

The most precious values

# Water, Nature & People

Purpose of Publication: K-water aims to be recognized by customers as a respected corporation by opening K-water's sustainable management performances and the future plans for the economic, environmental and social responsibility.

Publication of Report: This Sustainability Report 2009 is the 5th report containing sustainable management strategies as well as activities, performance and future plans of K-water, summarizing economic performance, environmental soundness and social responsibility. The previous report was published in September 2008.

Principles of Reporting: This report is prepared based on the Sustainability Reporting Guidelines (G3) of GRI. More details can be found in "GRI Index." on page 86~89

Target Readers: This report is prepared for all stakeholders who are directly or indirectly influenced by K-water's management, including its clients, local communities, government, affiliates, executives and employees, and non-governmental organizations.

Period of Reporting: The period of reporting is from January 1st to December 31st of 2008. The qualitative performance includes a part of the performance recorded until March 2009. The quantitative performance mostly shows the four-year data from 2005 to 2008. The fiscal year of K-water commences on January 1st and ends on December 31st.

Scope of Report: This report covers the current status and performance of the sustainable management on the head office, 8 regional headquarters, 25 domestic worksites and the international operations (13 projects in 11 countries). Since the international operations are managed as a project unit, not as a worksite, only the operational performance of the international operations is taken into account. In addition, 8 domestic worksites are integrated due to the reorganization of the substructure.

Changes: No significant changes to size, structure, standard year and governance structure have been made during the period of reporting.

Report Verification: In order to enhance the credibility of this report, the data and sentences contained in this report were sampled and verified by the Korean Foundation for Quality. The verification opinions can be found on page 90~91.

Additional Information: This report is also available at the homepage of K-water (<http://www.kwater.or.kr>). For more information on this report or the sustainable management of K-water, please contact the Performance Management Team of K-water (Tel: 82-42-629-2363~4, Fax: 82-42-629-2399)

#### Awards and Accomplishments

May 2006	Received An Award for the 3rd Korea's Best Landscape Architecture (Korean Institute of Landscape Architecture)
Sept. 2006	Seoul Metropolitan area's Integrated Water Supply Center certified as an environmentally friendly building (Korea Institute of Energy Research)
Sept. 2006	The Grand Prize for Social Contributing (The Korea Journalist Forum)
Oct. 2006	An Honorary Award (Korean Red Cross)
Nov. 2006	Received the Grand Prize for Social Contributed Corporation (The Korea Economic Daily, Open Management Research Inc.)
Nov. 2006	Received The Grand Prize for the 22nd Kyunghyang Electric Energy and the Prime Minister's Award (The Kyunghyang Daily, Korea Electric Power Corporation)
Nov. 2006	Certified as the most quality competitive corporation in 2006 (Ministry of Knowledge Economy Korean Agency for Technology and Standards)
Dec. 2006	The President's Award for the Best Agency with public purchase of products manufactured by small & medium-sized businesses (Presidential Commission on Small and Medium Enterprise)
Apr. 2007	The Grand Prize for the Most Honorable Corporation (The Federation of Korean Industries, the Seoul Economic Daily)
May 2007	The Grand Prize for Global Standard Management and CEO (The Korea Management Association)
May 2007	The Prime Minister's Award for family-friendly corporations (Ministry of Gender Equality)
Jul. 2007	Certified as a Corporation with Excellent Service Quality (Ministry of Knowledge Economy Korean Agency for Technology and Standards)
Oct. 2007	An award for Digital Knowledge Management (Ministry of Knowledge Economy)
Nov. 2007	Certification of ISO/IEC (information quality) 20000 (LRQA)
Nov. 2007	The President's Award for Sewage Treatment and Environmental Technology (Ministry of Environment)
Nov. 2007	The LOHAS Management Award (Korea Green Foundation)
Dec. 2007	The Best Sustainable Management Award (Ministry of Knowledge Economy, Korea Chamber of Commerce and Industry)
Apr. 2008	The Award for Korea's Digital Management Innovation (Ministry of Knowledge Economy, the Maeil Economic Daily)
Oct. 2008	The Grand Prize for Social Contribution (The Korea Journalist Forum)
Oct. 2008	The Best Sustainable Management Award (Ministry of Knowledge and Economy, Korea Chamber of Commerce and Industry)
Oct. 2008	An award for Korea's environmentally friendliness 2008 (Ministry of Environment)
Oct. 2008	An award for the Corporation of Knowledge Management in Asia (World Knowledge Forum)
Jan. 2009	The Grand Prize for Sustainable and Creative Management [Environmental Management] (Ministry of Knowledge Economy, UN Global Compact)

#### Membership Activities

Nov. 1971	Korea National Committee on Large Dams
Jan. 1976	Korea Electric Association
Dec. 1985	Korea Energy Foundation
Mar. 1997	Korea Electric Engineers Association
May 2001	Korea Power Exchange
Sept. 2001	Korea New & Renewable Energy Association
Jan. 2002	Korea Water and Wastewater Works Association
Mar. 2004	Korean Association of Environment Impact Assessment
Sept. 2004	Korea Business Council for Sustainable Development
Oct. 2005	Korea Engineering and Consulting Association
Jul. 2006	Business Ethics and Sustainability Management for Top Performance (BEST) Forum
Feb. 2007	UN Global Compact
Feb. 2007	U-City Forum
Mar. 2007	International Water Association (IWA)
Mar. 2007	American Water Works Association (AWWA)



This report was written to satisfy all the "A+" level requirements of the Sustainability Reporting Guidelines (G3) of the Global Reporting Initiative (GRI). The Korean Foundation for Quality Inc. verified that this report complied with the "A+" requirements of the guidelines.

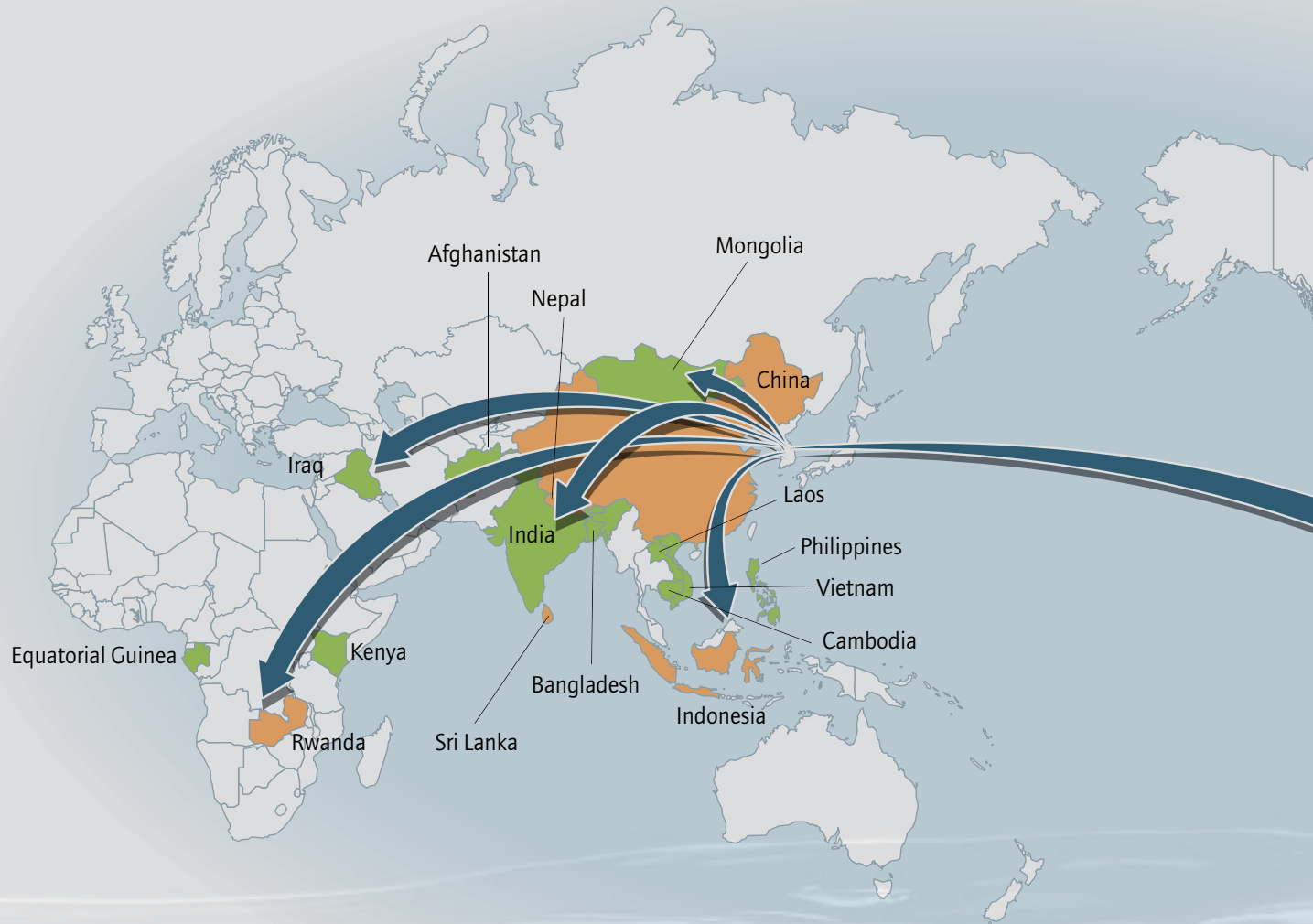
## Operational Status of International Operations

### Operations in Progress – 13 Projects in 11 Countries (18.9 Billion KRW)

Asia (India, Cambodia, Bangladesh, Laos, Vietnam, Philippines, Mongolia), Middle East (Afghanistan, Iraq), Africa (Equatorial Guinea), Americas (Haiti)

### Completed Operations – 18 Projects in 12 Countries (25 Billion KRW)

Asia (China, Vietnam, Nepal, Cambodia, Indonesia, Mongolia, Sri Lanka), Middle East (Afghanistan, Iraq), Africa (Kenya, Rwanda), Americas (Peru)



## Corporate Overview on December 31st, 2008

Corporation Name: K-water, Korea Water Resources Corporation  
 Date Established: Nov. 16th, 1967  
 Equity Capital: 10.0194 Trillion KRW  
 Total Liabilities: 1.9623 Trillion KRW  
 Total Assets: 11.9817 Trillion KRW  
 Sales: 2.0445 Trillion KRW

Major Operations: Construction and management of multi-purpose dams, construction and management of metropolitan waterworks, operation and management of local waterworks, and development of industrial complexes

Products and Services: Flood control service, water supply and power generation, production and supply of tap water, development and supply of industrial complexes

Worksites: Head Office, 8 Regional Headquarters, 25 worksites, international operations (13 projects in 11 countries)

Employees and Executives: 4,025 persons

Investor Composition: Korean Government 90.3%, the Korea Development Bank 9.6%, local governments 0.1%

Investors: Chilgok Enviro Ltd. (49% of shares), Kyungin Canal Ltd. (19.4%), Korea Construction Management Corporation Ltd. (18.9%), Green JangRyang Ltd. (5%)

Location of Head Office: 560 Sintanjin-ro, Daedeok-gu, Daejeon



Head office and 8 local headquarters

1967.11.16

10,019,447,539,165

1,962,286,687,793

11,981,734,226,958

2,044,532,724,904

4,025





## The power to change the world, Water

Water for a happy world

Water for a wealthy nation

Water for a healthy people

K-water is there for you.



### The Ten Principles of the UN Global Compact

The UN Global Compact's ten principles in the areas of human rights, labour, the environment and anti-corruption enjoy universal consensus and are derived from:

- The Universal Declaration of Human Rights
- The International Labour Organization's Declaration on Fundamental Principles and Rights at Work
- The Rio Declaration on Environment and Development
- The United Nations Convention Against Corruption

The Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labour standards, the environment, and anti-corruption:

#### 1. Human Rights

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights; and  
Principle 2: make sure that they are not complicit in human rights abuses.

#### 2. Labour Standards

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

#### 3. Environment

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

#### 4. Anti-Corruption

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

**K-water observes and supports UN Global Compact 10 principles.**

K-water CEO

“

Executives and employees of K-water will accomplish a company growing with customers and respected by society, and will contribute to the better future of mankind.

”



## **K-WATER WILL BE REBORN AS A COMPREHENSIVE WATER SERVICE CORPORATION THAT EARNS THE TRUST AND RESPECT OF OUR CUSTOMERS.**

First of all, I am much honored to tell our customers and stakeholders who have cherished and supported K-water about the activities and performances of sustainable management that K-water accomplished during the past year.

Last year, there were many changes in the managerial environment, such as the worldwide economic recession, the government's intense policies for advancing public corporations, and the green new deal. With its challenging spirit and belief that only thorough preparation for the future in difficult times can bring us a brighter tomorrow, K-water has been pushing new mid-long-term strategic management plans in preparation for its 50th anniversary. Through this, K-water has established a foundation for a new leap to accomplish its mission to 'make a better world with the help of water' on the basis of the strategic direction focusing on public services, growth and efficiency.

K-water made Korea's first sale of carbon credits, and secured the foundation for international investment and operation that will lead to the generation of national wealth by signing a treaty to construct 800 million USD worth of waterworks in Pakistan. K-water has also been selected as the operator of 3 projects including Gyeongin Waterway Project, one of the key operations of the 10 major projects of the government's green new deal, and plays a vital role in the government's strategic operations. Another accomplishment of K-water is its highly acclaimed global human resources pool and excellent managerial capacities, winning the Grand Prize for sustainable management for two consecutive years and the award for the Best Knowledge Management in Asia.

### **K-WATER WILL EXPAND ITS PUBLIC SERVICES FURTHER.**

It has become more and more important to manage irrigation, flood control, drought and water shortage due to climate change and global warming. K-water will prevent water-related disasters by securing environmentally friendly future water resources, systematic dam management utilizing cutting-edge information technologies, diversifying water sources for the provision of clean and safe tap water, introduction of advanced water purification and treatment, and improving worn-out facilities. K-water will make its best efforts to eliminate suffering from water shortage by securing stable water resources.

### **K-WATER WILL SOLIDIFY ITS FOUNDATION FOR SUSTAINABLE GROWTH.**

K-water will intensely conduct business operations of new/renewable energy and energy efficiency for low-carbon green growth.

In accordance with the government's plan to integrate exclusive agencies for local waterworks, K-water will further expand its efforts for scientific management of water resources, the key driving force of green growth, by actively participating in commissioned pilot programs in different areas.

Based on our technologies and credibility, we will continue to generate national wealth through international operations by developing a model for mutual cooperation of public and private sectors. We will also put forth all our efforts for sustainable growth while practicing high-level ethical management and performing all the operations in a transparent and fair way.

### **K-WATER WILL ENHANCE ITS GLOBAL COMPETITIVENESS**

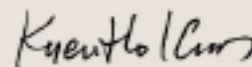
K-water is Korean public corporation that contribute to improve life quality and development of nation by providing best products and services and develop, manage, and preserve water resource to continue in environmental, economical and social way.

As one of citizen's activity of fulfil social responsibility, our company strive to become a sustainable company with ethical management, environmental management and social contribution through shareholders including customers, staffs, partners and general society. To meet the expectations, we joined UN global compact in February 2007, and stipulated 10 principles of UN Global compact in Code of Ethics, the internal regulations of company. As above, we promise to do our best to settle 10 principles throughout all management operations.

Thank you.

July, 2009

President of K-water





Challenges and Changes	8
○ Vision and Strategy of Sustainable Management	10
● Strategy and structure for Business Promotion	14
○ Sustainable Creative Innovation	16
R&D Investment	18

Corporate Governance Structure	22
● Ethical Management	23
Customer-oriented Management	24
Participation of Stakeholders	25
Mutual Growth with Stakeholders	26
Risk Management and Sustainability	28

Economy	
Businesses for Low-carbon Green Growth	32
● Successful Operation of Local Waterworks	34
○ Integrated Management of Waterworks	36
Development of Environment-friendly Futuristic City and Industrial Complexes	37
● Pioneering the International Water Market	38
Entry to Industrial Water Business	40

○ Sustainable Management Performance Index	68
Financial Performance	78
Positive & Negative Information	84
Key Performance Index	85
GRI Report Index	86
Third Party's Verification Statement	90
Appendix	92

● Highly Significant   ○ Significant



Environment	
System of Environmental Management	42
Green Network	44
● Countermeasures to the Climate Change	47
● Development of Environment-friendly Water Resources	48
Protection of Bio-diversity	50
● Water Quality Management	52
● Clean Management of Water Sources	54







## | Society |

Human Rights	56
○ Development of Top Level Competency	58
Great Work Place	60
● Social Contribution Activities	62
Activities of Water Love Volunteers	64







| Strategy |

# Water is energy.

The planet Earth is a blue planet abundant with water. However, the quantity of water that the humankind utilizes is limited. 'Water' is the energy that we must hand down to our next generation. How well do we save water? The nation that uses water wisely will become the powerhouse of the 21st century.



Challenges and Changes  
Vision and Strategy of Sustainable Management  
Strategy and Structure for Business Promotion  
Sustainable Creative Innovation  
R&D Investment



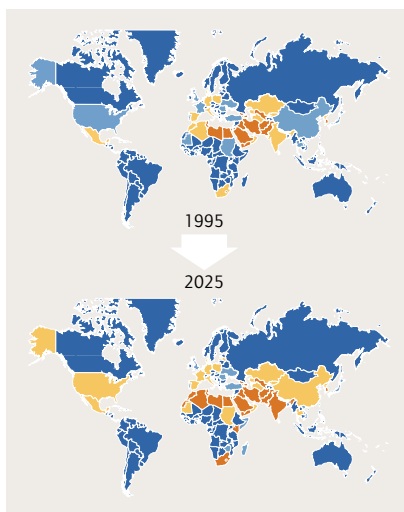
# Challenges and Changes

K-water will emerge as a comprehensive global water service corporation through active countermeasures to the rapid climate change of the planet and domestic/international changes in the managerial environment.

## TREND OF THE GLOBAL WATER INDUSTRY

The global water industry is shaping into a larger, more professionalized industry and focusing more on its public role. As the business sector becomes larger, revolving around Europe where the waterworks industry is highly developed, due to the efforts of securing the competitiveness through the economies of scale, the water industry is also becoming larger. In addition, multi-national water corporations, under a two-tier system with the service industry (operation/management) and related industries (construction/facility, etc.), attempt to break from conventional strategies of integrating and diversifying related industries, and they seek to develop into exclusive operational/management corporations of the full water cycle. Many countries also implement policies that promote public corporations in order to eliminate problems shown in the market that has been developed by the private sector.

## • PROSPECTS FOR CHANGES IN WATER STRESS •



Actual usage out of the total amount usable

- Over 40% (Severe)
- 40% ~ 20% (Dangerous)
- 20% ~ 10% (Appropriate)
- Less than 10% (Safe)

## COUNTERMEASURES TO CLIMATE CHANGE

International organizations such as UN recognize the water problem as the most dangerous factor that threatens the survival of Earth, and urge world wide countermeasures. According to the World Meteorological Organization and others, water stress is expected to spread globally due to climate change, increase of population and other factors. It is estimated that the status of the water stress involving 31 countries and 460 million people in 1995 will get worse in 2025, involving 54 countries and 2.8 billion people. Therefore, it is required to design and manage waterworks considering climate change in addition to active countermeasures to secure water resources in terms of water security. Furthermore, the damage caused by typhoons/floods due to climate change is on the rise, so measurement policies should be greatly reinforced in preparation for climate change.

## PARADIGM SHIFT IN THE MANAGEMENT OF WATER RESOURCES

Global management of water resources is directed toward integrated management of water resources, countermeasures to climate change as a matter of national security, and expansion of public functions. Thus, the paradigm for integrated management of water resources that considers irrigation, flood control, and environmental ecosystems is expanding, being led by advanced countries. European countries enacted basic water laws in the 60s to implement integrated management of water resources. The functions of public corporations, exclusively responsible for water resources management in many countries, are expanding for efficient water management, countermeasures to the climate change, and promotion of the water industry.

## CHANGES IN THE DOMESTIC MANAGERIAL ENVIRONMENT

### GOVERNMENT'S POLICY FOR PUBLIC CORPORATIONS

The new administration hopes to build an advanced country through green growth and advancement of public corporations. By securing safety over the whole society and low-carbon green growth, the government attempts to develop an advanced country which promotes low-carbon green growth as a new development power and initiates national development with full investment in the energy paradigm shift. In addition, the government intensely pursues the advancement of public corporations suggesting high efficiency in the public sector on the basis of the conversion into a smaller government and a bigger market.

K-water will secure the global competitiveness of the domestic water industry and establish an integrated management system for water resources in **preparation for the global climate change.**



#### • INTEGRATED MANAGEMENT SYSTEM FOR WATER RESOURCES •



#### GOVERNMENT POLICY RELATED TO THE WATER INDUSTRY

The government is implementing various water-related policies in order to enhance the competitiveness of the domestic water industry and establish a safe and efficient water supply system. To generate national wealth through an entry to the international water market, the domestic water industry is being reorganized and the water industry is being intensively promoted. For the safe supply of tap water, the water intake system is being diversified, the processing and management system of tap water is being advanced, and the water supply system is being reformed to be more efficient. In addition, the government is decreasing national financial support for the construction of dams and waterworks in order to reduce the financial burden on the SOC while attempting to stabilize the public expense to decrease the burden of low-income families and promote price stabilization.

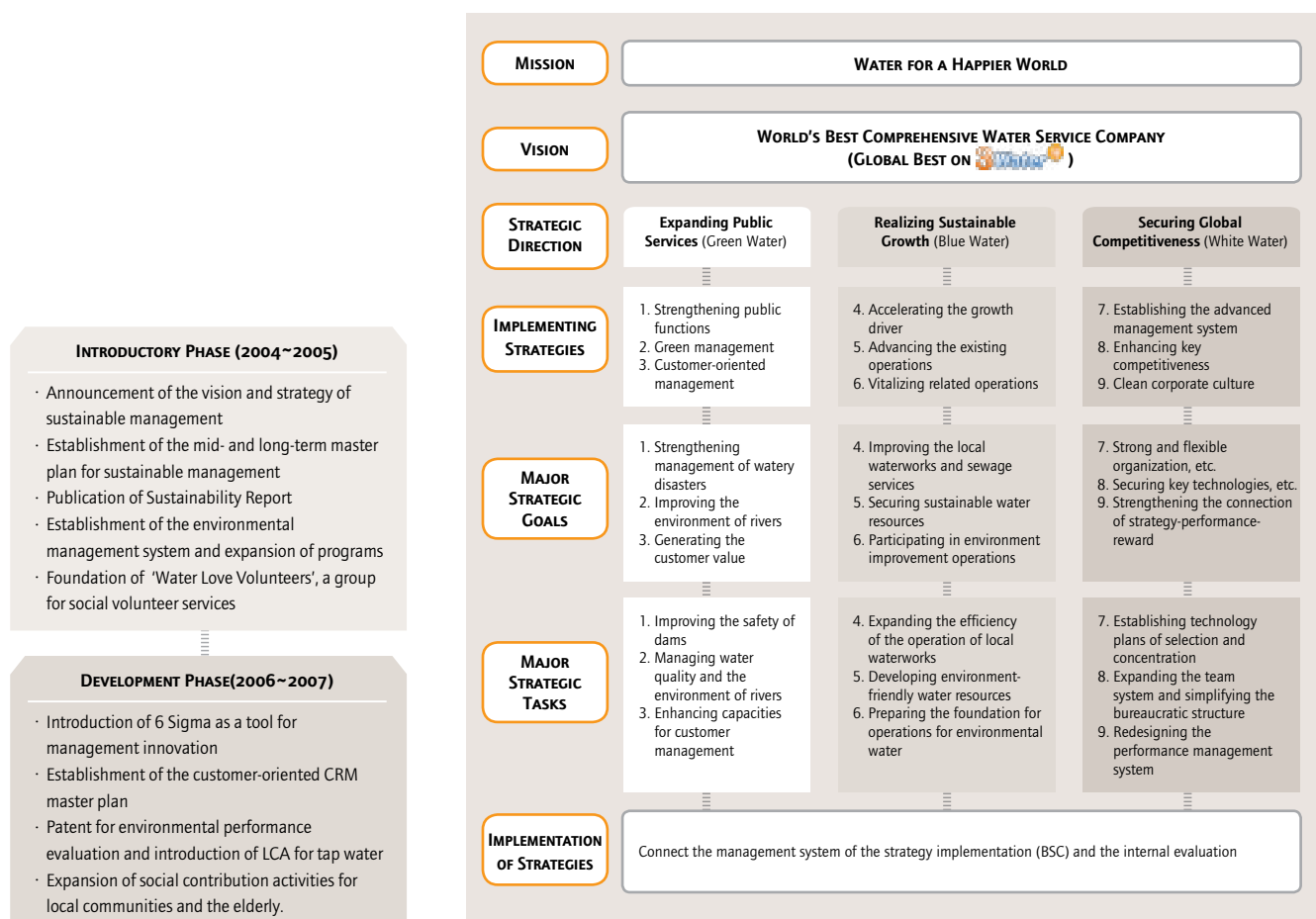
K-water **will further enhance national competitiveness** through the successful implementation of the government's green new deal and entry to the international water market.

# Vision and Strategy of Sustainable Management

K-water will grow into a sustainable corporation through economic efficiency, environmental soundness and fulfillment of social responsibility.

## RE-ESTABLISHMENT OF THE VISION AND STRATEGY OF SUSTAINABLE MANAGEMENT

As the managerial environment went through a radical transition, it was urgent for K-water to prepare a new management strategy that enhances its selection, concentration and operational capacities. The conventional strategy (STEP) had some positive achievements, such as the first introduction of the Balanced Score Card (BSC), but also raised criticism of the expansion-centered strategy and lack of connection to the government policies. With the strong leadership of the CEO and all employees' participation, K-water announced its new vision and strategy in November 2008 in order to reflect the internal and external environmental changes and accomplish balanced development of the local communities that focuses on public service, growth, and efficiency.



## NEW VISION

K-water established a new vision known as 'Global Best on 3 Water+' based on its internal capacities for water management while reflecting the founding purpose of the corporation.

**Global** | The connotation is the limitless potential for growth that enables a leap to becoming a global corporation in the Blue Gold 21st century.

**Best** | This expresses K-water's direction in the area of public services, growth and efficiency in order to become an exclusive global water corporation.

**3(Triple) Water+** | By clearly identifying 3 values (public services, growth, efficiency) of the national management of water resources, this clarifies the strategic direction and suggests a consistent implementation strategy.



## Global Best on 3Water<sup>+</sup>

Announcement of a new vision and strategy, to accomplish the balanced and sustainable growth of K-water's public services, growth and efficiency.

### THREE NEW STRATEGIC DIRECTIONS

These three new strategic directions for sustainable management are major managerial directions that should be strategically pursued in order to efficiently achieve the vision, and are mutually supplementary.

**Expansion of public services** | In order to make a world that is safe and happy thanks to water, K-water makes the improvement of water management functions a top priority. K-water will become a people-friendly public corporation that is beloved and trusted through enhancing the customer delight management, environmental management and socially responsible management.

**Realization of sustainable growth** | In order to realize the advancement of water management and services of balanced water supply, K-water establishes a foundation for sustainable growth by intensively promoting key operations that drive growth. By increasing the economical efficiency of the existing operations and participating in new operations in related fields, K-water will expand its role as a comprehensive water management agency.

**Acquisition of global competitiveness** | K-water will increase the efficiency of management by making a flexible organizational structure and expanding autonomous and responsible management through delegation of power. In addition, K-water will secure global competitiveness by acquiring world-class technologies, training key experts and establishing a corporate culture that highly values passion and performance.

### PROMOTION SYSTEM FOR SUSTAINABLE MANAGEMENT

The sustainable management that K-water is promoting aims to increase its economic profitability and environmental soundness, and, as a public corporation, to make sure that no area is excluded from the benefit of water supply by faithfully performing its social responsibilities. The goal of K-water is to generate a new corporate value through environmental management and balanced social contributions on the basis of economic efficiency, and ultimately to become a respected corporation.

Strategy

Approach

Challenges

Performances

#### • K-WATER'S MID- AND LONG-TERM GOALS OF SUSTAINABLE MANAGEMENT •

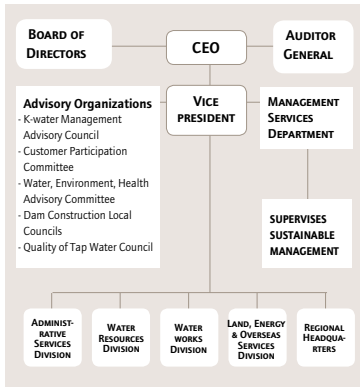
EXPANSION OF  
PUBLIC SERVICES  
(Green Water)

REALIZATION OF  
SUSTAINABLE  
GROWTH  
(Blue water)

ACQUISITION OF  
GLOBAL  
COMPETITIVENESS  
(White water)

CURRENT (2008)	SHORT-TERM GOAL (2013)	MID- AND LONG-TERM GOAL (2017)
<ul style="list-style-type: none"> <li>★ Stability in flood control and irrigation               <ul style="list-style-type: none"> <li>- Operation for increasing flood control capacities 5 dams</li> <li>- Water stored days in dams: 30~60 days</li> </ul> </li> <li>★ Advanced water purification facilities 6 units</li> <li>★ Customer satisfaction rating: AA</li> <li>★ Environmental Performance Index(EPI): 126</li> <li>★ Social contribution rating: AA</li> </ul>	<ul style="list-style-type: none"> <li>★ Stability in flood control and irrigation               <ul style="list-style-type: none"> <li>- Operation for increasing flood control capacities 16 dams</li> <li>- Water stored days in dams: under 30 days</li> </ul> </li> <li>★ Advanced water purification facilities: 10 units</li> <li>★ Customer satisfaction rating: AA</li> <li>★ Environmental Performance Index(EPI): 140</li> <li>★ Social contribution rating: AA</li> </ul>	<ul style="list-style-type: none"> <li>★ Stability in flood control and irrigation               <ul style="list-style-type: none"> <li>- Operation for increasing flood control capacities 23 dams</li> <li>- Water stored days in dams: under 15 days</li> </ul> </li> <li>★ Advanced water purification facilities: 14 units</li> <li>★ Customer satisfaction rating: AAA</li> <li>★ Environmental Performance Index(EPI): 160</li> <li>★ Social contribution rating: AAA</li> </ul>
<ul style="list-style-type: none"> <li>★ Local waterworks (supplied population): 0.94 million persons</li> <li>★ Development of new water resources: 5 dams currently under construction</li> <li>★ Operation rate of multi-regional waterworks: 64%</li> <li>★ Clean energy generated: 21.8Mw (26 plants)</li> <li>★ Greenhouse gas reduced by 1.2 million tons</li> </ul>	<ul style="list-style-type: none"> <li>★ Local waterworks: 8.32 million persons</li> <li>★ Construction of 6 new dams commences</li> <li>★ Operation rate of multi-regional waterworks: 73%</li> <li>★ Clean energy generated: 316Mw (81 plants)</li> <li>★ Greenhouse gas reduced by 1.57 million tons</li> </ul>	<ul style="list-style-type: none"> <li>★ Local waterworks: 13.60 million persons</li> <li>★ New water resources: 9 new dams completed</li> <li>★ Operation rate of multi-regional waterworks: above 74%</li> <li>★ Clean energy generated: 333Mw (115 plants)</li> <li>★ Greenhouse gas reduced by 1.59 million tons</li> </ul>
<ul style="list-style-type: none"> <li>★ Total personnel: 4,200 persons</li> <li>★ Trust management index: 52 points</li> <li>★ Intellectual property: 20 units</li> <li>★ R&amp;D practicality index: 25%</li> <li>★ integrity index: 9.2 points</li> </ul>	<ul style="list-style-type: none"> <li>★ Total personnel: 5,500 persons</li> <li>★ Trust management index: 67 points</li> <li>★ Intellectual property: 25 units</li> <li>★ R&amp;D practicality index: 33%</li> <li>★ integrity index: 9.5 points</li> </ul>	<ul style="list-style-type: none"> <li>★ Total personnel: 5,900 persons</li> <li>★ Trust management index: 83 points</li> <li>★ Intellectual property: 29 units</li> <li>★ R&amp;D practicality index: 35%</li> <li>★ integrity index: 9.2 points</li> </ul>

※ Trust management index: the average of Fortune's top 100 companies is 83 points



### ORGANIZATION FOR PROMOTING SUSTAINABLE MANAGEMENT

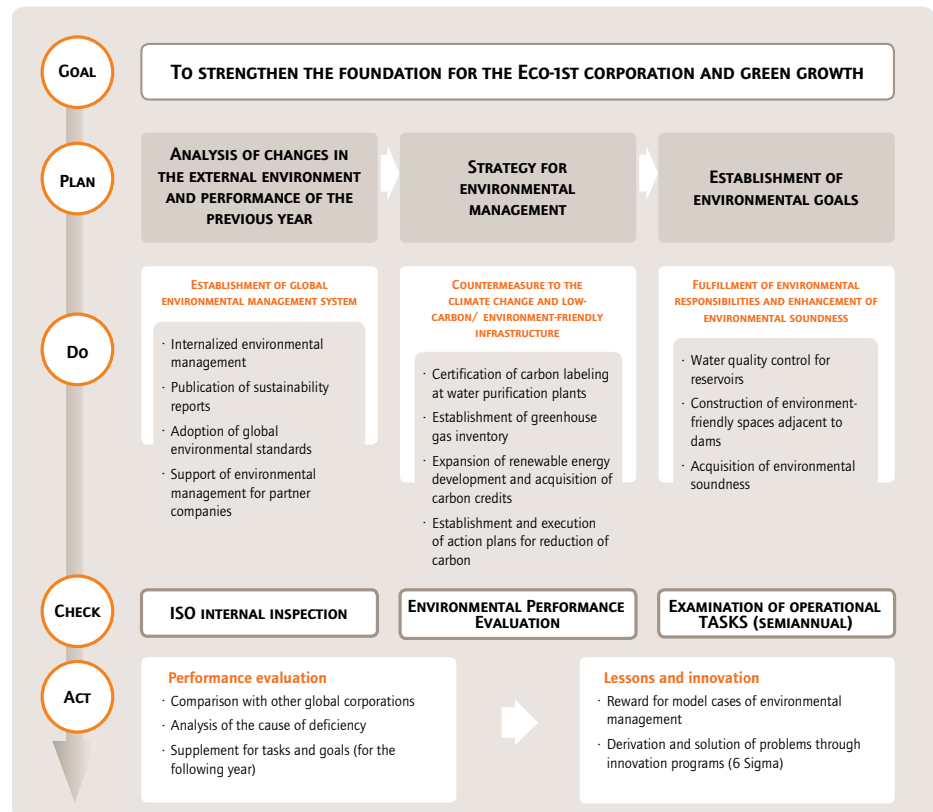
To ensure sustainable management promoted over the whole organization, K-water operates 25 worksites nationwide with its head office supported by 4 divisions and 8 regional headquarters. The organization responsible for promoting sustainable management is the management services department under the vice president's command, which prepares annual sustainability report to provide information to stakeholders. K-water also operates advisory councils and committees that cover economic, environmental and social areas in order to collect various opinions.

### STRATEGY FOR ECONOMICAL SUSTAINABLE MANAGEMENT

With the new operational strategy that reflects new managerial environments, K-water is planning to enhance its public services that are geared to improve the national economic growth and public welfare by preventing water-related disasters and securing stable water resources. In addition, K-water is intensively promoting the advancement of local waterworks services, revitalization of entry to international markets and low-carbon green growth as three key growth drivers through selection and concentration of operations, and is implementing sustainable growth by enhancing the efficiency of the existing facilities and newly participating in related operations. The economic profits gained from these will be shared with stakeholders. For more details, please refer to 'Strategy for operations and structures'. pp. 14 ~ 15.

### STRATEGY FOR ENVIRONMENTAL SUSTAINABLE MANAGEMENT

K-water made an internal and external announcement to continuously implement environment-friendly management. The environmental management of K-water goes beyond the level of legal environmental management and is being advanced so as to prevent risks in advance and generate new environmental values such as clean development mechanism (CDM).

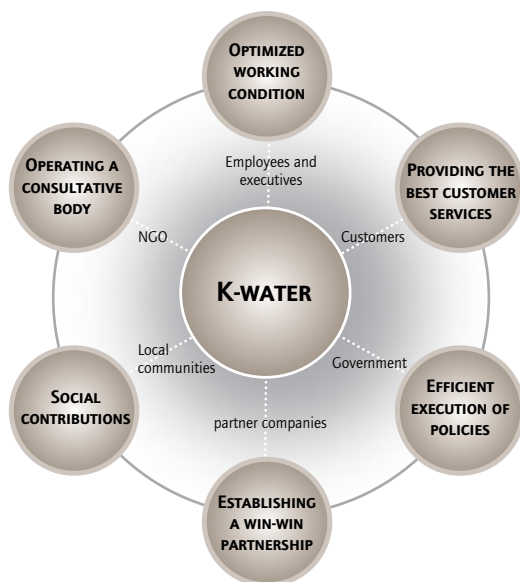


K-water provides transparent information by publishing sustainability reports, and encourages environment-friendly communication. With the introduction of ISO24500 (International standards for waterworks/ sewage services) and ISO26000 (Standards for corporate social responsibilities), K-water will continue to strengthen the foundation for global environmental management and to lead environmental management.

We are undertaking carbon management by establishing a master plan for climate change, and building low carbon, environment-friendly infrastructure. Moreover, we plan to reinforce execution of environmental responsibility by managing water quality of reservoirs, strengthening drainage basin management, and implementing environmental soundness of the green new deal.

#### STRATEGY FOR SOCIAL SUSTAINABLE MANAGEMENT

The demand for transparent and socially responsible management of public corporations is increasing, and the constant communication with customers is considered an important task. K-water aims to implement social sustainable management by establishing a win-win partnership with each stakeholder in order to fulfill the corporate social responsibilities. The strategy for social sustainable management of K-water is one of its 9 management strategies geared to increase the value of stakeholders in 6 internal and external categories of the corporation.



#### • DIRECTION FOR K-WATER'S SOCIALLY RESPONSIBLE MANAGEMENT •

<b>TRANSPARENT, ETHICAL MANAGEMENT</b> K-water puts forth its best efforts for transparent and trustworthy management and the establishment of process. K-water endeavors to implement ethical management in the daily life and work of employees and executives as the corporate culture.	<b>CUSTOMER-ORIENTED MANAGEMENT</b> K-water realizes customer delight by providing clean water and the best water supply services.
<b>HUMAN RIGHTS MANAGEMENT AND SAFETY/ PUBLIC HEALTH</b> K-water always considers the protection of human rights, safety and public health for all employees as well as the protection of rights of minorities including disabled people, and women.	<b>WIN-WIN PARTNERSHIP</b> K-water establishes partnerships with partner companies and pursues mutual profits by cooperation such as technology support.
<b>MANAGEMENT OF HUMAN RESOURCES</b> K-water supports career development considering the job capabilities of employees and executives from the moment they join the corporation until their retirement so as to improve their abilities and increase their value of life.	<b>CONTRIBUTION TO LOCAL COMMUNITIES</b> K-water operates various cooperative programs for local residents and contributes to the development of the nation and local communities through active social programs.

#### • BSC MEASUREMENT INDEX IN RELATION TO SOCIALLY RESPONSIBLE MANAGEMENT •

CATEGORY	2008	2013	2017	REMARKS
Customer Satisfaction (PCSI)	AA	AA	AAA	Ministry of Strategy and Finance
Integrity index	9.2	Above 9.5	Above 9.7	Anti-corruption and Civil Rights Commission
Social contribution grade	A1	A1	A1	Professional organization
Social contribution index	81	89	97	K-water
Core human resources index	24%	28%	30%	K-water

※ SOCIAL CONTRIBUTION RATING : PARTICIPATION X 0.3 + HOURS OF ACTIVITY X 0.4 + FUND FOR PARTICIPATION X 0.3

※ CORE HUMAN RESOURCES INDEX: (DOCTOR'S DEGREE X 1.5 + MASTER'S DEGREE X 1.5 + TECHNICAL EXPERT X 1.5 + 6 SIGMA BELT X 1)/TOTAL PERSONNEL

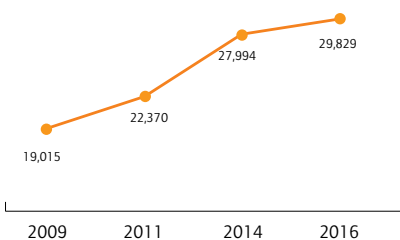
# Strategy and structure for business promotion

K-water established a strategy for economic sustainable management in order to accomplish the vision of 'Global Best Comprehensive Water Service Company'

• MID- AND LONG-TERM FINANCIAL PLANS (UNIT: HUNDRED MILLION KRW) •

Category	2011	2013	2015	2017
Sales	28,113	34,751	44,489	50,096
Net profit	1,610	2,058	2,708	3,366
Assets	146,837	169,124	198,326	218,702
Liabilities	41,911	57,302	75,087	84,209
Capital	104,926	111,822	123,239	134,493

• YEARLY INVESTMENT PLANS (UNIT: HUNDRED MILLION KRW) •



## REFLECTION OF NEW MANAGERIAL ENVIRONMENTS

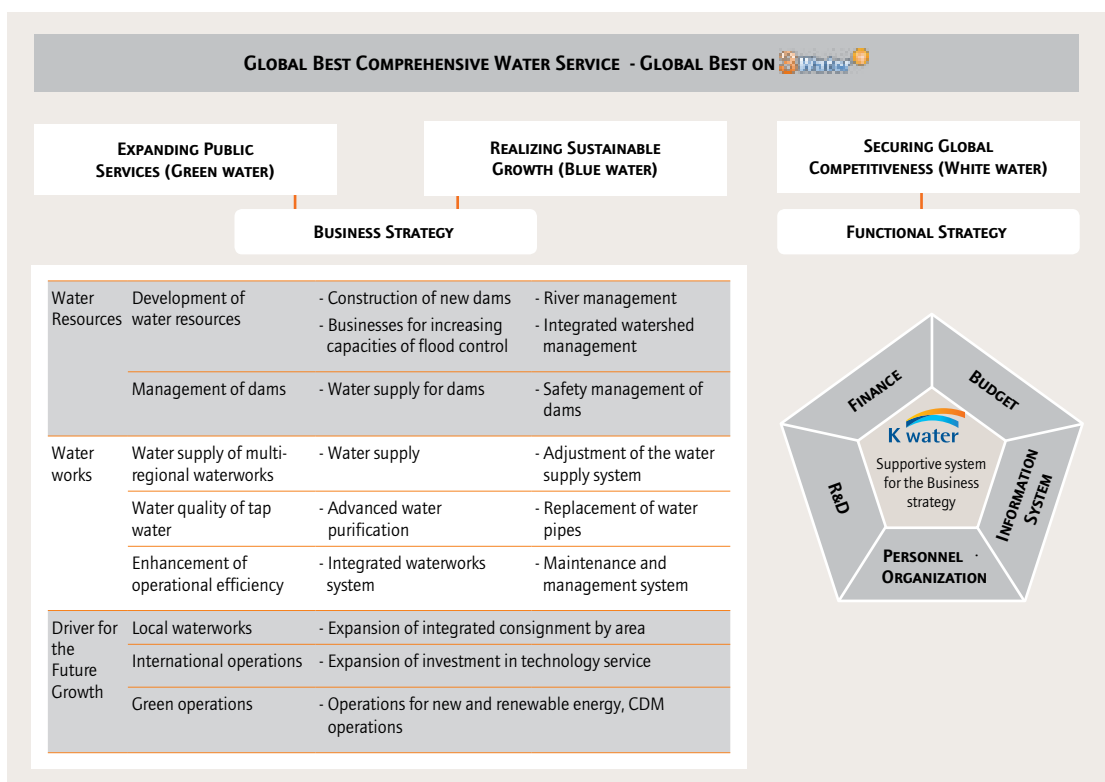
K-water re-established its operational strategy in order to set up a quick response system to deal with rapidly changing managerial environments such as recent climate change, enhancement of efficiency in public corporations, and paradigm shift of water industry; to expand its public services; to accomplish its mission and vision through the implementation of sustainable growth; and to secure global competitiveness. K-water will maximize its strengths, and establish and promote its operational strategies that optimize the portfolio for future operations including flood control, irrigation, local waterworks, international investment, low-carbon green growth, etc. The economic profits gained from these will be shared with stakeholders.

## RE-ESTABLISHMENT OF BUSINESS STRATEGY

K-water plans to enhance its public services that develop the national economy and improve the public welfare by preventing water-related disasters and acquiring stable water resources with the new business strategy that reflects new managerial environments. In addition, K-water will intensively foster the advancement of local waterworks and sewage services, revitalization of entry to international markets and low-carbon green growth as three key growth drivers, and realize sustainable growth by enhancing the efficiency of the existing facilities and participating in new related businesses.

Through this, K-water pursues the implementation of an integrated operational structure of the water cycle system, and the establishment of an appropriate portfolio of the existing operations and new growth businesses. In accordance with the mid- and long-term resource distribution plans for successful business promotion, the resources of personnel, organization, finance, budget, R&D and information will be optimally distributed. In addition, K-water will secure world-class global competitiveness

• STRATEGIC SYSTEM FOR K-WATER'S BUSINESSES •



through the establishment of an advanced management system, acquisition of core capacities and innovation of the organizational culture.

#### BUSINESSES FOR WATER RESOURCES

The shortage of water resources in Korea caused by climate change is estimated to be 1 billion cubic meters by 2016. As part of the government's green new deal, K-water plans to construct small and mid-sized environmental -friendly dams in order to resolve the water shortage and reduce flood damage, and a total of 14 dams to secure 600 million cubic meter water resources by 2016. With river management, K-water establishes a maintenance system for rivers to implement integrated watershed management including environmental management of water quantity, ecosystem, preventive management of water quantity and quality. By 2013, K-water plans to complete the maintenance of rivers and streams, and expand such maintenance to national rivers, producing an environment where people and various species coexist. To secure the stability of dams against an abnormal flood caused by the climate change, K-water also plans to complete projects for increasing flood control capacities, accomplishing its mission as a comprehensive water service company that takes full responsibility in the water crisis.

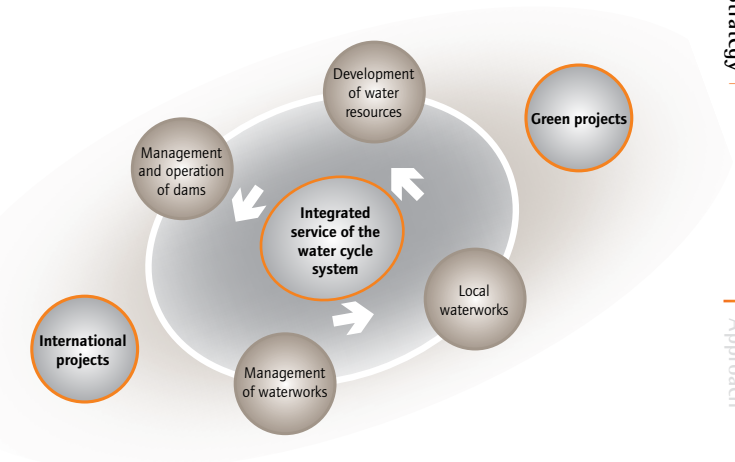
#### BUSINESSES FOR WATERWORKS

To resolve the imbalance of water supply among regions and secure water for national industrial use, K-water plans to complete the construction of 12 multi-regional waterworks including the Gwangyang(I) phase. As for the adjustment operation of the water supply system that aims to equally supply water, K-water plans to complete the establishment of 12 multi-regional water supply areas by 2017 and attempts to overcome the water crisis by increasing the operation rate of multi-regional waterworks through the water supply to the national infrastructure including the "Innovation City". In addition, K-water will expand the adoption of advanced water purification process and continuously replace water pipes in order to produce high-quality tap water. The integrated waterworks operation system for 7 areas in the country will be completed by 2017. K-water will also advance the water supply service that people can actually feel and trust by implementing the comprehensive waterworks management system through replacement of old water pipes and establishment of integrated waterworks information system to reduce damage caused by accidents and disasters and to secure a stable water supply.

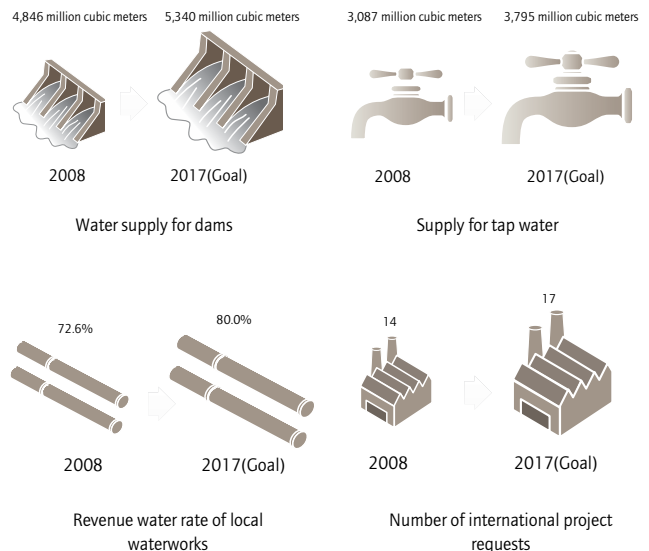
#### BUSINESSES AS A FUTURE GROWTH DRIVER

With businesses that enhance the efficiency of local waterworks, K-water aims to increase the competitiveness of the domestic water supply industry through the improvement of the water quality and services of local waterworks that have limited finance and technology. These operations set a goal to expand the service provision of local waterworks to 13.60 million persons and reach 80% of the revenue water rate. Consigned local waterworks will have their operational efficiency improved through integrated management by different areas. International businesses focus more on investment shifting from its

#### • K-WATER'S COMPREHENSIVE PROJECT STRUCTURE FOR THE WATER CYCLE SYSTEM •



#### • GOALS OF K-WATER'S MAJOR OPERATIONS (2017) •



existing exportation of ODA and technologies, thus intensively promoting new growth drivers in order to generate new national wealth. K-water plans to increase its comprehensive corporate competitiveness with combined efforts of domestic water-related companies and expand its influence in the worldwide water market that is growing at a rapid rate. K-water also plans to expand the emission credits by generating 333Mw of new and renewable energy by 2017 through the expansion of the new and renewable energy development using the existing dams and waterworks, and by operating CDM project.



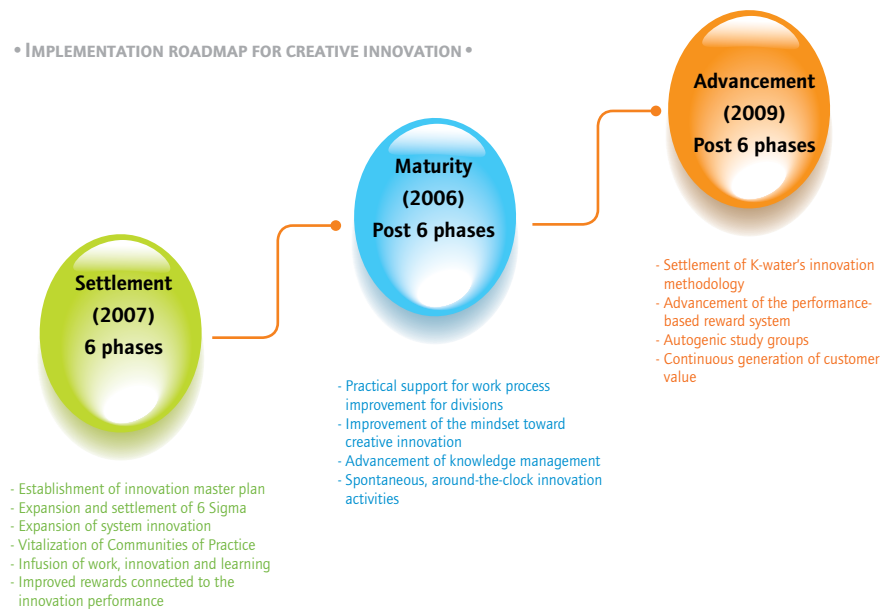
# Sustainable Creative Innovation

K-water will achieve the sustainable performance through innovative work process improvement activities.

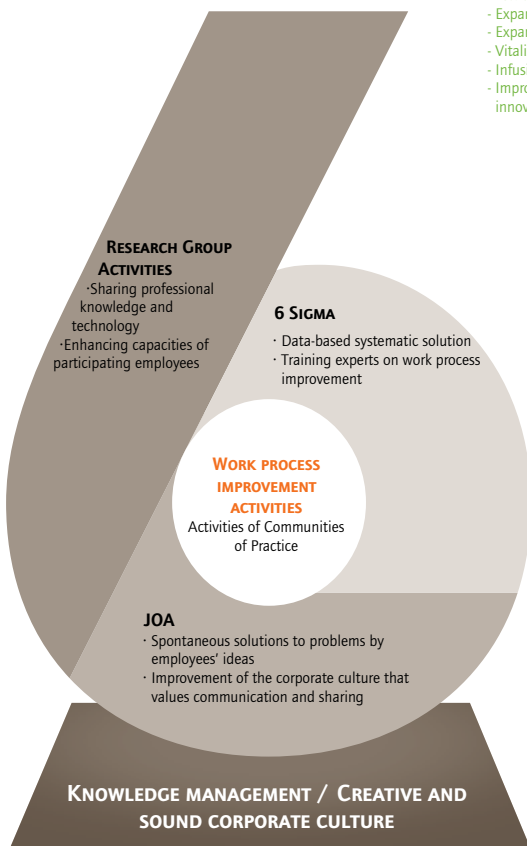
## DIRECTIONS FOR CREATIVE INNOVATION

K-water accomplished the 6th phase, the highest level of innovation in 2007's innovation evaluation of public agencies. Based on this, it will continue its efforts to create practical results. K-water also solidifies the foundation of innovation through the systematic operation of Communities of Practice, knowledge management that practically helps employees with their current work, improvement of the corporate culture that employees can actually feel.

### • IMPLEMENTATION ROADMAP FOR CREATIVE INNOVATION •



### • K-WATER'S SYSTEM FOR CREATIVE/ INNOVATIVE WORK PROCESS IMPROVEMENT ACTIVITIES •



## ACTIVITY SYSTEM FOR CREATIVE INNOVATION

K-water's system for creative innovation organically connects BSC with Communities of Practice and a knowledge proposal system. BSC provides a core performance index necessary for the achievement of K-water's strategic goals, and to accomplish this, 6 Sigma, JOA (K-water's modified model of the GE work-out technique) and activities of Communities of Practice are followed. The performance resulted from these connects the virtuous circle in the form of a knowledge proposal that all employees can share, thus bringing K-water's innovation to the next level.

**6th Level**

Maintaining the highest level of innovation in 2008

### MODEL CASE OF CREATIVE INNOVATION ACTIVITIES

#### PRACTICAL SUPPORT FOR WORK PROCESS IMPROVEMENT FOR DIVISIONS

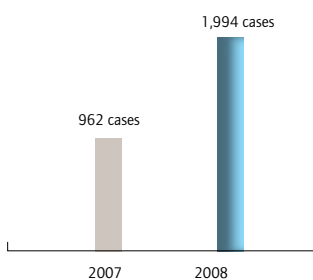
K-water operated workshops by divisions in order to vitalize the work process improvement activities and generate the customer value. For the successful operation of workshops, K-water induced active participation of the chiefs of divisions, and enhanced the practicality by continuously checking the implementation of each activity step. K-water also shared and spreaded model cases throughout the corporation by holding an interim presentation of performance.

Along with this, K-water performed service visiting actual work sites. Consultants visited regional headquarters in person and provided tailored consultation, and special lectures on creative innovation for the purpose of advancing the work process and enhancing capacities of work process improvement were provided by visiting consultants.

#### IMPROVEMENT OF THE MINDSET TOWARD CREATIVE INNOVATION

In order to improve employees' mindset toward creative innovation, K-water provided special lectures on innovation including 'Policies for the Advancement of Public Corporations and K-water's Tasks', 'Changing Management and Creative Management', etc. K-water also produced video clips on creative innovation to share and spread the direction of creative innovation and the CEO's management philosophy.

#### • NUMBER OF HIGH-QUALITY KNOWLEDGE PROPOSALS •



Creative innovation activities

#### ADVANCEMENT OF KNOWLEDGE MANAGEMENT

Based on the accumulated knowledge capacities, K-water established a knowledge network with external companies specializing in water and other partner companies. By adjusting the knowledge management system, K-water generated core knowledge necessary for new growth drivers. With management of work manuals in Wiki style, it always provides updated knowledge information for employees. In addition, K-water operates an open knowledge portal site known as 'Waterpedia' in order to share information and cooperate with stakeholders in the area of waterworks, and strengthened the connection with the in-house knowledge portal, OASIS. For the field of dams, K-water opened a 'Ubiquitous Dam' system to provide an integrated technology solution related to plans construction of dam as an effort of providing a real-time solution for customers, companies and academic users.

#### CREATING THE PERFORMANCE OF CREATIVE INNOVATION

In order to share the results of creative innovation activities, K-water operated a performance presentation of creative innovation for the whole corporation and a UCC contest for the improvement of the corporate culture. K-water extended such efforts to produce and publish a collection of creative innovation model cases. Externally, K-water spreads best practices of innovation through the presentation of best practices of the public innovation conference.

Such creative innovation activities of K-water provided grounds for winning a prestigious 'Asian MAKE (Most Admired Knowledge Enterprise) Award' from Teleos, England, for the first time as a domestic public corporation.

**8,333 cases,**  
Knowledge Proposals in 2008



Winning 'Asian MAKE Award'

# R & D Investment

K-water implements its comprehensive R&D activities such as continuous investment in R&D and establishment of a global network in order to secure global technology competitiveness.

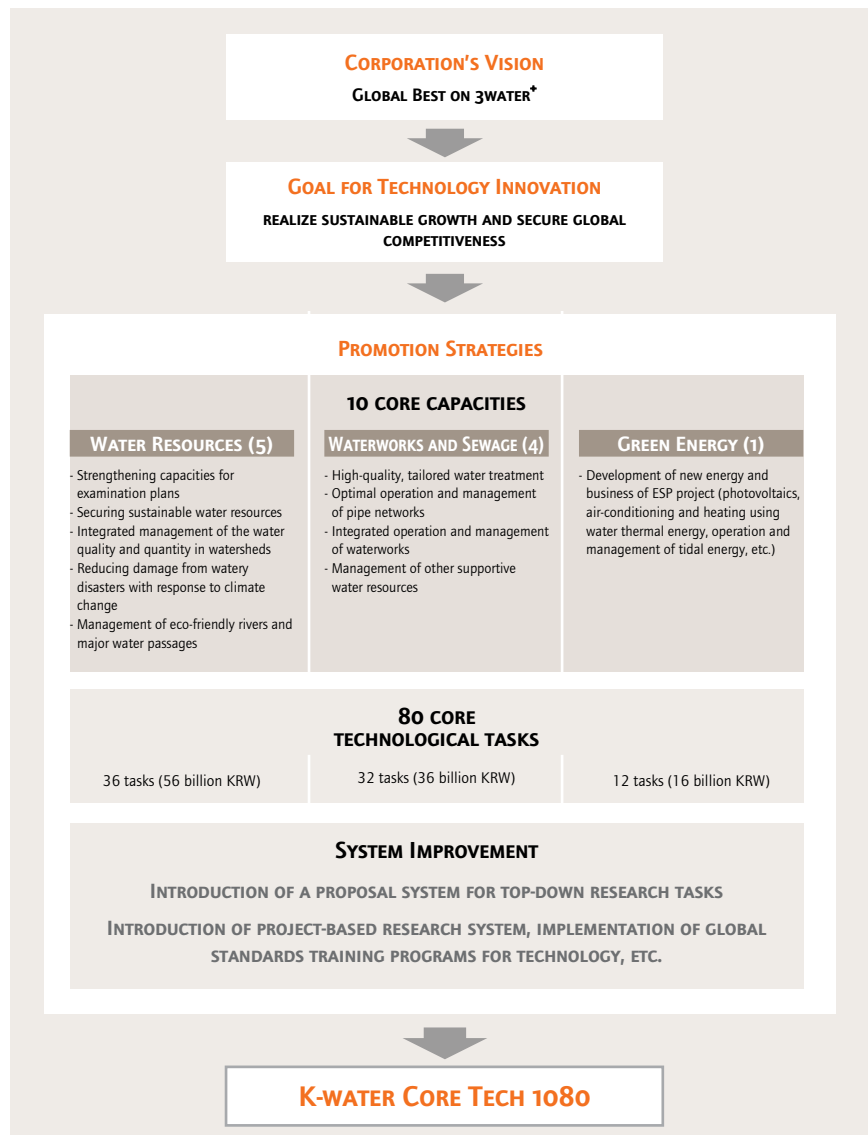
• K-WATER'S RESEARCH INFORMATION SYSTEM •



## CONTINUOUS R&D INVESTMENT

In order to generate a future growth driver in preparation for the 21st century's water generation demands and to secure core technologies, K-water established a comprehensive technology innovation plan (Core Tech 1080) geared for implementing sustainable growth and securing global competitiveness, investing 108 billion KRW in 10 core capacities and 80 core technological tasks by 2013. To do this, K-water invested 84.7 billion KRW in 2008, 7% of the sales and secured core technologies including a reverse osmosis system for industrial water that help lead the water-related technology. In addition, K-water secured 224 research personnel in order to enhance the human resources capacities and operated the R&D support for the core areas of the water industry in academic-industrial research collaboration as well as technology support for small- and mid-sized businesses to expedite the open technology innovation.

**108 billion KRW,**  
Amount of investment in the development  
of 80 core technologies (by 2013)



#### • CURRENT STATUS OF RESEARCH-BASED INFRASTRUCTURE •

Scale of buildings/land (79,832m<sup>2</sup>/90,311 m<sup>2</sup>), Test equipment (total 586 items)



Tap water analysis/research center



Flow meter calibration center

CATEGORY	2006	2007	2008
Sales (hundred million KRW)	11,113	11,413	12,101
Amount of Investment (hundred million KRW)	761	800	847
Investment rate (%)	6.8	7.0	7.0

NOTE) SINCE K-WATER'S MAJOR OPERATIONS ARE DAMS AND WATERWORKS, SALES GENERATED FROM COMPLEX CONSTRUCTION ARE NOT INCLUDED.

#### • CURRENT STATUS OF OPEN TECHNOLOGY INNOVATION •

SUPPORTED OPERATION	NUMBER OF TASKS	AMOUNT OF SUPPORT (HUNDRED MILLION KRW)	TARGET ORGANIZATIONS
Core technology related to the water industry	7 tasks including the influence assessment of water resources due to the climate change and its management policies	5.98	6 organizations including KAIST
Technology innovation for small and midsize businesses	5 tasks including the development of technology for constructing eco-friendly vessels that remove green algae without damaging the ecosystem of reservoirs	10.1	5 organizations including CM&Tech

#### EXPANSION OF R&D INFRASTRUCTURE

K-water pursues the continuous construction of infrastructure for the high-value-added water industry and global standards. Registered as Korea's first internationally certified national calibration agency in the area of the water level and top-rated international evaluation agency of water quality analysis, K-water operates an internationally certified test agency for water quality. As a professional agency for quality tests that established a large-scale system for testing the ground, K-water also leads the continuous expansion of R&D infrastructure to secure world-class core technologies.

#### OPEN TECHNOLOGY INNOVATION R&D

K-water pursues open technology innovation for academic-industrial research cooperation in the water industry and establishment of a win-win cooperative system with private companies. The supportive operation for core areas in the water industry is an operation that aims to acquire water-related original technologies, promote mutual growth through an enhanced partnership in academic-industrial cooperation, respond to the climate change and pursue future-oriented technology development for low-carbon green growth. For this, K-water provided financial support worth 598 million KRW to 6 selected agencies after examining the feasibility of CDM project through the analysis of KAIST's guideline on CO<sub>2</sub> reduction within waterworks/sewage and its potential reduction. K-water's supportive operation for technology innovation of small and midsize businesses aims to promote their technology innovation with financial support for the development of new technologies and localization of products in order to maintain the cooperative relationship with such small- and mid-sized businesses and secure practical technologies related to the water industry. K-water selected 5 tasks including the development of technology for constructing eco-friendly vessels that remove green algae without damaging the ecosystem of reservoirs, providing financial support worth 10.1 billion KRW. For the open technology innovation, the total amount of such financial support that K-water provides for technology development is 1 billion KRW each year. Through this, K-water provides an opportunity for various stakeholders related to the water industry to mutually grow and, at the same time, continues its efforts to fulfill its social responsibility. Based on continuous technology innovation, K-water utilizes this as a valuable chance to generate a new growth driver for the water industry and to secure core technology.

**84.7 billion KRW,**  
Investment in R&D in 2008

**7%,**  
Ratio of R&D investment to sales







# Water industry is a public utility.

The water-related industry, that makes people healthy and enables their economic activities, is a major state-run operation that should secure ethicality, transparency and public good.

PH

Corporate Governance Structure  
Ethical Management  
Customer-oriented Management  
Participation of Stakeholders  
Mutual Growth with Stakeholders  
Risk Management and Sustainability

# Corporate Governance Structure

K-water practices open management and professional management by expanding the participation of the Board of Directors in management and strengthening its professionalism.

## COMPOSITION OF INVESTORS

Major operations of K-water are construction and management of dams and waterworks for the purpose of comprehensive utilization, and development of water resources which having a significant impact on people's lives. Therefore, the "Korea Water Resources Corporation Act" limits the investors to state and local governments as well as the Korea Development Bank, and stipulates that "the state shall invest no less than 50% of its total capital." The investors as of 2008 are the state (90.3%), the Korea Development Bank (9.6%), and local governments (0.1%).

## COMPOSITION AND OPERATION OF THE BOARD OF DIRECTORS

The Board of Directors is the highest decision-making organization that deliberates and reaches decisions on important issues of the corporation considering the economical, social and environmental aspects, in addition to its functions of providing supervision and support to management. The Board of Directors consists of 13 members, 6 permanent and 7 non-permanent directors, and if part of the board members have a personal stake and thus their participation in the board is limited, the remaining members comprises the board. In 2008, a total of 12 BOD meetings were held, and 31 subjects were deliberated and handled. The chairperson of the board, concurrently the president/CEO, is nominated by the executive recommendation committee, decided by the steering committee, recommended by the Minister of Land, Transport and Maritime Affairs, and finally appointed by the President. Permanent members are nominated by the executive recommendation committee and appointed by the president/CEO, while non-permanent members are nominated by the executive recommendation committee, decided by the steering committee, and finally appointed by the Minister of Strategy and Finance. The executive recommendation committee is an independent organization that nominates professional executive candidates based on transparency and public good.

◀ CURRENT STATUS OF BOARD OF DIRECTORS (AS OF JUN 31, 2009) ▶

INTERNAL EXECUTIVES (PERMANENT)	
Kim, Gun Ho	President/CEO
Lee, Gil Jae	Vice president
Kim, Wan Kyu	Executive Director of Administrative Services Division
Byun, Doo Gyoan	Executive Director of Water Resource Division
Ahn Chang Jin	Executive Director of Water Supply Division
Kim, Tae Seon	Executive Director of Land, Energy & Overseas Services Division
EXTERNAL EXECUTIVES (NON-PERMANENT)	
Song, Jae Woo	Professor, Dept. of Construction and Urban Technology, Hongik Univ.
Song, Byoung Dae	Chairman of Daejeon city Party Committee
Kim, Hak Ryoul	President of Singwang Eco-road E&C
Son, Jin Sang	Professor, Dept. of Law, Andong University
Kim, Yeon Cheol	President, Hannam Administrative Welfare Graduate School
Yang, Hong Gyu	Representative, Yang Hong Gyu Law Firm
Kim, Gye Hyeon	Professor, Dept. of Social Foundation System Engineering, Inha University

## BOD EVALUATION ON OPERATION

The operation of the Board of Directors is evaluated by the government's annual management assessment and internal evaluation. The permanent directors receive different wages and incentives according to the state evaluation results. The evaluation also includes performance and devotion so that not only measurable performance but also immeasurable can be reflected in the rewards of executives.

## MANAGEMENT PARTICIPATION OF NON-PERMANENT EXECUTIVES AND ENHANCEMENT OF PROFESSIONALISM

By specifying the matters for decision of the BOD, strengthening its deliberation functions with the extended scope of report and opening the internal information network for non-permanent executives to provide them with wide ranged real-time management information, K-water enhances the understanding of the corporation management and thus induces the participation of non-permanent executives in management and increases their ability in decision making. In addition, K-water actively reflects the opinions of non-permanent executives by strengthening the pre-deliberation of the BOD's subcommittees (such as management/investment committee) from the planning time of businesses. Through various management activities including management consultation, internal instruction, etc., K-water expands the opportunity to graft their professional knowledge onto management and provides the workshops designed to enhance their job capabilities and professionalism related to water resources, expansion of field visits, and provision of various research data, etc. K-water also operates a Junior Board (21 members) to reflect the opinions of young employees to management and a management consultation committee (composed of external experts) for advice and consultation on management.

## INTERNAL AUDIT AND EXTERNAL SUPERVISORY ORGANIZATION

In order to monitor the fairness and appropriateness of K-water's operations, an internal audit/inspection office is set up as an independent organization as an effort to improve the management transparency through the examination of the discipline of government officials and regular audit/inspection. The audit and inspection office may state its opinions at the meeting of Board of Directors. As external supervisory organizations, there are; the Board of Audit and Inspection of Korea, the National Assembly, the Ministry of Land, Transport and Maritime Affairs and the Prime Minister's Office conduct occasional inspections of K-water.

**31** cases,  
Number of subjects handled in 2008

**21** persons  
K-water's junior executives

# Ethical Management

K-water earns trust from various stakeholders through its transparency that conforms to the global standards.



## THE CLEAN CORPORATION THAT PRODUCES CLEAN WATER

"We always have to keep in mind that the high level of ethical consciousness is the competitiveness of a corporation, and concurrently a driver for sustainable growth. (President/CEO Kim, Kuen Ho in December 2008)"

With the belief that all management activities should be based on the ethical value and that ethics is the most powerful competitiveness, K-water actively pursues ethical management. Particularly, K-water considered the three major strategic directions and connection with the core value to accomplish its vision in 2009 as the core value and made effort to reinforce of internal regulations such as a code of conduct for employees and executives and operate an ethical evaluation system for all employees by groups. As a result, K-water won the certification as the Best Organization for its Anti-corruption Policies by the Anti-corruption and Civil Rights Commission for three consecutive years.

## IMPLEMENTATION OF STAKEHOLDER-CENTERED BUSINESS ETHICS

Defining ethical management as a managerial activity to earn trust from stakeholders, K-water performs various activities for different stakeholders and gives feedback through the monitoring of regular performance indexes. As for customers, K-water amended 16 internal regulations to eliminate the infringement of customer rights or any possible inconveniences, and increases its corporate transparency through direct participation of customers when performing its operations. As for employees and executives, K-water operates practice-centered ethical training programs, manages human resources in a socially equal manner,



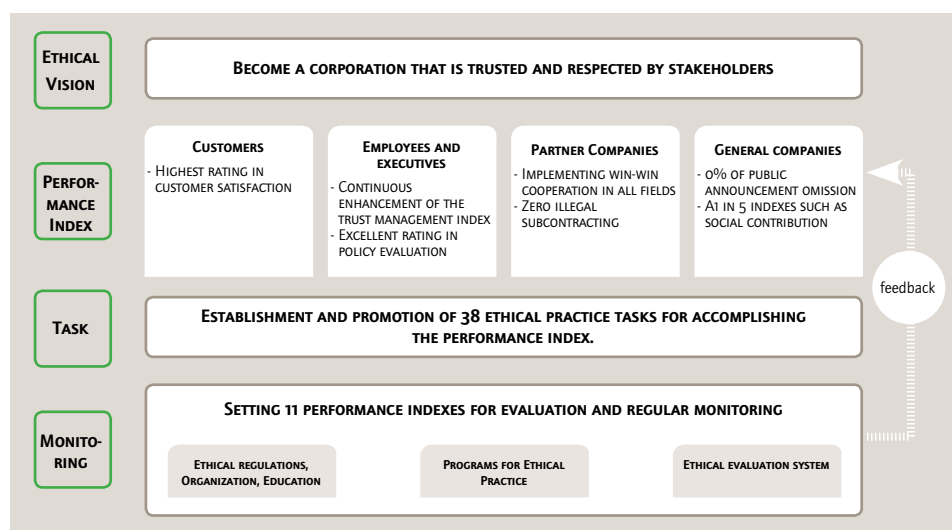
CEOs' oath of practicing anti-corruption ethical management (Sept. 2008)



Action learning of ethical practice task (May 2008)

and endeavors to minimize the industrial accidents through systematic preventive actions. As for partner companies, K-water maintains sound and sustainable partnership through the operation of a coexistence committee for mutual growth, and the 360-degree mutual monitoring of the contract process with partner companies. Along with these, K-water implements the social public good and expands its world-class low-carbon green growth through environmental management, that is, industrial ethical management. K-water makes its best efforts to fulfill its corporate social responsibility(CSR) that conforms to global standards by making strategic social contributions that are closely connected to its operations.

### • PROMOTION SYSTEM FOR ETHICAL MANAGEMENT •



**Three**  
consecutive years  
Certified as the  
Best Organization

Evaluation of Anti-corruption Policies (Anti-corruption and Civil Rights Commission)

# Customer-oriented Management

K-water, a corporation that endeavors to go beyond customer satisfaction to create customer value.

## CUSTOMER FIRST

"Let's try to earn trust from people with improved services." (From the inauguration speech of CEO Kim, Kuen Ho in July 2008)

K-water practices customer-oriented management to create customer value. K-water particularly classifies customers by the value flow and provides tailored services to each customer need, leading customer-oriented management in the public sector. In order to improve the customer service of the contacting division, K-water operates a service academy and an organization for a one-stop service. By recognizing that there is always an answer in the voice of customer (VOC), K-water established the Customer Relationship Management (CRM) for the optimal management of the VOC. K-water also opened a customer service hot line (1577-0600) to efficiently manage the VOC and innovate the customer service as a response to the dramatic increase of customers due to K-water's new operations such as local waterworks consignment. K-water's customer center owns the most numerous consultation manuals (650 units) in the area of tap water, and establishes a collaborative system with the contacting division providing a solution to the VOC within 24 hours as an effort to eliminate any inconveniences that customers may have.



Announcement of K-water's Customer Charter

## EXPANSION OF CUSTOMER PARTICIPATION AND PROVISION OF CUSTOMER DELIGHT SERVICE

K-water classifies its customers into direct customers and indirect customers. Direct customers include local governments, private companies, population supplied by consigned local waterworks, and sales customers, while indirect customers indicate NGOs, stakeholders such as local communities, homepage visitors and other people. K-water provides services that are tailored to the characteristics of different customers. Particularly, K-water provided a new operational model based on the social agreement by implementing the Songsan Greencity development plan after elongated public discussions with Siwha Committee for Sustainable Growth that is composed of various stakeholders. Along with that, K-water puts forth its best efforts to eliminate distrust of tap water through continuous promotional activities on the safety of tap water such as publication of water quality report and provision of real-time information on the water quality. In addition, K-water selects 78% of proposals made by customers and applies such proposals to the work process, and amended the Customer Charter (Standards on service provision) with the customer participation. As a result of providing the best services such as a price freeze for 5 consecutive years, service quality assurance with employees' real name, price consultation as customer property management, an interest rate freeze for building lots, K-water achieved the highest rating (92.6 points) in the Public Service Customer Satisfaction Index (PCSI) for 2 consecutive years.

**92.6** points,

2008's PCSI (for 2 consecutive years)

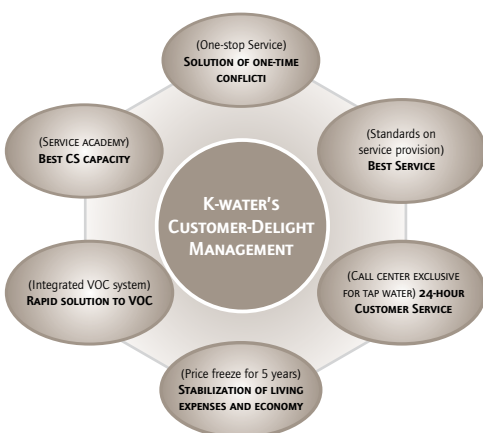
**99%**

2008's timely accomplishment rate of VOC solution

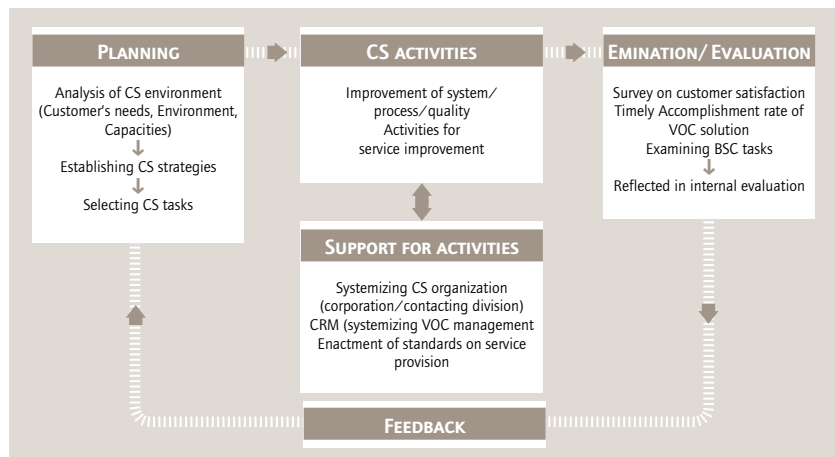
**5** years

A price freeze for service water

### • ANNOUNCEMENT OF K-WATER'S CUSTOMER CHARTER •



### • CS MANAGEMENT PROCESS •



# Participation of Stakeholders

Various opinions and demands of stakeholders are reflected in the management through open communication channels.

## K-WATER'S MATERIALITY ASSESSMENT

Since it is important to report major issues of stakeholders and K-water's management activities, the GRI guidelines require a sustainability report to include the identification, analysis and response to the interests and demands of stakeholders. K-water operates various communication channels in order to collect opinions of stakeholders, decides on the materiality of the demands and reflects them in the management strategy. Particularly, the performance of the sustainable management that has reflected the demands of stakeholders is announced in the sustainability report of K-water, thus continuing to communicate with stakeholders.

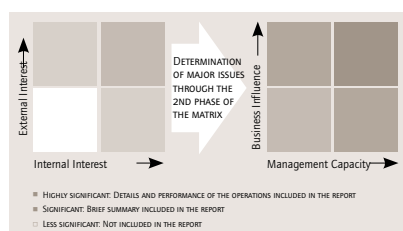
In order for various stakeholders to participate directly/indirectly in the management or voice their opinions, K-water operates various communication channels such as the VOC page at the homepage, customers' participation committee and discussion sessions, management consulting council, governmental dispatch, survey, etc. The demands of stakeholders collected through such communication channels will be categorized and then prioritized through the construction of a materiality matrix followed by the assessment of its materiality. The evaluation of

the matrix goes through 2 phases, the first of which is the evaluation of internal/external interest, and the second is the evaluation that considers the business influence and the management capacity. The details and performance of major issues rated as the 1st grade after the 2nd phase of the evaluation will be included in the sustainability report, and the issues rated as the 2nd and 3rd will be briefly stated in the report. K-water has been using the materiality assessment model since 2008 with advice of a professional organization.

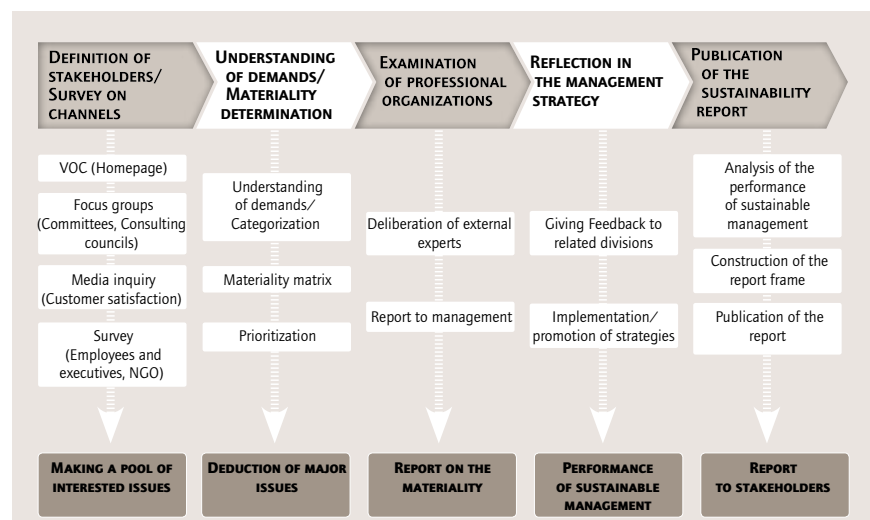
The major issues of K-water's sustainable management deduced through the materiality assessment are shown in the following table. These issues will be given as feedback to K-water's management strategy division and other related divisions, and their performance will be announced to stakeholders through a sustainability report. What we considered the most in the process of preparing this sustainability report was how to communicate more with stakeholders, and help the readers obtain information from this report more easily and conveniently. K-water puts efforts to publish this report in a more transparent and effective process.

### • MAJOR ISSUES OF K-WATER'S SUSTAINABLE MANAGEMENT •

CATEGORY	INTERESTS
HIGHLY SIGNIFICANT MATERIALITY	<ul style="list-style-type: none"> <li>★ RESPONSE TO THE CLIMATE CHANGE, DEVELOPMENT OF NEW AND RENEWABLE ENERGY</li> <li>★ K-WATER PROMOTION BUSINESSES, INCLUDING INTERNATIONAL BUSINESS, EFFICIENT BUSINESS OF LOCAL WATERWORKS AND MULTI-REGIONAL WATERWORKS</li> <li>★ QUALITY OF DAM AND TAP WATER</li> <li>★ ETHICAL MANAGEMENT</li> <li>★ DEVELOPMENT OF ECO-FRIENDLY WATER RESOURCES</li> <li>★ WATER TARIFF</li> <li>★ SOCIAL CONTRIBUTION</li> </ul>
SIGNIFICANT MATERIALITY	<ul style="list-style-type: none"> <li>★ SUPPORTIVE BUSINESSES FOR AREAS ADJACENT TO DAMS</li> <li>★ INTEGRATION OF THE WATER CYCLE SYSTEM, IMPROVEMENT OF THE MANAGEMENT SYSTEM</li> <li>★ MANAGEMENT STRATEGY, FINANCIAL AFFAIRS</li> <li>★ TRAINING HUMAN RESOURCES</li> </ul>



### • THE PROCESS OF K-WATER'S MATERIALITY ASSESSMENT •



"IT'D BE BETTER TO SEE THE NEGATIVE PERFORMANCE AS WELL."

OTHER OPINIONS

★ OPENED THE POSITIVE AND NEGATIVE INFORMATION PAGE

"I'D LIKE TO HAVE THE SUSTAINABILITY REPORT BEFORE JUNE."

★ SHORTENED SCHEDULE OF THE REPORT PUBLICATION (AUG. ~ SEPT. => APR.)

"PLEASE BE MORE SPECIFIC ON THE PROCESS OF THE MATERIALITY ASSESSMENT."

AND RESPONSES

★ INCLUDE THE DETAILED PROCESS OF THE MATERIAL ASSESSMENT

# Mutual Growth with Stakeholders

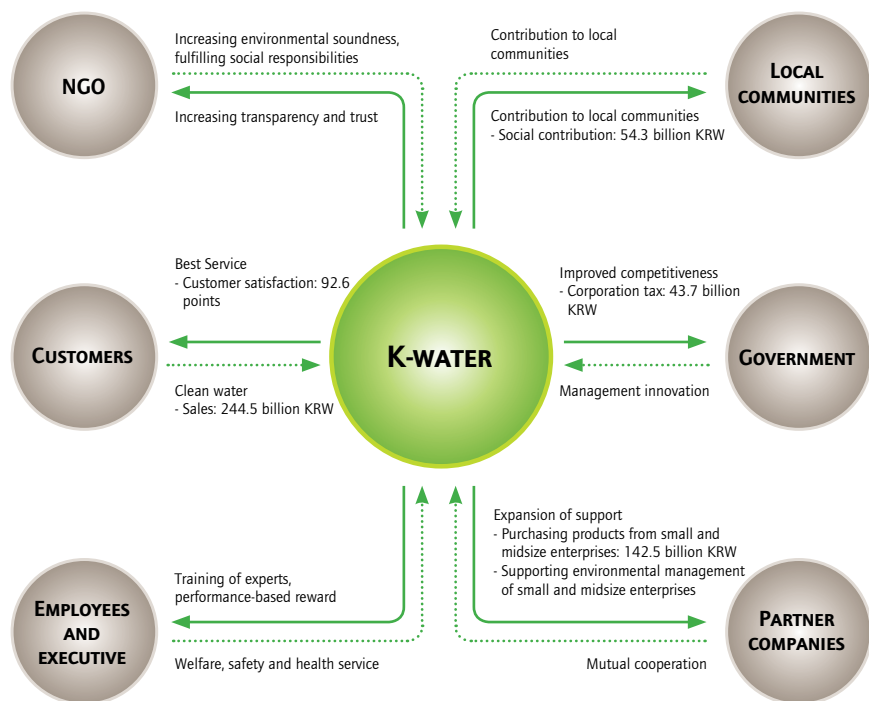
K-water establishes win-win trust relationships with stakeholders that are business partners to share and implement the sustainable management strategies.

## WIN-WIN PARTNERSHIP WITH STAKEHOLDERS

K-water operates various management participation systems for external personnel so that various stakeholders may directly/indirectly participate in the management or voice their opinions. With stakeholders participating in the decision-making process or project operations, K-water prevents conflicts in advance that may occur in the process and secures transparency and trust. In addition, K-water operates consulting councils or committees in order to obtain advice on the overall management as well as local councils to smoothly resolve conflicts that may occur in the process of operations.

The consulting councils or committees are comprised of NGOs, academy, mass media and others, while local councils mostly consist of experts at local issues, government officials, and local residents, thus expanding their participation in management. When establishing and implementing policies related to water resources, K-water also closely works with related governmental bodies such as the Ministry of Land, Transport and Maritime Affairs, and the Ministry of Environment, etc.

## • WIN-WIN COOPERATION WITH STAKEHOLDERS •



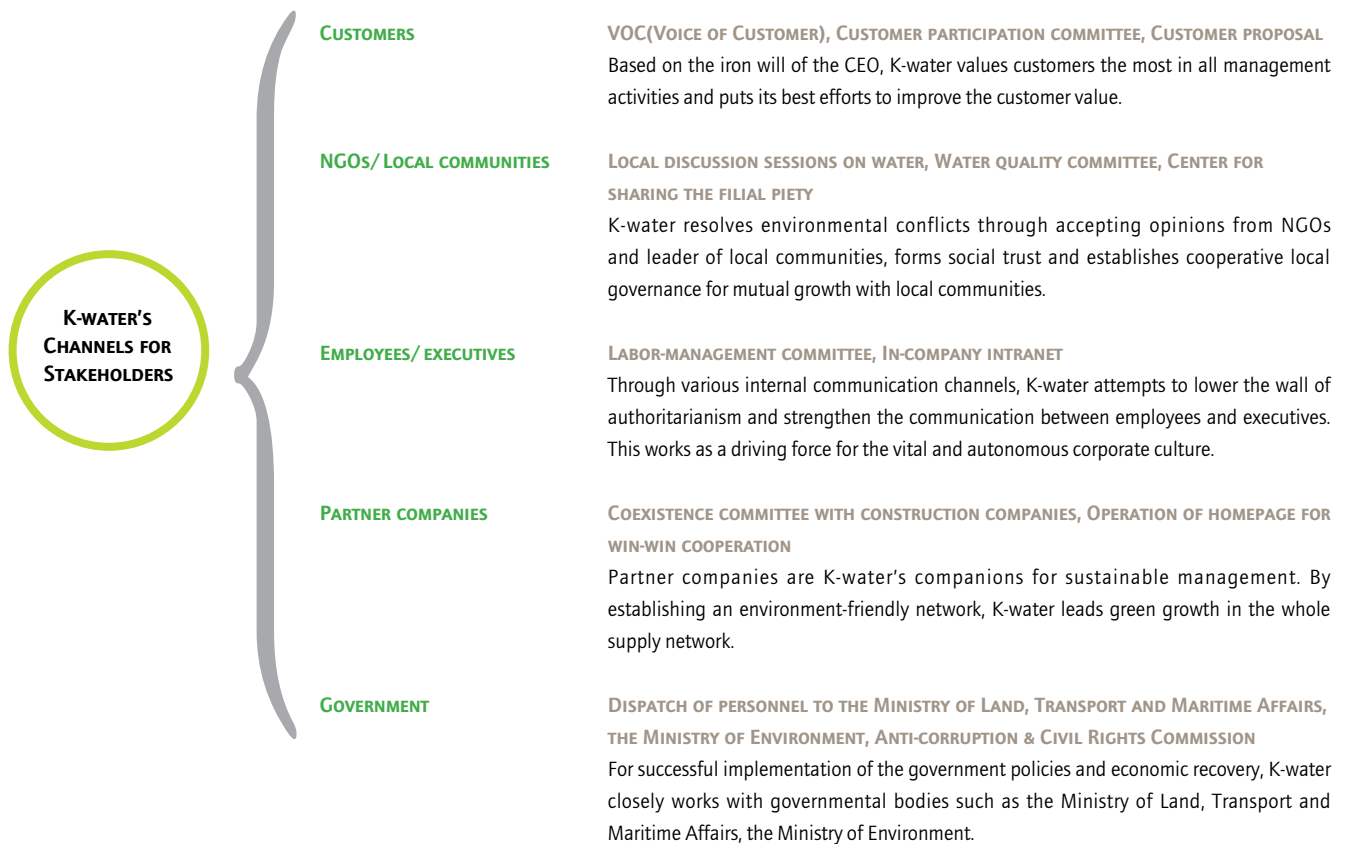
**1577-0600**

Integrated national call center service

## COMMUNICATION WITH STAKEHOLDERS

K-water listens to various opinions of stakeholders. Through various communication channels with customers, NGOs, local communities, government, partner companies and employees/executives, K-water narrows the gap between different perspectives. Through the VOC system at the homepage, anyone can participate, and K-water makes every possible effort not to miss a single voice.





## Best Practice

### WITH CUSTOMERS: K-WATER'S CUSTOMER CENTER OPENS

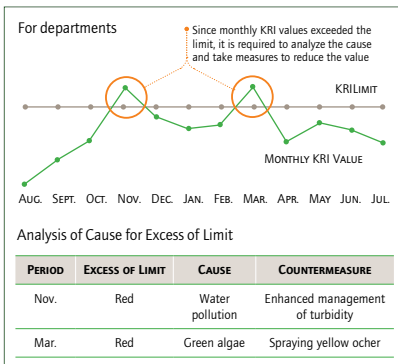
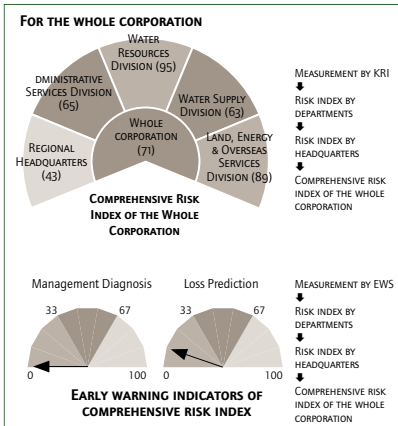
Since April 21, 2008, K-water has operated a customer center dedicated to professional consultation on its operations. Through the center, K-water sensitively responds to the opinions of various stakeholders such as customers and practices open management with the help of smooth communication with them. K-water's customer center provides prompt and clear solutions to the demands of stakeholders through regular customer services such as telephone consulting, civil affairs administration, and more. K-water's customer center also plays a role of a communication channel between the corporation and stakeholders through the monitoring of customer responses such as conflict prevention activities, satisfaction survey, and "happy calls", customer service hotline. In addition, K-water puts forth efforts to generate practical improvements in the customer service by connecting valuable voices of customers to the corporation's innovative system for service quality improvement so that their voices may never pass unheard.



# Risk Management and Sustainability

K-water supports rational decision-making for the accomplishment of strategies through integrated management of financial and non-financial risks enabled by the operation of Enterprise Risk Management system.

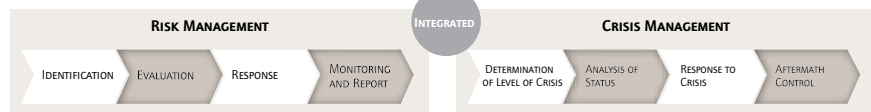
## • MONITORING OF COMPREHENSIVE RISK INDEX (ERM SYSTEM) •



## PROCESS OF RISK MANAGEMENT

K-water's risk management for the whole corporation includes preventive risk management and retrospective crisis management. Risk management focuses on preparatory management and prevention that identifies and responds to risk indications beforehand through deduction and monitoring of enterprise management risks and core risk indexes. The 33 enterprise management risks include 6 financial risks such as liquidity, interest rates, exchange, and credit, and 27 non-financial risks such as accidents, and disasters. As for crisis management, K-water reflected the standard model of risk management guidelines for public corporations and established step-by-step response procedures for initial measures and prevention of risk escalation. K-water also prepared manuals for crisis response in 17 related areas including management risks, disaster management, promotion crisis, and conflict management, so that employees can easily utilize those manuals in the field.

## • PROCESS OF RISK MANAGEMENT •



For the efficient implementation of risk management and its monitoring, K-water operates Risk Management Council with its vice president as Chief Risk Officer (CRO) for comprehensive risk management. Overall risk management tasks are conducted by a risk management team under the Business Planning and Coordinating Department. Risk management tasks will be assigned to a specific department depending on the types of risks for efficient responses.

## ENTERPRISE RISK MANAGEMENT (ERM) SYSTEM

K-water established Enterprise Risk Management System in 2007 and implemented risk management regulations since January 2008. K-water also stipulated duties of the risk management organization and launched a full-scale operation of the ERM system. Enterprise risks are managed through the early warning and monitoring of comprehensive risk indexes while divisional risks are managed through Key Risk Indexes (KRI).

## Best Practice

### DEVELOPMENT OF TRAINING SIMULATOR FOR A VIRTUAL FLOOD

The existing training programs for flood response were mainly tabletop exercises based on past floods, and thus the effectiveness was limited, raising the necessity of training programs for the operation of dams and rivers in response to possible future floods. Accordingly, members of K-water's in-house research group developed a virtual training program for flood analysis. The virtual training program calculates basis given data such as the forecasted course of clouds and precipitation, providing a random training situation of a flood.

K-water plans to expand the application of this virtual simulator to flood control centers of 4 major rivers and local governments, and it is expected to cut down the annual costs for flood recovery (210 billion KRW) through enhanced national disaster management.



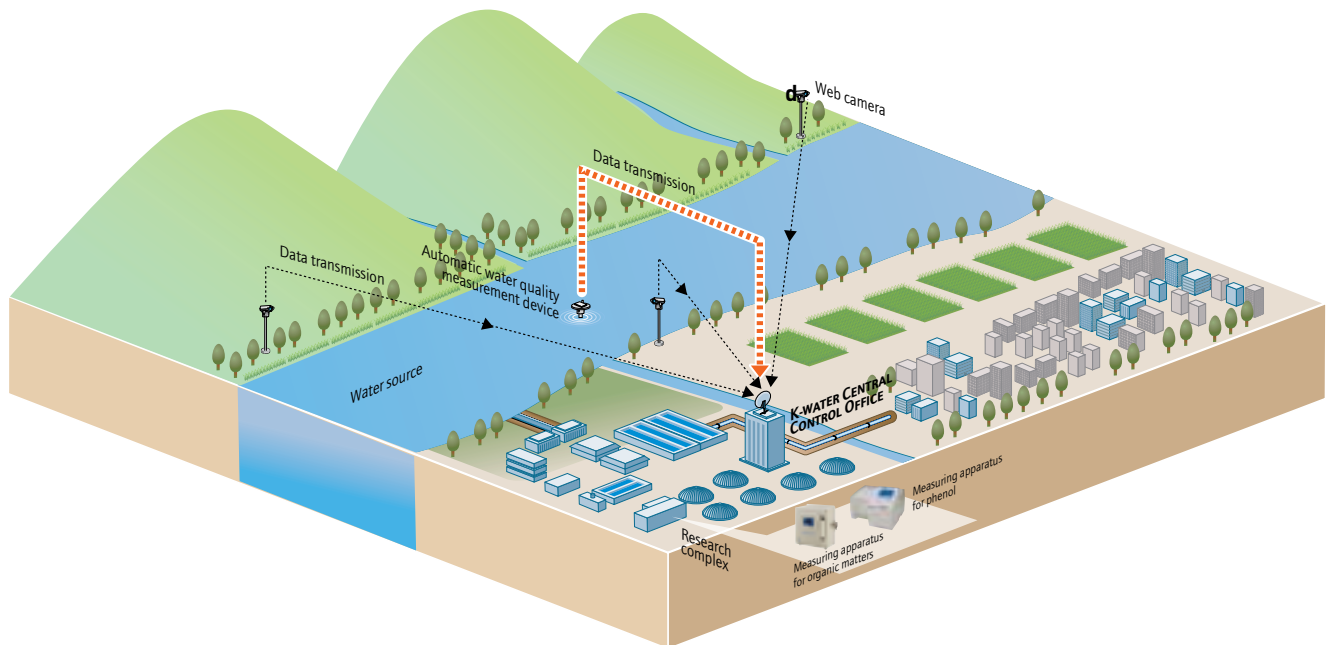
### PROMPT RESPONSE TO WATER POLLUTION IN THE NAKDONG RIVER THROUGH ERM

In March 2008, phenol and other contaminants were discharged to the main stream of the Nakdong River due to a fire at a chemical factory in Gimcheon. K-water took prompt initial countermeasures such as real-time water quality monitoring in accordance with the risk management system and enhancement of the water treatment process using activated charcoal, and successfully prevented further water pollution minimizing the social and economic impact of the accident in the area. Also, there weren't any civil complaints about water quality. In order to establish a prompter response system, K-water plans to introduce an ecological warning system reflecting characteristics within a region for the water source in the Nakdong River and to establish a system forecasting the arrival time of contaminants and the density.

### ADVANCEMENT OF MANAGEMENT FOR DROUGHT

Every part of the globe suffers from severe drought. Korea is no exception, with its southern part and Gangwon province suffering from a severe shortage of potable and industrial water for the first time in 80 years. As a preventive measure for drought, K-water supplies 100% of potable and industrial water and puts forth every effort toward supplying clean water to the public through the improvement of the water quality in rivers.

#### • REAL-TIME SURVEILLANCE SYSTEM FOR POLLUTION IN WATER SOURCES •



#### • PREVENTIVE MEASURE FOR DROUGHT •

##### EARLY PREDICTION AND COUNTERMEASURE FOR DROUGHT

- Operation of a drought prediction system
- Flexible operation of dams (adjustment of supply)
- 24 hour emergency work
- Emergency water supply system for drought areas

##### OPERATION OF A COOPERATIVE AND SUPPORTIVE SYSTEM

- Establishment of cooperation with related organizations (Oct. 2008 ~ ): the Ministry of Land, Transport and Maritime Affairs, National Emergency Management Agency, local governments, etc.
- Establishment and operation of a counter-drought emergency center for the enterprise countermeasure (Jan. 2009 ~ )

##### SUPPORT FOR EMERGENCY WATER SUPPLY

- Emergency water supply to areas with limited water supply: operation of water trucks, supply of bottled water
- Continuous supportive activities such as counter-drought activities during the Luna New Year vacation
  - Emergency water supply (operation of water trucks 88 times, bottled water 250 thousand bottles) and well drilling for subterranean water (Taebaek area)
  - Increased water discharge from Andong and Hapcheon dams (5.4 million cubic meters) due to excessive density of dioxin (Gumi and Daegu areas)





# Water has limitless potential.

Water is the essence of all life on Earth.  
Water is also a resource with the ultimate value that cannot be replaced by anything else.

Based on technology and trust accumulated for more than 40 years,  
K-water, a leading corporation for overcoming the national economic crisis  
and generating the national wealth,  
is right in the middle of the driving force that awakens the limitless  
potential of Blue Gold.

BLUE

## Challenges to Economy

Businesses for Low-carbon Green Growth  
Successful Operation of Local Waterworks  
Integrated Management of Waterworks  
Development of Environment-friendly Futuristic City and  
Industrial Complexes  
Pioneering the International Water Market  
Entry to Industrial Water Business



# Businesses for Low-carbon Green Growth

K-water is at the center of sustainable low-carbon green growth.

## DEVELOPMENT OF NEW/ RENEWABLE ENERGY AND CDM PROJECT

K-water actively pursues the development of new and renewable energy in order to respond to climate change caused by global warming and realizes the national vision of 'low-carbon green growth'. K-water's total capacity for hydropower generation is 1,017Mw as of Feb. 2009, representing 64% of Korea's total hydropower generation (1,597Mw), and the world's largest tidal power plant (254Mw) is under construction near Sihwa Lake in Gyeonggi Province. In addition, K-water contracted a Renewable Portfolio Agreement (RPA) with the government to provide new and renewable energy, investing a total of 13.7 billion KRW in the development of new and renewable energy with the total amount of 2,520Kw in the form of small-scale hydropower, wind power and solar power for 3 years from 2006 to 2008, and operates a mid- and long-term development plan for clean energy by 2030. K-water continues its efforts to increase the eco-friendly efficiency of the existing facilities through the development of green energy using water resources and waterworks nationwide.

### • STATUS OF DEVELOPMENT AND OPERATION OF NEW/ RENEWABLE ENERGY (AS OF FEB. 2009) •

CATEGORY	DEVELOPMENT	REMARKS
Hydropower	Large-scale hydropower	• Operating 10 units including the Soyang River Dam Facility capacity: 1,000.6Mw
	Small-scale hydropower	• Operating 20 units including the Andong Small-scale Hydropower Plant, Constructing 3 dams including the Hoengseong Dam Facility capacity: 17.8Mw
Tidal power	• Constructing Sihwa Tidal Power Plant (World's largestst)	Facility capacity: 254Mw
Wind power	• Constructing Sihwa Wind Power Plant	Facility capacity: 3Mw
Solar power	• Operating 4 units including Bonpo Solar Power Plant	Facility capacity: 170Kw
Air-conditioning and heating using water thermal energy	• Operating 3 units such as the Daecheong Dam, Juam Dam and Cheongju Water Purification Plant	Facility capacity: 100RT

# 1,276 Mw

Total facility capacity gained by the development of new and renewable energy

# 4 cases

Number of CDM projects registered in the UN

K-water actively responds to the climate change by reducing greenhouse gas emission through the development of new and renewable energy as in the CDM project. In May 2005, K-water commenced the CDM project as the first state-invested organization and registered 4 cases in the UNFCCC in January 2008, the most registrations from Korea. Recently, K-water has pursued another registration of new CDM projects in the UN such as a CDM project of waterworks energy efficiency improvement. In November 2007, K-water joined the state-run project (the Ministry of Knowledge Economy) that aims to reduce greenhouse gas with its two small-scale hydropower plants in Yongdam and Daegok, generating 9,446Mwh of electricity and reducing 5,000 tons of CO<sub>2</sub> in 2008. In September 2008, K-water sold the emission credits (6,782 CERs) earned through the reduction of CO<sub>2</sub> ,enabled by 2007's small-scale hydropower generation project, to Holland's ABN AMRO Bank.

### • STATUS OF K-WATER'S CDM PROJECTS •

PROJECT	TARGET	REGISTRATION IN THE UNFCCC	ANNUAL POWER GENERATION (MWH/ Y)	ANNUAL REDUCTION OF CO <sub>2</sub> (TON/ Y)
Sihwa Tidal Power	Sihwa Tidal Power Plant	Jun. 2006	552,700	315,440
Small-scale Hydropower 1	Andong Dam, Jangheung Dam, Seongnam 1	Oct. 2006	15,473	9,689
Small-scale Hydropower 1	Daecheong, Juam, Dalbang, Seongnam 2	Feb. 2007	13,996	8,697
Sihwa Wind Power	Sihwa Wind Power Plant	Nov. 2007	6,293	4,013
Sum			558,462	337,839

\* CO<sub>2</sub> CONVERSION FACTOR: SIHWA TIDAL POWER 0.6214 TON/MWH, SMALL-SCALE HYDROPOWER 0.6262 TON/MWH, WIND POWER 0.6376 TON/MWH

# 1,190 thousand tons of CO<sub>2</sub> / year

Reduced amount of CO<sub>2</sub> through the development of new and renewable energy



OVERVIEW OF THE GYEONGIN WATERWAY PROJECT

WIDTH	LENGTH	FACILITIES	PROJECT COST
80m	18KM (NEWLY CONSTRUCTED: 3.8KM)	MAIN TRANSPORTATION PASSAGE, TERMINAL AND FLOODGATE	2.2458 TRILLION KRW

### GYEONGIN WATERWAY

K-water is behind the development of the environment-friendly Gyeongin Waterway, that contributes to prevention of recurring floods in Gulpocheon, Incheon, reduction of transportation costs through an enhanced transportation system with the continuous use of the canal, resolution of chronic traffic jams in the Gyeongin area, vitalization of the local economy, and reduction of greenhouse gas. The Gyeongin Waterway, a green new deal project with an investment of 2.2458 trillion KRW in the construction of a 18km-long main transportation passage and other facilities, starts from Gyeongseo-dong, Seo-gu, Incheon (the West Sea) and ends at Gaehwa-dong, Gangseo-gu, Seoul (Hangju Bridge). K-water operates a local council to collect the opinions of stakeholders such as experts and local communities, as well as an environmental impact analysis to minimize the impact on the environment.

### CONSTRUCTION OF SMALL AND MIDSIZED GREEN DAMS AND GUIDANCE ON THE 4 MAJOR RIVER MAINTENANCE PROJECTS

Since the scale and frequency of recent droughts and floods are on the rise, it is necessary to construct small and midsized dams as a fundamental

countermeasure. K-water is developing 5 small and midsized dams, including Buhang Dam, in an environmentally friendly way, and plans to construct 4 new dams, including Songriwon Dam, based on the agreement and cooperation of the local communities.

In addition, K-water joins the 4 major river maintenance project, a 14 trillion KRW state-run project by 2012 with reinforcement of river banks, maintenance of rivers, and construction of dams, and takes the initiative in activities such as establishment of the master plan, construction of new dams and flood control areas, and re-development of agricultural dam. for countermeasures against flood and drought caused by climate change. Through the development of water resources with the help of local communities, K-water contributes to sustainable growth of the local communities by securing future water resources.

## 5 dams

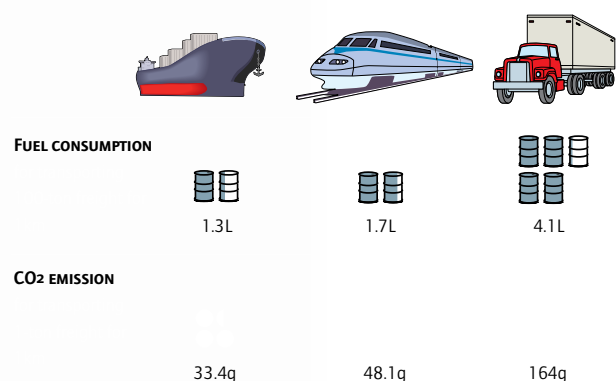
Green dams being constructed in 2008

## Focus

### CARBON REDUCTION OF THE GYEONGIN WATERWAY

A canal is an eco-friendly transportation route that contributes to the prevention of environmental pollution. A canal's environmental cost (e.g. air pollution) is only 1/14 of roads and 1/3 of railroads, and it is expected that the clean transportation will contribute to the improvement of air pollution in the Gyeongin area. When using the canal, it is estimated that 74,000 tons of CO<sub>2</sub> can be reduced a year for the next 30 years.

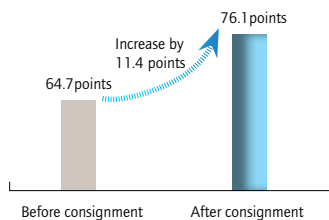
\* SOURCE: FEASIBILITY REPORT OF THE GYEONGIN CANAL (NETHERLANDS DHV, 2007)



# Successful Operation of Local Waterworks

K-water improves customer services and quality of tap water through consignment management of local waterworks that have poor finance and technology, contributing to the enhancement of the competitiveness of national water industry.

## • IMPROVEMENT OF CUSTOMER SATISFACTION •

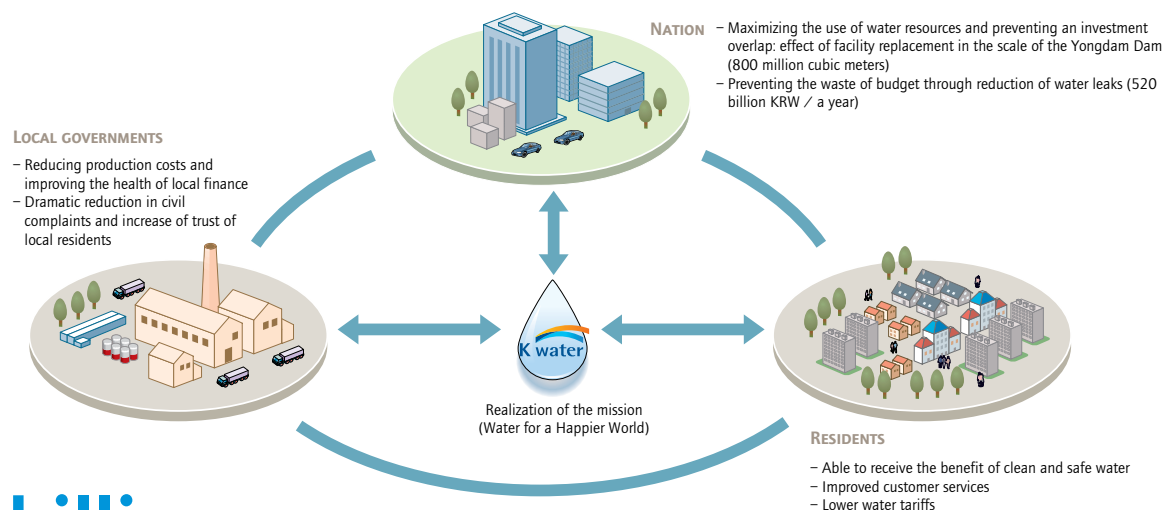


## EFFICIENT OPERATION OF LOCAL WATERWORKS

Domestic waterworks are operated in a two-tier system such as multi-regional (K-water) and local waterworks (164 local governments), and most dissatisfaction (rust water, water leaks, poor services) is caused by the services of local waterworks. However, most local waterworks have poor finance, technology and human resources, making it difficult to invest in facility improvement, which results in poor quality and services, in a vicious circle.

Through consignment management on local waterworks using multi-regional management and professionalism of K-water, we promote efficiency of domestic water business. Moreover, through of unification of metropolitan and local management, we are preventing duplication/overlapping investment and maximizing utilization of water resource.

## • EFFECTS OF LOCAL WATERWORKS •



# 7.6 billion

## KRW/year

Costs saved through the reduction of water leaks in local waterworks

# 15 units

Local waterworks managed by consignment (Mar. 2009)

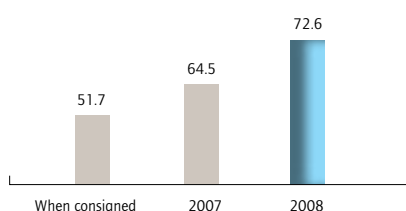
## PRESENT STATUS OF OPERATION IMPLEMENTATION

Starting from the launch of Nonsan Waterworks Service Center in April 2004, K-water has managed the overall water supply of 15 local waterworks (Jeongeup, Sacheon, Yecheon, Seosan, Cheonan <industrial water>, Goryeong, Geumsan, Dongducheon, Geoje, Yangju, Naju, Danyang, Paju, Hanpyeong) including the projects that has been transferred as of March 2009. K-water plans to invest 520.7 billion KRW for the next 20 ~ 30 years in the 13 local waterworks, including Nonsan, in order to maximize management efficiency by increasing the revenue water rate and reducing costs through the replacement of worn-out pipes, establishment of an IT-based integrated operational system, scientific management of the pipe network and other measures.

## OPERATIONAL PERFORMANCE OF LOCAL WATERWORKS

From the overview of the major performance of operations in cities such as Nonsan, Jeongeup, Sacheon, Yecheon, Seosan, Goryeong, Geumsan, and Dongducheon, that have been in operation for more than 1 year as of 2008, K-water conducted 25,000 leak recoveries in order to reduce the water leaks from worn-out pipelines and thus improve the overall efficiency. By implementing a systematic and strategic plan for improving the revenue water rate by replacing 426km of worn-out pipe lines and 50,000 water gauges, K-water increased the revenue water rate from 51.7% to 72.6%, reducing 17 million tons of water leaks and saving costs of 7.6 billion KRW.

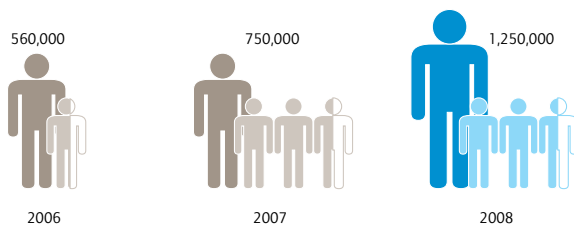
## • ANNUAL REVENUE WATER RATE (%) •



## FUTURE PLANS

Through continuous expansion of local waterworks, K-water will realize the efficient management of local waterworks, improve the competitiveness of the domestic water industry in preparation for the open water market, provide comprehensive water management service through integrated management of waterworks/sewage in connection with other sewage projects of K-water, and finally establish the foundation for the entry to the international market through the accumulation of domestic technologies related to waterworks and sewage.

### • EXPANSION OF POPULATION SUPPLIED BY LOCAL WATERWORKS (CUMULATIVE) •



**1,250,000** Persons,  
Population supplied by local waterworks (as of March 2009)

### DEVELOPMENT OF KEY TECHNOLOGIES FOR REDUCING WATER LEAKS

- ▶ Verification program for archiving the pipe network: Reduction of work hour (30 days to 1 day) (Patent pending)
- ▶ Selected model for a decompression valve with appropriate caliber: Maximized management of water pressure and stabilized water pipe lines
- ▶ Water pressure control model in the pipe network (K-Pressure): Applied to Goryeong local waterworks - Reduction of water leaks (800m<sup>3</sup>/day)

### APPLICATION OF STANDARDIZED AND NEW METHODS OF CONSTRUCTION

- ▶ Standardization of methods and procedures for water leak detection
- ▶ Standardization of water gauge selection and the water gauge chamber
- ▶ Application of methods for non-drilling pipe replacement
- ▶ Development and application of saddle ferrules that can be adjusted vertically

### • PROMOTION OF MID- AND LONG-TERM ROADMAP FOR INCREASING THE REVENUE WATER RATE OF LOCAL WATERWORKS •

#### Stage of Increasing the Revenue Water Rate ('04~'07)

- Commencement of consigned management
- Modernizing worn-out facilities
- Establishing a block system
- Replacing worn-out pipes

#### Stage of Expanding Technologies ('08~'09)

- Establishing the roadmap for core technologies
- Standardization/ systematization of operation
- Development/application of core technologies
- Technological support / Capacity building

#### Stage of Advancing the Management of Pipe Network ('10~)

- Implementation of real-time pipe network monitoring
- Development of the decision-making system for change and replacement
- Development of devices for reducing water leaks

## Best Practice

### SOLVING A 30-YEAR-OLD PROBLEM OF LOCAL WATERWORKS BY INVENTING AND EXPANDING EQUIPMENT FOR WATER PIPES

For the 5 years of consignment management on local waterworks, there have been many problems such as frequent construction to replace water pipe equipment caused by the use of existing equipment, residents' complaints caused by such construction, safety issues and inconvenience related to going down the manhole, etc. Through the analysis of these VOCs and activities of Communities of Practice, the Geumsan Local Waterworks Service Center developed a regulating valve that can be adjusted vertically without having to go down the manhole and a saddle ferrule that can be adjusted after being buried underground. As for the Geumsan Center that tentatively applied the valve, the costs were reduced by 3.65 million KRW, and it is expected that the cost reduction will increase to 12 billion KRW when applied nationwide.

CATEGORY	OLD PRODUCT	IMPROVED PRODUCT
Vertically adjustable saddle ferrule		
Vertically adjustable regulating valve		



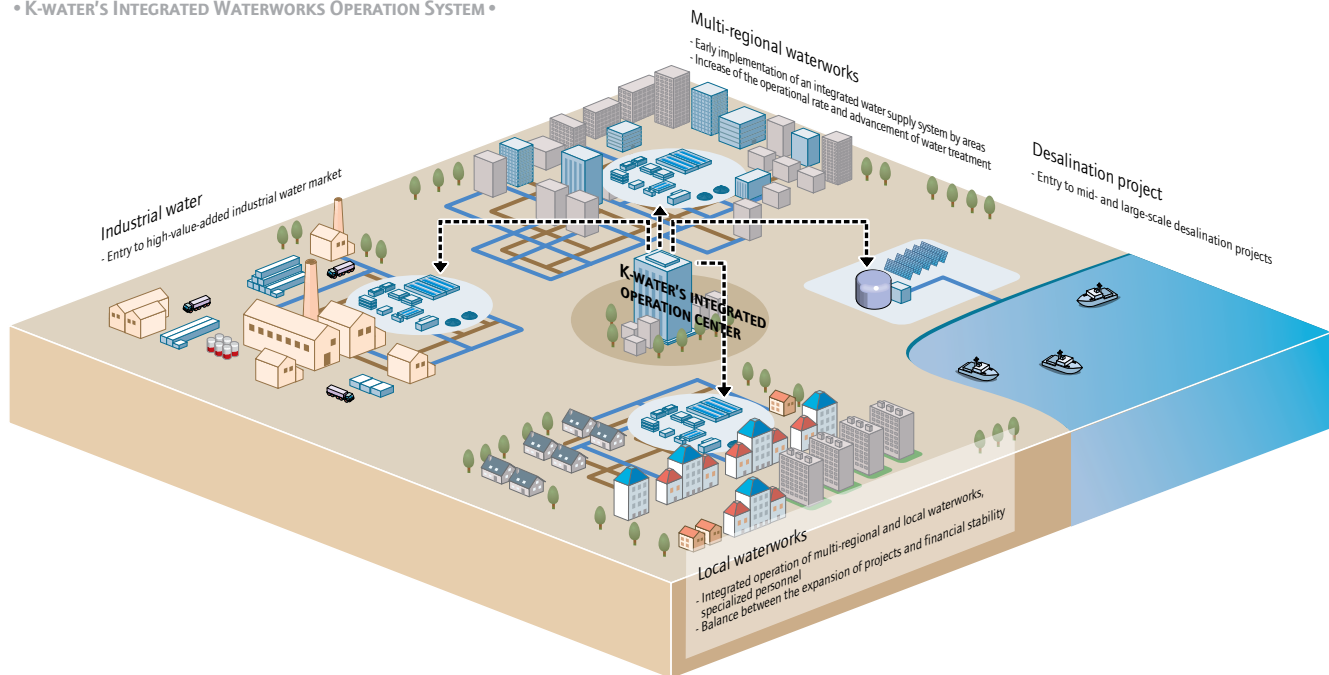
# Integrated Management of Waterworks

K-water established an integrated waterworks operation system for the efficient utilization of water resources, resolution of imbalance in water supply in different areas, and stabilization of water supply through connected utilization.

## INTEGRATED WATERWORKS OPERATION SYSTEM

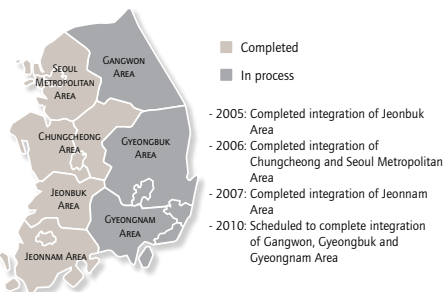
In order to efficiently utilize the limited water resources as an attempt to meet with the demands and trends of the generation, resolve the imbalance in water supply in different areas, consider a rational operational direction of multi-regional waterworks and industrial water through the analysis of population and demand for industrial water in different areas, and stabilize the water supply through connected utilization, K-water divided the nation into 7 areas and established an integrated waterworks operation system for scattered waterworks in those areas so that they can be centrally managed by the integrated operation system. Currently, K-water has successfully integrated 4 areas (Seoul Metropolitan Area/Chungcheong Area/Jeonbuk Area/Jeonnam Area) and aims to complete the process of integrating other 3 areas (Gangwon Area/Gyeongbuk Area/Gyeongnam Area) by 2010 so as to establish the foundation for integrated nationwide operation of multi-regional waterworks. In addition, K-water pursues integrated management of multi-regional and local waterworks, and plans to build an integrated infrastructure in the future that enables integrated management of all water facilities, including sewage treatment systems within regional boundaries.

### • K-WATER'S INTEGRATED WATERWORKS OPERATION SYSTEM •



## 4 Regions

### K-water's Integrated Areas for Waterworks



## PRESENT STATUS OF INTEGRATED WATERWORKS MANAGEMENT

K-water made it possible to automatically operate a unit-based process by automating water intake plants and pumping plants and improving the subsidiary facilities of water purification plants. In addition, K-water established an integrated operation center that enables a remote-controllable operation of all facilities within a region such as water purification plants, water intake plants, pumping plants, and water conduction/transmission/distribution/supply pipe lines, minimizing the operational personnel so as to increase the operational efficiency and enhancing the technological competitiveness for the future water market.

Particularly for the Seoul Metropolitan Area, K-water successfully established the world's largest integrated management system that can operate 23 water facilities (capacity 9.305 million /day) in one place.

# Development of Environment-friendly Futuristic City and Industrial Complexes

K-water is establishing lively, environment-friendly high-tech multi-functional cities and competitive national industrial complexes.

## NATURE IN A CITY, ANSAN AND SIHWA NEW TOWN

Started in 1977 as a project to decentralize the population and industry concentrated around the capital area, the development projects for Ansan and Sihwa New Town completed the first phase of the Ansan Project (49.75 km<sup>2</sup>) in 1993, constructing Banweol Industrial Complex and residential areas accommodating 300,000 people, and is scheduled to complete the second phase for Ansan (9.47 km<sup>2</sup>) and the first phase for Sihwa (57.11 km<sup>2</sup>) in 2009. These development projects contributed to stabilized housing and balanced growth by dispersing the overcrowded factories around the capital area. Ansan New Town is Korea's first planned city, with pleasant living conditions such as parks, and road networks with 63% afforestation rate, the highest among cities in Korea. Lake Park in Ansan New Town is especially appreciated by local residents as a place of leisure.

## ECO-FRIENDLY FUTURISTIC CITY, SIHWA MTV AND SONGSAN GREEN CITY

For the environmentally friendly utilization of the tideland created by the tide embankment of Sihwa Lake, Sihwa MTV (Multi-techno Valley) is being built in the northern tideland and Songsan Green City is under construction in the southern tideland. Sihwa MTV will be created as an eco-friendly oceanic high-tech multifunctional industrial complex (9.26km<sup>2</sup>) by attracting venture industries to supplement the weak functions of the existing Sihwa/Banweol industrial complexes in addition to the improvement of water quality in Sihwa Lake. For the efficient utilization of the southern tideland, Songsan Green City is also planned

as an eco- friendly futuristic city where the nature and people can co-exist by creating a multifunctional city with the capacity of accommodating 150,000 people in 54.69 km<sup>2</sup> by 2022, where the natural environment can be balanced with tourism, leisure and residence, and thus establishing an ecological network over the entire city.

## A BRIDGE FOR THE NATIONAL ECONOMY, GUMI/YEOSU NATIONAL INDUSTRIAL COMPLEX

Gumi and Yeosu National Industrial Complexes, planned in accordance with the government's key industry promotion policy, are being developed as eco-friendly complexes balanced with nature. Through this, Gumi National Industrial Complex has grown as a high-value- added digital electronic business cluster with 5.7km<sup>2</sup> completed by 1995 and 6.8km<sup>2</sup> scheduled to be completed by 2009. The municipal natural park (Haemaru Park) within the 4th district of the Gumi Complex is expected to provide a place of rest for the residents. In addition, the Nakdong River, flowing through the complex, provides the optimal conditions as an industrial complex with the supply of more than 330,000 tons of water from the source. Yeosu National Industrial Complex, a large-scale petrochemical complex, started in 1973 and is scheduled to be completed by 2010. Part of the complex (11.3km<sup>2</sup>) was completed in 2000, and another 7.8km<sup>2</sup> will be completed by 2010. This largest petrochemical complex in Korea has contributed to national competitiveness and balanced regional growth.

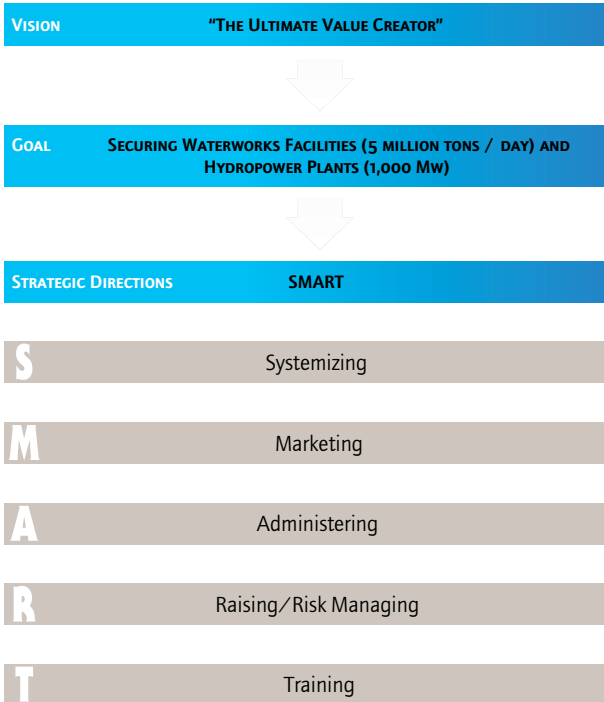


Lake Park in Ansan New Town

# Pioneering the International Water Market

Based on our advanced experiences and technologies, K-water will do its best to share clean water with every part of the world that suffers from water problems.

## • STRATEGY FOR INTERNATIONAL PROJECTS (SMART) •



## TREND OF THE INTERNATIONAL WATER MARKET

While the international water market is expected to expand from a market for 700 million people as of 2007 to a bigger market for 1.15 billion people by 2015, the competition over the international market is becoming fiercer day by day. Early in 2000, the water market was dominated by French and British water companies with more than 70% of the market share. However, the recent worldwide competition is becoming harsher with other European companies from Germany, Spain, Italy, and others coming into the market. Under these circumstances, K-water is leading the generation of national wealth through its entry to the water market based on the technologies and credits accumulated over 40 years, as well as its internal/external network.

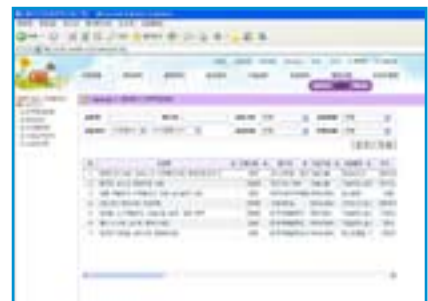
## ESTABLISHMENT OF BUSINESS STRATEGY (SMART)

Through establishing strategic international posts, K-water aims to respond to rapidly changing market environments. K-water also established a promotion strategy for maximum earnings by entering the development-centric investment business and technology services through securing strategic posts and strengthening sales capacity overseas, and in a long-term perspective, acquiring and/or purchasing shares of foreign water companies. This strategy suggests various strategic directions and action plans regarding the business operational system with the goal of achieving 40 billion KRW sales by 2015 and acquiring the capacity of 5 million tons/day for waterworks and 1,000MW for power plants in addition to the human resources training.

## PREPARING THE FOUNDATION FOR SYSTEMATIC BUSINESS OPERATION

By managing the database of various data and human resources related to international projects, K-water has developed and utilizes an integrated management system of international projects for the purpose of increasing the capability of taking new foreign investment projects and selling technologies to other countries. Through this, the efficiency of business management is increased, enabling the database for reports. Future projects can thus be taken, contributing to the systematic management of human resources related to international projects as well as career development.

## • INTEGRATED MANAGEMENT SYSTEM OF INTERNATIONAL PROJECTS •



### DIVERSIFICATION OF THE FIELD AND AREAS OF BUSINESS

Our international projects, such as conducting feasibility studies, designing execution, supervising construction, and other projects that for the development of potable water in Kien Giang, Vietnam; small-scale hydropower plants in Istalif, Afghanistan; waterworks/sewage in Naalai Hgu, Mongolia; improvement on the Malinao Dam in Philippines; flood control in Pampanga, Philippines; expansion of the water supply in Crua Debuke, Haiti, not only strengthen K-water's business capabilities but also contribute to the diversification of the field of business. Thanks to such efforts, K-water has successfully operated 10 water resources projects, 12 waterworks projects, 8 hydropower projects and 1 sewage project. In addition, K-water is expanding its efforts for international projects by participating in the sewage project in Muharak, Bahrain and the project for a waterworks master plan in Azerbaijan.

### INCREASED EFFORTS FOR MARKETING

K-water promoted its role and vision to the world by posting promotional materials at the 'Asia 2008 Water & Hydro Symposium' that was held for the purpose of contributing to economic growth and international cooperation through the development of water resources in Asia, an area with limitless potential. In addition, K-water also introduced its role and capabilities at 'World Urban Forum IV' held by 'UN-HABITAT' under the theme of 'Cooperation of K-water and local governments in the area of water'.

Moreover, to expand the strategic ties with foreign governmental bodies and local companies, K-water signed the memorandum of understanding

(MOU) for mutual cooperation in such projects as the feasibility study on the re-development of existing dams and diagnosis of related facilities with Congo's George Forrest International; the feasibility study on the waterworks with Luang Prabang, Laos; a supervision service to the hydropower plants in Chamelia, Nepal with N.E. Group; and the feasibility study on waterworks/sewage in Naalai Hgu with Mongolia's Construction/City Development Department.

### WORLD'S BEST COMPREHENSIVE WATER SERVICE COMPANY

As a professional organization representing Korea's water services, K-water will expand the opportunities for Korean private companies to enter the international market and thus contribute to the generation of national wealth through K-water's entry to the international market as a public corporation, which is enabled by the government's policy of vitalizing public organizations' international advancement, with K-water's technologies and capabilities for international projects accumulated through 31 projects in 18 countries. In addition, K-water will do its best to emerge as one of the world's best comprehensive water service companies by realizing the corporate mission (Water for a Happier World) and fulfilling its social responsibility (Improvement of welfare by supplying clean water).

## 11 Countries

K-water's 13 International Projects (as of March 2009)

## Best Practice

### INTERNATIONAL INVESTMENT PROJECT ON PATRIND HYDROPOWER IN PAKISTAN

K-water is currently operating an investment project on the hydropower of 150Mw (enough to supply 200,000 households) in Pakistan, which suffers severely from electricity shortage. The total cost for the project is 331 million USD, and K-water plans to operate the facility for the next 30 years. The finance will be acquired through project financing with domestic and international banking facilities such as ADB, the Export-Import Bank of Korea, and others. This project is the first international project of Korea's public corporation in the area of hydropower, and promotes the generation of national wealth over the entire process of investment, construction, operation and management through the joint cooperation with private companies. In the future, K-water plans to actively take part in other international projects such as the waterworks project in Islamabad, Pakistan in addition to projects in Laos, Nepal, Philippines, and other countries.





# Entry to Industrial Water Business

K-water is generating a new growth driver by entering the high-value-added market for industrial water that requires advanced technologies.

## FIRST YEAR TO PIONEER THE HIGH-VALUE-ADDED MARKET FOR INDUSTRIAL WATER

Multinational water companies, such as Veolia, operate 6 businesses for industrial water in Korea, including Hynix. According to the recent changes in the economic conditions, the domestic management of industrial water is converting to the outsourcing of minor fields. K-water signed a contract for consignment management of industrial water with Hyundai Steel Co. in February, 2009 for the operation and management of a production facility (supply and drainage) of industrial water at the integrated steel mill in Dangjin. With the contract, K-water will take full responsibility of managing the water supply and drainage facility of Hyundai Steel Co. for the next 15 years, supplying high-quality industrial water in an economic and stable way.

## OVERVIEW OF THE CONSIGNMENT MANAGEMENT CONTRACT

- Operation: Long-term consignment management (Owned by Hyundai, Operated by K-water)
- Target facility: Water supply and drainage facility (192,000 tons/day, Reverse Osmosis process)
- Operating term: May 1, 2009 ~ December 31, 2023 (14 years 8 months)
- Scope of business: Operation and maintenance of facilities (Costs for repair and extension of the facilities borne by Hyundai)

With this operation/management project for the industrial water facility, Hyundai Steel Co. is enabled to secure the stabilized water supply and safety in water quality through the responsible management of a professional public corporation specializing in water. Particularly, K-water's responsible management has ensured the labor union's agreement to prevent the problem of a facility shutdown.


K-water made its first step into the consignment management business, thus creating a new growth driver, and established a foundation for international business by operating the world's largest reverse osmosis facility. Along with this, K-water will continue its efforts to promote the domestic water industry in the competition with multinational companies by securing technological capacities for the next generation of water treatment in the field of industrial water and leading the future in water treatment technology.

**192,000**  
**m<sup>3</sup> / day**

The World's Largest Reverse Osmosis  
Facility



Contract for Consignment Management of a Water Supply and Drainage Facility with Hyundai Steel Co. (Feb. 2009)

A photograph of a pond with a wooden boardwalk. The foreground is filled with large, green lotus leaves. The boardwalk, made of wooden planks and railings, leads from the bottom right towards the center of the pond. In the background, there are green reeds, a small building, and a clear blue sky.

The world is facing drought, flood and other calamities caused by global warming and climate changes. K-water is expanding its efforts to strengthen the countermeasures toward climate change in environmental, social and economic aspects through the stabilized water management, the establishment of low-carbon, eco-friendly infrastructure and the promotion of projects for new and renewable energy enabled by acquiring sustainable water resources.

## Challenges to Environment

- System of Environmental Management
- Green Network
- Countermeasures to the Climate Change
- Development of Environment-friendly Water Resources
- Protection of Bio-diversity
- Water Quality Management
- Clean Management of Water Sources



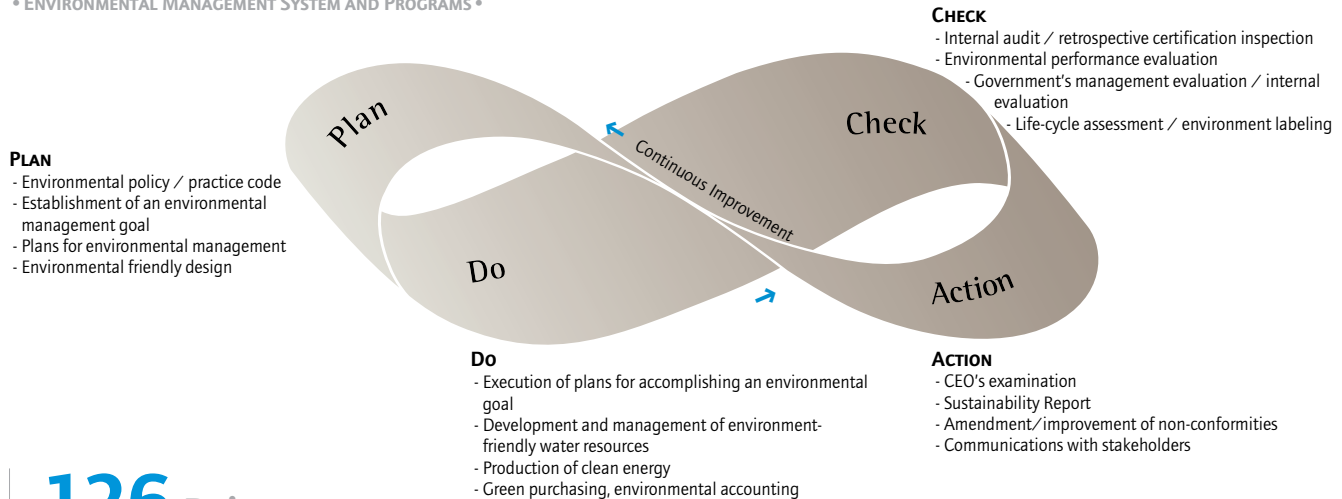
# System of Environmental Management

K-water generates a new environmental value by increasing environmental performance and reducing potential environmental threats through the operation of various environmental management programs.

## ENVIRONMENTAL MANAGEMENT SYSTEM

After the first certification of the environmental management system (ISO 14001) in October 2002, K-water has verified the efficiency of its environmental management system with a renewal inspection every three years. K-water's ISO 9001 and ISO 14001 are reflected in the corporate regulations with each division conducting an assessment of an environmental impact, establishment of a goal, an environmental inspection and performance evaluation in accordance with the procedures of environmental management stipulated in those regulations. In 2008, K-water reflected performance indexes(PI) in the internal evaluation to adopt ISO 24500 (International standards for waterworks/sewage services), and continues to strengthen the foundation for global environmental management through ISO/CD 26000 (Standards for corporate social responsibilities) in 2009.

### • ENVIRONMENTAL MANAGEMENT SYSTEM AND PROGRAMS •



**126 Points**

Improvement Index of Environmental Performance Evaluation

## Best Practice

### WINNING THE GRAND PRIZE FOR ENVIRONMENTAL MANAGEMENT IN 2009

In January 2009, K-water won the Grand Prize of Korea's Sustainable Creative Management Award 2009 (in environmental management), the most honorable award given to a corporation that leads the future of Korea with the global competitiveness. Hosted by the Ministry of Knowledge Economy and the Korean National Commission on Sustainable Development, the award was given to K-water, the first public corporation introducing environmental management in 2002, for its efforts in leading environmental management in the public sector by operating various environmental management programs such as LCA and EPE and for its contribution to the national economic development through eco-friendly water management.

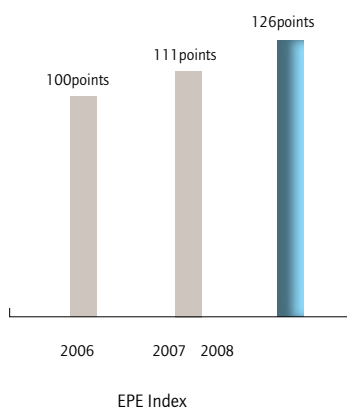


### ENVIRONMENTAL AUDIT

K-water conducts an annual environmental audit for each business unit in order to inspect and improve environmental management system. After the internal audit for all divisions, K-water also conducts an inspection on the overall environmental management system that includes the environmental management process, education, responsive activities against accidents, etc. for representative worksites of each business field that are randomly selected by an external certification organization. To make the environmental management immanent and to strengthen the capacity of certifying the internal management quality, K-water has trained internationally certified ISO auditors from 2007 and 34 experts at quality/environmental management so far. In 2008, 68 cases of non-conformity in the internal audit and 6 cases in the external audit were discovered and corrected accordingly at the managerial level to prevent them from re-occurring.

### ENVIRONMENTAL PERFORMANCE EVALUATION (EPE)

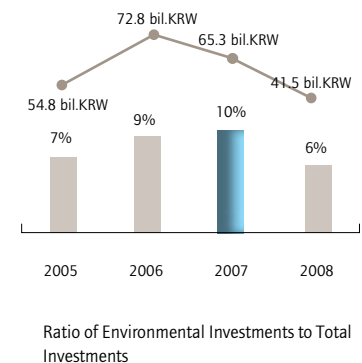
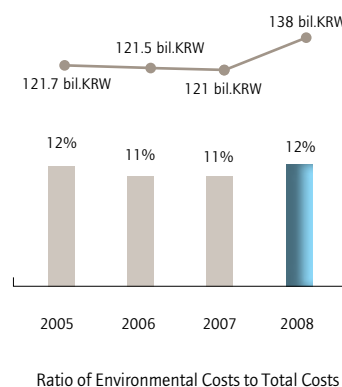
For the systematic management of the environmental outcome that is achieved through environmental management activities, Environmental Performance Evaluation Program based on ISO 14031 has been introduced. From 2006, after the project of establishing a computerized system for EPE was completed, the management of environmental performance and internal assessment have been conducted (5%) based on the computerized system. In addition, the patent on the computerized system for the environmental performance evaluation was acquired in January 2007 for the first time in Korea. In order to identify the comparative improvement of its environmental performance, K-water adopted EPE indexes and reflects them in the BSC strategic execution index. The EPE index in 2008 was 126, showing that the environmental performance has been improved by 26% compared to 2006.



### CALCULATION OF ENVIRONMENTAL COSTS

In order to measure and appropriately distributed the environmental costs and thus increase the efficiency of environmental investments and its performance, K-water adopted environmental accounting as a strategic tool, supporting rational managerial decision making and providing transparent information to stakeholders. K-water prepared its own concept and standards for appropriate environmental costs, calculating the annual environmental costs and environmental investments from 2000. For more systematic operation of the results of the environmental accounting, K-water operates a computerized system of management accounting, utilizing the calculated environmental accounting information for the new future environmental investments and the managerial decisions on budgets for the environmental capital. The environmental costs for 2008 were 138 billion KRW, taking up 12% of business costs. 41.5 billion KRW, which is 6% of the total investments, was for the environmental investments and was intensively invested on the prevention of environmental pollution and treatment. The reason for the reduced environmental investments compared to 2007 is because the investment fund was not administered for the waterworks field due to the delayed construction of the 1st phase multi-regional waterworks facilities in the capital area.

**41.5 billion KRW**  
Environmental Investments in 2008

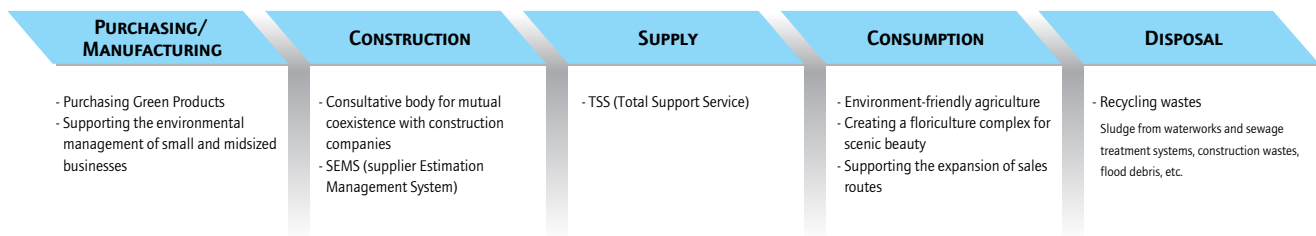


# Green Network

K-water strengthens its infrastructure of environmental management for the mutual growth with stakeholders and realizes an environment-friendly supply network.

From purchasing to waste treatment, K-water secures environmental soundness by leading mutual growth with partner companies through the management of an environment-friendly supply network that considers the stakeholders in the whole process of the supply network.

## • K-WATER'S MANAGEMENT OF AN ENVIRONMENT-FRIENDLY SUPPLY NETWORK BY STAKEHOLDERS •



### GREEN PURCHASING

For the reinforced practice of environmental management in the stage of production and consumption, K-water adopted the green purchasing system in 2002, and is expanding the green purchasing through continuous improvements on the operational and purchasing system. K-water manages environment-friendly products with the Energy Recycling Label, EDPs and energy efficient products as green products. The green purchasing in 2008 was 6.4 billion KRW, representing 21% of all products purchased. K-water expands its efforts of purchasing energy saving office supplies and electronic appliances in order to reduce indirect energy consumption, and purchased energy efficient products worth 75 million KRW in 2008.

**6.4 billion**  
KRW,  
Green Products Purchased in 2008

**1.172 million m<sup>2</sup>,**  
Area Adjacent to Dams Converted to  
Eco-friendly Agriculture in 2008

### MUTUAL COOPERATION WITH CONSTRUCTION COMPANIES

In order to establish and expand mutually cooperative partnerships with construction companies, K-water has established a mutually cooperative consultative body in which the ordering body, undertaker and subcontractors participate. A communicative channel known as "Committee for Mutual Cooperation" is an attempt to resolve problems occurring between the undertaker and subcontractors, and improve the operational process. Starting from a demonstrative project in 2006, the committee has continued to expand to include 38 construction projects in 2008 (e.g. dams and waterworks). The committee also works towards creating a sound subcontracting culture for successful mutual cooperation with small and mid-sized construction enterprises by distributing an operational manual for mutual cooperation in the construction industry, establishing a communication system through a homepage for mutual cooperation, and supporting partner companies with technology.

### SUPPORT FOR ECO-FRIENDLY AGRICULTURE IN AREAS ADJACENT TO DAMS

Conversion to eco-friendly agriculture is a project that induces residents cultivating flood control reservoirs to apply eco-friendly agricultural techniques such as organic farming, and non-pesticide cultivation. K-water provides support such as environment-friendly agricultural resources, natural manure, inspection of remaining pesticides on the soil or crops, examination of heavy metals, acquisition of certification for the environment-friendly farm produce (non-pesticide or low-pesticide), in order to acquire the objective credibility.

The conversion to eco-friendly agriculture is expected to protect the water quality of dams as the water source and increase the earnings of local residents by selling environment-friendly crops, which contributes to making dams a beloved facility of local residents and the whole nation.

## • STATUS OF ECO-FRIENDLY AGRICULTURE AND FUTURE PLANS •

Year	Converted Area
2006	1,750,000m <sup>2</sup>
2007	1,864,000m <sup>2</sup>
2008	1,172,000m <sup>2</sup>
~2011	3,640,000m <sup>2</sup>
Total	8,426,000m <sup>2</sup>



### SUPPORTING THE ESTABLISHMENT OF A VOLUNTARY ENVIRONMENTAL MANAGEMENT SYSTEM FOR PARTNER COMPANIES

The environmental responsibility of a corporation has already expanded from the corporate responsibility itself to the whole process of product manufacturing. The voluntary environmental management system of K-water's partner companies and their clean production system strengthen the capacities of small and mid-sized businesses for environmental management, thus leading to the enhanced competitiveness of K-water, the administering organization. In order for partner companies (small and mid-sized) that have poor human resources, information and infrastructure to develop as an environmentally friendly company, K-water provides various environmental management programs such as education on environmental management for the establishment of ISO 14001, certification screening, support for certification fees, and other help.

Through this supporting project for environmental management, each partner company could bring out the establishment of a tailored environmental management system, law-observation process, acquisition of the capabilities for crisis management, construction of the infrastructure for environmental management, improvement on environment-friendly products and services, enhanced VOC management, establishment of a clean production and consumption system, and the others. These accomplishments led to various benefits of environmental

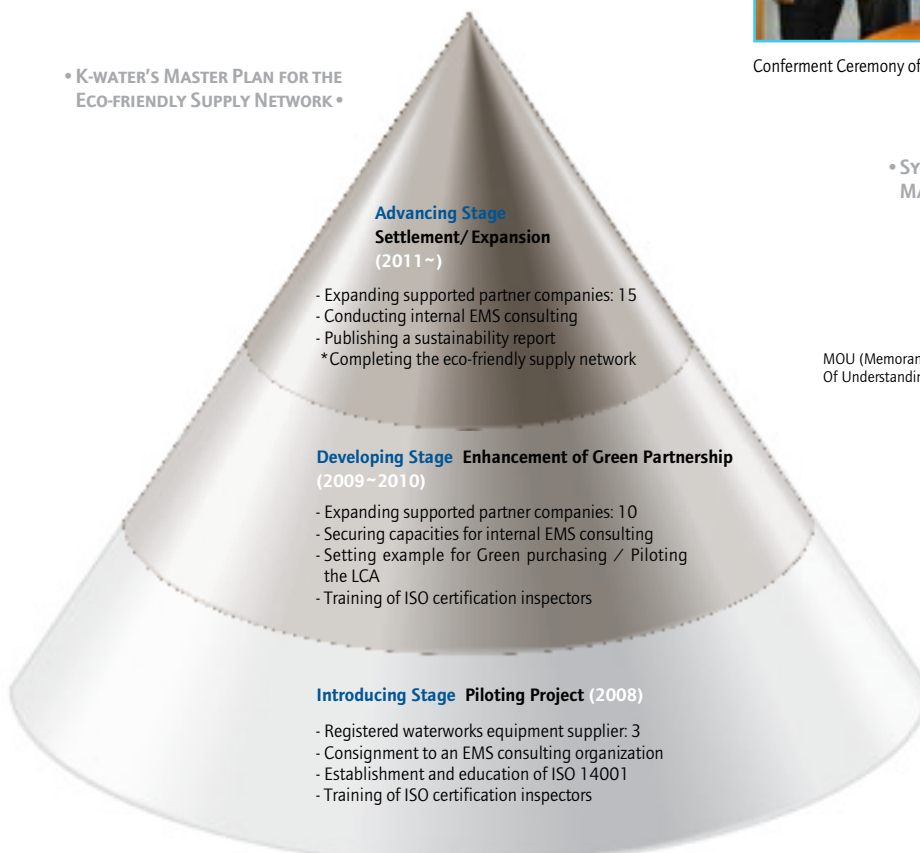
management including improved productivity, increased sales enabled by enhanced customer satisfaction, cost-cutting achieved by reduced environmental costs, and more.

K-water will continue to further its overall environmental capacities by establishing an eco-friendly supply network and fulfilling the corporate social responsibilities as a combined effort with partner companies. K-water will also continue to establish ISO 14001, the environmental management system for its partner companies, conduct the life-cycle assessment, adopt the green purchasing and expand the environmental management program for the publication of the sustainability report, thus enhancing its environmental soundness by jointly fulfilling corporate social responsibilities with the partner companies through the acquisition of the foundation for the green growth over the entire supply network and completion of the environment-friendly supply network.

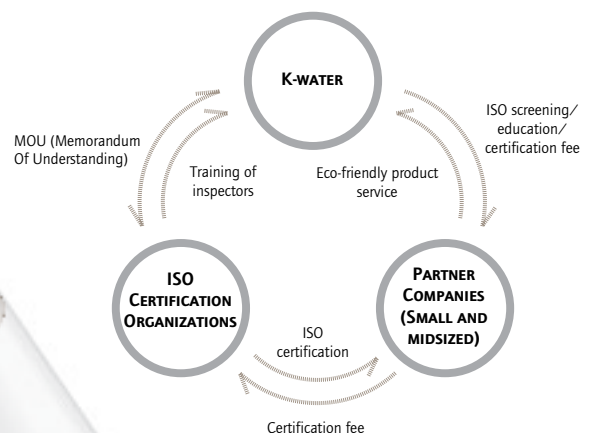


Conferment Ceremony of the ISO 14001 Certificate to Partner Companies (December 16, 2008)

#### • K-WATER'S MASTER PLAN FOR THE ECO-FRIENDLY SUPPLY NETWORK •



#### • SYSTEM OF THE SUPPORTIVE PROJECT FOR ENVIRONMENTAL MANAGEMENT OF SMALL AND MIDSIZED ENTERPRISES •



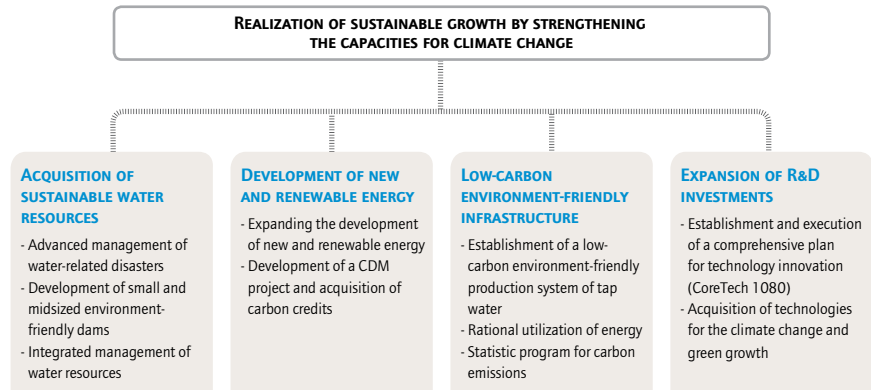
# Countermeasures to the Climate Change

K-water pursues low-carbon sustainable growth for the safety of people's lives from the climate change and the virtuous circle of economic growth and environmental improvements.

## STRENGTHENING STRATEGIC COUNTERMEASURES CAPACITIES FOR THE CLIMATE CHANGE

The world is now facing an environmental crisis symbolized by the climate change and, at the same time, an energy/resource crisis shown by the high oil prices. Korea is also experiencing severe meteorological phenomena such as a heat wave, drought, and flood, caused by global warming. Advanced and developing countries are expected to join the movement of reducing greenhouse gas in accordance with the Bali Roadmap (December 2007), and Korea will be included in the group that should reduce greenhouse gas emission from 2013.

K-water recognizes climate change as a new opportunity in corporate management, and makes every effort to strengthen its capacities for the climate change and integrated responses through strategic approaches to the acquisition of sustainable water resources, integrated water management, establishment of low-carbon environment-friendly infrastructure, and development of new and renewable energy.



## EFFORTS TO REDUCE GREENHOUSE GAS EMISSIONS

Although K-water does not have a direct connection to greenhouse gas emissions, due to its role as a water corporation, there is still an indirect connection to greenhouse gas emissions because of the use of energy in the process of operating water management infrastructural facilities. An increased emission within the range of improved energy and carbon efficiency is more positive than the uniform reduction of the emissions, so K-water manages the emissions of greenhouse gas by managing the carbon intensity index that utilizes the Carbon Cleanliness (total emissions of greenhouse gas / energy usage) and the Carbon Efficiency (total emissions of greenhouse gas / revenue).

K-water's Carbon Cleanliness in 2008 was 2.08, similar to the previous year. However, the value is lower than the domestic average. This value indicates that 2.08CO<sub>2</sub>/ton of greenhouse gas was generated when consuming 1TOE. The Carbon Cleanliness is an indicator that shows how much carbon is emitted after energy consumption. A higher value of the Carbon Cleanliness indicates more carbon emitted, thus escalating global warming. The Carbon Efficiency in 2008 was 23.11, an 11% decrease compared to the previous year, meaning 23.11 CO<sub>2</sub>/ton of greenhouse gas was generated to make earnings worth 100 million KRW.

The total emissions of greenhouse gas in 2008 were 472,000 CO<sub>2</sub>/ton, a 0.4% increase from that of 2007. The relatively small increase of the greenhouse gas emissions considering the previous year's business activities such as increased revenue was made possible due to various energy saving activities in contrast to the increased use of electricity for the increased water supply. The direct emissions of greenhouse gas caused by the use of diesel, gas, and other fuel sources were 3,496 CO<sub>2</sub>/ton, and the indirect emissions of greenhouse gas caused by the use of electricity, etc. were 468.8 CO<sub>2</sub>/ton.

K-water's Carbon Efficiency was 23.11, an 11% decrease from 2007.

Since the main source of K-water's greenhouse gas emissions is energy use for the operation of waterworks facilities, K-water monitors the emissions using the EPE system and contributes to enhanced competitiveness by running energy saving programs in each possible area, reducing greenhouse gas and thus improving the air quality in addition to lowering the production costs for tap water. For the conversion to a highly efficient energy consumption system, K-water evaluates energy efficiency from the inspecting and designing stage of facilities, thus tightening the energy management of existing facilities. Particularly, K-water strictly manages the electricity in units to reduce greenhouse gas from waterworks, the main source of its carbon emissions.

#### DEVELOPMENT OF GREEN TECHNOLOGY AND FUTURE PLANS

For green growth and the reduction of greenhouse gas, K-water plans to invest 16 billion KRW by 2013 in securing the key technologies required for the optimal utilization of water resources and facilities that K-water manages. K-water secures an energy-saving production and supply system through the development of new energy, the value of which is maximized by adding additional functions to the basic functions of the existing business as well as the optimized operation of dams and waterworks, and improvements on energy-consuming facilities. Currently, K-water is undertaking 12 key technological tasks including the development of a practical water current hydraulic turbine.

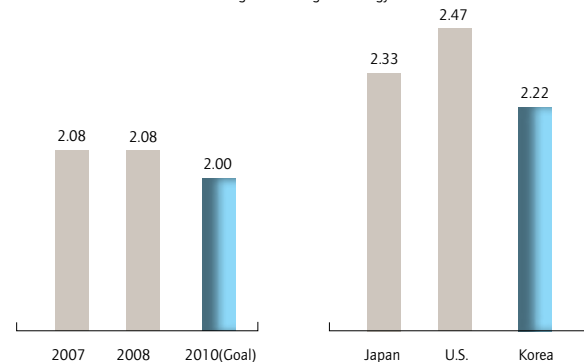
The future plans of K-water include the establishment of a low-carbon tap water production system through the certification for Environmental Declaration of Products and low carbon certification, advancement of the EPE system for the statistics of greenhouse gas emissions, verification of greenhouse gas inventory conducted by a professional organization, establishment of a goal to voluntarily reduce the greenhouse gas through a project estimating the potential reduction by divisions. All these efficient carbon reduction programs suitable for K-water are part of its corporate efforts to respond to climate change.

#### • DEVELOPMENT PROJECT FOR GREEN TECHNOLOGIES •

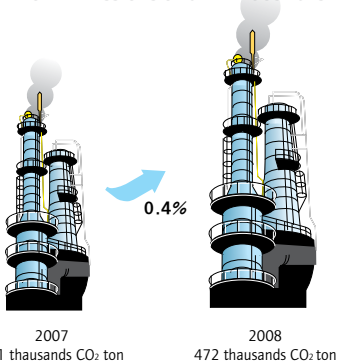
<b>SMALL-SCALE HYDROPOWER</b>	<ul style="list-style-type: none"> <li>- A practical water current hydraulic turbine</li> <li>- Technology for evaluating the performance of small-scale hydropower plants</li> </ul>
<b>PHOTOVOLTAICS</b>	<ul style="list-style-type: none"> <li>- Commercialization of application technologies of photovoltaic power generation above the water level</li> <li>- Development of technologies for optimal design of photovoltaic power generation at waterworks</li> </ul>
<b>AIR-CONDITIONING AND HEATING USING WATER THERMAL ENERGY</b>	<ul style="list-style-type: none"> <li>- Research on the application of the geothermal heat pump system using water pipes</li> <li>- Supply of air-conditioning and heating using water thermal energy from the bottom of dams</li> <li>- Supply of air-conditioning and heating using oceanic water thermal energy</li> </ul>
<b>INCREASING EFFICIENCY OF ENERGY USE</b>	<ul style="list-style-type: none"> <li>- Development of technologies for design and performance improvements through the current analysis of a hydraulic turbine</li> <li>- Development of technologies for design/operation of a pumping system</li> <li>- Securing operational/management technologies for tidal power plants</li> <li>- Development of technologies for energy recycling without using waterworks</li> <li>- Development of techniques for status evaluation for the purpose of replacement of worn-out pipes</li> </ul>

#### • K-WATER'S CARBON CLEANLINESS (CO<sub>2</sub> / TON) •

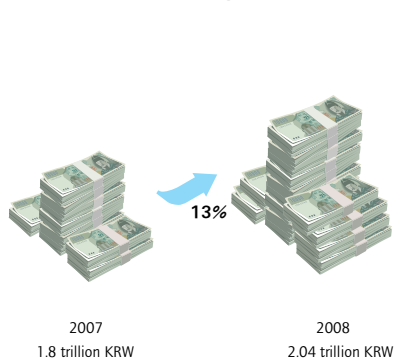
Carbon Cleanliness = Total emissions of greenhouse gas / energy use



#### • TOTAL EMISSIONS OF GREENHOUSE GAS •

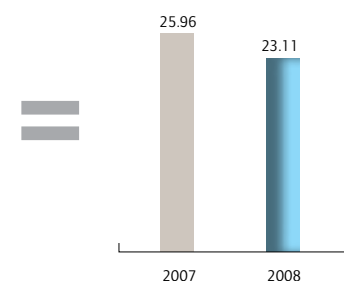


#### • REVENUE •



#### • CARBON EFFICIENCY (CO<sub>2</sub> TON / KRW100 MN) •

Carbon Efficiency =  $\frac{\text{Total emissions of greenhouse gas}}{\text{revenue}}$



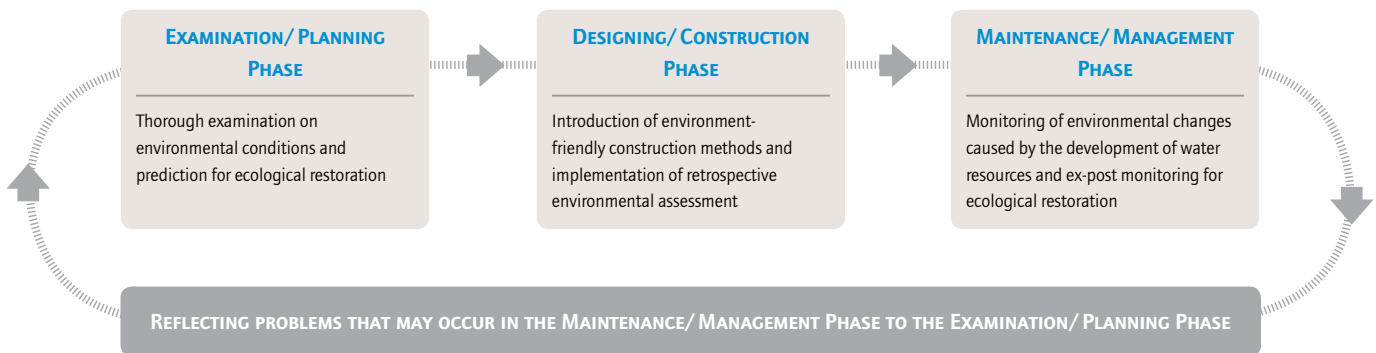
# Development of Environment-friendly Water Resources

K-water's development projects observe environment-friendly design guidelines, minimizing environmental impact and creating natural environment where life can breathe.

## OPERATION OF A DEVELOPMENT SYSTEM FOR ENVIRONMENT-FRIENDLY WATER RESOURCES

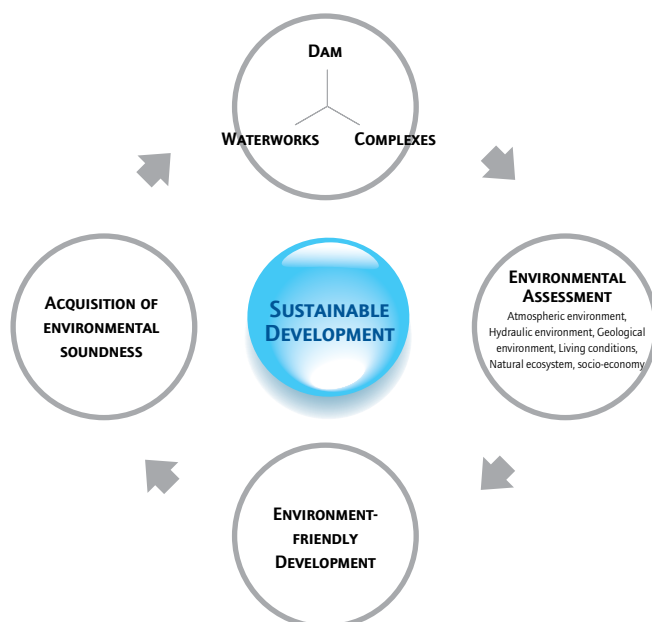
K-water operates a development system for environment-friendly water resources in order to minimize the environmental impact caused by the acquisition of water resources, maximize the utilization of the natural resources, preserve the nearby ecosystem, and best considers the social and cultural particularity. All development projects of K-water strictly observe environment-friendly design guidelines to minimize environmental impact and create a natural environment where life can breathe.

### • DEVELOPMENT SYSTEM FOR ENVIRONMENT-FRIENDLY WATER RESOURCES •



## THOROUGH ENVIRONMENTAL ASSESSMENT

K-water conducts a substantial strategic environmental assessment in the planning phase of water resources development, an ex-ante environmental examination that deliberates the appropriateness of the project and feasibility of the site, and an assessment of the environmental impact that establishes the reduction policy for large-scale development projects, endeavoring to realize a strategic water resources development in which stakeholders democratically participate, and the values of development and environment co-exist.



## ENVIRONMENTAL ASSESSMENT

### STRATEGIC ENVIRONMENTAL ASSESSMENT

- Determines the environmental feasibility of the project in the drafting phase of a policy

### EX-ANTE ENVIRONMENTAL EXAMINATION

- Deliberates the appropriateness of the project and feasibility of the site, Establishes a reduction plan (for a small-scale development project)

### ASSESSMENT OF THE ENVIRONMENTAL IMPACT

- Establishes a reduction plan (for a large-scale development project)



### INTRODUCTION OF ECO-FRIENDLY CONSTRUCTION METHODS AND FACILITIES

In addition to the treatment of non-point source pollution, K-water secures a secondary buffer by installing an environmental base facility that processes the sewage and animal wastewater and creating a marsh at the mouth of a reservoir. K-water also endeavors to secure clean source water by introducing an automatic water quality monitoring system, a submerged aerator, a selective water intake facility, and more.

- 1 Artificial marsh at the Pyeongrim Dam
- 2 Submerged aerator
- 3 Water tower for selective intake



K-water induces an environment-friendly cycle of resources by recycling wood waste, flood debris, fertile soil, etc. In order to reduce noise and vibration, K-water also uses low-noise, low-vibration devices and installs sound-proof walls. In addition, K-water was designated major places for scenic beauty to create pleasant living conditions.

- 4 Blocking floating debris
- 5 Support for local residents utilizing wood waste
- 6 Measurement of the impact of noise/vibration



### REVITALIZATION OF THE LOCAL ECONOMY

K-water makes an effort to revitalize the local economy by developing tourism resources with landscape architecture that goes well with the local characteristic, along with roads, flood control reservoirs, a cultural center, protective facilities for the ecosystem, and etc. for the use of ecological tourism and cultural events.

## Focus

### RESTORATION PROJECT FOR POLLUTED LAND

Certain areas within the watershed of dams may have been polluted with heavy metals such as arsenic, cadmium, lead, etc. due to the effects of closed mines and shooting ranges. Such environmental hazards are eliminated beforehand in the process of development. K-water restores the polluted land by removing rock waste and cleaning the soil, and thus eliminates any hazardous factors that may threaten the public health to maintain a healthy ecosystem.



Rock waste polluted with heavy metals



Removal of rock waste



Removal completed

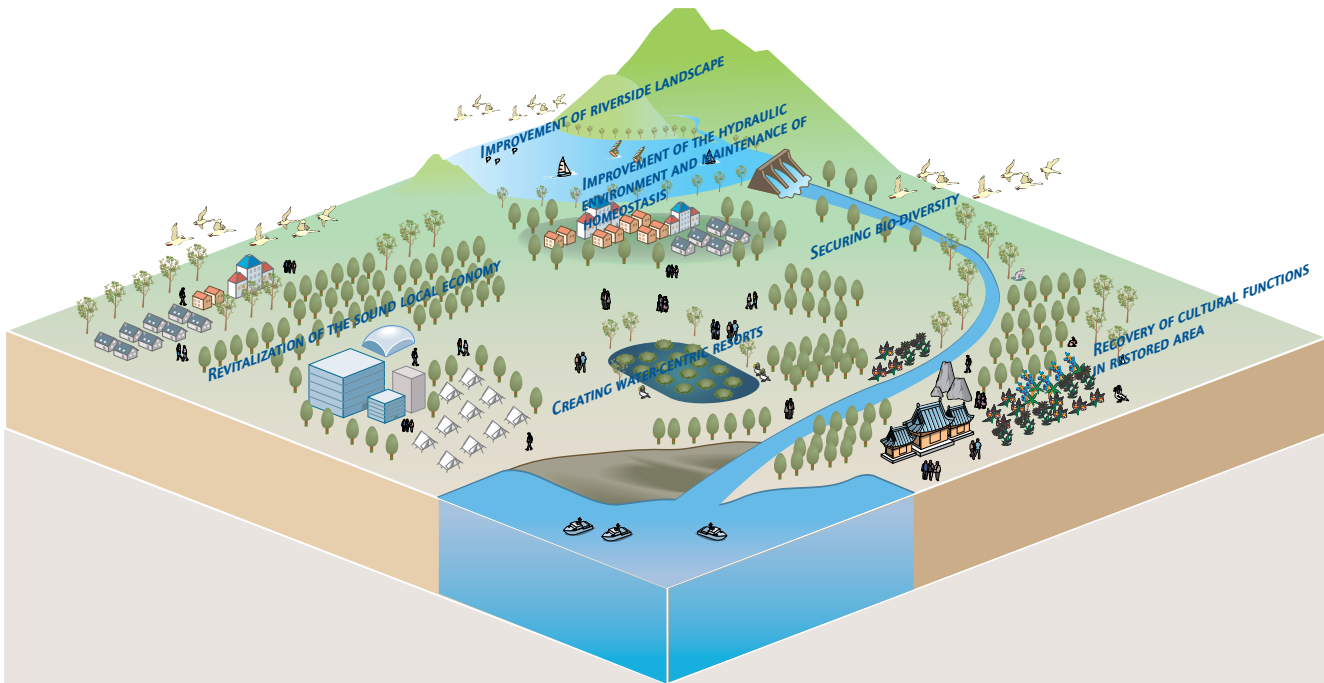


Ecosystem restored



# Protection of Bio-diversity

K-water makes its best effort to maintain the face of the nature as it is by minimizing the environmental changes



## • STRATEGY FOR LIFE RESTORATION AND BIO-DIVERSITY MANAGEMENT •

### SECURING BIO-DIVERSITY

RESTORING ECOLOGICAL BALANCE THROUGH CREATION OF A STABLE BREEDING SPACE FOR PLANTS AND ANIMALS, CREATING BIOTOPE, WILDLIFE CORRIDOR, ARTIFICIAL MARSHLAND AND ECOLOGICAL PARK

### IMPROVEMENT OF THE HYDRAULIC ENVIRONMENT AND MAINTENANCE OF HOMEOSTASIS

PREVENTING POLLUTION OF WATER THAT IS THE CORE HABITAT FOR PLANTS AND ANIMALS, CARRYING OUT IMPROVEMENT PLANS, PLANTING PLANTS THAT PURIFY WATER AND INSTALLING A HEAD BALL AND WATER TREATMENT FACILITIES FOR INTAKE WATER

### IMPROVEMENT OF RIVERSIDE LANDSCAPE

IMPROVING THE LANDSCAPE IN THE AREAS WHERE THE WATER LEVEL CHANGES, IMPROVING THE TRANSITION ZONE BETWEEN UNDERWATER AND GROUND LIVING ORGANISMS, WORKS TO PREVENT ERODING OF WOODS SURROUNDING LAKES, TOP SOIL, CONSTRUCTION OF ARTIFICIAL FLOATING ISLAND, ETC.

### DEVELOPMENT OF PRESERVATION PROGRAMS FOR THE ECOSYSTEM AND CULTURE

ENHANCING THE AWARENESS OF LIFE RESTORATION THROUGH ENVIRONMENTAL EDUCATION, WALKING PATHS BY THE RIVERSIDE, TOURING COURSE FOR WILDLIFE

### REVITALIZATION OF THE SOUND LOCAL ECONOMY

CONNECTING THE ENVIRONMENT RESTORATION PROJECT TO PROFITABLE BUSINESSES FOR THE LOCAL RESIDENTS, CLEAN TOURIST COMPLEXES BY THE RIVERSIDES, AND EXHIBITION CENTERS FOR LOCAL PRODUCTS AND CRAFTS

### RECOVERY OF CULTURAL FUNCTIONS IN RESTORED AREA

CONVERTING RESTORED AREAS INTO ECOLOGICAL EDUCATION CENTERS AND CULTURAL SPACES FOR LOCAL RESIDENTS, NATURAL STUDY GROUNDS, TRAINING CENTERS FOR TEENAGERS, RIVERSIDE CONCERT HALLS, ETC.



A habitat for otters at the Buhang Dam

From designing to construction and management, K-water performs various activities to preserve wildlife habitats such as reducing pollutants that may affect the ecosystem, minimizing the environmental impact caused by projects, restoring the damaged ecosystem, and making improvements on the ecosystem.

### PRESERVATION OF WILDLIFE HABITATS

For habitats for insects, amphibians, reptiles, birds and particularly for otters, one of our natural treasures, K-water creates piles of stone and wood, and an ecological ponds as well as artificial marshlands and natural rivers for water purification. K-water also creates spawning grounds and fish passages to protect fish resources. Furthermore, K-water builds wildlife corridors, connecting areas that have been severed by the construction of roads, in order to prevent damages to the ecosystem and enhance the ecosystem from a more comprehensive perspective. K-water also puts forth its efforts to make a complete ecological connection between the left and right sides of dams through afforestation of the rear side of dams so that the nearby fauna and flora can co-exist.

### ECOLOGICAL RESTORATION FOR ENDANGERED SPECIES

In order to reduce the environmental impacts caused by the development of water resources and create alternative habitats, K-water has established a plan for ecological restoration to preserve the ecosystem in the area adjacent to dams. For example, K-water is currently creating a substitute habitat (gravelly fields, habitats for aquatic insects, various aquatic plants, etc.) for otters (Natural Monument No. 330) and long-billed plovers (2nd degree endangered species designated by the Ministry of Environment) and two artificial marshes for amphibians and reptiles. Particularly when designing facilities for ecological restoration, K-water ensures that those facilities are appropriate and environment-friendly by reflecting on the ecological characteristics of the endangered species through consultation from domestic/international ecology experts in.

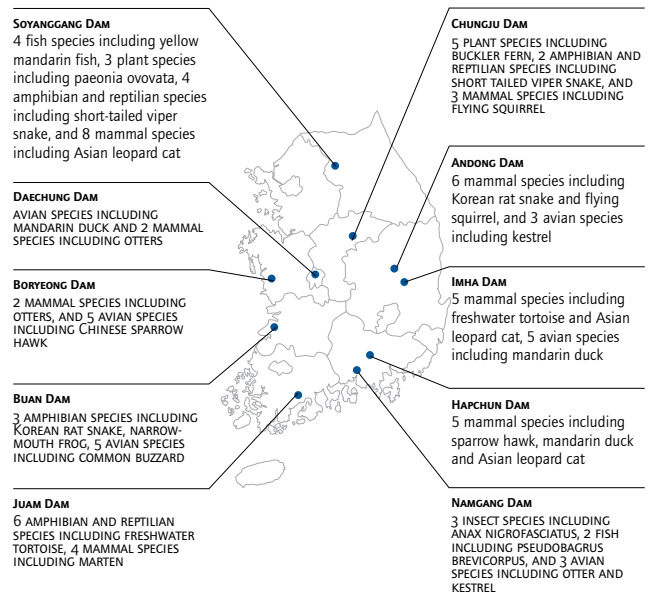
### MONITORING ENVIRONMENTAL CHANGES IN BUSINESS AREAS

K-water has established an environmental impact assessment and countermeasures to reduce environmental impacts and changes related to civil complaints and critical issues resulting from the development of water resources. Alerted by local environmental activists that the construction of a flood control facility in Gunnam for the Imjin River may damage the ecological environment for endangered cranes, K-water executed restoration plans such as installing sound-proof walls, providing food, performing regular monitoring, and more through on-site assessments and conferences with related organizations with the help of avian experts.

K-water also regularly monitors the environmental changes at its project sites for 5 years after completion. In 2008, post environmental assessments were conducted on Namgang Dam, Jangheung Dam, Daegok Dam, Gunnam flooding control facility, Buhang Dam, Seongdeok Dam, Hantangang Dam and Hwabuk Dam. The results of the monitoring

showed that the meteorological and environmental impacts (e.g. impacts on fog, sun rise, water quality, the status of fauna and flora, farm produce, etc.) were negligible at most business sites. There were some negative findings in certain dams such as an increased number of foreign species or aggravated pollution of deposits. However, the increased number of foreign species could be attributed to factors other than the construction of dams. Aggravated pollution of deposits may also be a natural phenomenon found in an artificial lake where the water current is enclosed. K-water plans to conduct research on the specific causes of these changes as well as to constantly monitor the sites.

#### • ENDANGERED SPECIES AT MAJOR DAMS (IDENTIFIED AS RARE AND ENDANGERED) •



## Best Practice

### CONDUCTING 『A PROJECT BUDGED BY RETURNED NATIONAL ENVIRONMENTAL FUND』

K-water is currently conducting a project of ecological restoration that is connected to other business activities with the returned 'National Environmental Fund' (worth 2.5 billion KRW) from the Ministry of Environment. The project is a combined effort with local residents, government officials and ecology experts, and K-water plans to execute a project of ecological restoration for the Nakdong River in 2009 with such programs as ecological restoration in Yeongju, building an ecological education center in Yecheon, creating ecological lake in Cheongsong, and constructing an ecological walking path in Goyreong.



# Water Quality Management

K-water produces tap water with high quality through an advanced water purification technology and strict quality management.

**5 times,**

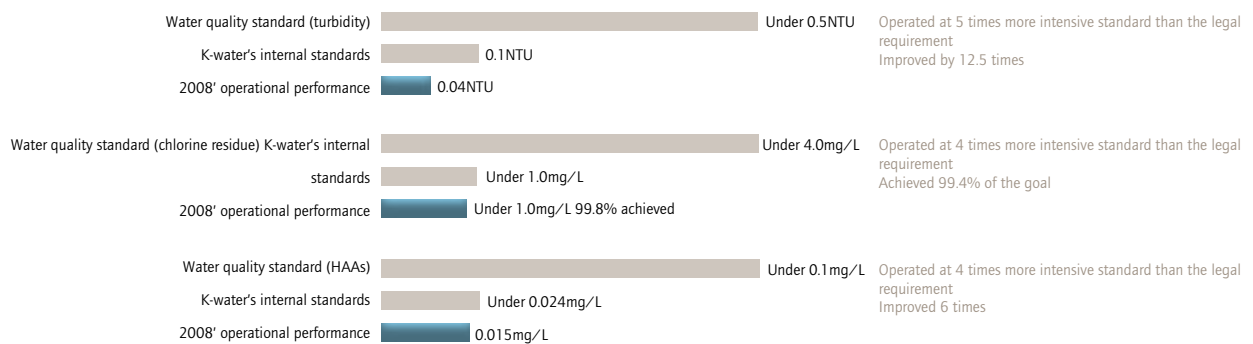
More intensive standard than the legal requirement

## ADVANCEMENT OF THE PRODUCTION PROCESS

K-water improves the quality of the tap water as it produces through the advanced water purification technologies, such as ozone, granular activated charcoal process etc., that can treat the materials determining the taste and odor, disinfection by-products, and extremely small quantities of hazardous materials, which are difficult to eliminate in the existing water purification and treatment process. By 2008, three water purification plants completed the adoption of the technologies, and a total 14 plants by 2018 will also adopt the system.

K-water evaluates in real time the water quality management of multi-regional water purification plants through the 2nd generation water grade assessment system (K-water QPI) using IT and the web. The K-water QPI selects 13 intensively managed items including turbidity and applies much stricter internal standards than the related laws require, contributing to the high water quality. Notably, K-water's turbidity test must pass the threshold of 0.1NTU, which is 5 times more intensive than the legal requirement (0.5NTU).

## THE RESULTS OF WATER QUALITY IMPROVEMENT



**250 items,**

Items of the world's highest level for the tap water analysis

## IMPROVED QUALITY MANAGEMENT THROUGHOUT THE SUPPLY PROCESS

Although produced safely in water purification plants, tap water may be contaminated during the supply process while traveling through worn-out pipes. This is the main cause of rust water. K-water annually designates certain sections of the worn-out pipe network and continuously replaces such worn-out pipes, minimizing the possibility of quality loss during the supply process.

In 2008, K-water replaced a total of 15.54km of worn-out pipes and maintained the average revenue water in multi-regional waterworks above 99%. K-water also developed and a new process improving rust water, increasing 13% of the water purification plants that achieve the rust water index (LI, above -1.5) from 2007's 30% to 43% in 2008.

## PRODUCING AND PROVIDING CUSTOMERS WITH RELIABLE HIGH-QUALITY WATER

K-water

### PRODUCING HIGH-QUALITY TAP WATER

- Devising comprehensive improvement plans for water purification and treatment facilities
- Introducing an advanced water purification and treatment process
- Establishing K-water QPI

### IMPROVING THE CREDIBILITY OF TAP WATER

- Conducting a water quality test over 250 items
- Securing technologies for water quality analysis
- Improving worn-out pipes and enhancing the index on rust water
- Expanding information on real-time water quality

### REALIZING GREEN WATER PURIFICATION PLANTS

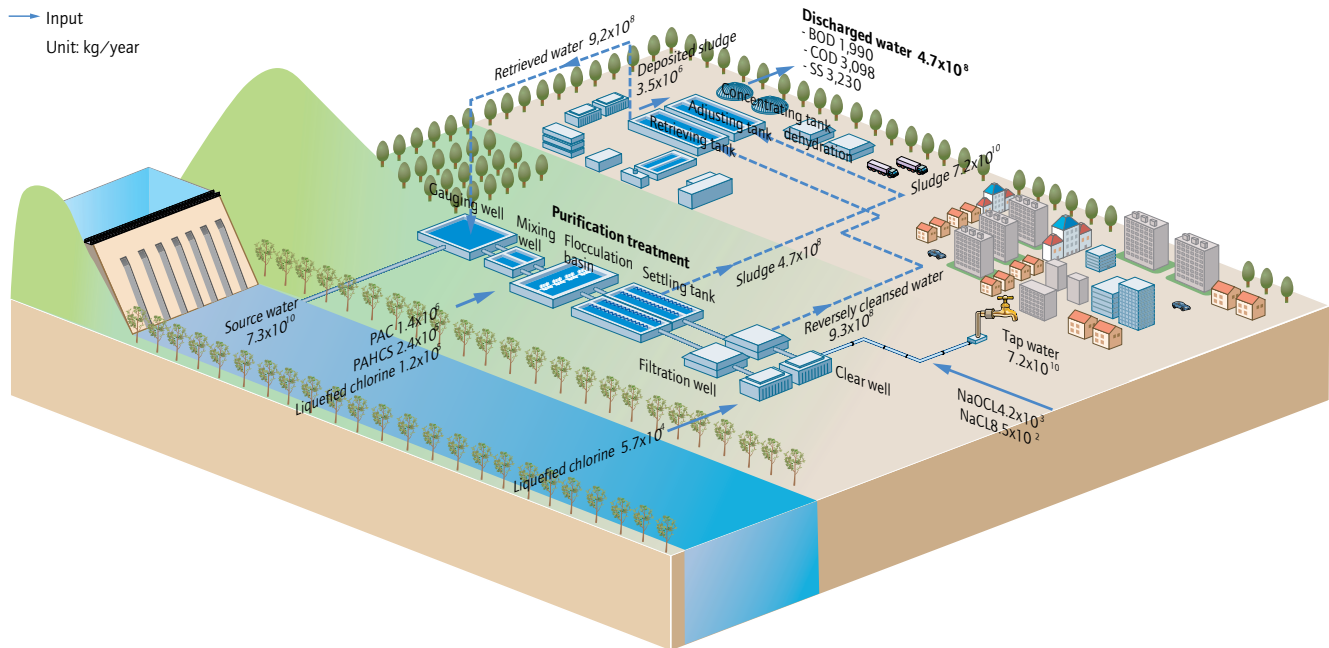
- Certified as eco-friendly plants (LCA)
- Improving the quality of water discharged from purification plants
- Reducing the sludge generated at the plants

• THE ENTIRE FLOW CHART OF TAP WATER (SIHEUNG WATER PURIFICATION PLANT) •

--- Output

→ Input

Unit: kg/year



#### IMPROVED QUALITY MANAGEMENT THROUGHOUT THE SUPPLY PROCESS

Although produced safely in water purification plants, tap water may be contaminated during the supply process while traveling through worn-out pipes. This is the main cause of rust water. K-water annually designates certain sections of the worn-out pipe network and continuously replaces such worn-out pipes, minimizing the possibility of quality loss during the supply process.

In 2008, K-water replaced a total of 15.54km of worn-out pipes and maintained the average revenue water in multi-regional waterworks above 99%. K-water also developed and a new process improving rust water, increasing 13% of the water purification plants that achieve the rust water index (LI, above -1.5) from 2007's 30% to 43% in 2008.

#### LIFE CYCLE ASSESSMENT (LCA)

LCA is a technique intended to reduce and improve pollution by quantifying and evaluating the affecting factors on environmental pollution generated throughout the entire process of manufacturing and supplying tap water "from the source water to the faucet". In 2008, the environmental assessment method was applied throughout the entire production process at Siheung, Gumi and Sacheon water purification plants.

The results of the LCA-driven analysis on the 9 categorical contributions of the Siheung water purification plant to the environmental impacts such as resources consumption, global warming, etc. showed that "global warming" has the largest environmental impact. Chemical and sludge transportation was identified as a process with the largest environmental impact since the transportation consumes a great amount of fossil fuel. Therefore, K-water attempts to devise a method to minimize sludge treatment method to minimize the distance of the sludge transportation in order to improve the process of tap water production process in an environment-friendly way.

#### ENVIRONMENTAL DECLARATION OF PRODUCTS (EDP)

EDP is a Type III Environmental Declaration, certified and publicized by a 3rd party, which quantifies the resources used throughout the product's life cycle and environmental pollutants discharged, as well as their environmental impacts. K-water acquired Korea's first EDP certification in 2007 and completed the internal certification on 3 water purification plants in 2008 by training 62 internal experts. In order to provide transparent environment-related information on the production process of tap water, all the water plants under K-water's management will be EDP certified, and thus K-water will continue its efforts to make a more environment-friendly process of tap water production.

- Siheung water purification plant's drinking water (Certification No. 2008-005)
- Siheung water purification plant's industrial water (Certification No. 2008-006)
- Sacheon water purification plant's drinking water (Certification No. 2008-007)
- Gumi water purification plant's drinking water (Certification No. 2009-002)

99%,

The revenue water of multi-regional waterworks in 2008

9 plants

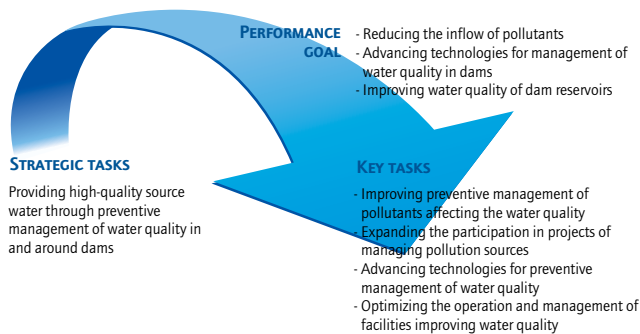
Certified as EDP (in total by 2008)



# Clean Management of Water Sources

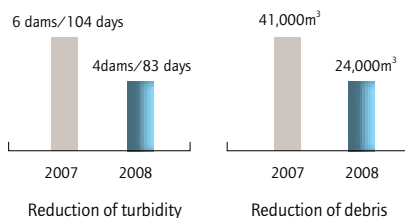
Clean tap water starts from the management of water quality of the source water of the dam. Through strict management of water quality in and around dams, K-water provides high-quality source water.

## • MANAGEMENT SYSTEM FOR WATER QUALITY IN AND AROUND DAMS •



### MINIMIZING THE INFLOW OF POLLUTANTS

Due to an increase in recent meteorological abnormalities such as large-scale typhoons, intensive local heavy rains, caused by the global warming, natural calamities like avalanches, and floods, are on the rise every year. Such avalanches and floods bring a great amount of soil and debris into dams causing long-term turbidity and water pollution. To overcome the limit of retrospective water quality management, K-water conducts ex-ante inspections and preventive measures on the cause of turbidity and debris before the flood season with the Ministry of Land, Transport and Maritime Affairs and local governments. As for a more fundamental countermeasure, K-water is devising a comprehensive plan to prevent turbidity for 5 rivers. In addition, K-water reduces the inflow of non-point pollutants such as fertilizers and pesticides by expanding the environment-friendly cultivated farming areas adjacent to dams. By 2011, K-water plans to convert the cultivation of all the farming land (8,426,000m<sup>3</sup>) within the flood control reservoirs to environment-friendly agriculture.



### ADVANCEMENT OF TECHNOLOGIES FOR WATER QUALITY MANAGEMENT

In order to manage the water quality in dam reservoirs, it should be possible to forecast the future water quality in a scientific way. However, dam reservoirs are large in scale, remain for a long period of time, and are affected by various seasonal and meteorological factors. Thus, it is very difficult to understand the causal relationship of changes in water quality. Water quality forecast is a technology devised to overcome this limit, and K-water pursues the adoption of the 3-dimensional forecast technology, more advanced than the 2-dimensional model in order to make rational decisions and application of technologies. Through a pilot project from 2008 to 2009, K-water plans to establish the expanded 3-dimensional model of water quantity and quality for all dams.

### EXPANDING PARTICIPATION IN PROJECTS OF REDUCING POLLUTANTS

By participating in the national water quality management projects such as the construction of an artificial marsh, So-okcheon in Daechong Lake, K-water pursues the reduction of pollutants in watersheds. It also conducts as proxy for the government's "Pilot Project of Reducing Non-point Pollution" (the Ministry of Environment), putting forth efforts to reduce non-point pollution. In addition, K-water constructs on consignment for 4 environmental base facilities in the upper streams and manages 80 such facilities, building the foundation for comprehensive water quality management of pollutants such as life sewage, and animal wastewater, that causes water pollution in dams.

### OPTIMAL OPERATION/ MANAGEMENT OF FACILITIES IMPROVING WATER QUALITY

Generally in summer, green algae appear in eutrophicated reservoirs or rivers, hindering the purification process and causing water pollution. For efficient control of the green algae, K-water operates various facilities that help improve the water quality such as protective layers of algae, a water circulation system (submerged aerators), selective water intake facilities. To maximize the operational efficiency of such facilities, K-water also conducts various research activities including the analysis of effects, establishment of operation guidelines. K-water particularly pursues the adoption of new technologies such as development of green algae prevention technology, and special vessels for removing green algae.

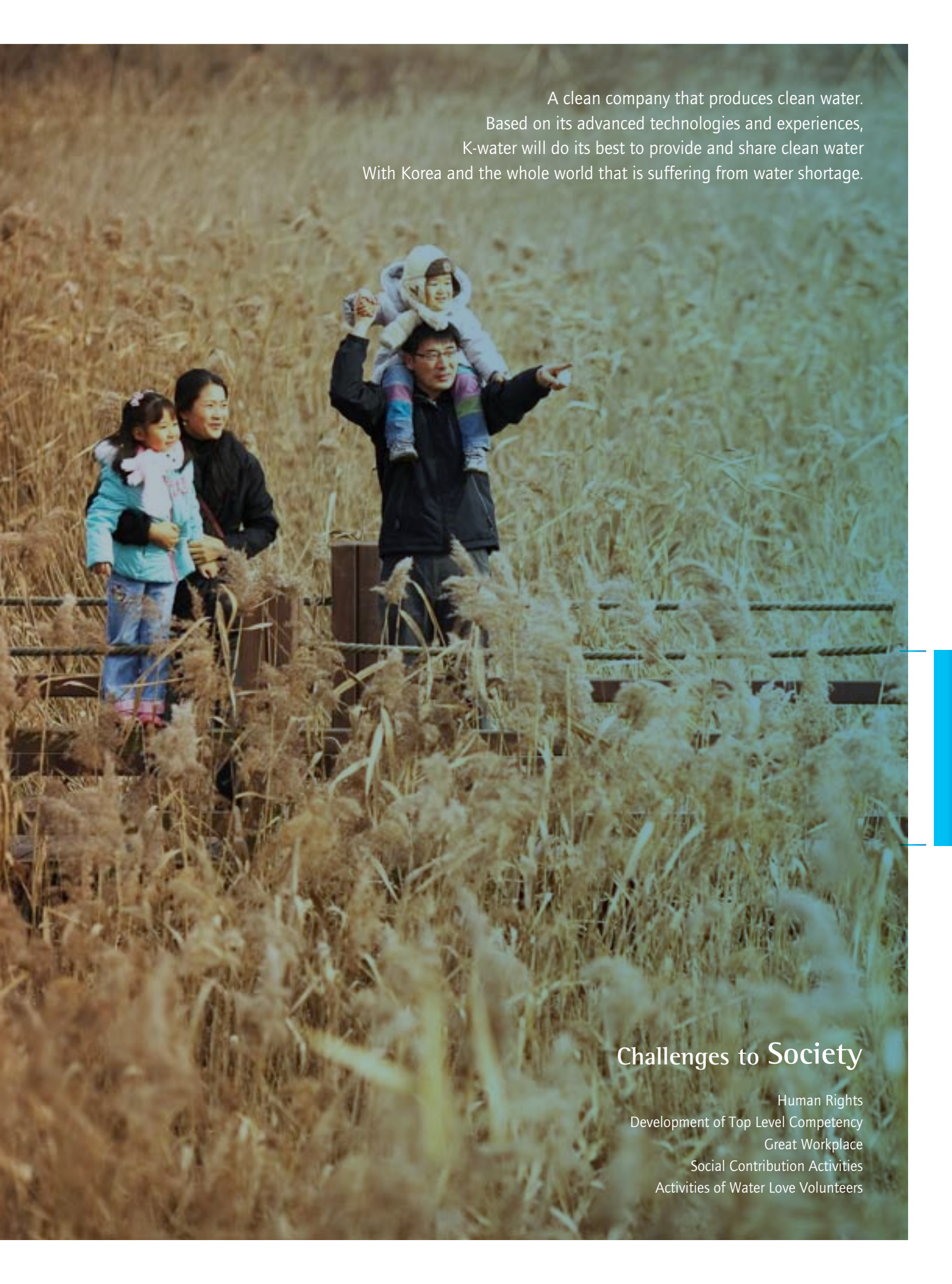
## 2.6mg/L(COD),

The average water quality of the source water in dams under the management of K-water in 2008 (1b grade, good)

## Focus

### SCIENTIFIC MANAGEMENT OF WATER QUALITY

K-water devised a plan for advancing the technology forecasting the water quantity and quality of dams, establishing a 3-dimensional forecasting model for reservoirs, and training experts. K-water minimizes the turbidity duration with early removal of turbid water enabled by the adjustment of dam discharges and the intake depth through the monitoring of turbidity and simulated analysis. For more scientific management of water quality, K-water is additionally developing i-RTMMS, a monitoring and forecasting system for the environment of water quality, that is specifically designed for actual on-site operators using the real-time water quality measurement and modeling. As of 2008, the inflow of turbid water and its current has been monitored through the automatic turbidity detection system operated in 40 locations and at 10 dams.



A clean company that produces clean water.  
Based on its advanced technologies and experiences,  
K-water will do its best to provide and share clean water  
With Korea and the whole world that is suffering from water shortage.

## Challenges to Society

Human Rights  
Development of Top Level Competency  
Great Workplace  
Social Contribution Activities  
Activities of Water Love Volunteers



# Human Rights

K-water is leading the protection of rights for the social minorities and the underprivileged.

## EFFORTS TO PROTECT HUMAN RIGHTS

K-water has a policy to protect the rights of minority groups of the company in the workplace and handle problems between employees and executives. K-water runs various programs such as expanded employment, gender equality and maternity protection programs to protect the rights of minority groups such as the disabled, female employees and contract employees, and we also have a Gender Equality Department under the Labor Union. K-water is currently conducting various human rights programs to protect the rights of the minority groups such as sexual harassment prevention, information security, and more, and plans to expand such human rights education. In addition, K-water guarantees the right of forming a collective agreement and the freedom for collective bargaining, which ensures that no workplace potentially infringes on the rights.

## GENDER EQUALITY

Since the announcement of gender equality in 2004, K-water has excluded any discriminating factors against female employees when employing or promoting them, counsels them to solve their difficulties and conducts various gender equality programs such as enhanced protection of maternity through active management and support for female employees. The basic salaries for both male and female at the same position are equal if they entered the company in the same year, and K-water makes every possible effort for equal treatment for male and female employees in promotion and payment.

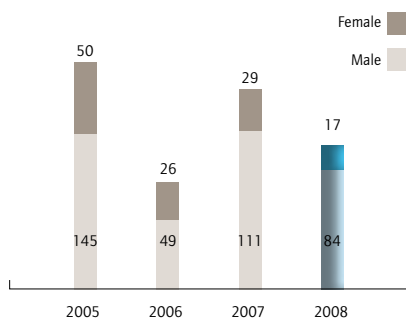
As of December 2008, there were female employees, representing 9.6% of the total employees. Among them, there are 2 female directors (level 2), and 19 female vice-directors (level 3). The female portion of the newly recruited in 2008 took up 17%, and particularly, more than 30% of new employees in the job categories of administration, civil engineering, environment, and computing were females, satisfying our goal of recruiting at least 30% female employees.

K-water also conducts a sexual harassment prevention program more than once a year in accordance with the Enforcement Decree of the Prohibition and Remedy for Sexual Discrimination Act, Article 4, and reports the results to the Ministry of Gender Equality. To protect the human rights and prevent the decrease of labor productivity, one person from each division should complete an annual cyber education course and spread the contents within the division.

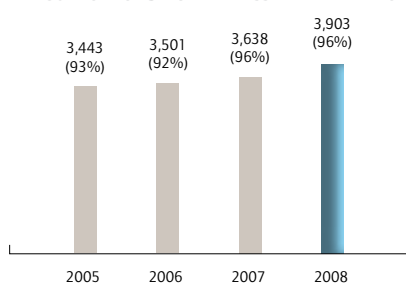
## ENHANCED PROTECTION OF PERSONAL INFORMATION

K-water regularly conducts programs devised to construct the infrastructure for the protection of personal information (e.g. social security number) and enhance the information security. As the first subsidiary body under the Ministry of Land, Transport and Maritime Affairs to operate a cyber security center, K-water monitors the divulgence of personal information with expert monitoring agents in real time. With the regular monitoring on the homepage, K-water checks whether personal information has been breached and systematically manages personal information by establishing guidelines for the protection of personal information. In order for related personnel to recognize the significance of personal information, the seriousness of problems caused by the divulgence and precautions when providing information, we also conduct regular education for newcomers, external students, personnel in charge of information security and personnel from affiliates on actual cases of information divulgence and prevention of personal information divulgence.

### • RECRUITMENT •



### • EDUCATION FOR SEXUAL HARASSMENT PREVENTION •



9.6%,

Female Portion of employees

17%,

Female Portion of new employees in 2008

### HANDLING EMPLOYEES' PROBLEMS

By operating a counseling channel in the HR-BANK (an integrated human resources management system) at all times, K-water handles the problems of employees, solving 28 cases (71.7%) out of a total 39 through reasonable judgment via on-line and face-to-face counseling in 2008. Unsolved cases are considered in the following periodic transfer. We also operate the EAP (Employee Assistance Program) to relieve the stress induced by various causes such as maladjustment to organization, work overload, etc. by taking measures to prevent and solve problems so as to provide a healthier and more pleasant life within the organization, thus improving the quality of life.

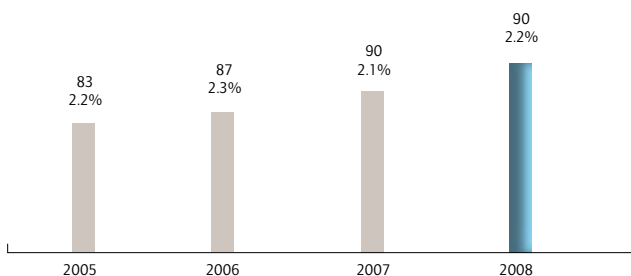
#### • SOLUTION OF EMPLOYEES' PROBLEMS •

Category	2005	2006	2007	2008
Total cases	50	43	45	39
Cases solved	31	30	35	28
Solution rate	62.0%	69.8%	77.8%	71.8%

### EXPANDED EMPLOYMENT OF THE DISABLED

K-water provides a breastfeeding room and women's resting spaces in the Head Office to protect maternity and enhance the operation of in-house nursery facilities. As an effort to enhance the in-house nursery facilities so as to support female employees from the conflict between work and family responsibilities, we operate various programs for maternity protection such as an operational committee, expand and renovate nursery facilities, improve nursery programs, a flexible work hour plan, etc. Particularly, we stipulated new articles on child-rearing in the collective agreement, elongating the maternal leave in case of miscarriage.

#### • EMPLOYMENT OF DISABLED PEOPLE •



EAP System  
(Employee Assistance Program)

### MATERNITY PROTECTION PROGRAM

K-water provides a breastfeeding room and women's resting spaces in the Head Office to protect maternity and enhance the operation of in-house nursery facilities. As an effort to enhance the in-house nursery facilities so as to support female employees from the conflict between work and family responsibilities, we operate various programs for maternity protection such as an operational committee, expand and renovate nursery facilities, improve nursery programs, a flexible work hour plan, etc. Particularly, we stipulated new articles on child-rearing in the collective agreement, elongating the maternal leave in case of miscarriage.

#### • MATERNITY PROTECTION PROGRAM •

##### Childcare Facility Water Lovers Daycare

##### OPERATING THE FAMILY DAY(CHILDCARE DAY) ON EVERY WEDNESDAY

##### INTRODUCTION OF TEMPORARY RETIREMENT WITH THE SPOUSE

Condition: in case of the overseas service for 1 year or more, educational dispatch, and temporary retirement to accompany the spouse

Period: Once, for 2 years

##### IMPROVEMENT ON THE MATERNITY LEAVE POLICY

Employees with an infant aged from less than 1 to a child aged less than 3

##### CHILDBIRTH ENCOURAGEMENT SUPPORT

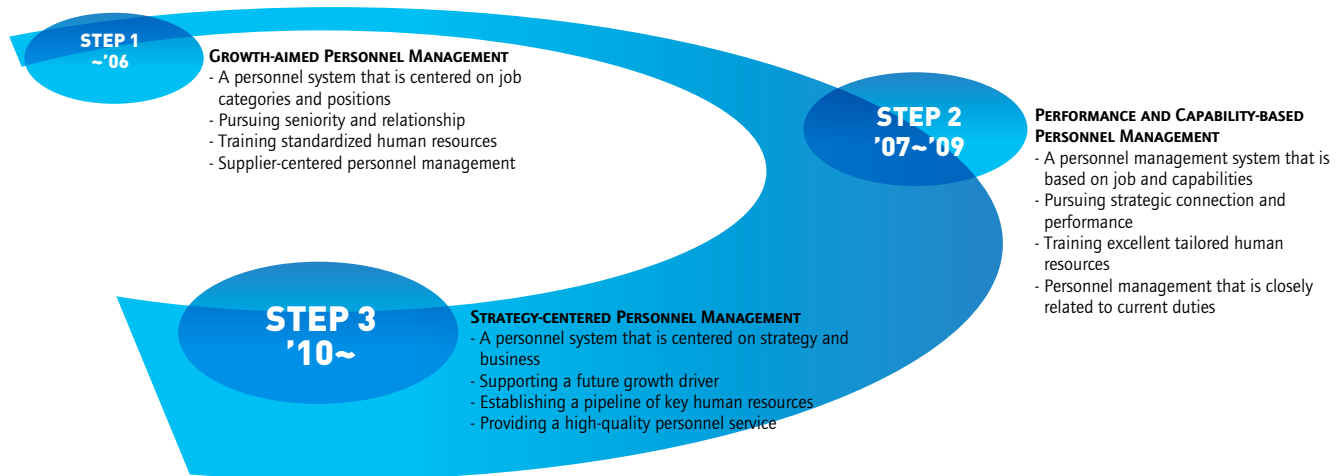
- Payment of childbirth encouragement bonus, exception of the circulation work for pregnant women and nursing mothers
- Installation of feeding equipment, exclusive parking area for pregnant women and nursing mothers
- Elongating the maternal leave in case of miscarriage: To provide a long enough period for full recovery



# Development of Top Level Competency

Through the human resources management of HR-Bank,  
K-water trains global experts.

As a key partner to accomplish its vision and strategy, K-water secures the global competitiveness of the human resources by training them to be capable of arranging and inducing all functions of personnel revolving around capacity and performance.



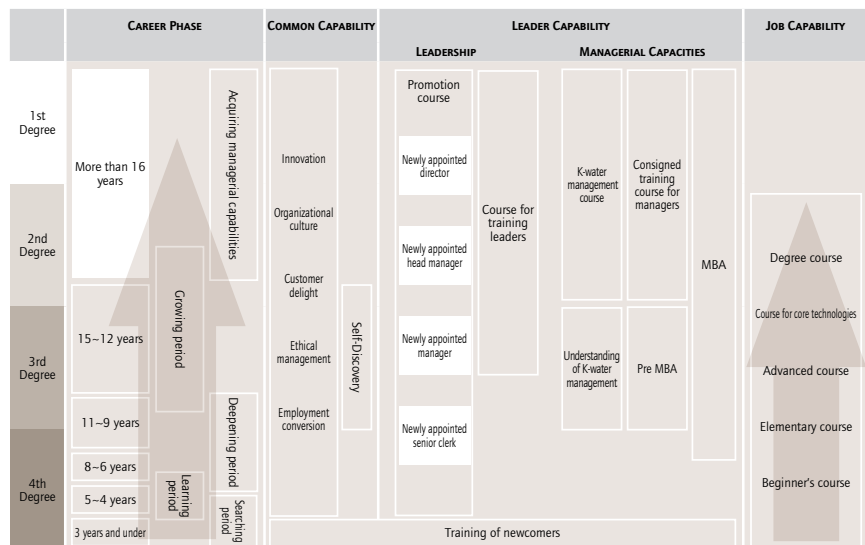
**61** hours

Time spent for education of each individual in 2008

## CAPABILITY-BASED PERSONNEL MANAGEMENT AND INFORMATION SYSTEM

K-water manages human resources based on capability by establishing capability (common, leadership, job) models and operates a capability-based educational and training programs that can improve the current capabilities by identifying required capabilities for performance. Such management of human resources is done through HR-Bank (an integrated human resources management system) with integrated management of personnel-related data and 100% systemized operation of all personnel functions in order to prevent any errors.

### • K-WATER'S EDUCATIONAL AND TRAINING SYSTEM •



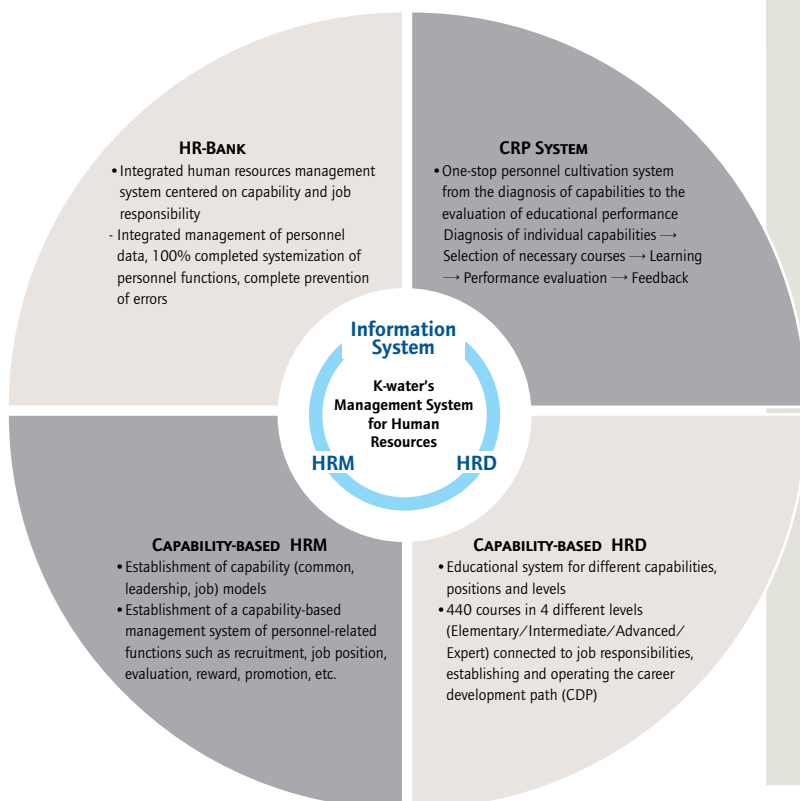
### EXPANDED COMPENSATION AND PERSONNEL MANAGEMENT BASED ON CAPABILITY AND PERFORMANCE

The monthly wage of a new employee is set at 273% of the legal minimum wage. All employees are subject to a periodic evaluation. Executives receive piece rates according to their accomplishments after closing a management contract with the president. As for recipients of pensions, first class employees are paid with piece rates depending on the department evaluation while second class employees are paid based on their individual MBO evaluations. Employees under the third class receive piece rates in accordance with the department evaluation. Depending on the results of individual performance evaluation, the 20% gap between the top and bottom piece rates will be paid, motivating employees for capacity building. In addition, K-water swaps administrative personnel with technicians in order for them to experience various duties and enhance their job proficiency. As giving rewards and incentives for excellent performance, superior employee, excellent knowledge and proposals, K-water also induces employees to maximize devotion to the job.

### CAREER DEVELOPMENT FOR EMPLOYEES AND EXECUTIVES

In order to continuously develop the capabilities of employees and executives, K-water systematically trains employees on the basis of self-initiation and the "Competency Reinforcement Plan" (CRP) supported by K-water, attempting to realize the differentiated capability building depending on the job performance by different positions that is based on the capability model. For continuous development of excellent employees, K-water manages a professional HR index (e.g. job experience, degree, certification) as the BSC performance index, pursuing the systematic training of human resources. The educational and training programs of K-water convert the purpose of education from job responsibilities to performance, designing the whole education focusing on capabilities. We also operate differentiated educational programs for managers and employees by different categories of job, leadership and common capabilities.

**11,666** persons,  
Educated and trained in 2008



### Focus

#### PERFORMING A LEADING ROLE IN THE AREA OF KOREA'S HRD

Through the one-stop personnel cultivation system from the diagnosis of capabilities to the evaluation of educational performance, K-water devised and executed a strategy for the human resources development that underlies the management strategy, winning the Korea HRD Award in 2009. K-water operates a unique personnel cultivation system (patented as a business model), implementing a differentiated personnel cultivation system by different roles and thus strengthening the connection with HRD and HRM. K-water established a CRP system that can accomplish the strategic HRD from the perspective of a HRD internal stakeholder, contributing to the development of HRD for domestic corporations by spreading the know-how.



# Great Work Place

K-water operates various welfare programs for the enhanced quality of life and its balance with work.

## ENHANCING WELFARE FOR EMPLOYEES AND EXECUTIVES

K-water's business is scattered throughout the country. In order to solve the housing problems of employees who have been transferred to different areas, K-water provides partial support for loans to purchase a house for stability of housing and living status through house purchasing. For individual welfare, we run a welfare program for families to give them a strong and stable trust in the company, which increases productivity. Through the additional service for anniversary celebration and "Family Love Tour", employees are motivated to work and families are moved by the company's care. Moreover, by admission to a culture organization, they can experience high-quality culture and art.

## LIFETIME LEARNING

By providing employees with various education programs, K-water helps them develop their abilities. This program is a self-initiated Competency Reinforcement Plan (CRP) which allows each employee to increase his/her proficiency in the job performance. The basic concept of CRP is T-style human resources development, and a T-style employee is an individual with professional knowledge of a field as well as broader knowledge and insight on related fields. This program educates employees in a professional manner on one specific field from the moment of joining the company for a certain period of time, followed by broader education on the overall process of the company after becoming a manager.

## HEALTH AND SAFETY

K-water implements a great workplace of healthy people. According to the results of the health examination conducted in 2008, the healthy groups (A and B class) and the commented groups (C2 and D2 class) were 73.9% and 26.1%, respectively, the latter increased by 14.4% compared to 2007. The ratio of diseased patients of the total examinees has increased to 6.6% in 2008 from 2007's 3.1%. K-water also plans to adopt programs to combat the drinking culture, allegedly the main cause of the increased number of people in the commented groups.

In connection to this, K-water operated a stop-smoking program, obesity clinic, EAP (Employee Assistance Program), and other programs. in order to prevent adult diseases in healthy employees and manage the health for people in the cautious groups or already with diseases. We got a lot of positive feedback and good results.

**0** cases,  
Labor dispute in 2008

**0.32%**  
Rate of industrial accidents in 2008

**80.7%**  
The rate of employees joining the labor union (as of March 2009)

### • INTEGRATED HEALTH PROMOTIONAL PROGRAMS •

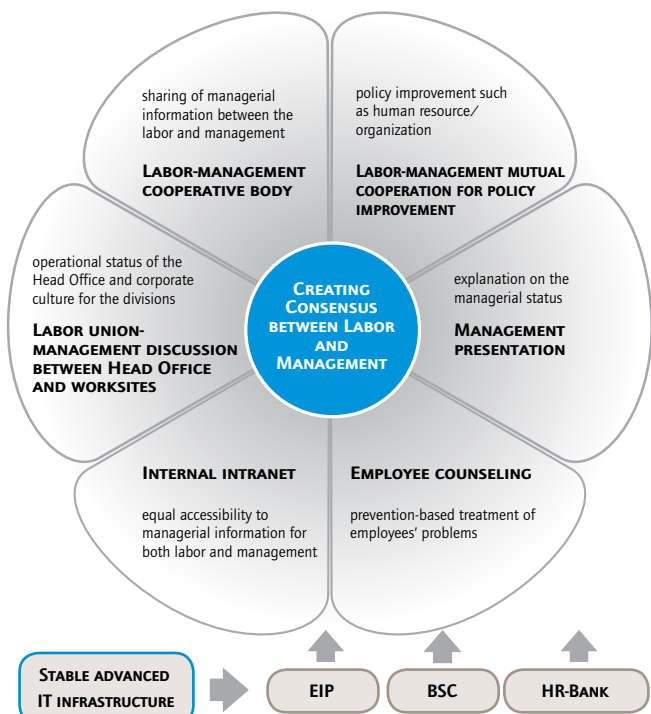
CATEGORIES	CONTENTS	EFFECTS
Health Management System	• Archiving the database of individual health management (100%)	• Providing real-time information on health management and counseling with an expert
Integrated Health Examination	• Supporting costs for the health examination	• 14 cases of early diagnosis of cancer in 2008
Employee Counseling System	• Enhanced management of stress - Management of stress by divisions - Tailored counseling for newcomers	• Support of service to a total of 181 persons • Conducting feedback such as satisfaction survey
Stop-smoking Program	• Operated: Jun. ~ Sept. 2008 • Participants: 30 persons	• Persons who stopped smoking: 18 (60%) - Ex-post management for 3 months
Obesity Clinic	• Operated: Aug. ~ Nov. 2008 • Participants: 24 persons	• Persons who succeeded in weight loss: 11 (46%) - Reduced body fat
Support for Pregnant Women	• Adopted pre-delivery examination costs for pregnant women • Support for women's resting space, milk extractor	• Minimizing the job vacancy caused by pregnancy



#### REALIZATION OF LABOR-MANAGEMENT PARTNERSHIP

The Labor Union, established in 1987, is for the employees under the third class and has adopted the Union Shop system by which an employee is automatically admitted when joining the company. Currently, there are 3,168 members, representing 80.7% of the total number of employees as of April 2009. K-water builds consensus over the entire corporation and strengthens mutual trust by expanding the sharing of information between the labor union and management through policy improvement, management presentation and the cooperative body involving the whole organization. Since 2006, the Labor-management Consensus Committee, K-water's unique labor union-management cooperative body, operates a working-level group dedicated to the policy improvement such as human resource organization, corporate culture, welfare system, integrated operation of waterworks, etc. in order to solve long-term managerial tasks, gaining the result of devising 86 improvement plans by 2007 that are gradually carried out. The committee also strives to improve and guarantee the working conditions observing the Labor Standard Act Article 7 (Prohibition of Forced Labor).

#### • COMMUNICATION FOR LABOR-MANAGEMENT COOPERATION •





# Social Contribution Activities

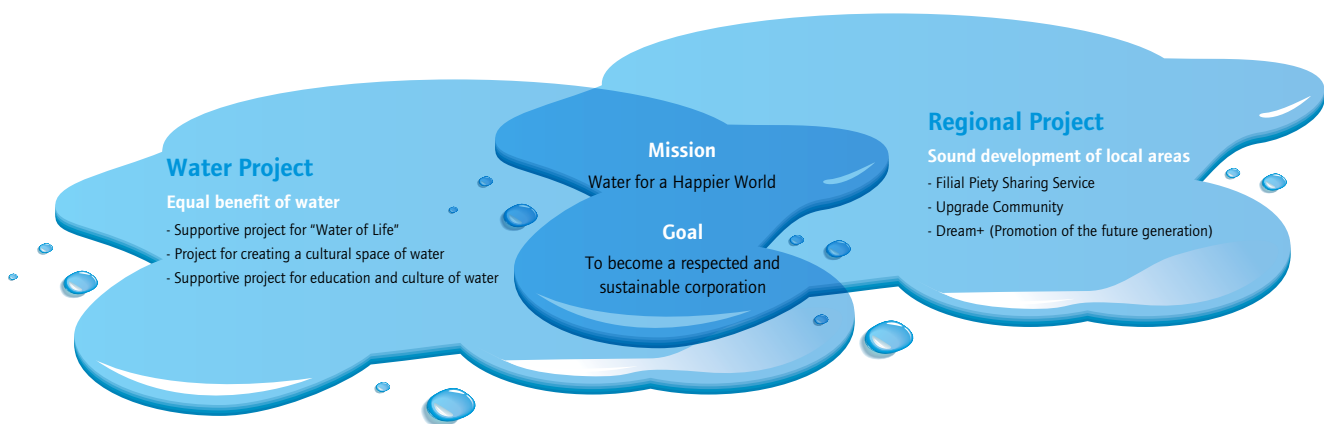
The more we share and love, the happier we all get.

## 54.3 billion KRW

Investment for social contributions in 2008 (3% of revenue)

### STRATEGIC SOCIAL CONTRIBUTIONS

As a key strategy for the sustainable growth, K-water makes social contributions by the means of selection and concentration so as to provide practical benefits to beneficiaries and thus contribute to the expansion of the corporate value. K-water's social contributions are comprised of strategic social contributions made by the corporation and voluntary activities provided by employees and executives. Particularly changing from the existing contributions like one-time donations and charity, K-water makes efforts for the equal benefit of water (Happy Water) that goes with the corporation's unique business characteristic and focuses on social contributions for the sound development of local areas (Happier World) adjacent to dams that safely manage the priceless water.



## 65,000 hours,

Time spent for voluntary activities in 2008

### REGIONAL PROJECT

Areas adjacent to dams are mostly slow in development due to the geographical characteristics and various development restrictions. For the balanced development of the areas adjacent to dams and the local residents, K-water provides tailored supportive services for different generations such as Filial Piety Sharing Service (elderly people), Profitability Promotion (middle-aged) and Education for the Future Generation (students).

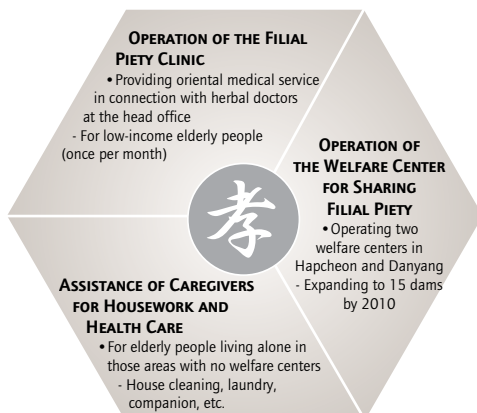
**Filial Piety Sharing Service** | Service for enhancing the welfare for the elderly people in the areas adjacent to dams and the head office

Since 2006, K-water operates a Welfare Center for Sharing Filial Piety, focusing on the solution of welfare problems related to the elderly people living in areas adjacent to dams, where the elderly population aged 65 and above is increasing. Welfare workers and physical therapists reside in those areas providing services like homecare volunteers, daytime protection, sharing of filial piety, physical therapy, free meals, etc.

**Upgrade Community** | Creation of farm land for environment-friendly agriculture in the upper streams of dams and expansion of sales routes

Farming in the upper streams of dams is restricted due to the protection of source water. K-water contributes to protect water quality, revitalize the local economy and increase profitability of the local residents by creating environment-friendly farm land in the upper streams. By 2008, K-water has created environment-friendly farm land (3,034m<sup>2</sup> in total) through technology education on environment-friendly agriculture and instructions on the certification process. Also, K-water contributed to the increased profits of the local residents with efforts to expand the sales routes such as making a brand for farm produce, operating a homepage, etc.

### • K-WATER'S FILIAL PIETY SHARING SERVICE •



**Dream+(Promotion of the future generation)** | Scholarship program for students living in areas adjacent to dams and support for hiring native English speakers as English teachers.

K-water provides a scholarship program giving annual benefits worth of 30 billion KRW to students living in areas adjacent to dams as well as expenses for meals, learning equipment and extracurricular study rooms. In order to provide students living in areas adjacent to dams with an opportunity for global education and lessen the economic burden of parents for private lessons, K-water has supported for hiring native English speakers as English teachers from 2007. In 2008, 6,009 people from 94 schools in 17 dams participated. In addition, K-water operates a summer English camp and an English contest every year.

#### WATER PROJECT

3.97 million people, 7.9% of the entire population in Korea (according to the waterworks statistics in 2007 the Ministry of Environment), still do not receive the benefit of tap water. For these people, K-water strives to make a happier world where no one suffers from water shortage. First, K-water operates the supportive project for 'water of life', in which K-water provides assistance such as drinking water in elementary schools, desalination facilities on islands, and emergency water supply for areas hard hit by disasters and drought. In addition, as part of the project, we have built environmental-friendly equipment and a water culture center in areas adjacent to dams, where the local residents can have cultural experiences and rest. We also conduct a project for education culture of water by hosting various local festivals and cultural events so as to help the local economy.

#### SOCIAL CONTRIBUTION IN OVERSEAS COUNTRIES

K-water strives to fulfill its responsibility as a global corporation in accordance with the recent expansion of its international business in Asia and Africa. Starting from 2006's supportive activities for development of drinking water in Tajikistan, K-water expanded its social contributions to Cambodia, Mongolia and East Timor in 2007 and to Hoa Bin, Vietnam in 2008. The social contributions in Vietnam were made by 20 people in 3 teams from September to December 2008 (three times), and in December, K-water held the ceremony for the completion of development of drinking water in Jamo village. Also, K-water continues its efforts to solve the water shortage around the globe as a water professional corporation by supporting various activities such as providing bottled water to overseas areas hit by disasters, including North Korea.

#### ACTIVITIES FOR WATER LOVE VOLUNTEERS

Celebrating its 6th anniversary, 'Water Love Volunteers' endeavors to deliver love more closely to the underprivileged neighborhood. 96% (3,891 people) of the total employees participated in 2008, joining 89 voluntary groups and spending a total of 65,000 hours in volunteer activities. We operate a volunteer management system known as "Love System" for the systematic management of voluntary activities of Water Love Volunteers. The system provides real-time assistance in the whole process of the voluntary work from opening a volunteer group work to managing the performance. K-water converts volunteer performance into mileage and reward excellent employees with the highest mileage (e.g. hours, and frequency). K-water also supports these activities through matching grant, and volunteers can have a paid day-off once a month.

\* MORE DETAILS ON K-WATER'S SOCIAL CONTRIBUTIONS CAN BE FOUND AT THE HOMEPAGE ([HTTP://WWW.KWATER.OR.KR](http://www.kwater.or.kr)).

#### • SYSTEM FOR WATER PROJECT •



##### SUPPORTIVE PROJECT FOR WATER OF LIFE

Project for supporting water that thinks about water, nature and people

##### WATER OF HOPE

- Installation and operation of water supply (purification) facilities for elementary/middle schools
- Operating and managing facilities for 121 schools

##### WATER OF LOVE

- Operation of desalination facilities in islands
- 41 facilities in 8 local governments
- Emergency water supply for areas hit by disasters and drought

##### WATER OF NATURE

- Providing environmental water for the conservation of the ecosystem
- Finding unattended holes to prevent the pollution of underground water
- Maintenance on rivers to recover the function of dams



##### PROJECT FOR CREATING A CULTURAL SPACE OF WATER

Providing dams as an environment-friendly, cultural and space for rest

##### ENVIRONMENT-FRIENDLY MAINTENANCE ON DAMS

- For 24 dams from 2002
- 14 dams including Chungju Dam completed

##### OPERATION OF WATER CULTURE CENTER

- Constructing multi-functional water culture centers in multipurpose dams nationwide.
- 13 dams including the Buan Dam completed

##### ENVIRONMENT-FRIENDLY PLACE FOR REST

- Enhancing the function of cultivating the water source with afforestation in areas adjacent to dams
- Creating a floriculture complex for scenic beauty in flood control reservoirs



##### SUPPORTIVE PROJECT FOR EDUCATION CULTURE OF WATER

Conducting cultural events with dams and culture interlocking and water education

##### DAM CULTURE FESTIVAL

- Hosting and supporting various cultural events such as dam culture festival

##### WATER TOUR

- Tour to water resources facilities that K-water manages

##### WATER CONTEST AND EDUCATION

- Conducting various contests to enhance the awareness on water and education related to water

# Activities of Water Love Volunteers

Gets bigger as we share.

1. Sharing rice cakes for the Korean Thanksgiving Day
2. Support for hiring native English speakers as English teachers
3. Delivery of side dishes
4. Do you know the 'Sack Man'?
5. Give me some water, too.
6. Removing dirt from farm houses hit by flood
7. Voluntary work for cleaning facilities
8. Sharing Kimchi
9. Harvesting potatoes
10. Caregivers feeding elderly people

			8
1	3	6	9
2	4	7	10
	5		

"Water for a Happier World." K-water makes its best efforts to fulfill its social responsibilities. Particularly, K-water's Water Love Volunteers, a volunteer group comprised of K-water's employees, continue to conduct various theme activities nationwide such as environment conservation in connection with environmental activists, relief and aid activities for areas hit by natural disasters, campaigns to help the underprivileged neighborhood to share love with them, and other activities.











# A corporation that knows best about water.

A corporation where employees happily work.

A corporation that values employees.

A corporation that returns its profits to the local communities and society.

A corporation that actively reduces difficulties for nation and the public

A global corporation that is a leading pioneer in the world's water market.

A corporation that practices transparent, ethical, innovative and environmental management.

A corporation that knows about water better than anything else, that is K-water

# R K W T S

Sustainable Management Performance Index

Financial Performance

Positive & Negative Information

Key Performance Index

GRI Report Index

Third Party's Verification Statement

Appendix

# Sustainable Management Performance Index (GRI Report Index)

## Economy

### ECONOMIC EFFECTS

#### CREATION AND DISTRIBUTION OF ECONOMIC VALUE

The business of water resources, a core business directly connected with national economy, creates economic value by efficiently utilizing limited resources and returns it to society. Recently, we saw our sales increase for 4 consecutive years, with the result that the economic value of K-water is also increasing. More than 78% of the total annual sales are invested as operating expenses and capital cost to continue production.

ITEMS	2005	2006	2007	2008
Created economic value (1)	1,618,263	1,751,463	1,833,397	2,066,036
a)Net sales	1,590,951	1,721,105	1,812,905	2,044,533
b)Interest income, rent, and profits from sale of assets	27,312	30,358	20,492	21,503
Distributed economic value (2)	1,143,012	1,290,085	1,403,972	1,619,246
a)Operating expenses: production costs, and asset purchasing expenses	691,681	829,876	911,769	1,127,327
b)Wage and welfare: wage, benefits	226,059	242,381	291,699	303,943
c)Capital cost: interest paid, dividends	75,785	78,209	61,119	67,155
d)Taxes: corporate tax, local tax paid	96,177	91,431	83,929	65,033
e)Investment in local community: contributions, various allotted charges	53,310	48,188	55,456	55,788
Surplus economic value (1-2)	475,251	461,378	429,425	446,790

### RESPONDING TO CLIMATE CHANGES

#### THE FINANCIAL EFFECTS, RISKS, AND OPPORTUNITY FACTORS OF CLIMATE CHANGES

The world is now facing an environmental crisis symbolized by climate change and, at the same time, an energy/resource crisis shown by high oil prices. Korea is also experiencing severe meteorological phenomena such as heat waves, droughts, and floods, caused by global warming. Advanced and developing countries are expected to join the movement of reducing the greenhouse gas in accordance with the Bali Roadmap (December 2007), and Korea will be included in the group that should reduce the greenhouse gas emission from 2013.

K-water recognizes climate change as a new opportunity for corporate management, and makes every effort to strengthen its capacities for the climate change and integrated responses through strategic approaches to the acquisition of sustainable water resources, integrated water management, establishment of low-carbon environment-friendly infrastructure, and development of new and renewable energy.

※ For K-WATER'S STRATEGY AND PROGRAMS AGAINST CLIMATE CHANGE, PLEASE REFER TO PAGES 46 AND 47.

### RETIREMENT GRANTS

We guarantee the immediate and total retirement grant payment, accumulating retirement grant complement and considering the average wage during 3 months in work and before retirement as stated in the Labor Standard Act. We are considering changing our current retirement grant system to a retirement pension system. Retirement Pension Policy will be enacted with the agreement of the Labor Union.

### GOVERNMENT SUBSIDY

As it carries out business of public weal, K-water receives a part of its business expenses from the government in the form of a subsidy. We have received 1.46 billion in 2007 and 6.7 billion won in 2007 as government subsidy for the last 4 years for the advanced purification facilities which are two of the Ministry of the Environment's model projects, building up infrastructure for national rental apartment complexes, the project on increasing the rate of revenue water, and support for constructing the Innovation City.

Recipients of government subsidy

DETAILS	2005	2006	2007	2008
Total(million won)	24,001	18,500	1,463	6,995
Gumi Sewage Treatment Plant	-	-	-	-
Gumi Research of Cultural Properties	80	350	-	-
Gumi rental complex	11,604	5,600	-	-
Yeosu rental complex	4,000	3,000	-	-
Changwon advanced purification plant	3,742	5,588	-	-
Construction of International Water Supply and Drainage Center	-	-	-	-
Project on Increasing the rate of revenue water (Jeongeup)	4,575	3,962	1,463	-
Supporting on constructing the Innovation city				6,995

### MARKET STATUS

#### NEW EMPLOYEE'S SALARY VS. LEGAL MINIMUM SALARY

The monthly wage of a new employee, 5th class employee with university degree, is set at 273% of the legal minimum.

### LOCAL PURCHASING POLICY

K-water purchases through electronic purchasing system and procurements. K-water ensures that construction contracts or merchandise in less than certain amounts are procured locally to facilitate local purchase in the area where the field office is located.

### LOCAL RESIDENT HIRING

In general, limitations such as academic background, regionalism, and age are not considered when it comes to hiring people, but metermen and operating staff (operators) at the business office are hired locally. Since 2004, we have contributed to local communities by hiring 126 residents

Local resident hiring status of local waterworks service centers

ITEM	TOTAL	2007	2005	2006	2007	2008
Numbers of Persons	121	19	25	15	20	42

### INDIRECT ECONOMIC EFFECTS

#### INVESTMENTS IN SOC FACILITIES

K-water is contributing to the economic development of the nation through total investments of 1.3 trillion won as of 2008. It invested 659.6 billion won in the expansion of water resources such as the construction of dams such as Hantangang Dam and Sungduck Dam. Also, it invested



308.1 billion won in building waterworks facilities and water supply facilities, and 239.5 billion won in building new towns and industrial complexes.

#### DAM ENVIRONMENT IMPROVEMENTS AND OPENING WATER CULTURE CENTER

Comparably new dams were constructed with environmental considerations, but old dams gave no such benefit to the local economy because of their obsolete facilities. For this reason, K-water opened the top of the dams and completely renovated the existing facilities, providing the local residents with observation decks, elevators, promenades and water culture centers that serve as resting or cultural spaces.

#### SUPPORT FOR DAM ADJACENT AREA

K-water not only provided financial assistance to revitalize the economy of area around dams, but also supported farmers by contributing to raising farm households' income and to improving welfare. K-water provided 53.2 billion won for such projects in 2008.

ITEMS		CONTENTS
Local support	Income raising projects	• Farm road, Compost, Farming facilities
	living foundation building projects	• Medical appliances, Village assembly hall, Village ramp
Resident support	Residents living support projects	• Environment-friendly farming assistance, public appliances for village assembly hall
	children raising support projects	• Education service by natives, Scholarship, School meal charge
Other support	Dam reservoir usage fee subsidy	• supporting 50% of Dam reservoir usage fee
	promotion and other projects	• supporting 50% of Dam reservoir usage fee • Local festival, Filial piety welfare center

#### SUPPORT FOR ECO-FRIENDLY AGRICULTURE IN DAM ADJACENT AREAS

Fertilizers, pesticides, and soil improvement work utilized for farming activities in areas adjacent to dams are non-point source pollutants resulting in water pollution including eutrophication, and turbid water in reservoirs. K-water has led to convert the farm permits approved land of 8.4 million m<sup>2</sup> in areas adjacent to dams into environment-friendly agriculture. The conversion to eco-friendly agriculture is expected to protect the water quality of dams as the water source and increase the earnings of local residents by selling environment-friendly crops, contributing to making dams a beloved facility of local residents and the whole nation.

Dam adjacent area farmers in the environment-friendly farming complex cultivate crops, including potatoes and corns by environment-friendly agricultural methods such as organic farming, and non-pesticide cultivation. K-water provides support such as environment-friendly agricultural resources, natural manure, inspection of remaining pesticides on the soil or crops, examination of heavy metals, and acquisition of certification for the environment-friendly farm produce (non-pesticide or low-pesticide), in order to acquire the objective credibility. K-water is scheduled to finish converting all farming permit areas of 8,426 thousand m<sup>2</sup> into environment-friendly farming land by 2011.

Status and Plan of eco-friendly agriculture

ITEM	2006	2007	2008	~2011	TOTAL
Conversion Area (m <sup>2</sup> )	1,750 thousand	1,864 thousand	1,172 thousand	3,640 thousand	8,426 thousand

## Environment

### MATERIALS

For water purification chemicals and raw waters, please refer to page 53, 'Life Cycle Assessment.' For waste sludge and construction wastes, please refer to page 71.

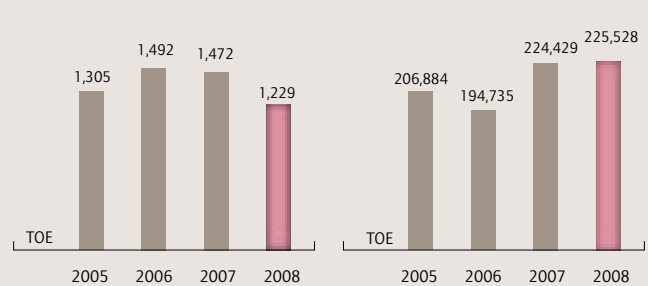
### ENERGY CONSERVATION

#### ENERGY CONSUMPTION

The total energy consumption during 2008 was 227thousand TOE, which was increased by 3.8% compared to last year. Most of this consumed energy consisted of electricity used for intake and supply of water, as well as operation of pumps in water boosting stations. The cause of such increase was that the increase in supplied water caused increases in electricity consumption. The amount of direct energy consumption, such as diesel and gas, was 1,229TOE, and the amount of indirect energy consumption, which mainly resulted from electricity usage, was 225,528 TOE.

direct energy consumption

Indirect energy consumption



### EFFORTS FOR SAVING ENERGY

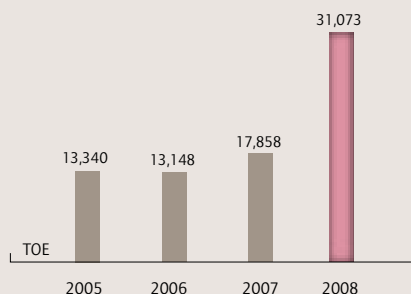
Saving energy is very helpful for raising our competitiveness such as improving air quality, and reducing costs of water production. In order to enhance the efficiency of our energy consumption system, K-water has evaluated the efficiency of energy usage from the stage of reviewing and designing various facilities, and we have also intensified our management for electric power consumption at existing facilities. In particular, we have concentrated our efforts in strict management of electric power consumption as this is the largest portion of our costs in the water supply business.

#### ENERGY EFFICIENCY IMPROVEMENTS

K-water actively promotes the operation efficiency improvement project of the dam & waterworks facilities in order to countermeasure the energy crisis dependent on recent high oil prices and to reduce green house gas. The energy efficiency improvement through the optimal decision of pump performance in waterworks facilities, the internal coating of pumps and the pump operation optimization, and waterworks revenue improvement project help us reduce electricity and the green house gas emissions. Also, K-water makes a contribution on extending clean energy supply and efficiently coping with global warming. Accordingly, K-water conducted the validity study on the CDM project of waterworks energy efficiency improvement in 2008 and is going to launch a model project and its UN registration.



Energy savings per department by the energy-saving programs



#### ENERGY-SAVING PROGRAMS

Management Focus	<ul style="list-style-type: none"> <li>• Energy expense saving by equipment improvement including lighting</li> <li>• Efficient operation of lighting and air equipment</li> <li>• Energy savings through economic utilization of electric appliances</li> <li>• Promoting carpool system and small car purchasing</li> </ul>
Water Supply Focus	<ul style="list-style-type: none"> <li>• Developing and operation the electric charge calculation</li> <li>• System improvement including revision of Korea Electric Power Corporation's electricity supply regulations</li> <li>• Applying efficient facilities and improving existing facilities</li> </ul>
Power Generation Focus	<ul style="list-style-type: none"> <li>• Improving facilities to maintain load power factor over 95%</li> <li>• Setting and maintaining electricity consumption/saving rates in dam operation</li> <li>• Expanding the development of new and recycled energy sources</li> </ul>



#### ACCOMPLISHMENTS OF ENERGY-SAVING PROGRAMS

- Reduction effect by managing electrical power consumption on waterworks ('07, 0.3186kwh/m<sup>3</sup> ⇒ '08 0.3182kwh/m<sup>3</sup>)
- Saved amount of 7,356Mwh

## WATER USAGE

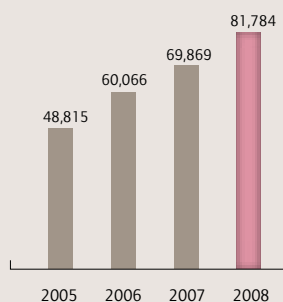
### WATER SOURCES AFFECTED BY WATER INTAKE

K-water launches multi-regional waterworks construction projects for supplying a high quality water to the Kyungnam and Busan areas that have poor water source condition. The Namgang Dam was considered for the water intake source in the beginning, however a variety of research activities are being carried out for an alternative water source according to the suggestion of flood damage and eco-system change due to the increase of the Namgang reservoir level. Intake of water from the rivers for the purpose of producing tap water may possibly bring about changes in the ecosystem, which include lowering of water levels from the intake source including dam and rivers and reduction of fish resources, as a result. Daap water intake facility, built in 2005, is being used as a fish protection dam during the dry season. Recently, with construction and operation of the Daap water intake facility, the estuary of the Seomjin River is being turned to the ocean, thus bringing about changes in the ecosystem which includes increases of maritime fish resources like sea bass. Thus, the research and investigation is being carried out at the site in order to identify an accurate cause of the phenomenon.

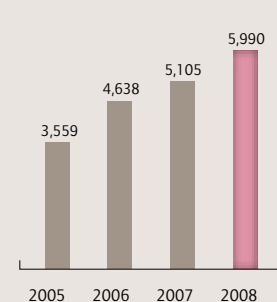
### WATER RECYCLING

At K-water's headquarters, we use recycled water in toilets and heavy water for trees. Also, we give a discount (30% of water utility fee) to those customers who use the recycled water to expand the scope of recycling for the development of a resource circulating society.

Customers' recycled water generation (1,000 m<sup>3</sup>)



Recycled water usage discount (KRW 1 million)



For the recycled water usage of the headquarters, please refer to page 97.

## BIO-DIVERSITY CONSERVATION

Diverse activities are being carried out for the preservation of the bio-habitat environment such as minimizing destruction to the natural environment from development projects, restoring the destroyed ecosystem and creating an enhanced ecosystem. For more information on bio-diversity management strategy and future plans, please refer to pages 50 and 51.

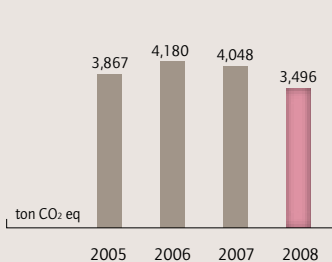
## GREENHOUSE GAS EMISSION

### TOTAL EMISSION OF GHG

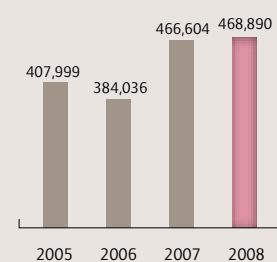
The total emissions of greenhouse gas in 2008 were 472 thousand CO<sub>2</sub>ton, a 0.4% increase from that of 2007. The relatively small increase of the greenhouse gas emissions considering the previous year's increased revenue was made possible due to various energy saving activities in contrast to the increased use of electricity for the increased water supply. The direct emissions of greenhouse gas caused by the use of diesel, and gas were 3,496 CO<sub>2</sub>ton, and the indirect emissions of greenhouse gas caused by the use of electricity were 468.8 CO<sub>2</sub>ton.

The indirect greenhouse gas emissions from consumption of electricity in 2008 are 484 thousand CO<sub>2</sub> tons.

Direct CO<sub>2</sub> emissions



Indirect CO<sub>2</sub> emissions



### GREENHOUSE GAS EMISSION REDUCTION PROJECTS AND RESULTS

For K-water's CDM projects and results, please refer to page 32.

### EFFORTS TO REDUCE GREENHOUSE GASSES AND AIR POLLUTANTS IN ORDER TO PREVENT GLOBAL WARMING

The water purification process does not discharge those materials destructive to the ozone layer such as freon gas, and regular safety checks are being conducted in order to prevent leakage of freon gas included in the air conditioning products within buildings. Moreover, although there is no manufacturing process which discharges air pollutants directly, efforts are being made in order to reduce oil consumption by reflecting it in the environmental goal in order to minimize air pollutants which

may be discharged by the use of gasoline and kerosene consumed for the operation of the workplaces.

Air pollutants discharged in 2008(Unit: kg)

PARTICULATE MATTERS	SOx	CO	HC	NOx
20	143	51	5	203

### THE AMOUNT AND QUALITY OF EFFLUENTS

Since the amount of water discharged and its quality from the water purification plant and sewage treatment plants may have a considerable influence on the river water quality and the ecosystem, K-water is applying strict management standards beyond the legal requirements, and the quality of discharged water is continuously being monitored in order to minimize the impact to the ecosystem of the water discharge area and to conserve the water quality at the downstream. Moreover, the quality of the discharged water has been selected as a core index for the environmental goal and environmental performance evaluation for the sites of dam project operating waterworks facilities and sewage treatment facilities, and such results have been reflected as divisions' assessment criteria since 2004.

#### WATER PURIFICATION PLANTS

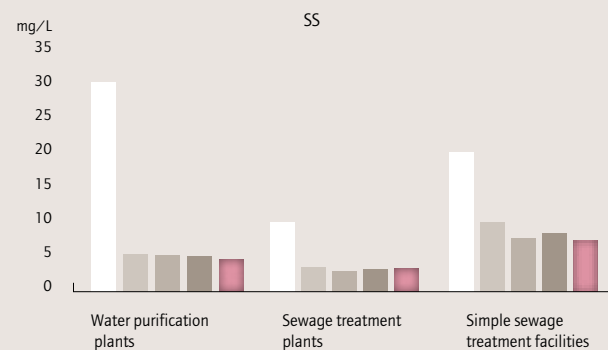
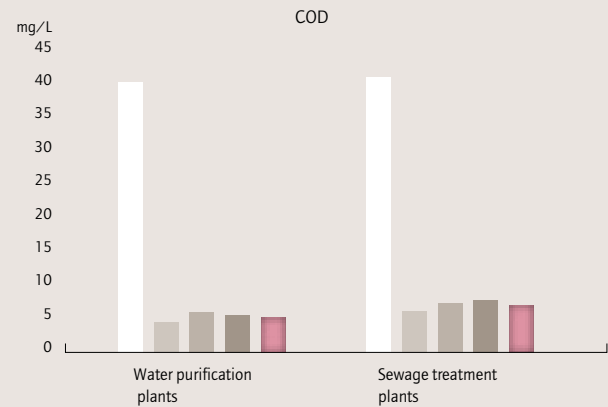
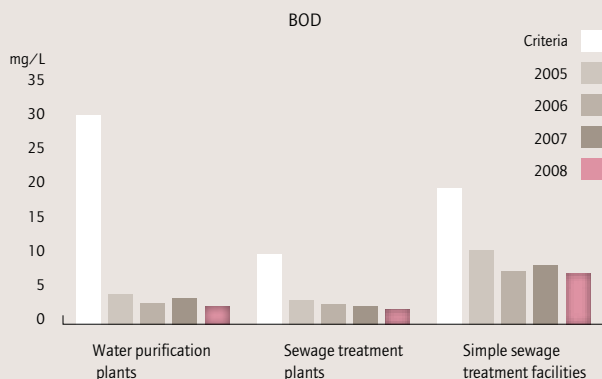
Average quality of the discharged water at water purification plants in 2008 was enhanced to BOD 2.3mg/L, COD 4.4mg/L, SS 3.9mg/L, showing the improvement from 2007. It is within 8%, 11%, 13% of the basis of discharge taxes levy, BOD 30mg/L, COD 40mg/L, and SS 30mg/L.

#### SEWAGE TREATMENT PLANTS

Average water quality of the discharged water from 20 sewage treatment plants currently being operated in 2008 was BOD 2.1mg/L, COD 5.9mg/L, SS 2.9mg/L, which was a mere 21%, 15%, 29% of the reinforced water quality standard for discharged water based on specific regions including the clean area which was BOD 10mg/L, COD 40mg/L, SS 10mg/L, respectively. Moreover, K-water is also assuming leadership in enhancing the water quality of discharged water with the optimal means of operation using the self-developed sewage treatment program (PASS2).

#### SIMPLE SEWAGE TREATMENT FACILITIES

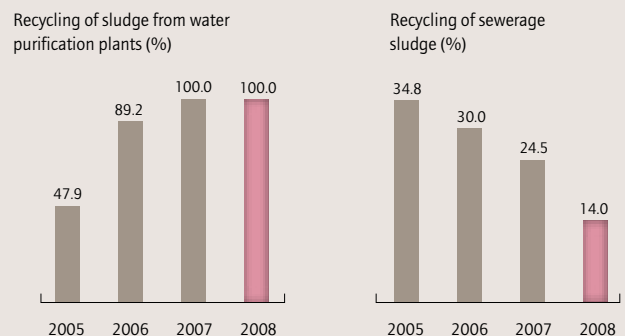
Average water quality of the discharged water is BOD 6.6mg/L, SS 6.1mg/L, which is within 33% and 23% of the legal requirement of BOD 20mg/L and SS 20mg/L respectively.



### WASTE AND RECYCLING

#### SLUDGE FROM WATERWORKS AND SEWERAGE TREATMENT SYSTEMS

The sludge produced in the course of water treatment of 1 m<sup>3</sup> was 55 g and the quantity of sludge produced from sewage was 84,679 tons in 2008. It was recycled 100% into cement, filling materials, planting soil. The total quantity of sludge produced in the wastewater treatment in 2008 amounted to 27,235 tons. 3,802 tons, 14% of this, was recycled into planting soil, cement ingredients and compost. The reason for the recycling of sewage sludge in 2008 was that when the Heungsung and Busan wastewater plants discharged all the sewage sludge into the sea, those plants were newly commissioned to K-water. Currently, K-water is trying to build the recycling facilities in those plants, and the sewage sludge recycling from all sewage treatment plants managed by the K-water will be increased.



#### RECYCLING OF CONSTRUCTION WASTE

K-water is trying its best to preserve the national environment and improve resource conservation and public welfare by appropriate and environment-friendly handling of ever increasing construction waste and by continuous recycling efforts. As a result of these efforts, 91,947

tons of construction waste have been recycled as road and park site preparation soil, wood chips to be distributed to local residents for compost and firewood for heating (49% recycling). Proactive efforts will be made by active pursuit of reduction policy which will minimize waste at its generation stage and further expand the scope of recycling for the settlement of resources circulating society. In order to achieve this, continuous efforts will be made to predict the amount of waste generated per process on the site, to set up corresponding plans for treatment, and maintenance and accurately to manage discharge conditions and timing in the waste treatment plan.

## HAZARDOUS MATERIAL CONTROL, WASTE TREATMENT AND DISCHARGE

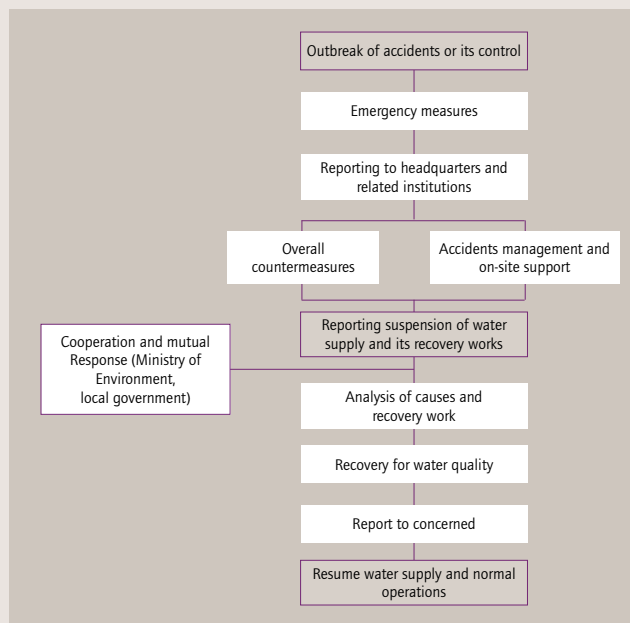
### DISCHARGE MANAGEMENT OF HAZARDOUS MATERIALS

If hazardous material leakage occurs at our work sites, it can seriously damage the surrounding environment, bio-diversity, and residents' health. We are abiding by related regulations through strict handling of the hazardous materials generated from the project site. So far, there has been no incident of leakage of major hazardous materials. Moreover, a capability of management for crisis preparedness is being developed by establishing a crisis preparedness manual in preparation for outbreak of various accidents including leakage of hazardous materials and following regular exercises.

### WASTE DISCHARGE MANAGEMENT

Following the restriction against discharging sludge to the seas (admission to the protocol of London Dumping Convention in 1996), discharging sludge from water purification plants to the seas has been banned with amendment of enforcement regulations in the Maritime Pollution Prevention Law (Ministry of Maritime Affairs & Fisheries Regulations No. 330, on February 21, 2006) from January 1, 2007, and K-water has recycled 100% of sludge generated from water purification facilities since 2006. No waste is transferred overseas.

#### Hazardous Material Leakage control System



## PRODUCTS AND SERVICES

### RESULTS OF ENVIRONMENTAL EFFECT REDUCTION EFFORTS

K-water has been continuously improving the environmental performance through the dynamic circulation process of P(Planning), D(Deed),

C(Checking) and A(Amendment) reflecting ISO 14001 requisites, and in 2007, In 2007, we set up 30 environmental targets in 8 major areas and achieved 97% of them



#### Achievements of Environmental Management in 2008

<b>ENVIRONMENT - FRIENDLY DEVELOPMENT AND MANAGEMENT</b>	7 cases of Design for Environment (DfE)
	15 cases of Environmental impact assessment by project
	7 cases of environment-friendly development
	12 cases of environment-friendly management of facilities
	72.4% achieved in management of revenue water rate at regional waterworks
	3 LCA cases (Siheung, Sacheon, Gumi water purification plant)
<b>SUPPLY OF CLEAN WATER</b>	KRW 41.5 billion (6.0%) of environmental investment
	Improvement of quality of dam water (COD 2.6mg/L in average)
	Improvement in revenue water rate (50 % ⇒ 52%)
	Improvement of water quality (Purified water: 0.1 NTU 99.9%; settled water: 1 NTU 90.8%)
<b>PRODUCTION AND CONSUMPTION OF ENVIRONMENT-FRIENDLY PRODUCTS</b>	Solution on distrust for tap water: supply of water of 7,708 thousand bottles real-time exposure on water quality at 39 facilities
	Production of hydropower energy (1,615 GWh)
<b>REDUCED CONSUMPTION OF RESOURCES AND RECYCLING</b>	Green purchasing (KRW KRW 6.4 billion)
	Reduction in cost of chemicals for purification of water (KRW 4.89/m <sup>3</sup> in unit requirement of chemical)
	Electricity consumption at project sites (reduction of 7,356MWh)
	Reduction in oil consumption (LNG 313 thousand m <sup>3</sup> , Diesel 84,371 L, Kerosene 7,730 L) recycling of waste materials
<b>REDUCTION IN DISCHARGE OF POLLUTANTS</b>	Reduction in usage of backwash water at water purification facilities (1.57% of clean water production)
	Reduction in food waste (discharge of food leftovers generated from headquarters 176kg/day)
	Improvement of discharged water quality from water purification plant (BOD 2.8mg/L, COD 5.3mg/L, SS 4.8mg/L)
	Control of discharged water quality from waste water treatment facility (BOD 7.6mg/L, SS 7.0mg/L)
<b>ENVIRONMENT, SAFETY AND PUBLIC HEALTH CONTROL</b>	Reduction in discharge of sludge from water purification plants (discharge of sludge: 0.06kg/m <sup>3</sup> )
	Drill for sudden water quality drop (114 cases)
	industrial disaster ratio : 0.32%
<b>STRENGTHENING TIES WITH CIVIL SOCIETY</b>	Accident in environment, safety and public health: 0 cases
	Environmental volunteer activities (205 times/ 12,322 hrs)
	Implementing cooperative programs with nongovernmental organizations (operating councils): 27 cases
<b>OTHER ACTIVITIES FOR ENVIRONMENT MANAGEMENT ACTIVITIES</b>	Tour of inspection on water resources corporation (for 13,000 people)
	Promoting Forest Management Program (area 75,658ha, 5dams)
	Opening of performances for environmental management Publication of report for sustainable management and registration of GRI(A+ level)
	Development of water resources in underdeveloped countries (13 overseas projects/ KRW 18.9 billion)
	Patent registered 37 cases(ex: the sampler for discharges of waterworks)

## REGULATION, TRANSPORTATION, AND ENVIRONMENTAL ACCOUNTING

### CONFORMATION OF REGULATIONS

No fines or non-monetary sanctions have been imposed upon us due to violation of laws or regulations.

### ENVIRONMENTAL EFFECTS OF EMPLOYEE TRANSPORTATION

In the research concerning the amount of air pollution generated from transportation of our employees, we found our employees generated 1,298 kg of pollutants such as SOx. To minimize energy consumption, it is enforcing no-driving-day and car pool system.

Environmental Effects of Employee Transportation(unit: kg)

MINUTE DUST	SOx	CO	HC	NOx
20	143	867	5	262

### ENVIRONMENTAL COST AND TOTAL INVESTMENT

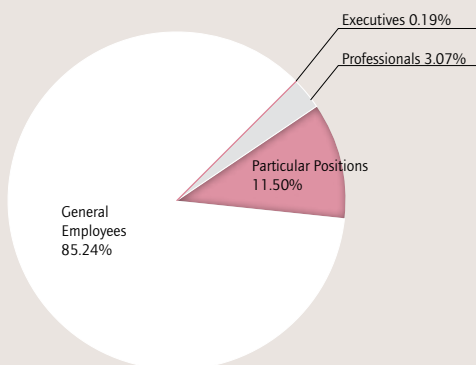
For more detailed information on environmental accounting such as environmental cost or investment, please refer to page 43.

## Labor

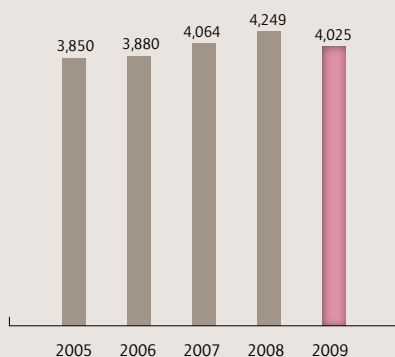
### EMPLOYMENT STATUS

Including the seven executives, the total number of employees is 4,025, which decreased by 5.2% since 2007. Because K-water has merged and abolished similar functioning divisions, simplified the organization class for strengthening a global competitiveness, and reduced employees through the voluntary retirement program. K-water hired 101 new employees in total through the open hiring procedure to the public.

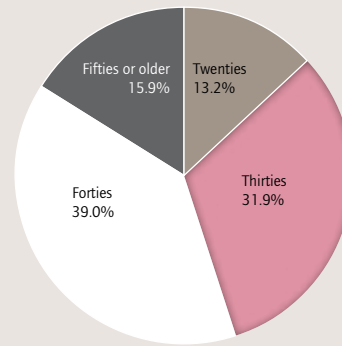
Total Number of Executives and Employees in 2009 (personnel)



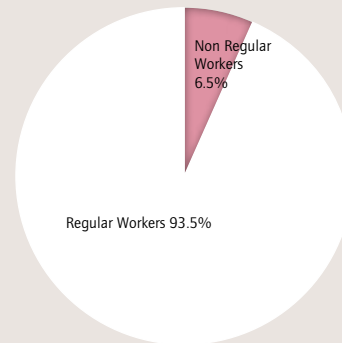
Executives and Employees (personnel)



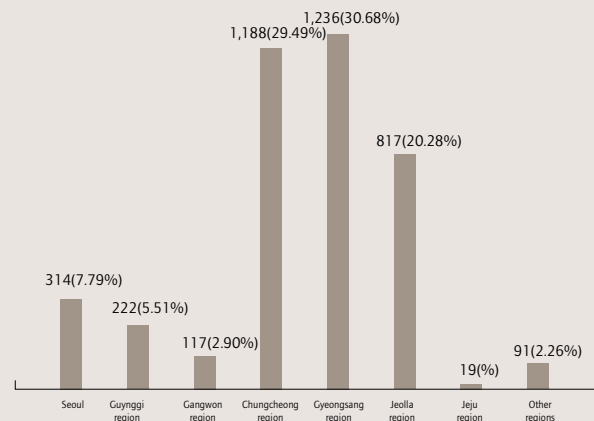
Composition by Age (%)



Type of Employment

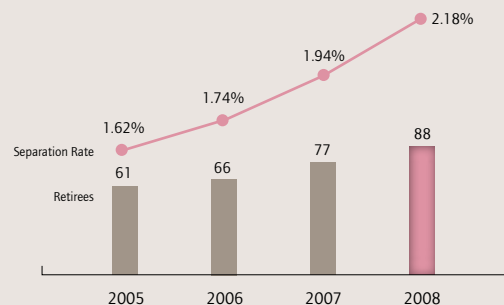


The number of employees by region



### SEPARATION RATE

In recent years, the number of retirees has increased, but the transfer rate has decreased. The total number of transfers was 88 in 2007, which only reaches 1.9% of transfer rate.





REASONS FOR RETIREMENT	PERSONS
Contract expiration	1
Mandatory Retirement	4
Voluntary retirement	3
Voluntary resignation	26
Retirement due to age limit	53
Dismissal	1
Total	88

\* TOTAL NUMBER OF EMPLOYEES IS 4,025 AS OF DEC., 31, 2008

#### WELFARE POLICIES

We offer various welfare policies to increase productivity by motivating employees, increasing their quality of life and stabilizing the living foundation as well as the four major social insurances set by law.

CLASSIFICATION	CONTENT
Housing	* Loan for buying a house * Providing company owned housing
Education	* Financial support for junior high or high school students * Financial aid for college tuition * Running daycare center
Health	* Establishment of Health Management System (Clinic for quitting smoking and reducing obesity) * Medical room in headquarters, and safety and health personnel at sites * In-house dentist and oriental medicine clinic EPA program
Maternity protection	* Providing breastfeeding rooms and women's resting place * Interim workforce for maternal leave
Injury compensation	* Injury compensation * Health insurance for difficult-to-cure diseases such as cancer
Others	* Running physical training center * Support for club activities * Funeral support service

#### LABOR RELATIONSHIP

Collective bargaining is practiced on important matters affecting 80.7% of employees such as work conditions. Under Article 35 of collective agreement (responsibility of notice), the Labor and Management must notify each other on occurrence of important matters such as alteration on article of association and work conditions.

#### SAFETY AND HEALTH AT WORKPLACE

Capital-Labor Collaborated Safety and Health Committee run by K-water is managed as Capital-Labor Consensus Committee, consisting of 8 members from both Labor and Management. The Capital-Labor Consensus Committee deliberates on pending problems every fiscal year, striving to decrease conflicts through bilateral comprehension and satisfactory explanation, increasing productivity and employee welfare, leading to the common gain. For the occupation health and safety, K-water operates the Capital-Labor Collaborated Industrial Health & Safety Committee on the office with employees more than 100 persons.

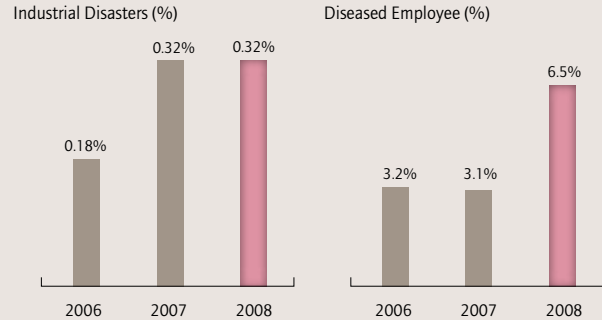
#### SAFETY AND HEALTH MATTERS IN CAPITAL-LABOR CONSENSUS COMMITTEE

- |   |                                  |
|---|----------------------------------|
| • Work environment improvement for female employees | • Integrated Injury Compensation |
| • Safety measures for accidents                     | • Maternity Protection           |

K-water operates a variety of industrial safety and health education programs and strengthens the safety management system on the construction sites, and carries out the accident prevention program on sports activities. K-water allows the wounded or injured employees

to return to their position after complete recovery. Our strict medical examination for early discovery of diseases and the systematic management of diseased employees made a contribution to reducing the number of diseased employees in 2008

#### Industrial Disasters, Diseased Employees



#### Injury, Occupation Disease, Loss Days

YEAR	INJURY	INJURY RATE	OCCUPATION DISEASE	LOSS DAY	LOSS DAY RATE
2008	12	0.27%	0	189	4.38%

#### RISK & DISEASE MANAGEMENT PROGRAM FOR EMPLOYEES AND LOCAL COMMUNITY RESIDENTS

For the enhancement of life quality of aged people in areas adjacent to dams, we have built a Filial Piety Welfare Center.

#### EMPLOYEE ASSISTANCE PROGRAM(EAP)

We strive to enhance work satisfaction by introducing EAP to cope with stress induced from various reasons such as increase in work load, maladjustment in the organization, etc.

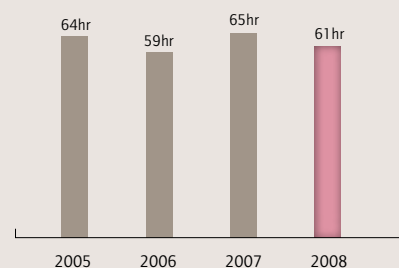
For more information, refer to page 57.

#### FILIAL PIETY WELFARE CENTER

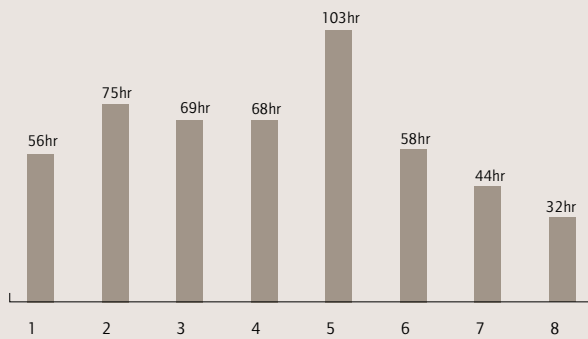
For the enhancement of life quality of aged people in areas adjacent to dams where the ratio of elderly people is increasing, we have built a Filial Piety Welfare Center. K-water built the Filial Piety Welfare Center near Hapchun Dam in 2006, and opened the Chungju Dam Filial Piety Welfare Center in 2008. K-water is scheduled to construct these filial piety welfare centers around all the dam adjacent areas by 2010 in order to improve the local community welfare.

#### EDUCATION AND TRAINING

##### Annual Average of Education Hours per Person



Annual Average of Education Hours for Each Class



#### SUPPORT PROGRAM FOR RETIREES

With the introduction of Salary Peak Policy in 2004, the number of career changes has increased. For this, we run the 'Evergreen Program' to help salary peak subjects and the third class employees having 2 years before retirement to prepare for a new life by career education and consultation.

#### FAIR EVALUATION AND COMPENSATION

All employees are subject to a periodic evaluation. Executives receive piece rates according to their accomplishments after closing a management contract with the president. For recipients of pensions, the first class employees are evaluated on department evaluation, work assessment, and strategic subject assessment while the second class employees are evaluated on team evaluation and their individual MBO evaluations in order to receive piece rates. Employees under the third class receive piece rates in accordance with the department evaluation.

· Work Assessment Results : Assessment by superior

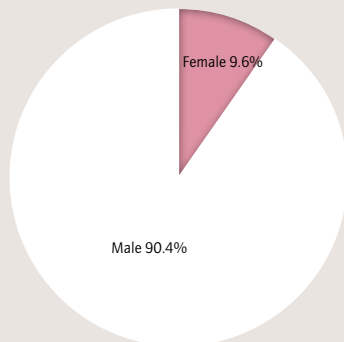
· Strategic Subject Assessment Results : Assessed by CEO for strategic subjects and general performance

#### DIVERSITY AND EQUAL OPPORTUNITY

##### EMPLOYEES AND EXECUTIVES

The gender ratio among the employees of 2008 is 90.4% male to 9.6% female. However, thanks to having enacted a system of female employment since 2003. As of December, 2008, K-water's female employees are 385 persons. Among them, there are 2 directors (grade 2), and 19 vice-directors (grade 3).

Employees by Sex



#### PAY LEVEL COMPARISON

The pay level is identical for both male and female at the same level in case of same entrance year.

## Human Rights

#### INVESTMENT AND PROCUREMENT PRACTICES

K-water makes it clear in the ethics preamble that it respects the employees's individual diversity and dignity. All management activities are being carried out, based on the spirit of human respect according to the ethics preamble.

#### HUMAN RIGHTS INVESTIGATION ON INVESTMENT AGREEMENT OR CONTRACT

K-water's International projects are mostly small investment projects such as Official Development Assistance (ODA) and engineering (investigation layout, execution supervision, etc.) technology export, which do not include subjects of the protection of human rights. In the future, we will include subjects of human rights in direct investment projects.

#### HUMAN RIGHTS REVIEW FOR CONTRACTORS

K-water eliminates corporations which do not meet our basic ethical standards when sealing a domestic goods or construction contract. We collectively evaluate the company's financial soundness, credibility, quality of products, and business showings in substitution of human rights investigation of those companies we work with.

#### HUMAN RIGHTS TRAINING

Currently K-water's human right protection training courses are concentrated on sexual harassment prevention training. In the future, it will expand training courses to other aspects of human rights. For more information, refer to page 56.

#### ANTI-DISCRIMINATION PRACTICES

K-water makes it clear in the ethics preamble that it respects individual persons without any discrimination and respect differences and creativity, and complies to ILO Convention No. 111 "Discrimination (Employment and Occupation) Convention". K-water has a policy to protect the rights of minority employees and handle employee troubles. We run various programs such as expanded employment, gender equality and maternal protection programs to protect the rights of minority employees such as handicapped people, female employees and contract employees, and we also have a Gender Equality Department within the Labor Union. For more details, please refer to page 56.

#### RIGHT OF FORMING ASSOCIATIONS AND THE FREEDOM FOR COLLECTIVE BARGAINING

We guarantee the right of forming associations and the freedom for collective bargaining stated by the collective agreement, which ensures the complete protection of rights in every job site.

#### PROHIBITION OF UNDERAGE EMPLOYMENT

According to the employment rules, we prohibit employment of those under age 15, or middle school students under age 18. We are considering changing rules for our new employees to submit proof of their age.

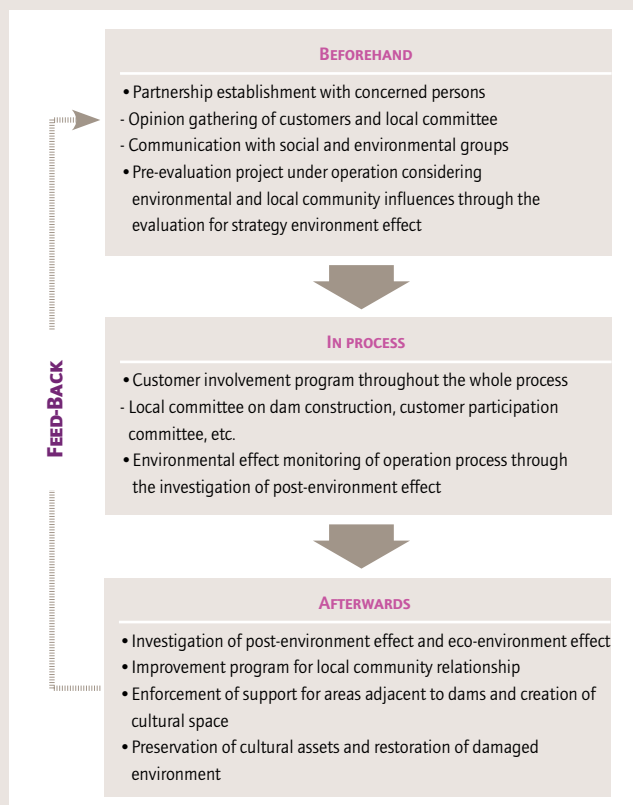
#### PROHIBITION OF FORCED LABOR

We abide by the Korean Labor Standard Law on the subject of prohibition of forced labor and Abolition of Forced Labor Convention ILO (NO 105). Also we support Labor Standards principles of Global Compact.

For better protection of individual rights and prevention of decrease of productivity, one person from every department must acquire a cyber education degree and transmit to the rest of the department annually.

As a public enterprise, which has heavy responsibilities in SOC investment, K-water faces many conflicts and lawsuits with local residents in the process of dam, waterworks, and complex development constructions. The cases mostly involve land compensation. 130 cases occurred in 2008; 54 are concluded and 76 are still in process. But, K water is putting forth its best effort to solve these problems as soon as possible while protecting the rights of former residents who have to leave the area. As a support plan for the post dam construction, we support the local residents with various subsidies.

Business promotions differ at each development level according to its environmental and social effect. In effort to reflect opinions of local residents in advance and relieve conflicts, opinions are collected from the primary stages of dam construction design. Also, a joint committee is operated for better communication. K-water participates in water resources development projects overseas, in countries such as Cambodia and Rwanda, and conducts the environmental effect evaluation at the beginning for their sustainable development and environment conservation.



The Strategic Environmental Assessment is a means of supporting the systematic decision making which considers an environmental impact together with a socio-economic impact from early stages of administrative planning prior to the development project. K-water is leading the establishment of a democratic and environment-friendly water resources plan by carrying out a strategic environmental assessment for the first time in the country targeting the superior national administrative plan in the field of water resources including a long-term comprehensive plan for water resources and a long-term plan for dam construction in 2007.

K-water uses Environmental Impact Assessment as a means to predict/prevent environmental pollution, which may be caused by various development projects. In planning and implementing dam construction, K-water use this tool as a measure to reduce environmental damage and maintain a sound environment.

According to evaluation contents on the evaluation sheet of environmental effect, post management, direction and accuracy of prediction are inspected. 10 cases including Buhang Dam were subject to this process in 2007.

Preservation of local cultural assets that could be damaged by water supply development and restoration of environment are currently in operation. K-water strives to preserve cultural assets of dam construction scheduled areas such as the Jangheung Dam historic park and Daegok Dam cultural artifacts pavilion.

K-water operates various infrastructures such as the ethics committee, the integrity-improving task force, the corruption practices finding task forces, and the integrity innovation leaders in order to effectively control corruption practices in the organization. The integrity innovation leaders in the respective offices have especially become a power improving corporate ethics soundness.

K-water abides by the ethics regulations that all employees take part in and practice, such as the ethics preamble focusing on stakeholders, the employees' behavior preamble, which is a strict activity regulation for the employees, the research ethics regulation and the officer integrity contract.

K-water also operates the 2 stage corruption impact evaluation system in order to strengthen the propriety and transparency of the internal regulations by analyzing and evaluating the corruptive factors that may be internalized in those regulations. K-water took a correction on 55 regulations and eliminated the corruptive factors in advance.

K-water set ethical management as its one of four primary management strategies. It has reshaped ethical management system to make a solid base for transparent and fair business management practice. It has provided companywide integrity education to all executives and

employees in order to bring reform. And it has given extended and diversified education in innovative integrity, including countrywide lecturing tour, enhancement in ethical education on general education curriculum, and customized education for specific tasks. As a result, an annual cumulative number of all participants, including executives and employees, reached 9,337 in 2008.

#### EXCELLENT GOVERNMENT AGENCY ON ETHICS APPROVED BY THE GOVERNMENT FOR 3 CONSECUTIVE YEARS

In spite of CEO's ethical management willingness and all employees' participation, the integrity index of 2008 decreased compared to the previous year. It is analyzed that construction activities are comparatively the weak point. K-water takes anti-corruption measures such as the audit activities against the vulnerable offices, the business focusing on customers, and ethical compliance for official positions. In spite of the decrease of the integrity index, K-water was chosen by the government as an excellent government agency on ethics for 3 consecutive years.

#### PARTICIPATION IN PUBLIC POLICY MAKING

K-water closely cooperates with the Ministry of Land, Transport and Maritime Affairs, the Ministry of Environment, and other relevant government departments in making public policies and laws concerning water resources. Also K-water dispatches its personnel at Ministry of Land, Transport and Maritime Affairs, Sustainable Development Committee, and Anti-Corruption & Civil Rights Commission to discuss upcoming issues on temporary basis. Since corporation are prohibited from donating to political entities, K-water does not allow any donations to politicians in any form.

#### COMPLIANCE WITH FAIR TRADE LAWS

Under the Monopoly Regulation and Fair Trade Act, K-water abides by fair trade and is subject to periodic audits by the Fair Trade Commission for any unfair competition or monopolistic acts. For the last 4 years, there has been no official warning from FTC and no other fine or non-monetary sanction has been imposed upon us due to violation of laws or regulations.

## Product Responsibility

K-water practices customer-driven management that makes us come closer to customers based upon the management philosophy, "Customers' values are our values" through the customer charter preamble.

#### SAFETY AND HEALTH FOR CUSTOMERS

K-water has endeavored to improve the safety of tap water by introducing Lifecycle Assessment (LCA) about tap water and received environmental performance report certifications through all of our waterworks sites.

As a part of further strengthening water quality grade evaluation system applicable to water purification plants, we expanded water quality inspection items to 14 items including turbidity, chlorine residue, taste, odor, and sterilization residues, and strived to produce tap water to customers' satisfaction by running inspection programs since 2003. We are managing water quality based on our own 'Service Standards to Fulfill' and no non-confirmation was found in 2008.

#### PRODUCT AND SERVICE LABELING

K-water classifies customer types and provides customized services fitting to individual customers in order to satisfy their needs. Also it has monitoring and feedback system to accomplish customers' satisfaction. So far, no non-compliance was found concerning products and service labeling related regulations and laws. For customer satisfaction evaluation and other details, please refer to 'Customer-oriented Management' on page 24.

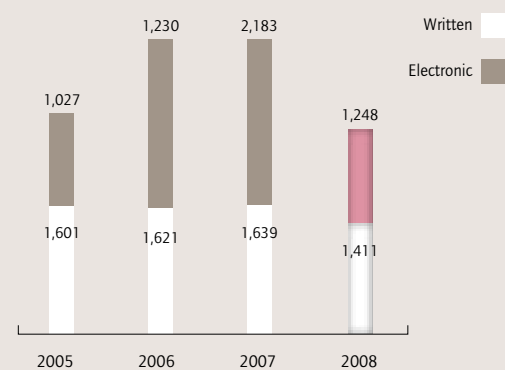
#### MARKETING COMMUNICATION

Since customers are liable to be affected by marketing communication in their decisions, it is necessary to provide them with exact information so as not to prejudice their sound judgments. All business activities, including marketing communication activities such as advertisements, promotions, sponsorships, complied related laws and in-house work ethic principals. All advertisements including public announcements about land lotting-out are fairly executed according to our own criteria for the selection of media. There has been no case of violation to date in connection with marketing or advertisements.

#### PROTECTING CUSTOMERS' INFORMATION AND PROCESSING CUSTOMER PETITIONS

We are protecting customer's personal information through our security policies in the customer database including access controls, control of authority, and post audit, and there has been no case of customer complaints in connection with protection of customer's personal information. However, we pay a 10 thousand won gift certificate per case of customer complaint which caused inconvenience to a particular customer in the process of our promptly processing his/her complaints. In 2008, we paid a total of 210 thousand won for 21 cases.

Number of Customer Petitions





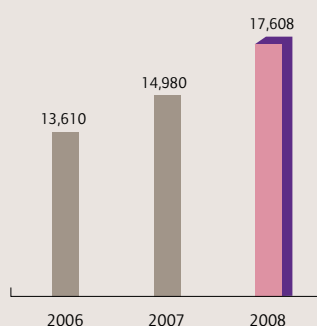
# Financial Performances

Following our shift to a more customer-oriented approach, K-water has carried out various activities to satisfy the customer. We have formulated a mid/long-term management strategy with the goal of becoming a respected global water service specialist and set up a separate unit dedicated to customer satisfaction. These efforts resulted in an organizational culture emphasizing the customer, reinforced infrastructure, and innovation in customer related processes. The upward trend in water supply volume and pursuit of new businesses such as regional waterworks drove up sales by 12.8% to KRW2.04 trillion. Increased raw material prices prompted by rising crude oil prices and other external factors pressured the gross profit margin, lowering net profit by 6.7% to KRW138.8 billion. We anticipate an improvement in topline growth and profitability in 2009 led by greater investment in core technology development and a pickup in our new growth businesses.

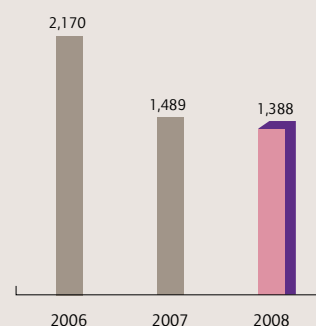
## CREDIT RATING

- \* Moody's: A2
- \* S&P: A

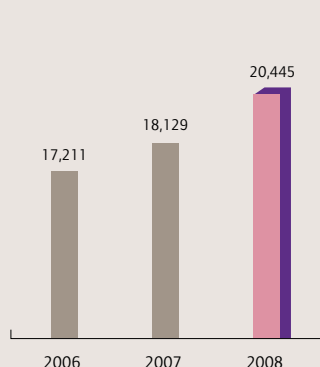
## COST OF SALES (Unit: KRW100 mn)



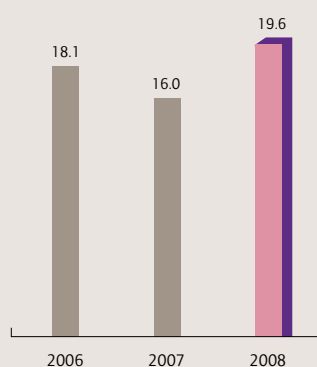
## NET PROFIT (Unit: KRW100 mn)



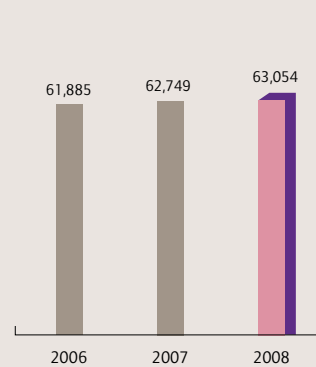
## SALES (Unit: KRW100 mn)



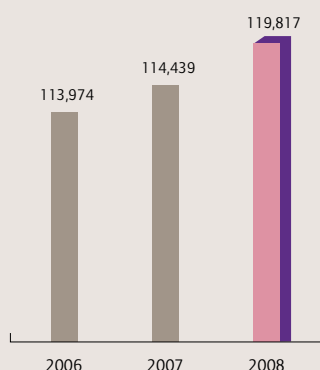
## CAPITAL (Unit: KRW100 mn)



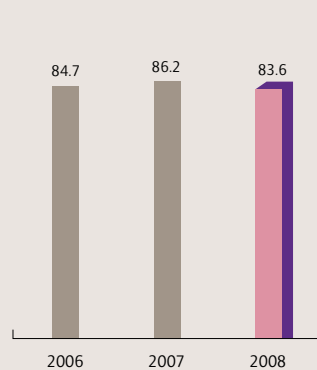
## DEBT RATIO (Unit : %)



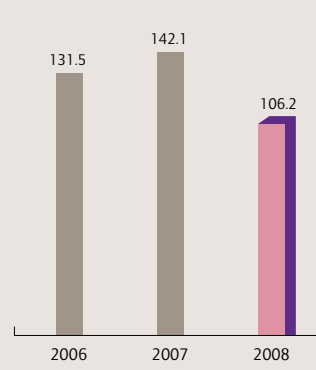
## ASSETS (Unit: KRW100 mn)



## CURRENT RATIO (Unit: %)



## EQUITY TO ASSET RATIO (Unit: %)



## BALANCE SHEETS (AS OF DECEMBER 31, 2008 AND 2007)

Unit : In Millions of Korean Won and In Thousands of U.S. Dollar

	2008(W)	2007(W)	2008(\$)	2007(\$)
[ ASSET ]				
I. Current assets				
1. Cash and cash equivalents	30,422	117,931	24,193	93,782
2. Short-term financial instruments	8,000	30,422,758,839		117,931,209,880
3. Trade accounts and notes receivable, less allowance for doubtful accounts of ₩486,790 in 2008 (₩635,975 in 2007) (Notes 2 and 13)	286,954	291,616	228,195	231,902
4. Other accounts receivable, less allowance for doubtful accounts of ₩2,561,192 in 2008 (₩2,738,157 in 2007) (Note 2)	9,205	603	7,320	480
5. Inventories including land lots of ₩22,293,981 in 2008(₩233,932,104 in 2007) (Notes 2, 6 and 20)	286,954	291,616	228,195	231,902
6. Accrued income	3,271	2,830	2,601	2,251
7. Advance payments	92,160	72,776	73,289	57,874
8. Prepaid expenses	3,721	1,111	2,960	884
9. Other current assets	43,486	33,239	35	26
[ Total current assets ]	463,171	740,227	368,327	588,650
II. Property, plant and equipment (Notes 2, 7, 8, 19 and 20):				
1. Land(Note 7)	32,741	32,799	26,037	26,083
2. Buildings	299,666	282,438	238,303	224,603
3. Structures	123,536	121,977	98,240	97,000
4. Machinery and equipment	455,306	442,752	362,073	352,089
5. Ships	7,925	7,534	6,303	5,992
6. Vehicles	11,122	10,143	8,845	8,066
7. Construction-in-progress	1,868,324	1,659,166	1,485,745	1,319,417
8. Other tangible assets	80,536	74,630	64,045	59,348
Less accumulated depreciation	2,879,160 (395,260)	2,631,442 (350,872)	2,289,591 (314,322)	2,092,598 (279,024)
Property, plant and equipment, net	2,483,899	2,280,569	1,975,268	1,813,574
III. Investments and other assets:				
1. Long-term financial instruments (Note 3)	10,894	4,261	8,664	3,389
2. Available-for-sale securities (Note 2, 4)	4,218	4,080	3,355	3,245
3. Equity method investment securities (Note 2, 5 and 21)	5,170	10,583	4,112	8,417
4. Long-term loans, etc (Note 23)	13,750	10,155	10,934	8,076
5. Guarantee deposits	102,359	91,810	81,399	73,010
6. Derivative financial instruments (Notes 2 and 22)	237,703	13,453	189,028	10,698
7. Unfinished constructions (Notes 2 and 6)	1,168,842	895,898	929,497	712,444
8. Other investments	2,375	6,242	1,889	4,964
9. Intangible assets, net (Notes 2, 9 and 20)	7,234	7,322	5,752,779	5,823,204
10. Long-term Trade accounts receivable	255,228	63,887	202,965	50,805
Total investments and other assets	9,034	8,423	7,184,622	6,698,253
[ Total assets ]	11,981	11,443	9,528,218	9,100,477
[ LIABILITIES AND STOCKHOLDER'S EQUITY ]				
I. Current liabilities:				
1. Trade accounts and notes payable	6,223,540	6,266,716	4,949	4,983
2. Other accounts payable	80,957,318	83,568,042	64,380	66,456
3. Advances received	257,351,198	269,137,621	204,653	214,026
4. Withholdings	19,846,988	20,477,882	15,783	16,285
5. Accrued expense	8,782,960	6,268,287	6,984	4,985

	2008(W)	2007(W)	2008(\$)	2007(\$)
6. Income taxes payable (Note 17)	20,249,804	33,396,512	16,103	26,558
7. Unpaid dividend	58,793	35,455	47	28
8. Current portion of bonds and long-term debts	29,335,678	83,886,798	23,329	66,709
9. Unearned revenue	64,702	32,684	51	26
10. Current portion of deferred income tax liabilities	6,997,420	11,578,445	5,565	9,208
11. Other current liabilities	6,372,862	6,153,073	5,068	4,893
[ Total current liabilities]	436,241,263	520,801,515	346,912	414,156
8. Prepaid expenses	3,721	1,111	2,960	884
9. Other current assets	43,486	33,239	35	26
[ Total current assets ]	463,171	740,227	368,327	588,650
II. Non-current liabilities				
1. Bonds, less discount on bonds ₩2,502,930 in 2008 (₩2,034,280 in 2007) (Notes 10 and 12)	950,841,570	467,551,720	756,136	371,811
2. Long-term debts (Notes 11 and 19)	416,216,061	445,551,738	330,987	354,315
3. Severance and retirement benefits, net (Note 2)	156,752,912	129,398,272	124,654	102,901
4. Derivative financial instruments (Note 22)		6,724,315		5,347
5. Deferred income tax liabilities (Notes 2 and 17)	2,234,882	5,524,728	1,777	4,393
Total non-current liabilities	1,526,045,425	1,054,750,773	1,213,555	838,768
[ Total liabilities ] Commitments and contingencies (Note 21)	1,962,286,688	1,575,552,287	1,560,467	1,252,924
III. Stockholders' equity:				
1. Paid-in capital (Notes 1 and 14)				
2. Capital surplus:	6,305,440,943	6,274,900,943	5,014,267	4,989,981
- Asset revaluation surplus	1,449,018,997	1,449,018,998	1,152,301	1,152,301
- Others	2,360,169	2,360,169	1,877	1,877
	1,451,379,166	1,451,379,167	1,154,178	1,154,178
IV. Retained earnings				
1. Legal reserve	591,315,150	555,432,460	470,231	441,696
2. Reserve for business expansion	1,440,903,488	1,323,945,712	1,145,848	1,052,840
3. Reserve for investment in social overhead capital	72,015,546	102,503,909	57,269	81,514
4. Unappropriated retained earnings	138,773,516	148,925,082	110,357	118,429
	2,243,007,700	2,130,807,163	1,783,704	1,694,479
V. Capital adjustments-stock issuance cost (Note 21)	(340,736)	(736,832)	(271)	(586)
VI. Accumulated other comprehensive income (Note 2, 17and 22):	19,960,466	11,947,185	15,873	9,501
[ Total shareholders' equity ]	10,019,447,539	9,868,297,626	7,967,752	7,847,553
[ Total liabilities and shareholders' equity ]	11,981,734,227	11,443,849,913	9,528,218	9,100,477

## STATEMENTS OF INCOME (YEARS ENDED DECEMBER 31, 2008 AND 2007)

Unit : In Millions of Korean Won and In Thousands of U.S. Dollar

	2008(W)	2007(W)	2008(\$)	2007(\$)
I. Sales (Notes 2, 13 and 24):				
1. Land development and lotting-out operations	184,065,243	190,431,952	146,374	151,437
2. Construction operations	531,260,034	341,850,394	422,473	271,849
3. Utilities management operations	1,241,334,502	1,190,647,942	987,145	946,837
4. Other operations	87,872,946	89,974,312	69,879	71,550
	2,044,532,725	1,812,904,600	1,625,871	1,441,674
II. Cost of sales (Note 24):				

	2008(W)	2007(W)	2008( \$ )	2007( \$ )
1. Land development and lotting-out operations	177,879,744	133,231,683	141,455	105,950
2. Construction operations	530,523,740	343,554,728	421,888	273,205
3. Utilities management operations	963,038,245	927,627,992	765,836	737,676
4. Other operations	89,372,789	93,589,987	71,072	74,425
	1,760,814,518	1,498,004,390	1,400,250	1,191,256
III. Cost of sales	283,718,207	314,900,210	225,621	250,418
IV. Selling and administrative expenses (Notes 24 and 25)	98,492,265	98,244,022	78,324	78,126
V. Operating income (Note 24)	185,225,942	216,656,188	147,297	172,291
VI. Other income (expenses):				
1. Interest expense (Note 25)	(10,140,033)	(8,839,260)	(8,064)	(7,029)
2. Rental income	787,104	810,188	626	644
3. Other bad debt expense	-	-	-	-
4. Loss on foreign currency transactions, net	(1,486)	(2,210,005)	(1)	(1,757)
5. Gain (loss) on foreign currency translation, net	(221,862,873)	(18,482,000)	(176,432)	(14,697)
6. Reversal of allowance for doubtful accounts	308,319	8,911,878	245	7,087
7. Donations	(1,488,140)	(1,455,819)	(1,183)	(1,158)
8. Equity in earnings of equity method investment, net	604,987	870,675	481	692
9. Gain (loss) on disposal of property, plant and equipment, net	459,957	2,910,831	366	2,315
10. Impairment loss on property, plant and equipment	-	(32,794)	-	(26)
11. Gain (loss) on valuation of derivative financial instruments, net(Notes 2 and 22)	221,862,873	(9,750,000)	176,432	(7,753)
12. Receipt of indemnities	3,398,923	2,424,442	2,703	1,928
13. Others	3,360,850	3,046,257	2,673	2,422
	(2,709,519)	(21,795,607)	(2,155)	(17,332)
Income before income taxes	182,516,423	194,860,581	145,142	154,959
Provision for income taxes (Note 17)	43,742,907	45,935,499	34,786	36,529
Net income	138,773,516	148,925,082	110,357	118,429

## STATEMENTS OF APPROPRIATIONS OF RETAINED EARNINGS (YEARS ENDED DECEMBER 31, 2008 AND 2007)

Unit : In Millions of Korean Won and In Thousands of U.S. Dollar

	2008(W)	2007(W)	2008( \$ )	2007( \$ )
I. Retained earnings before appropriations:				
1. Unappropriated retained earnings carried forward from the prior year	-	-	-	-
2. Net income for the year	138,773,516	148,925,082	110,357	118,429
	138,773,516	148,925,082	110,357	118,429
II. Transfer from other reserves				
1. Investment in social overhead capital reserve	22,857,739	30,488,363	18,177	24,245
	22,857,739	30,488,363	18,177	24,245
III. Selling and administrative expenses (Notes 24 and 25)				
1. Legal reserve	184,065,243	190,431,952	146,374	151,437
2. Reserve for business expansion	531,260,034	341,850,394	422,473	271,849
3. Stock issuance costs	1,241,334,502	1,190,647,942	987,145	946,837
4. Cash dividends	87,872,946	89,974,312	69,879	71,550
	2,044,532,725	1,812,904,600	1,625,871	1,441,674
Unappropriated retained earnings to be carried forward to the next year				



## STATEMENTS OF CHANGES IN EQUITY (YEARS ENDED DECEMBER 31, 2008 AND 2007)

Unit : In Millions of Korean Won and In Thousands of U.S. Dollar

(₩)	PAID-IN CAPITAL	CAPITAL SURPLUS	CAPITAL ADJUSTMENTS	ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)	RETAINED EARNINGS	TOTAL
As of 1 January 2007	6,188,500,943	1,451,379,167	(1,200,510)	(6,513,602)	2,021,664,446	9,653,830,444
Cash dividends for 2006	-	-	-	-	(39,111,326)	(39,111,326)
Amortization of stock issuance cost	-	-	-	671,038	-	(671,038)
Increase in capital	86,400,000	-	(207,360)	-	-	86,192,640
Net income for the year	-	-	-	-	148,925,081	148,925,081
Gain on valuation of derivative instruments, net	-	-	-	18,460,787	-	18,460,787
As of December 31, 2007	6,274,900,943	1,451,379,167	(736,832)	11,947,185	2,130,807,163	9,868,297,626
As of 1 January 2007	6,274,900,943	1,451,379,167	(736,832)	11,947,185	2,130,807,163	9,868,297,626
Cash dividends for 2006	-	-	-	-	(26,103,588)	(26,103,588)
Amortization of stock issuance cost	-	-	469,391	-	(469,391)	-
Increase in capital	30,540,000	-	(73,296)	-	-	30,466,704
Net income for the year	-	-	-	-	138,773,516	138,773,516
Gain on valuation of derivative instruments, net	-	-	-	8,013,281	-	8,013,281
As of December 31, 2007	6,305,440,943	1,451,379,167	(340,737)	19,960,466	2,243,007,700	10,019,447,539
(\$)						
As of 1 January 2007	6,188,500,943	1,451,379,167	(1,200,510)	(6,513,602)	2,021,664,446	9,653,830,444
Cash dividends for 2006	-	-	-	-	(39,111,326)	(39,111,326)
Amortization of stock issuance cost	-	-	-	671,038	-	(671,038)
Increase in capital	86,400,000	-	(207,360)	-	-	86,192,640
Net income for the year	-	-	-	-	148,925,081	148,925,081
Gain on valuation of derivative instruments, net	-	-	-	18,460,787	-	18,460,787
As of December 31, 2007	6,274,900,943	1,451,379,167	(736,832)	11,947,185	2,130,807,163	9,868,297,626
As of 1 January 2007	6,274,900,943	1,451,379,167	(736,832)	11,947,185	2,130,807,163	9,868,297,626
Cash dividends for 2006	-	-	-	-	(26,103,588)	(26,103,588)
Amortization of stock issuance cost	-	-	469,391	-	(469,391)	-
Increase in capital	30,540,000	-	(73,296)	-	-	30,466,704
Net income for the year	-	-	-	-	138,773,516	138,773,516
Gain on valuation of derivative instruments, net	-	-	-	8,013,281	-	8,013,281
As of December 31, 2007	6,305,440,943	1,451,379,167	(340,737)	19,960,466	2,243,007,700	10,019,447,539

## STATEMENTS OF CASH FLOWS (YEARS ENDED DECEMBER 31, 2008 AND 2007)

Unit : In Millions of Korean Won and In Thousands of U.S. Dollar

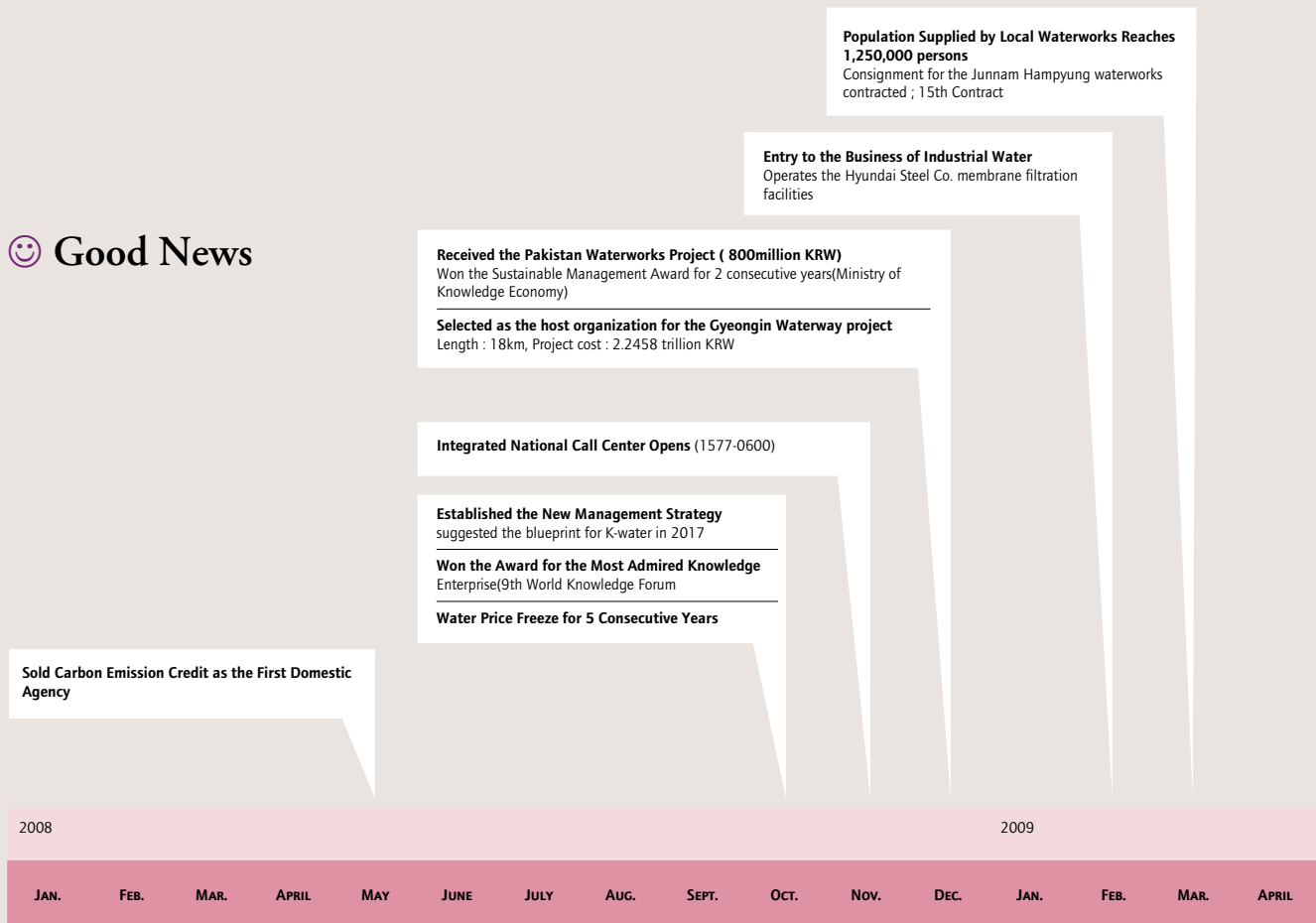
	2008(₩)	2007(₩)	2008(\$)	2007(\$)
I. Operating activities				
1. Net income	138,773,516	148,925,082	110,357	118,429
2. Adjustments to reconcile net income to net cash provided by (used in) operating activities:				
1) Provision for severance and retirement benefits	30,820,985	31,646,475	24,510	25,166
2) Depreciation and amortization	464,429,335	451,395,294	369,328	358,962
3) Amortization of discount on bonds	415,536	393,106	330	313
4) Loss on foreign currency transactions, net	-	2,210,005	-	1,757
5) Loss (gain) on foreign currency translation, net	221,862,873	18,482,000	176,432	14,697
6) Reversal of allowance for doubtful accounts	(308,319)	(8,911,878)	(245)	(7,087)
7) Donations	190,495	9,344	151	7
8) Equity in earnings of equity method investments, net	(604,987)	(870,675)	(481)	(692)
9) Loss (gain) on disposal of property, plant and equipment, net	(459,957)	(2,910,831)	(366)	(2,315)

	2008(W)	2007(W)	2008(\$)	2007(\$)
10) Impairment loss on property, plant and equipment	-	32,794	-	26
11) Loss (gain) on valuation of derivative financial instruments, net	(221,862,873)	9,750,000	(176,432)	7,753
12) Others, net	19,794	67,758	16	54
13) Trade accounts receivable	(186,370,673)	(38,925,270)	(148,207)	(30,954)
14) Inventories and long-term contract work-in-progress	(61,660,948)	(29,089,695)	(49,035)	(23,133)
15) Other accounts receivable	(8,601,485)	72,969,818	(6,840)	58,028
16) Accrued income	(440,670)	275,540	(350)	219
17) Advance payments	(19,384,631)	3,991,280	(15,415)	3,174
18) Prepaid expenses	(2,610,784)	(38,169)	(2,076)	(30)
19) Other current assets	(10,248)	1,250	(8)	1
20) Trade accounts payable	(43,176)	581,804	(34)	463
21) Other accounts payable	(2,610,724)	(50,103,928)	(2,076)	(39,844)
22) Advances from customers	(11,786,422)	(56,058,010)	(9,373)	(44,579)
23) Withholdings	(630,894)	6,830,020	(502)	5,431
24) Accrued expenses	2,514,673	(128,611)	2,000	(102)
25) Income taxes payable	(13,146,708)	(12,973,186)	(10,455)	(10,317)
26) Deferred income tax liabilities	(8,969,056)	(18,676,953)	(7,132)	(14,852)
27) Unearned revenue	32,018	(420,154)	25	(334)
28) Other current liabilities	219,790	1,036,634	175	824
29) Payment of severance and retirement benefits	(3,466,344)	(3,782,078)	(2,757)	(3,008)
[ Total adjustments ]	177,536,600	376,783,686	141,182	299,629
[ Net cash provided by operating activities ]	177,536,600	376,783,686	141,182	299,629
II. Investing activities:				
1. Decrease in long-term financial instruments	11,622,692	7,113,590	9,243	5,657
2. Decrease in long-term loans	1,049,893	1,495,257	835	1,189
3. Decrease in short-term financial instruments	162,650,000	171,850,000	129,344	136,660
4. Acquisition of available-for-sale securities	(138,500)	(80,000)	(110)	(64)
5. Decrease in refundable guarantee deposits	22,157,986	22,746,754	17,621	18,089
6. Proceeds from disposal of property, plant and equipment	1,208,684	4,354,707	961	3,463
7. Increase in short-term financial instruments	(158,000,000)	(172,500,000)	(125,646)	(137,177)
8. Decrease (increase) in held-to-maturity securities	-	10,000,000	-	7,952 (18,255,753)
9. Increase in long-term financial instruments	(18,255,753)	(5,724,391)	(14,517)	(4,552)
10. Increase in long-term loans	(4,644,294)	(2,448,484)	(3,693)	(1,947)
11. Proceeds from disposal of equity method investments	6,017,980	-	4,786	-
12. Increase in refundable guarantee deposits	(32,727,570)	(35,661,284)	(26,026)	(28,359)
13. Acquisition of property, plant and equipment and intangible assets	(581,520,782)	(615,754,142)	(462,442)	(489,665)
14. Decrease (increase) in other investments	5,250,000	5,250,000	4,175	4,175
[ Net cash used in investing activities ]	(585,329,664)	(609,357,994)	(465,471)	(484,579)
III. Financing activities:				
1. Proceeds from Issuance of bonds	261,011,441	-	207,564	-
2. Contribution from the government of the Republic of Korea and local governments	30,466,704	86,192,640	24,228	68,543
3. Redemption of bonds	(60,000,000)	(61,301,500)	(47,714)	(48,749)
4. Repayment of long-term borrowings	(23,886,798)	(22,265,678)	(18,995)	(17,706)
5. Payment of dividends	(26,080,250)	(39,075,870)	(20,740)	(31,074)
[ Net cash provided by (used in) financing activities ]	181,511,097	(36,450,408)	144,343	(28,986)
IV. Net increase (decrease) in cash and cash equivalents	(87,508,451)	(120,099,633)	(69,589)	(95,507)
V. Cash and cash equivalents at the beginning of the year	117,931,210	238,030,843	93,782	189,289
VI. Cash and cash equivalents at the end of the year	30,422,759	117,931,210	24,193	93,782

# Positive & Negative Information

K-water opens all good news and positive news related to K-water in order to make a balance of the information service, making all of the readers evaluate K-water's sustainable management performances objectively.

## 😊 Good News



## ☹ Not So Good News

**Phenol Leaked into Nakdong River**  
Fire at a company's Kimcheon factory caused hazardous materials, including phenol, to be leaked and water supply stopped  
**Response :** To enhance emergency response system by bio-alarm system on water source, system to estimate the arrival time of hazardous materials and concentration

**Integrity Index Decreased**  
(Anti-corruption & Civil Rights Commission)  
**Response :** Enhanced the anti-corruption practices for No bribe & entertainment

# Key Performance Index

	GRI	Indicators	Unit	2005	2006	2007	2008
ECONOMY	EC01	Total Sales	Millions in KRW	1,590,951	1,721,105	1,812,905	2,044,533
	2.8	Dam water supply	Million m <sup>3</sup>	4,616	4,706	4,757	4,847
	2.8	Service water supply	Million m <sup>3</sup>	2,881	2,972	3,064	3,094
	2.8	Unit price for dam water supply	KRW/m <sup>3</sup>	47.93	47.93	47.93	47.93
	2.8	Unit price for service water supply	KRW/m <sup>3</sup>	286.60	286.60	286.60	286.60
	2.8	Accounted for Water Rate (Multi-Regional Waterworks)	%	99.00	99.52	99.70	99.80
	EC01	Interest Paid to Fund-Providers	millions in KRW	28,942	23,814	22,754	26,898
	EC01	Dividends Distributed to Investors	millions in KRW	35,281	39,111	26,104	24,285
	EC01	Operating Income to Sales	%	18.7	16.87	11.95	9.06
	EC01	Tax Amount Paid	millions in KRW	76,730	78,952	50,317	43,743
	2.8	Number of Dam Water Customers	Sites	108	88	95	119
	2.8	Number of Service Water Customers	Sites	1,538	1,543	1,707	1,714
	PR05	Customer Satisfaction Index	Points	83.0	87.0	93.5	92.6
SOCIETY	LA01	Total number of employees	Persons	3,880	4,064	4,249	4,025
	HR04	Total number of female employees	Persons	309	357	376	385
		Labor hours (Statutory labor hours)	Hours/week	46.75(40)	46.75(40)	46.75(40)	46.75(40)
	LA01	Number of New Employees	Persons	239	110	140	101
	LA02	Number of Exiting Employees	Persons	61	66	77	88
	LA10	Number of Trainees	Persons	12,926	11,513	13,906	11,666
	HR05	Labor-Management Agenda and Consensus	Cases	14	12	13	10
	LA07	Industrial Accidents	Cases	14	7	14	13
	LA07	Industrial Accident Rate	%	0.38	0.18	0.32	0.32
	LA07	Patients	Persons	127	122	127	274
	LA07	Prevalence Rate	%	3.3	3.2	3.1	6.5
	EC09	Aid to Local Communities around Dams	Billions in KRW	425	467	520	532
	EC09	Investment in Social Activities	Billions in KRW	480	475	540	543
	EN16	Total Carbon Dioxide Emissions	tCO <sub>2</sub> e	411,866	388,216	470,652	472,386
	EN03	Total Energy Consumption	TOE	208,189	196,227	225,901	226,757
	EN03	Power Consumption for Water Purification	MWh/m <sup>3</sup>	0.3164	0.3167	0.3186	0.3182
	EN08	Total amount of water obtained	1,000 m	2,898,823	2,985,975	3,103,761	3,096,865
	EN06	Power Generated from Multi-purpose Dams	GWh	2,457	2,183	2,159	1,615
	EN22	Total Sludge from Water Treatment Plants	tonnes	103,622	100,174	97,458	84,679
ENVIRONMENT	EN22	Total Recycled Sludge	%	47.9	89.2	100	100
	EN10	Quantity of Recycled Water (Head Office Consumption)	m <sup>3</sup>	8,531	9,423	8,079	8,065
	EN14	Young fish stock	One thousand fish	1,445	1,982	1,548	1,298
	EN21	BOD of Water Discharged from Water Treatment Plants	mg/L	3.9	3.0	2.8	2.3
	EN21	COD of Water Discharged from Water Treatment Plants	mg/L	5.7	5.5	5.3	4.4
	EN21	SS of Water Discharged from Water Treatment Plants	mg/L	5.5	4.4	4.8	3.9
	EN21	Water sewage treatment BOD	mg/L	2.9	2.2	1.9	2.1
	EN21	Water sewage treatment COD	mg/L	7.8	7.0	6.9	5.9
	EN21	Water sewage treatment SS	mg/L	3.3	3.2	2.7	2.9
		Replacement of Worn-out Pipes (Length)	km	14.2	11.3	12.5	15.54
		Replacement of Worn-out Pipes (Cost)	Millions in KRW	13,046	10,059	10,912	29,786
		Water Quality Control Cost per Ton (Unit Requirement of Chemicals)	KRW/m <sup>3</sup>	5.6	5.8	5.2	4.9
	EN30	Investment in Environmental Facilities	Millions in KRW	548	728	653	415
	EN30	Environmental Investment to Total Investment	%	7.0	8.9	10.0	6.0
	EN30	Environmental cost	Millions in KRW	1,217	1,215	1,210	1,380
	EN30	Environmental Cost to Project Cost ISO9001/14001	9.06	11.70	11.0	11.0	12.0
	4.11	Environmental Impact Assessment	Cases	10	2	1	2
	4.11	Preliminary Environmental Feasibility Review	Cases	3	10	6	3



# GRI Report Index

INDEX	CONTENTS OF INDEX	K-WATER ADAPTATION INDEX	GLOBAL COMPACT	PAGE	REPORT RATE
Strategy and Analysis					
1.1	Vision and Strategy	CEO Message, Strategy and Vision		2-3, 10-11	●
1.2	Major effects, Threatening factors and Opportunity factors	Continuance possibility factors, Ethics, Crisis management		8-9, 28-29	●
Structure Profile					
2.1	Structure Name	Company Name		Wing	●
2.2	Major brands, products and services	Major brands, products and services		Wing, 14-15	●
2.3	Structure of major business departments, operating company, subsidiary companies, collaborating companies, Structure of major business departments, financing companies, etc.	Structure of major business departments, financing companies, etc.		Wing, 12	●
2.4	Location of head office	Location of head office		Wing	●
2.5	Number of countries reported structure is operating in, Names of countries that have detailed relations with the problem of continuance possibility handled in the report	Number of businesses, number of overseas business companies		Wing	●
2.6	Characteristics and legal form of owned structure	Financial provider structure, shares structure		22	●
2.7	Subject market	Subject market and customer categories		24	●
2.8	Size of reported structure	Number of executives, sales, total assets, total debts		Wing	●
2.9	Important changes in size, structure or owned structure during reported period	No important changes		Wing	●
2.10	Awards during reported period	Breakdown of overseas awards and certificates		Wing	●
Parameters					
3.1	Report period	2007, part of 2008		Wing	●
3.2	Date of most recent report	29-Aug-07		Wing	●
3.3	Report cycle	Annual		Wing	●
3.4	Inquiries on report and related areas	Report inquiries		Wing	●
3.5	Report contents definition process	Subject readers and stakeholders		Wing	●
3.6	Report border	Korean businesses and overseas business accomplishments		Wing	●
3.7	Detailed restrictions of report range or report border	Accomplishments of overseas business		Wing	●
3.8	Reporting standard of things that may have a large effect on comparing possibilities according to period or structure, such as collaborating companies, subsidiary companies, rented facilities or outside duties	Same term as 4 financing companies		92	●
3.9	Data measurement methods including presumptions and methods that support accomplishment index and other predictions adapted in information collection process, and calculation standard	Financial, environmental, social data measurements		92	●
3.10	Effects of re-stating information presented in last report and explanation of reason for re-statements	No change		Wing	●
3.11	Big change in report range, border and measurement method compared to last report	Change in Korean place of business and overseas projects		Wing	●
3.12	Index that shows the position of standard notices in the report	GRI Content Index		86-89	●
3.13	Policies and current activities to find an outside verifier	Third Party Verification Report		90-91	●
Dominating structure, responsibility, participation					
4.1	Dominating structure of organization	Authority, structure and responsibility of Board of Directors		22	●
4.2	Chairman Board of Directors and executive	Mayor as Chairman of Board of Directors		22	●
4.3	In case the Board of Directors is unified, the Board of Directors states the number of independent people who are not executives	Permanent and temporary directors		22	●
4.4	A mechanism where stockholders and employees give advice to or present a direction for the Board of Directors	Operation of Youth Board of Directors consisting of Employees		22	●

INDEX	CONTENTS OF INDEX	K-WATER ADAPTATION INDEX	GLOBAL COMPACT	PAGE	REPORT RATE
4.5	Relationship between compensation of directors, high administrators and executives, and accomplishments of the organization	Evaluation and relation of Board of Directors Operation Results		22	●
4.6	Process to prevent conflict of understanding within the Board of Directors	Strengthening of Fast and Sufficient Pre-Deliberation		22	●
4.7	Process to decide qualifications of Board of Director members and standard of expertise to support financial/environmental/social strategies	Permanent director and Outside director Appointment Procedure		22	●
4.8	Mission/core values statement, action outline and rules made internally in relation to financial/environmental/social accomplishments and activities.	Ethical Outline, Environmental Management Course, Innovation vision Mission		Appendix	●
4.9	Process of the Board of Directors understanding financial/environmental/social activities and directing management.	Board of Directors Operation Procedure		22	●
4.10	Board of Directors financial/environmental/social accomplishments evaluation process	Government analysis of operation results, Accomplishment yearly salary graded		22	●
4.11	Explanation of prevention rules and selection of approach method and selection	Prevention Rules and Approach Methods		22-29	●
4.12	Membership or support of outside initiatives such as financial/environmental/social fields and rules	Declaration to Abide by Global Compact		Appendix	●
4.13	Status of Korean and overseas committees and policy facilities membership	Members domestic and foreign committee and policy facilities activities		Wing	●
4.14	List of participating stakeholder groups	Stakeholders group		25-27	●
4.15	Participating stakeholders identification and selection standard	Stakeholders identification and selection		25-27	●
4.16	Status of Stakeholders Participation method	Method of Stakeholders Participation		25-27	●
4.17	Points of Interest presented by stakeholders and counteraction methods	Stakeholders' Points of Interest and Counteractive Methods		25-27	●
Financial accomplishments index					
	Public announcement for management approach method			14-15	●
EC1	Direct creation and division of economic value	Creation and division of economic value		68	●
EC2	Threat to business activities due to financial effect of change in climate, and threats and opportunities	Counteraction to change in climate and CDM project		68	●
EC3	Pension support range	Retirement fund management, retirement program		68	●
EC4	Government support fund accomplishments	National Treasury support fund		68	●
EC5	Salary of new employees compared to legal minimum wage at major business places	Salary of new employees compared to legal minimum wage		68	●
EC6	Location purchase policy, actions and ratio at major business places	Local purchase policy		68	●
EC7	Employment of local personnel priority at domestic major business field offices and local high executives ratio	Employment of local personnel at domestic field offices		68	●
EC8	Service support and infrastructure investments that prioritize public benefit, and its effects	Investment in social indirect fund facilities, Improvement of existing dam environments		69	●
EC9	Awareness and explanation of indirect financial wave effects	Economic activation support for dam surrounding areas		69	●
Environmental accomplishments index					
	Public announcement for management approach method			12	●
EN1	Weight or volume standard materials used	Knowledge on quality of substances in entire process evaluation		69	●
EN2	Ratio of reusable materials used	Rate of reusing sludge and construction waste	7	71	●
EN3	Direct energy use according to 1st stage energy sources	Diesel, kerosene, LPG, NG usage amount		69	●
EN4	Indirect energy use according to 1st stage energy sources	Amount of electricity used from outside purchase		69	●
EN5	Amount of energy reduced due to saving and efficiency	Amount of reduction from using energy saving program	8	69	●
EN6	Efforts to supply energy efficient or reusable energy based products and services, and amount of energy reduced by this business	Purchase of energy saving products, energy reduction	9	69	●
EN7	Indirect energy reduction business and accomplishments	Efforts to reduce energy use, turning off the PC during lunch hour, 5-day car cycle, other energy saving efforts	8	69	●
EN8	Total water withdrawal by source	Total water withdrawal by water plants		85	●
EN9	Water sources that were largely affected by water taken.	Sources worried to change the ecology from water taken	8	70	●
EN10	Total amount and ratio of reusable and reused water	Amount of water material used	8	85	●
EN11	Location and size of land owned, rented and managed around protection areas and areas where the biological value is high	Environmentally-friendly water resource facilities, Diverse biological conservation facility and space	8	70	●

INDEX	CONTENTS OF INDEX	K-WATER ADAPTATION INDEX	GLOBAL COMPACT	PAGE	REPORT RATE
EN12	Effects of activities, products and services in protection areas and areas where the biological value is high on biological variety value	Monitoring environmental change in business areas	8	70	●
EN13	Protected or restored habitat	Organism habitat environment and conservation for environment cultural heritage	8	70	●
EN14	Biological variety management strategy of protected or revived land, current actions and future plans	Biological variety management strategy	8	70	●
EN15	Number of national endangered species on IUCN Red List living in business affected areas, and endangered rate	Awareness of endangered species according to major dams	8	70	●
EN16	Total discharge of direct and indirect greenhouse gases	Amount of greenhouse gases discharged according to direct or indirect energy consumption		70	●
EN17	Other indirect greenhouse gases discharge amount	Amount of greenhouse gases discharged due to office travel and business trips of executives	9	70	●
EN18	Greenhouse gases reduction business and accomplishments	CDM projects		68	●
EN19	Amount of ozone destructing substances discharge	No discharge of ozone destructing substances		71	●
EN20	Amount of discharge to the atmosphere of NOx, Sox and other major contaminating substances	Amount of discharge to the atmosphere through energy consumption		71	●
EN21	Waste water discharge amount and water quality according to final place of discharge	Quantity and quality of water discharged from purification plants and water		71	●
EN22	sewage treatment sites	Amount of waterworks sludge and construction wastes		71	●
EN23	Waste discharge amount according to form and treatment method	Amount of construction waste and sludge		71	●
EN24	Number of important dangerous substance leak cases and amount of leakage	No leakage accidents		72	●
EN25	Water areas affected by waste water discharge of organization and name of land, size, protection situation and biological diversity	Conservation of ecological environment and water quality of discharged water	8	71	●
EN26	Reduction of products and services on environment activities and accomplishments	Water contamination prevention activities and environmental management accomplishments	8	72	●
EN27	Products sold and ratio of reusable packaging	No relation because of product characteristics	7	-	N/A
EN28	Number of fines and non-financial restraints from environmental law violations	Abiding by environmental laws and preventing accidents	8	72	●
EN29	Important environmental effect of moving products and basic materials and executives travels	Environmental effects depending on movement of executives		73	●
EN30	Environmental protection expenditure and investment total	Environmental investment and environmental cost		72	●
Labor accomplishments index					
	Public announcement for management approach method			13	●
LA1	Form of employment, employment contracts and personnel status according to location	Form of employment, employment contracts and personnel status according to location		73	●
LA2	Number and ratio of people that left the company	Number and ratio of people that left the company		73	●
LA3	Privileges of full-time employees that are not given to part-timers	Privileges of full-time employees		74	●
LA4	Ratio of employees that are subjects of group negotiations	Ratio of employees that are subjects of group negotiations	3	74	●
LA5	Minimum period for reporting important change in business	Reporting period according to group agreement		74	●
LA6	Employee ratio represented by labor union joint Health and Safety Committee	Changed to joint labor-management conference	3	74	●
LA7	Number of injuries, work diseases, days lost, and work related disasters	Rate of industrial disasters and diseases		74	●
LA8	Education, training, counseling, prevention and threat management programs to support seriously diseased employees, their families and local residents	Employee assistance program, Filial piety projects for local residents		74	●
LA9	Welfare and Safety conditions, formal subject of negotiations with joint labor-management conference	Joint labor-management conference agenda	3	74	●
LA10	Average education hours per day according to form of employee	Average training hours per year according to employee grade		74	●
LA11	Duties education and lifelong education programs for continuous employment and retiring employees support	Evergreen program for retirees		75	●
LA12	Percentage of employees receiving regular performance and career development reviews	Employees receiving performance and reviews	6	75	●

INDEX	CONTENTS OF INDEX	K-WATER ADAPTATION INDEX	GLOBAL COMPACT	PAGE	REPORT RATE
LA13	Structure of Board of Directors and employees	Status of executives structure	6	75	●
LA14	Ratio of basic salary of newly recruited men and women personnel according to employee range	Ratio of basic salary of newly recruited men and women personnel	6	75	●
Human rights accomplishments index					
HR1	Number and ratio of major investing agreements that include human rights protection clauses or that passed human rights evaluation	Contracts and agreements including human rights evaluation	2	75	●
HR2	Human rights evaluation ratio of major supply companies and contract companies	Method of evaluating human rights of supplying companies, etc.	2	75	●
HR3	Employee training on duties related human rights policies and processes	Human rights related education (Sexual harassment prevention education)	2	75	●
HR4	Total discrimination cases and related handling	Management and counseling through executives'difficulties handling system	1	75	●
HR5	Duty fields evaluated to have a chance of serious violation of association or group negotiations freedom, and management to guarantee such rights.	Rights and benefits protection for women and the disabled, etc.	1	75	●
HR6	Business fields with a high chance of child labor and management to stop child labor.	Restraint against employing youths(Employment rule)	5	75	●
HR7	Business fields with a high chance of forced labor and management to stop such labor.	Forced labor prohibition rule(Korean labor standard law)	4	75	●
HR8	Ratio of security personnel that have certified human right policy and process education.	Education accomplishments of human rights related security personnel	1	76	●
HR9	Number of local residents rights violation and related management	Civil treatment of local residents	2	76	●
Social accomplishments index					
SO1	Characteristics, range and effect of program that evaluates local social effects from beginning, during and finishing stages of duties.	Environmental evaluation according to stages, aftereffects evaluation		76	●
SO2	Number and ratio of business units analyzed to have corruption risk.	Inspection of high positions or departments with high chance of corruption through department purity evaluation	10	76	●
SO3	Ratio of employees who received anti-corruption policy and process related education.	Rate of ethical management training certification	10	76	●
SO4	Management of corruption cases.	Handling of corruption cases	10	76	●
SO5	Position on public policies, establishment of public policies and participation in lobbying.	Participation in public policies, such as carrying out government policies		77	●
SO6	Total amount donated to parties, politicians or related facilities according to nation.	Support in the name of the corporation is legally prohibited		77	N/A
SO7	Number of unfair competition activities and monopoly actions that were dealt with legally, and the results.	Regular Free Trade Commission inspections	10	77	●
SO8	Number of cases of fine and non-financial restraint due to violation of law or regulations.	Number of violation cases and fines		77	●
Product responsibility accomplishment index					
PR1	Stage of deliberation of life cycle that evaluates health and safety effects of product and service, ratio of major products and services that actually carry out the evaluation.	Evaluation of entire tap water process and introduction of environmental score note Highly purifying treatment facility established, strengthening of purification plant water quality grade evaluation system		53	●
PR2	Number of violation of customer health and safety effects related restraints and voluntary rule violation cases in product and service life cycle.	Efforts to abide by laws related to health and safety of customers		77	●
PR3	Necessary product and service information type for process, ratio of products and services with such information.	Efforts to provide information on tap water quality, etc.		77	●
PR4	Number of product or service information labeling related restraint voluntary violation.	Efforts to provide information on tap water quality, etc.		77	●
PR5	Customer satisfaction related activities including customer satisfaction evaluation survey results, etc.	Customer satisfaction research results		77	●
PR6	Marketing communications such as advertisement, promotion, sponsorship restraints, standard and voluntary rule abiding program.	Abiding by marketing related restraints		77	●
PR7	Number of marketing communications such as advertisement, promotion, sponsorship restraints, standard and voluntary rule violation cases.	Efforts to abide by promotion related laws		77	●
PR8	Number of complaints on violation of customer personal information protection and customer data loss.	Number of Internet civil cases and breakdown		77	●
PR9	Total fine from violation of laws and regulations on product and service supply.	Efforts to abide by service supply laws		77	●



# Third Party's Verification Statement

## DEAR READERS OF K-WATER SUSTAINABILITY REPORT 2009

### INTRODUCTION

Korean Foundation for Quality (hereinafter 'KFQ') has been engaged by Korea Water Resources Corporation to independently verify its 2009 Sustainability Report (hereinafter 'Report'). The compilation of the Report is the responsibility of the Korea Water Resources Corporation management and KFQ's responsibility is to express our opinion on the Report based on the verification scope agreed.

### INDEPENDENCE OF VERIFICATION

KFQ has no conflict of interest with Korea Water Resources Corporation in terms of profit generation-related activities except providing third party verification service on the report. And we do not have any biased opinion on Korea Water Resources Corporation's stakeholders.

### CRITERIA OF VERIFICATION

KFQ has conducted verification in accordance with the 'AA 1000 Assurance Standard (AA 1000 AS)' published by Accountability in 2003. AA 1000 AS requires that 3 principles such as Materiality, Completeness and Responsiveness, thus the Report were assessed by these principles. And KFQ also applied '2006 GRI Sustainability Reporting Guideline (hereinafter GRI Guideline) as a verification criteria which Korea Water Resources Corporation adopted to their '2009 Sustainability Report'.

### VERIFICATION SCOPE AND PROCEDURE

KFQ verification was focused on the data and information on sustainability management activities and performance of K Water's head office, 8 regional headquarters and 25 domestic/international branch offices(13 projects of 11 countries), and this verification scope is agreed with the K Water.

Verification has planned and undertaken to achieve reasonable assurance whether there is any material error or misrepresentation in the Report. Also KFQ has verified credibility of the Report contents and effectiveness of the internal process systems for preparing the Report according to the following steps:

#### • DESK REVIEW

We have performed GAP analysis of the key issues and performance data described in the Report against GRI Guideline and information acquired through internet and media survey.

And we have planned on-site assessment to assess credibility of the sustainability management activities and performance data described in the Report.

Financial performance in the Report have crosschecked with audited '2009 Financial Statement of Korea Water Resources Corporation'.

#### • ON-SITE ASSESSMENT/VERIFICATION

We have undertaken on-site verification on head-office and each one of multi-purpose dams and multi-regional water supply systems under sampling principle after due consideration of material information in the report, except sampled branch-offices during the past 4 years.

Based on the sampling principle after due consideration of information materiality, we have examined relevant documents to sustainability management activities and its performance, and interviewed personnel in charge of reported sustainability activities to gather evidences.

#### • RESOLUTION OF FINDINGS

We have discussed the issues found during the procedures above, and reviewed the final version of the Report again to check the correction and reflection of the founded facts by Korea Water Resources Corporation. Then, GAP analysis against the GRI guideline was conducted again on the final Report to make our conclusion to the Application Level of the GRI Guideline.

#### CONSIDERATION AND LIMITATION

Accuracy and completeness of performance data reported in the Report are subject to inherent limitations due to their nature and the methodology used determining, calculating and estimating such data.

#### CONCLUSION/ OPINION

Based on our review, KFQ have obtained reasonable basis to express the conclusion on the Report are below:

1. Korea Water Resources Corporation has met the conditions for application level A+ in the '2006 Sustainability Reporting Guideline'.
2. Korea Water Resources Corporation has the process to identify and understand their activities, performance, concerns and issues rose by stakeholders, and have disclosed their effort, and performance regarding to identify material issues properly.
3. Korea Water Resources Corporation has implemented internal system to generate, gather and analysis information and data on the Report to make public available.

In conclusion, KFQ has not found that there is any material error or misrepresentation in the report.

#### HIGHLIGHTS

- Korea Water Resources Corporation's fiftieth sustainability report appears to indicate efforts to report the all related core and additional indicators in GRI Sustainability Reporting Guidelines(G3) fairly and transparently.
- K Water collects opinion from their stakeholders through various communications and reflects their expectation and concerns to K Water's sustainable management strategy.
- Also, K water has a will to strengthen their sustainable management and social responsibility. K Water also has a plan to assess their 'Sustainability Report' in conformity to the international standard that will be established as ISO standard (ISO 26000).

31th March 2009

CEO Jae Ryong Kim

Korean Foundation for Quality (KFQ)



# Publishing the Sustainability Report

The report did its best to reflect the voices of stakeholders in the process of issuance, and was assured by the third party.

K-water mainly aims to issue a corporate accomplishment report that will earn the trust and respect of stakeholders. We asked for advice from internal and external major stakeholders on the planning and writing of the report, and made efforts to stay true to the accomplishment index presented by the G3 guideline, an international standard, in the sustainability report.

## REPORT RANGE OF ACCOMPLISHMENT INDEX

The report presents the sustainability management status and accomplishments of 25 domestic branches, including the head office, and 11 overseas branches. Since the 4 K-water financing companies have the same accounting periods as our corporation, it did not have an effect on comparison possibility of periods and structures, and the share method and cost method were used for the share ratios.

## REPORT STANDARDS OF ACCOMPLISHMENTS DATA

The report made efforts to stick to the report rules stated in the G3 guidelines. Accomplishments data on economy, environment and society, were found according to the index agreements attached to the G3 guidelines. The EPE computation system was mainly used to quote data in the environment part, and the financial part used financial statements and settlement of accounts that were inspected by accounting. Social part and other data were received from each related department and used. Each

accomplishment index presented the tendency data of 3~4 years, and not only ratio but absolute value was also presented to help understand the data.

## EFFORTS FOR SUSTAINABLE IMPROVEMENTS

It is the fourth year since the first report in 2005. However, the report still lacks many points to become a report appropriate for the standard of expectations and interests stakeholders have in it. K-water will make efforts to more actively collect opinions of internal and external stakeholders, and reflect them to make a more sophisticated report and sustainability management in the future.

## STANDARD OF G3 GUIDELINE ADAPTATION

The K-water sustainability report 2008 was written to fulfill the conditions of level A of the G3 guidelines application levels. KFQ(Korean Foundation for Quality) confirmed through assurance that the report was appropriate for level A+.

REPORT STANDARD		C	C <sup>+</sup>	B	B <sup>+</sup>	A	A <sup>+</sup>
Standard notice	G3 profile notice	Notice categories: 1.1, 2.1-2.10, 3.1-3.8, 3.10-3.12, 4.1-4.4, 4.14-4.15	Outside assurance of report	All items of level "C" and 1.2, 3.9, 3.13, 4.5- 4.13, 4.16-4.17	Outside assurance of report	Same as requirements of level B	Outside assurance of report
	G3 Management method notice	No need		Notice of DMA of all indexes		Notice of CMA of all indexes	
	G3 Accomplishment index and additional indexes	Must report at least 10 accomplishment indexes (At least on economy, environment and social index, each)		Must report at least 10 accomplishment indexes (At least on economy, environment, social and product liability index, each)		a) Report all G3 core indexes and industrial guide indexes according to the importance rule, or b) if not, explain why	

# Code of Ethics, Customer Charter, Environment-friendly Management Principles, Mission statement for Innovative vision

## CODE OF ETHICS PREAMBLE

Korea Water Resources Corporation is an organization for Korean people to develop, maintain and preserve Korea's water resources to make sure they are sustainable environmentally, economically and socially, and to provide them with the best products and services in order to contribute to improved quality of life and national development. With this pride and confidence, we commit ourselves to the following code of ethics to be reborn as a world-renowned corporation specializing in water in this era of water in the 21st century.

- To, accomplish our mission with a creative and open-to-challenge mind and do our given work with honest and fair attitudes and to make efforts for transparent management.
- To, commit ourselves to environment-friendly management with a keen awareness that the environment is an invaluable asset to hand down to the next generation and a foundation for a healthy and pleasant life.
- To, provide customers with the best products and services to ensure customer satisfaction and value-oriented management to live up to customer-first principles.
- To, respect local traditions and cultures, contribute to community development and enrich the life of community members with due obligation as a community member.
- To, observe moral and legal values, respect market orders of free competition, and pursue fair competition.
- To, respect individual persons without any discrimination and respect differences and creativity.
- To, develop a partner relationship between union and management based upon trust and harmony with a strong sense of unity to pursue mutual prosperity.

\* FOR FURTHER DETAILS INCLUDING CODE OF ETHICS AND EMPLOYEES' BEHAVIORAL CODES, PLEASE REFER TO CODE OF ETHICS SECTION IN OUR HOMEPAGE.

## CUSTOMER CHARTER PREAMBLE

For the practices of the customer-driven management that makes us come closer to customers based upon the management philosophy, "Customers' values are our values," K-Water promises to do our best as follows :

- To set up and implement standards for service in practice as much as we can, always considering customers' point of view.
- To open as much information as customers want to put transparent management into practice.
- To, listen to customers' complaints and advice by collecting their opinions regularly and rectifying problems.
- To, promise the maximum compensation in case a customer suffers from our failure to follow standards of service in practice.
- To perform our work without any discrimination against any customer and to guarantee customers' best interest by pursuing the most economical and efficient management.

## ENVIRONMENT-FRIENDLY MANAGEMENT PRINCIPLES

K-Water is keenly aware of the need for the utmost effort for sustainable development in harmony with nature for more pleasant and better-to-live-in environment.

In this vein, therefore, K-Water, as a corporation specializing in water, the origin of life, announces the following environment-friendly management principles in order to be reborn as an environment-friendly corporation loved and trusted by people.

- To take the lead in preserving clean water and air and healthy natural environment.
- To predict the effects of water resources development and management on the environment and consistently pursue preservation of eco-system, prevention of pollution and environment improvement in order to make sure that our activities are in harmony with environment preservation.
- To establish sound consumption culture of cutting down on supplies and energy and recycling them and always be alert against environment destruction out of carelessness.
- To accommodate people's opinions as much as possible in making environment-related plans and promote trust and transparency of our business by opening related information and materials.
- To bear the primary obligation of preventing environmental pollution in advance, make efforts to settle problems in case pollutions take place, and bear in mind that words put into practice are the fundamentals of corporate ethics.
- To constantly offer employees environmental training and focus on research and development for environment preservation and improvement to ensure that our activities for environment suit codes of ethics.

All the employees of K-Water hereby declare that we do our utmost to guarantee next generations to live in pleasant environment by putting the principles into practice.

## MISSION STATEMENT FOR INNOVATIVE VISION

To provide people with clean and safe water, protect their life and property from disaster caused by water, to be reborn as the best water service organization through change and innovation, K-Water declares the following:

- To make customer satisfaction top priority in management and rectify existing practices, systems and values to be customer-driven.
- To do our work with honest and fair attitudes without deviating from conscience, common sense and law to be a trustworthy public corporation, and to actively participate in socially beneficial activities to engage in the community.
- To secure a world-level competitive edge to achieve our vision with confidence and passion defying changes and establish a sustainable and stable foundation for growth.
- To raise awareness of the importance of environment for healthy life and sustainable growth of the future generations and to make efforts to preserve the environment.
- K-Water will concentrate on devoting itself to growing into a business that works well, has a competitive edge and is loved by people by putting the above mentioned statements into practice.

# Terminology Definitions

**Green Dirt** Dirt used to spray over dirt to make a foundation for grass to grow.

**Non-point Pollution Source** A pollution source having an irregular discharge route, unlike point pollutants sources, such as human populations or livestock having regular points of discharge. This source pollution is calculated by the pollution load arising from land use in watersheds (including paddies, fields and forest), and usually discharged to water system by rain.

**Disinfection by-product** Cancer-causing substance such as THM or HAA that is produced when disinfection products used in the purification process reacts to organic compounds in the water.

**New and Recyclable Energy** Three kinds of new energy including hydrogen, fuel cell, and liquefied coal gas and eight kinds of recyclable energy including solar heat, solar light, bio energy, wind power, hydro-electric power, terrestrial heat, marine energy and energy from waste.

**Sludge** Sediments produced from sewage treatment or water purification process.

**Ozone** A triatomic molecule, consisting of three oxygen atoms. One of the advanced water treatments for odor removal thanks to the powerful oxidation.

**Reverse Osmosis (RO : Reverse Osmosis)** A filtration process removing minute ionized matters less than 1nm in size, and applied to the desalination of salt water and the treatment for ultrapure water.

**Prevalence Rate** The number of patients divided by total population surveyed at a certain region at a certain time

**Life Cycle Assessment (LCA)** Technique for evaluating environmental impact of a product or service by quantitatively measuring the substances and energy consumed and discharged in an entire process of the product or service.

**Environmental Impact Assessment** Estimations analyses and assessments of the impact of Social Overhead Capital (SOC) facilities, such as roads, ports, railroads, airports and industrial complexes, as well as reclamation projects, on the environment

**Activated Carbon** A form of carbon that has been processed to make it extremely porous and thus to have a very large surface area available for adsorption or chemical reactions. It is applied to one of the advanced water treatments for odor removal.

**Seawater Desalination** Technology for production of potable water by removing salt and other chemicals from saline water. Most small or medium sized facilities use the Reverse Osmosis Method, a type of membrane filtering method, as it is preferable in the aspects of energy consumption and maintenance

**Deep Seawater** Seawater flowing at depths 200 meters from the surface of the sea where sunlight cannot reach, recently there is increasing demand for this by many industries, such as fisheries, food producers, beverage companies, cosmetics and pharmaceuticals.

**BSC (Balanced Scorecard)** Performance management system consisting of comprehensive indexes that enables to measure mission and strategy of an organization

**CDM (Clean Development Mechanism)** One of the Kyoto Mechanisms under which developing countries can participate in the reduction of greenhouse gas emissions



**COD(Chemical Oxygen Demand)** Amount of oxygen consumed by oxidizing pollutants contained in water by an oxidizing agent. Higher levels of COD indicate higher water pollution amounts.

**CRM(Customer Relation Management)** A strategy to obtain new customers, keep relation with existing customers, and to maximize customer's lifetime value by supplying products and services in customers' needs.

**CS(Customer Satisfaction)** Customer satisfaction for products or service

**GRI(Global Reporting Initiative)** Organization founded with the support of the UNEP in 1997 to develop the guidelines for "Sustainable Management Reports."

**ISO14001** International environmental management system standards as prescribed by the ISO (International Organization for Standardization).

**ISO 24500** International waterworks and sewage treatment service standards, published in October, 2007.

**ISO 26000** International standard for social responsibility. It includes seven principals (ownership structure, environment, human rights, labor, organization management, customer, and local community) and voluntary-to-use principle. It was published in November, 2009.

**JOA(Join, Open, Advance)** K-water's unique innovation method for solving problems. K-water modified and developed the GE work-out method to fit to its management environment.

**MBR(Membrane Bio Reactor)** A sewage treatment technology that uses membrane and its microscopic holes to eliminate various pollutants and pathogenic microorganisms.

**MTV(Multi-Techno Valley)** A latest 21st century complex area of electronics/electrics, R/D, etc., that is being built in the reclaimed land north of Shihwa.

**NTU(Nephelometric Turbidity Unit)** Unit of turbidity of water samples measured by the intensity of light dispersed on the sample.

**QPI(Quality Performance Index)** Performance Index for water quality management, which is K-water's unique automatic evaluation method, utilizing IT and Web technologies for evaluating water quality and management effort.

**RT(Ton of Refrigeration)** Unit of refrigeration capacity. One ton of refrigeration capacity can freeze one tonwater at 0°C in 24 hours.

**SS(Suspended Solid)** Particles that are 0.1 or more in diameter and float in water to make it turbid.

**TOE(Ton of Oil Equivalent)** The amount of energy use such as use of electrical energy, gas and oils, converted to crude oil (tones).

**UNFCCC(United Nations Framework Convention on Climate Change)** A convention organized to regulate artificial emissions of greenhouse gases for prevention of global warming. Its full name is the United Nations Framework Convention on Climate Change).

**VOC(Voice of Customers)** Customers' expectations and requests for the products and services provided by company.

We would particularly like to acknowledge the work done by everyone who has contributed to producing this report.

<b>Business Planning &amp; Coordinating Dept.</b>	Hwansam Jung, Jinsik Yang, Dogyoun Kim, Jaeyun Kim, Saewyan Tac, Shinchul Park, Sinje Lee, Junggyu Park
<b>Public Relations Dept.</b>	Yekeun Oh, Seonmin Hwang, Sujung Bae, Sungwoo Shi, Seungtaek Kang, Jihyun Park
<b>Water Supply Business Dept.</b>	Donggyu Kim, Jinkyoo Jang, Jincheol Park, Jongsun Sin
<b>Industrial Estate Development Dept.</b>	Seokkyu Seo, Seungjae Lee, Doyoung Kim
<b>Water Resources Development Dept.</b>	Heongsun Ji, Seobyung Kang, Byeonghun Son, Seokhyo Park
<b>Water Supply Operations &amp; Maintenance Dept.</b>	Keeheon Jung, Jinkeun Kim, Hohee Bang, Jinkab Kim
<b>Accounting &amp; Finance Dept.</b>	Changmin Lee, Sungyun Lee, Youngjoo Oh, Minkyong Oh, Byeong min Yoo, Minah Kang
<b>Water Resources Business Dept.</b>	Heewan Kang, Yongbum Jang, Piljung Moon, Jiwon Kim, Jihee Lim
<b>Miryang Dam Office</b>	Hyunghee Jeong, Sangchul Nam, Jangsang Lee, Iljun Park, Dongsoo Kim, Changdeok Moon, Jaehyun Park, Soongoo Kang, Sungyoub Jung, Eunyoung Kim
<b>K-water Academy</b>	Hwasook Lee, Yongmin Kim
<b>K-water Institute</b>	Hyoseok Chae, Jeongyeul Lim
<b>Green Energy &amp; Resources Dept.</b>	Jeongjo Hong, Hyeongseok Lee
<b>International Business Dept.</b>	Taekwon Seo, Wonhai Son
<b>Dam &amp; Watershed Dept.</b>	Yongun Kim, Seonju Kim, Dukhee Han
<b>Construction Technical Knowledge Management Dept.</b>	Ssanggoo Lee, Kookrae Cho
<b>Administrative Service Dept.</b>	Donguk Lee, Byungki Kim, Yongsu Cheong, Gunwoong Lee, Kyungho Mun, Kyungwook Heo, Oeduk Kim, Hyunjung Kim, Soohyun Park, Yongguk Lee, Hyodong Min, Mark S. Schaerf
<b>Information Resources Services Dept.</b>	Youngwoo Lee



## Listening to Our Readers

Your comments will be of great help to us in promoting our activities for sustainable management. We are looking forward to receiving your comments and suggestions regarding this Sustainability Report, as well as our activities for sustainable management. We appreciate our comments and suggestions very much and will include them, when possible, in our next report. Your invaluable opinion will be a great help for use to continue sustainable management activities. Please fill out the questionnaire attached and send it to the Performance Management Team of K-water via fax(+82 42 629 2399) or e-mail(sustainability@kwater.or.kr.)

Paste here!

From:

Name: \_\_\_\_\_

Telephone: \_\_\_\_\_

E-mail: \_\_\_\_\_

Address: \_\_\_\_\_  
\_\_\_\_\_

□□□-□□□

To:

560 Sintanjin-ro, Daedeok-gu, Daejeon, Korea  
Performance Management Team  
Korea Water Resources Corporation

306-711

Paste here!

Paste here!

The most precious values

Water Nature People





## About K-water's Sustainability Report 2009....

1 Which of the following would best describe you?

- |                        |                    |                    |                   |
|------------------------|--------------------|--------------------|-------------------|
| ① Investor/Shareholder | ② Business partner | ③ K-water employee | ④ Local Residents |
| ⑤ NGOs                 | ⑥ Scholar          | ⑦ Journalist       | ⑧ Others (      ) |

2 What brought your attention to K-water's Sustainability Report?

- |                      |                        |                          |                                   |
|----------------------|------------------------|--------------------------|-----------------------------------|
| ① K-water's homepage | ② Newspaper/ Magazines | ③ Internet Search engine | ④ Recommendation by K-water staff |
| ⑤ Others(      )     |                        |                          |                                   |

3 Which section was the most interesting?

- |                       |                |                       |                           |
|-----------------------|----------------|-----------------------|---------------------------|
| ① Strategy            | ② Approach     | ③ Challenges(Economy) | ④ Challenges(environment) |
| ⑤ Challenges(society) | ⑥ Performances |                       |                           |

4 Which section do you think needs improvement?

- |                       |                |                       |                           |
|-----------------------|----------------|-----------------------|---------------------------|
| ① Strategy            | ② Approach     | ③ Challenges(Economy) | ④ Challenges(environment) |
| ⑤ Challenges(society) | ⑥ Performances |                       |                           |

5 Please feel free to give us your comments about the overall structure and contents of this report or our activities.

WE ARE WAITING FOR YOUR VALUABLE OPINIONS.

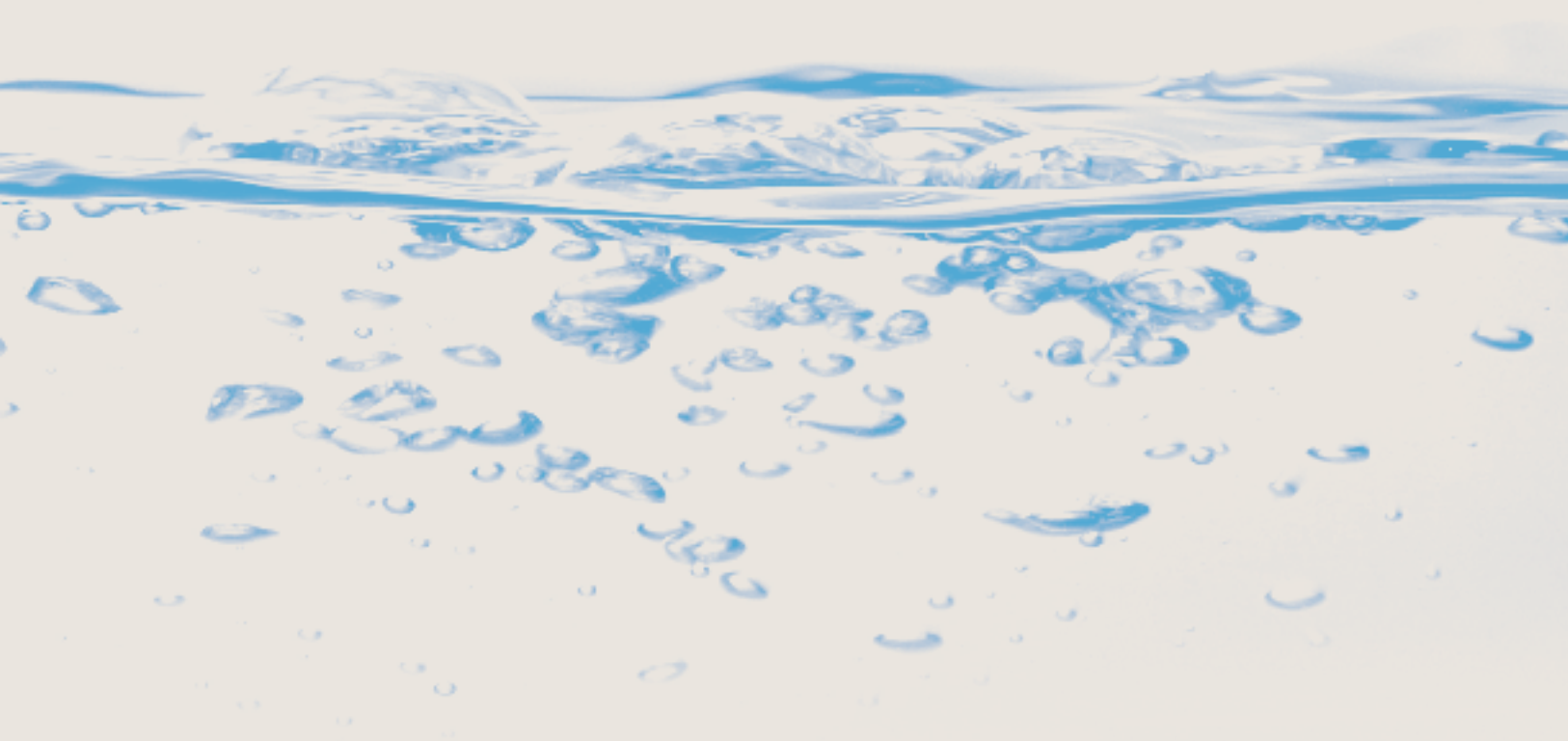
Your invaluable opinion will be a great help  
for use to continue sustainable management activities.  
We will review your answers and reflect then in our next report.  
Also we will send a small gift in return.

#### Information

Performance Management Team, K-water  
560 Sintanjin-ro, Daedeok-gu, Daejeon  
306-711 Republic of Korea  
Tel 82-42-629-2363  
Fax 82-42-629-2399  
E-mail [sustainability@kwater.or.kr](mailto:sustainability@kwater.or.kr)  
Web site [www.kwater.or.kr](http://www.kwater.or.kr)



Performance Management Team(clockwise from back left)  
Youngdall Jung, Donghwan Kim, kwangwon Tae, Eunseok Yang, Woojin Song, Junho Kang,  
Kyungtae Kwon, Honhjin Jun, Jongseok Oh, Woogyu Kang, Jiwoong Kim




This report is also available on our homepage ([www.kwater.or.kr](http://www.kwater.or.kr)) for download in PDF file format. If you wish to have further details on our activities and achievements in sustainable management, please contact us at the address stated below.  
We appreciate your interest in our sustainable management activities.

Produced by the Performance Management Team of K-water  
Designed by the MijiAdcom (+82-2-783-6013)

\*This report is printed on the environment-friendly paper.



Global  Best on 3 Water<sup>+</sup>

