of leadership training programs, targeting team leaders and those in equivalent positions. Designed to encourage the development of team spirit, these exercises primarily focus on the preparation of proposals and reports, accounting, and developing a professional mindset.

Furthermore, we upgraded our training programs which concentrate on the skills needed at each level by conducting a study on the capabilities of all our employees and reflecting the results on the training curriculum. On average, each employee attended 9.6 training sessions and received 80 training hours in 2007. The figures represent a vast increase over the previous year. Training expense per employee rose to KRW2,609,000. To boost training participation and maximize the effects of training, KDHC gives additional points to people with an outstanding training record. To meet employees' diverse learning needs, KDHC has a personal development scheme (extended KRW700,000 to each employee in 2007) which helps staff further their education and hone individual skills.

### Employee education

Category	2005	2006	2007
Education and training expenses (KRW thousand)	1,684,125	2,674,691	2,878,500
No. of trainees	4,917	6,465	10,596
Frequency of education per person	5.2	6.2	9.6
Education and training expenses per person (KRW thousand)	1,775	2,541	2,609
Average training hours per person (hours)	32	73	80

### Education structure with introduction of team system

Category	Programs
Team members	<ul style="list-style-type: none"> <li>• Future leaders class</li> <li>• Introduction to junior managers class</li> <li>• Multi-player team member cultivation class</li> <li>• New employee guide class</li> <li>• Basic job skills training</li> </ul>
Team leaders	<ul style="list-style-type: none"> <li>• Workshops in management and training by Advanced Management Program(AMP)</li> <li>• Team leader training program</li> <li>• Training for new team leaders</li> </ul>

### Training programs in 2007

Program	Details	Total no. of trainees
Required course	Education by job level, basic job training	965
Training for technological development	Job skills training course	734
	Intensive job-training course	116
General courses to develop abilities	Informatization, change and innovation, customer satisfaction, ethics management, labor-management relations, self-development training, etc.	8,781
	Total participants	10,596

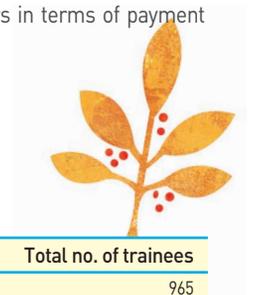
We also developed in-house cyber contents related to work duties to overcome the limits of collective training, which include class size limit and on-the-job utility. In 2007, totally 104 people took part in three cyber training programs. Meanwhile, ethics lectures were included in the training curriculum to raise understanding of ethics management and cyber ethics training was conducted for new recruits. We also took steps to raise the effectiveness of sexual harassment prevention training and create a healthy work environment. In 2007, outside lecturers were invited to hold touring lectures on sexual harassment. Employees with direct customer contact are required to undergo customer service training to ensure customer service quality.

Sexual harassment prevention training



### Rational Compensation

KDHC sets wage levels in accordance with government guidelines. Our average annual wage last year was at KRW 49.5 million, close to the average of KRW 50.8 million for 24 other public enterprises.<sup>(4)</sup> There is no difference between male and female workers in terms of payment structure.



- Customers
- Employees
- Partners
- Communities

## Win-Win Labor Management Relations

### Labor Union

KDHC allows its employees complete freedom of association in terms of membership and activities in their labor union, as per the articles of the collective agreement. The union was inaugurated on May 24, 1993. It has adopted a union shop system, accepting all employees below the manager level as full members. Number of union members totaled 962, 87.1% of employees as of the end of 2007.

Labor union is composed of 15 chapters, including one at the head office. Under the union are a general council, a board of representatives, a steering committee, an executive council, and an auditor. Its mission is to promote better working conditions for workers and enhance their social and economic status.

### Union membership

Category	2005	2006	2007
Total no. of employees	949	1,042	1,104
No. of union members	826	904	962
Ratio	87.0%	86.7%	87.1%

#### Articles of the collective agreement relating to hiring

- Article 5 (scope of union membership)** It shall be a union shop accepting all employees of the 4<sup>th</sup> grade and lower as members.
- Article 6 (entry of union members)** Employees falling under Article 5 shall automatically become members upon joining the company

#### Grievance-handling procedure



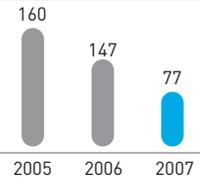
### Labor-management Communications

Labor-management conference deals with such major issues as labor disputes, working conditions, employee benefits, and safety measures once a quarter. Results are transmitted to employees in real-time through the "Happy Net", our in-house Intranet. In addition, we attempt to resolve conflicts between labor and management through discussions prior to labor actions. As a result of these efforts, we have had no strikes for 14 consecutive years up to 2007. Furthermore, working level talks led to a consensus between labor and management without the need for formal negotiations in 2007. We run a 24/7 "hot line" enabling our employees to directly communicate with the CEO. KDHC regularly holds meetings between employees and the CEO as well as labor union head to promote free exchange of opinions. Our "participation room" and "open discussion room" systems encourage communication between management and employees.

Moreover, employees can view business conferences and monthly management meetings on the in-house Internet TV system. In this way, we have readied diverse channels to actively reflect the interests and grievances of employees and shared management information with employees in a transparent manner to strengthen the win-win partnership between labor and management.

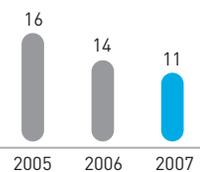
#### Grievance settlement at branches

(Unit: Cases)

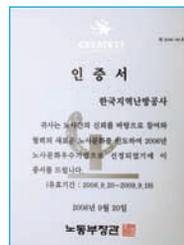


#### Grievance settlement at head office

(Unit: Cases)



\* Head office settlement rate 88% / Branch office settlement rate 93%



Certificate of good company for new management-employee culture in 2006

## A Pleasant and Welcoming Workplace

### Employee Benefits

Our basic philosophy is to create "a happy environment at home and work" for our employees, who are our internal stakeholders. To this end, we are constantly striving to make the worksite a more enjoyable place by raising employees' quality of life and making balanced investments in employee welfare programs.

Employee benefits range from support for housing and stable livelihoods, healthcare, as well as leisure and recreation. All these benefits are included in our "Cafeteria Plan," which we introduced in 2003. We also conduct employee satisfaction index surveys every year. Retiring workers are provided with retirement grants through a reserve account for severance benefits.

These reserves amounted to approximately KRW 24.6 billion at the end of 2007, representing 36% of our yearly personnel expenses (KRW 67.6 billion). These retirement allowances are operated by eight insurance companies to enhance the stability.

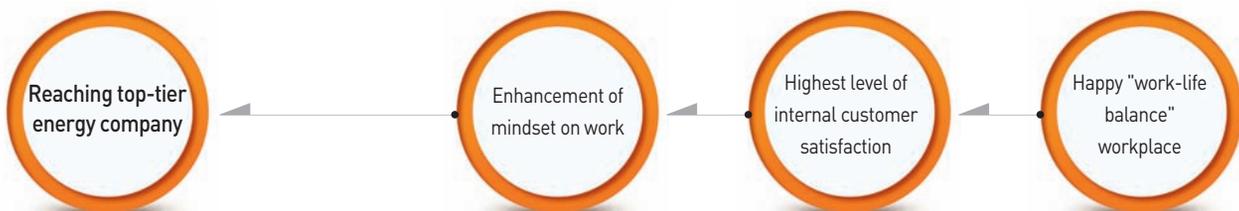
### Employee benefits programs

Program	Details
Support for housing	<ul style="list-style-type: none"> <li>Loans for house payments</li> <li>Provision of company houses &amp; boarding houses</li> </ul>
Support for stable life	<ul style="list-style-type: none"> <li>Loans from life stabilization funds</li> <li>Support for tuition fees for middle and high school students and loans for higher education</li> </ul>
Support for health-care	<ul style="list-style-type: none"> <li>Annual health checkups</li> </ul>
Support for work and life	<ul style="list-style-type: none"> <li>Support for employees working overseas</li> <li>Support for transfer expenses</li> <li>Shuttle buses</li> <li>Employee facilities (cafeterias, barbershops, customer reception rooms, etc)</li> </ul>
Support for leisure and recreation	<ul style="list-style-type: none"> <li>Operate Cafeteria Plan (comprising 13 items, including expenses for cultural activities)</li> <li>Support for club activities and annual selection of excellent clubs</li> <li>Recreation facilities (condos)</li> <li>Individualized compensation leaves</li> <li>Sports facilities (table tennis rooms, swimming pools, gyms, etc.)</li> </ul>

Benefit programs for employees



### Welfare philosophy



Improvement in quality of life / Balanced investment in employee welfare

- Customers
- Employees
- Partners
- Communities

### Family-friendly Management

KDHC offers a variety of maternity programs to comply with government policies on such social problems as the country's falling birthrate and aging and to improve working conditions for female workers. Beginning in 2006, we have been operating child-care centers and nursing rooms, paying subsidies for childbirth expenses, and offering maternity leaves. Improvement in working conditions leads to productivity enhancement. We plan to continue expanding our range of career support programs for married women.

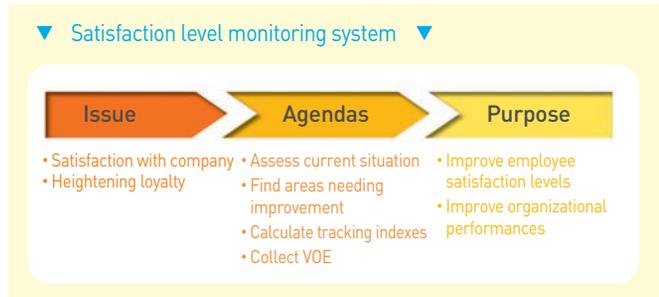
As part of our "family-friendly management," we have been offering access to summer recreational facilities and organizing cultural events for employees and their families. These gestures boost employee loyalty and provide a greater opportunity for them to use their leisure time. Additionally, we invite families of the new employees to attend the 'Open Company Joining Ceremony' in order to shed the stiff image of a public company.

### Programs to support compatibility between work and life

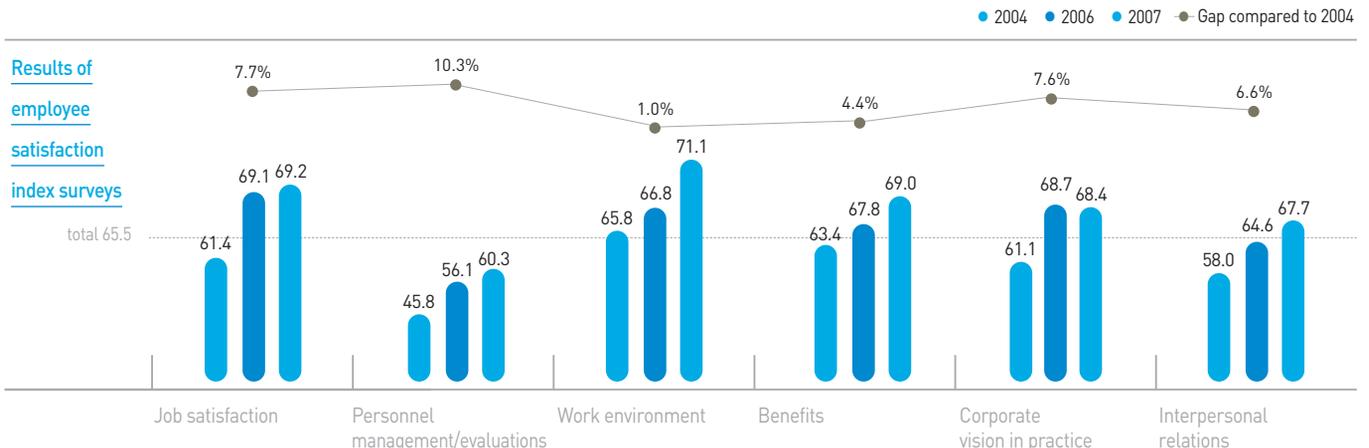
Category	Programs
Expanding maternity programs	• Operation of child-care centers (to be operated by company as of March 2007)
	• Childbirth subsidies
	• Nursing rooms
	• Child-care day (6th day of every month)
	• Improved working conditions for female workers before and after childbirth
	• Maternity leaves: 98 days (including 60 days after childbirth)
	• Miscarriage leaves (10 days, 30 days, 60 days)
	• Child-care leave (including male employees, expanded to 3 years after childbirth)
	• Payment of allowances for child-care leave

### Employee Satisfaction Index Survey

Every year, KDHC monitors employee satisfaction levels regarding our benefits programs and overall operations. The results are reflected in our efforts to build a foundation for customer satisfaction-oriented management through improved systems and increased employee satisfaction levels. Employees gave a score of 69.0 points to our employee benefits program in 2007, up 4.4 points from 2004 and up 1.2 points from 2006. By area, working environment ranked relatively high at 71.1 points. However, HR management/evaluation remained low at 60.3 points, despite the considerable advances made over the years.



01. Family invitation event
02. Ceremony for the new employees with family members
03. Operation of child-care centers



# Health and Safety Management

## Health and Safety Management Systems

Amid a rising interest in safety issues, the growing size of our company also requires a heightened awareness of safety. We are in the process of building a foundation for advanced safety management activities, elevating awareness among employees and external partners, and conducting work training to improve on-site abilities of safety managers. In 2007, we offered 393 hours of safety awareness training programs for existing employees, 101 hours for recruits, and 293 hours for outsiders, helping us make everyone more aware of the need for safety awareness.

Other activities in this area included holding safety meetings, establishing safety committees, safety-check days, and simulation drills to address potential work problems. As a result, eight branches including Gimhae branch achieved a total of 2,100 accident-free workdays. We had no accidents at all from 2004 through to 2007, except for a very minor accident in 2005.

## Occupational Safety and Health Committee

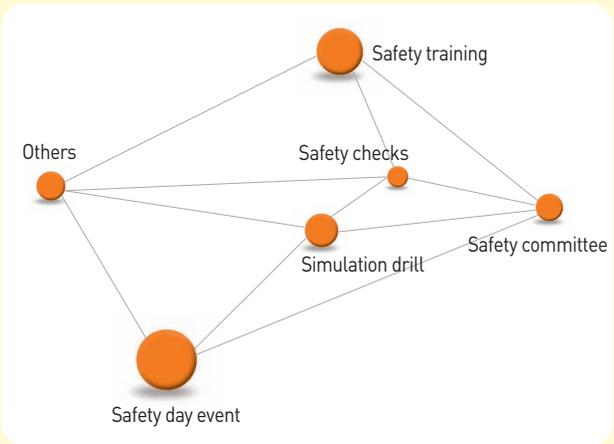
KDHC has been holding quarterly meetings of the Industrial Safety and Health Committee from 2006 as a means of preventing accidents on the job. The committee is made up of no more than ten members, with equal representation from labor and management. It deals with matters related to plans for prevention of workplace accidents, worker safety/health training, health checkups and other issues related to workers' well-being.

In 2004 and 2007, we carried out a survey to assess workplace risk factors for muscular-skeletal disorders. In 2007 the survey was expanded to cover the personnel of our partner companies. The surveys revealed that none of the processes carried out at KDHC worksites are included in the list of work with muscular-skeletal risk (totally 11) under the Industrial Safety and Health Act. Taking our commitment further, we plan to set up a medical tracking system to help prevent muscular-skeletal disorders.

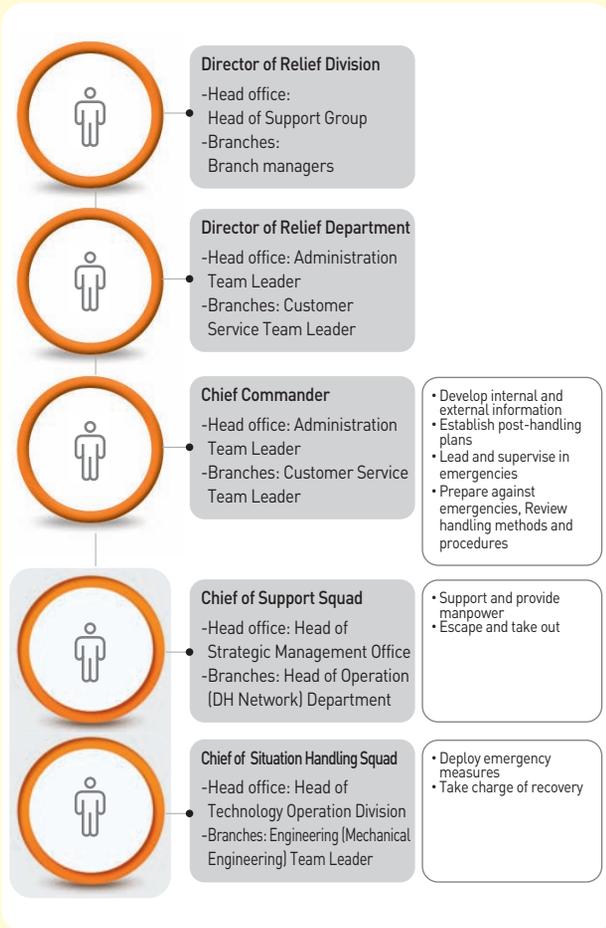
### Result of accident-free campaign

- Eight branches achieved a total of 2,100 accident-free days
- Four branches including Sangam branch are under accident-free campaign

### Basic plans for safety management



### Safety and emergency structure



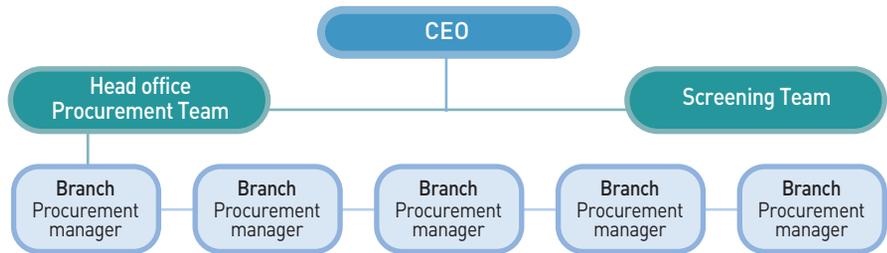
# PARTNERS

## Vision and Strategy

- Vision** The Best Environment-Friendly Energy Company
- Mission** Establish mutual cooperative relations through transparent and fair trade
- Strategy and Task**
  - Transparent and fair bidding culture**
    - Distribute integrity pact, Develop increased level of transparency through electronic contracting system
  - Support for growth of SME partners**
    - Carry out new product development with guaranteed purchases program, Implement R&D support programs, Share accomplishments, Introduce financial support program
  - Sustainable growth with partners**
    - Expand environmentally friendly purchasing, Increase social contribution-type purchasing

KDHC has established three strategies to ensure transparent and fair trade culture with its partners. These include building a transparent and fair bidding culture, supporting the growth of our SME partners, and sustaining growth with partners.

## Organization



To maintain fair and transparent ties with our partners and realize ethical management, KDHC has a special team dedicated to managing partner companies.





1. **Bidding, conclusion of contracts, and post-management:** Receipt of results, receipt of tenders (for small-sum bids), receipt of screening documents, receipt of contract documents, electronic signing of contracts, receipt of applications for inspection, receipt of bills, etc.

## Partners

### Transparent Management for Win-Win Partnership

To guarantee transparent and fair trade with our partner companies, we carry out open management activities all the way from bidding to post-management. Our partners are classified in three categories; Partners in charge of maintenance and management of heat production and supplying facilities, partners supplying raw materials and facilities, and construction companies. We worked with a total of 632 partners in 2007. SMEs accounted for 39.9% of our total transactions with partners. Total amount of purchasing from SMEs accounted for 22.4%, KRW 52.8 billion out of KRW 236.2 billion. (If the purchasing amount of fuel of KRW 181.3 billion is excluded, the ratio increases to 96%.) In terms of construction and service, SMEs accounted for 46.3% and 38.7%, respectively out of KRW 649.3 billion. When it comes to number of partners, SMEs represented 88.9%, or 562 companies out of a total of 632 partner companies. We plan to increase the proportion of transactions with SMEs gradually through SME support policies.

### Fair Trade

Our partnership is based on open and fair contracts. All contract processes are carried out through the electronic contracting system, enabling us to build trust-based relationship.

#### Electronic Contract System

KDHC is participating in the government's "Government to Business (G2B) development and e-Biz" projects to expand the foundations for e-commerce. In March 2006, as part of the efforts, we introduced electronic contracting system to add to our levels of ethics management and transparent contracts and reduce the expenses generated in the process of contracts. Contract procedures have been simplified through the organic integration of each system, resulting in heightened efficiency. The openness of these procedures has also been increased by computerizing the bidding, conclusion of contract, and post-management<sup>(1)</sup> processes.

#### e-Procurement by category in 2007

(Unit: KRW billion)

Category	Construction	Services	Purchasing	Total	Compared to target
Target	95.8	11.3	2.7	109.8	100%
Actual e-Procurement amount	112.7	17.5	8.7	138.9	127%

#### No. of partners and results

(Unit: KRW billion)

Category	2006			2007		
	No. of cases	Amount	Percentage to total amount	No. of cases	Amount	Percentage to total amount
Construction	137	109.5	29.5%	285	649.3	69.6%
Services	301	41.2	11.1%	332	47.6	5.1%
Purchasing	554	220.7	59.4%	575	236.2	25.3%
Total	992	371.4	100.0%	1,192	933.1	100.0%

#### Enhancing transparency of bidding through Korea e-procurement system

Category	2005	2006	2007
Guideline for e-Bidding	Estimated amount below KRW 5 billion	Estimated amount below KRW 10 billion	Estimated amount of KRW 10 billion and above
No. of e-Procurement	131 cases (KRW 45.1 billion)	390 cases (KRW 107.2 billion)	425 cases (KRW 138.9 billion)

\* Amount of e-Procurement of KRW 10 billion and above: KRW 53.7 billion (excluding power plant etc.)

## Stakeholder Value

- Customers
- Employees
- Partners
- Communities

### Screening Standard

We have developed standard for screening our partners' qualifications in the areas of construction, services, and purchasing. It helps us evaluate the soundness of the bidding companies at the time of bidding, and contribute to building stronger foundations for high quality heat supplies and spreading corporate social contribution culture. Our accounting standard reflects those established by the Ministry of Strategy and Finance and the Public Procurement Service. Major evaluation factors include construction capabilities, technological capabilities, management conditions, and market credibility. When evaluating a potential partner's market credibility, we add or deduct points for social and environmental contribution activities including its attitude towards the human rights. Points are added for positive social contribution endeavors, exemplary new employment practices, and companies that have been included in the "Good Company For New Management-Employees Culture" established by the Ministry of Labor. On the other hand, we deduct points for companies that have abused the public trust by violating the Wastes Control Act, etc.

### Integrity Pact

Code of Conduct contains regulations prohibiting the exchange of money and other valuables between our employees and partners. We introduced an "integrity pact" in June 2004 to define the nature of relationship between internal and external contracting parties, reinforce the transparency of our contract system, and ensure win-win relationship with the SME partners. We also formulated rules pertaining to bidding; they include limitations to qualifications, the cancellation of contracts, and the suspension of transactions when the integrity pact has been violated. In addition, all of our partners must promise that they will not engage in unfair business practices or provide money or other valuables or entertainment in their dealings. In November 2008, we revised the integrity pact to include an article which forbids parties that have not signed the pact from bidding or signing contracts related to KDHC operations. Another revision requires our employees to submit a written oath that they will not receive any bribes. We also operate a hot-line, a help-line, and a "cyber sinmungo" (or "alert device") to detect unfair trade practices.

### Details of expanded electronic procurement

(Unit: KRW million)

Details	Date of contract	Contract amount
Goyang-Eunpyeong heating pipeline works	March 22	12,807
Eunpyeong New Town district heating pipeline works (2 sections)	August 22	8,480
Pangyo boosting station construction & Bokjeong boosting station renovation	August 24	16,754
Paju Unjeong heating pipeline works (1 section)	September 14	15,609
Total	4 cases	53,650



## Details of projects to expand electronic procurement

### 1. Pursue e-procurement for works estimated at KRW10 billion or more

- Improve procedure for filling out e-document (volume statement) and seek volume reduction by negotiating with related divisions, incl. Construction Div. and DH Pipe Network Div.
- Analyze volume per item to reduce volume of e-documents, analyze reason for excessive amount of e-documents and discuss improvement measures with Korea District Heating Engineering Co. (KDHEC), which creates the e-documents
- Figure out factors which increase volume, such as volume statement form
- Remove disruptions and reduce volume (from 30Mb ▶ 4Mb) by removing unnecessary forms, changing method of filling out volume statements and eliminating overlapping contents
- Expand e-procurement to works estimated over KRW10 billion by reducing volume of e-documents

### 2. Results of expanded e-procurement

- Four projects including 'Goyang-Eungpyeong heating pipe laying works worth KRW53.7 billion changed to e-procurement

2. The government supports SMEs that are involved in new product development with guaranteed purchase by providing up to 75% of their expenses to a maximum of KRW 300 million.

## Supporting Partners

### Subcontract Management System

KDHC protects the rights and interests of subcontractors by adhering to all regulations contained in the Framework Act on the Construction Industry and the Fair Transactions in Subcontracting Act. In addition, we try to secure quality of construction by fostering small-sized constructors. To comply with measures for protecting subcontractors as outlined in the Fair Transactions in Subcontracting Act, we stipulate in regulations that the subcontractor must strictly abide by the Subcontract Management Plan which it has submitted. In the case the subcontractor fails to faithfully execute the plan, the subcontractor must immediately take corrective measures.

### Purchasing SME Product and Supporting R&D

We try to purchase more SME-developed products by giving priority to products developed by SMEs, which is clearly stated in our bidding guides. In 2007, we purchased a total of KRW 2.8 billion for 20 R&D items such as switchboard and hoist. Going forward, we will increase these kind of products. In the meantime, we make provision for financial support for SMEs to promote R&D, thus enhancing trust of district heating service. In addition, we place direct orders of less than KRW 5.0 billion for heat pipe projects. We plan to expand the volume of SME-targeted orders even more in the future.

### ● New Product Development with Guaranteed Purchase

KDHC engages in new product development with guaranteed purchase and R&D expense-support programs to help SMEs maintain stable growth and boost their level of technology. By helping SMEs develop new products and replace foreign goods and by purchasing SME-developed products for a certain period, we contribute to their technological innovation and foreign currency savings.

● **Support for R&D Expenses** Apart from government-supported spending<sup>(2)</sup>, we plan to provide funding to a maximum of KRW 200 million (or 75% of total R&D expenses) to SMEs that are engaged in manufacturing, construction, or software development and are also involved in R&D in the field of district heating. To encourage SMEs to develop technology and support development of stable sales channels, we apply priority purchasing for two years to the newly developed products.

● **Supporting Overseas Marketing** We support overseas marketing of SMEs that manufacture district heating facility and equipment. We finance them up to KRW 5 million, thus enhancing their global competitiveness and marketing capability.

### ● Purchasing in Consideration of Environment and Society

KDHC purchases products and goods in view of environment-friendliness and social contribution. Proportion of environment-friendly products such as office supplies manufactured by SMEs and products produced by the physically challenged rose dramatically to 90.3% and 57.6% in 2007 from 80.0% and 8.14% in 2006.

### Purchasing of environmentally friendly products and products produced by the physically disabled

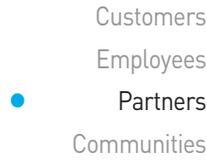
(Unit: KRW thousand)

Category	2005	2006	2007
Environmentally friendly products	207,220	721,423	920,606
Products produced by the physically disabled	3,817	11,368	128,726
R&D products	-	3,546,523	2,854,505

### New product development with guaranteed purchase

Category	Projects and tasks	No. of participating companies	Effects
2004	Research in Twin Pipe and its practical use (first developed in Korea)	4	Annual reduction: KRW 200 million
	• Development of foam pads	1	Extend life span of core parts of heat pipes and save budget by around 10% when applied to worksites
2007	• Development of air plugs	1	





### Financial Support for Partners

Since September 2006, we have been providing collateral-free working capital to SMEs in line with their credit ratings. This program is operated in linkage with domestic commercial banks. As a result, we are able to give financial support for SMEs without extra financial burden and secure items from partner companies stably. In 2007, we provided about KRW 10 billion to ten companies through the scheme which help them manage their businesses in a stable way. We plan to promote the program and expand the financial support not only to existing partners but to new partner companies.

### Benefit Sharing Program

We began operating a benefits sharing system in which we and our partners work together to reduce costs, improve quality, and develop new products, and share the results in 2007. By licensing the rights to our heating pipe telemetering system, we receive royalty payments (3% of net product sales). In the case of partners, they are able to create new revenue sources by manufacturing products using our licensed technology. When a fault is detected in the signal transmission line, we are able to switch over to the telemetering system and continue surveillance of the heating pipes. We have secured intellectual property rights by possessing the core technologies of the heating pipe telemetering system. In 2006, this led to annual savings of approximately KRW635 million in 2006. KDHC remains committed to expanding its win-win partnership with SMEs by expanding its benefit-sharing process.



## Communications with Partners

### Partnership through Communication

During the six meetings with partner firms held in 2008, 10 items were recommended and discussed. KDHC dealt with those issues which were most urgent. In 2007, we signed with four out of five companies in accordance to the multiple goods supply contract (directive by Public Procurement Office) but due to a recommendation from a manufacturer of pre-insulated pipes, we signed with all five companies in 2008. This was in order to promote SMEs and their technical development by engaging them in a bidding for contract volume. Meanwhile, we accepted the recommendation of a non-destructive testing company and disclosed the 2008 order for non-destructive testing via an electronic contract system.

### Partner Satisfaction Level Survey

At our survey in 2007, we received favorable evaluation. For example, more than 98% of the respondents replied positively on the integrity of our employees. We made significant strides in efforts to prevent corruption and make it easier to present opposing views, with our marks in those areas rising by 6.5%p and 14.5%p respectively over the previous year. We are also developing measures to tackle corruption by diagnosing its actual conditions and causes. This will help us establish a fairer and more transparent corporate culture and raise our corporate credibility and image.

KDHC growing together with partner companies



### Partner satisfaction level surveys

	2005	2006	2007	Remarks
Survey method	Check by phone	Anonymous questionnaire (sent out and replied to by post)	Anonymous questionnaire (sent out and replied to by post)	Survey targets were companies who had done business with KDHC over the last year worth over KRW 10 million
Survey target	287	365	187	
Survey subjects	Listen to grievances	Opinion surveys (gather opinions on corruption level)	Opinion surveys (gather opinions on corruption level)	

# COMMUNITES

## Vision and Strategy

### Vision

The Best Environment-Friendly Energy Company

### Mission

Fulfill social responsibilities and practice the management of sharing to create a happier society for all

### Strategy and Task

#### Expand supply of stable, high-quality, and economical energy

- Achieve vision for sustainable management, Distribute to 2 million households across the country

#### Form mutually beneficial relations with communities near business sites

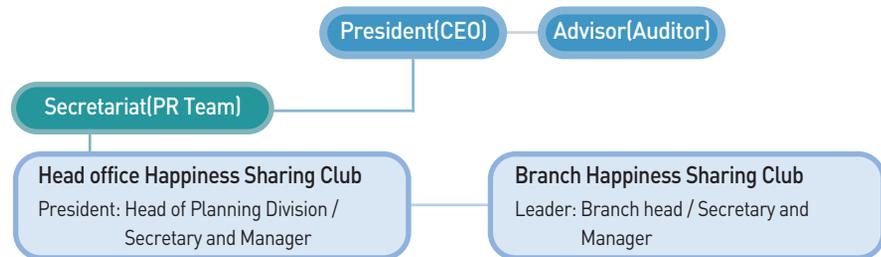
- Guarantee heating for low-income earners living close to business sites, Promote support for education and heating in low-income areas, Promote social equity-based employment program

#### Carry out employees' volunteer community service activities to support the underprivileged

- Encourage employees' volunteer activities and establish relevant systems, Support growth of company-wide plans including Happiness Sharing Club

In an effort to fulfill our responsibilities towards communities, we have developed three core strategies: expanding energy supply, building positive relationship with communities, and providing community service activities through the voluntary participation of employees.

## Organization



We operate Happiness Sharing Club at our head office and 12 branches; they are led by the Planning Division head and branch managers. They help the underprivileged and strive to improve their quality of life through educational, environmental, and cultural support.



- Customers
- Employees
- Partners
- Communities

# Communities

## Management of Sharing for Communities

KDHC is practicing the management of sharing to fulfill its responsibilities towards the communities where it operates. This includes support for low-income earners and seniors living alone and activities to narrow the gap between urban and rural communities. In addition, we continue to serve the customers, communities, suppliers and other organizations through various volunteer activities based on ethics management and environmental activities.

## Communication with Communities

KDHC started to establish organization and systems for its social contribution activities in 2004. In order to create a happier world with the communities, we listen to their voices and reflect their opinions in our operations. We make people's lives more convenient by dealing with the needs and wants of their communities as promptly as possible. Public petitions are handled by the Auditing Office, while important issues are reviewed by top management and then taken up by the appropriate division.

## Community Contribution Activities

KDHC pursues social contribution activities that bring benefits to both our company and the communities in which we work. Under the belief that companies must grow together with society, we will continue to supply high-quality, economical energy and extend support to areas even beyond where we operate, and lend a helping hand to isolated groups through volunteering.

### Contributing to Communities through Energy

KDHC is committed to expanding the supply of high-quality energy. Moreover, we have systematized our heating charge subsidy programs to better fulfill our social responsibilities as a public enterprise since 2006. We are also extending our support for heat charges in rental apartments and welfare facilities where low-income earners or the physically-challenged live. In 2006, for example, we exempted all basic charges (totaling about KRW 940 million) for about 46,000 households living in rental apartments. A similar program applying to 31 welfare facilities where the extremely needy reside resulted in exemptions of approximately KRW 100 million. In 2007, the benefits were widened to KRW 1.1 billion for 48,000 households and KRW 101 million for 31 welfare facilities. We also joined an MBC radio program to subsidize heating expenses through a campaign called "Heating Expenses of Love," in 2006, helping 45 welfare facilities and households. Again in 2007, we supported 42 welfare facilities and 19 households. We are committed to pursuing happiness in a socially equitable manner and energy welfare through a wide range of activities aimed at guaranteeing everyone's rights to enjoy district heating.



01. Filial duty event for seniors living alone
02. Helping at an outing of the disabled
03. Environmental conservation activities



01

02

03

Volunteer activity - Building houses for the underprivileged



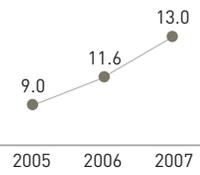
### Happiness Sharing Club

Employees at KDHC founded a volunteer organization, "Happiness Sharing Club" in November 2004 for the purpose of effectively pursuing social contribution. The Club is led by the President(CEO) while the secretariat under the President controls all the social activities of the head office and twelve branches. 446 active members and 822 donors took part in its activities in 2006 while the number of participants increased to 493 active members and 890 donating members in 2007. Number of volunteer activities and hours per employee reached 2.2 times and 13 hours in 2007 and have steadily increased since 2004. KDHC supports these activities by designating the last Wednesday of every month as "volunteer day."

Members of Happiness Sharing Club participate in volunteer services while making donations to the "Happiness Sharing Fund" every month. The fund is then doubled through matching grant program in which the company donates same amount raised by its employees. The activities by the Club have been established as a representative social contribution brand of the company. They have resulted in an expansion of employees' participation in community involvement projects and forwarded the creation of a corporate culture of caring and sharing. We are dedicated to sharing with our communities by helping the underprivileged, supporting educational and cultural activities, and protecting the environment.

### Average volunteer service hours per employee

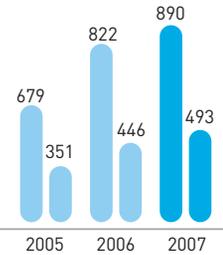
(Unit: Hours)



### Members of Happiness Sharing Club

(Unit: Persons)

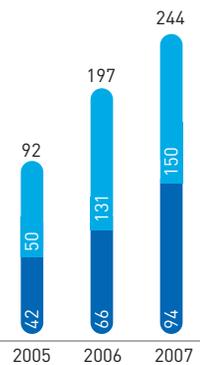
● Donating members ● Active members



### Happiness sharing funds

(Unit: KRW million)

● Matching fund ● Sharing fund



### Organization of Happiness Sharing Club



### Major activities by Happiness Sharing Club in 2007

Category	Support for the underprivileged	Educational and cultural support	Support for environmental protection
	371 times KRW 89,090,996	63 times KRW 18,247,553	18 times -
Activities	<ul style="list-style-type: none"> <li>Supporting isolated neighbors including seniors living alone, handicapped persons, children from broken families who suffer from poverty, disease and dissolution of families.</li> <li>Providing free meals and movie tickets</li> <li>Supporting children from broken families in sisterhood relationships and offering emotional support</li> <li>Providing health insurance payments and free health checkups</li> </ul>	<ul style="list-style-type: none"> <li>Coaching children of inadequate means and supporting their continued learning</li> <li>Supporting learning for children of low income families</li> <li>Providing scholarships and money for uniforms/books</li> <li>Mentoring</li> </ul>	<ul style="list-style-type: none"> <li>Preserving our environment is our promise to future generations</li> <li>One company for one river campaign</li> <li>Environmental protection campaigns</li> </ul>

## Stakeholder Value

- Customers
- Employees
- Partners
- Communities

1. Yes, I Can English speaking contest
2. Yes, I Can English class
3. Experiencing city life



### Donating and Sponsoring

We help the underprivileged by assisting starving children and neighbors in need, supporting areas impacted by the construction of new and renewable energy facilities, providing relief funds for flood victims, and operating talent cultivation programs.

### Fostering Talents

KDHC has operated the Yemi Guardian Angel Club since December 2005 to bridge the educational gap between urban and rural communities and to foster talents by supporting abandoned mining areas. Its specific activities include education, cultural activities and PC support for Yemi Elementary School students.

Beginning from March 2006, we have been offering English classes by native English speakers on a biweekly basis, targeting all the students of Yemi Elementary School. At the Seoul YWCA National English Speaking Contest which took place in February 2007, two students won prizes (Bronze, Merit). The students were able to further hone their skills in English camps during the summer and winter vacations. In addition, the Yemi Guardian Angel Club is operating a variety of programs, such as science labs and experiencing city life program. By the end of 2007, we have donated 148 PCs to the school to improve informatization capabilities.

### Support for Neighborhoods of Power Plants

This project targets residents of villages and towns within 5 km from our power plants. It aims to facilitate the development of power resources by increasing their understanding of the electric power business. We are currently carrying out various activities around the Daegu, Suwon, Cheongju, and Hwaseong power plants. Some of these activities include support for school meal facilities, educational equipment and materials, scholarship, study tours of power plants, and events for residents.

### One Branch-One Culture Activities

We operate regional contribution projects that match the unique characteristics of our branches. By offering regional cultural events, such as "one company-one culture" activities for district heating customers, we are inspiring pride and increasing customer satisfaction.

### Opening Convenience Facilities to Residents

Our facilities, including swimming pools, table tennis rooms, and auditoriums, have been opened free to the regional residents since the early 1990s. We also open our parking facilities to the public on weekends and holidays.

1. Provided PCs for Shinan-gun and signed up for 'One company-one village' program with Jeungdo-myeon
2. Donated air-conditioner to Shinheung 2-ri, as part of 'One company-one village' program
3. DH heating pipe



### Partnership with Rural Communities

We support farming and fishing villages through the "one company-one village" program that aims for cooperation and win-win development between urban and rural communities. At the "32 companies-32 villages" joint agreement for sisterhood relations organized by the Seoul Metropolitan Government in November 2005, we signed "one company-one village" agreement with Sinheung 2-ri, Jeju-do and have conducted a campaign for domestically-grown agricultural products. In July 2007, we signed another "one company-one village" agreement with Jeungdo-myeon, Chollanam-do and opened up a campaign for the region's main agricultural goods such as rice, salt, clams, and abalones. We provided funds for the seniors' hall and donated PCs and air-conditioners, in addition to installing streetlights and repairing old traffic signs.

### Volunteer Service with Youths

We have been operating an "adolescent volunteer service" program since July 2006. Its ultimate goal is to teach good character and promote closer bonds with KDHC, and it also gives teenagers opportunities for volunteer service related to energy savings and environmental protection. Through training programs and tours of our facilities, we help these young people develop good energy usage habits and provide them with opportunities to help the less fortunate. About 20,000 and 14,000 youngsters participated in these activities, respectively in 2006 and in 2007.

### Support for neighborhoods of power plants

(Unit: KRW million)

	2005	2006	2007
Daegu	28	30	30
Suwon	28	30	30
Cheongju	28	30	30
Hwaseong	-	19.6	87

### "One branch-one culture" activities in 2007

Branch name	Details
Jungang	• Children's song contest
Bundang	• Events to experience farm life
Gangnam	• Herb farm visit
Goyang	• Magic show for children
Daegu	• Free Internet education
Suwon	• Music concert
Cheongju	• Free swimming lessons
Yongin	• Energy savings and environmental protection poster contest for children
Sangam	• Healthy life classes (yoga) targeting housewives
Gimhae	• "Starry Night" film festival
Yangsan	• Visit to Upo Neup [swamp] for children
Hwaseong	• Hwaseong Song Festival



# Appendix



## Appendix

Global Compact Practice	81
Third Party Assurance Statement	82
GRI Index	84
Memberships in Associations	87
TF Team Introduction	88
Survey of Readers' Opinions	89



● KDHC's Implementation of Global Compact

● Reported ● Partly reported ○ Not reported ◇ Not Available(N/A)

Category	Principle	KDHC Activities	GRI G3	BEST	Page No.		
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights; and	<ul style="list-style-type: none"> <li>• Employee/partner firm training</li> <li>• Human rights protection and ethics management training</li> <li>• Training for personnel handling security</li> <li>• Sexual harassment prevention training</li> </ul>	HR1 ●	PN2 ●	63-65, 72, 76		
			HR2 ●	PN3 ●			
			HR3 ●	EM7 ●			
			HR4 ●	EM8 ●			
			HR5 ●	EM9 ●			
			HR6 ●	EM10 ●			
			HR7 ●	EM30 ●			
			HR8 ○	EM31 ○			
			HR9 ○	CO2 ●			
Human Rights	2. make sure that they are not complicit in human rights abuses.	<ul style="list-style-type: none"> <li>• Collective agreement</li> </ul>	HR1 ●	PN2 ●	72		
			HR2 ●	PN3 ●			
			HR8 ○	EM31 ○			
Labor Standards	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	<ul style="list-style-type: none"> <li>• Formation of labor union</li> <li>• Occurrence of labor disputes</li> </ul>	HR5 ●	EM8 ●	66		
			LA4 ●	EM12 ●			
			LA5 ●	EM13 ●			
	Labor Standards	4. the elimination of all forms of forced and compulsory labor;	<ul style="list-style-type: none"> <li>• Adherence to Employment Standards Act, ILO regulations, and collective agreement</li> </ul>	HR7 ●	EM10 ●	64	
				HR6 ●	EM9 ●	64	
	Labor Standards	5. the effective abolition of child labor; and	<ul style="list-style-type: none"> <li>• Disabled worker hiring rate</li> <li>• Female worker hiring rate</li> </ul>	HR4 ●	EM2 ●	28, 63, 65	
				HR2 ●	EM3 ●		
				LA10 ●	EM5 ●		
				LA13 ●	EM7 ●		
Environment	7. Businesses should support a precautionary approach to environmental challenges;	<ul style="list-style-type: none"> <li>• Non-financial risk management</li> </ul>	4.11 ●	GR11 ●	20		
			8. undertake initiatives to promote greater environmental responsibility; and	<ul style="list-style-type: none"> <li>• Adoption of environmental management system</li> <li>• Environmental performance management</li> <li>• Environmental education</li> <li>• Minimizing environmental impact</li> <li>• Response to climate change pact via business diversification</li> </ul>	EN2 ●	EV1 ●	48, 50 - 52
					EN5 ●	EV2 ●	
					EN6 ●	EV3 ●	
					EN7 ●	EV4 ●	
					EN10 ●	EV11 ●	
					EN13 ◇	EV16 ●	
					EN14 ◇	EV17 ●	
					EN18 ●	EV23 ●	
					EN21 ●	EV24 ●	
EN22 ●	EV26 ◇						
Environment	9. encourage the development and diffusion of environmentally friendly technologies.	<ul style="list-style-type: none"> <li>• Energy conservation activities</li> <li>• Environmental investment expenditure</li> <li>• Global warming prevention activities</li> </ul>	EN26 ●	EV27 ◇	50 - 52		
			EN27 ●				
			EN30 ●				
			EN2 ●	EV4 ●			
			EN5 ●	EV5 ●			
			EN6 ●	EV11 ●			
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	<ul style="list-style-type: none"> <li>• Operation of Ethics Management Committee</li> <li>• Ethics training</li> <li>• Creation of internal accounting control system</li> </ul>	EN7 ●	EV18 ●	25 - 26		
			EN10 ●	EV23 ●			
			EN18 ●	EV24 ●			
			EN26 ●				
Anti-Corruption			EN27 ●				
			SO2 ●	CO5 ●			
			SO3 ●	EM25 ●			
			SO4 ●	EM26 ●			

# Third Party Assurance Statement



\* GRI Guideline (Global Reporting Initiative) refers to sustainability report guidelines established jointly by the UNEP and CERES, an international association of environment groups, in 1997. The G3 version was officially announced in October 2006.

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

\*\*\* The BEST Guideline (B.E.S.T Sustainability Reporting Guideline) was jointly developed by the Ministry of Commerce, Industry, and Energy (MOCIE), the Korea Chamber of Commerce and Industry (KCCI), and the Institute for Industrial Policy Studies (IPS) and provides for five levels of reporting rigor (Level 1 ~ 5).

**To the Management of the KDHC (Korea District Heating Corp) Sustainability Report 2008:**

- The Institute for Industrial Policy Studies (The Auditor) was engaged by the KDHC (Korea District Heating Corp) to review information specified in its 2008 Sustainability Report (The Report) to provide independent third-party assurance on its contents. KDHC is responsible for the collection and presentation of all information within The Report as well as the maintenance of the underlying data collection system and internal controls. The key objective of our review is to provide independent assurance that all statements and data cited in The Report are free of material misstatement or bias and that the data collection systems used are robust. On the basis of the above, The Auditor presents the following third-party statement of assurance.

**Context and Scope**

- In its 2008 Sustainability Report, KDHC describes efforts and progress made toward sustainability management as well as its plans for the future. The Auditor's review examined the following.

- Reasonable assurance on whether: the financial data specified under "Corporate Value" is properly derived from KDHC's audited Annual Reports for 2007;
- Limited assurance on whether: the data specified under "Introduction", "Environmental Value", "Stakeholder Value" and "Appendix" of The Report are stated adequately and in full and are free of material misstatement or bias.

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

**Independence**

- The Auditor was not involved in the preparation of any part of The Report, and with the exception of this work has no other affiliation with KDHC that might compromise our independence or autonomy or place The Auditor under KDHC influence, therefore ruling out any possible conflicts of interest. The Auditor has no relationship with KDHC regarding any of its for-profit operations and activities.

**Criteria**

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

- The Global Reporting Initiative's (GRI Guideline)\* G3 Sustainability Reporting Guidelines Version 3.0.
- The AA1000 Assurance Standard's (AA1000 AS)\*\* three core principles of Materiality, Completeness and Responsiveness; and
- The local BEST Guidelines (B.E.S.T Sustainability Reporting Guidelines)\*\*\* for sustainability management.



**Work Undertaken and Scope** • The Auditor reviewed the Materiality, Completeness, and Responsiveness of The Report through the process outlined below:

- a review of media reports relating to KDHC
- a review of information contained in The Report as well as the underlying data collection system (validation of internal sustainability-related organizations, systems, and activities)
- data sampling and assessment of high-risk areas to support intensive review of key statements in The Report, internal policies, documentation, and information system
- interviews with managers and staff in charge of sustainability reporting, as well as persons responsible for The Report's source information
- a reconciliation of financial information stated in The Report against the audited Annual Report
- an on-site review of the head office

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

**Materiality: Does The Report cover economic, social and environmental issues of the greatest importance to KDHC?**

The report reflects the company's efforts to identify the areas of interest for and key issues concerning internal and external stakeholders through the performance of satisfaction surveys and materiality assessment (company regulations, codes and laws, benchmarking, media research) with each stakeholder, and to reflect the findings in the report.

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

We have found that in order to identify sustainable management strategies and issues, Korea District Heating Corporation (KDHC) has set up an organization for promoting sustainable management which comprises of expert departments such as strategy team and innovation team for promoting value creation management, corporate social responsibility management and environment-friendly management.

**The Institute for Industrial Policy Studies (IPS)**

Established in 1993, the Institute for Industrial Policy Studies has accumulated broad expertise in the area of sustainability management since 2002. "The Auditor" is composed of ten individuals (Chul-Ho Shin, Seok-Young Lee, Sung-Pil Park, Dong-Won Lee, Jin-Tae Kim, Un-Yong Shin, Sang-Chun Kim, Ji-yeon Ahn, Yong-In Kim, Eun-Ok Kim) - professors at Korea's top universities or expert practitioners with professional accreditation and extensive experience in sustainability management based on majors in business management, accounting, environmental science etc.

**Responsiveness: How well does The Report address information of importance to KDHC stakeholders?**

We have found KDHC to be making efforts to identify key information for stakeholders by conducting satisfaction survey with each stakeholder and by utilizing offline channels such as the open public corporation committee.

- Relative to BEST Guidelines, in view of the level of reporting rigor and intensity of information provided, The Auditor finds The Report to fulfill 92.6% of the reporting requirements necessary to qualify for a Level 4 Report (from among Level 1 - 5).

- Relative to the GRI Guidelines, The Report meets the content and quality requirements of GRI G3 Application Level A+.

**Issues for Future Consideration** • In KDHC's second sustainability report, 2008 Korea District Heating Corporation Sustainability Report, we have found that the company has made more efforts to identify major areas of interest for and material issues concerning the stakeholders by conducting materiality assessment and to reflect these in its business strategies than in its first report. It has, moreover, adopted the Disclosure on Management Approach (DMA) to report the importance and implementation plan of each area. Our review engagement has led to the following recommendations for KDHC's continuous improvement of sustainability management performances and reporting quality.

- We recommend that KDHC demonstrates its efforts to keep its promise with the stakeholders in the report by disclosing major feedbacks from the stakeholders obtained through communication channels and how they have responded to and handled the feedbacks.
- We recommend that KDHC develops a system for reviewing issues of high interest and high risk to the stakeholders at the management level such as the board of the directors, and for reflecting the results immediately in its business strategies.
- We recommend that KDHC sets up a sustainable management committee to expand the existing sustainable management organization company wide, and to refine the system for comprehensively assessing and managing sustainable management goals and performances.

We expect the assurance report to serve as a basis for KDHC's establishment and improvement of a more systematic sustainable management reporting system.

January 23, 2009

**Yoon-Chul Lee**

President, The Institute for Industrial Policy Studies

# GRI Index

● Reported ● Partly reported ○ Not reported ◇ Not Available(N/A)

GRI Index	GRI Content	Extent of Reporting	Page No.	BSR Indicators	
Vision and Strategy	1. 1	Statement from the most senior decision-maker of the organization.	●	2-3	A_1
	1. 2	Description of key impacts, risks, and opportunities.	●	20	A_2
Organizational Profile	2. 1	Name of the organization.	●	14	A_3
	2. 2	Primary brands, products, and/or services.	●	16-17	A_4
	2. 3	Operational structure of the organization, including main divisions, operating companies, subsidiaries, and joint ventures.	●	14-15	A_5
	2. 4	Location of organization's headquarters.	●	14	A_7
	2. 5	Number of countries where the organization operates, and names of countries with either major operations or that are specifically relevant to the sustainability issues covered in the report.	◇	-	A_7
	2. 6	Nature of ownership and legal form.	●	18	A_8
	2. 7	Markets served (including geographic breakdown, sectors served, and types of customers/beneficiaries).	●	16	A_9
	2. 8	Scale of the reporting organization, including: * Number of employees; * Net sales (for private sector organizations) or net revenues (for public sector organizations);	●	14, 18	A_10
	2. 9	Significant changes during the reporting period regarding size, structure, or ownership.	●	18	B_8
	2. 10	Awards received in the reporting period.	●	13	C08
Report Parameters	3. 1	Reporting period for information provided.	●	1	B_3
	3. 2	Date of most recent previous report (if any).	●	1	B_8
	3. 3	Reporting cycle (annual, biennial, etc.)	●	1	B_6
	3. 4	Contact point for questions regarding the report or its contents.	●	1	B_9
	3. 5	Process for defining report content.	●	5	B_4
	3. 6	Boundary of the report.	●	1	B_1
	3. 7	State any specific limitations on the scope or boundary of the report .	●	1	B_2
	3. 8	Basis for reporting on joint ventures, subsidiaries, leased facilities, outsourced operations, and other entities that can significantly affect comparability from period to period and/or between organizations.	●	15	A_6
	3. 9	Data measurement techniques and the bases of calculations.	●	1	-
	3. 10	Explanation of the effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement.	●	1	-
	3. 11	Significant changes from previous reporting periods in the scope, boundary, or measurement methods applied in the report.	●	1	B_5
	3. 12	Table identifying the location of the Standard Disclosures in the report.	●	Appendix	B_10
	3. 13	Policy and current practice with regard to seeking external assurance for the report.	●	1	B_7
Governance, Commitments and Engagement	4. 1	Governance structure of the organization, including committees under the highest governance body responsible for specific tasks, such as setting strategy or organizational oversight.	●	18	GR1
	4. 2	Indicate whether the Chair of the highest governance body is also an executive officer.	●	18	GR1, GR3
	4. 3	For organizations that have a unitary board structure, state the number of members of the highest governance body that are independent and/or non-executive members.	●	18	GR2
	4. 4	Mechanisms for shareholders and employees to provide recommendations or direction to the highest governance body.	●	18	GR12
	4. 5	Linkage between compensation for members of the highest governance body, senior managers, and executives, and the organization's performance.	●	18	GR7
	4. 6	Processes in place for the highest governance body to ensure conflicts of interest are avoided.	●	18-19	GR13
	4. 7	Process for determining the qualifications and expertise of the members of the highest governance body for guiding the organization's strategy on economic, environmental, and social topics.	●	18-19	GR4
	4. 8	Internally developed statements of mission or values, codes of conduct, and principles relevant to economic, environmental, and social performance and the status of their implementation.	●	26, 58	-
	4. 9	Procedures of the highest governance body for overseeing the organization's identification and management of economic, environmental, and social performance.	●	19	GR5
	4. 10	Processes for evaluating the highest governance body's own performance, particularly with respect to economic, environmental, and social performance.	●	20	GR6
	4. 11	Explanation of whether and how the precautionary approach or principle is addressed by the organization.	●	20	GR11
4. 12	Externally developed economic, environmental, and social charters, principles, or other initiatives to which the organization subscribes or endorses.	●	26, 58	GR10	
4. 13	Memberships in associations and/or national/international advocacy organizations.	●	-	A_11	
4. 14	List of stakeholder groups engaged by the organization.	●	4-5	C_1, C_2	
4. 15	Basis for identification and selection of stakeholders with whom to engage.	●	5	C_1	
4. 16	Approaches to stakeholder engagement, including frequency of engagement by type and by stakeholder group.	●	5	C_2	
4. 17	Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting.	●	5	C_3	

● Reported ● Partly reported ○ Not reported ◇ Not Available(N/A)

GRI Index	GRI Content	Extent of Reporting	Page No.	BSR Indicators	
<b>Economic</b>					
	<b>EC Disclosure on Management Approach</b>	●	35		
Economic Performance	EC1	Direct economic value generated and distributed, including revenues, operating costs, employee compensation, donations and other community investments, retained earnings, and payments to capital providers and governments.	●	38	EC1
	EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change.	●	39-40	EC2
	EC3	Coverage of the organization's defined benefit plan obligations.	●	67	EC3
	EC4	Significant financial assistance received from government.	●	38	EC5
Market Presence	EC5	Range of ratios of standard entry level wage compared to local minimum wage at significant locations of operation.	●	65	EM4
	EC6	Policy, practices, and proportion of spending on locally-based suppliers at significant locations of operation.	◇	-	EC4
	EC7	Procedures for local hiring and proportion of senior management hired from the local community at significant locations of operation.	○	-	EC4
Indirect Economic Impacts	EC8	Development and impact of infrastructure investments and services provided primarily for public benefit through commercial, in-kind, or pro bono engagement.	●	78-79	EC6
	EC9	Understanding and describing significant indirect economic impacts, including the extent of impacts.	●	73, 77	EC7
<b>Environmental</b>					
	<b>EN Disclosure on Management Approach</b>	●	45		
Materials	EN1	Materials used by weight or volume.	●	50	EV10
	EN2	Percentage of materials used that are recycled input materials.	●	52	EV11
Energy	EN3	Direct energy consumption by primary energy source.	●	50	EV7
	EN4	Indirect energy consumption by primary source.	●	50-51	EV8
	EN5	Energy saved due to conservation and efficiency improvements.	●	50, 53	EV5
	EN6	Initiatives to provide energy-efficient or renewable energy based products and services, and reductions in energy requirements as a result of these initiatives.	●	50	EV5
	EN7	Initiatives to reduce indirect energy consumption and reductions achieved.	●	50	EV5, EV25
	Water	EN8	Total water withdrawal by source.	●	51
EN9		Water sources significantly affected by withdrawal of water.	●	51	EV20
EN10		Percentage and total volume of water recycled and reused.	●	51	EV18
Bio diversity	EN11	Location and size of land owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	◇	-	EV22
	EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas.	◇	-	EV22, EV26
	EN13	Habitats protected or restored.	◇	-	EV27
	EN14	Strategies, current actions, and future plans for managing impacts on biodiversity.	◇	-	EV6, EV26
	EN15	Number of IUCN Red List species and national conservation list species with habitats in areas affected by operations, by level of extinction risk.	◇	-	EV28
Emissions, Effluents, and Waste	EN16	Total direct and indirect greenhouse gas emissions by weight.	●	52	EV12
	EN17	Other relevant indirect greenhouse gas emissions by weight.	●	51-52	EV13
	EN18	Initiatives to reduce greenhouse gas emissions and reductions achieved.	●	50	EV4
	EN19	Emissions of ozone-depleting substances by weight.	●	51-52	EV14
	EN20	NOx, SOx, and other significant air emissions by type and weight.	●	51	EV15
	EN21	Total water discharge by quality and destination.	●	51	EV17
	EN22	Total weight of waste by type and disposal method.	●	52	EV16
	EN23	Total number and volume of significant spills.	●	51	EV21
	EN24	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally.	●	52-53	EV29
	EN25	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the reporting organization's discharges of water and runoff.	●	51	EV19
Products and Services	EN26	Initiatives to mitigate environmental impacts of products and services, and extent of impact mitigation.	●	51-52	EV23
	EN27	Percentage of products sold and their packaging materials that are reclaimed by category.	●	52	EV24
Compliance	EN28	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations.	●	51	EV31

● Reported ● Partly reported ○ Not reported ◇ Not Available(N/A)

GRI Index	GRI Content	Extent of Reporting	Page No.	BSR Indicators
Transport	EN29 Significant environmental impacts of transporting products and other goods and materials used for the organization's operations, and transporting members of the workforce.	●	53	EV30
Overall	EN30 Total environmental protection expenditures and investments by type.	●	48	EV1
<b>Social-Labor Practices and Decent Work</b>				
	<b>LA Disclosure on Management Approach</b>	●	62	
Employment	LA1 Total workforce by employment type, employment contract, and region.	●	63	EM1
	LA2 Total number and rate of employee turnover by age group, gender, and region.	●	63	EM5
	LA3 Benefits provided to full-time employees that are not provided to temporary or part-time employees, by major operations.	●	67	EM20
Labor/ Management Relations	LA4 Percentage of employees covered by collective bargaining agreements.	●	66	EM12
	LA5 Minimum notice period(s) regarding operational changes, including whether it is specified in collective agreements.	●	66	EM13
	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.	●	69	EM14
Occupational Health and Safety	LA7 Rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities by region.	●	69	EM19
	LA8 Education, training, counseling, prevention, and risk-control programs in place to assist workforce members, their families, or community members regarding serious diseases.	●	67	EM18
	LA9 Health and safety topics covered in formal agreements with trade unions.	●	69	EM15
Training and Education	LA10 Average hours of training per year per employee by employee category.	●	65	EM27
	LA11 Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings.	●	65	EM28
	LA12 Percentage of employees receiving regular performance and career development reviews.	●	65	EM29
Diversity and Equal Opportunity	LA13 Composition of governance bodies and breakdown of employees per category according to gender, age group, minority group membership, and other indicators of diversity.	●	63	EM2
	LA14 Ratio of basic salary of men to women by employee category.	●	65	EM3
<b>Social-Human Rights</b>				
	<b>HR Disclosure on Management Approach</b>	●	62	
Procurement Practices	HR1 Percentage and total number of significant investment agreements that include human rights clauses or that have undergone human rights screening.	●	72	PN2
Non-Discrimination	HR2 Percentage of significant suppliers and contractors that have undergone screening on human rights and actions taken.	●	72	PN3
	HR3 Total hours of employee training on policies and procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained.	●	65	EM30
	HR4 Total number of incidents of discrimination and actions taken.	●	64	EM7
Freedom of Association and Collective Bargaining	HR5 Operations identified in which the right to exercise freedom of association and collective bargaining may be at significant risk, and actions taken to support these rights.	●	66	EM8
Child Labor	HR6 Operations identified as having significant risk for incidents of child labor, and measures taken to contribute to the elimination of child labor.	●	64	EM9
Forced and Compulsory Labor	HR7 Operations identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of forced or compulsory labor.	●	64	EM10
Security Practices	HR8 Percentage of security personnel trained in the organization's policies or procedures concerning aspects of human rights that are relevant to operations.	○	-	EM31
Indigenous Rights	HR9 Total number of incidents of violations involving rights of indigenous people and actions taken.	◇	-	CO2
<b>Social-Society</b>				
	<b>S0 Disclosure on Management Approach</b>	●	57, 62	
Community	S01 Nature, scope, and effectiveness of any programs and practices that assess and manage the impacts of operations on communities, including entering, operating, and exiting.	●	75	CO2
	S02 Percentage and total number of business units analyzed for risks related to corruption.	●	25	CO5
Corruption	S03 Percentage of employees trained in organization's anti-corruption policies and procedures.	●	28	CO5
	S04 Actions taken in response to incidents of corruption.	●	25	CO5
Public Policy	S05 Public policy positions and participation in public policy development and lobbying.	●	28	CO6
	S06 Total value of financial and in-kind contributions to political parties, politicians, and related institutions by country.	●	28	CO7
Anti-Competitive Behavior	S07 Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes.	◇	-	CS3
Compliance	S08 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations.	●	59, 64	CO9

● Reported ● Partly reported ○ Not reported ◇ Not Available(N/A)

GRI Index	GRI Content	Extent of Reporting	Page No.	BSR Indicators
<b>Social-Product Responsibility</b>				
	<b>PR Disclosure on Management Approach</b>	●	57	
Customer Health and Safety	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.	●	61	CS4
	PR2 Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes.	●	61	CS11
Product and Service Labeling	PR3 Type of product and service information required by procedures, and percentage of significant products and services subject to such information requirements.	●	59	CS5
	PR4 Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes.	●	59	CS12
	PR5 Practices related to customer satisfaction, including results of surveys measuring customer satisfaction.	●	59	CS9
Marketing Communication	PR6 Programs for adherence to laws, standards, and voluntary codes related to marketing communications, including advertising, promotion, and sponsorship.	●	59	CS13
	PR7 Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship by type of outcomes.	●	59	CS14
Customer Privacy	PR8 Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	●	59	CS15
	PR9 Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services.	●	59	CS12

<b>GRI Index Supplementary Information</b>	
	<b>Supplementary Information</b>
EC6	We have electronic contract system which offers same qualification on bidding, thus we do not have any policy for locally-based supplier.
EC7	All hiring is overseen by the HR team at head office. There are currently no regulations related to local hiring.
EN11-EN15, HR9	Due to the nature of business, housing development project starts after assessment including biodiversity. Thus we do not affect protected areas.
EN25	We do not currently conduct separate assessments of how our activities affect the biodiversity value of water bodies and related habitats. However, we plan to prepare such measures to manage our environmental impact.
HR2	We screen our suppliers and contractors on qualification standards, not on human rights-related issues.
HR8	We do not report on this indicator as our security personnel are dispatched from an external security company.
S07	Due to the nature of public sector, there are no non-monetary sanctions

# Memberships in Associations

## DOMESTIC

- Public Corporations' Council for the Korean Pact on Anti-Corruption and Transparency
- Korea Society of Energy and Climate Change
- Korea Industrial Safety Association
- Society of Air Conditioning and Refrigerating Engineers of Korea
- Korean Institute of Electrical Engineers
- Korean Society of Environmental Engineers
- Consumers Korea
- New and Renewable Energy Policy Forum
- BEST Forum and BEST CEO Club
- Center for Sustainability Management
- Korea Customer Satisfaction Management Association
- Korean Society of Public Enterprise
- Korea Fair Competition Federation
- Korean Society of Corporate Research
- Korea International Trade Association
- Korea Fire Safety Association
- Korea New & Renewable Energy Association
- Korea Energy Association
- Korea Cogeneration Association (KCGA)

## OVERSEAS

- Korea Personnel Improvement Association
- Korea Electric Engineers Association
- Korea Association for Policy Analysis
- Korea District Heating Association
- Korea Institute of Plant Engineering & Construction
- Korea Environmental Preservation Association
- Korean Federation for Environmental Movement
- Korea Energy Economics Institute (KEEI) Energy Forum
- Fernwärme-Forschungs Institute
- International Energy Agency (IEA) District Heating & Cooling
- Euroheat & Power
- IDEA

General, Working level  
Suh, Tae Won. Team Manager of Strategy &  
Coordination Team  
031-780-4230



General Han, Kun Taik. Director of Strategy & Coordination Office  
031-780-4030

We want to listen to your  
valuable opinions.

Environment Han, Seong Soo. Manager  
02-300-3331

Economy Jin, Jong Young. Manager  
031-780-4281



Ethics/Innovation Baek, Seung Yeop. Manager  
031-780-4293

Partners Choi, Se Hoon. Manager  
031-780-4153

Secretary Kim, Sang Soo. Manager  
031-780-4211

Environment Lee, Jae Geon. Manager  
031-780-4441



Communities  
Jeong, Sang Weon. Manager  
031-780-4719

Communities Lee, Jin Won.  
031-780-4296

Strategic PR Jung, Jae Hoon. Manager  
031-780-4020

KDHC Profile Shin, Hyun Ho. Manager  
031-780-4214

Environment Jeoung, Nam Seoung. Manager  
031-706-2488(310)

Employees Park, Chang Ho. Manager  
031-780-4122



Customers Choi, Geum Sook. Manager  
031-780-4353

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Additional data and information on this report is available on our  
homepage and through divisions in charge.

# Survey of Readers' Opinions

Survey on CSM performances of KDHC

We wish to hear from stakeholders to produce better sustainability reports in the future.

Q1. Which of the following do you belong to?

- Employee    Shareholder    Investor    Business Partner    Government Employee    Social Group (including NGOs)  
 Specialist in Sustainability Management    Media    Academic Community    Other \_\_\_\_\_

Q2. What are you seeking in the report?

- Company Introduction    Investor Information    Overall Sustainability Management    Economic Performance  
 Environmental Performance    Social Responsibility Performance    Employment and Work Environment    Customer Satisfaction Management  
 Cooperation with Business Partners    Communications with Stakeholders

Q3. Please check to show how much you agree with the following.

	Highly agree	Agree	Neutral	Disagree	Highly disagree
• Clearly written and easily understandable	<input type="checkbox"/>				
• Provides sufficient and useful information on important issues	<input type="checkbox"/>				
• Useful and reliable content	<input type="checkbox"/>				
• Well-designed and helpful for understanding its contents	<input type="checkbox"/>				

Q4. Which part, if any, of the report should be added to?

- KDHC Profile    Corporate Sustainability Management    Ethics Management    Innovation Management  
 Economy    Environment    Customers    Employees    Partners    Communities

Q5. Please give us feedback on the following. (Section: Economy, Society, Environment, Employee, etc.)

- What part(s) did you find the most impressive? \_\_\_\_\_  
• What part, if any, of the report should be added to? \_\_\_\_\_  
• What part(s) did you find most useful? \_\_\_\_\_  
• What is your overall level of satisfaction with the report?  Very satisfactory    Satisfactory    Average    Unsatisfactory    Very unsatisfactory

Q6. Any other comments?