

The most precious values

# Water, Nature & People



2010 Sustainability Report

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The Applicable Level of GRI G3 Guidelines

This is to disclose that K-water's Sustainable Management Report (Report) fully satisfies the requirements of 'A+' standards outlined in the GRI GR3 Guideline. An independent 3rd party assurance agency, the Korean Foundation for Quality has verified that this report is compliant with 'A+' GRI G3 Guidelines.

| Corporate Overview (December 31, 2009) |

Corporate Name	K-water, Korea Water Resources Corporation
Date Established	November 16, 1967
Capital	KRW 10,281.4 Billion
Total Liabilities	KRW 2,995.6 Billion
Total Assets	KRW 13,277.0 Billion
Sales	KRW 2,005.4 Billion
Major Operations	Construction & Management of Multipurpose Dams, Construction & Management of Multi-regional Waterworks, Operation & Management of Local Waterworks, and Development of Industrial Complexes
Products & Services	Flood control, Water Supply & Power Generation, Water Supply, and Industrial Water Development & Supply to Industrial Complexes
Worksites	Head Office, 8 Regional Headquarters, 31 Worksites, International Operations (9 Projects in 6 Countries)
Employees & Executives	4,031
Head Office Location	560 Sintanjin-ro, Daedeok-gu, Daejeon

| Overseas Business Status |

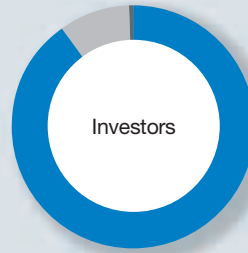
● Projects In Progress	<b>9 Projects in 6 Countries (KRW 338.7 Billion)</b>
	Asia (India, Cambodia, Vietnam, Pakistan) Middle East (Afghanistan, Iraq)
● Completed Projects	<b>27 Projects in 18 Countries (KRW 33.0 Billion)</b>
	Asia (China, Philippines, Vietnam, Nepal, Cambodia, Bangladesh, Indonesia, Mongolia, Sri Lanka, Laos)
	Middle East (Afghanistan, Iraq)
	Africa (Kenya, Rwanda, Congo, Equatorial Guinea)
	Americas (Peru, Haiti)

Corporate Shareholder Composition (2009)

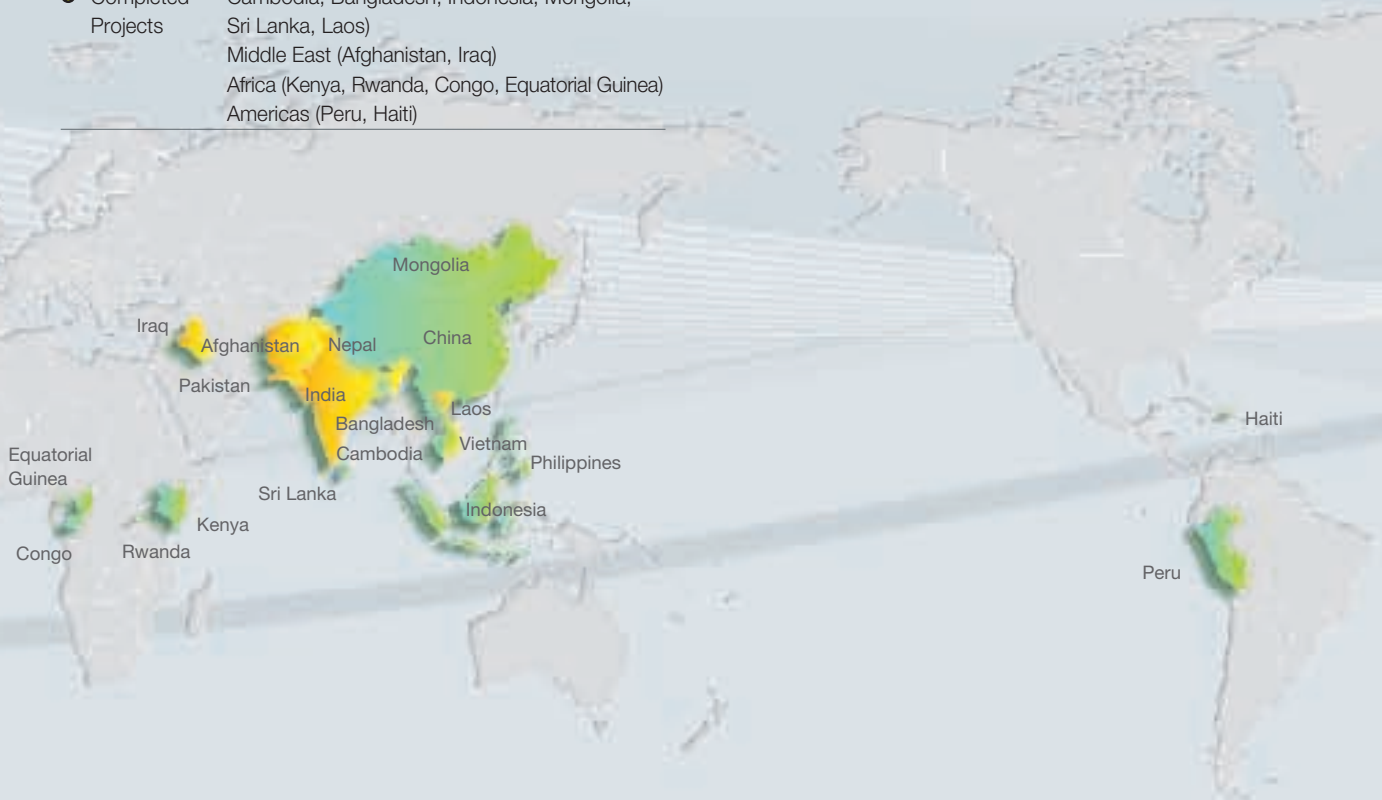
Investor Composition (2009)

■ Korean Government	90.6%
■ Korea Development Bank	9.3%
■ Local Governments	0.1%

■ Chilgok Enviro Ltd.	49%
■ Kyungin Canal Ltd.	19.4%
■ Korea Construction Management Corporation Ltd.	18.9%
■ Green JangRyang Ltd.	5%



| Head Office & 8 Regional Headquarters |



# ABOUT THIS REPORT

## Publication Objective

This Sustainability Report ("Report") was published to provide all stakeholders with transparent information regarding K-water's economic, environmental and social performance in 2009, and K-water's visions & strategies.

## Report Publication

The "2010 Sustainability Report" is the 6th Report published. The Report is published every year encompassing K-water's sustainable management strategies, activities and performance, and future plans. The Report summarizes K-water's economic performance, environmental soundness and Social Responsibility. The previous Report published in April, 2009.

## Reporting Principles

This Report was prepared based on GRI's Sustainability Reporting Guidelines (G3). Greater details of the GRI Index can be found on pages 88~90 of this report.

## Target Readers

This Report was prepared for all stakeholders such as customers, local communities, government, cooperative firms, executives & employees, and non-governmental organizations (NGO) that are directly or indirectly influenced by K-water's management activities.

## Reporting Period

The reporting period is from January 1 to December 31, 2009. Qualitative performance up until May 2010 is partially covered in the Report, while the quantitative performance includes 4 years data from 2006 to 2009. K-water's fiscal year is from January 1 to December 31.

## Scope of Report

This Report covers K-water's sustainable management status and performance of its head office, 8 regional headquarters, 31 domestic worksites, and overseas operations (9 projects in 6 countries). Since K-water's overseas operations are project-based and not worksites, only their business performances are reflected in the Report. As for changes in domestic worksites, 8 were integrated as part of K-water's reorganization, while 9 new worksites were established as a result of new national projects.

## Changes

During the reporting period, there were no major changes in terms of size, structure, standard year, or governance structure. However, there were changes in application standards for comparing certain data and calculation methods compared to that of the previous year.

## Report Assurance

Third party assurance of the data and selected sentences of the Report was carried-out by the Korean Foundation for Quality to enhance the credibility of the Report. The assurance opinion is included on pages 92~93.

## Additional Information

This Report can also be viewed on K-water's homepage ([www.kwater.or.kr](http://www.kwater.or.kr)). If additional information on K-water's sustainable management activities is required, please contact K-water's Performance Management Team

(Tel: 042-629-2364, Fax: 042-629-2399)

## Awards & Accomplishments

Oct. 2009	Low Carbon Green Growth Excellence Company Award (Presidential Committee on Green Growth, Ministry of Environment)
	New & Renewable Energy Prime Minister Grand Prize (Ministry of Knowledge Economy)
	Asia Most Admired Knowledge Enterprise Award (Teleos/UK)
Jan. 2009	The Grand Prize for Sustainable and Creative Management [Environmental Management] (Ministry of Knowledge Economy, UN Global Compact)
Oct. 2008	Asia Most Admired Knowledge Enterprise Award (Teleos/UK)
Oct. 2008	2008 Korea Environment-friendly Award (Ministry of Environment)
Oct. 2008	The Best Sustainable Management Award (Ministry of Knowledge and Economy, Korea Chamber of Commerce and Industry)
Oct. 2008	Grand Prize for Social Contribution (The Korea Journalist Forum)
Apr. 2008	Award for Korea's Digital Management Innovation (Ministry of Knowledge Economy, Maeil Economic Daily)
Dec. 2007	The Best Sustainable Management Award (Ministry of Knowledge Economy, Korea Chamber of Commerce and Industry)
Nov. 2007	LOHAS Management Award (Korea Green Foundation)
Nov. 2007	The President's Award for Sewage Treatment and Environmental Technology (Ministry of Environment)
Nov. 2007	ISO/IEC 20000 (Information Quality) Certification (LRQA)
Oct. 2007	Award for Digital Knowledge Management (Ministry of Knowledge Economy)
Jul. 2007	Certified as a Corporation with Excellent Service Quality (Ministry of Knowledge Economy, Korean Agency for Technology and Standards)
May 2007	Family-friendly Corporate Excellence Prime Ministers Award (Ministry of Gender Equality)
May 2007	Global Standard Grand Prize & Excellence CEO Award (The Korea Management Association)
Apr. 2007	2007 Most Respected Corporate Excellence Award (The Federation of Korean Industries, Seoul Economic Daily)
Dec. 2006	Public Purchase of SME Products Presidential Corporate Excellence Award (Presidential Commission on Small and Medium Enterprise)
Nov. 2006	Certified as a Quality Competitive Excellence Corporate (Ministry of Knowledge Economy, Korean Agency for Technology and Standards)
Nov. 2006	22nd Kyunghyang Electric Energy Grand Prize & Prime Minister's Award (Kyunghyang Daily, Korea Electric Power Corporation)
Nov. 2006	Social Contribution Excellence Corporate Grand Prize (Korea Economic Daily, Open Management Research Inc.)
Oct. 2006	Red Cross Medal, Honorary Chief (Korean Red Cross)
Sep. 2006	Korea Social Contribution Grand Prize (The Korea Journalist Forum)
Sep. 2006	Certified as a Multi-regional Integrated Water Supply Operations Center Environment-friendly Building (Korea Institute of Energy Research)
May 2006	3rd Korea Excellence Landscape Award (Korean Institute of Landscape Architecture)

## Membership Activities

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

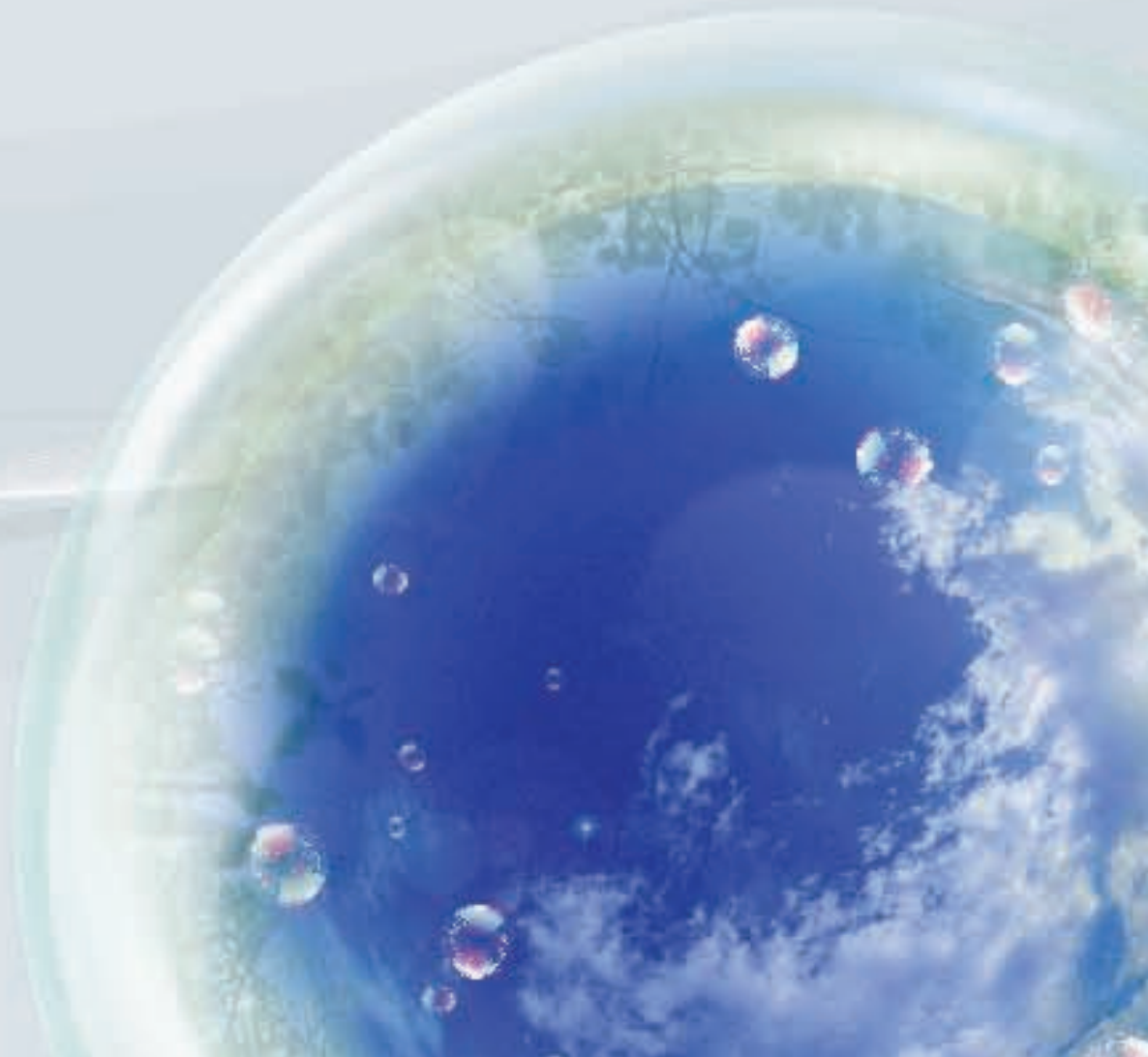
# Creating a Happier World with Water



A happier world with water is yesterday's future and is preparing for a precious future today.

K-water is leading the way with new endeavors to create a more prosperous world with water.

K-water's green dream of handing over a clean earth to the next generation is being realized.



## CEO Message

K-water will provide green value services by upholding core values of purity, passion and creativity to create a more prosperous and happy world for the public and the next generation.



## K-water is creating new hope wherever water flows connect the hopes of future generations into one.

I would like to convey my deepest gratitude for supporting and encouraging K-water's efforts to create a more prosperous and happy world with water. I am also grateful for being able to present our 6th Sustainability Report that details our sustainable management activities and performance.

### Even in the midst of the global economic crisis, we were able to establish a Green Growth platform.

Ever since K-water constructed the first Korean multipurpose dam, the Soyang River Dam, in 1967, we have taken a leading role in national development and public happiness for the past 40 years by supplying abundant and clean water. In addition, to sincerely fulfilling our Social Responsibilities, we joined the UN Global Compact on February 2007. As such, we are committed to supporting and abiding by the 10 UN Global Compact principles. In 2009, even in the midst of the global financial crisis, we were able to establish a strong platform for global and continuous growth through various activities such as large scale national projects, low carbon new growth green business activities, and mutual cooperative & social contribution activities.

We have been improving management efficiencies by being the first public corporation in Korea to adopt an advanced annual payment system for all employees. We have also firmly established our mid-to-long-term strategy management plan to create a "Water Strong Country" by strategically implementing a new water management paradigm based on advances in technology and concepts. By declaring "Purity, Passion, Creativity" as our core values, we have established milestones to achieve "Our Mission is to Create a Happier World with Water."

### K-water is leading the way with the low carbon, green growth a new national development paradigm.

By successfully initiating and executing the "4-River Restoration" Project, the government's "Green Deal Project," and the "Gyeong-in Ara Waterway" Business, K-water has been playing a key role in the low carbon green growth which has developed into a new national paradigm strategic initiative. Going forward, by aggressively dealing with the climate change crisis through the future-oriented low carbon green growth paradigm, we are

creating new growth opportunities. A good example of our commitment towards new & renewable energy development is the expansion of Clean Development Mechanism (CDM) activities through the sales of carbon credits amongst corporates, the first of its kind in Korea.

### K-water has continuously achieved excellent performances results through global human resources

Having being acknowledged having world class operational competencies for its water purification our plants received the "5 Star" Certification from the American Waterworks Association, the first company to ever receive it outside North America, K-water has been able to solidify its overseas business platform. K-water also received the highest Knowledge Management Corporate Award in Asia and the Sustainable Management Excellence Award for two consecutive years. In addition to receiving the grand prize for Low Carbon Growth and New & Renewable Energy, K-water was acknowledged for its leadership role in Environment-friendly sustainable management. This acknowledgement was based on K-water's global human resource pool in diverse sectors.

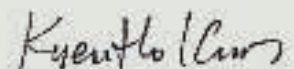
### K-water is committed to strengthening future competitiveness

K-water will continue its effort to enhance water management capabilities under the belief that cultivating global human resources and developing core technologies are two essential components for establishing a competitive future. We will further strengthen our global competitiveness by further strengthening our corporate structure through sustainable management efficiency enhancements. Finally, we would like to request that you continue to support and encourage K-water's pure, passionate and creative efforts and challenges in order to create a new future.

Thank You

August 2010

President of K-water Kun-Ho Kim





*As if a gust of clean air has just passed by a new life*

- 06\_ Forecast & Outlook
- 08\_ Vision & Sustainable Management
- 12\_ Business Strategy and Structure
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- 16\_ Sustainable R&D Investments



# Strategy

●

Receiving clean air from beautiful nature as it embraces the world. K-water is leaping forward as the world's best integrated water services corporation by achieving its "Global Best on 3Water+" vision in order to embrace the values for today and tomorrow.

# Forecast & Outlook

As a corporation that has turned crises into opportunities, K-water will emerge as an integrated globally specialized water service provider by actively countering climate change and expanding new business opportunities in the midst of a fast-changing management environment.

## Changes in the Water Resources Management Paradigm

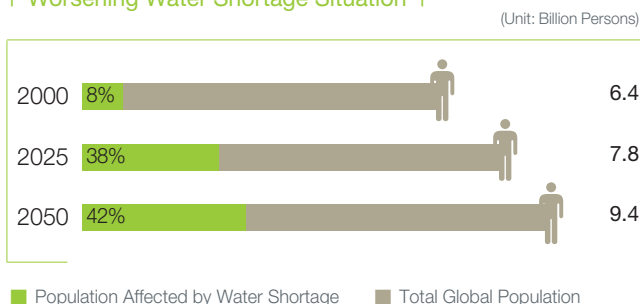
The trend in global water resource management is towards strengthening the public role of corporations to meet the challenges of climate change from a water resource management and national security perspective. In addition, having acknowledged that water is not an abundant resource anymore, an integrated water resource management paradigm that takes into consideration water intake and supply is proliferating amongst advanced nations. Since the 1960s, advanced countries in Europe have enacted a "Basic Water Laws" and have been carrying-out integrated water resource management. While water demand is expected to increase and will continue to rise, the supply is limited, and in order to effectively manage water resources and counter-manage the effects of climate change, the role and importance of specialized public water resource management corporations are growing. As the domestic water resource management industry is evolving from simply solving water related problems to a new water management paradigm that integrates water utilization, regulation and the environment based on the government's low carbon green growth policy, the role of water resource management by the public sector is growing in importance.

## Outlook of the Global Water Industry

The global population in 2050 is projected to increase to 9.4 billion, while the population in urban areas is expected to increase to 69.6% (6.5 billion) of the total global population. As the population continues to grow, water shortages due to climate change increases, and the demand to replace worn-out facilities in advanced countries in North America and Europe increases, the annual water industry is projected to expand to over KRW 1,000 trillion.

The total population affected by water shortages due to global warming, such as climate change, is estimated to be approximately 1 billion. This figure is expected to increase to 3 billion in 2025 and 4 billion by 2050. Considering that 2 billion of the total global population did not have access to clean water, and that 2.6 billion suffered from lack of basic sanitation facilities in 2004, water supply facility investments are projected to increase continuously.

### I Worsening Water Shortage Situation I



### I Integrated Water Resource Management Structure I

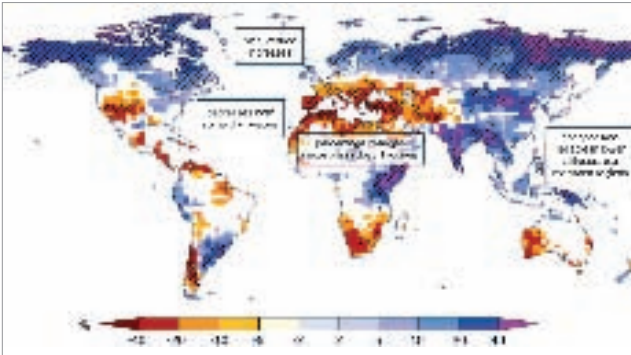


### Trends of the Global Water Industry

To alleviate operational structural inefficiencies in the water industry stemming from small local self-governing bodies managing the water industry, major advanced countries, such as in Europe, are moving towards a strategy which focuses on managing the water industry on a larger scale. After the 1990s, 73% of all water & sewage treatment management consignment contracts are being implemented through an integrated operational structure, helping enhance efficiencies. As such, more and more integrated operations & management strategies are being initiated. Looking at world-class water-related corporations globally, the trend is to create vertical integration of the value chain to cover the entire water life cycle. Through vertical integration, corporations are achieving competitive superiority by securing 'economies of scale and scope.' In addition, the population served by multi-national corporations is decreasing (Top 5 corporations' market share: 73% in 2001 → 39% in 2008), while the population served by local corporations in developing countries is sharply increasing.

As there is a paradigm shift from a focus towards an abundant supply of water to improving water quality and efficiently managing the supply of water, the need for technological differentiation, such as the demand for more advanced technology standards, are continuously on the rise. As such, world-class global water-related corporations are concentrated on providing Total Solutions to the entire water treatment process, such as system planning, installation, operations, and management.

Comparative Changes in Annual Emissions between the Periods 1980~1999 & 2090~2099



※ Source: Climate Change & Water (IPCC Technology Report-IV; 2008)

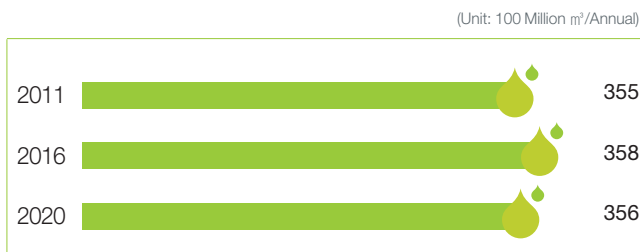
Policies of the Global Water Industry

European countries, such as France, that have been developing their water industry over long periods of time, are more focused on providing support to domestic corporations that are expanding overseas rather than developing their own water industry. However, to overcome their own water shortage situation, Singapore is more concentrated on developing its own water industry over a short-period of time by getting their national corporations to participate in large scale projects led by the government. In the case of Israel, to overcome their water resource shortage situation, they have solely designated Mekorot as the sole comprehensive water management institution, while implementing a government-wide water industry development program through the NEWTech program. Japan announced its "Multi-directional Future Water Industry Development Plan" to develop its water industry. Recently, Japan established a Master Plan to develop its water industry so as to enter the waterworks & sewage treatment operations business. To achieve this, Japan is actively developing its government led water industry and establishing national strategies to expand overseas. One example is its effort to strengthen cooperation between private and public institutions.

Projected Domestic Water Demand

In 2006, according to the Ministry of Land, Transport and Maritime Affairs' "Water Resource Long-term Comprehensive Plan," the domestic population is projected to increase to 57 million and the total water demand is expected to be 35.6 billion /m<sup>3</sup> annually by 2020. From the total expected demand, water for agriculture is expected to comprise 44% of the total, followed by river maintenance water and household water requirements at

Domestic Water Demand Projection I



8.4 billion /m<sup>3</sup> annually and 8.2 billion /m<sup>3</sup> annually, respectively. Looking at the supply and demand status of water in the future, by 2020, a 930 million /m<sup>3</sup> shortage is projected.

Status of the Domestic Water Industry

The domestic water industry is valued at approximately KRW11.2 trillion in size, with the waterworks & sewage treatment market taking up the largest portion at 91% of the total. Since the domestic penetration level of Waterworks & Sewage Treatment is at advanced country levels, the domestic water industry is at a stage of diverting its effort to construction and management. By 2011, construction of all domestic infrastructures will have been completed. With this, operations, management and facility replacement are steadily taking a larger portion of the market. The domestic water supply business is divided into the Multi-regional waterworks, Local Waterworks and sewerage business. The water business is 100% operated by K-water and local governing bodies, without the participation of private sector corporations. However, 64% of the total sewage treatment business is carried-out on consignment with the participation of private sector corporations.

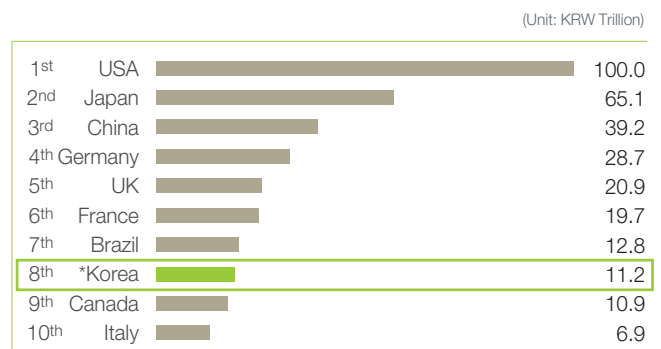
Government's Development Policy towards the Water Industry

Based on the government's "Water Industry Development Plan," the size of the domestic water industry is projected to expand to KRW 20 trillion. The plan is to develop the domestic water industry into a global water industry. According to the government's 2007 "Water Industry Development 5-year Detailed Implementation Plan," 31 detailed tasks in 6 sectors, including implementation plans and investment size, have been outlined. However, since most of the government's water industry development plans have either been changed or delayed, the only current visible project underway is the waterworks & sewage treatment facility upgrade business.

Trends in Overseas Expansion of the Domestic Water Industry

Korean water industry's expansion overseas is mostly concentrated on the facilities & construction sector, while operations & management overseas still take up a small portion. From 2007 up until July 2009, the facilities & construction sector comprised of 88.5% of the total contracted amount overseas. As the operations & management sector takes up the largest portion in the water industry, there is a need to concentrate our effort to developing and entering the operations & management sector.

Comparative Size of the Domestic Water Industry I



\* Korea: Water 5.1 Trillion, Sewage Water 5.1 Trillion, Industrial Water 1 Trillion

※ Source: Global Water Market, 2008

# Vision & Sustainable Management

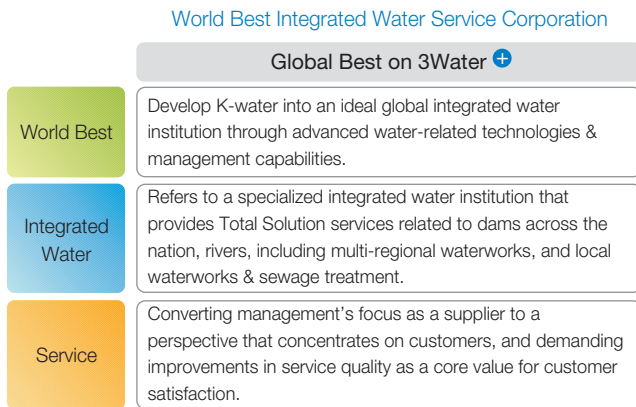
By 2017, K-water will have been in existence for half a century, establishing itself as a global comprehensive water service leader by harmoniously balancing public, growth and efficiency factors.

## K-water's Vision

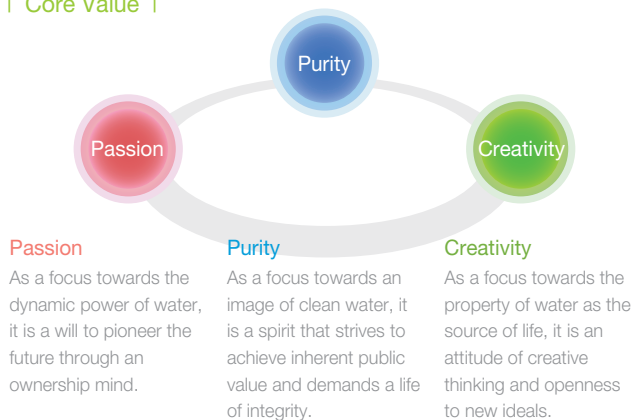
K-water has further supplemented the mid-to-long-term strategic management plans, enabling it to lead the paradigm of change in the water industry as climate change, has forced the industry to adapt, and to establish a new growth engine through the successful completion of the Green New Deal which includes the 4-River Restoration Business and the Gyeong-in Ara Waterway Business. Since the vision that was established in 2006 and the strategic direction that was established in 2008 coincides with K-water's current management status and has a wide spread consensus, the vision and strategic direction will remain as part of K-water's management strategy. At the same time, the strategic structure, including the nine Implementation Strategies and Strategic Tasks, was further complemented, while the Action Plan was outlined in more concrete terms.

K-water's core values, which form the Corporation's mental and cultural foundation, were recently established to help achieve its visions and strategies. Based on a unified belief and core values that forms the basis for action, K-water will strengthen its leadership and consolidate its competencies company-wide.

## I K-water Vision I



## I Core Value I



## 3 Strategic Directions

The 3 major sustainable management strategic directions enable K-water to achieve a strategic focus and act as a directional beacon for aligning organizational activities, allowing K-water to achieve effectively its vision. This will require expanding public services, achieving continued growth and securing global competitiveness.



### Public Service (Green Water)

K-water will create a corporation that is loved and trusted by citizens by strengthening water management functions and creating environmental & customer value. It will also have to provide safety from water-related disasters and guarantee a prosperous life through water.

### Sustainable Growth (Blue water)

Improve Efforts to maintain a sustainable growth platform by creating a new business model based on core competencies by creatively utilizing the business environment such as the changing water management paradigm, fast-growing water industry, and continuing advent of new green growth policies.

### Global Competitiveness (White water)

K-water will secure global competitiveness by upgrading the organizational, structure, improving personnel and labor / management relations to more advanced levels, maintaining financial soundness by expanding sales and achieving cost innovations, and developing core human resources and technologies.

### Sustainable Management Implementation Structure

The purpose of the sustainable management initiatives that K-water has implemented is to provide clean water as a public corporation, and to ensure that no person or area is alienated. All citizens will receive the benefits of water by improving economic profitability and environmental soundness, and by sincerely fulfilling the corporation's social responsibilities. By carrying-out environmental management and social contribution activities based on economic efficiencies, K-water will create new corporate values and ultimately, it will be recognized as a 'Respected Corporation.' As a result of K-water's sustainable management efforts, it was ranked a combined 2nd place from 45 major public corporations on the 'Sustainable Management Index' announced by Kyunghyang Daily. The Index evaluates the economic, environment and social efforts made by corporations.



Core Value Declaration Ceremony



Achieved **2<sup>nd</sup>** Place,  
Kyunghyang Daily 2010 Sustainable Index

### K-water's Mid-to-Long-term Goals for Sustainable Management



Current (2009)
<ul style="list-style-type: none"> <li>Stabilizing Water Intake / Supply                             <ul style="list-style-type: none"> <li>- Enhance Flood Control Via 6 Dams</li> </ul> </li> <li>5 High Level Water Purification Facilities</li> <li>Highest Customer Satisfaction Ranking</li> <li>132 on the Environmental Performance Index</li> <li>AA Social Contribution Ranking</li> </ul>
<ul style="list-style-type: none"> <li>1.510 million Waterworks Customers</li> <li>Development of New Water Resources:                             <ul style="list-style-type: none"> <li>5 Dams are Under Construction</li> </ul> </li> <li>Metropolitan Water Operational Level: 67%</li> <li>Green Sales: KRW 225.6 Billion</li> <li>Carbon Emission Rights: 8.7 Thousand Tons</li> </ul>
<ul style="list-style-type: none"> <li>Total Employees: 4,031</li> <li>Credibility Management Index: 61 Points</li> <li>Intellectual Property Rights: 39</li> <li>R&amp;D Practicality Index: 35%</li> <li>Clean Level: 8.99 Points</li> </ul>

Short-term Objective (2013)
<ul style="list-style-type: none"> <li>Water Intake / Supply Stabilization                             <ul style="list-style-type: none"> <li>- Water Regulation Capability Enhancement Measures: 16 Dams</li> </ul> </li> <li>7 High Level Water Purification Facilities</li> <li>Highest Ranking in Customer Satisfaction</li> <li>Environment Performance Execution Index of 150</li> <li>AA Social Contribution Ranking</li> </ul>
<ul style="list-style-type: none"> <li>4.88 million Local Water Customers</li> <li>Initiated the Construction of 8 New Dams</li> <li>Metropolitan Water Operational Level: 72.5%</li> <li>Green Sales: KRW 1,284.2 Billion</li> <li>Carbon Emission Rights: 392 Thousand Tons</li> </ul>
<ul style="list-style-type: none"> <li>Total Employees: 5,400</li> <li>Credibility Management Index: 67 Points</li> <li>Intellectual Property Rights: 25</li> <li>R&amp;D Practicality Index: 36%</li> <li>Clean Level: 9.5 Points</li> </ul>

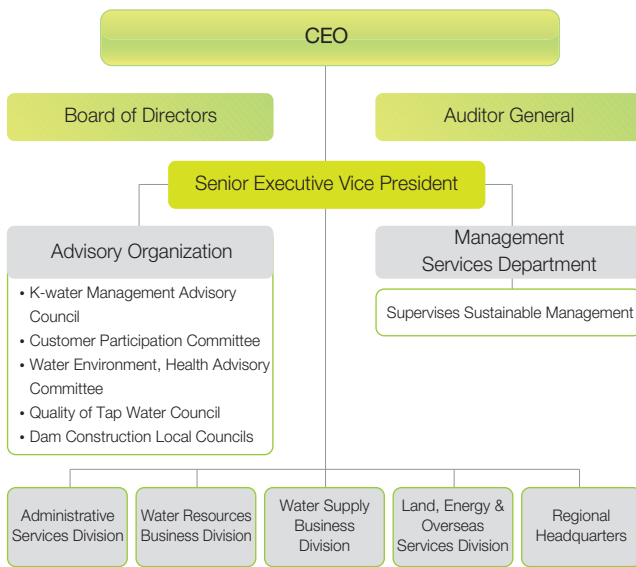
Mid-to-Long-term Objective (2017)
<ul style="list-style-type: none"> <li>Stabilizing Water Intake / Supply                             <ul style="list-style-type: none"> <li>- Water Regulation Capability Enhancement Measures: 23 Dams</li> </ul> </li> <li>10 High Level Water Purification Facilities</li> <li>Highest Ranking in Customer Satisfaction</li> <li>Environment Performance Execution Index of 155</li> <li>AAA Social Contribution Ranking</li> </ul>
<ul style="list-style-type: none"> <li>14.24 Million Local Water Customers</li> <li>Completion of 9 New Water Resource Dams</li> <li>Metropolitan Water Operational Level: Over 74%</li> <li>Green Sales: KRW 1,785.6 Billion</li> <li>Carbon Emission Rights: 460 Thousand Tons</li> </ul>
<ul style="list-style-type: none"> <li>Total Employees: 6,000</li> <li>Credibility Management Index: 83 Points</li> <li>Intellectual Property Rights: 29</li> <li>R&amp;D Practicality Index: 37%</li> <li>Clean Level: 9.7 Points</li> </ul>

※ Trust Management Index: Average 83 Points for Fortune 100 Advanced Corporates

### Sustainable Management Implementation Organization

K-water operates 4 divisions at the head office, with 8 local headquarters and 31 nation-wide management offices (construction offices) to effectively implement sustainable management company-wide. Under the direction of the senior executive vice president, the Management Services Department is in charge of the overall sustainable management, providing stakeholders with transparent information through the Sustainable Report which is published annually. At the same time, K-water operates advisory committees and councils to collect diverse opinions and suggestions regarding the economy, environment and society.

#### I Sustainable Management Implementation Organization I



### Sustainable Creative Management

K-water will complement its mid-to-long-term strategic management plans by using preventative measures to minimize the effects of water related disasters and safely secure water resources to establish new growth engines that reflect new management environment policies. Through these efforts, K-water will further strengthen its public services to help in national development and enhance public welfare.

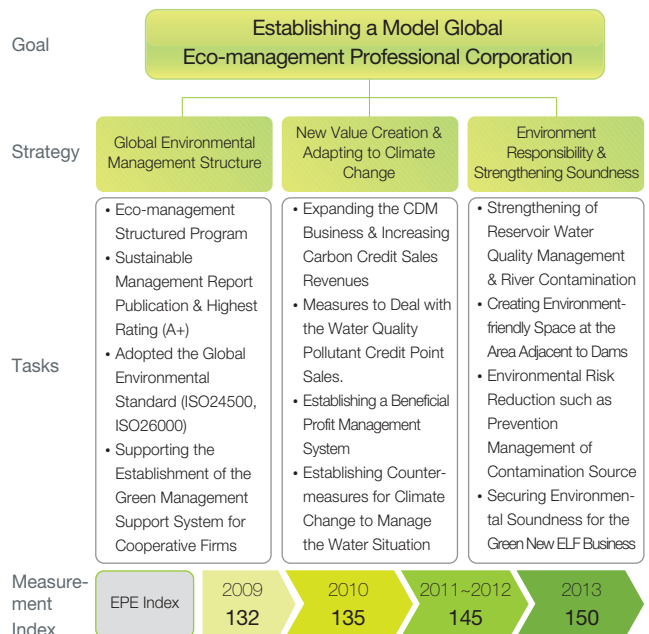
Through selected and focused strategies, K-water will focus on developing the 3 major growth engines that include the advancement of local Water & Waste Water services, overseas expansion, and growth of low carbon green businesses. Improvements will also be made in the efficiency of existing facilities, while participating in related new business opportunities in order to achieve sustainable growth. The economic performance derived from these endeavors will be shared with all stakeholders. For more details, please refer to the "Business Implementation Strategy & Structure" on pages 12 & 13.

### Sustainable Environmental Management

Since 2002 K-water has declared internally and externally its environmental management objectives and as such, has continuously carried-out management policies based on environmental-friendliness. K-water has also converted its management structure so as to create harmony between economical performance and the environment. The Environmental Performance Evaluation (EPE) system was setup to systematically manage the environmental effects from business activities and the environmental management performance. At the same time, the strategic implementation of Balanced Score Cards (BSC) is managed by establishing the EPE index to achieve continuous performances and improvements. K-water's environment management surpasses existing legal environmental performance management levels. Its environment management is continuously being upgraded to create new environmental values through risk prevention and Clean Development Mechanism (CDM). K-water is promoting environment-friendly communications through the publication of the Sustainable management report. Through the Report, communications with stakeholders have been enhanced, while greater transparency has been achieved in terms of access to information provided.

In addition, K-water was the first company in Korea to initiate an ISO/CD26000 diagnosis and feedback program, helping elevate K-water's position as a leader by fulfilling its social responsibilities. ISO/CD26000 is an international guideline for the social responsibilities of corporations related to environment, human rights and customers. Through this, K-water is strengthening its global environmental management standing.

#### K-water Environmental Management Implementation Strategy



K-water is taking the lead in environmental management by strengthening its global environmental management position through the above activities. A “Master Plan to Counter Climate Change” was established in December of to actively participate in international and domestic green house gas reduction policies.

As part of its efforts, K-water has strengthened its carbon management system by establishing its internal carbon reduction targets, preventing floods and drought by optimizing the climate change adjustment system, and preserving the ecology of water bodies and bio-diversity. Greater emphasis has also been placed on carrying-out its responsibilities in the environment sector by strengthening reservoir water quality and river management, creating Environment-friendly spaces at the areas adjacent to dams, and securing environmental soundness for the Green New Deal initiative.

**Sustainable Open Management**

There continues to be greater demand for management transparency of public enterprises and environment-oriented management, while the need for regular communications with customers is growing in importance. K-water’s objective is to create a socially sustainable open management by establishing a Win-win partnership with each stakeholder to fulfill its corporate social responsibilities. As part of K-water’s 9 major management strategies, the social sustainable management strategy strives to enhance the value of the 6 major internal & external stakeholder groups.

**| BSC Evaluation Table of Social Responsibility Management |**



**| K-water's Social Responsibility Management Direction |**

<p><b>Transparent, Ethical Management</b></p> <p>K-water is focusing its efforts to carry-out transparent &amp; credible management activities &amp; processes. Efforts are being made to make sure that ethical management takes root as part of the corporate culture in the daily work and life of all employees &amp; executives.</p>	<p><b>Customer-oriented Management</b></p> <p>K-water is creating a great impression by providing customers with clean water &amp; the highest water supply services.</p>
<p><b>Human Rights Management &amp; Safety/Health</b></p> <p>Taking into consideration all the employees’ human rights and safety/health, K-water is committed to protecting the rights of minorities such the disabled and female employees.</p>	<p><b>Win-win Partnership</b></p> <p>K-water is seeking to achieve mutual benefits through coexistent cooperation such as technology transfers through the formation of through forming partnerships with cooperative firms.</p>
<p><b>Human Resource Management</b></p> <p>To enhance employees’ &amp; executives’ competencies and value of life, taking into consideration their work capabilities, K-water supports career development opportunities from the time the employee first enters the corporation until after retirement.</p>	<p><b>Local Community Contributions</b></p> <p>K-water contributes to local societies and national development through active social contribution activities by operating diverse cooperative programs for local societies and the public.</p>

**| K-water's Business Implementation Goal |**

	2009	2013	2017	Remarks
Customer Satisfaction (PCSI)	Highest Ranking (Over 90)	Highest Ranking (Over 90)	Highest Ranking (Over 90)	Ministry of Strategy and Finance
Clean Level	8.99	Over 9.5	Over 9.7	Anti-corruption & Civil Rights Commission
* Social Contribution Index	83	89	97	K-water
* Core Personnel Index	29%	30%	35%	K-water

\* Social Contribution Index: Participation Level x 0.3 + Hours of Activity x 0.4 + Fund Contribution Amount x 0.3

\* Core Personnel Index: (PhD x 1.5 + Masters Degree x 1 + Technician x 1.5 + 6 Sigma Belt x 1) ÷ Total Personnel

# Business Strategy and Structure

K-water will establish an optimal business portfolio by taking into consideration the social environment and internal capabilities by each business which includes water resources, waterworks and green growth, and implement its business strategy to achieve its vision.

## Establishing a Business Strategy for Sustainable Growth

K-water will achieve sustainable growth by creatively countering any business environment that has both opportunities and risks. The company's role as a professional water management institution will be strengthened further to prepare for climate change and manage any paradigm shifts in water management. New growth models such as green growth will aggressively be sought after and implemented. New national projects such as the 4-River Restoration Business and the Gyeong-in Ara Waterway Business and the not only led the government's Green New Deal Policy, but also provide an opportunity to expand business scope for K-water. Through this, K-water will advance its water management competencies through effective water intake/supply, regulations and water friendliness, and pursue a new concept business by creating a complex living environment that enables green growth and cultural/tourism/leisure activities.

## Business Vision & Strategies

K-water established its business vision and has implemented strategies by segmenting its overall business into the water resources business, water supply business and green growth sectors, for the purpose of analyzing business conditions, value chains and business portfolios. The water resources business is focused on "Achieving an Integrated Water Resource Management System to Counter Climate Change." This business sector's activities include, securing sufficient water resources, operating & managing dams scientifically by utilizing IT-based technology, strengthening the management of water quality and quantity, and expanding participation in river related businesses.

## I Corporate-wide Business Structure I



The Water Supply business sector strives to "Provide a Total waterworks Solution to Lead the Growth in the Water Industry." It is contemplating entering into new water related business areas such as establishing a stable water supply system, expanding the out-contracting of local waterworks businesses, and participating in drainage/industrial water businesses. The Green Growth business sector's aim is to "Create a New Business Model that Merges Water with Greenness." Some of the activities include achieving low carbon green distribution, fostering specialized complexes which utilize valuable water, advancing to the foreign water market the overseas water market, and the development of new & renewable energy development. The projects have been classified based on business priorities as follows: infrastructure business, growth engine business and next generation business.

K-water's selective & focused strategies has been strengthened by classifying the Green Growth business sector into infrastructure, growth engine and next generation businesses. The infrastructure business refers to the main business that enables the creation of stable profitability, and the growth engine business refers to future main businesses that have a positive market outlook, while already having secured internal competencies. The next generation business on the other hand, refers to R&D-oriented investments which target businesses have future market potentials.

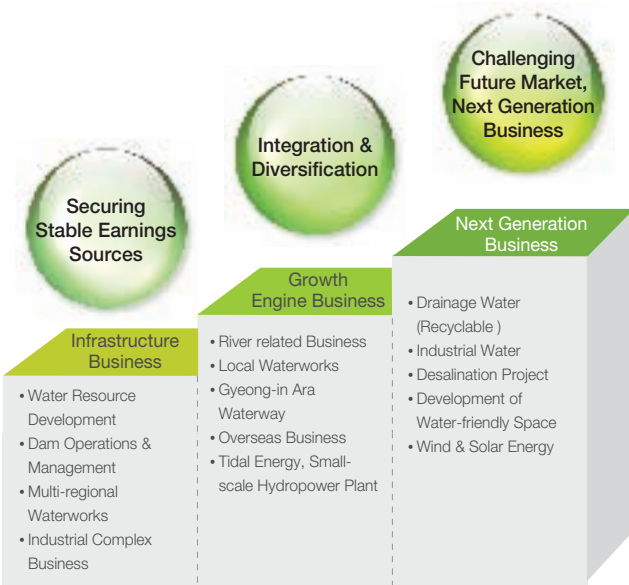
## Water Resource Business

It is important to secure a sufficient resource of water in order to effectively counter abnormal weather conditions such as frequently occurring droughts and floods due to climate change. By constructing 5 dams (Seongduk, Gunwi, Buheung, Gunnam, Hantan River) that are expected to be completed by 2012, K-water will be able to secure approximately 100 million m<sup>3</sup> of water. Revising the long-term dam construction plans, K-water will continue to construct small & medium environment-friendly dams. For efficient water management, K-water is scientifically managing the dams and expanding the capacity of 23 existing dams. A water quality/quantity projection management system is also being setup.

As a core player in the 4-River Restoration Business, K-water will invest KRW 8 trillion by 2012, and construct 3 dams, 2 flood control reservoirs and 15 weirs. By securing water resources, preventing floods, restoring the ecosystems & wetlands, fostering historical / cultural space, and contributing to the vitality of local economies, K-water is creating a sustainable development platform, and leading green growth from a national standpoint. By expanding its water management scope from just utilization and regulation to water-friendliness, K-water will create new opportunities by developing the areas around the water ways which are expected to rise in value due to the 4-River Restoration Business, and through the development of new water demands such as the water needed to improve the environment and sceneries.



I Creating the Business Portfolio I



Water Supply Business

According to GWI (Global Water Intelligence, 2008), the global water industry is expected to grow to US\$530 billion by 2016. Utilizing a stable multi-regional water supply structure, K-water will aggressively expand the integrated consignment of local waterworks, while focusing on drainage and industrial water to secure a sustainable future in the water market.

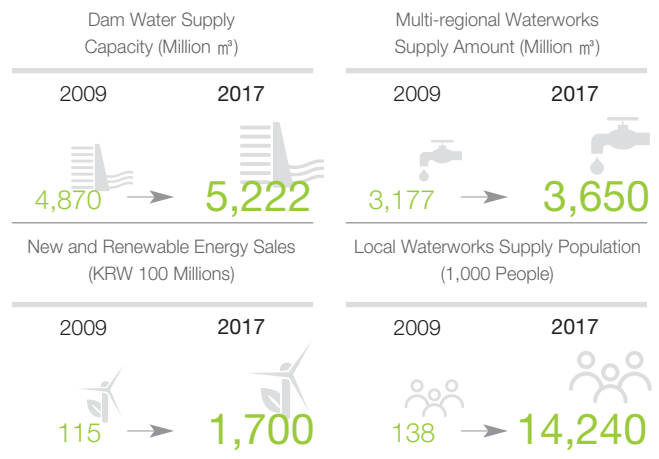
For the multiregional waterworks, by the end of 2010, integrated operational systems will be established for 7 sectors, and by 2011, all systems will be operational. In addition to the current 6 sectors of the water supply systems control business, based on the Water Maintenance Basic Law (December 2009), 11 new businesses in 9 sectors will be initiated, alleviating the regional water imbalance. Higher quality water will be supplied by adopting an upgraded water filtration process in the 14 water purification plants, and repairing existing pipes. By 2017, the local waterworks will be integrated into 18 sectors (93 local governments), enabling to 14.24 million citizens, which is 30% of the total water supply population nation-wide, to be supplied with water.

As of the end of 2009, K-water had a market share of 1% in the drainage market, which will be expanded to 5% by 2017. At the same time, utilizing water treatment technology, K-water will aggressively contemplate entering into new water markets, including the industrial water business. By securing Total Solution capabilities in all areas of the water circulation structure linking multi-regional waterworks, local waterworks and sewage treatment (recycled water) businesses, K-water will contribute to the development of the domestic water industry, and also create national wealth by entering the overseas market through cooperation with private enterprises.

Green Growth Business

Green Growth has become a new paradigm in economic and social development. K-water will creatively carry-out its existing business based on green growth, while creating new business models. One example is the Sihwa MTV and Songsan Green City that will be developed around the Sihwa River by 2022. It will be a model water-friendly green city complex that integrates water and land.

I K-water Business Implementation Target (2017) I



The construction of the Gyeong-in Ara Waterway Business will be completed by 2011. This will enable low carbon green distribution, while creating special cultural, leisure and tourist attractions with water sceneries going out in 8 directions. K-water will also generate 499 thousand kW of energy by 2020 through small-scale hydropower plants, tidal energy and new & renewable energy sources. Through the CDM business, K-water will be able to reduce GHG and sell carbon credits. Utilizing the business experience gained from the ODA and technology services business, and local networks, K-water will search and carry-out highly profitable investment activities overseas through BOT (Build-Operate-Transfer), M&A (Mergers & Acquisitions) and other opportunities.

I K-water's 2017 Future Platform I



# Sustainable Creative Innovation

K-water is growing into a globally competitive corporation through continuous performance initiatives based on creative innovation practices to achieve its vision despite the fast and ever-changing business environment.

## Implementation Direction of K-water's Creative Innovations

Although K-water achieved the highest innovation evaluation level for public corporations at level 6 in 2007, it continues to actively promote creative innovations to secure global competitiveness despite the fast and ever-changing global business environment.

\* K-water is doing whatever's possible to embody an innovative-based and active mentality for each employee by systematically operating Creative Innovation Communities of Practice (CoP), promoting knowledge management to provide concrete support to the work being carried-out on-site, and improving practices pertaining to the organizational culture based on the 3 core values, which include purity, passion and creativity.

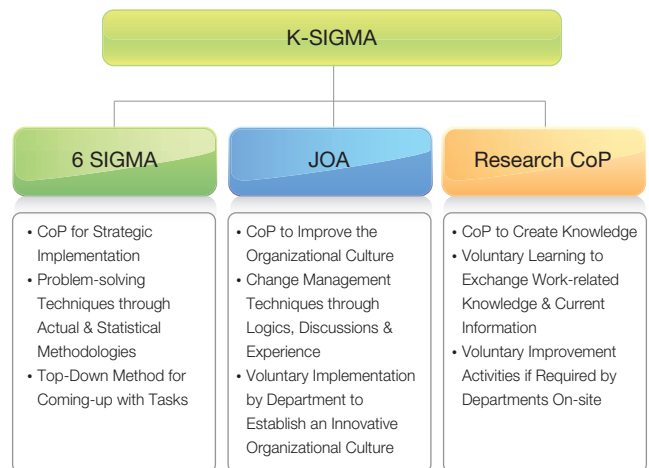
## K-water's Proprietary Creative Innovation Practice Structure (\*K-sigma)

K-water's innovative practice structure is organically linked to the BSC, Creative Implementation CoP and knowledge management. As the BSC is a core performance index required to achieve K-water's strategic objectives, various activities are needed such as the 6 Sigma, JOA (Converted GE Work-out Methodology into K-water's own.), and Creative Implementation CoP of the Research CoP. These diverse creative innovation practices have been reestablished as K-sigma, K-water's proprietary CoP implementation brand. Performance results gained through CoP activities under the K-sigma brand consists of knowledge management (KM) which is based on knowledge proposals, and a circulation structure that is shared by employees through organizational cultural activities.

### I Creative Innovation Implementation Road Map I

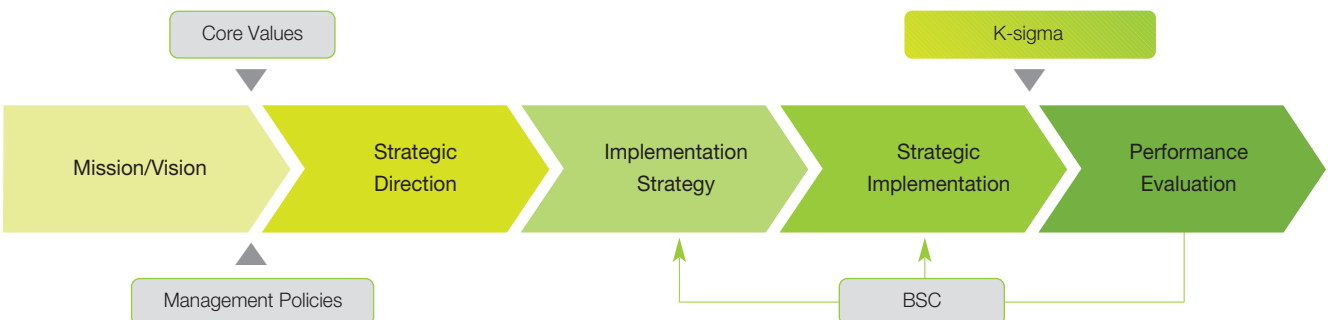


### I K-sigma Implementation Structure I



\* As an abbreviation to Knowledge Sigma, K-sigma is K-water's proprietary innovation technique comprising of 6 sigma, an innovation tool used to help in cost reduction and process improvements, JOA, is a technique used to help eliminate unnecessary work and improve organizational culture, and finally, Research CoP, to encourage knowledge creation.

### I Strategic Structure to Achieving K-water's Vision & Realizing Value I



**Case Studies of Creative Innovation Activity Implementations**

**Implementing Leader-oriented Voluntary Innovation Activities**

K-water is actively supporting leader-oriented voluntary innovation activities to incorporate creative innovation practices for all employees. Led by on-site department heads, including regional executive directors, required tasks to create customer value are voluntarily selected and implemented. Department heads actively participate in and display support leadership in implementing the selected tasks. The tasks are continuously evaluated in stages to enhance the performance of these tasks. Next, the results of the tasks are presented to each division on an intermediate basis and presented to the entire corporation through the Creative Innovation Festival. Excellent case samples are selected, shared, and dispersed company-wide. Consultants are also sent out to the regional headquarters to provide customized consultant services catering to the work and duties on-site. Through these consultant services, special lectures are provided to upgrade their knowledge in advance work methodologies and to enhance work improvement competencies. The training of innovation expert personnel (6 sigma Belt Certified Personnel) is the backbone to continuous creative innovation activities.

**Enhancing Creative Innovation Minds**

Innovation related special lectures such as "Speed Management required for Leader Innovation," and "Strengthening On-site Oriented Innovation Activities" are provided to enhance employee creativity. Voluntary organizational cultural improvement activities are also held focused which focus on the 3 major core values, which are Purity, Passion and Creativity, and which incorporate the CEO's management philosophy.

**Establishing an Open Knowledge Network & Volunteer Knowledge-based Activities**

K-water is distributing expert knowledge through diverse networks with external water professional firms, cooperative firms and outside customers. Through the Waterpedia portal system that was established in 2007, K-water is sharing its water technology internally, and technological information with the industrial, academic and institutional sector.

By opening the dam related "Damquitious" system, K-water provides information regarding dam construction designs and technology in its entirety. This way, K-water is able to solve any concerns or problems that users such as customers, corporates, or academicians may have on a real-time basis. The policy to embrace customer proposal is operated as part of knowledge management to utilize the diverse and creative ideas provided through diverse sources, such as general customers and cooperative firms, and in management operations. Considering that the proposals and knowledge provided by employees are voluntary, and that the proposals and knowledge are of value, it shows the increasing level of participation of high quality and individual knowledge of the employees.

**Creating Creative Innovation Performances**



Awarded the Asian MAKE Award

Creative innovative performance presentations and the creative innovation magazine, "O! Culture," are published and distributed enabling everyone to share in the performance of creative innovation activities. Case examples of these activities were also distributed. Through excellent case example presentations to the Knowledge Management Society and the Public Innovation Conference, K-water was able to spread its excellent innovation activities outside the corporation. As a result, K-water was the first public corporation in Korea to be selected as the "Most Respected Knowledge Management Corporation" by Teleos, a UK institution, resulting in K-water receiving the globally respected and prestigious "Asian MAKE (Most Admired Knowledge Enterprise)" award for two consecutive years.

**7,530** Cases, 2009 Knowledge Proposals



Creative Innovation Festival



# Sustainable R&D Investments

K-water is targeting to become a “Global Water Management Research Institute that Grows with its Customers” through continuous technological innovation and by securing core technologies (5 Major Star Brand Technologies).



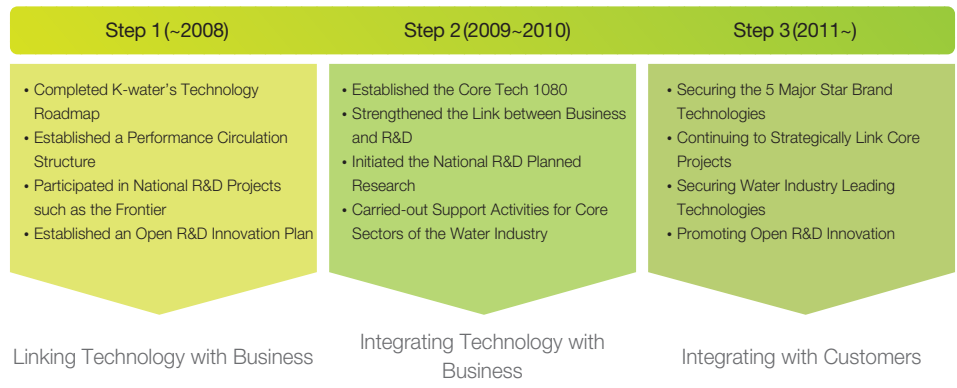
K-water Institute's Homepage  
(www.kiwe.re.kr)

## K-water R&D Strategy

K-water established its Technology Innovation Plan (CoreTech 1080) in December of 2008, and plans to achieve technological levels reaching 80~90% of advanced nations' levels through investments of KRW 108 billion in 10 major core competencies and 80 core technology projects by 2013.

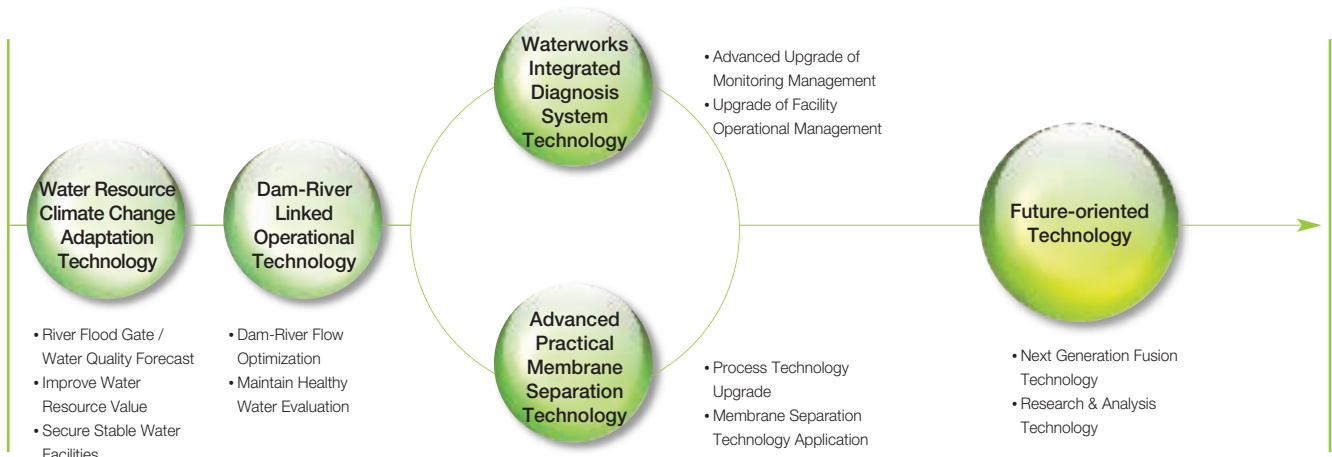
As such, to secure core technologies (5 Major Star Brand Technologies), K-water will concentrate on 50 projects out of the 79 research projects (63%) and invest KRW 8 billion out of the R&D budget of KRW 11.5 billion (70%) to ensure that K-water is effectively carrying-out its strategy of “Selection & Concentration.” As part of K-water's open R&D innovation plan to lead the core technology sector of the water industry, it will continue to carry-out its 「Small & Medium Enterprise Support Business」 and 「Water Industry Core Sector R&D Support Business」.

## | Mid-to-Long-term Roadmap |



KRW **86** Billion,  
2009 R&D Investment Amount

## | 5 Major Star Brand Technology |

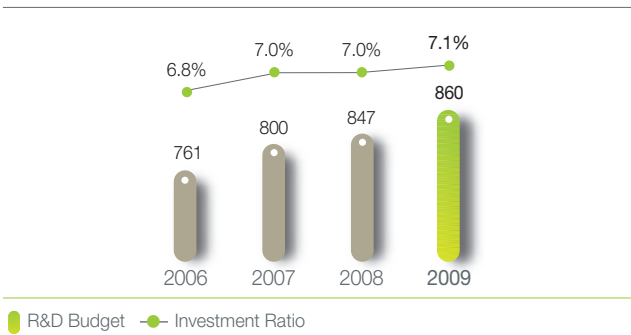


### R&D Performance Status

K-water budgets and invests more than 7% of its revenue towards R&D, carrying-out 90 projects annually on average. An average of 486 research theses(2005-2009) are published annually as a result of projects carried-out, while intellectual property rights, including patents, continue to increase. K-water will take the lead in providing expert knowledge services and water industry technology development by strengthening research capabilities and through the creation of technological value.

#### • R&D Budget Status

(Unit: KRW 100 Million, %)



### R&D Infrastructure Status

K-water operates a world-class waterworks and , sewage research & training center which has a technology research & training support institution, an internationally certified control facility in the first domestic water level measurement sector, and a flow control system that has the largest diameter in Korea at 800 mm. In addition, a "500 Criteria Pool Water Quality Analysis" is carried-out to test water at the Water Analysis & Research Center. By obtaining certifications as a professional facility safety diagnosis professional institution and a professional water quality testing professional institution, K-water is expanding its R&D infrastructure to exceed global standards.

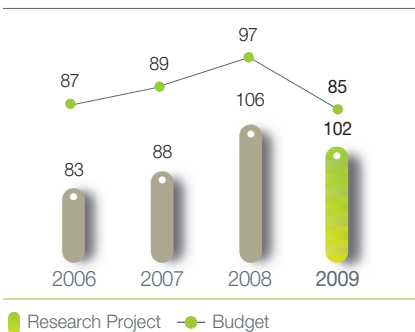


Water Analysis Research Center

※ R&D Infrastructure Status : Building/Property Size (79,832m<sup>2</sup>/90,311 m<sup>2</sup>), Testing Equipment such as Instruments (Total 621 Items)

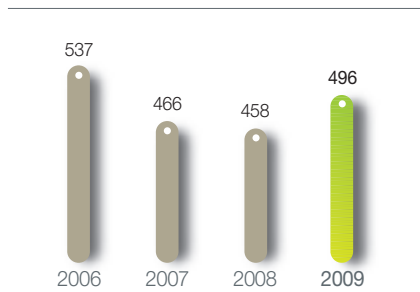
#### • Research Project & Budget

(Unit: KRW 100 Million, Cases)



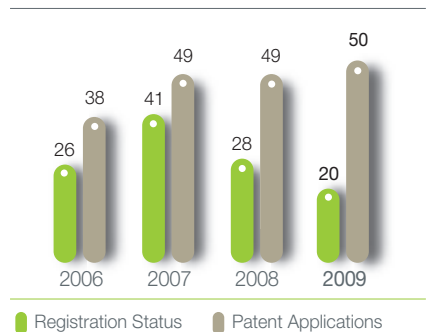
#### • Published Research Thesis

(Unit: Cases)



#### • Patent Application & Registration Status

(Unit: Cases)



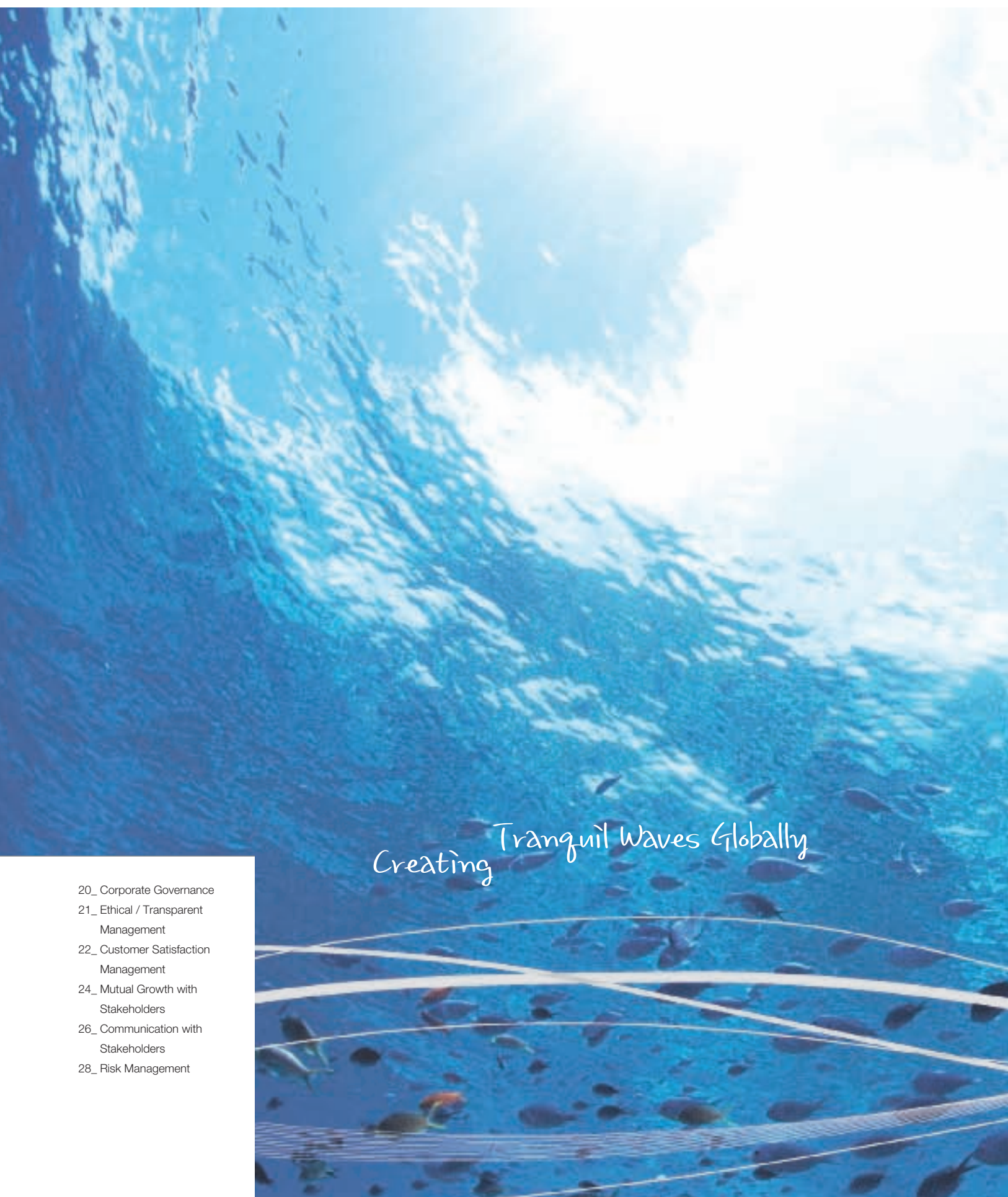
The Nation's Largest Flowmeter Calibration System



The National Water-level Gauges Certified by ISO / IEC17025



Water & Sewage Treatment Demonstration Plant



*Creating Tranquil Waves Globally*

- 20\_ Corporate Governance
- 21\_ Ethical / Transparent Management
- 22\_ Customer Satisfaction Management
- 24\_ Mutual Growth with Stakeholders
- 26\_ Communication with Stakeholders
- 28\_ Risk Management

# Approach

●

K-water is creating tranquil waves globally and instilling new life. As a transparent and clean waves become a dynamic waves that change the entire world, K-water is connecting the present and future generations into one. With waves of hope, K-water is creating a future that is open to everyone.

# Corporate Governance

Utilizing expertise, greater participation by Board Members in management is contributing to improvements in corporate governance.

## Shareholder Structure

In accordance to the Korea Water Resources Corporation Act, K-water's investors are limited to the Korea Development Bank (KDB), central government and local governments. The central government has to invest more than 50% of the total capital. Currently, K-water's shareholders are comprised of the central government (90.6%), KDB (9.3%) and local governments (0.1%).

## Composition & Operations of the Board of Directors

The Board of Directors (BoD), the highest decision-making body, deliberates and passes resolutions on K-water's major issues such as business plans, taking into consideration economical, social and environmental factors. The BoD oversees the duties of senior management and provides support to management. The BoD is comprised of 13 directors, 6 permanent and 7 non-permanent directors. In 2009, the BoD held 21 meetings, with 51 items being deliberated and processed. Based on the revised law related to the operations of public corporations, an elected non-permanent director took on the duty of chairman of the board in February of 2010. This improved corporate governance and enhanced the checks & balances of management. The chairman of the board, including non-permanent directors, are recommended by the Executive Recommendation Committee and decided by the Steering Committee. Final appointments are made by the Minister of Strategy & Finance, while the Executive Recommendation Committee makes the recommendation and the public corporation Steering Committee makes the decision on the CEO. Once decided, the Minister of Land, Transport & Maritime Affairs recommends the Steering Committee's decision to the Korean President, who makes the final appointment. The permanent members of the BoD are then decided by the appointed CEO.

## Activity Evaluation of the Board of Directors

Once a year, the BoD's operational status is evaluated through a governmental management evaluation and an internal evaluation. Annual salaries of the permanent members are based on performances, which are evaluated by the government. In addition, the executive's compensation is based on quantitative factors such as performances and effort levels, and qualitative factors.

21

K-water's Junior Directors

## Management Participation & Expertise Enhancement of Non-permanent Directors

K-water is expanding the BoD's participation in management and enhancing the decision-making capabilities of the BoD through enhanced deliberation functions by establishing more concrete items for decision-

making and expanding the scope of items that need to be reported to the BoD to enable non-permanent members to better understand K-water's management & operations, the internal information network has been opened to the BoD, while greater information is provided to non-permanent members on a real-time basis. Suggestions and opinions of non-permanent members are reflected from the start of a project by enhancing the pre-deliberation functions of the professional committees, including management & technology committees. Members with special interests or stakes in any decision-making item are restricted from participation to ensure impartiality. More opportunities are provided to allow expert knowledge to be applied to management through diverse management activities such as inviting management professionals as internal lecturers. Information related to the status of management and professional research data are provided. K-water also established a Junior Board consisting of 21 young employees, whose opinions and suggestions are reflected in overall management through the Junior Board. A Management Advisory Council to provide advice on management & operations was established, consisting of outside professionals.

## | Board of Directors (As of the end of May 2010) |

Directors	Name	Title
Internal Executives (Permanent)	Kim, Kuen Ho	President
	Kim, Wan Kyu	Senior Executive Vice President
	Choi, Won Sik	Executive Director of Administrative Services Division
	Yum, Kyung Taek	Business Executive Director of Water Resource Division
	Choi, Hong Gyu	Business Executive Director of Water Supply Division
	Park, Gee Hwan	Business Executive Director of Land, Energy & Overseas Services Division
External Executives (Non-permanent)	Song, Jae Woo	Professor, Dept. of Construction and Urban Technology, Hongik Univ.
	Kim, Yeon Cheol	Hannam University, President of the Graduate School of Public Policies
	Yang, Hong Kyu	Representative Lawyer of the Yang Heung Kyu Law Office
	Kim, Kye Hyun	Inha University, Professor of Civil / Environmental / Geoinformatic Engineering Department
	Song, Byeong Dae	Grand National Party, Daejeon Metropolitan City Party Committee Head
	Kim, Hak Ryul	Shinkwang Eco Road E&C Co., Ltd. CEO
	Kim, Byung Chin	Doowon Technical College, President

## Internal Audit & External Supervision Institution

K-water operates an independent internal Audit & Inspection department to supervise the appropriateness and impartiality of the work carried-out. Through the supervision of the public office disciplines and regular audits, management transparency is being improved. The internal Audit & Inspection department's auditor may be called upon to make statements to the BoD. The auditor is also prepared to faithfully answer to any audits by the Board of Audit & Inspection, Parliamentary Inspection, Ministry of Land, Transport and Maritime Affairs and the Prime Minister's Office.



# Ethical / Transparent Management

K-water is a corporation that places great importance on individual and corporate ethics. K-water is gaining the trust & credibility of the stakeholders through global ethical & transparent management.

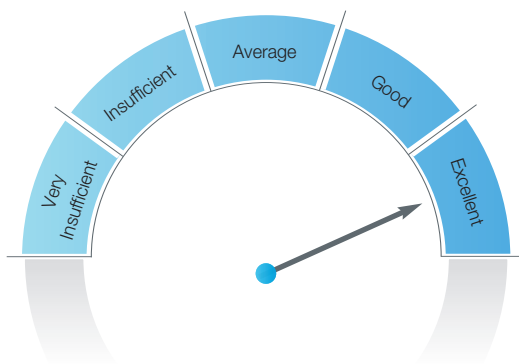
## Clean Corporation, Producing Clean Water

“Whoever works hard in a straight clean manner, will gain the trust of the citizens. I would like to stress the importance of sticking to the basics, while placing great emphasis on the happiness of the public and customers.”  
(President Kun-Ho Kim, November 2009)

K-water is aggressively pursuing ethical management as the basic foundation since it provides a strong competitive platform. In 2009, K-water especially focused on reestablishing its core values to help achieve its vision, accepting ethical management as its primary management target, and initiating its target of becoming a global ethical management corporation.

K-water received the “Anti-corruption Policy Evaluation Excellent Company Award” from the Anti-corruption & Civil Rights Commission of Korea for 4 consecutive years. This was the result of strengthening internal policies such as revising principles of conduct by employees & executives, and advancing the ethical system by operating an “Ethical Committee,” the highest policy decision-making body for implementing ethical management, and a “Clean Reporting Center,” a place where employees can voluntarily return received ‘gifts.’ The efforts of both the employees & executives were also a pivotal factors.

### 2009 Corruption Prevention Policy Evaluation (Anti-corruption & Civil rights Commission)



## Achieving Stakeholder-oriented Corporate Ethics

K-water is initiating diverse activities based on its management principles, ethical management organization and systems to enhance trust between itself and its customers, employees & executives, cooperative firms and society in general. To eliminate customer rights infringements and dissatisfaction, various policies have been revised. As a result, 43 policy items were improved, which include adopting an electronic public tender system in all areas requiring contracts. In another effort to enhance transparency, K-water allows customers to directly participate in the implementation of projects. By providing ethical training focused on actual case studies and operating labor support policies related to the welfare and health of all employees & executives, K-water is pursuing its ethical activities in connection with providing high quality water supply services.



Small & Medium Corporate Support Meritous Presidential Award

A Win-win cooperative relationship is maintained with cooperative firms through a coexistent council to achieve mutual growth. In addition, a 360° joint monitoring system on all steps of contracts has been established between K-water and the cooperative firms. These measures have been established to ensure a continuous healthy and sustainable partnerships. K-water is also expanding its world-class low carbon green growth projects to create social benefits, which is an obligation that is required for public corporations. Efforts are also being taken to carry-out global standard Corporate Social Responsibilities (CSR) by linking projects with strategic domestic and overseas social contribution activities.

**1st** 2009 KoBEX Index  
(Ministry of Knowledge Economy): 9.7 Points  
**Excellent Ethical Management Corporation Certification**



Executive's Clean Ethical Management Practice Pledge (February 2010)



Action Learning of Ethical Practice Project (April 2010)



Excellent Eco-family Corporation Certification

# Customer Satisfaction Management

K-water is promoting 'Water-Pro Services,' which is a professional and proactive service which focuses on customers and is creating customer impressions and values

## Established mid-to-long-term CS management strategies and the adoption of the "Water-Pro Service."



Mid-to-long-term CS management strategies have been established to strengthen CS (Customer Satisfaction) activities that are more systematic and professional.

Through these activities, K-water will be able to satisfy the growing public demand from a professional water service corporation, and will also be able to actively take necessary measures to adjust to changes in the customer satisfaction management environment. By significantly improving the internal / external service processes, K-water has been able to prevent customer dissatisfaction, resulting in enhanced customer loyalty. Simultaneously, amongst SOC public corporations, K-water was the first to adopt the 'Service Identity (SI)' to be able to effectively provide special customer satisfaction services to customers, and to highlight how its services differentiate from other SOC public corporations.

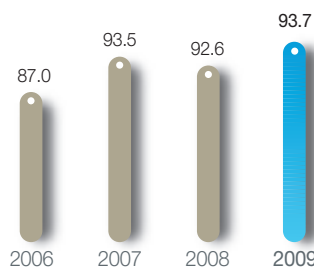
The service identity, 'Water-Pro Service,' reflects K-water's strong intention to provide proactive and professional services to its customers. To achieve this, differentiated services are provided for each customer, while customer opinions and suggestions are actively adopted in K-water's CS management. Through these efforts, K-water is enhancing customer values. As a result, K-water received the highest rating for 3 consecutive years in the Public-service Customer Satisfaction Index(PCSI) evaluation, and was the first public corporation to be awarded the 'The people Sinmoongo (a big drum) Grand Prize.' K-water was also selected as an Excellent Institution (the highest ranking) by the Civil Affairs Inspection Evaluation by the Ministry of Land, Transport & Maritime Affairs. K-water has received these awards as recognition for its CS management as being of the highest standard in Korea.

\* Water-Pro : An expression of trust towards K-water's customers services (Trust, Dynamic, Purity, Etc.)

- Oval Shaped Arrangement: Circulation, Continuation
- Blue: K-water, Water, Purity / Orange: Dynamic, Positive, Excitement / Green: Nature, Trust, Hope

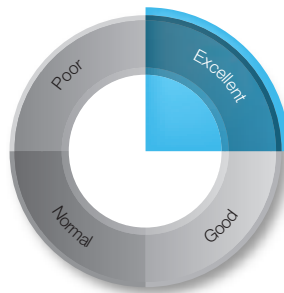
### Public-service Customer Satisfaction Index Level

(Unit: Points)



※ Sponsor: Ministry of Strategy & Finance (Highest Public Corporation Customer Satisfaction Level: Above 90 Points)

## 2009 Public Corporation Civil Appeals Inspection Results: Excellent



Excellent	(3 Public Corporations)
Good	(5 Public Corporations)
Normal	(5 Public Corporations)
Poor	(3 Public Corporations)

※ Sponsor: Ministry of Land, Transport & Maritime Affairs

## 3 Years Continuously Achieved the Highest Rating Level, For Public Corporation Customer Satisfaction

## Established an Advanced Service Quality Management Structure

K-water's focus has moved away from result-based monitoring such as resolving customer complaints and carrying-out customer satisfaction surveys, towards continuously improving basic factors such as the concentrated management of core services quality, the prevention of errors in the entire service process (Before Service), and the minimization of customer dissatisfaction through quality improvements. To achieve this, K-water adopted the 'Service Quality Index (SQI),' a strategic service evaluation system to create a general quality management system which utilizes service monitoring and data measurement methods. The SQI is comprised of error rates, observance rate of resolving customer's complaints through visits, level of satisfaction towards solving complaints through visits, and VOC complaint rates.



Local Waterworks Service Quality Management System

### Providing the World's Best Quality Water

To provide clean water, K-water has taken various measures, which include expanding and upgraded water filtration facilities, analyzing 500 water quality items (the largest domestically), initiating a water quality certification policy, and finally adopting an internal water quality evaluation policy. As a result, as the first non-North American corporation, K-water was able to receive the "5-Star Certification (the highest certification level) from the American Waterworks Association (AWWA). This certification proves that K-water's water is one of the world's highest quality.

※ 5-Star: The Highest American Waterworks Association (AWWA) Sponsored Water Purification Plant Operation Management Capability Certification

### Providing Impressive Customer Services through Creative VOC (Voice of Customer) Management

Through diverse VOC channels from the construction and management business, K-water is humbly accepting negative customer comments. While carrying-out large scale national projects like the Gyeong-in Ara Waterway Business and the 4-River Restoration Business, K-water established communication window, such as local development councils, to be able to collect suggestions and opinions from stakeholders. Through various windows of communication, K-water is actively reflecting customer opinions and suggestions in its projects. Some of the suggestions relate to improving the surrounding environments and changing the locations of the quay facilities.

At the same time, K-water was the first company in Korea to provide information related to compensations on its homepage, making it convenient to access information about compensation, while enhancing transparency. A free financial consulting service is also provided to local citizens to enable them to achieve independent economic sustenance.

K-water operates a Customer Relationship Management (CRM) system to achieve innovations in its VOC policies. In 2008 the tap water professional call center (1577-0600) was established nation-wide, a first in Korea, and in 2009, the CRM system was further strengthened by systemizing the counselling manual, strengthening the training of counselors and increasing the number of counselors. A VOC integrated system and an online customer card system was also implemented. Various innovative customer management systems were also adopted, which include installing the VOC system to allow high tech equipment such as PDAs to access VOCs in real-time.

Through the VOC management system, despite the burden of increased raw material expenses, K-water has frozen its water prices for 6 consecutive years to alleviate the economic burden of customers. Tap water quality inspections and water quality certification policies for each household were initiated to enhance customers' trust of tap water.

At the same time, a convenient and economical Pack preventing water meter from rupturing by freezing was developed and distributed for free to customers. This was to solve some of the inconveniences to customers stemming from replacing water meters and water stoppages due to waterline ruptures from the freezing cold weather during the winter season.

A system to help enhance the collection of VOC was established. This included the "The Customer's Voice Award of the year" policy which awards customers that have contributed to K-water's CS management through their VOC. Recipients are awarded with a 'Appreciation Plaque.'

6 Years, Water Price Freeze

99 %, VOC Processing Rate In 2009



The People Sinmoongo (a big drum) Grand Prize



U.S. AWWA's '5-Star Certification'



Media Reporting of Frozen Water Meter Rupture Prevention Pack

# Mutual Growth with Stakeholders

K-water is implementing sustainable management strategies that enables mutual growth with stakeholders as coexistent partners through continuous and systematic communication with stakeholders.

## communication with Stakeholders

K-water has established various outsider management participation systems to enable stakeholders to directly and indirectly participate in management or offer their suggestions. By enabling stakeholders to participate at the decision-making level or during a project's implementation process, potential conflicts that could occur during the implementation of a project implementation can be prevented, while providing transparency and credibility to the stakeholders. In addition, advisory councils or committees have been established to acquire advice on the overall project. Local councils have also been established to smoothly solve any conflicts that have occurred during the

implementation processes of projects.

An advisory council or committee is comprised of professionals from NGOs, academia, media, etc., depending on the requirements needed for a specific area. As for local councils, they are mostly comprised of professionals, civil servants and local citizens, and depending on the local issue, it enables them to have greater access to management. K-Waterworks closely with related government institutions such as the Ministry of Land, Transport & Maritime Affairs and the Ministry of Environment on issues such as establishing and implementing policies related to water resources.

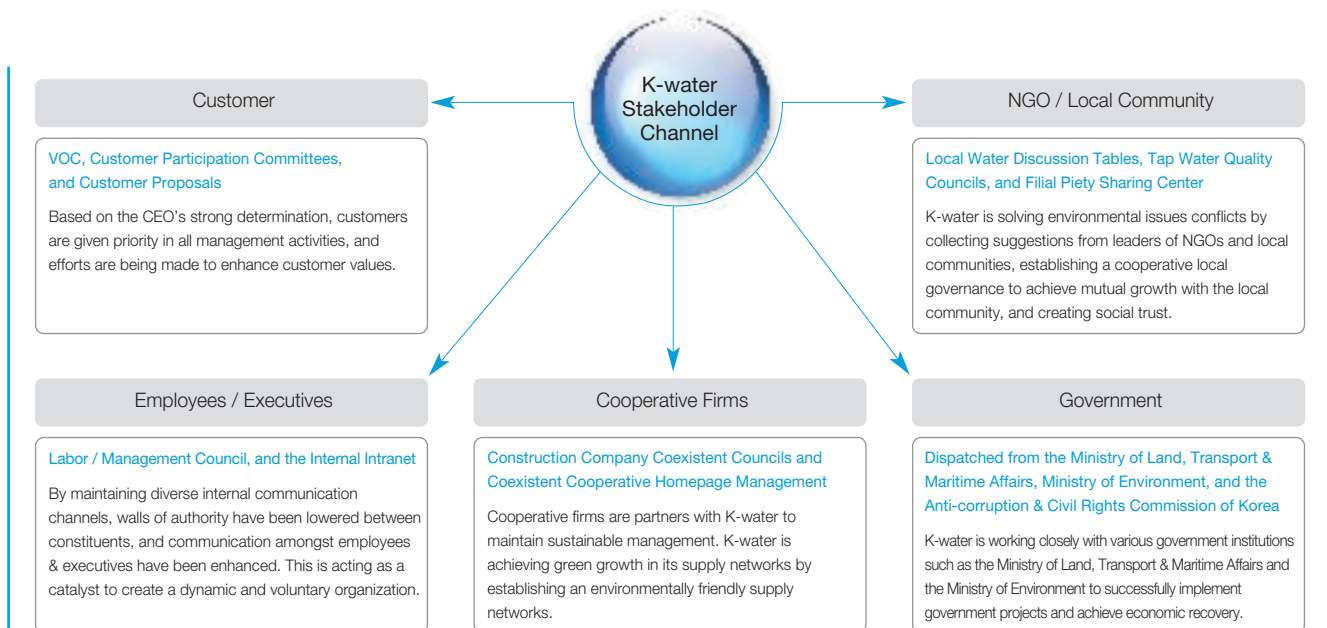


### Stakeholder Management Participation

K-water listens to suggestions from diverse stakeholders. Various communication channels have been established for customers, NGOs, local communities, government, cooperative firms, and employees & executives to collect suggestions regarding major issues of concern, and

to actively reflect these suggestions in management. The VOC system can be found on K-water's homepage. and Anyone can participate. K-water is trying to make sure that everyone's voices are heard.

### | K-water Stakeholder Channel |



### FOCUS



2nd The People Sinmoongo (a big drum) Grand Prize

## With the Customers: The People Sinmoongo Grand Prize

The People Sinmoongo (a big drum) Grand Prize in 2009 was sponsored by the Anti-corruption & Civil Rights Commission of Korea. From the 640 administrative and public institutions, K-water was awarded the Prime Minister's Institutional Commendation in the Ombudsman sector. This was the result of being recognized for solving various complaints on a timely basis through the VOC Integrated System, which includes the integration management of VOCs received on and off-line, the issuance of property expropriation certificates, and the results of the surveys & appraisal evaluations can be accessed through K-water's homepage. By establishing the 'Han Yeo Ui Local Development Council' through the direct participation of stakeholders such as organizations and citizens affected by the submergence area of the Hantan River, the compensation amount was pre-determined and executed to provide for a collective compensation, resulting in promoting equitable compensation for those who were affected. The establishment of a social agreement and equitable compensation for the affected citizens & organizations of why K-water's VOC Integrated System is so successful.



# Communication with Stakeholders

Through various communication channels, K-water is continuously communicating with the stakeholders to research and bring to light major issues, and to actively reflect these issues in management policies and initiatives.

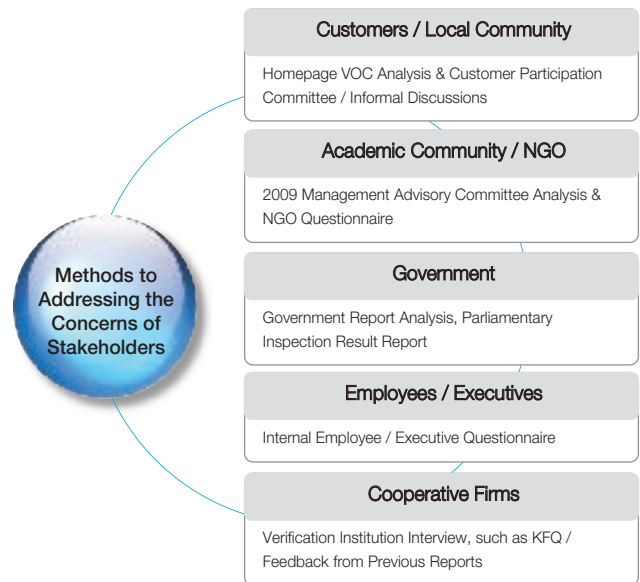
## Materiality of Communication with Stakeholders

Projects initiated by K-water both directly and indirectly affect the various stakeholders. At the same time, the stakeholders significantly influence K-water's corporate policies. To actively conform to the new environment, corporations need to further their communication with stakeholders. Communication with stakeholders is the corporations' best way to search for means to coexist with stakeholders. It is important in that by preemptively identifying risk factors and taking counter measures they will contribute to the sustainability of corporations.

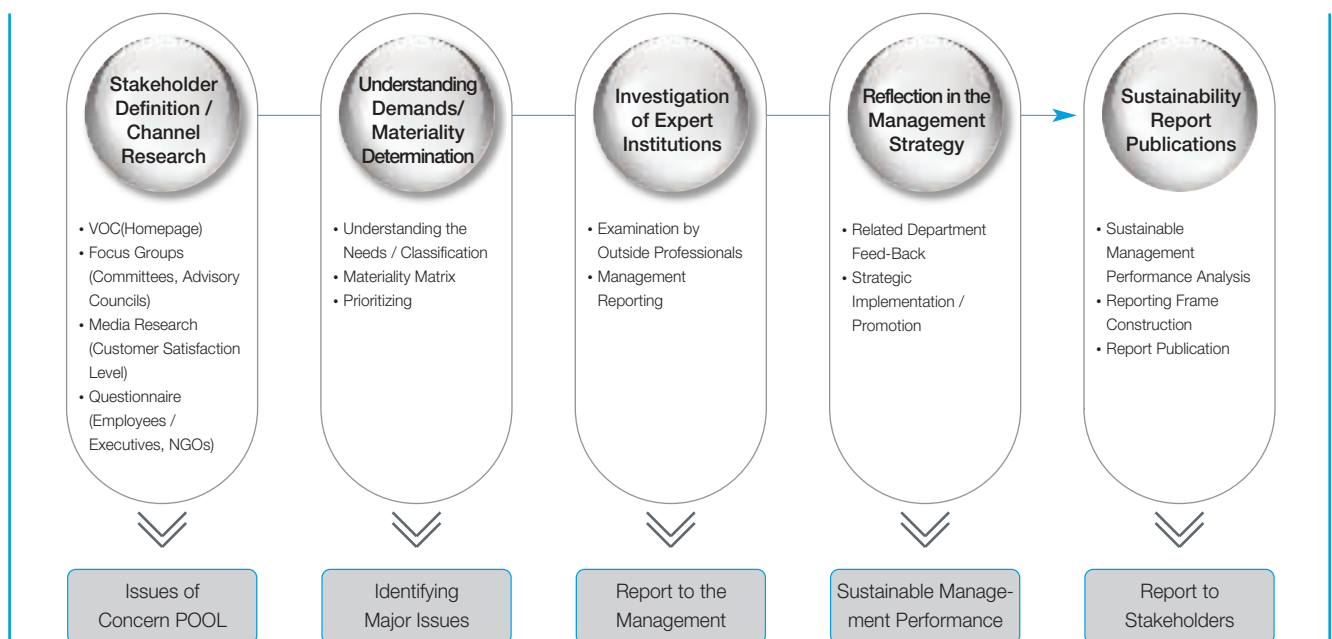
## Communication with Stakeholders' Framework

Communication with stakeholders is the beginning and the end in understanding the stakeholders. K-water has classified the stakeholders that directly affect its business activities into customers & local society, government that affects major policy directions, employees & executives that are at the center of innovation and growth, and cooperative firms. Communications is the foundation to achieving mutual growth for K-water and its diverse stakeholders.

## | Addressing the Concerns of Stakeholders |



## | K-water's Materiality Evaluation Process |



### Implementing K-water's Materiality Test

According to the Sustainable management report Global Reporting Initiative (GRI), placing a priority on providing stakeholders with wanted information is recommended. As such, it is necessary to identify, analyze and find solutions to meet the interests and demands of stakeholders. GRI demands that this kind of information be included in the Report.

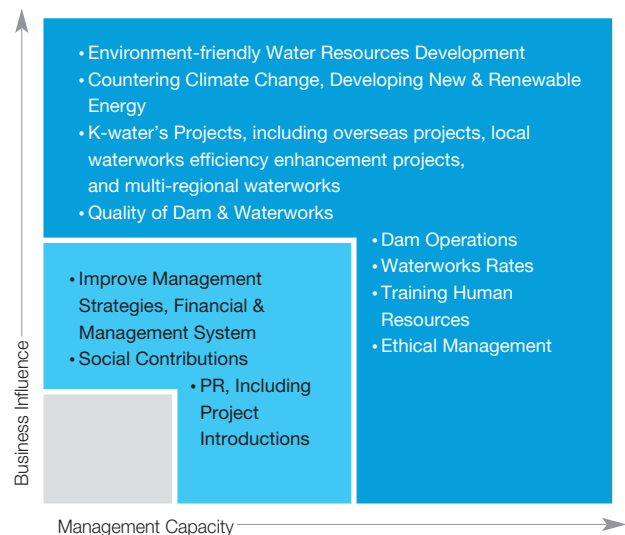
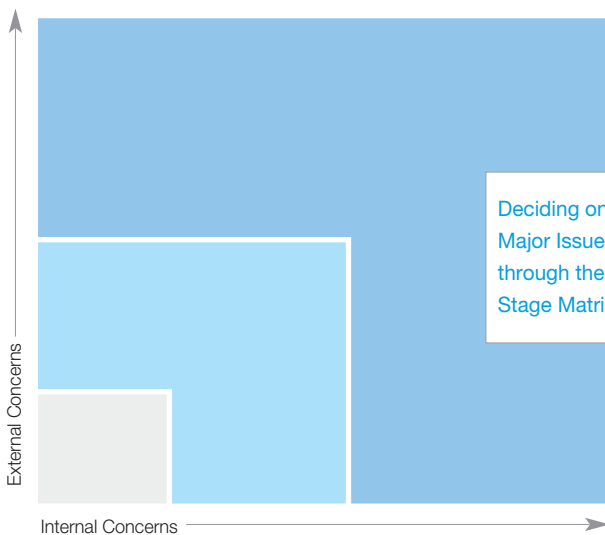
K-water established and maintains diverse communication channels which have enabled the company to collect stakeholder suggestions and opinions. The materiality of the demands by stakeholders are identified and reflected in the Sustainability report. Especially in case of the results stemming from the implementation of Sustainable management, which reflect stakeholders demands, the results are disclosed through K-water's Sustainability report. As such, K-water is pursuing various methods to communicate with stakeholders. To enable stakeholders to directly and indirectly participate in management or provide suggestions, K-water has established and operates diverse communication channels which include the VOC, where stakeholders can input their suggestions, customer participation committees & informal customer meetings, Sustainable management advisory councils, government personnel dispatches, and surveys. Stakeholders' demands that have been collected through the various communication channels are first categorized before prioritizing them through the materiality matrix. Once prioritize, the materiality is evaluated.

The matrix evaluation is initiated through a two staged process. The first stage is evaluating internal and external interests. The second stage evaluation takes into consideration the impacts on businesses and management competencies. After the 2nd evaluation stage, implementation and performance results of the issues that have been identified as level 1 materiality are reported in the sustainability report in greater detail. As for level 2 & 3 materiality issues, they are succinctly reported in the Sustainable management report. Through the advice of a professional organization, K-water established and has utilized a materiality evaluation model since 2008.

### K-water's Sustainable Management

To identify materiality issues for K-water's sustainable management, the following diagram outlines the major interests of stakeholders. These issues were received by K-water's management strategy departments and then steps were implemented. The performance results of implementing these issues are disclosed to the stakeholders through the sustainability report. K-water continues to place significant effort in communicating with stakeholders such as customers, local communities, academia, NGOs, government, employees & executives, and cooperative firms. K-water will continue to establish a growth platform by identifying stakeholder demands quickly and by enhancing both K-water's and stakeholders' values through cooperation.

### I Important Issues Related to Sustainable Management I



※ 1st Stage Interest Level Evaluation: K-water carries-out surveys which are targeted towards citizen's groups, employees, and executives to confirm major issues derived from communicating with diverse internal and external stakeholders.

- Low Materiality: Don't Report
- High Materiality: Simply Record
- Very High Materiality: Detailed Implementation Contents & Performance Reporting

# Risk Management

K-water is doing everything possible to achieve its management objectives by forecasting and managing potential risks (financial, non-financial) as a result of management on a company-wide basis, and to enhance corporate values by operating an Enterprise Risk Management (ERM) system.

## Risk Management Structure

K-water's enterprise risk management can be segmented into pre- and post-risk management, while risk are managed in 4 areas which include management, conflicts, disasters and PR. Risk management is a process of preventive measures to make sure risks don't develop into a real risk. The measures include managing counter-measures and continuously monitoring department risk indices. On the other hand, risk management is a post-management process of case risks that developed into real risk.

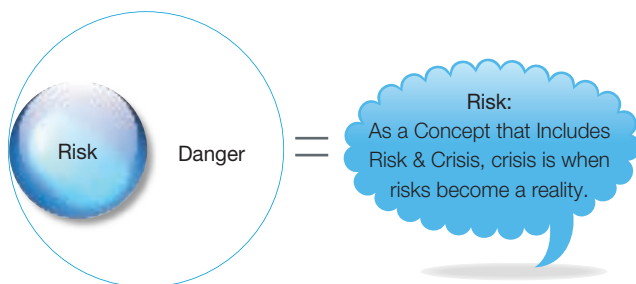
In the case of a risk situations, recovery steps are to be taken, which includes deciding on the level of warning and setting up an emergency action headquarters based on the Counter-measure Manual by risk type. Risks are evaluated and segmented into a company-wide management (core, importance) risk or department management risk based on the frequency and impact level to K-water's management activities. The focus is on the pre-management of risks.

## Risk Management Structure

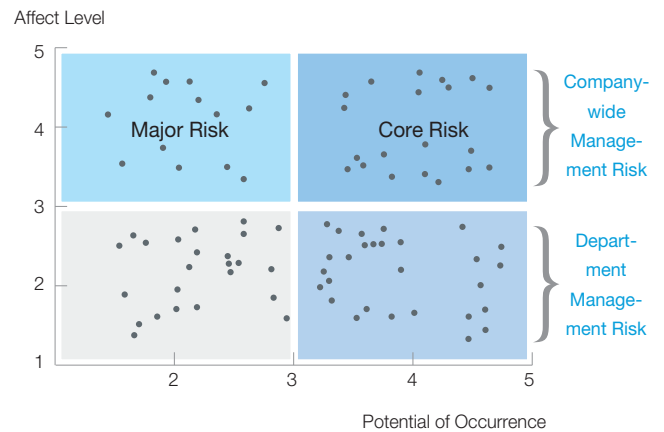
K-water has established risk expansion prevention procedures by incorporating public corporation risk management principle into its risk management. As a result, 27 counter-measure working manuals for risk were published and cover the 4 risk areas (management, conflicts, disasters, PR) making it possible for employees to easily utilize the manuals on-site.

Headed by the Senior Executive Vice President takes on the role as the Chief Risk Officer (CRO), and heads the Risk Management Committee which oversees the overall risk management of K-water. Establishing risk management strategies are the Business Planning & Coordinating Department's responsibility, while separate departments are designated to manage specific risk situations depending on the type of risk in order to effectively initiate counter measures.

### | Risk Concept Outline |



### | Risk Segmentation |



## BEST PRACTICE

### Establish & Operate a Clean Water Management System (Dr. SafeWater)



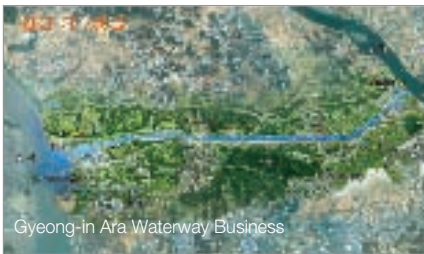
As the potential for water pollution has increased due to increased risk of water pollution disasters occurring such as the case in 2008 when phenol leaked into the water source and in 2009 when 1,4-dioxine was detected in the Nakdong River, K-water established and operates professional counter-measures, better known as Dr. SafeWater. Dr. SafeWater utilizes advanced technologies such as a Geographic Information System (GIS), enabling K-water to make decisive decisions using real-time information which is essential during a water quality disaster. Through the use of this system, K-water has advanced its disaster management platform, enabling it to manage risks more systematically and solve disasters professionally.

※ (Example.) In the case of the Nakdong River water system, 1,4-Dioxine was detected. K-water was able to provide safe drinking water by strengthening water source & filtration quality surveys, while temporarily securing substitute sources.





**As Part of the ERM System, K-water is Leading the New Green Deal Project by Expediting the Gyeong-in Ara Waterway Business**



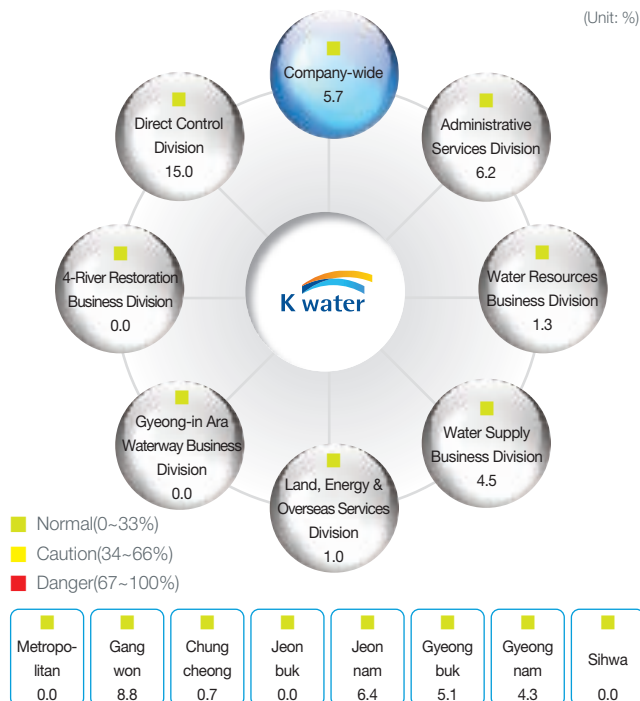
Gyeong-in Ara Waterway Business

The Gyeong-in Ara Waterway Business, which was originally initiated in 1995 as a BTO (Build-Transfer-Operate) project, was delayed for a long period of time, making it inevitable

for K-water to take-over the project after close discussions with the government to smoothly implement this national project. To solve the issue of expediting the project, the President directly headed a special task force team, which directly led the project. As a result, a new project implementation model was presented through a close cooperation structure headed by K-water.

As a result of these efforts, the project timetable was drastically reduced from the normal 2 year period to 5 months. This will substantially contribute to the national economy by creating an innovative green distribution system through the construction of a distinct water way, and by providing dynamism to culture, tourism and leisure.

**Company-wide Overall Risk Index (Examples)**



**Continued Water Supply through Systematic Drought Counter-measures**

Many areas around the world are suffering from severe drought. In the case of Korea, the drought that hit the southern area of Gangwon Province in 2008-2009 left the Gwangdong Dam reservoir area with 42% lower than average rain falls (473.1 mm). This was the worst drought recorded in weather observation history for this area. It exceeded Gwangdong Dam's design frequency (10 years). K-water established a system to actively counter drought situations by systematically dividing the roles of the head office, divisions and management office.

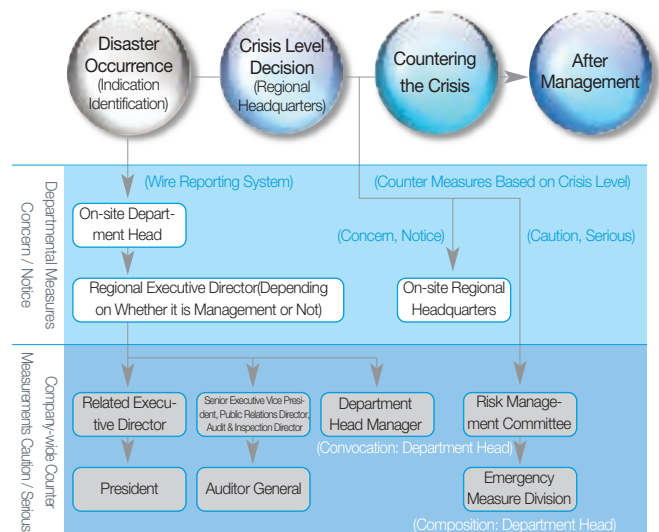


Supplying Water to Drought Regions

K-water established plans to counter drought situations by setting up a step-by-step process to supply emergency water to minimize the impact of the drought in areas supplied by

the Gwangdong Dam. As a result of these efforts, K-water was able to supply a minimum of 50% of the required drinking water in worse case scenarios. To avoid these disasters from re-occurring, K-water has established and is implementing various plans such as reestablishing its dam operational plans in cases of floods, enhancing the safety level for water utilization, and constructing support dams.

**K-water's Crisis Management System**





*Traversing Across the Crisp Air Waves*

**GREEN  
Economy**

- 32\_ Low Carbon New Growth  
Green Business
- 34\_ Successful Operations of  
Local Waterworks
- 36\_ Integrated Operations of  
Waterworks Facilities
- 37\_ Water Friendly Green City &  
High Tech Green Complex
- 38\_ Global K-water
- 40\_ Promoting the Industrial  
Water Business



# Challenges



K-water is moving towards a sustainable future by creating a new wind globally. Many challenges exist

in the road to the future. Through a wide perspective that can see into the future and a creative challenging spirit, a new green value is being created in areas where the water ways connect. In the midst of the green growth stands

K-water

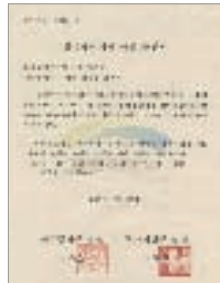
# Low Carbon New Growth Green Business

As Korea's Green Hub, K-water is leading the low carbon green growth by developing new & renewable energy to counter climate change, constructing the Gyeong-in Ara Waterway Project 4-River Restoration Project.

## Operating & Developing New Renewable Energy

K-water has aggressively taken measures to overcome climate change, a global crisis, by utilizing the government's low carbon green growth plan as a new platform for growth to actively develop new renewable energy. As of 2010, K-water operates a 1,018MW hydropower plant which supplies 63% of the the entire domestic hydropower plant capacity (1,615MW). By the end of 2010, K-water will initiate the largest tidal-powered electric plant in the world(254MW). K-water is also in the process of constructing small-scale hydropower plants with a total capacity of 52MW, including the Ankye Dam, Hoengseong Dam and the 4-River 16 Weirs. K-water also concluded the 2nd Renewable Portfolio Agreement with the government to invest KRW 371.7 billion for 3 years between 2009 and 2011 in new renewable 320MW energy facilities. , which include small scale hydropower, wind power and solar power facilities. In 2009 alone, K-water invested approximately KRW 8.9 billion in new renewable energy (small-scale hydropower, wind power and solar power facilities) with a total capacity of 3,364kW. Using the 15 multipurpose dam's clean energy hydropower, K-water reduced CO2 emissions by 780 thousand tons in 2009. K-water continuously searches for new ways to utilize renewable energy using water. Recently, K-water developed a Temperature Differential Cooling/Heating System using the temperature differential of water and air as the heat source for cooling and heating. Efforts are being taken to aggressively reduce green house gases by improving the efficiency of dams' and waterworks' facilities which include improvements in waterworks pump efficiencies, and increasing power generation facilities by modernizing worn out hydropower plants.

## Clean Development Mechanism (CDM) Projects & the Selling of Carbon Credit Points



CDM Country Certification

K-water is aggressively countering climate change by reducing the effects of green house gases by developing new renewable energy as part of the CDM project. As the first government-invested corporation to implement a CDM project and in May of 2005, K-water registered a total of 5 projects, the most by one company in Korea, in the United Nations Framework Convention on Climate Change (UNFCCC) as of January 2010.

Recently, K-water initiated a CDM project to register the Gyeong-in Ara Waterway to improve distribution and waterworks facilities' energy efficiency Improvement projects in the UNFCCC. By registering the Yongdam and Daegok small-scale hydropower project as part of the government's (Ministry of Knowledge Economy) "Green House Gas Emission Reduction" project, K-water produced 7,649MWh and reduced CO2 by 4,000 tons in 2009. In September of 2008, K-water was the first company in Korea to sell Unilateral CDM project credit points (6,782CERs: Certified Emission Reduction) which were obtained from the accumulation of CO2 credit points in 2007 from the small scale hydropower project, The credits were sold to ABN-AMRO Bank of the Netherlands. In 2009, K-water sold its carbon credit points (8,608 CERs in kind) to Korea Carbon Finance, Inc.

### I New Renewable Energy Development & Operations Status (February 2010) I

**1,328** MW

The Total Facility Capacity of New Renewable Energy Operations & Developments

Category	Operations & Development Status	Remarks
Hydropower	Large-Scale Hydropower	• 10 Dams, Including Soyang River Dam which is Operational Facility Capacity 1,000.6MW
	Small-Scale Hydropower	• 22 Small-Scale Hydropower Plants, Including Andong Small-Scale Hydropower are Operational / 19 Small-Scale Hydropower Plants, Including Hoengseong Dam & 4 Major River dammed pools which are currently under Construction Facility Capacity 69.7MW
Tidal Power	• Sihwa Tidal Power Facility which is under Construction (World's Largest)	Facility Capacity 254MW
Wind Power	• Sihwa Wind Power is under Construction	Facility Capacity 3MW
Solar Power	• 8 Solar Power Facilities are Operational, Including the Bonpo Solar Power Facility	Facility Capacity 579kW
Temperature Differential Cooling & Heating	• 5 Facilities iare operational, Which Includes Daechong Dam, Juan Dam, Cheongju Water Purification Plant, Buan Dam Water Cultural Center, & Choongchung Center	Facility Capacity 195RT

**8,608** CERs

Carbon Credit Points Sold to Korea Carbon Financing

### I CDM Registration Status (February 2010) I

Project Name	Target Project	UNFCCC Registration Date	Annual Generation Quantity (MWh/y)	CO2 Reduction Amount (m <sup>3</sup> /y)
Sihwa Tidal Power	Sihwa Tidal Power	Jun. 2006	507,629	315,440
Small-Scale Hydropower 1	Andong Dam, Jang Heung Darn, Seongnam 1	Oct. 2006	15,473	9,689
Small-Scale Hydropower 2	Daechung, Jooam, Dalbang, Seongnam 2	Feb. 2007	13,944	8,664
Sihwa Wind Power	Sihwa Wind Power	Nov. 2007	6,293	4,013
Small-Scale Hydropower 3	Gosan, Pangyo	Nov. 2009	5,557	2,987
Total			548,896	340,793

※ CO2 Conversion Factor: Sihwa Tidal Power 0.6214ton/MWh, Small-Scale Hydropower 0.6262ton/MWh, Wind Power 0.6376ton/MWh



**Gyeong-in Ara Waterway Business**

The Gyeong-in Ara Waterway Business reduces flood damages caused by the swelling of Incheon’s Gulpo River Watershed, improves the distribution transportation system, helps reduce transportation costs by using it as a canal all year-round, alleviates chronic inland traffic congestion in the Gyeong-in area, helps vitalize the local economy and reduces green house gases, making it an environment-friendly development project. A total of KRW 2,245.8 billion was invested in developing the facilities and the 18km waterway that links the Western sea (Kyungseo-dong, Seoku, Incheon) to the Han River (Kyehwa-dong, Gangseo-ku, Seoul). Environmental impacts were minimized through environmental reviews & environmental performance evaluations at the start of the project. Through a public contest in October of 2009, K-water finalized its water culture friendly plans, which include 8 water views, parkways and bicycle lanes. The Gyeong-in Ara Waterway Project is a model for Korea’s national green growth project, initiative helping reduce 4,200 tons of CO<sub>2</sub> annually, creating 25 thousand jobs, and inducing production worth KRW 3 trillion.

**Leading the Environment-friendly Green Dam Construction & 4-River Restoration Business**

Flood and drought damages have risen sharply due to climate change. By implementing basic measures such as continuously securing water resources through the construction of environment-friendly green dams, K-water is actively taking counter measures to overcome climate change, while achieving the country’s visions towards water. To preemptively take preemptive measures to solve future water problems through a social agreement, K-water is developing & constructing 6 small & medium of environment-friendly green dams which include Yeongju Dam and Buham Dam in an environment-friendly manner. With local and regional cooperation, 3 new dams, including the Bohyunsan Dam, are being planned for development. To counter floods or droughts due to climate change, and improve and restore water quality in rivers, K-water is leading the 4-River Restoration Business by investing a total of KRW 22 trillion by 2012.

## 4-River Restoration Business’s Clean Green Energy Production & Carbon Reduction Effects

By also linking weirs to the 4-River Restoration Business, K-water will be able to secure a hydropower capacity of close to 50,756kW through 16 weirs. As a result, 271,710 thousand MWh will be produced annually. This has an oil substitution effect of 450 thousand barrels annually, while reducing carbon dioxide by 150 thousand tons. This significantly contributes to the reduction of green house gases in Korea. The 271,710 thousand MWh produced annually will be able to provide electric power to 58,000 families (4 persons / family) annually.

Nakdong River Kangjong Reservoir

# Successful Operations of Local Waterworks

Utilizing the best management techniques & technological capabilities, K-water is contributing to enhancing to the enhancement of competitiveness of the domestic waterworks industry by improving customer satisfaction and water quality through advanced local waterworks.

## Local Waterworks Efficiency Enhancement Project

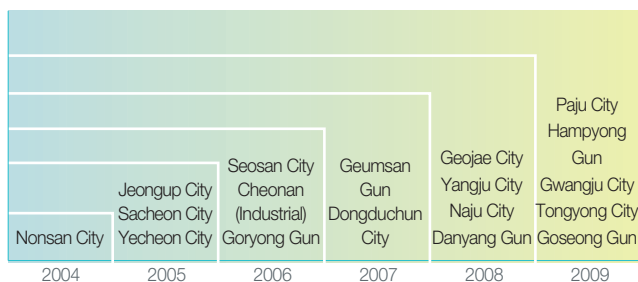
The operation of domestic waterworks is divided into the multi-regional waterworks (K-water) and local waterworks (164 local governments). The lack of confidence in water (rust water, leakage, lack of services) by the public mostly stems from services provided by the local waterworks. Most of the local waterworks are small in size, lack the manpower and technology, and are financially weak, making it difficult to investment in facility improvements. This causes a vicious cycle of low quality and poor service.

Utilizing the experience and expertise gained from operating multi-regional waterworks, K-water is taking measures to enhance the efficiency of the domestic local waterworks business through consignment management of the local waterworks. By integrating the operations of multi-regional and local waterworks, and local waterworks, water resource utilization can be maximized, while redundant and excessive investments can be prevented.

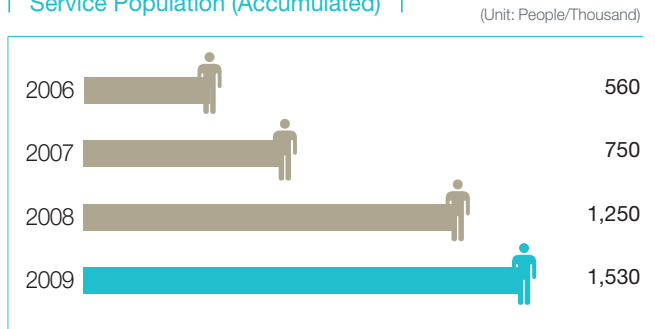
## Project Implementation Status

The opening of the Nonsan Water Supply Service Center was in April of 2004, as of May 2010 K-water has taken charge over all operations including water supply and management of 18 local waterworks from self-governing bodies. Some local waterworks are still in the process of transferring control over to K-water. The local governments that have transferred or that are in the process of transferring operations to K-water are Nonsan, Jeongup, Yecheon, Seosan, Chonan (industrial), Goryong, Geumsan, Dongducheon, Keojae, Yangju, Naju, Danyang, Paju, Hampyong, Gwangju, Gosung and Tongyong. In the next 20 to 30 years, K-water will invest a total of 835.KRW 3 billion in the 18 local waterworks, including the Nonsan waterworks which is currently under operations. The investment will help replace worn out pipes, establish IT-based integrated operating systems, and enable scientific pipe network management. This will increase water revenue and reduce costs, helping maximize management efficiencies.

## Status of Consignment Management on Local Waterworks



## Expansion of Local Waterworks Service Population (Accumulated)



## Local Waterworks Operational Performance

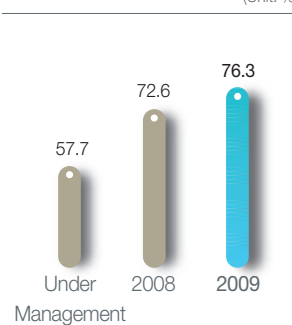
From the 12 local waterworks (Nonsan, Jeongup, Sacheon, Yecheon, Seosan, Goryong, Geumsan, Dongducheon, Keojae, Yangju, Naju and Danyang) that K-water has taken over and has been operating for over a year from the local governments, approximately 7,000 cases of leakage restoration construction works were carried-out to reduce and improve leakage from worn out pipes.

By systematically and strategically implementing water revenue enhancement measures based on mid-to-long-term plans such as replacing 593km of worn out water pipelines and approximately 70,000 water meters, K-water was able to increase the average revenue water revenue rate from 57.7% to 76.3% for the 8 existing local waterworks and the 4 local waterworks that K-water took charge of in 2009. As a result, a substantial amount, KRW 8 billion in production costs was reduced.

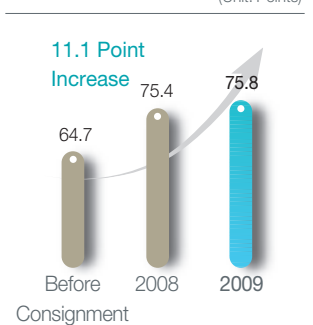
KRW **8** Billion/Annual,

Cost Reduction through Decrease in Local Waterworks Leakage

### Yearly Revenue Water Rate Status (Unit: %)



### Enhanced Customer Satisfaction (Unit: Points)

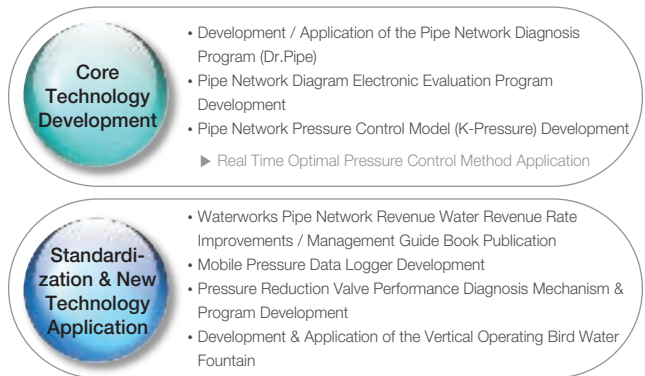
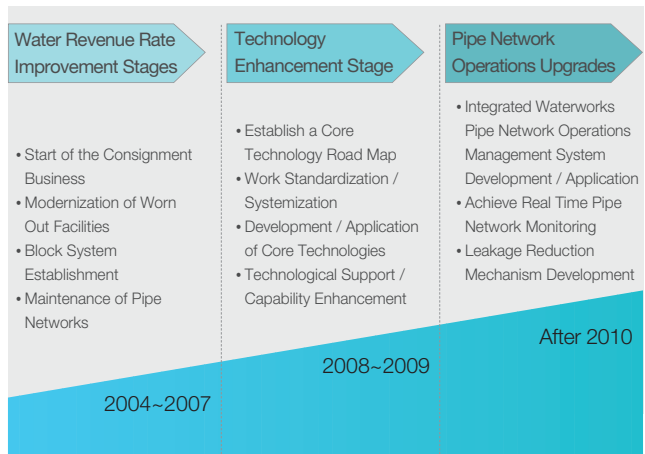


In addition, by providing differentiated services such as creating an exclusive leakage restoration team, operating a 24 hour call center, offering free indoor leakage inspections, and adopting water quality certification policies, and by making great efforts to improve water quality, the customer satisfaction level increased from 75.4 points in 2008 to 75.8 points in 2009. Through these efforts, K-water is contributing to the quality enhancement of water services. By integrating the consignment operations of 4 new local waterworks, Insacheon, Kojae, Tongyong & Gosong, not only has the management of the local waterworks improved, but a platform has also been established to enable aggressive measures to be taken to deal with the fast-changing waterworks industry and expedite the integration of consignment operations.

**Future Plans**

K-water will enhance local waterworks efficiencies through the continuous expansion of its local waterworks projects, while improving competitiveness of the domestic waterworks industry in preparation for the opening of the water market. K-water will also provide general water management services through the integrated operations management of local waterworks, and waterworks & sewage treatment integrated management linked to the sewage treatment project that K-water is currently carrying-out. Through the accumulated technology in the domestic waterworks & sewage treatment sector, K-water will establish a platform to expand into the overseas market.

**Future Plans I**



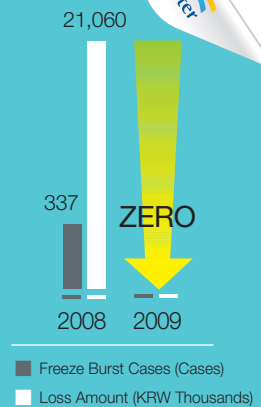
**1.53** Million People,

Local Waterworks Supply Population (July 2009)

**BEST PRACTICE**

**Providing Customer Impressive Services through the Development & Distribution of the Freeze Burst Prevention Pack**

Every winter, problems such as inconveniences to customers, water meter replacements, and water revenue rate reductions due to leakages continue to occur as a result of water mains and meters bursting. To improve this problem, through 6-sigma activities, the Yangju Water Supply Service Center developed the Freeze Burst Prevention Pack (Patent Registered). After confirming the effectiveness by installing and testing the packs in 5,000 locations in 2008, the packs were distributed to all of K-water's Water Supply Service Centers. In Yangju City, where the packs were to be installed and tested, an annual cost savings of KRW 21 million was achieved. If the packs were to be installed at all of K-water's consigned local waterworks areas across the country, an annual budget reduction of KRW 1.2 billion would be expected.



# Integrated Operations of Waterworks Facilities

K-water is establishing the world's best waterworks integrated system to enable the efficient usage of water resources, to alleviate imbalances in the regional water supplies, and to secure stable supply of water through usage integration.

## Status of the Integrated Operations of Waterworks Facilities

Automatic operations of an entire waterworks facility processes, including the water intake plant, pumping plant and water purification plant, has been made possible by establishing the waterworks integrated operations system. By operating an entire waterworks facility from the regional integrated operations center, and by remotely monitoring and controlling the water production and supply process 24 hours a day, facilities are not only efficiently operated and managed, but it also enables K-water to secure a leading role in water management technology. In addition, by integrating the operations of 4 sectors, K-water was able to achieve personnel reduction and technological competitiveness improvements. As a result, in 2009, K-water was able realize KRW 24.4 billion in tangible / intangible savings. Once the operational integration of 7 additional sectors is completed, based on analyses, K-water can expect savings of approximately KRW 39.5 billion annually. At the same time, with the establishment of the world's largest operations center, integrating 23 metropolitan waterworks, K-water has created a base from where it can leap forward and be recognized as one of the top general water service corporations in the world.



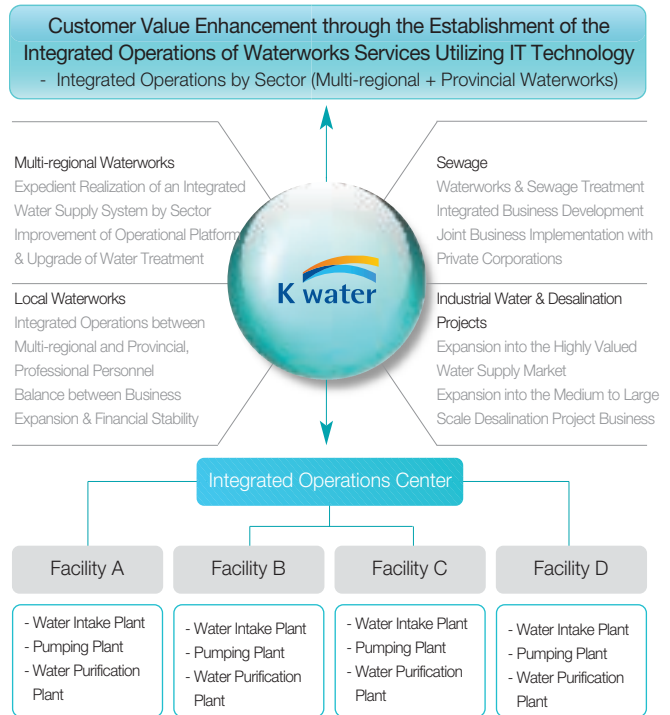
World's Largest Metropolitan Integrated Operations Center

## IT Based Hi-tech Waterworks Facility Integrated Operations System

K-water divided its operations into 7 sectors centered-around the regional headquarters across the country to optimize water resources. To enable the integrated operations of the waterworks facilities in each sector, K-water is establishing an IT & automation technology-based waterworks integrated operations system. In addition to the current establishment of integrated operations for 4 sectors that includes the Seoul Metropolitan, Choongchung, North Cholla and South Cholla sectors, once the operational integration of the remaining 3 sectors, Gangwon, Gyeongbuk and Gyeongnam is successfully completed in 2010, K-water will have integrated the operations of the entire multi-regional waterworks by sector. Once completed, K-water is expected to be the world's first to achieve a multi-regional integration operational system on a national level.

## Future Plans

K-water is currently in the process of linking and integrating the operations of the multi-regional waterworks with the continuously expanding local waterworks. Once the establishment of the waterworks integration operational system by sector is complete, K-water will have established upgraded plans for changes to the water operations environment and will reflect them in future plans. Through the realization of a highly advanced waterworks integrated operational system that is strong in dealing with various crises 24 hours a day, K-water will do its best to stably provide a stable and clean water supply to the public.



- Established in the Jeonbuk Area (2005)
- Established in the Chungcheong Area, Metropolitan Area (2006)
- Established in the Jeonnam Area (2007)
- Completed the Establishment areas of Gangwon, Gyeongbuk, Gyeongnam Areas (2010)





# Water Friendly Green City & High Tech Green Complex

K-water will help create jobs and lead the national green growth initiative through economic growth by creating a futuristic integrated cities and high tech national industrial complexes utilizing its accumulated know-how.

## High Tech Green Technology Mecca, Sihwa MTV

To utilize the polder that was formed as a result of the construction of the Sihwa embankment in an environment-friendly manner, the development of the Sihwa MTV (Multi-Techno Valley located in the polder area, North of Sihwa Lake, and Songsan Green City located in the polder area South of the Sihwa Lake are being pursued.

The Sihwa MTV, which is slated to be completed by 2016 will be a total break from existing industrial complexes which are comprised of plants focused on manufacturing. Rather, the Sihwa MTV will be a futuristic high tech integrated industrial complex (9.26km<sup>2</sup>) with diverse functions. The complex will have high tech knowledge functions that include a futuristic technology intensive industry, knowledge-based industrial functions such as the venture capital industry, commercial work functions such as financial and business, support functions such as research & welfare, and ecological environment & environmental education functions. The Sihwa MTV development project will create approximately 72,000 jobs and will have an effect of creating approximately KRW 9 trillion from production. This is expected to play a substantial role in local development and national economic growth.

## Environment-friendly Future City, Songsan Green City

Songsan Green City will be developed on 55.8km<sup>2</sup> (55,830,000m<sup>2</sup>) a polder, South of Sihwa Lake and is to be completed by 2022. This will help in efficiently utilizing the new polder area. The new city will be an integrated city with a mixture of natural environment, tourism, leisure and housing, and is expected to have a population of 150,000. By establishing an ecological network across the entire city, the city will be an environment-friendly water friendly, futuristic green city that allows nature and man to coexist.

The industrial sector will be specialized into 5 blocks that includes a marine tourism & leisure complex, city center, automobile theme park, dinosaur fossil displays, and ecological living complexes. Through corporate investments and vitalized industries, the value created from production is expected to be KRW 14.9 trillion, while KRW 600 billion of income is expected to be generated. KRW 6.7 billion in value-added is also expected to be created, generating a total projected value of KRW 22.2 trillion. The city will be reorganized from a general industrial complex area within a metropolitan city to a pleasant integrated living area.

## Catalyst to National Economic Growth, Gumi / Yeosu National Industrial Complex

In line with the government's policy towards fostering the infrastructure industry, starting in 1974, K-water initiated the construction of national industrial complexes in the Yeosu, Changwon, Onsan and Gumi areas. The national industrial complexes Changwon and Onsan have been completed, while the complexes in Gumi and Yeosu are in the construction process.

The Gumi industrial complex that was initiated in 1977 currently has 2 complexes, #2 and #3, which were completed in 1995. The 2 complexes cover an area of 5.7km<sup>2</sup>. The #4 Gumi industrial complex is targeted to be completed by 2010 with an area of 6.8km<sup>2</sup>. To comply with the government's low carbon green growth policy, the complex will be developed into an environment-friendly complex by adopting new & renewable energy facilities, high efficient energy utilization facilities, and a bicycle network. The complex has truly grown into Korea's largest national industrial complex with major domestic and overseas global corporations such as Samsung, LG and Exxon-Mobile, and approximately 1,800 other companies will be located in the complex.

As Korea's largest general petrochemical complex, the construction of the Yeosu national industrial complex was completed with an area of 11.3 km<sup>2</sup> between 1974 and 2000. The Yeosu complex expansion project that was initiated in 1992 is expected to be completed by 2012 with an area of 7.8km<sup>2</sup>. Currently, petrochemical companies such as GS Caltex and LG Chemicals have operations at the complex. By developing the complex in conjunction with the greater Gwangyang Bay area, K-water is contributing to balancing regional development and to securing national competitiveness.



Environment-friendly Future City, Songsan Green City

# Global K-water

Utilizing its accumulated advanced technology and experience gained from domestic water management, K-water will elevate its global status as a corporation that shares in the benefits of water by providing clean water to people around the world who face difficulties due to water problems.

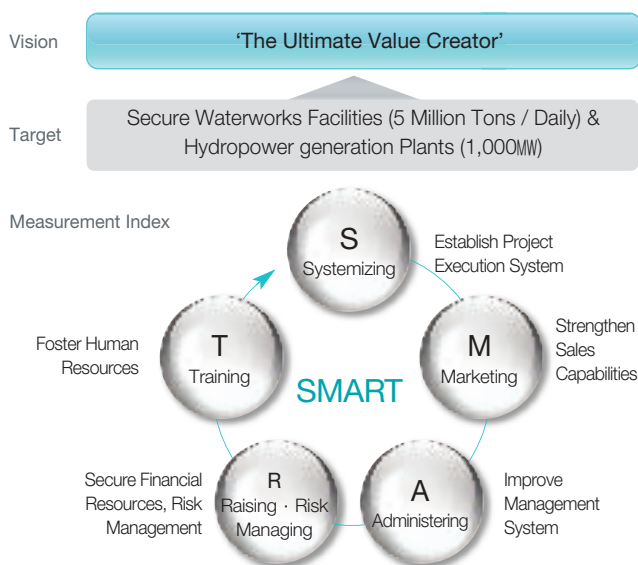
## Flow of the Global Water Market

As of 2009, the global water market size was 12% of the global population to 800 million. As the global water market is expected to significantly increase to meet the needs of 1.15 billion people by 2015, the competition surrounding the water market is intensifying. The water operations market is changing from a global oligopoly structure to a multipolar competitive structure where local corporate service populations are increasing, while the influence of the top five large corporations (Veolia, Suez, SAUR, Agbar and RWE) are decreasing. Utilizing its 42 years of technological capabilities in the water resource area, its credit level, and its internal/external networks, K-water is entering the global water market and contributing to the wealth of the nation.

## Project Implementation Strategy (SMART)

In addition to countering the fast-changing market situation, K-water is strengthening its overseas sales capabilities, while entering into the technology services and development-based investment businesses by securing a strategic foothold. K-water also set up long-term implementation strategies to maximize revenues by acquiring shares in overseas water corporations. Based on this, K-water established diverse implementation strategic plans ranging from project execution systems to human resource development to achieve its KRW 40 billion target in 2015 (K-water achieved KRW 6.1 billion, KRW 7.4 billion and KRW 6.4 billion in 2007, 2008 and 2009, respectively), and to secure a 5 million ton/daily waterworks and 1,000MW power generation facility.

### I Overseas Project Implementation Strategy (SMART) I



## Project Diversification & System Improvements

By carrying-out feasibility studies, detailed designs and construction supervisions on various overseas projects, K-water strengthened its project competencies and diversified its projection portfolio. The overseas projects include Vietnam’s Kiên Giang Drinking Water Development Project, Afghanistan’s Talipeuso Small-scale Hydropower Project, Mongolia’s Nalaikh Waterworks & Sewerage Project, Philippines’ Malinao Dam Construction Project & Pampanga Flood Control Project, and Haiti’s Croix-des-Bouquets Drinking Water Supply Expansion Project. So far, K-water has carried-out 14 water resource projects, 12 waterworks projects, 9 hydropower projects, and a sewage treatment project. Through these initiatives, such as Pakistan’s Patrind Hydropower Project, K-water is diversifying its business structure.

To properly execute overseas projects, rational decision-making and consensus building among employees & executives is important. K-water created an Overseas Project Selection Committee and the Investment Evaluation Committee. K-water is doing everything possible to improve systems for overseas project development and operations by developing overseas projects as part of K-waters management policies, and improving project organizations to enhance value.

## The Strengthening of Marketing

K-water also contributed to economic development and international cooperation through water resource development in the Asian region, which has limitless potential. An employee was dispatched to Thailand, a water resource expert was dispatched to the Asia Development Bank (ADB) in the Philippines, and an employee was dispatched to Dubai as a resident employee to secure a bridgehead in the Middle East, which is growing into the largest global water market. Through diverse efforts and activities such as establishing networks with regional local governments, initiating strategic PR activities, and searching for new projects, K-water is actively demonstrating its water resource development and management capabilities overseas.

To expand strategic cooperation with overseas government institutions and local corporations, K-water concluded a project development agreement (MWSS etc.) to jointly enter the Philippines’ water market (Hydropower Project included), and held a Korea-Philippines Economic Forum Case Study Presentation. An agreement to acquire shares in ETA and TAGI was also concluded to initiate Pakistan’s Patrind Hydropower Project investment, and a mutual cooperation memorandum of understanding (MOU) was signed with Cambodia’s Ministry of Water Resources & Meteorology to carry-out feasibility studies on water resource development projects in the Puset and Preknot Valleys. As a result, K-water was awarded Pakistan’s Patrind Hydropower Project (Project Cost: US\$331 million) in 2009.

### Securing Financial Resources & Strengthening Project Risk Management

Since overseas projects are carried-out outside Korea, in addition to risks pertaining to the projects themselves, there exist special country risks for each country relating to policy and FX. Along with these risks, there is a need to establish measures to counter the risks related to potential losses in investment as a result of breach of contracts and changes in government policies of the local government. To solve these issues, K-water hired and appointed an overseas project legal expert to manage risk by reviewing the legal environment in case of initiating overseas investment projects, which include laws, taxes, contracts, etc. In addition, by newly hiring a financial expert to analyze overseas investments and projects, K-water was able to secure the necessary human resources for its overseas projects. As for the sewerage sector, a professional member was appointed to strengthen K-water's project selection capability. To strengthen K-water's project implementation structure to be more successful, through an external international professional advisory organization, a project selection and risk identification system was established.

In cases of investment projects, K-water was able to minimize its equity investment portion through project financing from domestic and overseas financial institutions, and through participation of financial investors in the project. To guarantee against risks such as breach of contracts, K-water subscribed to overseas investment insurances. K-water also established measures to manage FX risks through currency hedges.

### World's Best Comprehensive Water Service Corporation

As Korea's representative water expert institution, K-water is following the government's policy to promote overseas expansion of public enterprises. K-water is utilizing its overseas project execution capabilities and technological expertise accumulated by executing 27 projects in 18 countries. With this, K-water will expand opportunities for private enterprises to enter the overseas market as a result of public enterprises expanding overseas, and will also take the lead in creating national wealth. By realizing its corporate mission of "Water for a Happier World," and fulfilling its social responsibilities to "Promote Welfare by Providing Clean Water," K-water will do its best to advance in its goal of being the world's best comprehensive water service corporation.

#### I Overseas Project Implementation Status Table I

In-progress Projects	<b>9 Projects in 6 Countries (KRW 338.7 Billion)</b> Asia (India, Cambodia, Vietnam, Pakistan) Middle East (Afghanistan, Iraq)
Completed Projects	<b>27 Projects in 18 Countries (KRW 33.0 Billion)</b> Asia (China, Philippines, Vietnam, Nepal, Cambodia, Bangladesh, Indonesia, Mongolia, Sri Lanka, Laos) Middle East (Afghanistan, Iraq) Africa (Kenya, Rwanda, Congo, Equatorial Guinea) Americas (Peru, Haiti)

KRW **338.7** Billion,  
Revenues from current overseas projects being executed in 6 countries, as of June 2010

#### BEST PRACTICE

### Drinking Water Supply Project for Haiti's Croix-des-Bouquets, a City that Survived the Earthquake Disaster



safe waterworks facilities, such as high standard water tanks, that could withstand disasters similar to the earthquake. As a result, K-water became well-known in Haiti and amongst other related organizations.



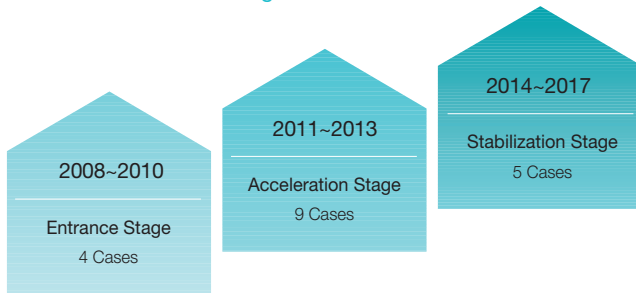
# Promoting the Industrial Water Business

K-water is contributing to the national industrial development through its accumulated technological capabilities by concluding new industrial water agreements and establishing a platform to continuously expand its business.

## The Establishment of a Next Generation Industrial Water Master Plan

An Industrial Water Master Plan was established in April of 2010 to create a business expansion platform. Focused project implementation targets and optimal business models were selected by researching and analyzing the domestic industrial water market. By establishing a systematic mid-to-long-term implementation plan, K-water will be able to successfully expand the industrial water business.

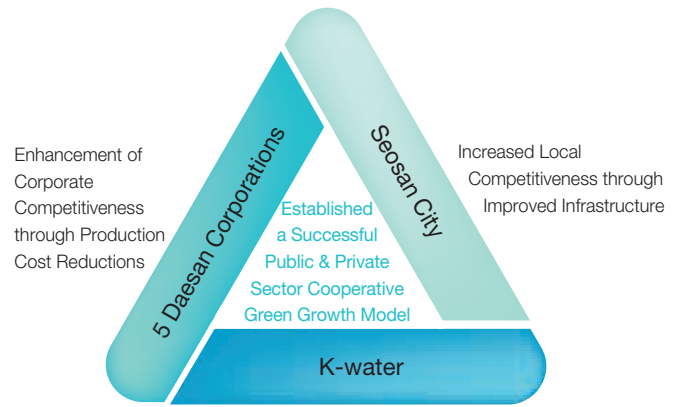
### | Commercialization Targets for Industrial Water |



## Concluded Customized Industrial Water Integrated Water Supply Agreement for Daesan

K-water concluded a water supply & drainage facility (192,000m<sup>3</sup>/day, reverse osmotic membrane) operations management agreement with Hyundai Steel on February 2009, and a basic customized industrial water integrated supply agreement with 5 corporations for Daesan and Seosan and Seosan City in August of 2009, and a working agreement in January of 2010.

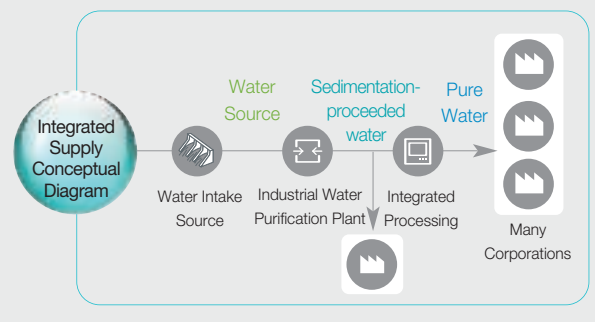
### | Advantages of Daesan's Integrated Supply |



Created a Platform to Expand Overseas by Securing Reverse Osmosis Technological Capabilities

## Daesan Customized Industrial Water Integrated Supply Project Outline

Supply Target	5 Corporations in Daesan (Hyundai Oilbank, Samsung Total, Honam Petrochemical, LG Chemical, KCC)
Project Method	K-water Investment / Operations
Project Time Table	27 years (Construction 2 Years, Operations 25 Years)
Facility Capacity	<ul style="list-style-type: none"> <li>• Pure Water 119,000m<sup>3</sup>/daily, Waste Water 11,000 m<sup>3</sup>/daily</li> <li>• Source Water : Sedimentation-proceeded water of Asan purification plant</li> <li>• Main Process: Reverse Osmosis</li> </ul>
Implementation Working	<ul style="list-style-type: none"> <li>Basic Agreement August 2009,</li> <li>Details Agreement January 2010</li> </ul>



By constructing & operating a reverse osmotic membrane integrated supply facility at Daesan seaside industrial district, K-water is able to provide customers with a stable supply of customized industrial water. As a result, the existing inefficient structure of reprocessing by individual corporations will be significantly improved, catering to the government's green growth policy. The 5 Daesan corporations were able to thus enhance competitiveness through cost reductions, while Seosan City was able to help vitalize the local economy by securing a stable water source. By securing core technological capabilities such as designing, constructing and operating the reverse osmotic membrane water processing facility, a platform for overseas expansion will be established. This agreement is considered a successful model cases of mutual cooperation between the public and private sector. Through the design & construction of the integrated facility, K-water plans to supply water starting in 2012.



Working Agreement Signing Ceremony (January 2010)

# GREEN Environment

A warm world where a bright smile amidst a green environment is possible is a green precious value that K-water is seeking. As a clean corporation producing clean water, K-water is preciously protecting every drop of water to make sure we and our descendants don't experience shortages.

- 42\_ K-water's Green Management Structure
- 44\_ Green Network
- 46\_ Countering Climate Change
- 48\_ Environment-friendly Green Development of Water Resources
- 50\_ Protection of Bio-diversity
- 52\_ Management of Water Quality
- 54\_ Source Water Quality Improvement

# K-water's Green Management Structure

By operating diverse green management programs and continuously improving environmental performance through internalization, potential management risks are minimized, while creating new green values.

**132** Points,  
EPE Improvement Index

## Environmental Management System

Since K-water first received the Environmental Management System (ISO14001) certification in October of 2002, K-water's Environmental Management System has continuously been evaluated for its effectiveness through annual post management audits and renewal audits every 3 years. ISO9001 & ISO14001 standards are reflected in K-water's corporate regulations. According to the environmental management work process outlined in the corporation's regulations, each department is carrying-out duties related to Environmental Impact Evaluations, Establishing Environmental Targets Establishment, Environmental Audits and Environmental Performance Evaluations (EPE). In 2009, K-water was the first company in Korea to receive the ISO/CD26000 (Corporate Social Responsibility International Standard) level diagnostic evaluation. As a result of the evaluation, out of the 200 items in 7 categories, K-water was in compliance with 187 items achieving a compliance rate of 94%. This elevated K-water's status as a corporate leader in social responsibility.

## I Environmental Management System & Process I



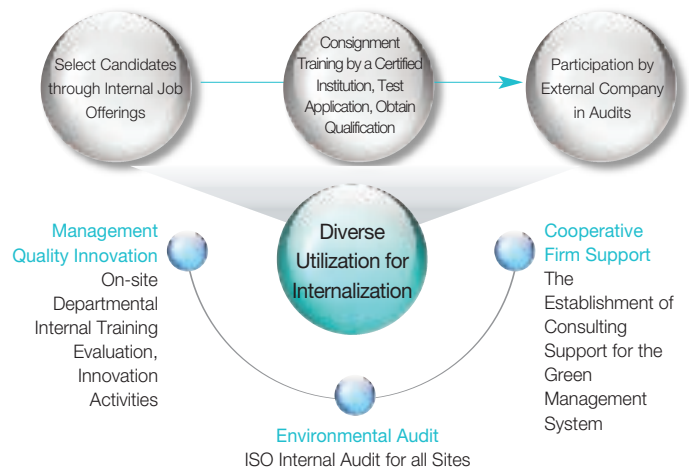
## Environmental Audit

In accordance to ISO14001 and corporate regulations, K-water holds an environmental audit every year for each business site to evaluate and improve the environmental management system. After an internal audit on the entire management process for all departments through the ISO P-D-C-A (Plan-Do-Check-Act) process, an external certified institution carries-out an overall audit on K-water's environmental management system. To internalize environmental management and strengthen internal management quality assurance competencies through a strategic audit of the overall environmental management system, between 2007 and 2010, 58 internationally certified ISO certification auditors were trained. Through this, K-water was able to strengthen its internal assurance capabilities regarding ISO standards. In 2009, through an internal and external audit, 56 and 6 items were respectively found to be inappropriate. Measures were immediately taken and reflected in K-water's management to prevent any further occurrences.

## I Training of ISO Certification Auditors I

**Foster ISO Certification Auditors (2007 ~): 58 Personnel**

- Need to Foster Professional Personnel to Internalize Green Management
- Fostering Program & Diversified Utilization Plan



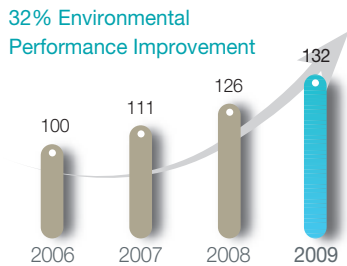
KRW **42.8** Billion,  
2009 Environmental Investment Amount

### Environmental Performance Evaluations (EPE)

In 2003, K-water implemented the Environmental Performance Evaluation (EPE) program based on ISO14031, to carry-out regular measurements and a diagnosis on its environmental performance as part of its environmental management activities, and for systematic management through continuous improvements. Using the EPE electronic system established in 2006, an environmental performance of management and an internal evaluation (5%) were initiated. In January of 2007, K-water was the first company domestically to acquire a patent for its EPE Electronic System.

• EPE Index

(Unit: Points)



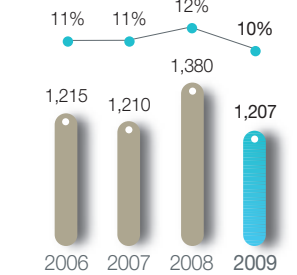
To evaluate comparative improvements in K-water's environmental performance, the EPE Index was adopted by using it as a BSC (Balanced Score Card) Strategic Implementation Index. The EPE Index score in 2009 was 132 points, an improvement of 32% in environmental performance compared to that of the base year's (2006) result.

### Environmental Expense Calculation

K-water adopted environmental accounting to enhance environmental investment efficiencies and performance. By establishing an eco-cost concepts & standards that are appropriate to K-water in 2000, environmental costs and investments are calculated annually. An electronic management accounting system is used to more systematically utilize environmental accounting results, enabling new environmental investment and capital budgets to be used in decision-making. The 2009 environmental cost was KRW 120.7 billion, 10% of the total business cost, while environmental expenses were recorded as KRW 42.8 billion, 5% of total investments. Investments were mainly in environmental pollution prevention and processing expenses. Although the overall environmental investment amount increased due to the increase in waterworks and dam environmental investments, the environmental investment ratio partly decreased in 2009 since the total cost rate increased substantially.

• Total Cost / Environmental Cost Ratio

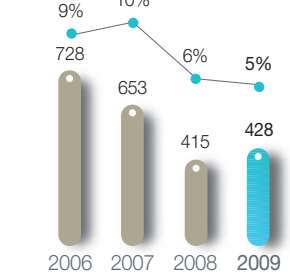
(Unit: KRW 100 Million, %)



■ Cost Amount  
● Environmental Cost Ratio

• Total Investment / Environmental Investment Ratio

(Unit: KRW 100 Million, %)



■ Investment Amount  
● Environmental Investment Ratio

## Awarded Grand Prize for Sustainable Creative Management, Green Growth & Green Energy

In January of 2009, K-water was awarded the 「2009 Korea Sustainable Creative Management Grand Prize (Environmental Management Sector)」, which is highly prestigious award given to corporations that leads the country's future into global competitiveness. On October, K-water was also awarded the 「2009 Low Carbon Green Growth Award (1st)」 and 「Green Energy Prime Minister's Award」, both of which are highly prestigious awards given to corporations that contribute to the national environment industry growth and low carbon green growth. As the first public enterprise to operate diverse environmental management programs such as the Life Cycle Assessment (LCA) on the entire water production process, Environmental Performance Evaluation (EPE) System, and Water Carbon Labeling (CL) by adopting Green Management in 2002, K-water is a leader in environmental management in the public sector. Since K-water is contributing to the national economic development through environment-friendly and advanced water resource and energy management, K-water was evaluated highly and was recognized with these awards.

# Green Network

K-water has strengthened its environment-friendly green supply network management for the entire supply network, and is achieving a Win-win situation for all green growth Initiatives through green cooperation with stakeholders.

By managing its environment-friendly supply network for the entire supply network process from purchasing to wastes, which include expanding green purchasing, supporting small & medium businesses' green management, carrying-out coexistent cooperation with construction companies, and supporting environment-friendly farming, K-water is seeking to achieve mutual growth with cooperative firms and local citizens.

## Environment-friendly Network Management by Stakeholders

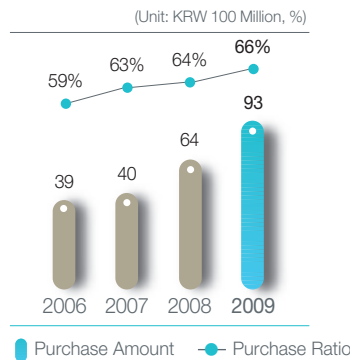


Purchasing / Manufacturing	Green Product Purchasing, Supporting Small & Medium Businesses' Environmental Management
Construction	Construction Company Coexistent Council, Supplier Registration Policies (SEMS)
Supply	Waterworks Technology Support (TSS)
Consumption	Environment-friendly Farming, Floricultural Scenery Complex Creation, Market Expansion Support
Waste	Recycling Wastes - Water Purification Plant / Sewage Treatment Plant Sludge, Construction Wastes, Flood Waste, Etc.

## Green Purchasing

To strengthen its environmental management practices from production to consumption, K-water adopted a green purchasing policies in 2002. Purchasing was strengthened by efficiently managing green purchasing. Green purchasing operating policies & the system are being improved through joint system operations with the Korea Environmental Industry & Technology Institute. Going a step further, by applying and managing environment-friendly products as part of the EPE System, Kwater's 2009 green purchasing performance increased to KRW 9.3 billion, a 45% growth compared to that of the previous year. Environment-friendly products include those with the Environment Mark or Energy Recycling Mark, and Environmental Labeling & Energy Efficiency Management Products. This is 66% of the compulsory purchase target for environment-friendly products which the Ministry of Environment established.

## Green Purchasing Performance



KRW **9.3** Billion,  
2009 Green Merchandise  
Purchasing Amount

## Coexistent Cooperation with Construction Companies

To establish and expand coexistent cooperative partnerships with the construction sector, a Coexistent Consultative Group consisting of construction organizations, principal project recipients and sub-contractors was established in 2006 for each project. In 2009 construction projects with the Consultative Group expanded to 39, which include dams and waterworks construction. K-water is creating a sound sub-contracting culture to achieve mutual growth with small & medium institutions in the construction sector.

## Supporting Environment-friendly Farming in Areas Adjacent to Dams

The objective of the Eco-friendly Farming in Areas Adjacent to Dams is to induce farmers in dam flood control areas to cultivate land using eco-friendly farming methods such as organic farming and non-agricultural chemical farming to create a dynamic economy and to preserve the water quality of reservoirs. Compared to that of 2009, land converted to eco-friendly farmland increased by 25.5% in 2009 to 1,468,000m<sup>2</sup>.

## Environment-friendly Farming Implementation Status & Plan

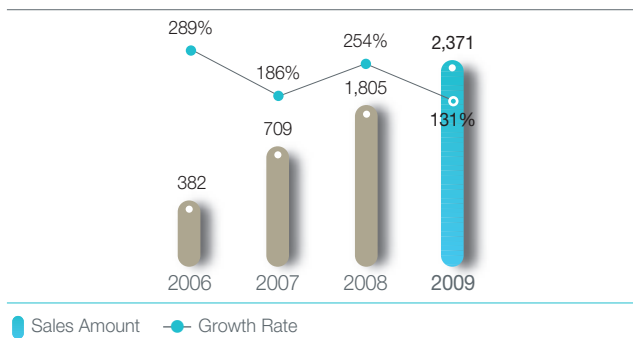
Category	2007	2008	2009	~2011
Conversion Area	1,864 thousandm <sup>2</sup>	1,170 thousandm <sup>2</sup>	1,468 thousandm <sup>2</sup>	3,924 thousandm <sup>2</sup>

**1,468** Thousand m<sup>2</sup>,  
2009 Eco-farming Conversion Area Adjacent to Dams

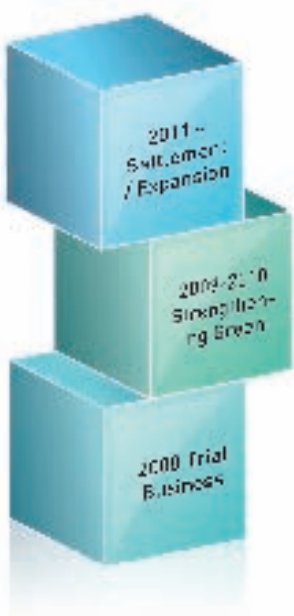


K-water provided environment-friendly farming equipment, natural composts and agricultural training to support to farmers. Additional support was provided which included residual agricultural chemical testing on soil and cultivated products, and heavy metal inspection. K-water also assisted in farmers acquiring environment-friendly farm product certifications for no or little use of agricultural chemicals. K-water also played a role in helping local farmers achieve KRW 539.9 billion in sales between 2005 and 2009 by arranging sales to large outlets such as women's association in apartments and large food processing plants, and through participation in various farm product sales events. By converting to environment-friendly farming, the water quality of dams, which is the supply source for water, has been preserved, while local farming income has increased. This contributed to the national and local citizens' appreciation of the dams.

• Environment-friendly Farm Product Sales Amount & Growth Rate  
(Unit: KRW Million, %)



| K-water 's Environment-friendly Supply Network Master Plan |



- Cooperative Firms Targets / Support Expansion: 10 Companies
- Carrying-out Internal EMS Consulting
- Sustainability Report Publication
  - ※ Complete Environment-friendly Supply Network
- Cooperative Firms Targets / Support Expansion: 6 Companies
- Strengthen Internal EMS Consulting Capabilities
- Green Purchasing / LCA Trial Initiation
- Foster & Train ISO Certification Auditors
- Waterworks Material Supply Registration Companies: 3 Companies
- EMS Consulting Consigned to Professional Institution
- ISO14001 Establishment & Training
- Foster & Train ISO Certification Auditors

**Voluntary Support of Cooperative Firms Establishment of an Environmental Management System**

Now corporate social responsibility is not just limited to the company alone. Responsibility has been extended to the entire life-cycle of production. Cooperative firms voluntarily participate in environmental management and the establishment of the clean production system establishment helps strengthen small & medium businesses' environmental management capabilities. At the end, it can also strengthen K-water's competitiveness.

**Green Management Support Implementation Structure for Small & Medium Businesses**



K-water provided diverse environmental management programs to cooperative firms (small & medium enterprises) that lack the personnel, information and infrastructure to help them develop into an environmentally friendly corporations. The programs include environmental management training to help establish ISO14001, environment management technology support service, certification auditing, and certification expense & post-management expense support. Through this, K-water was able to establish a coexistent green partnership, enabling it to receive environment-friendly products and services. By strengthening its environment-friendly supply network with cooperative firms, K-water will fulfill its corporate social responsibilities jointly with its cooperative firms, and will maximize its environmental competencies in all areas of the industry.

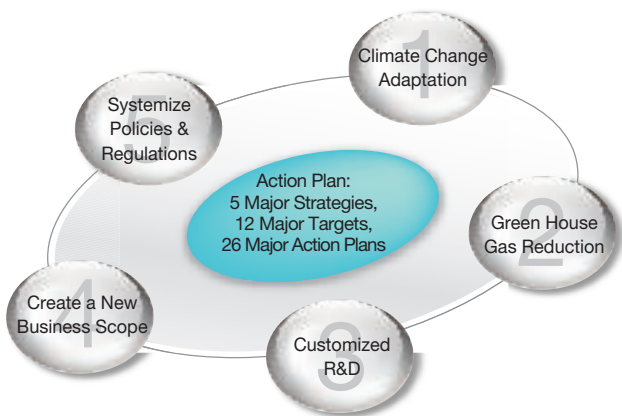
# Countering Climate Change

By aggressively participating in global green house gas reduction efforts to counter climate change, K-water is pushing forward with sustainable development, leading the government's low carbon green growth efforts.

## Strengthening Corporate-wide Counter-measurements

As the sense of crisis regarding climate change is increasing, a target was set to limit the average global temperature increase to 2 °C was set at the Copenhagen Conference in December of 2009 to reduce green house gases. The government is also aggressively taking counter measures by enforcing "Low Carbon Green Growth Basic Laws" set in April of 2010. Green house gas reduction based on the Framework Convention on Climate Change can be used as a new trade barrier. New markets are expected to be created through carbon credit transactions and trade barriers using advanced reduction technologies by European countries and advanced nations such as Japan. Acknowledging the countering of climate change as a new stepping stone in the management of K-water, it is striving to enhance its capability to counter climate change and establish integrated counter-measures by securing sustainable water resources & integrated water management, developing low carbon environment-friendly technologies & establishing necessary infrastructures, and developing new & renewable energy. By establishing the "Climate Change Counter Strategy Master Plan" in December of 2009, K-water instituted its 5 major strategies and 26 action plans to reduce green house gases by 46% compared to that of 2005. Through these efforts, K-water is taking the lead in implementing the government's low carbon green growth policies.

## | K-water's Climate Change Counter Strategy Master Plan |



### 1. Climate Change Adaptation

- Establish Multiple Flood Prevention Systems
- Secure a Stable Supply of Water
- Establish a Preventive Water Quality System
- Enhance Ecological Health
- Improve Public Health

### 2. Green House Gas Reduction

- Yearly Green House Gas Reduction

\* Freeze Emissions in 2010 Compared to that of 2005, 2015 40% Reduction, 2020 46% Reduction

### 3. Customized R&D

- Incorporate with Strong Climate Change Counter Technology

### 4. Create a New Business Scope

- Merge Water & Cities
- Enhance & Diversify Water Utilization Value

### 5. Systemize Policies & Regulations

- Systemize Climate Change Counter Measures
- Development & the Expansion of New Water Value Concepts
- Establish a Green Management Platform

## Green House Gas Reduction Efforts



GHG Inventory Certification

To create a low carbon green management platform to counter climate change, K-water acquired verification from a global verification institution, Det Norske Veritas, located in Norway (DNV). This was accomplished by researching and analyzing green house gas types and emission quantity that is produced during a project's entire life-cycle. Reduction technology and potential emissions quantity was also researched and analyzed. K-water also prepared and managed a statistical

table. An "Energy Utilization Efficiency Plan" was established and implemented in May of 2009 to take measures to counter the Framework Convention on Climate Change and the rising price of oil. To prepare for the obligatory adoption of the Energy Management System in 2010, K-water enacted and implemented (UNIDO: United Nations Industrial Development Organization) ISO 50001 (2010). K-water also replaced its main computer server with a highly efficient and low powered server. By recycling the replaced server as an information resource, K-water was able to achieve a Green Data Center (GDC).

K-water is creating a green waterworks business establishment by being the first domestic waterworks business and public enterprise to implement Carbon Labeling as a trial project. All K-water events are carbon neutral, making them Green Events. However, in the case that a major event is larger than a set size limit, K-water is required to obtain a Carbon Neutral Certification from the Korea Energy Management Corporation (KEMCO) before the event can be held. In addition to directly reducing green house gas emissions, K-water is managing the Carbon Cleanness Level (Total Green House Gas Emissions / Energy Utilization Amount) and Carbon Efficiency Level through Carbon Intensity Index management within energy efficiency and carbon efficiency improvement levels.

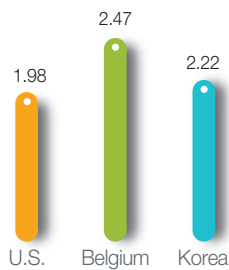
The carbon Cleanness Level in 2009 was similar to that of previous year at 2.08 CO<sub>2</sub>, but lower than the domestic average. This refers to 2.08 CO<sub>2</sub> tons of green house gases being emitted whenever energy ITOE is consumed. The carbon Cleanness Level is an index that shows the amount of carbon that is emitted when energy is consumed. A low carbon Cleanness Level means a low carbon emission and translates to the slowing of global warming. The 2009 carbon efficiency level increased by 5% compared to that of the previous year, to 24.23 tons. This means that to achieve KRW 100 million in revenues, 24.23 tons of green house gases were emitted. The major reason for the increase in the carbon efficiency level was the reduction in power generation, which led to a decrease in revenues.

The total green house gas emission amount increased by 2.9% in 2009 compared to the previous year (485,877 tons CO<sub>2</sub>). This was due to the

expansion of new projects (Gyeong-in Ara Waterway Business, etc.) and the increase in power usage due to the rise in water supply. Direct green house gas emissions due to the use of diesel fuel and gas was 4,459 tons CO<sub>2</sub>, whereas indirect green house gas emissions from the use of electricity was 481,418 tons CO<sub>2</sub>. The main source of K-water's green house gas emission is the energy used to operate the waterworks. That is why K-water utilizes two systems to regularly monitor green house gas emissions. The two systems are the Environmental Performance Evaluation (EPE) System and the recently setup Inventory System. At the same time, by operating energy savings implementation programs for each sector, K-water is reducing green house gases, improving the atmospheric environment and reducing water production costs. These efforts greatly contribute to enhancing corporate competitiveness. To convert to a high efficient consumption structure, K-water is carefully researching various equipments and evaluating the energy efficiency of equipment from the design stage. For existing facilities, energy unit costs are more carefully managed. To reduce green house gas emissions from the waterworks business sector, which is a major carbon emission source, the power unit cost is strictly managed.

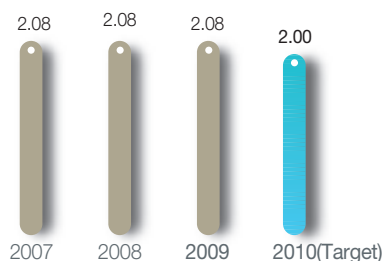
• Domestic & Overseas Average Carbon Cleanness Level

(Unit: CO<sub>2</sub> Tons/TOE)



• K-water's Carbon Cleanness Level

(Unit: CO<sub>2</sub> Tons/TOE)



Development of Green Technology & Future Implementation Plans

K-water is placing its effort to secure necessary core technologies to optimize the usage of operating equipment and water resource facilities in order to reduce green house gases and achieve green growth. To achieve this, K-water plans to invest a total of KRW 16 billion until by 2013. By adding supplementary functions to the current functions of the existing business, new energy will be developed, helping to maximize utilization value. K-water is also securing energy saving products & supply systems by optimizing the operational management of dams & waterworks equipment, and improving the performance of high energy consumption equipment. Currently 12 core technology projects are being carried, out including the commercialization of the strong current turbine power generator.

Going forward, by acquiring a corporate-wide carbon labeling certification and low carbon certification, K-water will establish a low carbon water production system. Methods to link the Inventory System and EPE System, which is used for effective management of green house gas emissions, will be established. Through this, a detailed reduction potential assessment project will be initiated for each sector of K-water's business. By implementing carbon reduction programs that are appropriate and effective for K-water, like voluntarily establishing and implementing green house gas reduction targets, K-water will place a corporate-wide effort to countering climate change.

| Green Technology Development Projects |

Small-scale Hydropower	Commercialization of strong current turbine power generators
	Small-scale Hydropower Performance Evaluation Technology
Solar Energy	Commercialization of the water surface solar energy generation application technology
	Water works Solar Generation optimal Design Technology Development
Temperature Differential Cooling & Heating	Research on applying water temperature differential geothermal heat pump system using water pipes
	Distribution of cooling & heating using temperature differences in the lower level of dams
	Distribution of cooling & heating using the temperature difference of the ocean
Energy Efficiency Enhancement	Design and performance Enhancement technology development Water through water turbine mobility analysis
	Pumping System optimal design & operations technology development
	Secure tidal power generation operational management technology
	Technology development for recycling unused waterworks energy
	Status evaluation technique development for reconstructing or replacing worn-out hydropower generators

# Environment-friendly Green Development of Water Resources

By observing environment-friendly design principles, initiating pre-environmental examinations, and carrying-out environmental impact evaluations, K-water is achieving environment-friendly green development of water resources that harmonizes man with nature, enabling K-water to lead national green growth.



Youngju Multi-purpose Dam Citizens Briefing Session

For water resource development projects, K-water is inducing environmentally-friendly development through a step-by-step environmental assessment to secure environmental soundness and sustainability.

## I Sustainable Water Resource Development I



### Environmental Assessment

- Strategic Environmental Evaluation  
Decide the Environmental Adequacy from the Policy Draft Stage
- Pre-environmental Review  
Project Plan's Appropriateness & Location Adequacy Review
- Environmental Impact Evaluation  
Establish Development Project Reduction Methods

## Vitalizing the Local Economy

Utilizing the environment-friendly dam body landscape architecture of dams road ways, flood control areas, cultural centers and ecosystem preservation facilities, tourism resources that fit the special characteristics of the local area to encourage the use of these resources as eco-tourism and cultural event sites, K-water is striving to vitalize the local economy.

### BEST PRACTICE

## 「Establishing Measures to Counter the Declining Environment-friendly of the Hantan River Dam's Daraktae Shooting Range」

The large flatland and natural purification plant situated downstream of the shooting range was utilized to treat pollutants (explosives, heavy metals, etc.) emitted from the large-scale shooting. By preventing pollutants from flowing into the Hantan River and purifying with the vegetation, hazardous factors have been eliminated in the Hantan River's ecosystem with an environment-friendly manner. These measures were initiated through a social consensus with related experts and organizations such as the army, Ministry of Environment, academia and K-water.



### Creating a Clear Clean Air Environment

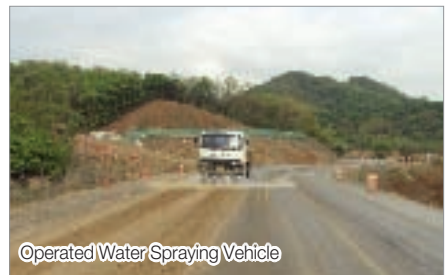
A dust protection cover was installed to reduce scattered dust and gas emissions as a result of K-water's project activities, while water is regularly sprayed to reduce dust and vehicle speed have been limited. At the same time, environmental training is held for K-water's employees.



Construction Site Air Quality Measurement



Dustproof Cover Installation



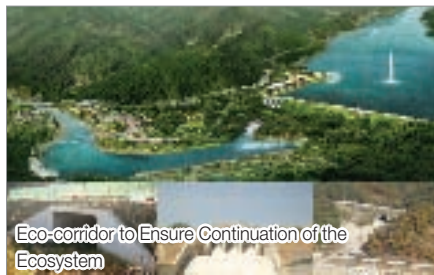
Operated Water Spraying Vehicle

### Creating a Healthy Natural Ecosystem

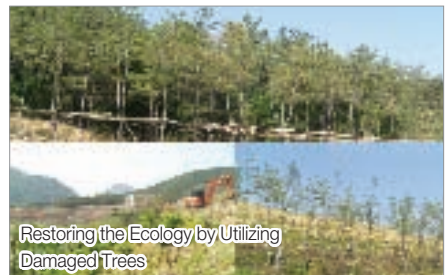
Major conservation of animals and plants in the area was researched. As a result, any trees that were damaged due to K-water's projects are utilized in the landscape architecture. Eco-corridors are being built to prevent the discontinuation of the ecological network. Measures are also being taken to protect and conserve various conservation animals such as otters and cranes. Through these efforts, K-water is creating sound ecological areas.



Protecting Cranes (Research, Cultivate Feeding Grounds, and Provide Feed)



Eco-corridor to Ensure Continuation of the Ecosystem



Restoring the Ecology by Utilizing Damaged Trees

### Securing Clean Water Resources

By installing basic environmental facilities upstream of the dam to treat domestic sewage and livestock waste water, and to cultivate a wetlands in the inflow areas of the reservoirs, the source of pollution can be and a 2nd buffer zone can be secured at the same time. In addition, through the "Taking Care of Forest Project" in the watershed, sources of watersupplies are being expanded and self-purification functions are being enhanced to ensure K-water supplies clean water.



Basic Environmental Facilities Upstream of the Dam



Water Purification in the Dam's Inflow Section & Animal/Plant Life Habitation wetland



Taking Care of Forest Project in the Watershed Area

# Protection of Bio-diversity

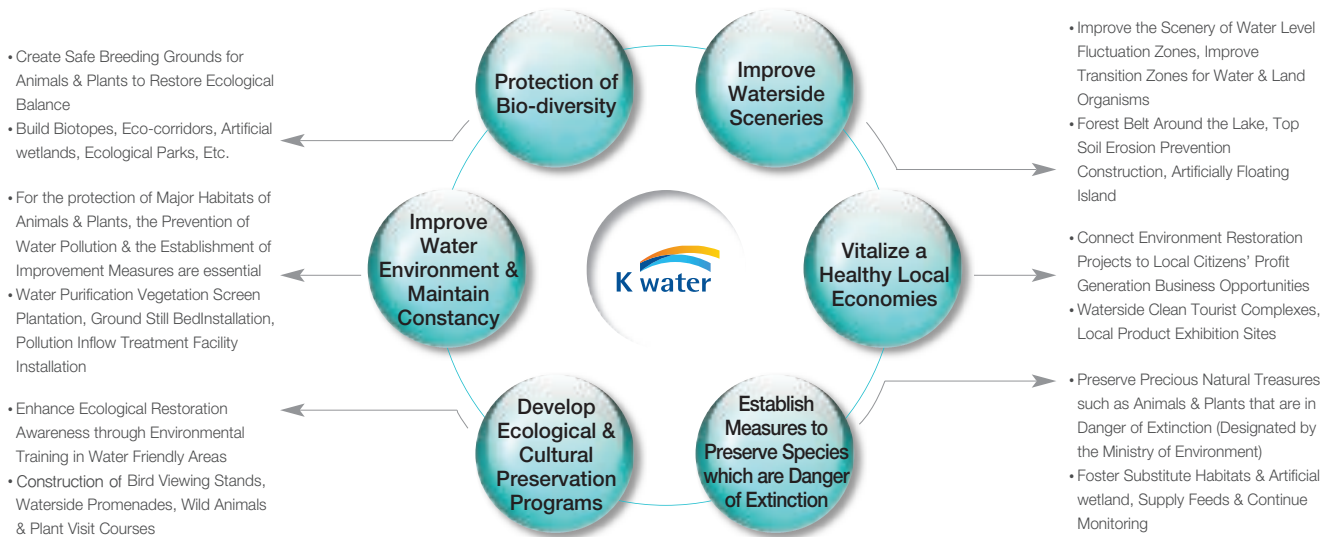
K-Water is doing its best to minimize the changes in the ecological environment and maintain a healthy ecosystem where nature and man coexist through environmental-friendly Green Development

K-water is strictly managing the entire life-cycle from design to management so as to preserve bio-habitat environments through various activities such as minimizing pollutants that affect the ecosystems, reducing the effects on the natural environments from various projects, restoring damaged ecosystems, and creating a better ecosystems.

## Protection of Bio-habitat Environments

To protect the habitat environments of insects, amphibian animals, reptiles, birds, and Korea's natural treasure, the otter, K-water has been building piles of rocks, piles of timber, ecological ponds, artificial wetlands that also acts as water purifiers, and natural rivers. Fishways and egg laying sites have also been installed to protect fishes' habitats. In addition, movement passageways (eco-corridors) for wildlife have been created using roads that have been relocated. Through the forestation of the rear side of dams, in concert with the surrounding forest vegetation, from an integrated perspective, severing or fragmenting the ecosystem can be avoided. By connecting the surrounding nature ecologically, the natural environments can be maintained as natural habitats.

## I Ecological Restoration & Diverse Management Strategies I



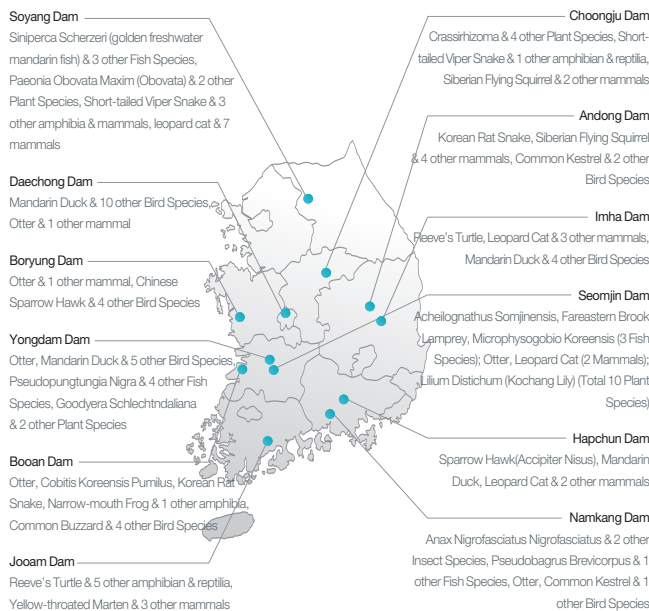
## I Bio-habitat Environment Preservation Facility I



### Ecological Restoration for Protective Species

K-water established and is implementing its plans to restore the ecology by minimizing the impact to the surrounding environment due to water resource development projects, and by building substitute habitats in areas adjacent to dams to preserve the ecology. A substitute habitat (gravel fields, water insect habitats, diverse aquatic living organisms) within the Hwabuk Dam area was built for otters (Natural Treasure Number 220) and white necked plovers (Designated by the Ministry of Environment designated as a species in danger of extinction – level 2). Artificial wetlands are also being built for amphibian animals and reptiles. Various measures are being formulated to preserve the natural growth environment for Supple-jack shrubs (*Berchemia berchemiaefolia*) located around Sungduk Dam.

#### Results of the Research on Species in Danger of Extinction Around Major Dams



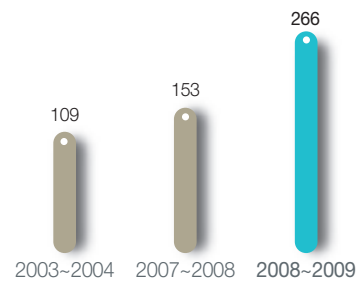
When designing ecology restoration facilities, taking into consideration the ecological characteristics of species in danger of extinction, K-water acquired advice from domestic and overseas ecological experts, to make sure that the ecology restoration facilities are appropriate and environment-friendly.

### Monitoring for Environmental Changes in Project Areas

When initiating projects, K-water monitors various sectors of the ecology, including water quality, air quality, animal & plant life (vegetation, mammalian, bird species, amphibia-reptilia, insect species, Large benthos invertebrates, plankton, etc.), and noise vibrations to identify changes in the environment due to the project and to establish & implement measures to minimize any changes to the environment. An example is the Kunnam Flood Control Reservoir being constructed on the Imjin River. The habitat for the Red-crowned Crane, a natural treasure that comes around the Imjin River during winter, was researched. As a result, with the participation of local citizens, related organizations, environmental organizations and experts, the flood area was cultivated, feed was provided and a substitute habitat was built to preserve the habitat for the red-crowned crane. Through these efforts, the number of red-crowned cranes that comes around winter in the Imjin River area continues to increase.

#### • Status of Red-crowned Cranes Coming Around Project Sites

(Unit: Number of Species)



#### BEST PRACTICE



### Establishing 「Red-crowned Crane Preservation Measures」

The Red-crowned Crane is designated as a natural treasure and has a high treasury value. To preserve the Red-crowned Cranes that comes around the project areas, local citizens, environmental organization, and experts came together to put together a plan to build a substitute habitat where dragonflies exist, as a feeding ground, and to cultivate the flood areas to provide feed to the Red-crowned Cranes.



# Management of Water Quality

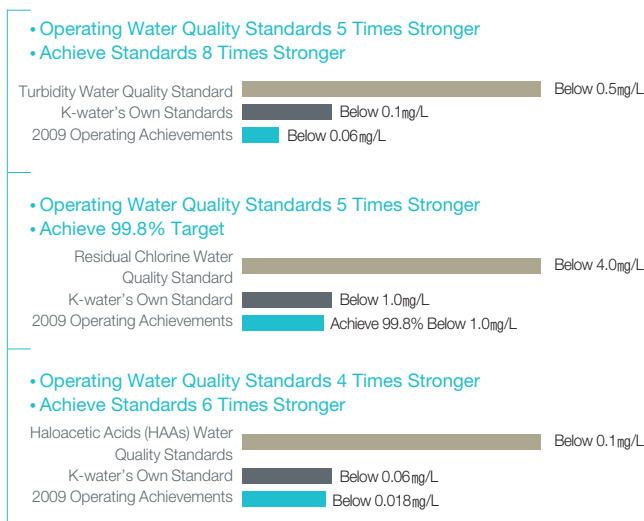
The public's trust towards K-water is increasing to the clean and high quality water being provided to them through advanced water quality management by adopting upgraded purification facilities and lowering the carbon level at project sites.

## Upgrading the Water Production Process

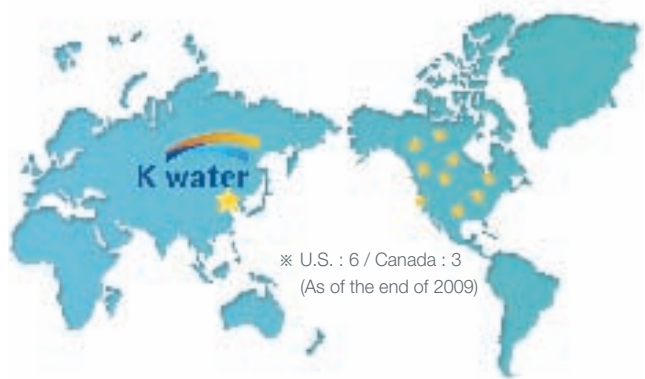
By adopting upgraded purification treatment technologies such as the Ozone and Granular Activated Carbon process, difficulties of eliminating tastes & smells can now be eliminated, while disinfecting by-products and minute quantities of pollutants can be treated, enabling K-water to enhance the quality of water. The upgrade technologies were adopted at 4 water purification plants (Bansong, Goryong, Banwol, Goyang) in 2009, and by the end of 2010, 12 more water purification plants are expected to adopt the new technologies.

To utilize IT & Web technologies, K-water has set up a 2nd generation water quality rating system (K-water QPI) to evaluate the water quality of multi-regional water purification plants nation-wide on a real-time basis. Through the "K-water QPI," 14 items, including turbidity, were selected for concentrated management. The 14 items were strictly evaluated using K-water's own standards, which are stricter than legal standards. This is to achieve higher quality water. In cases of turbidity, the QPI standard is targeted and managed at 0.1NTU, 5 times the legal standard of 0.5NTU. As a result, on June 2009, the Cheongju water purification plant became the first plant to receive 5-Star certification, the highest ranking certification, outside the North American region from AWWA (American Waterworks Association) The AWWA carried out a sponsored purification operational management capability certification policy evaluation. By expanding the number of 5-Star standard water purification plants, K-water will provide the world's best quality water to gain greater trust from customers.

## Results of Improving Water Quality



**5-Star** Certification,  
Asia's First, AWWA (June 15, 2009)



## Enhancing the Credibility of Water Quality Information

The water quality inspection process has been systemized through a 3 stage inspection process (1st Stage: Each Water Purification Plant → 2nd Stage: By Metro-regional Water Quality Inspection Center → 3rd Stage: Water Analysis Research Center), and the water quality inspection items list has been extended from 57, the legal inspection standard, to 250 items. To secure the world's best water quality inspection analysis capabilities, through the Water Quality Analysis Research Center, 500 items for inspection were identified up until 2009. By receiving the "Best International Certified Test Institution Grand Prize" in 2008, K-water was able to further enhance the credibility of its analysis results.

Water quality information from all of K-water's water purification plants that it manages is disclosed on K-water's homepage (www.K-water.or.kr) in real-time, making it more accessible for customers. At the same time, in 2009, the supply process and water quality information was also added with the water purification plant data which is supplied on the company's homepage, widening the scope of disclosed information.

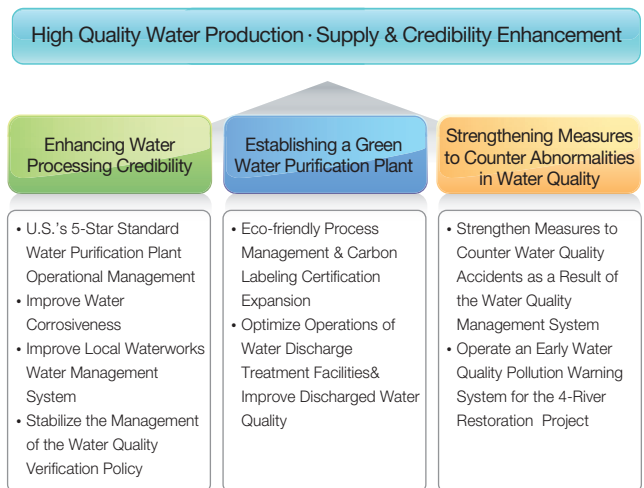
**250** Items,  
World's Best Standard for Water Analysis Itemization



### Strengthening Quality Management in the Supply Process

Even though water is safely processed at the water purification plant, the water can be polluted as it flows through rusted pipes before it reaches the tap. This is the major cause for reddish water (rust water). Every year K-water identifies worn-out pipe route sections and continuously replaces any worn-out sections, helping minimize water quality deterioration during the supply process. In 2009, by replacing a total of 19.5km of worn out pipe sections, the multi-regional waterworks average revenue water was maintained above 99%. The rust water index achievement rate was improved by 9% by developing and applying the newly developed rust water improvement process.

#### I Quality Management during the Supply Process I

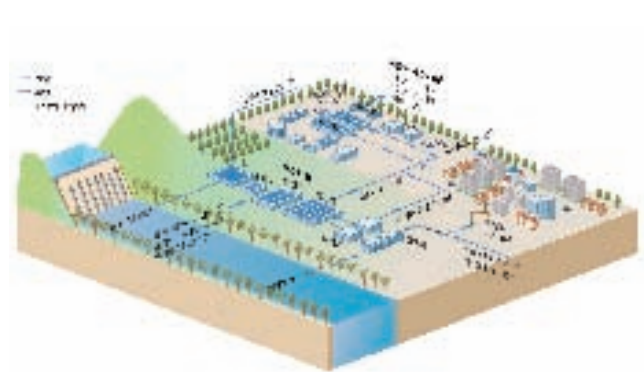


### Water Life Cycle Assessment (LCA)

The Water Life Cycle Assessment (LCA) is a technique used to reduce and improve the pollution level in water by quantifying and evaluating the causes of environmental pollution from the entire process from water production to supply ("from water source to tap"). In 2009, the Environmental Evaluation technique was applied to the life cycle of water production by water purification plants at Gosan, Deokso, Boryong, Songnam, Ilsan and Choongju.

After analyzing the contribution level using 6 categories that are affected, including resource exhaustion and global warming, the 'Global Warming' category was affected the most. It was also found that green house gas emission management was the controlling factor in the water environmental evaluation.

#### I Water Life Cycle Assessment I



### Water Labeling Certification: Realizing the First Waterworks Corporation to be Recognized as a Green Business Site



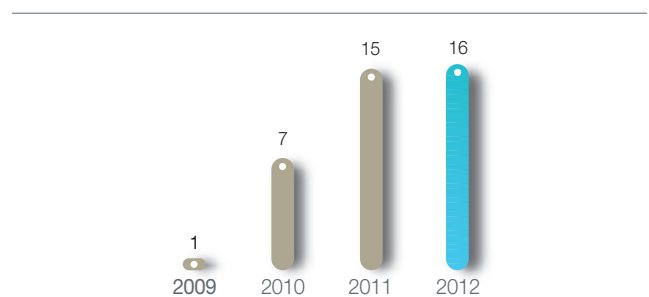
Carbon Labeling Certificate

Carbon Labeling is a policy of labeling products with the amount carbon dioxide that was generated during the life cycle of the product, including product, transportation, distribution, usage and discarding. K-water received the Carbon Labeling certification from the Ministry of Environment for its Cheongju Water Purification Plant Waterworks. K-water was the first waterworks corporation in Korea to be certified by producing and supplying 1 m<sup>3</sup> (ton) of water, 188g of carbon dioxide is emitted. Starting in 2010, K-water will replace its environment labeling with carbon labeling and expand its carbon labeling certification efforts to other facilities to improve water production by making the entire water production process low carbon and environment-friendly.

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#### • Carbon Labeling Certification Implementation Plan

(Unit: Cases)

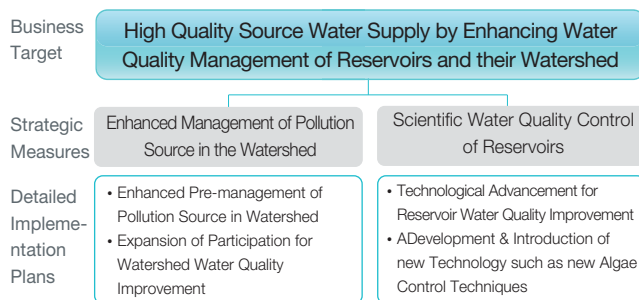


# Source Water Quality Improvement

Clean tap water comes from clean source water.

We supply high quality source water through scientific management of reservoirs and the watershed.

## Implementation System for Water Quality Management of Reservoirs & their Watershed



### Strengthen Management of Pollution Source in Watershed

Typhoons and concentrated heavy rains induce large quantities of soil and flood debris to flow into reservoirs, causing long term high turbid water phenomena and water pollution.

To overcome the insufficiency of water quality control after the pollutants coming into reservoirs, joint efforts with organization concerned such as pre-inspection and preventive measures for the pollutant sources are being taken. As a fundamental measure, integrated turbid water prevention plan for the drainage sections of the 5 major river watersheds was established. And for the better management of pollutant emissions source, "Integrated Pollution Source Information Management System" was established based on IT & GIS technology

### Expanding Participation to Improve the Water Quality in the Watershed

Efforts to participate in the projects for water quality improvement in the watershed area, such as ecological wetland development project which is being implemented by K-water, are being taken to reduce pollution sources in the watershed area.

K-water established an integrated management platform for management



of domestic sewage and livestock waste water, which are the main sources of the dam's water pollution. K-water is constructing 8 waste water treatment facilities and operating 102 facilities.

### Technological Advancement in Water Quality Management and Control of Dam Reservoirs

For water quality management of the dam reservoirs, it is necessary to scientifically forecast the future quality of water. However, since the dam reservoirs are huge, and there are diverse factors affecting each reservoir water quality including weather factors, it is very difficult to identify the exact causes & influences to water quality, making it imperative to use water quality forecast modeling techniques. For more rational decision-making and for the application of water quality improvement technologies, 3 dimensional water quality forecasting technologies are to be used, which is more advanced and accurate rather than 2 dimensional models. The 3 dimensional forecast technologies were applied at a dam as a trial in 2009. K-water has a plan to apply the 3 dimensional Hydrodynamic Water Quality Model to all at dam reservoirs.


### Efficient Algae Control Technology Adoption

During summer, the eutrophication of reservoirs and rivers, results in causing water pollution and purification treatment obstacles. Various water quality improvement facilities are adapted to control algae bloom such as curtain weir (inflow current prevention layer), water circulation systems (aeration facilities) and selective intake equipment. To enhance operational efficiency, diverse research is being implemented such as efficiency analysis & the establishment of operational guidelines for each technique. In 2009, new algae control technologies, such as algae removing (harvesting) ship and curtain weir (and advanced multi-regional algae control facilities), were successfully introduced and applied.

## Efficient Pollution Source Management through the "Integrated Pollution Source Information Management System"

The water quality of dam reservoirs is directly affected by pollution sources upriver. Therefore, pollution source management is a very important factor to preserve high quality water resources. For efficient and systematic management of the information related to water quality and pollution sources, the integrated information management system based on GIS & IT has been established, which provides high definition aerial photos, 3 dimensional image of the reservoirs and a watershed, water quality status and water control facilities status. The user friendly interface of the system will make it possible for the users to manage the pollution sources and facility more easily and efficiently by providing optimal information.



# GREEN Society

●

Sharing green hope, providing strength to neighbors and sharing the hope of water by filling people's lives with Love. Precious friend giving & receiving love through sharing; In a world where everyone lives, lives together and everyone are friends. K-water is always next to where everyone is.

- 56\_ Respecting Human Rights & Diversity
- 58\_ Fostering Global Human Resources
- 60\_ Creating a Great Work Place
- 62\_ Social Contribution Activities
- 64\_ Activities of Water Love Volunteers

# Respecting Human Rights & Diversity

K-water is taking the lead in protecting human rights & interests by protecting the social minorities and respecting diversity.

## Efforts to Protect Human Rights

K-water is protecting the rights of minorities within the corporation, while maintaining a policy of solving problems faced by employees & executives. Diverse policies such as programs to expand employment opportunities, maintain gender equality and protect workers during pregnancies are being initiated to protect the rights of minorities such as the disabled, female employees and contract workers. A Gender Equality Department has been established within the labor union, and efforts are being taken to provide the same benefits to contract workers as regular employees.

Human rights training courses are mainly carried-out to protect the rights of minorities. The training courses mainly consist of the company-wide sexual harassment prevention training and personal information protection training courses. Human rights training courses will be expanded to cover other areas. By guaranteeing the right to form collective agreements and initiate collective bargaining, there is no potential for rights to be infringed upon at any of K-water's worksite.

As of December 2009, there were 393 female employees, comprising 9.8% of total work force at K-water. The number of female managers is increasingly growing in numbers. At the end of 2009, there were a total of 24 female employees in managerial positions: 2 directors (level 2) and 22 managers (level 3). In 2009, 17% (18) of the new recruits were females. In accordance with article 17 of the Framework Act on Women's Development and enforcement ordinance article 27-2 of the same act, a sexual harassment prevention training program is held once every year and the results of the training program are reported to the Ministry of Gender Equality. To prevent any decreases in labor productivity at the worksites, a member from each department is required to complete a cyber training course once a year and disseminate the contents of the training program to his/her department.

**9.8 %**,  
The Percentage of Female Employees & Executives

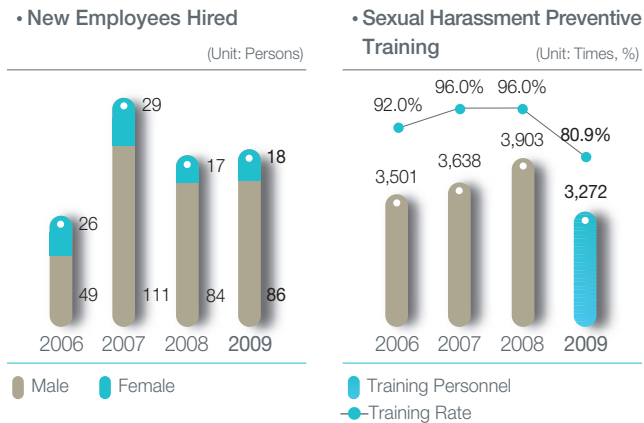
## Achieving Gender Equality

Since K-water announced Gender Equality regulations in 2004, discrimination factors in employment and promotion of female employees has been eliminated. At the same time, counseling for female employees faced with problems has been greatly promoted, and gender equality programs have been implemented by actively managing and supporting the female workforce through strengthened maternity protection. The basic salary is the same for male and female employees in similar positions and for those that have entered the corporation in the same year. Promotions and compensations are also equally provided to male and female employees.

## Handling Employee Problems

Employee problems are solved by operating a problem counseling window at all times within the HR-Bank (An Integrated Human Resource Management System). The utilization rate of the problem counseling window and face-to-face counseling to solve problems faced by employees increased two fold to 98 cases in 2009. Out of the 98 cases, 67 cases were solved (a 68.4% solve ratio) through an investigations. Unsolved cases are continuously evaluated and considered at a later date.

In addition, from the corporation's perspective, various methods were considered to aggressively prevent and alleviate stress caused from employees not being able to adapt to the organization, overwork, and other sources of stress, by operating an Employee Assistance Plan (EAP), which is an expert counseling support program. As a result of K-water's diverse efforts to enhance the quality of employees' lives and satisfaction through a healthy and dynamic organizational life, 16% of the employees, or 584 employees, received counseling.



## Status of Employee Problems Solved

Category	2007	2008	2009
Total Number of Problem Cases	45	39	98
Cases Solved	35	28	67
% of Cases Solved	77.8%	71.8%	68.4%

### Further Protecting Personal Information

K-water established infrastructures and regularly holds information security enhancement training courses to protect personal information. In regards to information provided by K-water, the collection of personal information is minimized. By utilizing i-Pin (Internet Personal Identification Number) rather than the personal registration number on the company's homepage, discretion is maintained in protecting personal information. Personal information is systematically managed by establishing personal information protection standards. To improve the awareness about the importance of personal information and the seriousness of the potential damages it can cause, and to emphasize the discretion required when providing information, cases of actual information leakages and personal information infringement prevention training courses are held regularly for new employees, external trainees, information security personnel and relevant personnel at cooperative firms.

In September of 2009, K-water was the first public enterprise to receive the ISO27001 certification. Through this certification, K-water established a strict personal information security system so as not to infringe upon customer rights. As a result of these efforts, out of 86 institutions, K-water was selected as the best institution in the National Intelligence Service's (NIS) Security Management Status Evaluation in November of 2009.



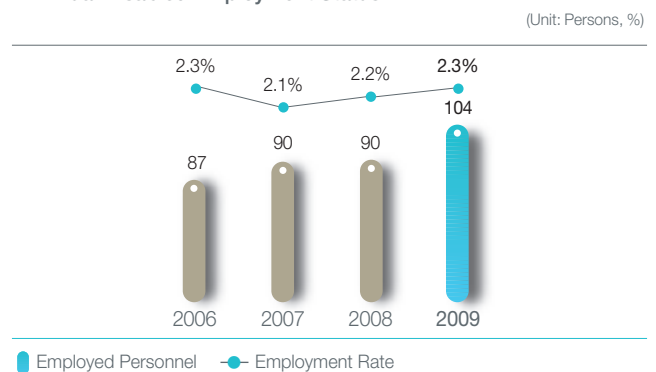
Application of i-Pin as a Substitute to the Personal Registration Number to Protect Personal Information

### Expanding Employment Opportunities for the Disabled

A policy to provide additional points to the disabled has been adopted when hiring employees. In regards to testing, depending on the level of the disability, an additional 3~5% points are added to applicants who have a disability. As for employees that have been disabled due to accidents, 100% of their salary is provided as support. For those employees registered as having a disability, a 3 day paid leave and gifts of encouragement are provided around disability day. Various convenience facilities have been installed for the disabled, which include parking zones, elevators, rest rooms, stairways and roadways.

The disabled employment rate was 2.3% or 104 employees in 2009. Since 2000, over the last 10 years, the disabled employment rate was above the compulsory legal rate of 2%.

#### Annual Disabled Employment Status



### Maternity Protection Program

A breast feeding area and female employee rest areas have been secured within the head office, and a corporate child care center has been established to assist female employees during maternity. The child care center has been expanded, while existing facilities have been remodeled to help alleviate the burden of raising their children, and to create harmony between work and family life. Diverse maternity protection programs are being carried-out such as the child care temporary leave and selective child care work time reduction policy. Breast pump support has also been expanded for female breast feeding employees.

- Operating a Child Care Center within the Company: Water Love Children's House
- Every Week Wednesday, Family Day <Childcare Day>
- Adopting a Joint Spouse Leave of Absence Policy
  - Conditions for Leave of Absence: If the Spouse is Working Overseas for Over a Year, Training, or Joint Leave of Absence
  - Leave of Absence Period: Once for Two Years
- Improved Childcare Leave of Absence Policy
  - For employees with Children Younger than 3 Years Old
- Childbirth Encouragement Support
  - Payment of Childbirth Encouragement Support, Work Circulation Exceptions for Pregnant Employees
  - Installation of a Breast Feeding Facility, Pregnant Women Only Parking Zone
  - Increase Miscarriage / Stillbirth Leave: Provide Sufficient Time to Physically / Mentally Recover

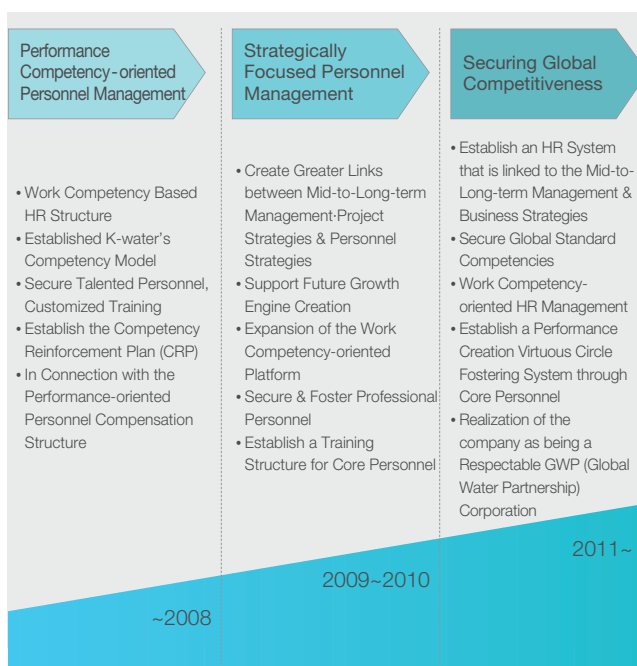
# Fostering Global Human Resources

To become the world's best integrated water service corporation, K-water is fostering global human resources by concentrating its corporate-wide competencies.

## Global Human Resource Roadmap

As K-water's core partner in achieving its visions and strategies, employees' functions are aligned based on competencies and performances. To achieve this, K-water is securing global competitiveness for its personnel resources.

### I Roadmap to Fostering Global Human Resources I



## Capability & Performance-based Compensation & HR Management

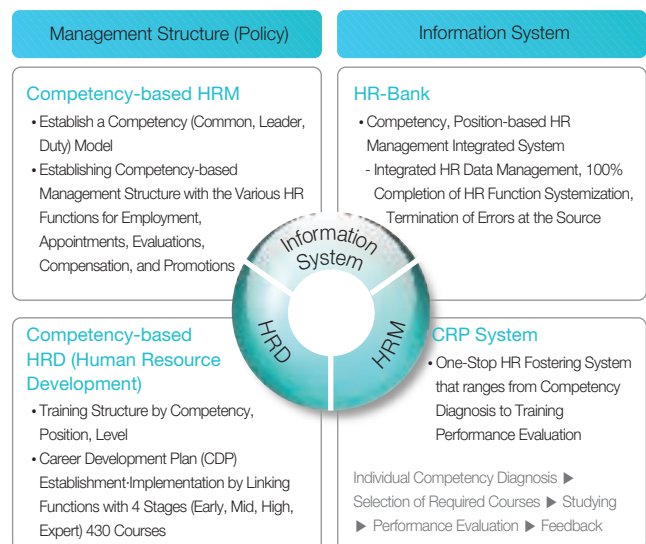
The monthly salary of new employees is set at 212% of the minimum wage in accordance to the government's public enterprise advancement policy, and all employees and executives are evaluated on performance regularly. In the case of executives, compensation is based on performance in accordance to the management contract signed with the President. As the executives are paid annual salaries, level 1 executive's compensation is based on the department's evaluation, while level 2 executives are compensated on individual MBO (Management by Objectives) evaluations.

As for level 3 or below for general employees, performance compensation is based on the department's evaluation. However, to encourage employee competency enhancement, there could be a difference of more than 20% higher or lower in compensation depending on the individual competency evaluation. In addition, to provide greater competency development opportunities through diverse work careers, a policy enabling employees to exchange functions, especially with employees in the administration and technology areas.

K-water also strives to enhance work competencies by awarding employees for work merits, employees selected as model employees, employees with superior knowledge, and employees providing excellent suggestions.

## Competency-based HR Management & Information System

K-water established a competency-based human resource management system that has helped to develop competency model (Common, Leader, Duty). A competency-based training system is being utilized to enhance current competency levels by identifying required competencies to generate performance. This kind of human resource management is implemented based on an advanced human resource management system such as integrating personnel management data through the HR-Bank (An Integrated Human Resource Management System), and by processing 100% of all HR management functions through the system.



## Employee & Executive Career Development

Since 2003, K-water established and operates a CRP (Competency Reinforcement Plan) system to help employees & executives in their career development. The CRP system helps in providing a balanced career development plan by appropriately reflecting the organizational and individual needs. Starting in 2010, selective learning for employees & executives is being strengthened, while various programs to enhance training effectiveness are being implemented, which includes "Module-based Courses," and the "Opening of All Training Courses to Employees & Executives."

### Fostering Core K-water Professional Personnel

To secure global competitiveness by fostering professional personnel, in addition to the 2008 “K-water Technical Expertise Course,” the “K-water Management Professional Course” was opened in 2010. This is to foster professional personnel by sector and to implement K-water’s maintenance strategy. Based on K-water’s management strategies and the technology roadmap, 11 professional training sectors were selected, including “Tariff Planning & Demand Management.” Through over 360 hours of concentrated training, K-water is currently fostering 110 personnel that are securing professional knowledge equivalent to a masters’ degree.

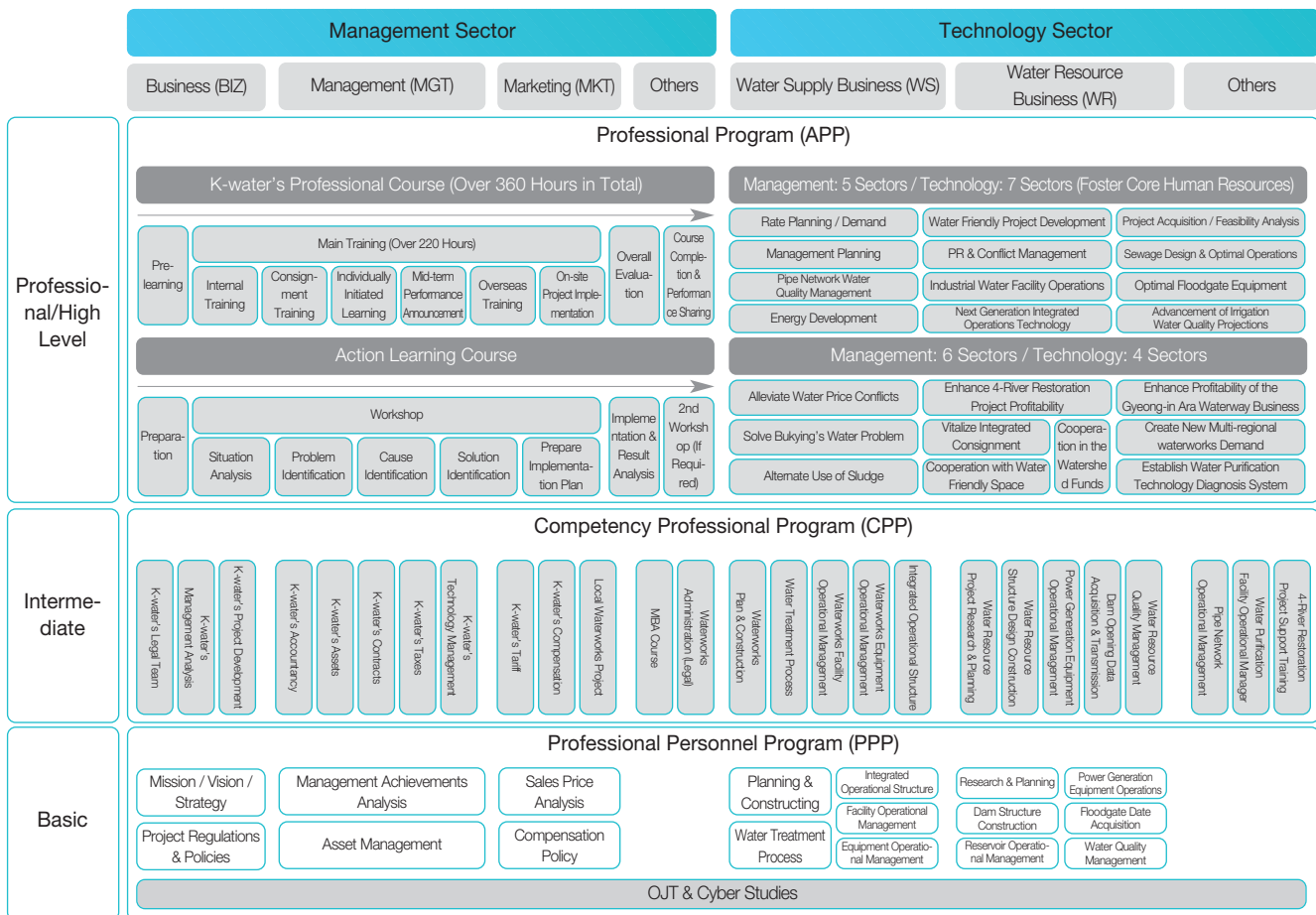
### Fostering Strategic Leaders

By adopting a unique systematic leader fostering course, the “Creative Innovation Leader Forum” in 2010, K-water initiated a 15 week strategic leadership enhancement program targeting towards talented personnel in all work functions. With an objective of enhancing implementation capabilities through communications and consensus building capabilities, this course provides diverse learning activities (workshops, seminars, knowledge training) such as leader competency assessment and coaching. The course also allows for the sharing of ideas through discussions with management, and acts as a Think Tank through discussions.

**60.5** HOURS, Training Hours per Person

**12,011** PERSONS, 2009 Training Personnel

### K-water’s Work Profession Training Structure



# Creating a Great Work Place

The quality of life and happiness index is increasing by initiating diverse welfare programs and strengthening a cooperative.

## Promoting Employee & Executive Welfare

Due to the characteristics of the waterworks and water resource business, K-water’s regional headquarters and management office are scattered all across the country. To solve housing problems for employees that have been transferred to different areas due to work, employees are provided support in terms of living quarters and rental homes. Parts of a home purchase loan are provided for to assist in purchasing a private home to ensure stable housing and living conditions. K-water received the Family Friendly Corporation Certification on November 17, 2009 by operating family friendly welfare policies and programs such as recreational facility accessibility to all family members, cultural & arts experiencing opportunities, writing classrooms & English camps for employees’ children.

## Voluntary Learning Structure

K-water is helping employees continuously upgrade their capabilities by providing diverse training programs. A representative program is the Competency Reinforcement Plan (CRP) which helps individual employees to enhance expertise in their specialized work functions on their own. The CRP is a ‘T-shaped’ personnel development concept. A T-shaped employee refers to an employee that is not only specialized in one’s traditional sector, but is also well-versed in terms of knowledge and insight in adjoining areas around the employee. It is a program that enables employees to acquire in depth knowledge in one area through expert training for a certain period of time when first entering the corporation. Once the employee reaches a managerial position, the employee is allowed to participate in training to expand his/her knowledge in a field that is relevant to the overall corporation.

## Welfare Safety

K-water is creating a Great Work Place (GWP) for healthy people. The results of health examination in 2009, showed that 67.7% of employees were classified as healthy (class A, B group), while 32.3% were classified as those having comments on their health (class C2 group). In comparison to the previous year, class C2 group increased by 6.3%p. However, among those examined, the prevalence rate, which refers to the ratio of those diagnosed with a disease, stood at 5.9%, which was a decrease from 6.6% in 2008. In regards to this, to prevent adult diseases from occurring in healthy patients and to manage the health of employees on the health black list and employees with diseases, a non-smoking program, an obesity clinic and a mental health program (EAP: Employment Assistance Program) were initiated, receiving great reviews from employees.

To reduce the number of employees with comments on their health examination, cerebrovascular & cardiovascular disease attack potential assessments were carried-out on all patients in 2010, and a health training session was included in the work training at the training center. Greater focus has been placed on supporting employee health programs by adding an employee (nurse) to the health management personnel and supporting on-site health management for small project sites. An MOU (Memorandum of Understanding) was concluded in October of 2009 with KOSHA (Korea Occupational Safety & Health Agency) to adopt the KOSHA 18001 (Construction Project Health Safety Management System) to secure the safety of on-site workers for national projects that have officially being initiated. KOSHA 18001 is currently being operated on a trial basis, but K-water plans to adopt it to all project sites by the end of 2010.

## I Health Promotion and Integrated Operational Program I

Category	Contents	Results
Health Management System	• Individual Health Management 100% Data Based	• Provide Real Time Health Management Information & Professional Consultation
General Health Inspection (Physical) Policy	• Financial Support for Health Check-ups	• 2009 Early Cancer Diagnosis: 21 Cases
Hazardous Site Health Management Policy (Water Analysis Center)	• Work Environment Measurements • Special Health Check-ups Initiated	• Laboratory Work Environment Evaluation • Special Health Check-ups initiated for 28 Laboratory Employees
Employee Consultation Support Policy	• Strengthen Stress Management - Departmental Stress Management - New Employee Customized Consultation Service	• 284 Provided Service Support • Carried-out Feed-backs such as Customer Satisfaction Surveys
Non-smoking Program	• Implementation Period: August ~ November 2009 • Participation Personnel: 19	• Successful Personnel: 12 (63%) - 3 Months After-management (97 Successful in Smoking Abstinence for 3 Years)
Diabetes Clinic	• Implementation Period: August ~ November 2009 • Participation Personnel: 19	• Successful Personnel: 4 (21%) - Body Fat Reduction
Pregnancy Woman Support	• Provide Pregnant Employees with Financial Support before Birth • Establish Female Employee Resting Rooms and Provide Support for Breast Pumps	• Minimize Work Vacuums for Pregnant Employees

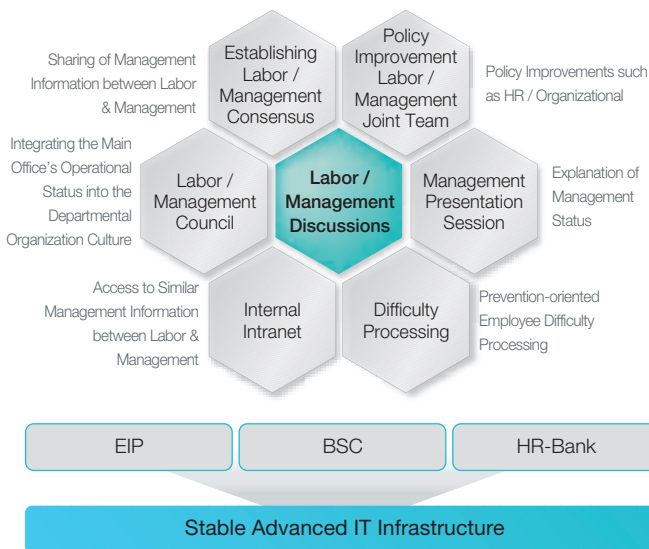


### Strengthen Cooperation between Labor & Management

Established in 1987, the labor union is comprised of level 3 or lower employees. In a union shop system, new employees are automatically registered as members. As of the end of 2009, 81.5% of employees, or 3,285 employees were registered as labor union members. Through policy improvements, management briefing sessions and corporate-wide cooperative bodies, information sharing between labor and management has increased, while a corporate-wide consensus has been established by strengthening mutual trust.

Since 2006, the Labor-Management joint Committee, K-water's unique labor-management cooperative body, established and operates a policy improvement working committee to solve long-term management issues such as issues related to the organization of human resource organization, welfare policies, and waterworks integrated operations. As a result by the end of 2009, 96 improvement issues had been identified and are gradually being implemented. Specifically, in regards to the issue of expanding the annual salary policy to all levels of the organization, through an agreement between labor and management, the conversion to an annual salary model based on performance and competency was completed. Amongst the SOC-type public enterprises, K-water adopted the most advanced annual salary model. K-water abides by the basic labor law article 7, (Prohibition of forced labor), and tries to guarantee and improve the legal working conditions of laborers.

### I Strengthen Labor / Management Relations I



0 Cases, 2009 Cases of Labor Disputes

81.5 % Labor Participation Rate (December 2009)




## Adopted the Most Advanced Company-wide Annual Salary Model

Since the adoption of the annual salary policy for level 2 and above employees, to solve a 10-year effort to revise the compensation structure focused on annual salaries for level 3 and below employees, K-water held working group meetings between labor union and management, and continuously held briefing sessions for all employees. As a result of these efforts, through a successful agreement between labor and management, an annual salary policy was adopted for all employees. Since K-water was the first SOC-type public enterprise to adopt the most advanced annual salary model, 15 media firms, including Yonhap News and Maeil Economic Daily reported this as an exceptional case. Labor and management continue to cooperate as one to adopt advanced management techniques.



2009 Wage Agreement Signing

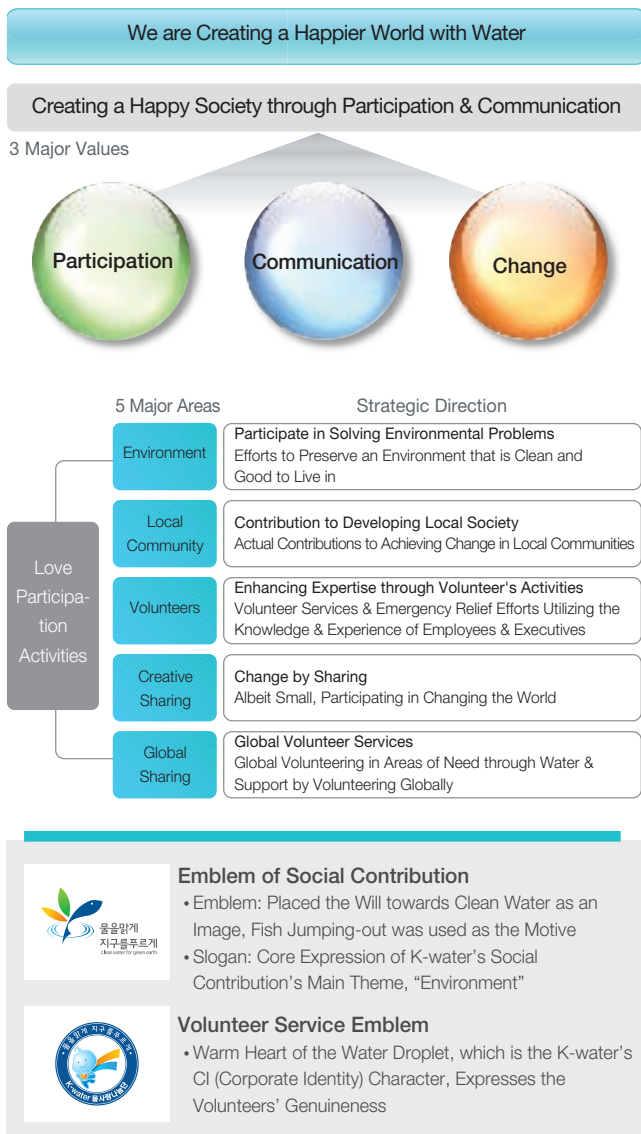
# Social Contribution Activities

K-water is work together to achieve a happier society that shares in a consensus.

## Implementing Social Contribution Activities Strategically

K-water established its 3 major values, 5 major core areas and strategic direction uniquely to K-water's social contribution activities to fulfill its mission of creating a "Happier World with Water." K-water is also implementing its social contribution activities strategically based on the choice and concentration strategies to achieve sustainable corporate development and fulfill its social responsibilities. Utilizing its business characteristics to its fullest, K-water selected its social contribution activity programs. Through the participation in solving environmental problems by expanding its activity scope to include water, rivers and the environment, K-water is contributing to the development of the nation and local communities.

### I Social Contribution Implementation Strategy I



## Keeping the Water Clean, and the Earth Green

Although K-water and the government allocate a huge budget to supply clean and safe water, citizens in small cities & districts and Islands with poor Waterworks facilities, accounting for 7.3% of the total population, or approximately 3,680 thousand citizens, do not have the benefit of water yet according to 2008 statistics released by the Ministry of Environment. K-water is trying to create "A World without Water Shortages, a Happier World with Water," by carrying-out various projects, including the "Life Water Support Project" for those areas that are suffering from water shortages, the "Water Cultural Space Creation Project" which provides the dam as a cultural and relaxation space around dams for local citizens to enjoy, and the "Water Culture Support Project" that contributes to local economies and culture.

### Living Together

Since most areas adjacent to dams are geographically located far from major cities, there is a lack of welfare facilities and life is inconvenient. To achieve balanced development to enhance welfare in area adjacent to dams, K-water is operating welfare centers sharing filial piety, supporting actions for income enhancement, and developing medial medical medial volunteer movement.

#### Service Sharing Filial Piety:

##### Enhancing the Welfare of Elderly in Areas Adjacent to Dams

Since 2006, to enhance the welfare of the elderly in the area adjacent to dams where the 65 or older population is increasing, K-water is operating a "Filial Piety Sharing Welfare Center."

<p><b>Welfare centers sharing filial piety</b></p> <ul style="list-style-type: none"> <li>• Operating 7 Centers, including Hapcheon, Boryung Dam</li> <li>- Establishment &amp; Operational Expansion of Welfare centers sharing filial piety</li> </ul>	<p><b>Help Service of Household Affairs &amp; Nursing</b></p> <ul style="list-style-type: none"> <li>• Supporting Senior Citizens Living Alone in Areas Adjacent to Dams</li> <li>- Cleaning, Cloth Washing, Nursing, Etc.</li> </ul>
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#### Income Enhancement & Vitalization of Local Economies:

##### Creating & Supporting Eco-friendly Farming Areas in the Dam's Upstream Area

In the designated water resources protected areas where farming is limited, K-water is creating environment-friendly farming areas in the dam's upstream areas to protect water quality and to contribute to the vitalization of the local economy such as enhancing of income levels.

#### Love-Sharing Love-Sharing Medical Volunteer Services:

##### Supporting Medical Volunteer Services in the Areas Adjacent to Dams

To promote the health of citizens living in the areas adjacent to dams where traffic is inconvenient and the medical environment is inferior to that of cities, K-water concluded an agreement with the Korean Open Doctors Society in 2009 to carry-out "K-water's Love Sharing Medical Volunteer Services," which mostly focuses on alienated groups such as senior citizens over the age of 65 and those with disabilities.

### Sharing in the Dreams & Hopes of Students

**Clean Water Scholarship Project:**

**Providing Scholarships to Students in Areas Adjacent to Dams & Supporting the Hiring of Native English Speaking Teachers**

K-water is also striving to improve the educational environment in areas adjacent to dams. By providing native English speaking teachers, holding English Camps, and providing scholarships, 4,557 students in 87 schools in 19 dams areas were able to enjoy the benefits of K-water's efforts.

**Information / Culture Support Projects:**

**Providing Recycled PC to Low Income Families & Supporting Boat Sports**

In cooperation with various social welfare organizations, K-water is providing low income families with recycled PCs, and holding large scale boat races named "Water Love" across the country annually by maintaining a boating team.

**Job-sharing:**

**Job-sharing in Areas Close to Work-sites Across the Country**

Utilizing financial resources (KRW 4.2 billion) from budget reductions, K-water initiated a "Daily Helper Support" project by hiring 620 unemployed housewives to help senior citizens living alone and the disabled. By also creating 400 or so jobs through the project support budget, K-water was able to provide support to public labor and after school activities. Through these activities, K-water is leading the Job-sharing effort to help vitalize the national economy.

### K-water's Water Love Volunteers

Established in July of 2004, K-water's Water Love Volunteers Group has 3,899 volunteers, or 96% of the total employees as of the end of 2009, participating in 85 volunteer clubs. A total of 49,000 hours were spent on volunteer activities (12.6 hours per employee). Through the "Love System," a social volunteer management system, K-water is providing systematic support to the employees & executives of the Water Love Volunteers Group. In addition, K-water is initiating a matching grant program where K-water matches the amount of funds accumulated from employees & executives who donated a certain amount of their salary to support the volunteer activities of the various clubs within the Water Love Volunteers Group.

### Sharing Love with Global Community

K-water is also actively implementing its overseas social contributions' theme, "Creating a Better World with Water in Collaboration with K-water." With the start of drinking water development volunteer activities in Tajikistan, K-water initiated various social contribution activities globally. In 2007, K-water carried-out volunteer services to develop a "Happy Well" in Cambodia and the building of a "Ger" in Mongolia. In 2008, a drinking water facility was installed in Hao Bin, Vietnam as part of K-water's volunteer activities. In 2009, a drinking water tubular wells were built at schools in remote regions located in Pampang State and Quezon City of the Philippines, and local water supply facilities were installed in the Borekhamxay and Luang Prabang regions of Laos. As a water professional corporation, K-water is continuously participating in the global effort to help solve global water problems.

KRW **59.6** Billion,  
Social Contribution Investments (3% of the total Revenue)

**49,000** Hours,  
2009 Volunteer Activity Hours

#### Water for Life Support Projects

Activities for Supplying Water Taking into Consideration Water, Nature and Humans

**Water of Hope**

- Purification of Underground Water to Provide Drinking Water to Elementary Schools Facility Installation & Operations
- Operations & Management of 121 School Facilities

**Water of Love**

- Operating Desalination Facilities in Island Areas - 8 local governments, 41 Centers
- Providing an Emergency Supply of Drinking Water to Disaster & Drought Areas

**Natural Water**

- Environmental Water Supply for Ecological Preservation
- Activities to Identify Negligent Areas to Prevent Underground Water Pollution
- Reconstruction of the Direct Flow of the River to Restore the Dam's Functions

#### Water Culture Space Creation Projects

Providing Dams that are Environment-friendly Relaxation & Cultural Spaces

**Environment-friendly Dam Maintenance Works**

- 24 Dams Targeted for Maintenance Work Starting in 2002
- Completed Maintenance Work on 14 Dams, Including Choongju Dam

**Operating a Water Cultural Hall**

- Installing a Water Cultural Halls at all Multipurpose Dams Country-wide
- Installations have been completed at 13 of the Dams, Including Boosan Dam

**Environment-friendly Relaxation Space**

- Improve Water Source Functions by Taking Care of Forest in Dam Watershed Areas
- The creation of Flower Scenery Areas in Flood Control Areas

#### Water Educational Culture Sponsorship Projects

Initiating Cultural Events and Water Training by Integrating Dam & Culture

**Dam Culture Festivals**

- Holds & Supports Various Cultural Events, such as the Dam Culture Festival

**Water Tour**

- Allows citizens to visit water resource facilities that K-water manages

**Public Water Contest & Training**

- Holds Various Public Contests and Water Educations programs to Enhance the Awareness of Water

※ Details of K-water's Social Contribution Activities can be accessed through K-water's homepage (<http://www.k-water.or.kr>).



## Activities of Water Love Volunteers


Through the voluntary participation of employees & executive, K-water's Water Love Volunteers Group continuously initiates diverse theme-based volunteer service activities such as environment preservation, disaster relief for disaster areas, helping neighbors in need by delivering love to alienated neighbors, and local social contributions, to actively fulfill its Corporate Social Responsibilities (CSR).



01.	02.	06.	07.
03.		08.	09.
04.	05.		10.
			11.

- 01. K-water's Housewife Employee Livelihood Supporter
- 02. Welfare Center, Flowing with Affectionate Warmth
- 03. Love-Sharing with Rice Cake on Thanksgiving Day in 2009
- 04. Loving Home, Together with the Disabled
- 05. Green Eyed English Teacher
- 06. Global Love Sharing (Drinking Water Development in Laos) 1

- 07. Global Love Sharing (Drinking Water Development in Laos) 2
- 08. Emergency Drinking Water Relief to Drought Hit Areas(Taebek)
- 09. Sharing Love Foodstuffs
- 10. Opening of the Soyang River Welfare Center
- 11. Love Sharing Medical Volunteer Service Together with K-water



*Everyone's Having  
a Warm Dream*

68_ Sustainable Management Performance Index (GRI)
79_ Financial Performance
86_ Positive & Negative Information
87_ UN Global Compact
88_ GRI Report Index
91_ K-water KPI
92_ Third Party Verification Statement
94_ Code of Ethics, Environment- friendly Management Principles, Customer Charter, Mission Statement for Innovative Vision
96_ Publishing the Sustainability Report
97_ Declaration Glossary

# Performances



K-water is connecting the dreams of current and future generations into one. K-water will prepare for a more prosperous future by loving the earth. K-water's dream of providing for a happier future for everyone and restoring our only earth, will become a reality.

# Sustainable Management Performance Index (GRI)

## Economy

### Direct Economic Effects

#### Economic Value Creation & Distribution

The water resource business, which includes dams & waterworks business are require projects that are directly linked to the public economy. By utilizing limited resources efficiently, K-water is creating economic values. With the drought in 2009, power generation dropped, reducing revenues slightly. As a result, the distributed economic value also dropped slightly. Over 79% of the total revenue generated in 2009 was invested in sales expenses and capital expenses related to production activities.

#### Economic Value Creation & Distribution |

(Unit: KRW Millions)

Category	2006	2007	2008	2009
Created economic value (1)	1,751,463	1,833,397	2,066,036	2,032,624
a) Net sales	1,721,105	1,812,905	2,044,533	2,005,384
b) Interest income, rent, and profits from sale of assets	30,358	20,492	21,503	27,240
Distributed economic value (2)	1,290,085	1,403,972	1,619,246	1,511,841
a) Operating expenses: production costs, and asset purchasing expenses	829,876	911,769	1,127,327	1,160,601
b) Wage and welfare: wage, benefits	242,381	291,699	303,943	285,818
c) Capital cost: interest paid, dividends	78,209	61,119	67,155	63,971
d) Taxes: corporate tax, local tax paid	91,431	83,929	65,033	26,176
e) Investment in local community: contributions, various allotted charges	48,188	55,456	55,788	61,051
Surplus economic value (1-2)	461,378	429,425	446,790	520,783

### Countering Climate Change

#### Financial Impact from Climate Change, and Risk & Opportunity Factors

As the sense of a crisis regarding climate change increases, a target to limit global temperature increases by 2 °C was reached at the Copenhagen Conference on December 2009 to help reduce green house gases. The government is also actively taking measures to counter climate change by enacting the “Low Carbon Green Growth Basic Law” in April of 2010.

Through the Framework Convention on Climate Change, green house gas reductions has become a new trade barrier, and new markets are expected to be created such as credit point sales and trade regulations utilizing advanced reduction technologies led by advanced nations such as countries in Europe and Japan. As such, it is perceived that countering climate change to be a new growth opportunity for K-water’s management, K-water is doing everything possible to enhance its capabilities to counter climate change and to utilize an integrated approach to countering climate change through strategic methodologies such as securing sustainable water resources & integrated water management, developing & establishing low carbon & environment-friendly technologies & infrastructures, and developing new & renewable energy sources. Detailed information can be found on pages 46-47.

### Retirement Grants

In preparation for the possible retirement of employees, in accordance to Labor Standard Act, retirement provisions have been allocated. Taking into consideration the average wage of employees during their employment period and 3 months before retirement, K-water guarantees that the employee will be able to receive the retirement grant on the date of retirement. K-water is considering converting the current retirement grant system to a retirement pension policy. This will be carried-out after an agreement is reached with the labor union.

### Government Subsidy Benefits

Since K-water is carrying-out national projects, parts of the project costs are supported by the government in a form of government subsidy benefits. For the past 4 years, K-water received government subsidy benefits for various projects including Water Purification Facility Upgrade Projects, which follow the Ministry of Environment’s model project, revenue water enhancement projects, and public rental apartment complex infrastructure construction projects. As for the construction project for the Innovation City, K-water received KRW 10,140 million in subsidy benefits from the government.

#### Recipients of Government Subsidies |

(Unit: KRW Millions)

Category	2006	2007	2008	2009
Total	18,500	1,463	6,995	3,150
Gumi Sewage Treatment Plant	-	-	-	-
Gumi Research of Cultural Properties	350	-	-	-
Gumi Rental Complex	5,600	-	-	-
Yeosu Rental Complex	3,000	-	-	-
Changwon Advanced Purification Plant	5,588	-	-	-
Construction of International Water Supply and Drainage Center	-	-	-	-
Project on Increasing the Rate of Revenue Water (Jeongeup)	3,962	1,463	-	-
Support for the Construction of the Innovation City	-	-	6,995	3,150

### Market Status

#### Legal Minimum Wage Vs. New Employee Wage Ratio

The monthly wage for entry level employees with a university degree (level 5) is 212% of the legal minimum wage.

#### Local Purchasing Policy

Purchasing is carried-out through the electronic purchasing system. However, to promote local purchasing by field offices, a maximum value amount was set, making it possible to contract construction or purchase merchandise locally.

#### Local Hiring in Domestic & Overseas Project Sites

In general, K-water ensures equal employment opportunities for all new employees, eliminating limitations on academic background, regionalism, and age. However, for local waterworks meter reading personnel and water project operators, K-water hires locally. Since initiating local waterworks consignments in 2004, as of the end of 2009, K-water hired 223 personnel locally, contributing to the development of the local communities.



Local Resident Hiring Status of Local Waterworks Service Centers

(Unit: Persons)

Category	Total	~2006	2007	2008	2009
People	223	59	20	42	102

Indirect Economic Effects

Investments in SOC Facilities

K-water invested a total of KRW 1,257 billion in SOC investments in 2009, contributing to the national economic development. Investments include KRW 427.3 billion in new dam construction projects such as the Hantang River and Sungduk River Dam Projects, water resource facilities such as the expansion of water resources in existing dams, KRW 259.3 billion in construction of waterworks facilities and water supply system control projects, and finally, KRW 570.4 billion was invested in the construction of new cities and development of industrial complexes.

Dam Environment Improvements and the Opening of the Water Cultural Center

The construction of a new dam takes into consideration environmental factors from the beginning. However, since existing dam facilities tend to be worn-out and obsolete, they are not able to provide much support to the local economy. Considering this, K-water is establishing overall plans to improve the environment of existing dams, while substantially renovating the surrounding facilities. Some of these efforts include setting up observation decks, elevators and promenades. Water Cultural Centers are also either being newly constructed or renovated to create a resting area and cultural space for visitors.

Providing Support to Local Citizens in Areas Adjacent to Dams

K-water continues to carry-out "Dam Support Projects" to help enhance the income level and welfare of local citizens in the areas adjacent to dams. In 2009 alone, K-water provided a total of KRW 55.6 billion as support to "Local Support Projects" such as installing joint farming facilities, paving farm roads, and constructing town centers, and to "Local Citizen Support Projects" such as providing medical, heating expense and tuition / scholarship support. Generation-based support projects such as providing native English speaking teachers for elementary students, supporting environment-friendly farming, and constructing filial piety sharing welfare centers are representative support projects that directly affect local citizens.

	Items	Contents
Local Support	Income Enhancing Projects	• Agricultural, Stock Raising, Fishing Projects such as Farm Roads, Composts, Farming Facilities
	Projects to Create Foundations for Livelihood	• Living Environment Improvement Projects such as Medical Equipment, Town Centers, and Town Access Roads
Resident Support	Local Citizen Livelihood Support Projects	• Medical Expense / Expert Heating Support, Electricity Expense / Living Expense Support & Job Sharing Projects
	Child Raising Support Projects	• Child Raising Support such as Education through Native English speakers, Scholarships, & School Meal Expense Support
Other Support	Dam Reservoir Usage Fee Subsidy	• Providing a 50% Subsidy for Local Governments using Dam Reservoirs
	PR & Ancillary Projects	• Projects Reflecting the Dam's Characteristics such as Constructing Filial Piety Sharing Welfare Centers & Supporting Environment-friendly Farming

Supporting Environment-friendly Agriculture in Areas Adjacent to Dams

Fertilizers, pesticides, and soil improvement works 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. Fertilizers and pesticides used for farming in areas adjacent to dams, and soil brought from other areas tend to directly seep into the reservoirs during floods, causing eutrophication and turbid water, which are representative non-point source pollutants causing water pollution. The 8,426,000km<sup>2</sup> of land that has been designated as farm land in the flood control land areas adjacent to dams are

being encouraged to be converted into environment-friendly farm land. Through this conversion, pollution sources are minimized, helping preserve dam water quality. In return, K-water is helping farmers acquire environment-friendly certifications for their agricultural products, while helping enhance their income by securing sales channels. Farmers in areas adjacent to dams that are carrying-out environment-friendly farming are cultivating potatoes, corn and other crops using organic methods and non-agricultural chemical methods. K-water is helping these farmers by providing environment-friendly farm equipment and natural compost depositories. In addition, to enable the agricultural products produced in these areas to acquire environment-friendly certification, through a technology support agreement with Agricultural Technology Centers of local governments, K-water is providing environment-friendly agricultural technology. To secure objectiveness in the credibility of agricultural products produced in these areas, K-water is providing support in inspecting agricultural products for residual agricultural chemicals and heavy metals, and in acquiring environment-friendly agricultural product (no or low agricultural chemicals) certifications. By 2010, the model for environment-friendly agricultural complexes will be expanded to cover all areas designated as farm land.

Eco-friendly Farming Implementation Status & Plans

(Unit: m<sup>2</sup>)

Category	Total	2007	2008	2009	~2011
Conversion Area (m <sup>2</sup> )	1,864 Thousand	1,170 Thousand	1,468 Thousand	3,924 Thousand	8,426 Thousand

Environment

Materials

For detailed information on the quantity of source water used to produce water and materials such as purification chemicals that are used to purify water, refer to page 53, Water Life Cycle Assessment (LCA) Material Income & Expenditures. For details on purification and sewage sludge produced during the production process and recycling of construction wastes, please refer to page 72.

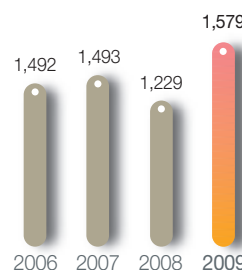
Energy Saving

Energy Consumption Amount

Total energy consumed in 2009 totaled 233,134 TOE, an increase of 2.8% compared to that of the previous year, while the energy was mostly used during the waterworks processes such as the intake and supply of water, and the operation of pumps in pumping plants. Direct energy consumed through diesel and gas was 1,579 TOE, while indirect energy consumed through electricity stood at 231,554 TOE.

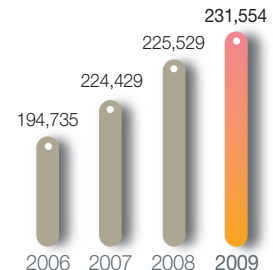
• Direct Energy Consumption

(Unit: TOE)



• Indirect Energy Consumption

(Unit: TOE)



※ TOE : Ton of Oil Equivalent

**Energy Reduction Quantity**

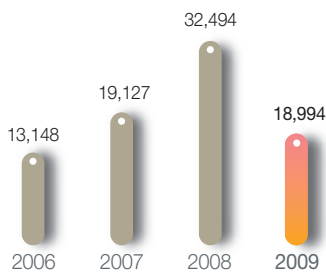
Energy savings contribute to reducing green house gases and water production costs. To convert to a high efficient energy consumption structure, equipment should be inspected and energy efficiency assessments should be carried-out during the design stage, while power unit costs should be managed carefully for existing facilities since power unit costs take up the largest portion in the waterworks expenses.

**Energy Efficiency Enhancement in Dams & Waterworks Facilities**

To reduce green house gas emissions and counter the energy crisis due to recent oil price hikes, improvements are being made to enhance energy efficiencies by deciding on optimal pump specifications, and optimizing internal coating & pump operational scheduling. Power consumption and green house gas emissions are being reduced through the increase of local waterworks revenue water. By enhancing the performance of multipurpose dam hydropower plants, K-water is contributing to increasing the supply of clean energy domestically and effectively countering climate change. Feasibility studies on the waterworks facility energy efficiency enhancement CDM projects were carried-out in 2008, and model projects were implemented in 2009. In 2010, K-water plans to receive verification of its model projects from a feasibility verification organizations, and in 2011, a registration registration from the UNFCCC will be requested (United Nations Framework Convention on Climate Change).

• Total Energy Reduction by Department

(Unit: TOE)



**I Energy Savings Implementation Plan & Performance I**

<p>General Management Sector</p>	<ul style="list-style-type: none"> <li>• Energy Expense Reduction through Equipment Improvements (Lighting Equipment)</li> <li>• Operational Efficiency through Lighting &amp; Air Equipment Improvements</li> <li>• Energy Reduction through Rational Utilization of Electrical Appliances</li> <li>• Energy Consumption Total Amount Policy Management &amp; Energy Reduction Target Management</li> </ul>
<p>Water Supply Sector</p>	<ul style="list-style-type: none"> <li>• Develop &amp; Operate an Electricity Charge Calculation Program</li> <li>• Revise Optimal Electricity Rate Contracts for each Project Site</li> <li>• Apply &amp; Improve High Efficient Equipment such as Improving Capacity of Transformers</li> </ul>
<p>Dam Sector</p>	<ul style="list-style-type: none"> <li>• Equipment Improvement to Maintain a Load Power Factor over 95%</li> <li>• Target Establishment &amp; Management of Dam Power Consumption Rate &amp; Savings Rate</li> <li>• Expanding the Applications of New &amp; renewable energies</li> </ul>



- Improve Waterworks Power Unit Cost (2008: 0.3182kWh/m<sup>3</sup> → 2009: 0.3176kWh/m<sup>3</sup>)
- Power Generation Sector Energy Reduction → 3,450kWh/m<sup>3</sup>

**Water Usage**

**Water Sources Affected by Water Intake**

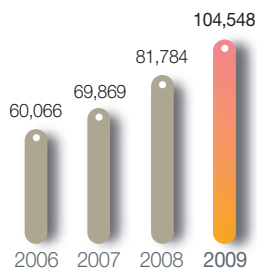
K-water initiated the Gyeongnam, Busan Area Multi-regional Waterworks Project to supply clean water to the Gyeongnam, Busan Nakdong River main stream area where water conditions are vulnerable. Initially K-water had plans to supply water by developing the Namkang Dam water intake level and river bank filtration water. However, due to concerns over increasing the intake level, plans to secure a water source through utilizing surplus Namkang Dam water and river bank filtration water was revised and a feasibility test was contracted-out. The Daap intake facility located in Gwangyang City, Jeonnam, supplies natural and industrial water to the Gwangyang Port area by intaking water from the Seomjin River. To minimize the effect on the environment and damage from sea winds, sufficient water from the rivers was secured and an environmental impact survey initiated. Recently, as the Seomjin River's river mouth is converting into a sea, changes are occurring in the ecological environment such as ocean organisms inhabiting the river mouth. Surveys were carried-out as to the cause of the phenomena. Multiple factors, in addition to the Seomjin River water intake were the cause. Causes include a drop in river bed due to rock extraction, increase in tide level due to landfill of Kwangyang Bay, and Dam construction upstream. Through local citizens' suggestions, K-water will initiate impact surveys on the damages caused to the fishing industry due to intake from Seomjin River and construction of Joan Dam. Continuous monitoring of the changes in environment will also be carried-out.

**Reusing & Recycling Water**

Recycled waste water (graywater) is used in restrooms and gardens at the head office. For customers using recycled waste water, a rate reduction (30% off of water rates) policy is applied to increase the use of recycled waste water and to establish a circulation-type society. In 2009, customers using recycled waste water increased by 28% compared to the previous year, resulting in a rate decrease of KRW 7.6 billion.

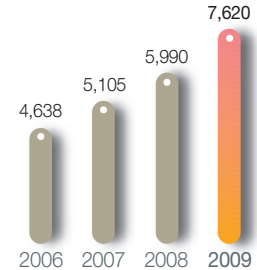
• Customer Recycled Waste Water Production Quantity

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



• Recycled Waste Water Rate Reduction Amount

(Unit: KRW Millions)



Please refer to page 95 for K-water's recycled waste water usage achievements.

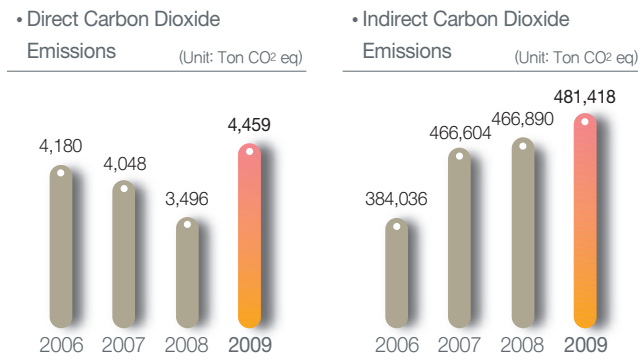
**Protection of Bio-diversity**

Diverse activities are being implemented to protect bio-diversity which includes designing, constructing & operating environment-friendly water resource facilities, creating bio-diversity preservation facilities & space, and preserving organism's habitational environment & natural cultural treasures. Detailed information related to bio-diversity identification, continuous environmental monitoring of management plans & project areas, and identification of species in danger of extinction, can be found on pages 50~51.

## Green House Gas Emissions

### Total Green House Gas Emissions

Total green house gas emissions reached 485,877 ton CO<sub>2</sub>, a 2.9% increase over the previous year. This was mainly due to the increase in power consumption stemming from the expansion of new projects (Gyeong-in Ara Waterway Business) and an increase in water supply. In 2009, direct green house gas emissions from the usage of diesel fuel and gas increased by 27.6% to 4,459 ton CO<sub>2</sub>, while indirect green house gas emissions from the use of electricity increased to 481,418 ton CO<sub>2</sub>, an increase of 2.7% from the previous year. In addition, indirect green house gas emissions from transportation of employees & executives to and from work, and business trips were 581,252 ton CO<sub>2</sub> in 2009.



### Green House Gas Reduction Project & Performance

Refer to page 31 of the main text for details regarding K-water's CDM projects & performance.

### Quantity of Ozone Layer Destroying Substance & Air Pollution Substance Emissions

There are no processes in the production of water that emits ozone layer destroying substances such as Freon gas. There could be potential leakages from cooling facilities that contain Freon gas. To prevent this from happening, regular safety inspections are carried-out on all cooling facilities. At the same time, there are no production processes that directly emit air pollution substances at any of K-water's project sites. However, there could be air pollution substances emitted while using oil to operate the project sites and facilities. To minimize this, by reflecting this into each department's environmental target, the departments implement diverse activities to reduce the consumption of kerosene.

### 2009 Air Pollution Discharge Status

(Unit: kg)

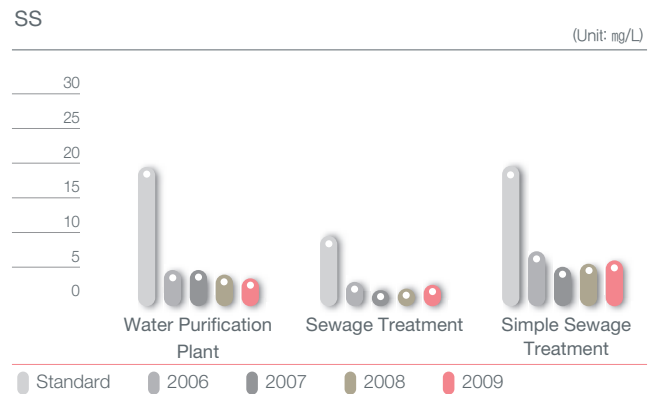
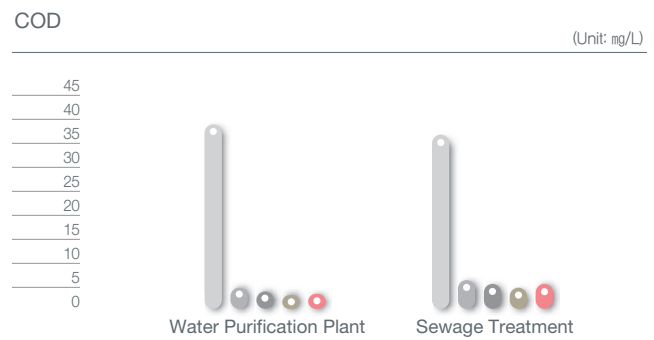
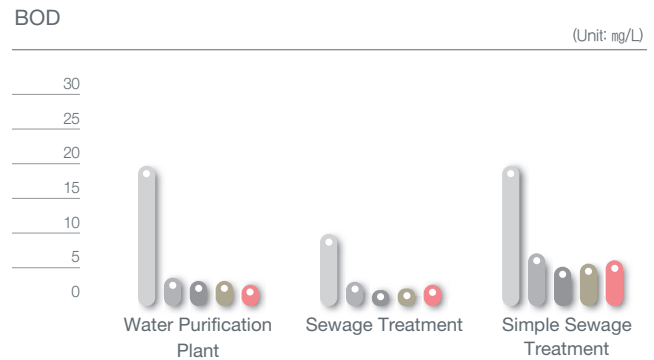
Particulate Matter	SO <sub>x</sub>	CO	HC	NO <sub>x</sub>
263	1,818	3,360	839	8,913

※ Ministry of Environment Announcement 2009-30, The Discharge Index of the partly revised policy towards the method of calculating the total automobile pollution substance discharge amount was applied.

## Total Waste Water Discharge Quantity & Water Quality

As the amount of discharged water from water purification plants and its quality directly affect the water quality of rivers and the ecological environment, K-water applies management standards that are stricter than legal standards. To minimize the impact on the ecological environment in the water discharge areas and preserve water quality in rivers, the quality of discharged water is continuously monitored by a water quality remote inspection system. By selecting discharged water quality as the waterworks project environmental

target, and as a core index of the environmental performance evaluation, K-water started reflecting the target and index in departmental evaluations starting in 2004.



### Water Purification Plant

In 2009, the average quality of discharged water from water purification plants were BOD 2.0mg/L, COD 4.3mg/L, SS 3.8mg/L, which was lower than the discharge tax levy standard of BOD 20mg/L, COD 40mg/L, SS 20mg/L 10%, 11%, 19%.

### Sewage Treatment Plants

As of the end of 2009, the average water quality of discharged water from the 18 sewage treatment plants were BOD 2.2mg/L, COD 7.2mg/L, SS 3.5mg/L, which was similar to the public sewage treatment facility discharge water quality standards of BOD 10mg/L, COD 40mg/L, SS 10mg/L 22%, 18%, 35%. To be at the forefront of improving discharged water quality, K-water has adopted and operates a self-developed Sewage Treatment Program.

**Simple Sewage Treatment Facilities**

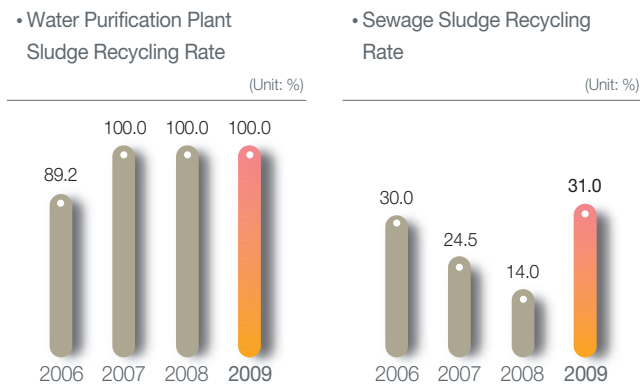
The average water quality of discharged water is BOD6.5mg/L,SS6.2mg/L, which is within the legal standards of BOD20mg/L, SS 20mg/L 32.5%, 31%.

**Discharging & Recycling Waste Products**

**Sludge from Waterworks & Sewage Treatment Systems**

In 2009, the amount of sludge produced from purifying 1 m<sup>3</sup> of water was approximately 58.1g. The total amount of sludge produced at water purification plants in one year was 90,717 tons, and 100% of the sludge was recycled and used as cement material, earth filling material and planting soil. Sludge produced at sewage treatment plants operated by K-water was 26,307 tons. From the total amount of sludge produced, the percentage of sludge recycled increased by 17% to 31% of total sludge, or 8,276 tons. The sludge was mostly used for planting soil, cement material and compost. The reason for the increase in sludge recycling in 2009 was mainly due to using the sludge produced from the Hwaensong District as land fill.

K-water will gradually increase the recycling rate of sludge by converting sludge into a resource and to prevent ocean disposals.



**Recycling Construction Waste**

By promoting the environment-friendly treatment and recycling of construction waste generated as a result of K-water's water resources business, K-water is contributing to the green preservation of the country, resource reductions and public welfare enhancement. The total construction waste generated in 2009 was 140,537 tons and from this 95.6% or 134,353 tons was used as road pavement material, material for creating green tracts of land through mounding and soil covering, recycled rock, and wood chips.

Going forward, K-water will minimize construction waste generation and create a resource recycling green society by "initiating designs for an environment that can coexist with nature" from the construction business planning stage, and "realizing a productive construction site through the recycling of construction waste" during the construction stage.

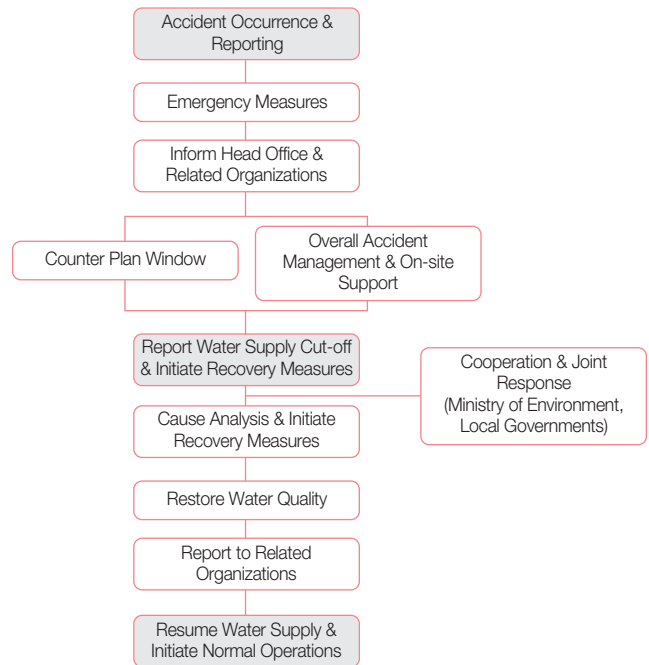
**Effects from Hazardous Material Spillage, Waste Material Treatment, Sewage Water**

**Hazardous Material Discharge Management**

Hazardous materials such as waste oil and chemical substances discharged from the project sites can have a serious effect on the surrounding environment, bio-diversity and health of local citizens. All hazardous substances from K-water's project sites are strictly treated according to related regulations. As of now, there have been no cases of accidents due to

any leakages of hazardous substances. However, to prepare for hazardous substance leakage accidents, K-water is enhancing its ability to take measures to counter potential accidents by establishing an accident manual and holding regular training activities.

**Hazardous Material Leakage Control System**



**Waste Material Discharge Management**

As a result of the London Dumping Convention (1996) banning the dumping of waste materials into the ocean, there was an amendment of enforcement regulations in the Maritime Pollution Prevention Law (Ministry of Maritime Affairs & Fisheries Regulations No. 330 on February 21, 2006). As a result, disposing sludge from purification plants into oceans have been banned as of 2007. Since 2006, all sludge generated from purification plants has been recycled, and no sludge is exported.

**Products & Services**

**Environmental Impact Reduction Activities & Performance**

K-water is continuously achieving environmental performance through a dynamic circulation process of P (Planning), D (Deed), C (Checking), and A (Amendment) that reflects the conditions of ISO14001. In 2009, 30 environmental targets in 30 categories were established. 99% of the targets were achieved.



2009 Environmental Management Performance

Category	Contents
Environment-friendly Development & Management	9 cases of Design for Environment (DfE)
	33 cases of Environmental Impact Assessments by Projects
	21 Cases of Environment-friendly Development
	2 Cases of Environment-friendly Management of Facilities
	76.2% Achieved in Management of Revenue Water at Local Waterworks
Supplying Clean Water	5 LCA Cases (Dukseo, Sungnam, Ilsan, Choongju, Boryung water Purification Plants)
	KRW 42.8 billion (5%) Environmental Investment
	Improvement in the Quality of Dam Water (Average COD 3mg/L)
	Improvement in the Dam watershed Area Sewage Treatment Rate (51% → 52%)
	Water Quality Improvement Level 64.8%, Settled Water Below 1NTU 99%
Production & Consumption of Environment-friendly Products	Alleviate Distrust towards Tap Water (Supplied 7,940 bottled waters, Disclosed Water Quality Real-time 171 facilities)
	Production of Hydropower Energy (1,453 GWh)
	Green Purchasing (KRW 9.3 billion)
	Reduction in the Cost of Chemicals for Purification of Water (KRW 6.22/m <sup>3</sup> - Chemical Unit Cost)
	Electricity Consumption at Project Sites (reduction of 3,450MWh)
Resource Savings & Recycling	Reduction in Oil Consumption (Diesel 76,319L, Kerosene 3,950L, LNG 210 Thousand m <sup>3</sup> )
	Reduction in Usage of Backwash Water at Water Purification Plant (1.4% of Clean Water Production)
	Reduction in food waste (discharge of food leftovers generated from head office 399kg/day)
	Improvement of Discharged Water Quality from Water Purification Plant (BOD 2.0mg/L, COD 4.3mg/L, SS 3.8mg/L)
	Control of Discharged Water Quality From Waste Water Treatment Facility (BOD 14mg/L, SS 11mg/L)
Reduction of Pollutant Discharge	Reduction in Discharge of Sludge From Water Purification Plants (Discharge of Sludge: 0.06kg/m <sup>3</sup> )
	Training for Water Quality Accidents (90 cases)
	Industrial Disaster Ratio : 0.3%
	Fines Paid for Violating Environmental Regulations 2 Cases
	Environmental Volunteer Activities 142 Times (625 hrs)
Environment, Safety, Health Management	Council (Sihwa, Daechungho) Activities, & Participation & Support of Various Events 18 Cases
	Support Water Resource Facility Tours (Water Tour 13,500 Visitors)
	Promoting Taking Care of Forests (area 29,000 ha, 1dam)
	Transparent Disclosure of Environmental Management Performance, Publishing the Sustainability Report & GRI Reporting Registration (A <sup>+</sup> )
	Development of Water Resources in Underdeveloped Countries (7 Overseas Projects/ KRW 333.3 billion)
Strengthening Cooperation with Civil Society	Patents Registered 39

Legal Compliance, Transportation, Environmental Accounting

Legal Compliance

No fines or cases of non-monetary sanctions were levied due to environmental regulation violations.

Environmental Effects from Transporting Employees & Executives

Results of the environmental effects analysis of employee & executive transportation and business trips showed that 1,303kg of air pollution, including SOx is being discharged. To minimize the environmental effects, car pooling and specific day driving policies are being initiated.

Air Pollution Materials Discharged during the Transporting of Employees & Executives

(Unit: kg)

Particulate Dust	SOx	CO	HC	NOx
12	85	1,010	5	191

※ Ministry of Environment Announcement 2009-30, The Discharge Index of the partly revised policy toward the method of calculating the total automobile pollution substance discharge amount was applied.

Environment Protection Expenditures & Investment Amount

For detailed information on environmental accounting, including environmental investments & environmental unit costs, please refer to page 43 of this report.

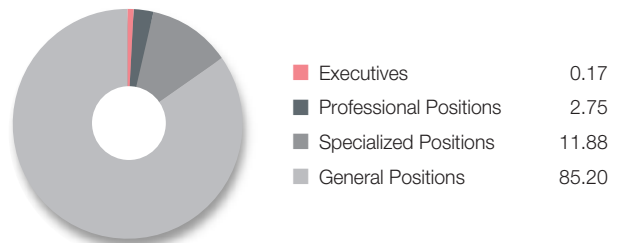
Labor

Employment Status

As of December 31, 2009, there were a total of 4,031 employees, including 7 executives at K-water. To enhance global competitiveness, departments with similar functions were integrated, while simplifying the organizational layer, resulting in the increase organizational efficiencies. To further enhance management efficiencies, 153 employees were reduced through honorary & voluntary retirement programs. However, to be able to carry-out the 4-River Restoration Project efficiently and properly, 104 new employees were hired in 2009.

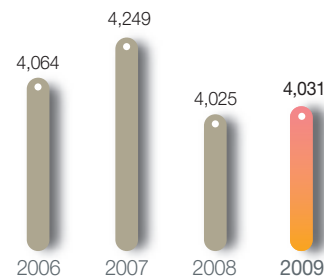
2009 Employees & Executives (Personnel)

(Unit: %)



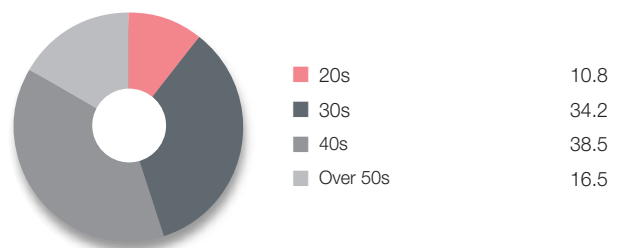
Employee & Executive Status (Personnel)

(Unit: Persons)



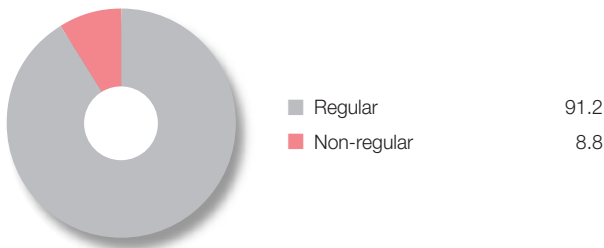
Number of Employees & Executives by Age Group (Personnel)

(Unit: %)



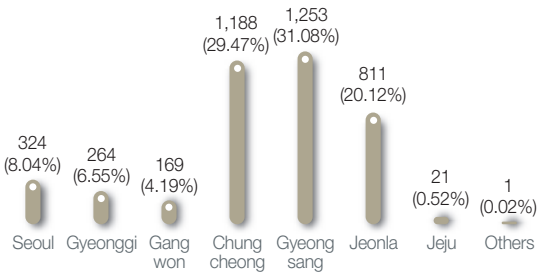
• Type of Employment (Regular, Non-regular Composition Ratio)

(Unit: %)



• Personnel Status by Region

(Unit: Personnel)

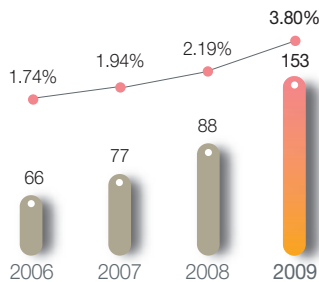


Employee Turnover Rate

The employee turnover rate in recent years has decreased. However due to honorary and voluntary retirements which have enhanced the efficiencies of public enterprises, the turnover rate in 2009 was 3.8% or 153 employees.

• Turnover Rate

(Unit: Personnel, %)



■ Retired Personnel —●— Turnover Rate

※ As of December 31, 2009: 4,031 Employees

Employee Welfare Policies

In addition to the legally guaranteed 4 major social insurance welfare policies for full-time employees, diverse welfare policies are being provided to increase productivity by helping stabilize living conditions, enhancing quality of life and providing incentives.

Category	Contents
Housing	• Home Purchase Loans
	• Company-owned Housing such as Dormitories
Education	• Tuition Support for Middle- and High School Students
	• Financial Aid for College Tuition
Health Management	• Head Office Child Day Care Center
	• Health Examination & Health Management Programs (Non-smoking & obesity clinics)
	• Head Office Medical Infirmary & On-site Safety / Health Personnel Designation Policy
Maternity Protection	• In-house Dentist and Oriental Medicine Clinic
	• Employee Mental Health Program (EAP)
Disaster	• Providing Breastfeeding Rooms and Female Employee Resting Area
Compensator	• Interim Workforce for Maternal & Child Care Leave Employees
Others	• Disaster Compensation Policy for Work-related Disasters
	• Support for Difficult-to-cure Diseases such as Cancer & Group Insurance Policy
	• Physical Training Center
	• Club Activity Support
	• Funeral Articles Support

Labor-Management Relations

In accordance to article 35 of the Labor Union & Labor Related Conciliation Law, the right to collective bargaining and to negotiate collective agreement is guarantee to all employees. The current labor union membership rate is 81.5%. Based on article 21 of the Collective Agreement (Responsibility to Notify), any changes made to labor conditions or articles of incorporation should be notified to each other without delay.

Workplace Safety & Health

The Labor-Management Joint Project Safety & Health Committee was replaced by a Joint Labor-Management Council, and is comprised of 8 members each from labor and management. The Council meets quarterly to discuss management issues. Through the Council, sufficient explanations on management issues are provided, and through mutual understanding, labor-management disputes are reduced, while achieving mutual benefits for both labor and management by enhancing productivity and welfare standards for employees. To ensure workplace health & safety, for project sites with over 100 employees, a joint labor-management Industrial Safety & Health Committee was created to discuss industrial safety & health issues within the workplace.

Safety & Health Issues amongst the Labor-Management Council Items

- Maternity Protection Policy Improvements
- Child Caring Support Policy Improvements
- Special Health Examinations for Employees Working in Hazardous Environments
- Head Office Medical Infirmary Operational Improvements

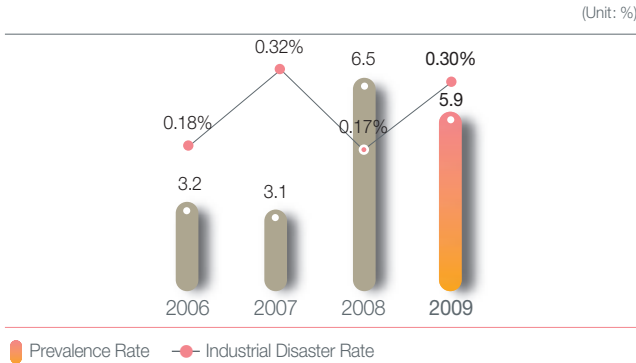
Diverse industrial safety & health educational programs are being carried-out, and on-site project safety management is being enhanced to prevent safety accidents. Safety accidents during sports events are being prevented, and a policy to reinstate disaster affected employees is being initiated. To discover diseases at an early stage, which is the purpose of health examinations, and to systematically manage employees with high risk of diseases, various measures are being initiated such as strict health examinations starting in 2009, non-smoking programs, obesity clinics and mental health programs (EAP). By achieving a good performance through these measures, the disease prevalence rate dropped in 2009.

Injuries, Occupational Disease, Days Lost, Work-related Disaster Rate & Prevalence Rate in 2009

(Unit: kg)

Injuries	Injury Rate	Occupational Disease	Days Lost	Days Lost Ratio
15 Cases	0.30%	0 Cases	504 Days	9.96%

Industrial Disaster Rate & Prevalence Rate



■ Prevalence Rate    ● Industrial Disaster Rate

※ The Industrial Disaster Rate is a Sum of the Total Disasters after Unifying the Business Registration Numbers.

Disease Prevention & Risk Management Program for Employees & Local Citizens

K-water operates an employee counseling support policy for employees and their families, and a "Filial Piety Sharing Welfare Center" to enhance the welfare of senior citizens

Employee Assistance Plan (EAP)

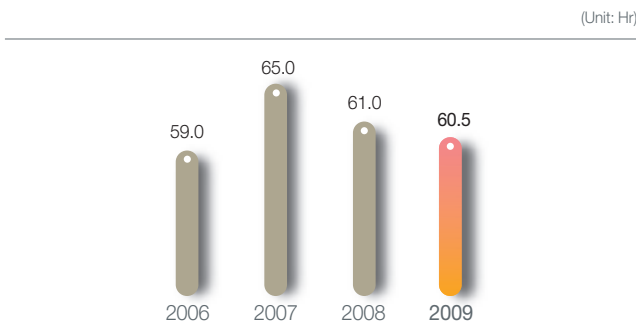
The EAP policy was adopted and is being utilized to prevent and alleviate stress generated from various sources such as not being able to adapt to the organization or excessive work. Details can be found on page 56 of this report.

Filial Piety Sharing Welfare Center

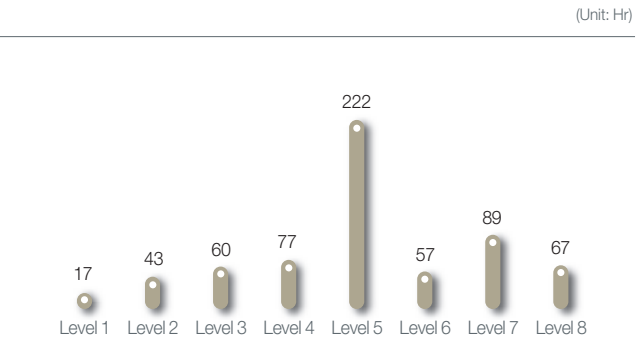
By selecting ways to solve problems related to the welfare of senior citizens living in the areas adjacent to dams as an activity theme, a "Filial Piety Sharing Welfare Center" was first established adjacent to the Hapcheon Dam in 2006. With the established of the Choongju Dam "Filial Piety Sharing Welfare Center" in 2008, there are currently 7 centers country-wide operated by K-water. Going forward, through the active participation of local governments, K-water will continue to try and solve welfare problems for senior citizens living in the areas adjacent to dams and to construct additional filial piety centers to enhance the local welfare.

Education & Training

Annual Average Training Hours per Employee



Annual Average Training Hours per Person for Each Level

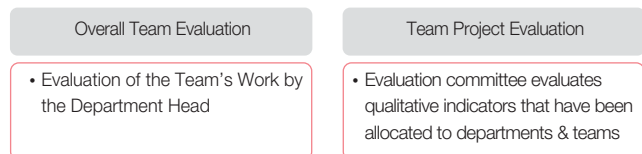


Evergreen Program for Retirees

To effectively prepare employees who are planning for retirement, an "Evergreen Program" is being implemented. K-water is trying to provide a 2nd opportunity to the retirees by providing training course related to change management & personal finances, real estate, and start-ups.

Target for Performance Evaluation

All employees & executives receive performance evaluations on a regular basis. For executives (Vice President), based on the performance & management contracts signed with the President, compensations are decided based on performance. As for employees below division heads, the department's management performance and evaluation are reflected in their personnel management and compensation. The evaluation items are segmented into a joint index and quantifiable and non-quantifiable indexes. The results are then divided into department evaluation, overall team evaluation, and team project evaluation, which are then used in personnel evaluation. Divisional, departmental and team evaluations also affect the calculation of compensations.

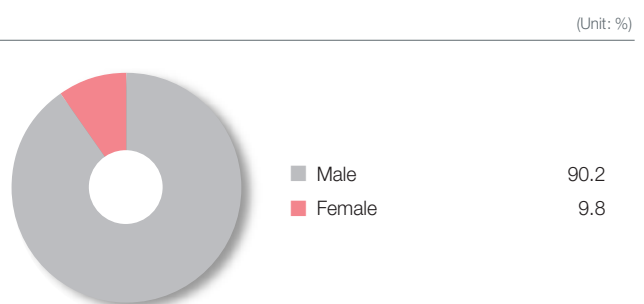


Diverse & Equal Opportunities

Employee & Executive Composition

As of 2009, the ratio of male and female employees stood at 90.2% and 9.8%. Although the ratio of female employees is relatively low, starting in 2003, K-water established its quota system for female. As a result, as of the end of December 2009, there were a total of 24 female employees. From the 393, there were a total of 24 female employees in managerial positions: 2 directors (level 2) & 22 managers (level 3).

Employee Composition



### Base Salary Comparison

If the positions and employment dates are the same, similar base salaries are paid to male and female employees.

## Human Rights

### Investment & Procurement Practices

In the preamble of K-water's Ethical Principals, in addition to clearly stating the principles of respect for human rights, a clause is included that states that individual diversity and dignity are respected. It is stipulated so that all management activities are carried-out based on the principles of human respect.

### Human Rights Review on Investment Agreements

Since the overseas projects that K-water is initiating are small investment projects that are mostly Official Development Assistance (ODA) projects and engineering (Survey & Design, Construction Inspection) technology export projects, the projects do not include a clause related to human rights protection. However, K-water will consider including the human rights protection clause in future direct investment projects and its decision-making process.

### Human Rights Review for Contractors

By eliminating unjust firms by establishing contract review standards when transacting with K-water such as service contracts, K-water is able to substitute human rights reviews with an overall review with includes financial soundness & corporate credit rating, quality, and delivery performance. Especially in pre-qualification (PQ) reviews for large construction biddings, reviews in the sectors of human rights and labor, including disaster rates, have been strengthened. Firms with low disaster rates are given preference. In addition, to protect the rights of one-time construction laborers, social insurance rates (Health Insurance, National Pension) are reflected in construction costs to settle insurance payments once construction is completed. Through these efforts, K-water is trying to increase social insurance payment rates by contractors.

### Human Rights Training

Currently, human rights training are concentrated on protecting the rights of minority employees such as the corporate-wide sexual harassment prevention training and personal information protection training. However, K-water plans to expand the contents of human rights training. For more detail, please refer to page 56 of this report.

### Prohibiting Anti-discrimination

In K-water's Ethical Principles, it is clearly stated that individual personalities are to be respected, and that there should not be any discriminatory treatment. Through this, K-water is abiding by the ILO policies (No. 111, "Convention on Discriminatory Treatment of Employment & Work"). To protect the rights of minority employees such as the disabled, female, and contract employees, various measures are being implemented, which include the expansion of employment opportunities for minorities, the reduction of working hours for child caring, and securing interim workers in case of child caring or maternity leave. A Gender Equality Department was created in the labor union to protect the rights of female workers. For further detail, please refer to page 56 of this report.

### Freedom to Form Organizations & Collective Bargaining

Based on the 3 Labor Standard principles of the 10 principles of the Global Compact, the right to form organizations in collective agreements and collective bargaining is guaranteed. There are no grounds for infringing on these rights in any of the project sites.

### Eradicating Child Labor

K-water prohibits the use of child labor at all project sites. There have been no cases of using child labor in any of K-water's project sites. To prevent child labor, based on K-water's youth employment regulation, anyone under the age of 15, or students in middle-school under the age of 18 are prohibited from employment. All new employees are required to provide documents proving their age. Through these efforts, K-water is faithfully abiding by the 5th Labor Standard principle from the 10 Global Compact principles.

### Eradicating Forced Labor

K-water is abiding by Korea's Labor Laws and ILO policies (No. 105, "Convention on Eliminating Forced Labor") to prohibit forced labor. K-water is faithfully abiding by the 4th Labor Standard principle from the 10 Global Compact principles.

### Security Practices

To protect individual rights and to prevent labor productivity from declining at the project sites, a cyber training course is held for 1 member from each department. That person has the responsibility to disseminate the knowledge gained from the cyber training program to his/her department. In addition, to protect against personal information being disclosed, K-water has replaced personal registration numbers with i-Pin (Internet Personal Identification Number). K-water is continuously searching for ways to enhance security measures. For more details, please refer to page 57 of this report.

### Rights of Local Residents

As an SOC investment related public corporation that constructs dams, waterworks, and industrial complexes, there are inadvertent disputes with local residents in the process of implementing projects. Most are lawsuits related to property compensations. Out of the 13 lawsuit cases in 2009, 1 case has been solved, while 12 others are still in legal proceedings. Despite the proceedings, K-water is trying to protect the local citizens that have to leave their base of life, while expediently solving these cases. As part of a support package to provide support to local citizens that have had their base of life submerged after construction, K-water is providing diverse benefits to the local citizens through the various support projects to areas adjacent to dams.



# Society

## Influence on Local Communities

### Initiating Environmental Assessments for Each Project Stage & Conducting Local Environmental Management

By taking into consideration the environmental & social effects in each stage of a project, K-water is carrying-out sustainable water resource development. From the administrative planning stage of a K-water water resource project, suggestions & opinions from local citizens are collected. At the same time, a local council is established through the participation of local citizens and project related parties to alleviate various problems that might affect the local community. In addition, by participating in overseas water resource development projects, K-water is contributing to the sustainable development of those countries where the projects are being carried-out, by initiating environmental evaluations to implement sustainable development from the planning stage.

#### • Strategic Environment Assessment

As a strategic decision-making support measure taking into considering administration planning, which is the first stage in each development project, to environmental, economic and social effects, the environmental feasibility of a plan must be secured that contributes to an environmentally rational dam candidate location selection process achieved through strategic environment.

#### • Pre-environmental Review System

As a policy to prevent any environmental impacts through the establishment of environmentally desirable administrative plans and development plans by reviewing the environmental effects and appropriateness of the selected development site based on administrative plans, which is the higher ranking stage in development projects, and development plans, the pre-environmental review helps in selecting an environment-friendly site when establishing basic plans for the construction of dams. When deciding on national projects such as the Youngju Multipurpose Dam and Bohyunsan Multipurpose Dam basic construction plans in 2009, a pre-environmental review was initiated. The review helped in decision-making by taking into consideration economical and technological factors, including environmental factors.

#### • Environmental Impacts Assessment

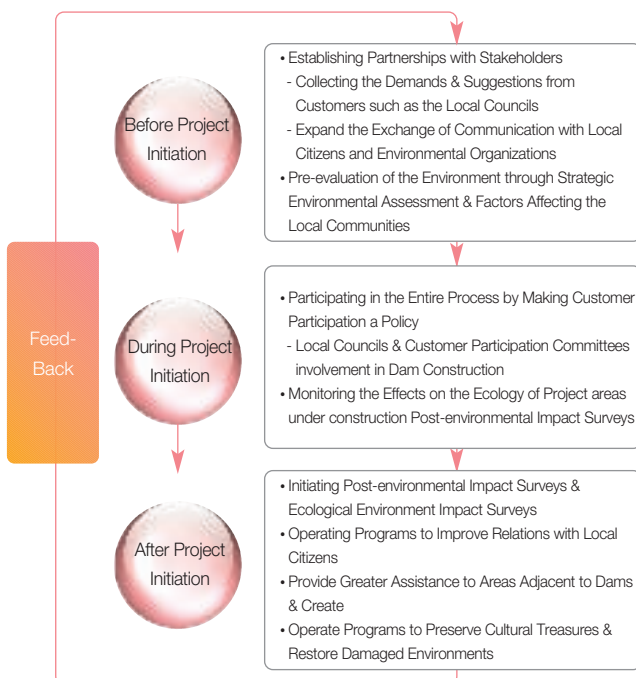
As a policy to minimize any environmental impacts by projecting & evaluating the effects on the environment from the actual esigning stage of a development project, and by identifying methods to reduce the effects on the environment, K-water is trying to protect the local environment by searching for appropriate reduction methods through an environmental impact assessment when establishing actual plans for dam construction. In 2009, an environmental impact assessment was carried-out on large scale national projects such as the Youngju Multipurpose Dam and the Gyeong-in Ara Waterway Business. As a result, environmental impact reduction measures were established through the creation of ecological wetlands, fish ways and canals for desalinization.

#### • Post Environmental Audit

Through the environmental impact assessment, an environmental audit is carried-out from the start of construction at the 5th year of construction on the construction sites to make sure that agreements are strictly adhered to and any potential environmental impacts from construction and operations are prevented. Measures were established to minimize the environmental impacts by initiating post environmental audits on 16 projects including the Gunwi Multipurpose Dam, 4-River Restoration Business, Sihwa River Hydropower Plant, etc.

#### • Environment Restoration & Cultural Treasure Preservation

Efforts are being taken to restore the local environment by creating environment-friendly facilities such as eco-corridors, fish ways and substitute habitats to prevent changes in the environment from water resource development projects, and to secure ecological soundness. As can be seen through the Jangheung Dam Seonsamun Cultural Park and the Daegok Dam Cultural Exhibition Hall construction, K-water is placing its effort on preserving local cultural assets that can be potentially submerged or damaged.



## Preventing Corruption

### Researching & Implementng Voluntary Improvement Measures in Sectors which are Vulnerable to Corruption

Work transparency was been enhanced and anti-corruption internal controls were strengthened by identifying potentially vulnerable areas vulnerable in the face of corruption and by proposing measures to voluntary improve policies. 19 measures out of the 43 policy improvement implementation measures in 6 sectors were selected as excellent case measures by the Anti-Corruption & Civil Rights Commission. By reviewing the policy improvement implementation status quarterly, and regularly providing feedback on implementation performances, policy improvement measures are strictly reviewed to see whether they have been implemented. As a result, 100% of the measures have been implemented.

### Achieved 1st Place for Improvements based on Overall Clean Index Evaluation Results

K-water received 1st place in the overall clean index improvement status through various measures, including i) developing & operating a clean index assessment model for senior positions, ii) revising clean ethical regulations & strengthening punishment standards, iii) initiating a 3-dimensional concentrated inspection on vulnerable sectors, iv) strengthening clean training for employees & executives (increased by 61% over the previous year to 15,958 people), v) establishing clean portals to increase the information flow between parties, vi) creating a clean activity differential compensation structure, vii) developing & operating a smart-type regular audit system, and viii) improving vulnerable work areas based on the diagnosis of corruption risks (BPR).

**Selected as an Excellent Anti-Corruption Policy Organization the 4th Consecutive Years by the Anti-Corruption & Civil Rights Commission of Korea**

With the strong will of the CEO towards transparent management and active participation of the employees & executives, among 104 organizations & institutions (39 administrative institutions, 26 local governments, 16 offices of education, and 23 public enterprises), K-water received a "Very Good" ranking for the 4th consecutive years in 2009 by the Anti-Corruption & Civil Rights Commission of Korea after an anti-corruption policy review (Only 6 organizations have had the same honor). K-water also received the Prime Minister's Award in the government sponsored "Citizens Reporting" sector.

**Ethical Training**

Ethical management was selected as one of the 3 major management strategies. Diverse communication channels are utilized to emphasize the importance of implementing ethical management. A foundation was established to implement transparent and equitable projects by reorganizing K-water's ethical management system. 15,958 employees & executives participated in various training programs, including the nation-wide training program as part of ethical training, general training program with ethical training as a requirement, and special work function trainings.

**Participation in Public Policy**

K-waterworks very closely with related government organizations such as the Ministry of Land, Transport & Maritime Affairs and Ministry of Environment when establishing water resource related policies and enacting / revising related laws. Since it is prohibited for legal entities to provide political donations, providing political donations or making donations in-kind under its name is prohibited by K-water.

**Anti-competitive Behavior & Abiding Laws**

In accordance to the antitrust policies and fair-trade laws, K-water observes fair trade. K-water receives regular audits from the Fair Trade Commission to search for any unlawful competitive behaviors or antitrust activities. There have been no items that have been pointed out over the past 4 years, and K-water has in no way been levied fines or non-monetary sanctions due to violations of laws or regulations.

**Product Responsibility**

Through the Customer Charter, based on a management philosophy that believes the customer's value is K-water's value, K-water is practicing a customer-oriented management system to get a step closer to customers.

**Observing Customer Health & Safety**

By expanding the waterworks Life-cycle Assessment (LCA) and the acquisition of the carbon labeling certification to all K-water's project sites, safety and quality of water has improved. Since 2003, targeted towards all multi-regional purification plants, K-water has been operating a water quality rating system internally on 14 items, including turbidity, residual chlorine, taste, smell and disinfection by-products. The evaluation standard that K-water applies is stricter than legal standards. In accordance to the internal "Service Implementation Standards," the frequency of cases of nonconformity water

quality standards is managed by K-water. There have been no cases of violations in 2009.

**Product & Service Labeling**

To satisfy the diverse needs of customers, customers have been segmented into groups, and customized services are provided to customers. A monitoring and feedback system has been established to analyze customer satisfaction. There have been no product and service labeling related regulations that have been violated. For detailed information such as customer satisfaction level assessments, please refer to Customer Satisfaction Management on pages 22~23.

**Marketing Communications**

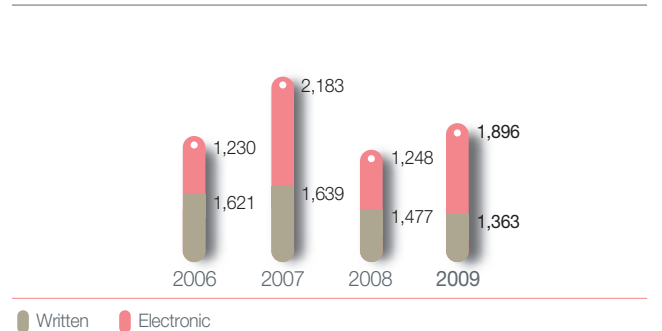
Efforts are taken to provide accurate information to customers as not to effect their judgement. Related regulations and corporate-wide work principles are observed, including marketing communications such as advertisements, promotions and sponsorships. For all advertisements, such as property sales advertisements, an internal selection standard is applied in selecting the advertisement medium to ensure impartiality. K-water observes the review regulations and laws of the Korea Advertising Review Board. There have been no cases of any violations related to marketing.

**Protecting Customer's Personal Information & Observing Supply-related Regulations**

Customers' personal information is protected by establishing customer & data base security policies such as Access Restrictions, Authorization Controls and Post Audits. In relation to protecting customer personal information, there have been no cases of complaints by any customers. To expediently process civil complaints, K-water applied stricter internal standards, resulting in K-water achieving a timely processing rate of 99%. Customer complaints are being minimized by observing service implementation targets that have been detailed by work sectors through the revision and implementation of the Customer Charter. K-water is striving to provide answers to concerned customers in a timely manner by operating a dissatisfaction receipt window that is open and accessible all times on K-water's homepage (Customer's Voice, Bulletin Board). The dissatisfaction items received are utilized as a precious resource to identify management improvement projects. There have been no fines paid as a result of violations of laws and regulations related to products and services. However, due to large scale national projects, such as the 4-River Restoration Business, civil complaints have gone up in 2009 as compared to the previous year.

• Number of Civil Complaint Cases

(Unit: Cases)



# Financial Performance

Although the supply of water has increased and revenues from new projects such as local waterworks projects have increased, overall revenues decreased by 1.9% to KRW 2,005.4 billion due to the slowdown in the power generation performance as a result of rain water shortages. With a freeze in water rates for 5 consecutive years, the portion related to the cost of sales increased, while net income decreased by 41.2% as compared to that of the previous year to 81.6 billion KRW. However, growth potential and profitability enhancement opportunities are expected in 2010 with the strengthening of competitiveness through increased investments in core technology sectors, and through greater focus on new growth engines.



## International Credit Rating

Moody's	A1
S&P	A

## Statement of financial position

As of December 31, 2009 and 2008

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

	2009(₩)	2008(₩)	2009(\$)	2008(\$)
<b>[ ASSET ]</b>				
I. Current assets				
1. Cash and cash equivalents	104,205	30,423	82,867	24,193
2. Short-term financial instruments		8,000		6,362
3. Trade accounts and notes receivable, less allowance for doubtful accounts of ₩556,175 (₩486,790 in 2008)	294,909	286,955	234,520	228,195
4. Other accounts receivable, less an allowance for doubtful accounts of ₩15,722,317 (₩2,561,192 in 2008)	6,578	9,205	5,231	7,320
5. Inventories including land lots held for sale of ₩50,118,463 (₩22,293,981 in 2008)	58,303	29,392	46,364	23,373
6. Accrued income	4,053	3,271	3,223	2,601
7. Advance payments	27,199	92,161	21,629	73,289
8. Prepaid expenses	4,667	3,722	3,711	2,960
9. Other current assets	32	43	26	35
<b>[ Total current assets ]</b>	<b>499,946</b>	<b>463,172</b>	<b>397,572</b>	<b>368,327</b>
II. Non-current assets:				
1. Long-term financial instruments	13,408	10,894	10,663	8,664
2. Long-term land investment	1,488,930	1,168,843	1,184,040	929,497
3. Available-for-sale securities	4,324	4,219	3,438	3,355
4. Equity method investments	8,482	5,171	6,746	4,112
5. Long-term loans receivable	17,319	13,750	13,773	10,934
6. Derivative assets	176,091	237,703	140,033	189,028
7. Other investments	3,591	2,375	2,856	1,889
8. Property, plant and equipment	2,903,246	2,483,900	2,308,744	1,975,268
9. Intangible assets	7,687,891	7,234,120	6,113,631	5,752,779
10. Long-term trade accounts receivable	363,274	255,228	288,886	202,965
11. Long-term guarantee deposits	110,567	102,360	87,926	81,399
<b>[ Total non-current assets ]</b>	<b>12,777,124</b>	<b>11,518,562</b>	<b>10,160,735</b>	<b>9,159,891</b>
<b>[ Total assets ]</b>	<b>13,277,070</b>	<b>11,981,734</b>	<b>10,558,306</b>	<b>9,528,218</b>
<b>[ LIABILITIES AND EQUITY ]</b>				
I. Current liabilities:				
1. Trade accounts and notes payable	7,143	6,224	5,680	4,949
2. Other accounts payable	119,074	80,957	94,691	64,380
3. Advances received	262,175	257,351	208,489	204,653
4. Withholdings	22,274	19,847	17,713	15,783
5. Accrued expenses	16,593	8,783	13,195	6,984
6. Income taxes payable	3,940	20,250	3,133	16,103
7. Unpaid dividends	80	59	64	47
8. Current portion of bonds and long-term debt	33,454	29,336	26,603	23,329
9. Unearned revenue	45	65	36	51
10. Current portion of deferred income tax liabilities	1,402	6,997	1,115	5,565
11. Other current liabilities	6,372	6,373	5,067	5,068
<b>[ Total current liabilities ]</b>	<b>472,552</b>	<b>436,241</b>	<b>375,787</b>	<b>346,912</b>

(Continued)

Unit: In Millions of Korean Won &amp; in Thousands of U.S. Dollar

	2009(₩)	2008(₩)	2009(\$)	2008(\$)
II. Non-current liabilities				
1. Bonds	1,937,557	950,842	1,540,801	756,136
2. Long-term borrowings	382,763	416,216	304,384	330,987
3. Severance and retirement benefits, net	166,200	156,753	132,167	124,654
4. Derivative liabilities	21,663	-	17,227	-
5. Deferred income tax liabilities	808	2,235	642	1,777
6. Provisions	14,097	-	11,210	-
<b>[ Total non-current liabilities ]</b>	<b>2,523,087</b>	<b>1,526,045</b>	<b>2,006,431</b>	<b>1,213,555</b>
<b>[ Total liabilities ]</b>	<b>2,995,639</b>	<b>1,962,287</b>	<b>2,382,218</b>	<b>1,560,467</b>
III. Equity:				
1. Paid-in capital	6,493,585	6,305,441	5,163,885	5,014,267
2. Capital surplus :	-	-	-	-
- Asset revaluation surplus	1,449,019	1,449,019	1,152,301	1,152,301
- Others	2,360	2,360	1,877	1,877
	<b>1,451,379</b>	<b>1,451,379</b>	<b>1,154,178</b>	<b>1,154,178</b>
3. Retained earnings	-	-	-	-
- Legal reserve	623,641	591,315	495,937	470,231
- Reserve for business expansion	1,545,710	1,440,903	1,229,193	1,145,848
- Reserve for investment in social overhead capital	49,158	72,016	39,092	57,269
- Unappropriated retained earnings	81,576	138,774	64,871	110,357
	<b>2,300,085</b>	<b>2,243,008</b>	<b>1,829,093</b>	<b>1,783,704</b>
	-	-	-	-
4. Capital adjustments-stock issuance cost	(570)	(341)	(453)	(271)
5. Accumulated other comprehensive income	-	-	-	-
- Gain on valuation of derivative financial instruments	36,951	19,960	29,385	15,873
<b>[ Total equity ]</b>	<b>10,281,431</b>	<b>10,019,448</b>	<b>8,176,088</b>	<b>7,967,752</b>
<b>[ Total liabilities and equity ]</b>	<b>13,277,070</b>	<b>11,981,734</b>	<b>10,558,306</b>	<b>9,528,218</b>

## Statements of income

Years ended December 31, 2009 and 2008

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

	2009(₩)	2008(₩)	2009(\$)	2008(\$)
I. Revenues				
1. Land development and lotting-out operations	222,714	184,065	177,108	146,374
2. Construction operations	497,096	531,260	395,305	422,473
3. Utilities management operations	1,206,486	1,241,335	959,432	987,145
4. Other operations	79,088	87,873	62,893	69,879
	<b>2,005,384</b>	<b>2,044,533</b>	<b>1,594,738</b>	<b>1,625,871</b>
II. Cost of sales:				
1. Land development and lotting-out operations	194,004	177,880	154,277	141,455
2. Construction operations	497,195	530,524	395,383	421,888
3. Utilities management operations	1,003,722	963,038	798,188	765,836
4. Other operations	87,553	89,373	69,624	71,072
	<b>1,782,473</b>	<b>1,760,815</b>	<b>1,417,473</b>	<b>1,400,250</b>
III. Gross profit	222,911	283,718	177,265	225,621
IV. Selling and administrative expenses	93,371	98,492	74,251	78,324
V. Operating income	129,540	185,226	103,014	147,297
VI. Other income (expenses):				
1. Interest income	8,863	16,758	7,048	13,327
2. Interest expense	(33,164)	(26,898)	(26,373)	(21,390)
3. Rental income	754	787	600	626
4. Other bad debt expense	(13,295)	(10,572)	-	-
5. Loss on foreign currency translation, net	(1) (1)	-	-	-
6. Gain (loss) on foreign currency transactions, net	105,058	(221,863)	83,545	(176,432)
7. Reversal of allowance for doubtful accounts	-	308	-	245
8. Donations	(1,451)	(1,488)	(1,154)	(1,183)
9. Equity in earnings (loss) of equity method investment, net	(69) 605 (55) 481	-	-	-
10. Gain on disposal of property, plant and equipment, net	4,653	460	3,701	366
11. Impairment loss on property, plant and equipment	-	-	-	-
12. Gain (loss) on valuation of derivative financial instruments, net	(105,058)	221,863	(83,545)	176,432
13. Income from collections of indemnities	12,394	3,399	9,856	2,703
14. Others	(16,309)	3,361	(12,969)	2,673
	<b>(37,623)</b>	<b>(2,710)</b>	<b>(29,919)</b>	<b>(2,155)</b>
<b>Income before income taxes</b>	<b>91,917</b>	<b>182,516</b>	<b>73,095</b>	<b>145,142</b>
<b>Provision for income taxes</b>	<b>10,341</b>	<b>43,743</b>	<b>8,224</b>	<b>34,786</b>
<b>Net income</b>	<b>81,576</b>	<b>138,774</b>	<b>64,871</b>	<b>110,357</b>

## Statements of appropriations of retained earnings

Years ended December 31, 2009 and 2008

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

	2009(₩)	2008(₩)	2009(\$)	2008(\$)
I. Retained earnings before appropriations:				
1. Unappropriated retained earnings carried forward from the prior year	-	-	-	-
2. Net income	81,576	138,774	64,871	110,357
	<b>81,576</b>	<b>138,774</b>	<b>64,871</b>	<b>110,357</b>
II. Transfer from other reserves	-	-	-	-
1. Investment in social overhead capital reserve	23,625	22,858	18,787	18,177
	<b>105,201</b>	<b>161,631</b>	<b>83,659</b>	<b>128,534</b>
III. Appropriations (2009 - proposed)	-	-	-	-
1. Legal reserve	21,040	32,326	16,732	25,707
2. Reserve for business expansion	71,274	104,806	56,679	83,345
3. Stock issuance costs	244	223	194	177
4. Cash dividends	12,643	24,276	10,054	19,305
	<b>105,201</b>	<b>161,631</b>	<b>83,659</b>	<b>128,534</b>
Unappropriated retained earnings to be carried forward to the next year	-	-	-	-

## Statements of changes in equity

Years ended December 31, 2009 and 2008

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

In Millions of Korean Won	Paid-in capital	Capital surplus	Capital adjustments	Accumulated other comprehensive income(loss)	Retained earnings	Total
<b>As of January 1, 2008</b>	6,274,901	1,451,379	(737)	11,947	2,130,807	9,868,298
Dividends	-	-	-	-	(26,104)	(26,104)
Amortization of stock issuance cost	-	-	469	-	(469)	-
Increase in paid-in capital	30,540	-	(73)	-	-	30,467
Net income	-	-	-	-	138,774	138,774
Gain on valuation of derivative instruments, net	-	-	-	8,013	-	8,013
<b>As of December 31, 2008</b>	<b>6,305,441</b>	<b>1,451,379</b>	<b>(341)</b>	<b>19,960</b>	<b>2,243,008</b>	<b>10,019,448</b>
<b>As of January 1, 2009</b>	6,305,441	1,451,379	(341)	19,960	2,243,008	10,019,448
Dividends	-	-	-	-	(24,276)	(24,276)
Amortization of stock issuance cost	-	-	223	-	(223)	-
Increase in paid-in capital	188,144	-	(452)	-	-	187,693
Net income	-	-	-	-	81,576	81,576
Gain on valuation of derivative instruments, net	-	-	-	16,991	-	16,991
<b>As of December 31, 2009</b>	<b>6,493,585</b>	<b>1,451,379</b>	<b>(570)</b>	<b>36,951</b>	<b>2,300,085</b>	<b>10,281,431</b>
<b>In Thousands of U.S. Dollar</b>						
<b>As of January 1, 2008</b>	4,989,981	1,154,178	(586)	9,501	1,694,479	7,847,553
Dividends	-	-	-	-	(20,758)	(20,758)
Amortization of stock issuance cost	-	-	373	-	(373)	-
Increase in paid-in capital	24,286	-	(58)	-	-	24,228
Net income	-	-	-	-	110,357	110,357
Gain on valuation of derivative instruments, net	-	-	-	6,372	-	6,372
<b>As of December 31, 2008</b>	<b>5,014,267</b>	<b>1,154,178</b>	<b>(271)</b>	<b>15,873</b>	<b>1,783,704</b>	<b>7,967,752</b>
<b>As of January 1, 2009</b>	5,014,267	1,154,178	(271)	15,873	1,783,704	7,967,752
Dividends	-	-	-	-	(19,305)	(19,305)
Amortization of stock issuance cost	-	-	177	-	(177)	-
Increase in paid-in capital	149,618	-	(359)	-	-	149,258
Net income	-	-	-	-	64,871	64,871
Gain on valuation of derivative instruments, net	-	-	-	13,512	-	13,512
<b>As of December 31, 2009</b>	<b>5,163,885</b>	<b>1,154,178</b>	<b>(453)</b>	<b>(1)</b>	<b>1,829,093</b>	<b>8,176,088</b>

## Statements of cash flows

Years ended December 31, 2009 and 2008

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

	2009(₩)	2008(₩)	2009(\$)	2008(\$)
I. Operating activities:				
1. Net income	81,576	138,774	64,871	110,357
2. Adjustments to reconcile net income to net cash provided by operating activities:	-	-		
1) Provision for severance and retirement benefits	23,002	30,821	18,292	24,510
2) Depreciation and amortization	494,201	464,429	393,003	369,328
3) Bad debt written off	13,364	-	10,627	-
4) Amortization of discount on bonds	1,866	416	1,484	330
5) Loss on foreign currency transactions, net	-	-		
6) Loss (gain) on foreign currency translation, net	(105,058)	221,863	(83,545)	176,432
7) Reversal of allowance for doubtful accounts	(308)	-	(245)	
8) Provisions	14,097	11,210	-	
9) Donations	190	-	151	
10) Equity in loss (earnings) of equity method investments, net	69	(605)	55	(481)
11) Gain on disposal of property, plant and equipment, net	(4,653)	(460)	(3,701)	(366)
12) Impairment loss on property, plant and equipment	-	-		
13) Loss (gain) on valuation of derivative financial instruments, net	105,058	(221,863)	83,545	(176,432)
14) Others, net	443	20	352	16
15) Trade accounts receivable	(116,069)	(186,371)	(92,302)	(148,207)
16) Inventories and long-term land investment	(348,998)	(61,661)	(277,533)	(49,035)
17) Other accounts receivable	2,702	(8,601)	2,149	(6,840)
18) Accrued income	(782)	(441)	(622)	(350)
19) Advance payments	64,962	(19,385)	51,659	(15,415)
20) Prepaid expenses	(945)	(2,611)	(752)	(2,076)
21) Other current assets	11	(10)	9	(8)
22) Trade accounts payable	919	(43)	731	(34)
23) Other accounts payable	38,117	(2,611)	30,312	(2,076)
24) Advances from customers	4,824	(11,786)	3,836	(9,373)
25) Withholdings	2,427	(631)	1,930	(502)
26) Accrued expenses	7,810	2,515	6,211	2,000
27) Income taxes payable	(16,310)	(13,147)	(12,970)	(10,455)
28) Deferred income tax liabilities	(11,815)	(8,969)	(9,396)	(7,132)
29) Unearned revenue	(20)	32	(16)	25
30) Other current liabilities	(1)	220	(1)	175
31) Payment of severance and retirement benefits	(13,555)	(3,466)	(10,779)	(2,757)
<b>[ Total adjustments ]</b>	<b>155,666</b>	<b>177,537</b>	<b>123,790</b>	<b>141,182</b>
<b>[ Net cash provided by operating activities ]</b>	<b>237,241</b>	<b>316,310</b>	<b>188,661</b>	<b>251,539</b>

(Continued)

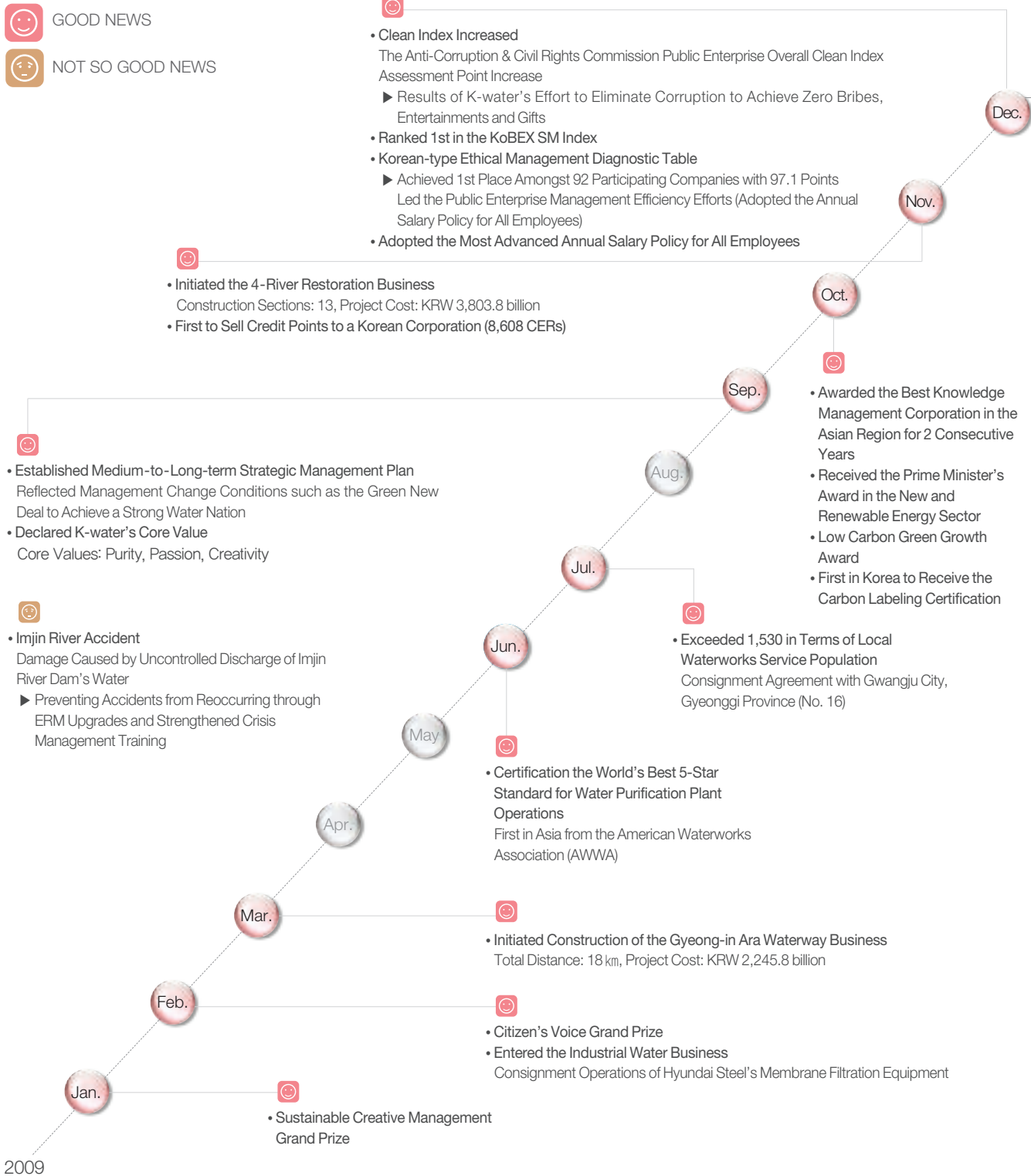


Unit: In Millions of Korean Won &amp; in Thousands of U.S. Dollar

	2009(₩)	2008(₩)	2009(\$)	2008(\$)
I. Investing activities:				
1. Decrease in long-term financial instruments	14,665	11,623	11,662	9,243
2. Decrease in long-term loans	2,118	1,050	1,684	835
3. Decrease in short-term financial instruments	53,000	162,650	42,147	129,344
4. Acquisition of available-for-sale securities	(105)	(139)	(84)	(110)
5. Decrease in refundable guarantee deposits	34,030	22,158	27,062	17,621
6. Proceeds from disposal of property, plant and equipment	9,868	1,209	7,848	961
7. Increase in short-term financial instruments	(45,000)	(158,000)	(35,785)	(125,646)
8. Proceeds from disposal of held-to-maturity securities				
9. Increase in long-term financial instruments	(17,179)	(18,256)	(13,661)	(14,517)
10. Increase in long-term loans	(5,687)	(4,644)	(4,523)	(3,693)
11. Proceeds from disposal of equity method investments	6,018	4,786		
12. Acquisition of equity method investments	(3,381)	(2,688)		
13. Increase in refundable guarantee deposits	(42,905)	(32,728)	(34,119)	(26,026)
14. Acquisition of property, plant and equipment and intangible assets	(1,212,935)	(581,521)	(964,561)	(462,442)
15. Decrease in other investments	5,250	4,175		
<b>[ Net cash used in investing activities ]</b>	<b>(1,213,510)</b>	<b>(585,330)</b>	<b>(965,018)</b>	<b>(465,471)</b>
II. Financing activities:				
1. Proceeds from issuance of bonds	1,089,907	261,011	866,725	207,564
2. Contribution from the government of the Republic of Korea and local governments	13,733	30,467	10,921	24,228
3. Redemption of bonds	(60,000)	(47,714)		
4. Repayment of long-term debt	(29,336)	(23,887)	(23,329)	(18,995)
5. Repayment of foreign currency denominated longterm debt				
6. Payment of dividends	(24,254)	(26,080)	(19,288)	(20,740)
<b>[ Net cash provided by (used in) financing activities ]</b>	<b>1,050,051</b>	<b>181,511</b>	<b>835,030</b>	<b>144,343</b>
III. Net increase (decrease) in cash and cash equivalents	73,782	(87,508)	58,674	(69,589)
IV. Cash and cash equivalents at the beginning of the year	30,423	117,931	24,193	93,782
V. Cash and cash equivalents at the end of the year	104,205	30,423	82,867	24,193

# Positive & Negative Information

K-water is maintaining a balance in disclosure by providing both good and bad news to enable readers of this sustainability report to objectively assess K-water's overall sustainable management performance.



# UN Global Compact



The principles of Global Compact are based on the following international agreements.

- Universal Declaration of Human Rights
- International Labor Organization's (ILO) "Declaration of the basic principles and rights of Labor"
- Rio Declaration on the Environment and Development
- United Nations Convention against Corruption

The Global Compact urges corporations to uphold, select and legalize the 4 major provisions, which include human rights, labor, environment and anticorruption.



Principle 1 : We support and respect the protection of internationally proclaimed human rights.

Principle 2 : We confirm that we do not complicit human rights abuses.



Principle 3 : We uphold the freedom of association and the effective recognition of the right to collective bargaining.

Principle 4 : We uphold the elimination of all forms of forced and compulsory labor.

Principle 5 : We uphold the effective abolition of child labor.

Principle 6 : We uphold the elimination of discrimination in respect of employment and occupation.



Principle 7 : We support a precautionary approach to environmental challenges.

Principle 8 : We undertake initiatives to promote greater environmental responsibility.

Principle 9 : We encourage the development and diffusion of environment-friendly technologies.



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

K-water is upholding and practicing the 10 principles of the UN Global Compact



President of K-water  
Kun-Ho Kim

# 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, 8-9	●
	1.2 Major effects, Threatening factors and Opportunity factors	Continuance possibility factors, Ethics, Crisis management		6-7, 28-29	●
Structure	2.1 Structure Name	Company Name		Wing	●
Profile	2.2 Major brands, products and services	Major brands, products and services		Wing, 12-13	●
	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, 10	●
	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		20	●
	2.7 Subject market	Subject market and customer categories		24-25	●
	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		100	●
	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		100	●
	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		88-90	●
	3.13 Policies and current activities to find an outside verifier	Third Party Verification Report		92-93	●
Dominating structure, responsibility, participation	4.1 Dominating structure of organization	Authority, structure and responsibility of Board of Directors		20	●
	4.2 Chairman Board of Directors and executive	Mayor as Chairman of Board of Directors		20	●
	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		20	●
	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		20	●
	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		20	●
	4.6 Process to prevent conflict of understanding within the Board of Directors	Strengthening of Fast and Sufficient Pre-Deliberation		20	●
	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		20	●
	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		20	●
	4.10 Board of Directors financial/environmental/social accomplishments evaluation proc	Government analysis of operation results, Accomplishment yearly salary graded		20	●
	4.11 Explanation of prevention rules and selection of approach method and selection	Prevention Rules and Approach Methods		20-29	●
	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		24-27	●
	4.15 Participating stakeholders identification and selection standard	Stakeholders identification and selection		24-27	●
	4.16 Status of Stakeholders Participation method	Method of Stakeholders Participation		24-27	●
	4.17 Points of Interest presented by stakeholders and counteraction methods	Stakeholders' Points of Interest and Counteractive Methods		24-27	●
Financial accomplishments index	<b>Public announcement for management approach method</b>			12-13	●
	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	●

Index	Contents of Index	K-water Adaptation Index	Global Compact	Page	Report Rate	
	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		<b>Public announcement for management approach method</b>		10	●	
	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	72	●
	EN3	Direct energy use according to 1st stage energy sources	Diesel, kerosene, LPG, NG usage amount	71	●	
	EN4	Indirect energy use according to 1st stage energy sources	Amount of electricity used from outside purchase	71	●	
	EN5	Amount of energy reduced due to saving and efficiency	Amount of reduction from using energy saving program	8	70	●
	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	70	●
	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	70	●
	EN8	Total water withdrawal by source	Total water withdrawal by water plants	91	●	
	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	91	●
	EN11	Location and size of land owned, rented and managed around protection areas and areas where the biological value is high	Environment-friendly water resource facilities, Diverse biological conservation facility and space	8	70	●
	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	71	●	
	EN17	Other indirect greenhouse gases discharge amount	Amount of greenhouse gases discharged due to office travel and business trips of executives	9	71	●
	EN18	Greenhouse gases reduction business and accomplishments	CDM projects	71	●	
	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	72	●	
	EN23	Waste discharge amount according to form and treatment method	Amount of construction waste and sludge	72	●	
	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	73	●
	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	73	●
	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	73	●		
Labor accomplishments index		<b>Public announcement for management approach method</b>		11	●	
	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	74	●	
	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	75	●	
	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	75	●	
LA9	Welfare and Safety conditions, formal subject of negotiations with joint labormanagement conference	Joint labor-management conference agenda	3	74	●	

# GRI Report Index

Index	Contents of Index	K-water Adaptation Index	Global Compact	Page	Report Rate
	LA10 Average education hours per day according to form of employee	Average training hours per year according to employee grade		75	●
	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	●
	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	76	●
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	76	●
	HR2 Human rights evaluation ratio of major supply companies and contract companies	Method of evaluating human rights of supplying companies, etc.	2	76	●
	HR3 Employee training on duties related human rights policies and processes	Human rights related education (Sexual harassment prevention education)	2	76	●
	HR4 Total discrimination cases and related handling	Management and counseling through executives' difficulties handling system	1	76	●
	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	76	●
	HR6 Business fields with a high chance of child labor and management to stop child labor.	Restraint against employing youths (Employment rule)	5	76	●
	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	76	●
	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		77	●
	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	77	●
	SO3 Ratio of employees who received anti-corruption policy and process related education.	Rate of ethical management training certification	10	77	●
	SO4 Management of corruption cases.	Handling of corruption cases	10	77	●
	SO5 Position on public policies, establishment of public policies and participation in lobbying.	Participation in public policies, such as carrying out government policies		78	●
	SO6 Total amount donated to parties, politicians or related facilities according to nation.	Support in the name of the corporation is legally prohibited		78	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	78	●
	SO8 Number of cases of fine and non-financial restraint due to violation of law or regulations.	Number of violation cases and fines		78	●
Product responsibility accomplishments 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		78	●
	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.		78	●
	PR4 Number of product or service information labeling related restraint voluntary violation.	Efforts to provide information on tap water quality, etc.		78	●
	PR5 Customer satisfaction related activities including customer satisfaction evaluation survey results, etc.	Customer satisfaction research results		78	●
	PR6 Marketing communications such as advertisement, promotion, sponsorship restraints, standard and voluntary rule abiding program.	Abiding by marketing related restraints		78	●
	PR7 Number of marketing communications such as advertisement, promotion, sponsorship restraints, standard and voluntary rule violation cases.	Efforts to abide by promotion related laws		78	●
	PR8 Number of complaints on violation of customer personal information protection and customer data loss.	Number of Internet civil cases and breakdown		78	●
	PR9 Total fine from violation of laws and regulations on product and service supply.	Efforts to abide by service supply laws		78	●

# K-water KPI(Key Performance Indicator)

1) Starting in 2010, recent 4 year interests have been re-calculated to include financial expenses that have been capitalized.  
2) Dividends distributed to capital providers are dividends provided on the year concerned.

GRI	Indicators	Unit	2006	2007	2008	2009		
Economy	EC01	Total Sales	KRW Millions in	1,721,105	1,812,905	2,044,533	2,005,384	
	2.8	Dam water supply	Million m <sup>3</sup>	4,706	4,757	4,847	4,867	
	2.8	Service water supply	Million m <sup>3</sup>	2,972	3,064	3,094	3,147	
	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	292.50	292.50	292.50	
	2.8	Accounted for Water Rate (Multi-Regional Waterworks)	%	99.52	99.70	99.80	99.80	
	EC01	Interest Paid to Fund-Providers	KRW Millions in	52,481	51,717	57,844	78,288	
	EC01	Dividends Distributed to Investors	KRW Millions in	39,111	26,104	24,285	12,643	
	EC01	Operating Income to Sales	%	16.87	11.95	9.06	6.46	
	EC01	Tax Amount Paid	KRW Millions in	83,913	68,929	52,533	23,581	
	2.8	Number of Dam Water Customers	Sites	88	95	119	131	
	2.8	Number of Service Water Customers	Sites	1,543	1,707	1,714	1,743	
	PR05	Customer Satisfaction Index	Points	87.0	93.5	92.6	93.7	
	Society	LA01	Total number of employees	Persons	4,064	4,249	4,025	4,031
		HR04	Total number of female employees	Persons	357	376	385	393
Labor hours (Statutory labor hours)			Hours/week	46.75(40)	46.75(40)	46.75(40)	46(40)	
LA01		Number of New Employees	Persons	73	133	88	83	
LA02		Employee Turnover	Persons	66	77	88	153	
LA10		Number of Trainees	Persons	11,513	13,906	11,666	12,011	
HR05		Labor-Management Agenda and Consensus	Cases	12	13	10	22	
LA07		Industrial Accidents	Cases	7	14	13	14	
LA07		Industrial Accident Rate	%	0.18	0.32	0.17	0.30	
LA07		Patients	Persons	122	127	274	247	
LA07		Prevalence Rate	%	3.2	3.1	6.6	5.9	
EC09		Aid to Local Communities around Dams	KRW Billions in	467	520	532	556	
EC09		Investment in Social Contribution Activities	KRW Billions in	475	540	543	596	
Environment		EN16	Total Carbon Dioxide Emissions	tCO <sub>2</sub> e	388,216	470,652	472,386	485,877
		EN03	Total Energy Consumption	TOE	196,227	225,901	226,757	233,134
	EN03	Power Consumption for Water Purification	Mwh/m <sup>3</sup>	0.3167	0.3150	0.3182	0.3176	
	EN08	Total amount of water obtained	1,000 /m <sup>3</sup>	2,985,975	3,073,425	3,111,885	3,153,449	
	EN06	Power Generated from Multi-purpose Dams	GWh	2,183	2,159	1,615	1,453	
	EN22	Sludge from Water Treatment Plants	tonnes	100,174	97,458	84,679	90,717	
	EN22	Total Recycled Sludge	%	89.2	100	100	100	
	EN10	Quantity of Recycled Water (Head Office Consumption)	m <sup>3</sup>	9,423	8,079	8,065	8,056	
	EN14	Young fish stock	One thousand fish	1,982	1,548	1,298	1,035	
	EN21	BOD of Water Discharged from Water Treatment Plants	mg/L	3.0	2.8	2.3	2.0	
	EN21	COD of Water Discharged from Water Treatment Plants	mg/L	5.5	5.3	4.4	4.3	
	EN21	SS of Water Discharged from Water Treatment Plants	mg/L	4.4	4.8	3.9	3.8	
	EN21	Water sewage treatment BOD	mg/L	2.2	1.9	2.1	2.2	
	EN21	Water sewage treatment COD	mg/L	7.0	6.9	5.9	7.2	
		Water sewage treatment SS	mg/L	3.2	2.7	2.9	3.5	
		Replacement of Worn-out Pipes (Length)	km	11.3	12.5	15.5	19.5	
	EN21	Replacement of Worn-out Pipes (Cost)	KRW Millions in	10,059	10,912	29,786	44,490	
		Water Quality Control Cost per Ton (Unit Requirement of Chemicals)	KRW/m <sup>3</sup>	5.8	5.2	4.9	6.2	
	EN30	Investment in Environmental Facilities	KRW Billions in	728	653	415	428	
	EN30	Environmental Investment to Total Investment	%	8.9	10.0	6.0	5.0	
	EN30	Environmental cost	KRW Billions in	1,215	1,210	1,380	1,207	
	EN30	Environmental Cost to Project Cost	%	11.0	11.0	12.0	10	
	4.15	Post Management Assessment to Maintain ISO9001/14001 Certification	Cases	1	1	1	1	
4.11	Environmental Impact Assessment	Cases	2	1	2	4		
4.11	Preliminary Environmental Feasibility Review	Cases	10	6	3	7		

# Third Party Verification Statement

## Third Party Verification Statement of Korea Water Resources Corporation's 2010 Sustainability Report

### Introduction

Korean Foundation for Quality (hereinafter 'KFQ') has been engaged by Korea Water Resources Corporation (hereinafter 'K-water') to independently verify its 2010 Sustainability Report (hereinafter 'Report'). The compilation of the Report is the responsibility of the K-water 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 K-water 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 K-water's stakeholders.

### Criteria of Verification

KFQ have 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 K-water adopted to their '2010 Sustainability Report'.

### Verification Scope and Procedure

KFQ verification was focused on the data and information on sustainable management activities and performance of K-water's head office, 8 regional head quarters and 31 domestic/international branch offices(9 projects of 6 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 the credibility of the Report's contents and effectiveness of the internal process systems for preparing the Report according to the following steps:

- Desk review

We have performed a 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 sustainable management activities and performance data described in the Report. Financial performance in the Report have crosschecked with the audited '2009 Financial Statement of K-water'.

- On-site Assessment/Verification

We have conducted on-site verification to assess accuracy of information in the Report, and effectiveness of information management system and report compilation process. Based on the principal of sampling especially materiality, each one of multi-purpose dams and multi-regional water supply systems were selected among the Headquarter and branch-offices. We have gathered evidences in regard to sustainable management activities and its performance by interviewing the person in charge of sustainability activities reported and reviewing K-water's internal procedures/documents. Also we have analyzed data management system and report complication process under consideration of Materiality.



- 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 K-water. 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 for determining, calculating and estimating such data.

#### Conclusion/Opinion

Based on our review, KFQ have procured reasonable grounds to produce the conclusion for the report as below:

1. K-water has met the conditions for application level A+ in the '2006 Sustainability Reporting Guideline'.
2. K-water 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. K-water 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

- K-water's sixth sustainability report has not only disclosed all of the key indicators and additional indicators while applying GRI Sustainability Reporting Guidelines(G3) fairly and transparently but also revealed the positive and negative sides in the report.
- K-water has collected opinions from their stakeholders through various communications and reflected their expectation and concerns to K-water's sustainable management strategy.

#### Suggestions for Improvement

- We suggest K-Water need to put effort to satisfy various stakeholder's right-to-know hereafter by applying indicators from the 'Sector Supplement' which GRI has been developing in the consideration of features of industry sector.



July 31, 2010  
 CEO Jae Ryong Kim  
 Korean Foundation for Quality (KFQ)

# Code of Ethics Preamble, Environment-friendly Management Principles, Customer Charter Preamble, 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 detailed information on ethical principles and the employee code of conduct, please refer to our homepage ([www.kwater.or.kr](http://www.kwater.or.kr)), Ethical 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.

( Customer Charter Preamble )

K-water is a public enterprise that enhances the quality of life for the public and contributes to national development by providing the best product and service, and by sustainably developing, managing and preserving our water resources environmentally, economically and socially. With this pride and confidence, we are entering the "21st Century Era of Water." To fully establish ourselves as a global water company, we commit to the following:

To establish credibility from our customers, we will stably provide high quality water and land.

To guarantee our customers' safety and property rights, we will provide necessary information and services even before our customers' request it.

To continuously improve customer service, we will regularly collect opinions from our customers by carefully listening to our customers' advice and suggestions.

To maximize customer benefits, we will strive to achieve management efficiencies and carry-our duties without discrimination towards all customers.

To be able to achieve these objectives, we will establish the highest performance standards. We also promise to abide by these standards.

( 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.

# Publishing the Sustainability Report

Efforts were taken to reflect the voices of our internal and external stakeholders when publishing this Report, and to ensure credibility, assurance on the contents of this report was provided by a third party.

The main objective of this Sustainability Report is to provide stakeholders with credible transparent corporate information and to gain the respect of the stakeholders. Matters of concern of the internal employees were accumulated through a survey, while those of the stakeholders were gained through advisors. The issues of concern were evaluated for their materiality and through the analysis of the evaluations, major issues of concern were established. K-water has tried to provide full disclosure of the performance indicators outlined by the G3 guideline, which is the international standard.

## Scope of the Performance Indicator Report

The scope of this Report covers 31 domestic project sites, including the main office, and 6 overseas project sites, providing sustainable management status and performance. Since the accounting periods are the same for K-water and its investors, it does not affect the comparison in terms of the period or structure. Depending on the share ownership, the actual value method or the cost method is applied.

## Performance Data Reporting Standard

K-water has made every effort to follow the reporting principles stated in the G3 guidelines when preparing this Report. Each of the economic, environmental and social performance data was derived based on the indicator covenants attached to the G3 guidelines. Environment related

data was mainly quoted from data derived from the Environmental Performance Evaluation electronic system, while financial data was derived from audited financial statements and statement of accounts. Information related to society and other sectors were directly received from related departments. K-water has tried to provide greater clarity by providing 3~4 year performance indicator data, and ratios and absolute data at the same time.




## Efforts to Enhance Sustainability

It has been 6 years since K-water first published its Sustainability Report. In the 6 years, K-water has painstakingly tried to identify the expectations and concerns of the stakeholders, but there's still room for greater improvements. In the next Sustainability Report, K-water will listen more carefully to the suggestions of the stakeholders to create a more advanced Sustainability Report.

## G3 Guideline Application Standard

K-water has tried to satisfy the requirements of 'A' standards outlined in the GRI GR3 Guideline for the "2010 Sustainability Report." An independent 3rd party assurance agency, Korean Foundation for Quality (KFQ), has verified that this report is compliant with 'A+', GRI G3 Guidelines.

GRI G3 Application Level Table

Report Application Lever		C	C+	B	B+	A	A+
Standard Disclosures	G3 Profile disclosure 	Disclosure items: 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	Disclosure items: All items of level "C" and 1.2, 3.9, 3.13, 4.5- 4.13, 4.16-4.17	Outside assurance of report	Disclosure items: Similar to Standard 'B' request items	Outside assurance of report
	G3 Management approach disclosure 	Not required		Disclosure in management approach for each indicator			
	G3 Performance indicator & additional industry indicators 	At least 10 performance indicators have to be reported (At least one or more economic, environmental and social indicators should be included)	Must only report 20 or more performance indicators (More than one indicator must be included related to the economy, environment, human rights, labor, society and product responsibility)	Based on importance principles, the reason for all G3 core performance indicators & industrial guideline indicators should be explained for either reporting or not reporting			

# Declaration Glossary

- **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 most 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 1mm 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.
- **Carbon Labeling** A policy to indicate the amount of green house gases emitted during the life cycle of a product or service in CO<sub>2</sub> terms.
- **Integrated Water Resource Management** In addition to management of water resources focused on quantity and surface water, it is an integrated management policy of regulating water & controlling floods by integrating diverse factors including water quality, ecology, surface water, underground water and substitute water resources.
- **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.
- **EPE (Environment Performance Evaluation)** Customers' expectations & demands regarding products & services provided by corporations.
- **ERM (Enterprise Risk Management)** A management system that evaluates, manages & prevents diverse potential risks that a company faces from a company-wide and overall perspective.
- **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).
- **ISO24500** International waterworks and ssewage treatment service standards, published in October, 2007.
- **ISO26000** 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.
- **K-sigma (K-water/Knowledge Sigma)** K-water's unique innovation method of combining various activities such as 6-sigma, which emphasizes cost reduction & process improvements, elimination of unnecessary work procedures, and encouragement of research & development.
- **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.
- **RPA (Renewable Portfolio Agreement)** Investment agreement concluded between the government and power generation company to develop & distribute new renewable energy.
- **RT(Ton of Refrigeration)** Unit of refrigeration capacity. One ton of refrigeration capacity can freeze one ton of water at 0°C in 24 hours.
- **SS(Suspended Solid)** Particles that are 0.1 $\mu$ m or more in diameter and float in water to make it turbid.
- **SQI (Service Quality Index)** As an index that quantifies the service quality provided to customers, it enables the overall management of the quality of services provided by the company.
- **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).

We are very thankful for all the efforts provided by those that have helped in publishing this Report.

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# Presenting a More Happier World with Water



Performance Management Team(clockwise from back left)  
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Junggyu Park, Kyungtae Kwon, Jaehon Cho, Taikwang Kim, Youngda Jung,  
Wonhai Son, Wookyu Kang, Woojin Song, 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. We would particularly like to acknowledge the work done by everyone who has contributed to producing this report.

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Produced by the Performance Management Team of K-water  
Design by Samwoo Communication

Global Best on 3Water+



This report is printed with soy ink on eco-friendly paper that received FSC(Forest Stewardship Council) certification.



## Readers' Voice

We are grateful to all our stakeholders that have an interest in K-water's sustainable management and have read the '2010 sustainable management Report.' Each opinion suggestion provided by you will be preciously utilized in further developing K-water's sustainable management. We value your accept your suggestions and we will try to reflect the suggestions in the next report.

K-water Management Services Dept. Performance Management Team  
Fax : 042) 629 - 2399 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

The most precious values

# Water, Nature & People



### About K-water's Sustainability Report 2010....

**1. Which of the following would best describes you?**

- ① Customer            ② Investor/Shareholder            ③ Government/Civil Servants            ④ Local Residents
- ⑤ Citizens, Social Group, NGOs            ⑥ Business partner            ⑦ Scholar
- ⑧ Journalist            ⑨ K-water employee            ⑩ Others (            )

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

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

**3. Which section was the most interesting?**

- ① Strategy            ② Approach            ③ Challenges(Green Economy)
- ④ Challenges(Green Environment)            ⑤ Challenges(Green Society)            ⑥Performances

**4. Which section do you think needs improvement?**

- ① Strategy            ② Approach            ③ Challenges(Green Economy)
- ④ Challenges(Green Environment)            ⑤ Challenges(Green Society)            ⑥Performances

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

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We are waiting for your valuable opinions.  
 Your opinion will be of great help  
 and will be used to continue sustainable management activities.  
 We will review your opinions and we will reflect them in our next report.