About This Report

Purpose of Publication
K-water has published its sustainability report annually since 2005. This report, the 2016 K-water Sustainability report, is the 12th publication and aims to provide our stakeholders with information on sustainability management which is focused on our mission, "Opening the Future and Providing Happiness by Sharing Water" and business performances. Furthermore, this sustainability report highlights our endeavors to develop into a global top integrated water enterprise. Of note, the 2016 report contains "out five promises" to the people as a public enterprise.

Reporting Standard
This report has been drafted in line with the GRI (Global Reporting Initiative) G4 Sustainability Reporting Guidelines (Core option) and ISO 26000. This report features key issues derived from materiality tests and DMA (Disclosure on Management Approach) on key issues.

Reporting Period and Boundaries
This report provides a general overview of the sustainability activities of the Head Office (3 divisions, 2 business divisions and 29 departments) and field offices (3 regional head offices, 2 institutes and 74 offices) from January 2015 to November 2016. Business performances of 10 overseas projects in 11 countries as of November 2016 were included as they are managed on a project by project basis. It does not cover subsidiaries and affiliates. For partnering companies in our corporate supply chain, their performances were partially included in relation with educational services or subsidies for mutual growth over the corporate supply chain. Financial performances have been filed based on consolidated data (K-IFRS) since 2011.

Report Assurance
Data and statements featured in this report were verified by Korea Productivity Center based on G4 Guidelines (Core option).

Amendments
There were not any significant changes such as corporate structure and ownership during the reporting period when compared to the previous year. However, some figures were amended to reflect changes in calculation and application standards. K-water publicizes its sustainability management and annual report through the disclosure of management on its website. The sustainability report is issued both in Korean and English. It can be downloaded in PDF format via our website. For more information, please contact the following.

K-water Sustainability Highlights 2015

Water Cycle
Water Value
Water Platform
K-water, Global Hub of Water Management

K-water’s Five Pledges for Sustainable Management

Pledge 1: "Intelligent Water Management and Satisfied Customers"
Supplying Healthy Tap Water
Producing High Quality Tap Water
ICT-Based Smart Water City
Coping with Climate Change and Prolonged Drought
Environmental Management for Healthy National Territory
Protecting People from Water Disasters

Pledge 2: "New Water Values for All"
K-water's Respect of the Natural Order
Securing Future Water Management Companionships
Active Happiness through Water-Companionships
Creating a Eco-Friendly Workplace Complex Cities

Pledge 3: "Leading Global Water Management Company"
Smart Water Management, a Scientific Solution to Global Water Problems
Leadership and Capability Development to Solve Global Water Issues
Expansion of Advancement into the Global Water Market and Retaining Its Global Capabilities
Diversification of Investments and Operations
Building Global Networks via Sophisticated Business Management

Pledge 4: "Global Sharing of Water-related Welfare"
Water Love Sharing Corps
Water for a Happier World, K-water’s Water-related Welfare Projects

Pledge 5: "Enterprise for and of Public Users"
The Autonomous, Positive, and Dynamic Corporate Culture of K-water
K-water’s Declaration of Human Rights Management
Ethical Management
Talent-Based Management
Shared Growth
Risk Management

Appendix
Sustainability Highlights
Thrift/Charity Insurance
GRI-G4 Disclosure/ISO 26000
UN Global Compact’s 10 Principles Support
Questionnaire to Collect Reader Opinions

Contact Information
Management Services Innovation Team, K-water
Sintanjin-Ro 200, Daedeok-Gu, Daejeon 34350, Republic of Korea
TEL. 82-42-629-2356~8 / Fax. 82-42-629-2399
E-mail: sustainability@k-water.or.kr
Web-site: www.k-water.or.kr
CEO’s Message

I would like to express my deepest gratitude for your support in K-water, and I am pleased to introduce to you about K-water’s 12th Sustainability Report.

K-water, as Korea’s premier state-invested water service enterprise, has endeavored to realize its mission of supplying safe water for the nation and securing water welfare for the past half century. Of note, impacted by the worsening climate change and regional water problems, the global water management environment is deteriorating. We have formulated a new mission, together with a vision and strategy, to address the current problems and secure sustainable growth for the future. K-water’s management and staff are committing all available resources to fulfilling its corporate vision and strategy. Moreover, we are working to be Korea’s Global Water Professional by taking advantage of its ongoing structural innovations and sound management.

The 12th Sustainability Report of K-water provides details of its recent endeavors and performance outcomes related to its “Five Pledges for Sustainable Management” on important management issues which our customers are interested in.

Pledge 1: “Intelligent Water Management and Satisfied Customers”

Based on a comprehensive water management system that takes into account the characteristics of major waterways, like the Han River and Nakdong River, K-water seeks to maintain integrated water management for the entire water cycle from water sources to sewage disposal. K-water has implemented the Smart Water Management Initiative (SWMI), which utilizes the latest information and communication technology (ICT), to ensure that users never have to worry about water safety, from the water sources to their faucets. We are also working to upgrade service quality from the prospective of end-users and secure water welfare so that consumers will have no concerns about a lack of water service.

Pledge 2: “New Water Values for All”

K-water strives to create new value for the public through the creation of eco-friendly waterfront spaces and full utilization of water resources in order to expand the development of clean energy (new & renewable sources). We are working to create new water values to serve the interests of future generations.

Pledge 3: “Leading Global Water Management Company”

K-water is pushing ahead with overseas water projects by taking advantage of its valuable experiences and expertise related to the entire water cycle, from water sources to tap water and sewage disposal. Moreover, K-water seeks to boost its leadership in regards to resolving water problems based on in-depth exchanges with global water specialists.

Pledge 4: “Global Sharing of Water-related Welfare”

K-water carries out differentiated CSR (corporate social responsibility) activities in line with its distinctive interests and corporate capabilities. For example, “Watering Your Dream” is a mentoring program for the children of disadvantaged families, while “Water Full of Happiness” provides maintenance work for water facilities located in low-income neighborhoods, along with installing tap-water facilities in foreign countries where lack of water is a problem. We conduct social contribution programs that address the specific needs of local communities and households, through the active volunteer works of the management and staff.

Pledge 5: “Enterprise for and of Public Users”

K-water is wholeheartedly committed to creating a workplace in which individuals and the company can grow together, under an autonomous, positive, and dynamic corporate culture. We practice proactive ethical management that reflects the needs of customers, respect for individual rights, and shared growth of the entire supply chain, including users, local communities, and small businesses.

Above all, we solicit the support and encouragement from all relevant parties for K-water’s efforts to realize our vision, “Opening the Future and Providing Happiness by Sharing Water”, based on our continuous innovation and spirit of challenge to overcome any adversities.

Sincerely yours,

Hak Su Lee
K-water CEO
Membership Activities & Awards

**Membership Activities**

1917 Association of Great Dams
1934 Korean Society of Engineering
1955 Korean Electric Association, International Contract Association of Korea
1970 Korean Water Resources Association
1995 Environment Impact Assessment Association
1996 Korean Environmental Impact Assessment Association
1977 Korean Electric Engineers Association
1999 Korea Disease Prevention Association
2001 Korea New Energy & Renewable Energy Association
2003 Korean Water and Environment Works Association
2005 Korean Society on Water, Environment

**Awards**

<table>
<thead>
<tr>
<th>Date</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dec. 2008</td>
<td>Korea Management Innovation: Social Prize (Awarded by Ministry of Knowledge Economy and Field Business Management)</td>
</tr>
<tr>
<td>Oct. 2008</td>
<td>Global Green Growth Innovation Awards (Korea Chamber of Commerce), Sustainability Management Awards (Highest Excellence) (Ministry of Knowledge Economy)</td>
</tr>
<tr>
<td>Oct. 2008</td>
<td>Korea Chamber of Commerce and Industry, Korea Eco-Friendly Company, Good Award (Award of Ministry of Environment, Asian Host Administrating Knowledge Enterprise (Korea))</td>
</tr>
<tr>
<td>Jan. 2009</td>
<td>Continuity &amp; Creation Management Award in Environmental Management (Korean Ministry of Environment and Environment)</td>
</tr>
<tr>
<td>Oct. 2009</td>
<td>Korean Institute of Hydraulic Engineering, membrane Association, ornamental Plants Association, Environment Management, Nanotechnology Energy Awards (Prime Minister's Commendation) (Ministry of Knowledge Economy, Asian Host Administrating Knowledge Enterprise (Korea))</td>
</tr>
<tr>
<td>Dec. 2010</td>
<td>National Green Technology Award (Korea Ministry of Knowledge Economy, Korea Ministry of Education)</td>
</tr>
<tr>
<td>June 2011</td>
<td>Korea Green Growth Award (Ministry of Knowledge Economy and Korean Ministry of Environment, Eco-Gas-Eco Technology Award (Korean Ministry of Environment)</td>
</tr>
<tr>
<td>Oct. 2012</td>
<td>The first public company to be awarded the Smart Work Superior Institute Award (Korean Ministry of Public Administration and Security)</td>
</tr>
<tr>
<td>Feb. 2013</td>
<td>The Host Administered Company (Korea) (Korea)</td>
</tr>
<tr>
<td>June 2013</td>
<td>Environmental Impact Management [Need Model] (Ministry of Environment), Global Green Contribution Institute of Excellence (Ministry of Health and Welfare)</td>
</tr>
<tr>
<td>July 2013</td>
<td>Korea Digital Innovation Award (Public Sector) (Ministry of Knowledge Economy)</td>
</tr>
<tr>
<td>Sep. 2013</td>
<td>Excellent enterprise with an outstanding performance in purchasing goods from SMEs (Small and Medium Business Administration of Korea)</td>
</tr>
<tr>
<td>Nov. 2013</td>
<td>Sustainability Best Award, Innovation Management Award (Ministry of Knowledge Economy)</td>
</tr>
<tr>
<td>Dec. 2013</td>
<td>Global Green Management Award (Ministry of Science, ICT and Future Planning) (Korea)</td>
</tr>
<tr>
<td>Oct. 2015</td>
<td>Korea Green Environment Competency Award (Ministry of Environment), Korea Ministry of Environment, Ministry of Knowledge Economy, Korean Ministry of Trade, Industry and Energy</td>
</tr>
<tr>
<td>Nov. 2015</td>
<td>The National Environment Grand Award (Korea Ministry of Environment), Asian Host Administrating Knowledge Enterprise (Korea) (Korea)</td>
</tr>
<tr>
<td>Dec. 2015</td>
<td>Global Green Management Enterprise (Korea) (Korea)</td>
</tr>
<tr>
<td>Feb. 2016</td>
<td>The Host Administered Company (Korea) (Korea)</td>
</tr>
<tr>
<td>July 2016</td>
<td>Listed company in water business assessment (Ministry of Environment)</td>
</tr>
<tr>
<td>Aug. 2016</td>
<td>Korea Green Management Award (Ministry of Science, ICT and Future Planning), Achieved Carbon Trust Standard (Korea Carbon Trust)</td>
</tr>
<tr>
<td>Sep. 2016</td>
<td>Water Project Innovation Award (Korea)</td>
</tr>
<tr>
<td>Oct. 2016</td>
<td>Korean Green Management Enterprise (Korea)</td>
</tr>
<tr>
<td>Dec. 2014</td>
<td>Korea Green Growth Award (Environmental Research of Sustainability, Korea Volunteer Work, Social Policy) (Ministry of Public Administration and Security, Scandinavian Administration and Knowledge Enterprise (Korea))</td>
</tr>
<tr>
<td>June 2015</td>
<td>Korean Natural Environment Award (Ministry of Environment and Environment)</td>
</tr>
<tr>
<td>Nov. 2015</td>
<td>The Host Administered Company (Korea) (Ministry of Trade, Industry &amp; Energy)</td>
</tr>
</tbody>
</table>

**Approach to Sustainability**

<table>
<thead>
<tr>
<th>Year</th>
<th>Title</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>2015</td>
<td>K-water GlobalGoals</td>
<td>Focus on nine SDGs (Sustainable Development Goals) (Ministry of Environment)</td>
</tr>
<tr>
<td>2015</td>
<td>K-water’s LEED</td>
<td>For K-water’s LEED</td>
</tr>
</tbody>
</table>

**K-water Sustainability Highlights 2015**

- **Economic Performance**
  - May: K-water CEO conferred KAPS Award
  - Aug.: MOU concluded with Ministry of Environment for water management cooperation
  - Sept.: MOU signed with Philippine San Miguel Corp. for flood management
  - Oct.: MOU concluded with Ministry of Environment for ecosystem conservation fund
  - Nov.: MOU signed on technical cooperation with Ministry of Environment for water management
  - Dec.: MOU concluded on strengthening bilateral cooperation on water management

- **Environmental Performance**
  - Jan.: Korean Non-Mainland Enterprise (Ministry of Environment) (Korea) |
  - Apr.: MOU signed on technical cooperation with Ministry of Environment for water management
  - May: MOU signed with Ministry of Environment for water management cooperation
  - June: MOU signed with Ministry of Environment for water management cooperation
  - July: MOU concluded on development and supply expansion of water management

- **Social Performance**
  - Apr.: MOU concluded on development and supply expansion of water management
  - May: MOU concluded on development and supply expansion of water management
  - June: MOU signed with Ministry of Environment for water management cooperation
  - July: MOU concluded on development and supply expansion of water management

- **CEOs’ Message**
  -Membership & Activities & Awards
  -K-water Sustainability Highlights 2015
  -Sustainable Development Goals (SDGs)
  -K-water’s LEED
  -Water Circle
  -Water Value
  -Water Program
Sustainable Development Goals (SDGs) for K-water’s GWP

* K-water’s GWP, which stands for “Global Water Professional, Great Work Place,” signifies K-water’s development goal of becoming a people-oriented enterprise.

Since its foundation, K-water has developed into an integrated water service enterprise over a period of 50 years and has played a leading role in the field of water resources management. As such, water resources management is emerging as a key issue in the required preparation for the future. K-water will analyze future social trends (megatrends) and respond to global challenges. We will redefine our value system, which will take K-water in a new direction as it approaches its 50th anniversary, and prepare for the next 50 years, along our management strategy. We will sincerely implement the United Nations (UN) SDGs, while spreading our expertise globally on various fields, including integrated water resources management, water energy development and creation of waterfront spaces.

Moreover, we will seek to globalize water-related values, and promote and share them for future generations. Our ultimate goal is to become a water professional, Great Work Place, by spreading our expertise globally on various fields, including integrated water resources management, water energy development and creation of waterfront spaces.

What are the UN SDGs (United Nations Sustainability Development Goals)?

On September 23, 2015, which marked the 70th anniversary of the Millennium Development Goals (MDGs) adopted by 193 countries, UN Secretary General G. Moon Ban and 193 country leaders agreed on the SDGs (Sustainability Development Goals), which are the joint global development goals for the next 15 years after the MDGs,

- End poverty in all its forms everywhere
- End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- Ensure healthy lives and promote well-being for all at all ages
- Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Achieve gender equality and empower all women and girls
- Ensure availability and sustainable management of water and sanitation for all
- Ensure sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Reduce inequality within and among countries
- Ensure access to water and sanitation for all
- Promote sustainable use of oceans, seas and marine resources for sustainable development
- Refuse to take action to combat climate change and its impacts
- Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
- Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Strengthen the means of implementation and invigorate the global partnership for sustainable development

- Goal 1: End poverty in all its forms everywhere
- Goal 2: End hunger, achieve food security and improved nutrition, and promote sustainable agriculture
- Goal 3: Ensure healthy lives and promote well-being for all at all ages
- Goal 4: Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
- Goal 5: Achieve gender equality and empower all women and girls
- Goal 6: Ensure availability and sustainable management of water and sanitation for all
- Goal 7: Ensure affordable and reliable energy
- Goal 8: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- Goal 10: Reduce inequality within and among countries
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
- Goal 12: Ensure sustainable consumption and production patterns
- Goal 13: Take urgent action to combat climate change and its impacts
- Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development
- Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reverse land degradation and halt biodiversity loss
- Goal 16: Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
- Goal 17: Strengthen the means of implementation and invigorate the global partnership for sustainable development

The environment for water supply and water management is changing fundamentally primarily due to abnormal weather conditions such as torrential rains and droughts. We will set up a sustainable water cycle system which integrates the management of water volume and quality in order to forecast future weather conditions and prevent damages from disasters like floods and droughts.
Water Value

Creating new value through the creative use of water

(Develop creative waterfront spaces and secure global capability of water related power generation (alternative energy sources))

Water Platform

Providing water services to ensure water security and prosperity for the earth

(Advance into Overseas Markets, Realize Korean Peninsula Integrated Water Resources Management)

Adversely impacted by global warming, the availability of waterfront space is rising, while global demands for clean energy are also going up. K-water endeavors to create waterfront spaces as new living spaces for residential, waterfront and cultural activities. K-water is also actively involved in the development of clean energy including floating photovoltaic power, water-thermal power and tidal energy. K-water is contributing to society by adding value based on its creative use of water.

In 2015, the average temperatures of the earth are forecast to rise by 3.2℃ because of climate change, while sweltering heat and tropical nights will likely increase 3-fold and 5-fold, respectively. As a consequence, demands for living and activities in waterfront spaces are all but certain to rise. K-water intends to employ its distinctive waterfront related technology to the development of waterfront spaces near dams, rivers, lakes and seas across the nation. By doing so, K-water will help to create eco-friendly waterfront cities which nature, culture and culture are fused together, and build space in which humans blend well with nature. While providing safe water, K-water is striving to build safe cities to flexibly respond to floods and droughts. Moreover, K-water remains committed to creating eco-friendly cities in which nature and humans live in harmony, with each other and building beautiful and unique waterfront cities that utilize waterfront assets, along with securing tourism-tenure multiple purposes cities in waterfront spaces. K-water is seeking to improve the living standards of people by providing waterfront recreation and living quarter spaces.

K-water also endeavors to develop various types of new and renewable energy like hydraulic power, solar power, wind power and tidal power and water-thermal power in response to the government policy that seeks to reduce greenhouse gas emissions and develop new (most) new and renewable energy. As the Paris Climate Change Agreement dealing with the mitigation of greenhouse gas emissions was signed, the Korean government adopted the policy to expand energy business as a core task. K-water is leading the greenhouse gas emissions mitigation effort, along with development of new clean energy businesses. K-water is emerging as an enterprise that plays a leading role in the creation of clean energy based on its professional water management capabilities.

While global population and water demand are rising rapidly, the total amount of global water resources remain virtually unchanged. As a result, the importance of technology for effective water usage and infrastructure is increasing day by day. K-water provides total water solutions on the entire global water cycle, based on its water-related expertise reliability and global network which have been built over the past half century.

Water platform

Creating new value through the creative use of water

(Develop creative waterfront spaces and secure global capability of water related power generation (alternative energy sources))

Water Platform

Providing water services to ensure water security and prosperity for the earth

(Advance into Overseas Markets, Realize Korean Peninsula Integrated Water Resources Management)

Adversely impacted by global warming, the availability of waterfront space is rising, while global demands for clean energy are also going up. K-water endeavors to create waterfront spaces as new living spaces for residential, waterfront and cultural activities. K-water is also actively involved in the development of clean energy including floating photovoltaic power, water-thermal power and tidal energy. K-water is contributing to society by adding value based on its creative use of water.

In 2015, the average temperatures of the earth are forecast to rise by 3.2℃ because of climate change, while sweltering heat and tropical nights will likely increase 3-fold and 5-fold, respectively. As a consequence, demands for living and activities in waterfront spaces are all but certain to rise. K-water intends to employ its distinctive waterfront related technology to the development of waterfront spaces near dams, rivers, lakes and seas across the nation. By doing so, K-water will help to create eco-friendly waterfront cities which nature, culture and culture are fused together, and build space in which humans blend well with nature. While providing safe water, K-water is striving to build safe cities to flexibly respond to floods and droughts. Moreover, K-water remains committed to creating eco-friendly cities in which nature and humans live in harmony, with each other and building beautiful and unique waterfront cities that utilize waterfront assets, along with securing tourism-tenure multiple purposes cities in waterfront spaces. K-water is seeking to improve the living standards of people by providing waterfront recreation and living quarter spaces.

K-water also endeavors to develop various types of new and renewable energy like hydraulic power, solar power, wind power and tidal power and water-thermal power in response to the government policy that seeks to reduce greenhouse gas emissions and develop new (most) new and renewable energy. As the Paris Climate Change Agreement dealing with the mitigation of greenhouse gas emissions was signed, the Korean government adopted the policy to expand energy business as a core task. K-water is leading the greenhouse gas emissions mitigation effort, along with development of new clean energy businesses. K-water is emerging as an enterprise that plays a leading role in the creation of clean energy based on its professional water management capabilities.
K-water creates new water-originated-values with the adoption of ideas that are based on unconventional thinking and innovation.
K-water, Korea’s only public water service agency, seeks to ensure efficient management of water resources, thereby protecting Koreans from disasters like floods and supplying clean water for all. K-water will endeavor to enable all areas of the country to access the benefits of water under the mission of “Opening the Future and Providing Happiness by Sharing Water”.

In 1994, K-water entered into the overseas market with a survey project on the Fenhe River in China’s Shanxi Province. Since then, K-water has performed a total of 67 projects in 24 countries as of November, 2016, by taking advantage of its bolstered business competencies and diversification efforts. Presently, K-water is performing or developing 13 projects in 11 countries, including investment projects such as Pakistan’s Patrind hydraulic power plant.
K-water has redefined its value system and management strategy to prepare for the next 50 years and its 100th anniversary. Furthermore, K-water has striven to bolster its integrated water management competencies by ramping up its water security and water cycle mechanisms in response to challenges of climate change. In this way, K-water is preparing to emerge as a global water professional. We will endeavor to transform management challenges into growth opportunities and achieve sustainable growth through innovative management.

New Value System to Usher in the Next 50 Years

K-water has reestablished its value system and strategy in response to changes of the future (mega trends) and requests of stakeholders. Based on this new system, K-water’s management and staff will move forward to effectively fulfill its mission for the next 50 years.

New Value System and Strategic Direction

K-water has defined its value system and strategy. In response to changes of the future (mega trends) and requests of stakeholders, based on this new system, K-water's management and staff will move forward to effectively fulfill its mission for the next 50 years.

Opening the Future and Providing Happiness by Sharing Water

Global Water Professional

New Value System to Usher in the Next 50 Years

<table>
<thead>
<tr>
<th>Purpose of Establishment</th>
<th>Development of water resources</th>
<th>Supply of industrial water</th>
<th>Improvement of water quality</th>
<th>Improve public welfare</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mission</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vision</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shared Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Core Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sound management</td>
<td>Innovation</td>
<td>Stakeholders' trust</td>
<td>Actualization of water cycle system</td>
<td>Creation of new growth value</td>
</tr>
</tbody>
</table>

Innovation Direction & Goals for Achieving K-water’s New Vision

<table>
<thead>
<tr>
<th>New Direction</th>
<th>Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Together</td>
<td>Increase in customer satisfaction</td>
</tr>
<tr>
<td>Autonomous</td>
<td>Induce change</td>
</tr>
<tr>
<td>Performance</td>
<td>Create value</td>
</tr>
</tbody>
</table>

Establishing New Business Units for Achieving K-water’s New 50 Year Vision

<table>
<thead>
<tr>
<th>Present business unit</th>
<th>Strategy for attaining K-water’s New 50 Year Vision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated water management business</td>
<td>Build an optimal water cycle system that benefits people</td>
</tr>
<tr>
<td>Healthy water supply business</td>
<td>Create new water-originated value through creative water utilization</td>
</tr>
<tr>
<td>Clean energy business</td>
<td>Water Platform</td>
</tr>
<tr>
<td>Waterfront space creation</td>
<td>Providing water services to all for a more prosperous world</td>
</tr>
</tbody>
</table>

Strategy for Enhancing the Business Units

<table>
<thead>
<tr>
<th>Water Cycle</th>
<th>Water Value</th>
<th>Water Platform</th>
</tr>
</thead>
<tbody>
<tr>
<td>Establish a platform for integrated water management Secure reliability of water quality &amp; Safe supply</td>
<td>Develop world-class waterfront space Secure technological competencies for water-using energy</td>
<td>Upgrade risk management capabilities for overseas projects</td>
</tr>
<tr>
<td>Level up response capacity to climate change Expand conscription &amp; concession contracts of regional tap water projects</td>
<td>Lay the foundation for continuing waterfront space creation</td>
<td>Lay the basis for pioneering into North Korea</td>
</tr>
<tr>
<td>Playing a pivotal role in smart water information management</td>
<td>Create new waterfront spaces</td>
<td>Create a roadmap for future growth of overseas businesses</td>
</tr>
<tr>
<td>Exploit high-tech market of water industry</td>
<td>Develop water-related energy sources</td>
<td>Develop core technology for water management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Develop a water platform water platform</td>
</tr>
</tbody>
</table>
K-water’s Board of Directors (BOD), its highest decision-making body, deliberates and passes resolutions on K-water’s major issues for achieving its management goals by taking into account economic, social, and environmental issues. The BOD also checks and supports the executives concurrently. K-water has developed and manages 22 key sustainability management performance indicators. As a result, K-water has ranked at the top of KOBEX SIM, Korea Business Index—Sustainability Management for four consecutive years.

Corporate Governance

The Korea Water Resources Corporation Act limits the corporation’s investors to the national government, local governments, and the Korea Development Bank (KDB). The law also stipulates that the national government must invest more than 50% of the total capital. As of March 31, 2016, K-water’s shareholders are comprised of the national government (91.5%), KDB (8.4%), and local governments (0.1%).

Composition and Role of the Board of Directors

K-water’s Board of Directors is comprised of 15 directors: 7 executive directors and 8 non-executive directors. Various specialists are appointed as non-executive directors to improve the governance structure of K-water and check management work. They also play for the improvement of the corporation’s financial soundness and waterfront business. More than half of the members of the Board, Executive Recommendation Committee, and the Audit Committee are outside directors to ensure independence and the role of checks and balances. In 2015, the Board of Directors convened for/on 19 sessions with a recorded attendance rate of 93%. The Board deliberated 48 matters and presented 65 management proposals. The management proposals were reflected into K-water’s management innovations.

Board of Directors’ Remuneration Policy

The executive directors receive performance-based payments according to the results of government evaluations, which consider quantified and non-quantified outcomes and implementation efforts. Based on this remuneration policy, K-water’s CEO was paid about KRW 214 million in 2015. The auditor was paid KRW 166 million and the executive directors were paid an average of KRW 71 million each. In 2015, K-water realigned its organization to place a greater focus on applying innovation to business processes and more scientific water management in response to the abnormal weather conditions. In 2016, the organization implemented more autonomous, positive, and dynamic work. Moreover, K-water intends to retrain its business personnel, which are responsible for water resources and water supply, into integrated water management operational units, based on the entire water cycle in order to fulfill its corporate vision over the next 50 years.

K-water holds regular advisory council and committee meetings, which include the participation of NGO, academia, and government representatives, to gather feedback from various stakeholders, and communicate with them. Of note, the Shared Growth and Cooperation Committee, established in 2014, discusses management issues with civic environment organizations including Korea Federation of Environmental Movements, water experts, and conflict management specialists. The committee has conducted 18 meetings, as of November 2016. The committee held 8 meetings each in 2015 and 2016. Opinions gathered in the committee meetings are reflected in management’s decision-making process, along with the outcomes being reported to stakeholders at subsequent meetings.

Sustainable Management

K-water’s shareholders are comprised of the national government (91.5%), KDB (8.4%), and local governments (0.1%).

Approach to Sustainability

K-water Global Hub of Water Management
K-water’s Code for Sustainable Management Appendices

Innovative Organizations for Sustainable Management

• Advancement of Sustainable Management
  Strengthening of Pre-adjustment Conflict Capacity
• Shared Growth with Partnering Companies
  Sustainability Growth through Financial Restructuring
• Sustainable Growth with Smart Management
  Strengthening Coach & Safety Management

Organizational Innovation

• Management Services Innovative Team
  • Corporate Partnership & Diagnosis Team
  • Financial Structure Improvement Team
• Future Strategy Development Team
  • Director & Safety Management Department

Needs

Creative Autonomaic, Minimalistic & Dynamic Organizational Culture
Innovate Business Processes: Managing for the Entire Water Cycle
Lay the Basic for Scientific Water Management in Response to Abnormal Weather Conditions
K-water Water Management Implementation for Units Linking Businesses

Corporate Overview

Vision & Strategy
Goverance & Responsible Management
K-water’s Communication with Stakeholders
Interviews with Stakeholders
Analysis of Future Social Trends (Megatrends)
Result of Communication with Stakeholders
K-water’s Core Sustainability Indicators

Corporate Overview

Vision & Strategy
Goverance & Responsible Management
K-water’s Communication with Stakeholders
Interviews with Stakeholders
Analysis of Future Social Trends (Megatrends)
Result of Communication with Stakeholders
K-water’s Core Sustainability Indicators
K–water’s Communication with Stakeholders

K–water operates communication channels and programs which aim to meet the special needs of stakeholders for effective open communication with its various stakeholders. K–water seeks to identify stakeholder groups which affect and are affected at each stage of its supply chain and to understand stakeholders’ needs in the corporate supply chain context. With this, K–water significantly enhances the stakeholders’ understanding of its corporate vision and management strategies.

K–water’s Stakeholders

K–water’s stakeholders include customers that directly receive services from K–water, the Korean government which is a major shareholder of K–water, local governments, local communities that undertake businesses, academia & NGOs which influence K–water’s businesses, partnering companies involved in K–water’s whole business process and its employees.

K–water Major Stakeholders

<table>
<thead>
<tr>
<th>Description</th>
<th>Stakeholders</th>
<th>Field of Interest</th>
<th>Communication Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internal</td>
<td>Supportive Type</td>
<td>Employees, Labor Union</td>
<td>Sustainable lifestyle growth, Better working conditions, Employee decision-making, Information sharing, Trust Building</td>
</tr>
<tr>
<td>External</td>
<td>Cooperative Type</td>
<td>Environmental regulation, National Assembly Expert group</td>
<td>Policy coherence Policy &amp; technical validity</td>
</tr>
<tr>
<td></td>
<td>Reflective Type</td>
<td>Corporate Social Responsibility, NGOs</td>
<td>Financial Transparency, Management participation opportunities</td>
</tr>
<tr>
<td></td>
<td>Persuasion Type</td>
<td>Media, Public</td>
<td>Media value, Management transparency, Partners</td>
</tr>
</tbody>
</table>

K–water’s Stakeholders are:

- Customers
- Employees
- Management
- Government
- Media
- NGOs
- Academia
- Local communities
- Communities
- Partnerships

Major Stakeholders in the Context of K–water’s Supply Chain
K-water's Communication with Stakeholders

Open Channel & Programs Based on the Characteristics of Stakeholders

Online
- K-water website, public organization ALD, Smartphone app, SNS, newsletter
- Communication CCG Portal
  - In-house broadcasting (View, ViewNow), online Q&A

Offline
- National Assembly, Smart Water Forum, Shared Growth & Cooperation Committee, etc., Water Management Council, National Policy Coordination Committee
- Colloquies, Conferences, Academic Seminars, Intensive Workshops, etc.
- In-depth interviews with stakeholders
- Public relations campaigns

Online
- K-water website, Smart phone app, SNS, including Facebook

Offline
- Customer Services Committee, CSIC activities
- Darim Construction Evaluation Council

Results of Communication Based on the Characteristics of Stakeholders

K-water strives to prevent conflicts that could happen during the business processes through effective communication that is focused on characteristics of stakeholders. By doing so, K-water works to minimize the inconveniences of people, enabling its stakeholders to get involved in the entire business management process directly and indirectly.

K-water has conducted a series of interviews with various stakeholders, including government officials, partners, local companies and academia, to share values with them and ensure sustainable growth. K-water will actively reflect its opinions into its future development strategy so as to lay the foundation for creating sustainable future values.

K-water is a special-purpose organization that is dedicated to pursuing shared growth together with small and medium-size enterprises (SMEs), in accordance with its long-term master plan for shared and sustainable growth. With the rapid spread of globalization, corporate business ethics and market values are being redefined, and the roles of large enterprises are changing. Thus, in order to withstand pressure from the central government and its management system so as to realize sustainable growth, it is necessary for K-water's management to establish sound corporate governance, to reflect the needs of its stakeholders, and to create a mechanism so that stakeholders can reflect their values and express their opinions. Of note, K-water will have to devise strategic measures such as corporate governance, where it is necessary to establish a citizens' alliance, along with a publicity campaign. It is also important to conduct further research into the global warming phenomenon as an urgent issue that cannot be delayed. Appropriate measures also need to be taken to improve the global warming environment.

K-water is a special-purpose organization that is dedicated to pursuing shared growth together with small and medium-size enterprises (SMEs), in accordance with its long-term master plan for shared and sustainable growth. With the rapid spread of globalization, corporate business ethics and market values are being redefined, and the roles of large enterprises are changing. Thus, in order to withstand pressure from the central government and its management system so as to realize sustainable growth, it is necessary for K-water's management to establish sound corporate governance, to reflect the needs of its stakeholders, and to create a mechanism so that stakeholders can reflect their values and express their opinions. Of note, K-water will have to devise strategic measures such as corporate governance, where it is necessary to establish a citizens' alliance, along with a publicity campaign. It is also important to conduct further research into the global warming phenomenon as an urgent issue that cannot be delayed. Appropriate measures also need to be taken to improve the global warming environment.
### Analysis of Future Social Trends (Megatrends)

#### Climate Change
- Current carbon dioxide emissions exceed the 2020 target by 4%.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

#### Technology Innovation/Fusion Trends
- Innovations and fusion, such as artificial intelligence, blockchain, virtual reality, robots, and IoT.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

#### Changing Population Structure & Urban Concentration
- By 2050, people living in urban areas are projected to be 66% of the total global population.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

#### Scarcity of Resources & Energy Mix
- Global demands for resources like water and energy are expected to rise sharply, alongside price hikes, due to population growth.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

#### Economic Globalization & Multiple International Order
- Due to the integration of global economies as a result of growth of world trade and capital movement, world trade is projected to rise by 5% annually.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

#### Transforming Government Activities
- Rising public debts will limit the execution of government policies.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

#### Safety/Security
- The risk of terrorism will likely rise mainly due to multiple international orders, while dangers of disasters will increase as a result of climate change.
- Important Values over the Next 50 Years
  - Eco-sustainability: 32.4%
  - Social responsibility: 50.2%
  - Public interests: 20.7%
  - Global standards: 13.0%

### Result of Communication with Stakeholders

#### Key Targets for the Next 50 Years
- Eco-sustainability: 32.4%
- Social responsibility: 50.2%
- Public interests: 20.7%
- Global standards: 13.0%

#### Important Values over the Next 50 Years
- Eco-sustainability: 32.4%
- Social responsibility: 50.2%
- Public interests: 20.7%
- Global standards: 13.0%
K-water is pursuing sustainable growth by comprehensively applying economic, social and environmental issues. The company identified the core issues of sustainability management by selecting issues deemed more important to K-water and stakeholders in accordance with a sustainability assessment method recommended by the GRI G4 and ISO 26000.

Materiality Assessment Process

[Step 1] Identifying Sustainability Management Issues

Company Status Analysis
Mid of 6-12-month management strategies, the status of major projects, sustainability management plans and achievements were analyzed and applied to draw up a list of key issues.

Media Analysis
We analyzed articles from January to December 2015 in order to grasp the external perception of major issues of sustainability management objectively and drew up a list of related issues.

Benchmarking Leading Companies
Based on sustainability reports of companies that carried out excellent and sustainable management among domestic and foreign companies, we analyzed sustainability management performances based on the GRI reporting principles. Through this, K-water identified additional issues that K-water should address.

Interviews with/of Experts
Interviews with/of experts were conducted with key stakeholder groups. Interviews consisted of internal and external experts who represent their groups. The opinions and requests of stakeholders were closely monitored and applied to draw up a list of key issues.

[Step 2] Prioritization

Stakeholder Survey
We conducted a survey of key stakeholder groups including employees, the government, customers (local governments and general customers), and partner companies, taking into consideration the responsibilities and impacts of K-water’s management. Through this, K-water’s sustainability management issues, which each stakeholder considers important, were identified and prioritized.

[Step 3] Selecting Core Issues

Internal Stakeholder Review
K-water released its analysis process and results to identify the key aspects of sustainability management and held a report session to discuss key sustainability management issues. We reviewed scopes, boundaries and period suitability by generalizing the results of not only an official reporting meeting but internal deliberation.

K-water’s Five Pledges for Sustainable Management

K-water selected “Five Pledges for Sustainable Management” based on 20 issues from a materiality test and reported related activities, achievements and future plans in detail.
K-water’s Five Pledges for Sustainable Management

Pledge 1 Intelligent Water Management and Satisfied Customers
Pledge 2 New Water Values for All
Pledge 3 Leading Global Water Management Company
Pledge 4 Global Sharing of Water-related Welfare
Pledge 5 Enterprise for and of Public Users

Sharing Happiness through Water

K-water will become a public enterprise trusted by the people via internal and external communications and collaboration.
Intelligent Water Management and Satisfied Customers

K-water is concentrating on advancing a paradigm of tap water supply with healthy with balanced minerals and to ensure the safety and stability of the tap water supply system for customers. In addition, the company is carrying out various activities such as environmental management with the goal of protecting people from climate change and pollution such as localized torrential downpours, severe droughts, the occurrence of green algae and water quality-lowering accidents that threaten the safety of K-water’s water services.

- Built a smart water management system that is enhancing consumer trust
- Published a report entitled ‘250 Water Quality Items of Healthy Tap Water’
- Laid the foundation for scientific water management to protect people from water-related disasters through various initiatives such as the establishment of National Drought Information Analysis Center
- Implemented environmental management such as saving resources and improving the environment over the whole business process
- Realize customer oriented smart water management
- Raise the direct drinking rate to 30%, the level of developed countries by 2024 by promoting healthy water supply
- Integration of water management for both quantity and quality in rivers and basins to cope with climate change
- Establish a flood and drought management system based on CPS* in order to prepare for water disasters

* CPS (Cyber Physical System): Real-time control of physical systems such as robots, software and surrounding environments in cyberspace

**Key activities for K-water’s sustainable management**

**Future plans for K-water’s sustainable management**

**Performance**

<table>
<thead>
<tr>
<th>Water Safety Index (WSI)*</th>
<th>Reduction of CO₂ Emissions</th>
<th>Rectifying Upstream Pollution Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Healthy Tap Water</td>
<td></td>
<td>Local emissions</td>
</tr>
<tr>
<td>0.805</td>
<td>0.898</td>
<td>98.5</td>
</tr>
<tr>
<td>0.898</td>
<td>0.911</td>
<td>98.6</td>
</tr>
<tr>
<td>0.951</td>
<td>0.978</td>
<td>99.8</td>
</tr>
</tbody>
</table>

* Water Safety Index (WSI) which measures the safety level of drinking water depending on the risk assessment. The closer to 1 the index is, the safer water is.

Supplying Healthy Tap Water

Only 5% of people directly drink tap water in Korea. Korea’s low direct drinking rate is blamed on distrust of water pipes and tanks and smell of disinfectants, causing high costs to society. But demand for tasty and healthy tap water has been on a steady rise. People are putting top priority on taste and the health benefits of water when choosing drinking water.

**Delivering Healthy Water from Water Sources to Faucets**

K-water is putting in place a water management system which remotely supervises and controls water by collecting operation data of the entire process from water sources to faucets on the basis of ICT (Information and Communication Technologies). Moreover, by analyzing the collected data the company is stably supplying water via an intelligent pipe network operation system that can control water quantity and quality on real-time and optimize energy usage. Furthermore, we developed and introduced advanced diagnosis technology and methods that can detect the deterioration of and change and defects in pipe conduits with a view to building a stable tap water supply system. At the same time, we are exerting ourselves to earn more trust from people by providing healthy tap water which includes a proper balance of minerals while reducing chlorine smell. We will raise the direct water drinking rate to 30%, as high as the level of developed countries by 2024 by supplying healthy water.

**Operation of the/an Intelligent Water Pipe Network System**

**Improvement of 804kms of old water pipelines by 2030**

26.5% of water pipes across the nation are superannuated water pipes 20 years or older. If neglected, they will deteriorate rapidly and result in water leakage and water quality problems. K-water is replacing or repairing them in an effort to improve customer confidence, reduce economic losses and ensure a stable water supply. According to the plan, we will improve 804kms of aging pipelines by 2030.

**Highly Advanced Water Purification that Filters Even Minute Pollutants**

Most water purification plants are carrying out standard water purification. But in some places which are experiencing high levels of pollution, advanced water purification systems are being introduced. Once water is processed using a standard purification system, the advanced system uses ozonization for disinfection, and uses active carbon to absorb by-products. At the moment, K-water has introduced advanced treatment systems in Banwol, Goyang and Seongnam Water Purification Plants along the Han River, Goyang and Baegyang Water Purification Plants along the Nakdong River, Gongju Water Purification Plant near Daechweom Dam and Geumnan Miy Water Purification Plant close to Yongdam Dam. We will steadily introduce more of such systems to water purification facilities along the Han River and the Nakdong River.
Producing High Quality Tap Water

Water Quality Grading System Based on Global Standards

With an eye toward enhancing its water purification plant operation capabilities by completely meeting global water quality standards, K-water is implementing a water quality grading system which compares and evaluates 41 water-purification plants across the nation. The system aims at satisfying the most stringent global quality standards of WHO and OECD member countries ("Global Water Quality Standard"). Its water-purification plants including consigned ones secured a Global Water Quality Standard achievement rate of 99.73% in both metropolitan and provincial areas in 2015.

K-water will secure global-level water management capabilities based on decades of waterworks operation and construction know how and advanced ICT (Information and Communication Technologies) that integrates waterworks facilities across the nation.

Stringent Tap Water Quality Standards through the Testing of 250 Items

Since 2002, K-water has been conducting stringent tests of 250 water items which is more demanding than those of advanced countries such as the United States and Japan. The diversification of water-pollution sources and an increase in social interest in water quality has led the company to build a data base in an effort to help not only those working in the water industry but also ordinary people to better understand the contents of water quality test items such as material characteristics, emission sources, management status and health risks. At the same time, we have published a booklet entitled “250 Water Quality Items for Healthy Tap Water Selected by K-water.” The booklet is also available our homepage (www.kwater.or.kr).

Publication of a booklet on the Water Quality Analysis Results of 250 Items tested by K-water

Since 2002, K-water has been conducting stringent tests of 250 water items which is more demanding than those of advanced countries such as the United States and Japan. The diversification of water-pollution sources and an increase in social interest in water quality has led the company to build a data base in an effort to help not only those working in the water industry but also ordinary people to better understand the contents of water quality test items such as material characteristics, emission sources, management status and health risks. At the same time, we have published a booklet entitled “250 Water Quality Items for Healthy Tap Water Selected by K-water.” The booklet is also available our homepage (www.kwater.or.kr).

ICT-Based Smart Water City

With the goal of addressing public mistrust in tap water and realizing water welfare, K-water changed the tap water supply paradigm from “clean and safe water” to “healthy water” containing a proper balance of minerals, and is developing “Smart Water City” projects including an improved tap water supply system and individually customized services for customers. Smart Water Cities developed by K-water manage water quantity and quality by applying ICT to the entire water supply process from water sources to hydrants connected to homes and provides tap water information in real-time. By doing so, cities and K-water are realizing a healthy water supply system.

Supplying Healthy Tap Water via ICT-Based Smart Water Management

K-water conducts tests of water quality on 500 items by monitoring the entire tap water supply process and building a constant water quality management system for the entire nation, automatic detection and pipe cleaning, among others, and then supplies purified water to each household.

Water Faucet and Water Quality Inspection Services

In a Smart Water City, one can get all information about the quality of tap water in his or her town and home electronically, water quality bulletin boards and a smartphone application. The city offers advisory service to check water quality, waterer afflicted and a water pipe inspection service (Water Doctor).

Increase in the Direct Tap Water Drinking Rate

K-water has been implementing a pilot smart water city project with Paju since 2014. By improving the water supply process, water quality in the pilot project improved and the direct tap water drinking rate went from 1% up to 36.3%. In addition, thanks to an increase in people’s responses to Smart Water City, the company is pushing forward to expand the project to cover the entire area of Paju. We are planning to expand Smart Water Cities across the nation in order to provide healthy tap water services to more people with the pilot project in Paju as a springboard.

Expanding Smart Water Cities All over Country

K-water’s Smart Water City Project aims to safely supply tap water to homes and enhance public trust on tap water and raise the direct drinking rate via a variety of customer-oriented services to improve water quality.

No More Mistrust of Tap Water!

K-water is identifying its efforts through tap water drinking campaigns, the expansion of the installation of tap water drinking fountains among others along with the Smart Water City Project and civic groups in order to improve the public’s opinion of tap water.
Coping with Climate Change and Prolonged Drought

Korea suffered from a severe drought in 2014 that lasted into 2015. As a result of the prolonged drought, K-water laid the foundation for overcoming the drought by organizing a companywide Drought Prevention Task-Forces which prepared drought prevention and mitigation plans. In preparation for abnormal climates in the future, we already have in place mid-to-long-term plans to optimize the operation of weirs in Korea’s four major rivers, expand the number of desalination plants and groundwater dams, and establish waterway connections between dams.

National Center for Drought Information Analysis

K-water went ahead with the establishment of an organization specialized in the collection and analysis of drought information to prevent and tackle prolonged droughts. At a national policy coordination meeting held in September 2015, it was decided that the National Drought Information Analysis Center should be established at K-water as a way to give the government supports such as drought forecasts and warnings and to manage droughts. The center will provide decision makers with vital information through drought monitoring and analysis. At the same time, the center will suggest and develop efficient policies on water resource management based on the rich experience of its expert staff.

Establishment of the National Drought Information Analysis Center for Integrated Management of Drought Information, Monitoring and Prediction of Droughts

Background
- Increase in the frequency and intensity of droughts called for measures to preemptively mitigate the effects of droughts rather than recovering damage from drought
- Lack of constant drought monitoring and forecast systems, dissemination of information, and coordination amongst ministries in the nation

Implementation Efforts
- Centralized collection of information and forecast systems, analysis of information, and coordination amongst various ministries
- Improved common drought monitoring and forecast systems

Implementation Results
- Establishment of the National Drought Information Analysis Center

National Drought Information Analysis Center

National drought information analysis center (National policy coordination meeting in September 2015)

Central and Local Governments
- Drought forecasts and warnings
- Quick decision-making to cope with droughts

Implementation plans
- Construction of the basic drought monitoring system
- Full operation of the drought warning and watch system
- Sharing information on the status of droughts (regions with linked water supply) and support for policy making and etc.

K-water’s Efforts to Reduce Damages Caused by Droughts

K-water is already preparing for droughts by diversifying drought phases into four stages (attention, caution, vigilance, and seriousness) according to the severity of droughts and overhauling the water supply plan according to the phases to ensure water supply stability/securely in case of droughts.

For example, the company supplied water to the western area of South Chungcheong Province which suffered the most from the prolonged drought in 2015 via Yongdam and Daechung Dams beginning in September. Starting in October, we induced voluntary 20% savings of domestic and industrial water supplies. K-water implemented a water-saving subsidy system in self-controlled water supply areas. The subsidy is KRW 1,240 per ton which is three times the water charge of multi-regional waterworks a year ago. For the prevention of water shortage caused by drought in the western area of South Chungcheong Province, the company built Boryeong Dam Waterway Tunnel to send water from the Geum River to Boryeong Dam. Through these efforts, Boryeong Dam, which suffered its worst ever drought in 2016, accumulated a total of 10.5 million m³ (45 days) of water. In case of the Han River, which supplies water to the Seoul metropolitan area, we were able to overcome an extreme drought by stockpiling (191 million m³ of water equivalent) to 220 days of average water supply)

Furthermore, K-water is actively conducting projects to increase water flow rates* of entrusted waterworks of municipalities. The company signed an agreement on emergency water supply projects with Dangjin, Boryeong, Seosun, Hongseong and Taean in South Chungcheong Province and dispatched experts to the sites. Therefore, we raised accounted water rates by 16.6% on average through the construction of a flow-monitoring system, old pipe replacement, systematic water leak repair, pipe network maintenance and hydraulic management which enabled the municipalities to overcome the severe drought.

On top of that, K-water strived to address water shortages. That is, the company provided bottled water and water supply vehicles to areas devoid of direct benefits from multi-regional and local waterworks such as islands and mountainous regions (in order to improve water-related welfare). We also connected the pipes of multi-regional waterworks to agricultural irrigation canals and supplied water using the weirs of Korea’s four major rivers.

Diversified Measures to Cope with Water Shortages

<table>
<thead>
<tr>
<th>Measure</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offering bottled water</td>
<td>575,000 bottles / 426 tons</td>
</tr>
<tr>
<td>Providing water supply vehicles</td>
<td>980 loads of 15 ton truck</td>
</tr>
<tr>
<td>Utilizing current waterworks</td>
<td>545,000 m³</td>
</tr>
<tr>
<td>Control of dam storage and discharge</td>
<td></td>
</tr>
<tr>
<td>Extension of Gunam Dam’s water-impounding period</td>
<td></td>
</tr>
<tr>
<td>Groundwater from wells</td>
<td></td>
</tr>
<tr>
<td>Utilizing the weirs of the four major rivers</td>
<td></td>
</tr>
</tbody>
</table>

* K-water uses the rate of flowing water to the amount of water supplied to water pipes, a flow rate decrease if there is a large amount of water leaking from water pipes.
Coping with Climate Change and Prolonged Drought

Mid & Long-term Drought Prevention Measures

K-water is actively developing measures to minimize damages caused by droughts due to abnormal weather. The company will continue to supply water in droughts by directly supplying water from multi-region waterworks to unserved areas less than 2km away from the waterworks. At the same time, we will convert/upgrade superannuated or unstable local waterworks into multi-region waterworks or connect them to emergency systems. In addition, we are endeavoring to protect people from droughts through various activities such as promoting small dams, stepping up the use of underground water resources, preparing integration convergence by basins, raising utilization rates of dams via regular dam evaluation and introducing retention ponds.

Pledge 1. Intelligent Water Management and Satisfied Customer
Pledge 2. New Water Values for All
Pledge 3. Leading Global Water Management Company
Pledge 4. Global Sharing of Water-related Welfare
Pledge 5. Enterprise for and of Public Users

Approach to Sustainability
K-water, Global Hub of Water Management

K-water’s Five Pledges for Sustainable Management

Appendix

Spotlight on K-water’s Efforts

K-water’s Performance Index

Running Quality, Environment and Green Management Systems that Honor Global Standards

- Obtained ISO (International Organization for Standardization) certificates in quality, environment and green management (ISO 9001, quality management) and ISO 14001 (environmental management) and ISO 10011 (green management)
- Every year, all departments are annually evaluated by specialized external institutions and Internal specialists about quality, environment and green management (customer service quality, safety and environmental management, etc.) and receive results and improvement guidelines.

Environmental Performance Evaluation Index (EPE)

- The index quarterly measures corporate environmental management performances for all management areas.
- Overall corporate environmental management performance improved from base year (2006) K-water has been managing and measuring key performance indicators since 2007
- Scored 148 points in the 2015 Environmental Performance Evaluation, and, compared with the base year (2006), performance has improved 48%

Fostered Internal Experts in Quality Environmental and Green Management

- The company has been selecting employees and providing them with ISO quality and environmental management certification auditor training opportunities since 2007
- By the end of 2015, 142 ISO certified auditors in corporate quality and environmental system have been fostered

Practical quality and environmental management is implemented at all K-water worksites through internal experts

K-water’s corporate activities are affected by climate change and pollution and vice versa. It is important for K-water to cope with climate change and the protection of the environment as greenhouse gas (GHG) emissions and waste, among others caused by corporate activities can have a negative impact on climate, nature and the environment. We are making efforts for the systematic implementation of environmental management. Such efforts should be steadily managed in terms of K-water’s social responsibilities. Given that we are a government-owned water management company, we view this as a common good.
K-water's Supply Chain & Environmental Management

**Approach to Sustainability**

K-water, Global Hub of Water Management

**K-water’s Five Pledges for Sustainable Management**

1. **Intelligent Water Management and Satisfied Customer**
2. **New Water Values for All**
3. **Leading Global Water Management Company**
4. **Global Sharing of Water-related Welfare**
5. **Enterprise for and of Public Users**

**Environmental Management for Healthy National Territory**

- Eco-friendly planning
- Eco-friendly construction
- Reduction and recycle of solid wastes generated by construction business
- Trainings on the environmental management to partnering companies
- Increasing the efficiency of energy, resource, and labor through facility improvement, process improvement
- Minimizing and recycle of waterworks and sewage waste
- Discharging water to be filtered and treated above legal requirement

**Environment Performance**

- Resource recycling
- Promoting product production (Refer to Graph ➊)
- Leading its partnering companies’ eco-friendly mannered production
- Environment improvement of drinking water sources

**Green Purchase ➊**

- **Total purchases (KRW 100 million)**
  - 2014: 368,401,643
  - 2015: 408,241,643

- **Green purchases (KRW 100 million)**
  - 2014: 100
  - 2015: 59

**Discharged Water Quality ➋**

- **Ratio of discharged water BOD (mg/L)** compared to strictest legal discharge standard by facility (mg/L)
  - 2014: 114,271
  - 2015: 114,271

- **Ratio of discharged water COD (mg/L)** compared to strictest legal discharge standard by facility (mg/L)
  - 2014: 114,271
  - 2015: 114,271

**Waste Production and Recycle in 2015 ➍**

- **Recycling rate (%)**
  - Waterworks sludge: 2014 - 2015: 60%
  - Sewage sludge: 2014 - 2015: 60%
  - Construction waste: 2014 - 2015: 60%

**Energy Consumption and Reduction ➋**

- **Usage (TJ)**
  - 2014: 17,388
  - 2015: 17,388

**Floating Garbage Removal in Dams and Rivers ➐**

- **Dam reservoirs (1,000 m³)**
  - 2014: 20,181
  - 2015: 20,181

- **River weirs (1,000 m³)**
  - 2014: 68,429
  - 2015: 68,429

**Environmentally-friendly produced products purchasing (i.e., Green Purchasing)**

- Support for constructing its partnering companies' environmental management system
- Proactive water quality management of drinking water sources

**Energy and resource cost reduction (Refer to Graph ➋)**

- Greenhouse gas emission reduction (Refer to Graph ➋)
- Disposal cost of waterworks/sewage sludge and construction waste (Refer to Graph ➋)
- Discharge water outfall areas and local environment protection and improvement (Refer to Graph ➋)

**Use**

- *Healthy Tap Water*, for human health
  - Light weight package use
  - Floating garbage removal in dams and rivers (Refer to Graph ➋)

**Prevention of groundwater overuse or pollution through increasing public tap water use**

- Reduction of social cost for wastewater and solid waste disposal
- Local environment protection

**Discharge water quality improvement (Refer to Graph ➋)**

- Use
- Discard & Reuse

**Environment Management**

- Raw Material (water source management)
- Production & Operation
- Use

**Business Development & Planning**

- Construction

**Environment Management for Healthy National Territory**

- Discharged Water Quality ➋
  - Ratio of discharged water BOD (mg/L)
  - Ratio of discharged water COD (mg/L)
- Waste Production and Recycle in 2015 ➍
- Energy Consumption and Reduction ➋
  - Usage (TJ)
- Floating Garbage Removal in Dams and Rivers ➐
K-water’s Efforts to Cope with Climate Change

K-water is subject to the Korean government’s national greenhouse gas (GHG) emission reduction goal management program and has been fulfilling its commitments. In 2015, K-water’s GHG emissions increased 3.3% to 646,559 ton CO₂-eq year on year. Since K-water focused on slashing GHG emissions in 2012, the company has reached its reduction targets for four years in a row. Most of K-water’s GHG emissions were indirect emissions from pump operation for tap water supply, while biogenic GHG emissions were not measured. GHG intensity was 17.1 (ton CO₂-eq/KRW 100 million), up by approximately 0.2 ton CO₂-eq from the previous year but down by 0.2 ton CO₂-eq from 2013. On top of that, K-water launched a Clean Development Mechanism (CDM) project for the first time as a government-invested institution in May 2005 and registered 12 projects with the United Nations (UNFCCC) and had a reduction of 330,000 tons of GHG emissions recognized.

![GHG emission goal achievement rate](image)

K-water’s Efforts to Cope with Climate Change

K-water is subject to the Korean government’s national greenhouse gas (GHG) emission reduction goal management program and has been fulfilling its commitments. In 2015, K-water’s GHG emissions increased 3.3% to 646,559 ton CO₂-eq year on year. Since K-water focused on slashing GHG emissions in 2012, the company has reached its reduction targets for four years in a row. Most of K-water’s GHG emissions were indirect emissions from pump operation for tap water supply, while biogenic GHG emissions were not measured. GHG intensity was 17.1 (ton CO₂-eq/KRW 100 million), up by approximately 0.2 ton CO₂-eq from the previous year but down by 0.2 ton CO₂-eq from 2013. On top of that, K-water launched a Clean Development Mechanism (CDM) project for the first time as a government-invested institution in May 2005 and registered 12 projects with the United Nations (UNFCCC) and had a reduction of 330,000 tons of GHG emissions recognized.

![GHG intensity based on sales](image)

K-water’s Efforts to Cope with Climate Change

K-water is subject to the Korean government’s national greenhouse gas (GHG) emission reduction goal management program and has been fulfilling its commitments. In 2015, K-water’s GHG emissions increased 3.3% to 646,559 ton CO₂-eq year on year. Since K-water focused on slashing GHG emissions in 2012, the company has reached its reduction targets for four years in a row. Most of K-water’s GHG emissions were indirect emissions from pump operation for tap water supply, while biogenic GHG emissions were not measured. GHG intensity was 17.1 (ton CO₂-eq/KRW 100 million), up by approximately 0.2 ton CO₂-eq from the previous year but down by 0.2 ton CO₂-eq from 2013. On top of that, K-water launched a Clean Development Mechanism (CDM) project for the first time as a government-invested institution in May 2005 and registered 12 projects with the United Nations (UNFCCC) and had a reduction of 330,000 tons of GHG emissions recognized.

![GHG Reduction](image)

K-water’s Efforts to Cope with Climate Change

K-water is subject to the Korean government’s national greenhouse gas (GHG) emission reduction goal management program and has been fulfilling its commitments. In 2015, K-water’s GHG emissions increased 3.3% to 646,559 ton CO₂-eq year on year. Since K-water focused on slashing GHG emissions in 2012, the company has reached its reduction targets for four years in a row. Most of K-water’s GHG emissions were indirect emissions from pump operation for tap water supply, while biogenic GHG emissions were not measured. GHG intensity was 17.1 (ton CO₂-eq/KRW 100 million), up by approximately 0.2 ton CO₂-eq from the previous year but down by 0.2 ton CO₂-eq from 2013. On top of that, K-water launched a Clean Development Mechanism (CDM) project for the first time as a government-invested institution in May 2005 and registered 12 projects with the United Nations (UNFCCC) and had a reduction of 330,000 tons of GHG emissions recognized.

![Protecting People from Water Disasters](image)

K-water’s Efforts to Cope with Climate Change

K-water is subject to the Korean government’s national greenhouse gas (GHG) emission reduction goal management program and has been fulfilling its commitments. In 2015, K-water’s GHG emissions increased 3.3% to 646,559 ton CO₂-eq year on year. Since K-water focused on slashing GHG emissions in 2012, the company has reached its reduction targets for four years in a row. Most of K-water’s GHG emissions were indirect emissions from pump operation for tap water supply, while biogenic GHG emissions were not measured. GHG intensity was 17.1 (ton CO₂-eq/KRW 100 million), up by approximately 0.2 ton CO₂-eq from the previous year but down by 0.2 ton CO₂-eq from 2013. On top of that, K-water launched a Clean Development Mechanism (CDM) project for the first time as a government-invested institution in May 2005 and registered 12 projects with the United Nations (UNFCCC) and had a reduction of 330,000 tons of GHG emissions recognized.

![K-water’s Efforts to Cope with Climate Change](image)

K-water’s Efforts to Cope with Climate Change

K-water is subject to the Korean government’s national greenhouse gas (GHG) emission reduction goal management program and has been fulfilling its commitments. In 2015, K-water’s GHG emissions increased 3.3% to 646,559 ton CO₂-eq year on year. Since K-water focused on slashing GHG emissions in 2012, the company has reached its reduction targets for four years in a row. Most of K-water’s GHG emissions were indirect emissions from pump operation for tap water supply, while biogenic GHG emissions were not measured. GHG intensity was 17.1 (ton CO₂-eq/KRW 100 million), up by approximately 0.2 ton CO₂-eq from the previous year but down by 0.2 ton CO₂-eq from 2013. On top of that, K-water launched a Clean Development Mechanism (CDM) project for the first time as a government-invested institution in May 2005 and registered 12 projects with the United Nations (UNFCCC) and had a reduction of 330,000 tons of GHG emissions recognized.

![K-water’s Efforts to Cope with Climate Change](image)
Solving Green Algae Issues through River Management in Consideration of River Ecology

Having broken away from ineffective post-algae responses in the past, K-water drew up an action plan to resolve green algae issues in 2014 and since then, has been implementing it for the systematic and proactive management. In 2015, the company made three strategies for expanding its roles and laid the foundation for actively responding to algae problems in accordance with revised relevant laws. In addition, we stepped up on-site monitoring by increasing the number of onsite monitoring personnel (1.9 fold) and are operating a situation room for immediate response to algae issues.

K-water’s 3 Strategies for Managing Green Algae

1. Spatial expansion
   - [old] Focus on management of dams and weirs
   - [improved] Expanding additional rivers and dam areas
   - Advancement of technology and management (5 detailed tasks)

2. Functional expansion
   - [old] Focus on water surface management
   - [improved] Expanding into water quality and aquatic ecosystems
   - Developing new business and moving forward with cooperation opportunities (3 detailed tasks)

3. Creating new business
   - [old] Focus on government-led projects
   - [improved] Expanding local cooperation-type projects

Revision of Relevant Laws to Reduce Green Algae

<table>
<thead>
<tr>
<th>Classification</th>
<th>Old</th>
<th>Improved</th>
<th>Expected effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Ecosystem Law</td>
<td>No groundwork for responses to green algae</td>
<td>Expanding responses into lakes, marshes and rivers</td>
<td>Expedites to play an important role in tackling green algae</td>
</tr>
<tr>
<td>Livestock Excretion Law</td>
<td>No groundwork for investigation into livestock excretion</td>
<td>Establishment of a tech-finding committee</td>
<td>Expedites to reduce pollution sources in livestock</td>
</tr>
<tr>
<td>Environment Law</td>
<td>No groundwork for reporting livestock</td>
<td>Expanding livestock reporting into livestock excretion</td>
<td>Expedites to reduce pollution sources in livestock</td>
</tr>
<tr>
<td>Environmental Law</td>
<td>No groundwork for reporting livestock</td>
<td>Expanding livestock reporting into livestock excretion</td>
<td>Expedites to reduce pollution sources in livestock</td>
</tr>
</tbody>
</table>

K-water Full-Time Green Algae Response System

<table>
<thead>
<tr>
<th>Classification</th>
<th>Overcoming efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and inspecting outbreak sites</td>
<td>Expanding the number of inspections in areas which are affected by severe algae to include holidays, 2PM-6PM (3-9 times number of previous year)</td>
</tr>
<tr>
<td>On-site measures</td>
<td>Variation of used vessels in cooperation with local residents, Measures were taken for 2,460,000 (1-3 times number of previous year)</td>
</tr>
<tr>
<td>Green algae situation room</td>
<td>Constantly responding via Green Algae Situation Rooms, Real-time monitoring and response systems (24/7)</td>
</tr>
<tr>
<td>Recording and reporting results of inspection</td>
<td>Daily monitoring of 39 sites, Daily responses and sharing information (41 national gene algae issue solving task force team)</td>
</tr>
</tbody>
</table>

Development and Improvement of Green Algae Reduction Technology

To proactively respond to green algae issues, K-water tentatively carried out pulsed discharges in the Gangdong Goryeong Weir-Changyeong Weir section in cooperation with relevant organizations from June to September of 2015. Pulsed discharges is a method that was used to suppress the growth of green algae in Australia. This method impedes the growth of blue-green algae by mixing upper and lower classes and destroying stratification via the acceleration of flow speeds in rivers through artificial and iterative methods. This method can reduce green algae simply by changing reservoir discharge methods without additional cost or chemical material use. A tentative discharge slashed the concentration of cyanobacteria 45%-55% and Chlorophyll-a (pigment materials composing algae) 9%-38% on days in which the method was applied. K-water will maximize water quality improvement effects via pulse discharges, step-up close cooperation with relevant organizations to prevent overall problems such as accidents from taking place and establish optimized pulse-type weir management methods. Moreover, we will secure safe water quality and lay the groundwork for new technology development and achieve win-win growth with partners by steadily pushing ahead with the development of green algae reduction technology and an improvement in its performances.

Mitigating the effects of green algae by developing new-concept green algae technology (Drop of 45% to 55% in blue-green algae)

- Developing high-effectiveness green algae removal technology and put to practical use
  - (Patent application in Jul. 2015)
- Developing green algae removal vessels

- Applying 22 technologies of small and medium firms to dams and weirs
- Improving performance via support program for small and mid-sized firms

- Developing excellent technology to clear green algae by offering new venus
- Establishing green algae removal project to improve water quality in connection with relevant organizations

* Test-Beds: Providing facilities to test and supplement new technologies developed by small and medium sized enterprises etc.

Appendix

K-water Full-Time Green Algae Response System

<table>
<thead>
<tr>
<th>Classification</th>
<th>Overcoming efforts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monitoring and inspecting outbreak sites</td>
<td>Expanding the number of inspections in areas which are affected by severe algae to include holidays, 2PM-6PM (3-9 times number of previous year)</td>
</tr>
<tr>
<td>On-site measures</td>
<td>Variation of used vessels in cooperation with local residents, Measures were taken for 2,460,000 (1-3 times number of previous year)</td>
</tr>
<tr>
<td>Green algae situation room</td>
<td>Constantly responding via Green Algae Situation Rooms, Real-time monitoring and response systems (24/7)</td>
</tr>
<tr>
<td>Recording and reporting results of inspection</td>
<td>Daily monitoring of 39 sites, Daily responses and sharing information (41 national gene algae issue solving task force team)</td>
</tr>
</tbody>
</table>
Real-Time and Integrated Floodground Data Management

The volatility of Korea’s climate patterns are increasing due to the effects of global warming and abnormal weather conditions. Combined with Korea’s unique landscape of steep terrain and fast flow of rivers, floodground management is growing increasingly complex. This makes it necessary for the government to quickly grasp and cope with hydrological phenomena such as floods and droughts and secure clear water for public use in response to drastic climate changes. K-water runs the Hydrological Data Information Management System (HDMIS) through constant real-time hydrological monitoring in one-minute intervals from multipurpose dams, water supply dams, multipurpose weirs and flood control sites.

Completion of K-LPM (K-water Long-term Precipitation Model)

With a view to enhance water management and taking into consideration long-term precipitation forecasts, K-water has built and is operating K-LPM by developing and applying a long-term precipitation downscaling method based on the GCM (general circulation model). The company is utilizing data from K-LPM as basic materials for the establishment of a monthly reservoir operation plan for stably water supply. K-LPM has also enabled K-water to lay the foundation for addressing water-related disasters such as droughts, floods and water quality problems.

We applied the latest forecasting method (the Ensemble Forecasting Method, a method actively used for probability-based forecasts) which includes physical processes within the model in an effort to boost the K-LPM’s accuracy. For high-volume numeric calculation, we introduced and are utilizing a super computer exclusively for weather forecast.

Flow Rate Management System for Efficient Water Resources Management

In order to include the necessary amount of water from rivers with limited water resources, it is necessary to be able to collect water demand and supply data in real-time for analytical purposes. By utilizing weather and discharge analysis models, data can be used to predict future demand patterns. K-water has integrated the “Real-Time Water Management System” of the Ministry of Land, Infrastructure and Transport and its “Real-Time Reservoir Operating System” and built the River Flow Rate Management System. Based on the system, we are contributing to rational and scientific water resource management such as mapping out a plan to run dams and multipurpose reservoirs in conjunction with multipurpose weirs and agricultural reservoirs with raised banks.

Analyzing Floods and Monitoring Water Disasters

With the aim of elevating the efficiency of flood control and securing the groundwork for a system to manage water by basins by integrating and managing current facilities, K-water built and is running its own flood analysis system (FAS) for all basins. FAS can automatically collect hydrological observation data and rainfall forecast data using a super computer that operates in real-time. The system is designed to be easily used through simple education, not to mention compatibility with an office automation environment,

K-water is a Global Hub of Water Management.

Flow Rate Management System for Sustainable Management

K-water, Global Hub of Water Management.

K-water’s Five Pledges for Sustainable Management

1. Intelligent Water Management and Satisfied Customer
2. New Water Values for All
3. Leading Global Water Management Company
4. Global Sharing of Water-related Welfare
5. Enterprise for and of Public Users

Key Features of System

- A long-term precipitation downscaling method
- Analysis of water intake and discharge
- Use analysis by grasping flow rates, reservoirs, weirs, water quality and etc. (Dams, agricultural and non-agricultural reservoirs, weirs, etc.)
- Flood analysis simulator
- Use of water for living, industry, agriculture and others
- Flood analysis simulation (Dams, agricultural reservoirs, weirs, water quality and etc.)
Pledge 1. Intelligent Water Management and Satisfied Customer

Pledge 2. New Water Values for All

Pledge 3. Leading Global Water Management Company

K-water’s Five Pledges for Sustainable Management

Appendix

Capacity (MW)

<table>
<thead>
<tr>
<th>Classification</th>
<th>Capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydropower</td>
<td>1,345</td>
</tr>
<tr>
<td>Total power</td>
<td>254</td>
</tr>
<tr>
<td>Wind power</td>
<td>8</td>
</tr>
<tr>
<td>Solar power</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>1,607</td>
</tr>
</tbody>
</table>

K-water’s new and renewable energy facilities capacities

<table>
<thead>
<tr>
<th>Classification</th>
<th>Capacity (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydropower</td>
<td>1,345</td>
</tr>
<tr>
<td>Annual power generation (GWh/year)</td>
<td>1,645</td>
</tr>
<tr>
<td>Annual replacement effects (1,000,000/annum)</td>
<td>100</td>
</tr>
<tr>
<td>Total GPM (1,000,000/annum)</td>
<td>1,050</td>
</tr>
</tbody>
</table>

K-water’s annual power generation by the end of 2020

K-water’s new and renewable energy company in Korea (accounting for 18% of entire domestic capacity)

K-water’s Respect of the Natural Order

Energy independence and Carbon Emissions Reduction via Hydroelectric, Tidal and Clean Energy Business

K-water is Korea’s number one new and renewable energy firm that accounts for 18% of new and renewable energy generation capacity and 61% of hydroelectric power generation capacity. The company is contributing to the government’s new and renewable energy policies through the development of creative water-specialized business models.

K-water is a number one new and renewable energy company in Korea (accounting for 18% of the national total)

- New and renewable energy facilities: 1,345MW (18% of the national total)
- Replacing imported oil amounting to about KRW 290 billion a year
- Reducing about 1.35 million tons of CO2 emissions a year
- Developing K-HIT* or K-water Hydro Intelligent Toolkit for Integrated Water Resources Management Decision Support

Hydroelectric Power Generation

- K-water is actively utilizing the surplus energy of water resources infrastructures and waterworks for the purpose of expanding the development of hydroelectric power.
- K-water is Korea’s number one new and renewable energy firm that accounts for 18% of new and renewable energy generation capacity and 61% of hydroelectric power generation capacity. The company is contributing to the government’s new and renewable energy policies through the development of creative water-specialized business models.

Solar Power Generation on Land

- With the aim of responding to the government’s policy to promote new and renewable energy, K-water is developing solar power generation on land by making good use of idle spaces (roofs, water purification sites and clarifiers).

K-water’s new and renewable energy facilities capacities

Classification | Capacity (MW)
--- | ---
Hydropower | 1,345
Total power | 254
Wind power | 8
Solar power | 9
Total | 1,607

K-water’s annual power generation by the end of 2020

K-water’s new and renewable energy company in Korea (accounting for 18% of entire domestic capacity)

- New and renewable energy facilities: 1,345MW (18% of the national total)
- Replacing imported oil amounting to about KRW 290 billion a year
- Reducing about 1.35 million tons of CO2 emissions a year
- Developing K-HIT* or K-water Hydro Intelligent Toolkit for Integrated Water Resources Management Decision Support

Hydroelectric Power Generation

- K-water is actively utilizing the surplus energy of water resources infrastructures and waterworks for the purpose of expanding the development of hydroelectric power.
- K-water is Korea’s number one new and renewable energy firm that accounts for 18% of new and renewable energy generation capacity and 61% of hydroelectric power generation capacity. The company is contributing to the government’s new and renewable energy policies through the development of creative water-specialized business models.

Solar Power Generation on Land

- With the aim of responding to the government’s policy to promote new and renewable energy, K-water is developing solar power generation on land by making good use of idle spaces (roofs, water purification sites and clarifiers).
Floating Solar Power Generation
K-water is a leader in the development of floating solar power generation systems. The company successfully installed a 500kW commercial model in the river that passes through Hapcheon Dam after a floating 100kW test-bed solar power generation system was introduced in 2011. We moved into an era of floating solar power system development by building a 2.7MW floating solar power generation system in the river that passes through Boryeong Dam in February 2015. Floating solar power generation systems can address the problems of reckless abuses of land and botanical damage since they are floating on water. At the same time, they increase electric power production by over 10% thanks to the cooling effect of water surfaces and hamper the creation of algal. In addition to these, there are other positive effects,

- Laying the foundation for the development of floating solar power generation systems by completing Boryeong Dam
- Floating Solar Power Generation System (Feb, 2015, 2.7MW)

* The foundation was laid for large-scale floating solar power generation system projects by securing social and environmental awareness and cost cutting.

- Carrying forward the creation of eco-friendly e-Towns near dams by developing 200kW floating solar power systems in Hapcheon Dam (100kW), Daecheong Dam (50kW), Yongdam Dam (50kW) by 2021 with a pilot project in Hapcheon Dam (10MW) commencing in 2017.

* Preparing a variety of funding models such as SPC(Special Purpose Company) by taking into account financial burdens that arise from increased investment.

Hydrothermal Energy
K-water is carrying forward a new business model to supply heat sources and heating and cooling sources for big buildings around water resources and waterfronts and urban areas by using the heat energy of water under K-water’s management,

- Carried forward the supply of large-scale building heating systems to fall buildings in downtown areas such as hyundai Home’s new building (10 thousand RT) following the second Lotte World (3,000 RT) and the start of the service. Oct. 2010 by utilizing K-water’s potential volume (30,000RT).

- Developing and applying heating source supply systems to community heating and cooling facilities specialized for K-water’s waterfront cities such as ShinWY, Gungnam and Baean BCO.

K-water’s New Energy Business Model
The global trend is pulling for the development of new and renewable energy sources. This is because now it is essential to develop clean energy for the reduction of CO2 emissions, the culprit behind global warming. K-water is taking the lead in national energy policies through the development of new and renewable energy sources such as small hydropower generation, wind power generation and the discovery of the hydrothermal energy business,

- Create eco-friendly towns that rely on clean energy resources - Develop ShinWya Lake Energy Cluster
- Expand the development of hydrothermal energy externally - K-water type prosumer system
- Develop a Korean-type hydroelectric power generation facility model

* K-water’s new business model toward the consumer and the professional model toward the main professionals has been planned to perfect the consumer and the professional model toward the main professionals.

ShinWya Lake Energy Cluster that creates synergy between Energy, Tourism and Culture
K-water will build a new and renewable energy experience center with land (1MW) and sea solar power (30MW) generation facilities and sea wind power (30MW) generation facilities with ShinWya Lake and its embankment as the center by 2021. The facilities will be integrated into current tidal and wind power generation facilities, thereby serving as a 15MW new and renewable energy complex and a marine energy tourist attraction,

- Complete ShinWya Lake wind power generation facility (1MW) on land
- Complete solar power generation facility (1MW) on land, (2MW) on rooftop of Sunnam University in 2018
- Complete solar power generation facility (1.5MW) in season 2021
- Complete wind power generation facility (15MW) in season 2021

Implementation Plan for Water–Energy Nexus Promotion
K-water drew up and is pushing forward with a water-energy nexus promotion plan in order to re-create the value of water resource facilities and maximize its use via the development of clean energy based on dams and waterworks. The company responds to the government’s policies on the growth of the new energy businesses and the expansion of new and renewable energy and make the energy business a future growth engine,

- Designating a floating 100kW test-bed solar power generation system in 2011. We moved into an era of floating solar power system development by building a 2.7MW floating solar power generation system in the river that passes through Boryeong Dam in February 2015.
- Floating solar power generation systems can address the problems of reckless abuses of land and botanical damage since they are floating on water. At the same time, they increase electric power production by over 10% thanks to the cooling effect of water surfaces and hamper the creation of algal. In addition to these, there are other positive effects.

- Laying the foundation for the development of floating solar power generation systems by completing Boryeong Dam Floating Solar Power Generation System (Feb, 2015, 2.7MW)

* The foundation was laid for large-scale floating solar power generation system projects by securing social and environmental awareness and cost cutting.

- Carrying forward the creation of eco-friendly e-Towns near dams by developing 200kW floating solar power systems in Hapcheon Dam (100kW), Daecheong Dam (50kW), Yongdam Dam (50kW) by 2021 with a pilot project in Hapcheon Dam (10MW) commencing in 2017.

* Preparing a variety of funding models such as SPC(Special Purpose Company) by taking into account financial burdens that arise from increased investment.

Hydrothermal Energy
K-water is carrying forward a new business model to supply heat sources and heating and cooling sources for big buildings around water resources and waterfronts and urban areas by using the heat energy of water under K-water’s management,

- Carried forward the supply of large-scale building heating systems to fall buildings in downtown areas such as hyundai Home’s new building (10 thousand RT) following the second Lotte World (3,000 RT) and the start of the service. Oct. 2010 by utilizing K-water’s potential volume (30,000RT).

- Developing and applying heating source supply systems to community heating and cooling facilities specialized for K-water’s waterfront cities such as ShinWY, Gungnam and Baean BCO.

K-water’s New Energy Business Model
The global trend is pulling for the development of new and renewable energy sources. This is because now it is essential to develop clean energy for the reduction of CO2 emissions, the culprit behind global warming. K-water is taking the lead in national energy policies through the development of new and renewable energy sources such as small hydropower generation, wind power generation and the discovery of the hydrothermal energy business,

- Create eco-friendly towns that rely on clean energy resources - Develop ShinWya Lake Energy Cluster
- Expand the development of hydrothermal energy externally - K-water type prosumer system
- Develop a Korean-type hydroelectric power generation facility model

* K-water’s new business model toward the consumer and the professional model toward the main professionals has been planned to perfect the consumer and the professional model toward the main professionals.

ShinWya Lake Energy Cluster that creates synergy between Energy, Tourism and Culture
K-water will build a new and renewable energy experience center with land (1MW) and sea solar power (30MW) generation facilities and sea wind power (30MW) generation facilities with ShinWya Lake and its embankment as the center by 2021. The facilities will be integrated into current tidal and wind power generation facilities, thereby serving as a 15MW new and renewable energy complex and a marine energy tourist attraction,

- Complete ShinWya Lake wind power generation facility (1MW) on land
- Complete solar power generation facility (1MW) on land, (2MW) on rooftop of Sunnam University in 2018
- Complete solar power generation facility (1.5MW) in season 2021
- Complete wind power generation facility (15MW) in season 2021

Implementation Plan for Water–Energy Nexus Promotion
K-water drew up and is pushing forward with a water-energy nexus promotion plan in order to re-create the value of water resource facilities and maximize its use via the development of clean energy based on dams and waterworks. The company responds to the government’s policies on the growth of the new energy businesses and the expansion of new and renewable energy and make the energy business a future growth engine,
K-water’s integrated water resources management is a future-oriented water management paradigm to deal with water-related disasters and manage water by basins in order to maximize synergies in terms of efficiency, fairness, and sustainability. K-water is steadily endeavoring to create a new water resources management paradigm in Korea through the convergence of government agencies to improve governance.

Integrated Water Resources Management (IWRM)

IWRM is a new water management paradigm to manage water by basins in order to maximize synergies in terms of efficiency, fairness, and sustainability. K-water is introducing IWRM into Korea and the water resources management paradigm is changing.

Goals of Integrated Water Management

- Addressing water problems in remote areas
- Improving water-related laws and regulations
- Enhancing water-related regulations for water-efficient growth
- Establishing integrated governance by basins

Realization of a healthy water environment and cooperative water culture

Healthy water environment where water quantity, quality, ecology, energy, and culture are in harmony
Cooperative water culture based on efficiency, fairness, and sustainability

Efficiency

Maximizing the efficiency of water use and establishing water management principles

- Making integration plans by basins
- Expanding and utilizing water functions
- Improving the water distribution systems in consideration of downstream areas
- Developing an integrated river branch disaster management system (municipalities)
- Providing basic services in areas suffering from droughts
- Allocating water resources for irrigation
- Establishing water-related regulations for water-efficient growth
- Establishing integrated governance by basins

Fairness

Addressing water problems in remote areas

- Providing basic services in areas suffering from droughts
- Improving the water distribution systems in consideration of downstream areas
- Identifying measures to mitigate water issues (local dams, utilization of sea water and seawater)
- Establishing a Basic Water Management and Technical Law
- Improving water rights and cost-bearing system
- Establishing water-related regulations for water-efficient growth
- Establishing integrated governance by basins

Sustainability

Climate change response, facility safety and healthy environment

- Actively coping with climate change
- Advancing and consolidating the facility safety management system
- Strengthening the national land use water integration management system
- Strengthening pollution source management by integrating basins and providing forecast information
Creating future value through convergence of and maintaining old reservoirs and dams through prevention-oriented preemptive responses. A water safety system that can be sustained despite climate change among other issues by overhauling floods on islands and in mountainous areas via the development of customized water resources development and advancement of a system based on differentiated and specialized technology.

K-water is expected to contribute to spreading Korea’s water management technologies at home and abroad by steadily advancing with the completion and branding of new technologies. We will boost our competitiveness in the water industry at home and abroad by way of the realization of eco-friendly water management technology based on its 40-year of know how in practical water management. K-HIT is expected to contribute to spreading Korea’s water management technologies at home and abroad by way of the completion and branding of new technologies. We will boost our competitiveness in the water industry at home and abroad by steadily advancing with the development and advancement of a system based on differentiated and specialized technology.

Development of K-HIT

K-HIT is a K-water Hydro Intelligent Toolkit for Integrated Water Resources Management Decision Support was developed to empower K-water to achieve the technological level of advanced countries and lay the groundwork for new growth engine businesses by securing integrated basin water management technology.

K-HIT is made up of basic technologies for integrated water management such as floodgate data modeling (or software), water use modeling (analysis software), remote control operation of dams and power generation facilities, K-water took the initiative in developing integrated basin water management technology based on its 40-year of know how in practical water management, K-HIT is expected to contribute to spreading Korea’s water management technologies at home and abroad by way of the completion and branding of new technologies. We will boost our competitiveness in the water industry at home and abroad by steadily advancing with the development and advancement of a system based on differentiated and specialized technology.

K-water is building eco-friendly complex cities via the re-creation of waterfront spaces. The company is contributing to vitalizing local economies and seeking to develop specialized development by regions by building eco-friendly complex cities with multiple functions such as commercial, industrial, cultural, tourism and leisure facilities with water-friendly spaces near national rivers and streams.

Creating a Eco-Friendly Waterfront Complex Cities

K-water is devoting itself to building waterfront cities that harmonizes water, nature and ecosystems in addition to scientific water management. The company is doing everything it can do build future-oriented complex cities with tourism and leisure facilities in harmony by way of the development of eco-friendly complex cities such as Sihwa Multi Techno Valley (MTV), Songsan Green City and Busan Eco Delta City and various water-friendly space creation projects such as general river improvement projects, the Ara Waterway and Sihwa Lake.

Water-Specialized Eco-Friendly Waterfront Cities merging the Benefits of Nature and Urban Life

K-water is building eco-friendly complex cities via the re-creation of waterfront spaces. The company is contributing to vitalizing local economies and seeking to develop specialized development by regions by building eco-friendly complex cities with multiple functions such as commercial, industrial, cultural, tourism and leisure facilities with water-friendly spaces near national rivers and streams.

Industrial and Ecological Cities with Waterways

National industrial complexes and new cities which laid the foundation for the growth of the national economy are growing into eco-friendly ecological cities via multipurpose complex cities by realizing industrialization and urbanization based on ICT where water, nature, tourism and leisure are mixed in harmony.

Creating of Creative Waterfront Cities

K-water is devoting itself to building waterfront cities that harmonizes water, nature and ecosystems in addition to scientific water management. The company is doing everything it can do build future-oriented complex cities with tourism and leisure facilities in harmony by way of the development of eco-friendly complex cities such as Sihwa Multi Techno Valley (MTV), Songsan Green City and Busan Eco Delta City and various water-friendly space creation projects such as general river improvement projects, the Ara Waterway and Sihwa Lake.

Luxurious Cultural Spaces with Tourism and Leisure Infrastructure

Beautiful waterfront spaces near dams, rivers and the Ara Waterway are happy spaces in which animals, plants and local residents live in harmony. We will enhance people’s quality of life and viable local economies by developing waterfront spaces and producing cultural contents.

Applying Natural Scenery and Water in a Safe Way

Creating value through convergence of K-water's eco-friendly infrastructure

Status of Development of National Industrial Complexes

Status on the Development of Sihwa Area

K-water is building eco-friendly complex cities via the re-creation of waterfront spaces. The company is contributing to vitalizing local economies and seeking to develop specialized development by regions by building eco-friendly complex cities with multiple functions such as commercial, industrial, cultural, tourism and leisure facilities with water-friendly spaces near national rivers and streams.

Innovative Management and Satisfied Customer

K-water is building eco-friendly complex cities via the re-creation of waterfront spaces. The company is contributing to vitalizing local economies and seeking to develop specialized development by regions by building eco-friendly complex cities with multiple functions such as commercial, industrial, cultural, tourism and leisure facilities with water-friendly spaces near national rivers and streams.

Innovative Management and Satisfied Customer

K-water is building eco-friendly complex cities via the re-creation of waterfront spaces. The company is contributing to vitalizing local economies and seeking to develop specialized development by regions by building eco-friendly complex cities with multiple functions such as commercial, industrial, cultural, tourism and leisure facilities with water-friendly spaces near national rivers and streams.
Leading Global Water Management Company

The water resources business is a major growth engine for the expansion of a nation’s economy. K-water is successfully carrying out overseas water resources projects through its rich experience and technological power and is growing into a world-class water-specialized player through active exchanges with leading global water-related organizations.

- Secured status as a major Asian partner of WWC (World Water Council)
- Reinforced global capabilities via operation of “Knowledge Sharing” Program
- Diversified the activities of the overseas business department

**Key activities for K-water’s sustainable management**

**Future plans for K-water’s sustainable management**

**Performance**
- Launched the Smart Water Management Initiative (SWMI) at 7th World Water Forum (Apr. 2015)
- Received the order for a hydroelectric power plant project in Nenskra, Georgia
- Received the order for a waterworks project in Bulacan, Philippines
- Completed a waterworks operation project in Shaying, Jiangsu, China
- Completed waterworks project in Ebinayong, Equatorial Guinea

**Size and Outlook of the World Water Market**

<table>
<thead>
<tr>
<th>Year</th>
<th>2016</th>
<th>2017</th>
<th>2018</th>
<th>2025</th>
</tr>
</thead>
<tbody>
<tr>
<td>Value (Unit: KRW trillion)</td>
<td>736</td>
<td>771</td>
<td>813</td>
<td>1084</td>
</tr>
</tbody>
</table>

**Integrating management of the entire water cycle from water source management to sewage treatment**

- Strengthening leadership as a world-class water company
- Taking the lead in overseas water resources projects

K-water began to expand into overseas markets by successfully hosting the World Water Forum in April, 2015. The company strives to take the lead in the KRW 1,000trillion world water market based on half a century of water management experience that covers the entire water circulation process experience and smart water management technology which incorporates ICT (Information and Communication Technologies).

**Smart Water Management Initiative (SWMI)**

- K-water which announced SWMI, an innovative water management method based on ICT, received favorable reviews from people who evaluated that K-water created a new paradigm of future water management. After launching SWMI, K-water received positive responses such as proposals from Suez, Veolia and Deltares who call themselves leaders in smart water management.

- Pledge 3. Leading Global Water Management Company
- Pledge 4. Global Sharing of Water-related Welfare
- Pledge 5. Enterprise for and of Public Users

**Smart Water Management, a Scientific Solution to Address Global Water Problems**


Experts evaluated that the 7th World Water Forum which opened under the theme of “Water for Our Future” on April 12 accomplished the most remarkable outcomes with the participation of 40,996 people from 168 countries. The hottest issue of the forum was to include the scientific and technological sector. In the science and technology session newly established at the suggestion of Korea, K-water hosted a special session on the SWMI (Smart Water Management Initiative), K-water’s scientific solution initiative to address the world’s water problems.

K-water which announced SWMI, an innovative water management method based on ICT, received favorable reviews from people who evaluated that K-water created a new paradigm of future water management. After launching SWMI, K-water received positive responses such as proposals from Suez, Veolia and Deltares who call themselves leaders in smart water management.

**Taking the Lead in the World Water Market by Hosting 7th WWF and Launching SWMI in the World Water Forum, 2016**

Experts evaluated that the 7th World Water Forum which opened under the theme of “Water for Our Future” on April 12 accomplished the most remarkable outcomes with the participation of 40,996 people from 168 countries. The hottest issue of the forum was to include the scientific and technological sector. In the science and technology session newly established at the suggestion of Korea, K-water hosted a special session on the SWMI (Smart Water Management Initiative), K-water’s scientific solution initiative to address the world’s water problems.

K-water which announced SWMI, an innovative water management method based on ICT, received favorable reviews from people who evaluated that K-water created a new paradigm of future water management. After launching SWMI, K-water received positive responses such as proposals from Suez, Veolia and Deltares who call themselves leaders in smart water management.

**Smart Water Management Initiative (SWMI)**

- Integrated management of the entire water cycle from water source management to sewage treatment
- K-water, Global Hub of Water Management
- K-water’s Five Pledges for Sustainable Management
- K-water’s Five Pledges for Sustainable Management
- K-water’s Five Pledges for Sustainable Management
- K-water’s Five Pledges for Sustainable Management

**SWMI, an ICT-based Intelligent Water Management System**

Participants had discussions in about 400 sessions of the four sectors — theme, political, science and technology and regional sessions. In an effort to address the world’s deteriorating water problems, in the science and technology session suggested by Korea, a total of 38 sessions were held to deal with efficient water management, smart water management and waste water recycling technology among others. We put our utmost efforts into promoting SWMI as a global agenda while preparing the 7th World Water Forum. With harnessing all of such results, we launched SWMI and are planning to strategically develop and expand SWMI.
K-water, which has played a leading role in strengthening international cooperation in the water sector in Asia, co-hosted the 7th World Water Forum (Daegu, Korea in April, 2011) and demonstrated leadership in solving global water issues. K-water developed AWHoT, which is a high-level meeting to address Asian water issues and seek solutions, into the Asia Water Council (AWC), an executive council and is serving as the chair of the AWC. Through this, we became a regional partner in Asia of the World Water Council (WWC) and are playing a central role in the regional high-level meeting to address Asian water issues and seek solutions, into the Asia Water Council (AWC). K-water also takes part in the AWC (Asia Water Council) in order to discuss pending water-related issues in Asia. After co-hosting the World Water Forum, K-water is operating a Knowledge-Sharing Program for the purpose of improving its global capabilities. The program aims to nurture human resources that will play the role of a bridgehead to overseas markets by disseminating K-water’s water management technology and experience. K-water has been conducting presentations about water education and holding workshops. K-water is planning to secure competitiveness by turning integrated SWM-based water management and technology to supply healthy water into the “K-water Program” (K-water’s overseas business model that provides customized solutions for pending water-related issues of overseas countries).

**Expansion of Advancement into the Global Water Market and Bolstering its Global Capabilities**

K-water paved the way to enter overseas water markets by organizing the K-Water Program Integration Council with the participation of the government, government-run and private companies and financial institutions. With the aim of enhancing business development capabilities, the company formulated a plan to expand from ten current overseas offices to thirty by 2017. We have been exporting our technology on a full scale since 2015 and incorporated them into the designs and plans for the hydroelectric power generation project in Nenskra, Georgia and for the commencement of operation of power generation facilities at Angat Dam in the Philippines and exporting integrated water management technology to Algeria and Indonesia.

**Smart Water Management (SWM)**

- Competency in integrated management of total services covering the entire water cycle
- Utilization of world-class IT for real-time remote facility management

**Global Leadership to Solve Water Problems**

K-water, which has played a leading role in strengthening international cooperation in the water sector in Asia, co-hosted the 7th World Water Forum (Daegu, Korea in April, 2011) and demonstrated leadership in solving global water issues. K-water developed AWHoT, which is a high-level meeting to address Asian water issues and seek solutions, into the Asia Water Council (AWC), an executive council and is serving as the chair of the AWC. Through this, we became a regional partner in Asia of the World Water Council (WWC) and are playing a central role in the regional high-level meeting to address Asian water issues and seek solutions, into the Asia Water Council (AWC). K-water also takes part in the AWC (Asia Water Council) in order to discuss pending water-related issues in Asia. After co-hosting the World Water Forum, K-water is operating a Knowledge-Sharing Program for the purpose of improving its global capabilities. The program aims to nurture human resources that will play the role of a bridgehead to overseas markets by disseminating K-water’s water management technology and experience. K-water has been conducting presentations about water education and holding workshops. K-water is planning to secure competitiveness by turning integrated SWM-based water management and technology to supply healthy water into the “K-water Program” (K-water’s overseas business model that provides customized solutions for pending water-related issues of overseas countries).

**K-water in the World Water Market**

K-water was in Charge of Equatorial Guinea’s First Water Purification Plant

K-water is expanding its overseas business abroad. The company, in charge of the construction and operation of the first water purification plant in Africa. The project began in 2011 and is expected to be completed in 2018. At the moment, we are supplying water to 1.5 million people in the city of Malabo.

**Commencement of Repairs and Reinforcement of Angat Dam**

Angat Dam, a core part of the Philippines’ infrastructure is 58km northeast of Manila. The dam has a power production capacity of 218MW which supplies 90% of Luzon’s power and supplies about 90% of the tap water to the capital of Manila. K-water was selected as a turnkey operator in 2010 based on its excellent technology for dam operation and management and has been continuously generating power since November 2014. The company began to repair and supplement Angat Dam completed in 2016 to ensure its safety after completion of its precise diagnosis. The repairing and supplementing work is expected to take 18 months to complete (Dec, 2016). This work is expected not only to prevent floods in the Manila area but also to contribute to the speed of and commercial power generation of the dam for the next 50 years.

**Strengthening Global Capabilities**

After co-hosting the World Water Forum, K-water is operating a Knowledge-Sharing Program for the purpose of improving its global capabilities. The program began with a view to serve as a bridgehead to overseas markets by systematically fostering water management specialists who will carry out the government’s water industry promotion policies internally and diffusing its water management experience and technology to overseas countries through educational programs externally. K-water has been conducting presentations about water education and holding workshops.

**K-water was in Charge of Equatorial Guinea’s First Water Purification Plant**

K-water is expanding its overseas business abroad. The company, in charge of the construction and operation of the first water purification plant in Africa. The project began in 2011 and is expected to be completed in 2018. At the moment, we are supplying water to 1.5 million people in the city of Malabo.

**Commencement of Repairs and Reinforcement of Angat Dam**

Angat Dam, a core part of the Philippines’ infrastructure is 58km northeast of Manila. The dam has a power production capacity of 218MW which supplies 90% of Luzon’s power and supplies about 90% of the tap water to the capital of Manila. K-water was selected as a turnkey operator in 2010 based on its excellent technology for dam operation and management and has been continuously generating power since November 2014. The company began to repair and supplement Angat Dam completed in 2016 to ensure its safety after completion of its precise diagnosis. The repairing and supplementing work is expected to take 18 months to complete (Dec, 2016). This work is expected not only to prevent floods in the Manila area but also to contribute to the speed of and commercial power generation of the dam for the next 50 years.

**Strengthening Global Capabilities**

After co-hosting the World Water Forum, K-water is operating a Knowledge-Sharing Program for the purpose of improving its global capabilities. The program began with a view to serve as a bridgehead to overseas markets by systematically fostering water management specialists who will carry out the government’s water industry promotion policies internally and diffusing its water management experience and technology to overseas countries through educational programs externally. K-water has been conducting presentations about water education and holding workshops.

**K-water was in Charge of Equatorial Guinea’s First Water Purification Plant**

K-water is expanding its overseas business abroad. The company, in charge of the construction and operation of the first water purification plant in Africa. The project began in 2011 and is expected to be completed in 2018. At the moment, we are supplying water to 1.5 million people in the city of Malabo.

**Commencement of Repairs and Reinforcement of Angat Dam**

Angat Dam, a core part of the Philippines’ infrastructure is 58km northeast of Manila. The dam has a power production capacity of 218MW which supplies 90% of Luzon’s power and supplies about 90% of the tap water to the capital of Manila. K-water was selected as a turnkey operator in 2010 based on its excellent technology for dam operation and management and has been continuously generating power since November 2014. The company began to repair and supplement Angat Dam completed in 2016 to ensure its safety after completion of its precise diagnosis. The repairing and supplementing work is expected to take 18 months to complete (Dec, 2016). This work is expected not only to prevent floods in the Manila area but also to contribute to the speed of and commercial power generation of the dam for the next 50 years.

**Strengthening Global Capabilities**

After co-hosting the World Water Forum, K-water is operating a Knowledge-Sharing Program for the purpose of improving its global capabilities. The program began with a view to serve as a bridgehead to overseas markets by systematically fostering water management specialists who will carry out the government’s water industry promotion policies internally and diffusing its water management experience and technology to overseas countries through educational programs externally. K-water has been conducting presentations about water education and holding workshops.

**K-water was in Charge of Equatorial Guinea’s First Water Purification Plant**

K-water is expanding its overseas business abroad. The company, in charge of the construction and operation of the first water purification plant in Africa. The project began in 2011 and is expected to be completed in 2018. At the moment, we are supplying water to 1.5 million people in the city of Malabo.

**Commencement of Repairs and Reinforcement of Angat Dam**

Angat Dam, a core part of the Philippines’ infrastructure is 58km northeast of Manila. The dam has a power production capacity of 218MW which supplies 90% of Luzon’s power and supplies about 90% of the tap water to the capital of Manila. K-water was selected as a turnkey operator in 2010 based on its excellent technology for dam operation and management and has been continuously generating power since November 2014. The company began to repair and supplement Angat Dam completed in 2016 to ensure its safety after completion of its precise diagnosis. The repairing and supplementing work is expected to take 18 months to complete (Dec, 2016). This work is expected not only to prevent floods in the Manila area but also to contribute to the speed of and commercial power generation of the dam for the next 50 years.

**Strengthening Global Capabilities**

After co-hosting the World Water Forum, K-water is operating a Knowledge-Sharing Program for the purpose of improving its global capabilities. The program began with a view to serve as a bridgehead to overseas markets by systematically fostering water management specialists who will carry out the government’s water industry promotion policies internally and diffusing its water management experience and technology to overseas countries through educational programs externally. K-water has been conducting presentations about water education and holding workshops.

**K-water was in Charge of Equatorial Guinea’s First Water Purification Plant**

K-water is expanding its overseas business abroad. The company, in charge of the construction and operation of the first water purification plant in Africa. The project began in 2011 and is expected to be completed in 2018. At the moment, we are supplying water to 1.5 million people in the city of Malabo.
Diversification of Investments and Operations

K-water is carrying forward the diversification of investments and operations through its overseas business department. The company is planning to increase the number of overseas offices to 30 by 2025. Based on its experience in the global water market, K-water has ventured into new business opportunities such as the hydroelectric power generation projects in Patrind, Pakistan and Nenskra, Georgia. As well K-water is involved other types of projects such as the waterworks project in Bulacan, Philippines and North Korean reunification preparations.

Overseas Business Strategy

- Expanding establishment of overseas corporations by regional offices to mitigate local risks and discover promising business opportunities worldwide.
- Conducting business in the Southeast Asia over the long-term, with expected advancement into newly emerging markets.
- Actively advancing into MDB\*1 projects for technological cooperation with developing countries.

Projectively Preparing for Unification with North Korea

- Preparing plans to connect in conjunction with government policies
- Establishing a tentative water resources infrastructure plan in consideration of North Korean special district plan among others
- Prepare a plan to jointly utilize water and electric power by turning superannuated hydroelectric power plants into multipurpose ones
- Strengthen international cooperation with neighboring countries such as China and Russia

Key Results of Overseas Projects in 2015

  - Providing tap water through the acquisition, construction and operation of local waterworks in Jiaosu Province’s Shaoying in Yangtze River Delta region, China’s largest economic development zone
  - Acquisition and operation of local waterworks

  - Increasing possibility of participating in future similar projects through technology transfer and management of new waterworks facilities in Ebibeyin City area in Equatorial Guinea
  - Technology support for operational management and education and training of local human resources among others

  - Increasing possibility of participating in future similar projects through technology transfer and management of new waterworks facilities in Ebebiyin City area in Equatorial Guinea
  - Technology support for operational management and education and training of local human resources among others

- [Pakistan] Patrind Hydroelectric Power Generation Project
  - Established a plan to complete Patrind Hydroelectric Power Plant in time and for its optimal operation
  - Reducing construction cost and optimized project budget via EPC international bids and the formation of strategic consortium with company with construction experience (Hanjin Heavy Industries)

- [Philippines] Awarded the Bulacan Waterworks Project for submitting a comprehensive and competitive bid
  - Taking the lead in World Water Market by co-hosting in 2015

- [Pakistan] Awarded the Nenskra Hydroelectric Generation Project (Total cost: KRW one trillion, 280Mw)
  - EPC: a turn-key project including engineering, procurement, and construction

Building Global Networks via Sophisticated Business Management

K-water is beefing up its business capabilities by establishing the Risk Management Committee with a view to coping with possible risk in overseas projects. Moreover, the company is differentiating operation by regions and business sectors and building and maintaining cooperative relationships with relevant units.

Global Business Management

- Reinforce quantification of business selection standards and risk management by sectors and nations
- Build close strategic bond with global organizations such as international organizations and MOUs among others
- Strengthen localization strategy for strategic overseas countries such as Thailand and Pakistan

Expanding Markets

- Laying foundation for related business such as KCT-based water management methods and alternative water resources
- Carrying forward business with focus on Southeast Asia and expand business into newly emerging economies
  - Southeast Asian Belt: Thailand, Philippines, Indonesia, Laos, Myanmar, Vietnam, Cambodia
  - European and Latin American markets: Georgia, Peru, Chile, Brazil and etc.

Proactively Preparing for Unification with North Korea

- Preparing plans to connect in conjunction with government policies
- Establishing a tentative water resources infrastructure plan in consideration of North Korean special district plan among others
- Prepare a plan to jointly utilize water and electric power by turning superannuated hydroelectric power plants into multipurpose ones
- Strengthen international cooperation with neighboring countries such as China and Russia

Key Results of Overseas Projects in 2015

  - Providing tap water through the acquisition, construction and operation of local waterworks in Jiaosu Province’s Shaoying in Yangtze River Delta region, China’s largest economic development zone
  - Acquisition and operation of local waterworks

  - Increasing possibility of participating in future similar projects through technology transfer and management of new waterworks facilities in Ebibeyin City area in Equatorial Guinea
  - Technology support for operational management and education and training of local human resources among others

  - Increasing possibility of participating in future similar projects through technology transfer and management of new waterworks facilities in Ebebiyin City area in Equatorial Guinea
  - Technology support for operational management and education and training of local human resources among others

- [Pakistan] Patrind Hydroelectric Power Generation Project
  - Established a plan to complete Patrind Hydroelectric Power Plant in time and for its optimal operation
  - Reducing construction cost and optimized project budget via EPC international bids and having 14 discussions about cooperation on water management
  - EPC: a turn-key project including engineering, procurement, and construction

- [Philippines] Awarded the Bulacan Waterworks Project for submitting a comprehensive and competitive bid
  - Taking the lead in World Water Market by co-hosting in 2015

- [Pakistan] Awarded the Nenskra Hydroelectric Generation Project (Total cost: KRW one trillion, 280Mw)
  - EPC: a turn-key project including engineering, procurement, and construction

- [Philippines] Awarded the Bulacan Waterworks Project for submitting a comprehensive and competitive bid
  - Taking the lead in World Water Market by co-hosting in 2015

- [Pakistan] Awarded the Nenskra Hydroelectric Generation Project (Total cost: KRW one trillion, 280Mw)
  - EPC: a turn-key project including engineering, procurement, and construction
Global Sharing of Water-related Welfare

According to its unique social contribution vision, K-water is implementing social contribution activities by setting three core values of social contribution and future directions to which its value system and strategy were applied by concentrating resources and capabilities. By making the most of its expertise in water management, K-water will become a company that realizes a society where people share love and happiness with one another and contribute to the development of the nation and communities.

- Enhancing water-related welfare by utilizing the company’s unique characteristics and business capabilities
- Carrying out customized programs for communities
- Promoting participation via internal and external communications and diffusing sympathy

K-water’s Water Love Sharing Corps is made up of employees that have been steadily carrying out a wide array of voluntary service activities such as environment preservation, disaster relief, helping the marginalized and contributing to local communities since its establishment in July 2004. K-water is systematically managing voluntary service activities by the establishment of internal volunteer social service clubs and the management of results. The company is giving support to the corps’ activities by allocating matching grants as part of its budget commensurate with the Love Water Sharing Fund raised from monthly donations from employees. In 2015, 4,357 employees, 99% of all employees, carried out social contribution activities totaling 58,000 hours by joining 112 voluntary service clubs under the Water Love Sharing Corps.

The Ministry of Health and Welfare and the Korea Social Welfare Council designated the Water Love Sharing Corps as an internal volunteer social service club in 2009. Therefore, the corps issues certificates of participation in social contribution activities to the general public. Through the organization, employees’ families and students are actively participating in local social contribution programs.

Major Activities
- Helping people in need
  - Various activities such as giving support to help people in regions by disasters such as floods and droughts
  -quick activities such as giving side dishes and becoming policemen
- Support for disaster relief
  - Various activities such as giving support to help people in regions by disasters such as floods and droughts
- Environment protection activities
  - Activities to protect the environment such as campaigns, from planting trees, cleaning desks, and others
- Contribution to communities
  - Community-friendly activities such as campaigns, river cleanups, activities to protect the environment, etc.
- Matching grant
  - Company donates the same amount as that of employees’ contribution funds
- Expenses for Supporting Dams
  - Company donates the same amount as that of employees’ contribution funds
- Co-ins of love
  - Donating prize money from Knowledge Suggestion Program

Organizational Chart

Financial Sources for Voluntary Activities

Performance
- Grand Prize in the social contribution sector of national sustainability management
- CSR Activity Prize among Korean companies which entered the Philippines market
- Recipient of a Prize from the Ministry of Gender Equality & Family for support for teenagers outside schools
- Educational Donation Prize among Korean Public Organizations

Key activities for K-water’s sustainable management

<table>
<thead>
<tr>
<th>Activity hours (Unit: hours)</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social contribution expenses (Unit: KRW 100 million)</td>
<td>639.1</td>
<td>746.6</td>
<td>763.1</td>
<td>794.6</td>
</tr>
</tbody>
</table>

Pledge 4

Global Sharing of Water-related Welfare

According to its unique social contribution vision, K-water is implementing social contribution activities by setting three core values of social contribution and future directions to which its value system and strategy were applied by concentrating resources and capabilities. By making the most of its expertise in water management, K-water will become a company that realizes a society where people share love and happiness with one another and contribute to the development of the nation and communities.
K-water is putting forth efforts to improve water welfare conditions and supply healthy water through projects in places where water welfare is limited such as farms, fishing towns, islands, military bases, marginalized superannuated houses and welfare facilities.

Bringing Happiness to Areas Once Devoid of Water-related Welfare

The Happy Water Project aims to repair water-related facilities in remote areas and provide water-related welfare services. K-water made an improvement to water use environments including kitchen sinks and water pipes at 279 sites including aging housing for vulnerable groups, welfare centers welfare centers and soup kitchens via this project from 2013 to 2019. The company addressed residents‘ inconveniences by quickly mobilizing water supply trucks and emergency bottled water to the South Chungcheong Provincial area that had trouble in using water such as the suspension of water supply due to a severe drought. K-water is steadily developing and expanding water welfare projects by directly supplying water from multi-regional waterworks to three unserved farming and fishing areas in three regions of South Chungcheong Province and improving water supply facilities at 692 military bases so that all people can enjoy the benefits of healthy water.

Stabilization of Aging Reservoirs Managed by Local Governments, the

As the steady deterioration of old reservoirs become a threat to people, K-water is taking part in preventing reservoir-related accidents, making the country safer. At the moment, the company is engaging in reservoir stabilization projects in seven cities and counties.

Direct Supply of Water from Multi-Region Waterworks to Unserved Areas

K-water is going forward with the direct supply of water from multi-region waterworks to unserved areas less than 2km from multi-region waterworks. The project, which is underway in 27 cities and counties, is improving welfare conditions by increasing the quantity and quality of water to previously unserved area.

Improving the Small-Scale Waterworks Management System

Small-Scale waterworks in small towns are hard integrate with local waterworks systems due to geographical characteristics and are vulnerable in terms of the management of water quantity and quality. Therefore, K-water is running and managing an ICT-based integrated operation system to monitor water quantity and quality in real-time and pushing forward with automated water service,.

Outsourcing Operation of Seawater Desalination Facilities on Islands

K-water has been carrying out the outsourcing operation of 39 seawater desalination facilities in eight municipalities since Seosan City in 2004. The company endeavors to relieve people on islands whom suffer from droughts by supplying 1,915m$^3$ of drinking water.

Groundwater Management Plan to Improve Regions Devoid of Water-related Welfare

A groundwater dam refers to groundwater resources securing facility that makes groundwater flow low by building an artificial cut-off wall in an aquifer and extract the water via a tube well. At the moment, Korea has six groundwater dams capable of supplying about 155,000 m$^3$ of water a day. First all, the company selected ten areas and applied a mid- to long-term plan to the Basic Groundwater Management Plan established in December 2012 to stably supply water to areas with poor water welfare such as islands and coasts and prevent saline water from penetrating into such areas. We are planning to carry the plan forward step by step.

Stabilization of Aging Reservoirs Managed by Local Governments, the

As the steady deterioration of old reservoirs become a threat to people, K-water is taking part in preventing reservoir-related accidents, making the country safer. At the moment, the company is engaging in reservoir stabilization projects in seven cities and counties.

Direct Supply of Water from Multi-Region Waterworks to Unserved Areas

K-water is going forward with the direct supply of water from multi-region waterworks to unserved areas less than 2km from multi-region waterworks. The project, which is underway in 27 cities and counties, is improving welfare conditions by increasing the quantity and quality of water to previously unserved area.

Improving the Small-Scale Waterworks Management System

Small-Scale waterworks in small towns are hard integrate with local waterworks systems due to geographical characteristics and are vulnerable in terms of the management of water quantity and quality. Therefore, K-water is running and managing an ICT-based integrated operation system to monitor water quantity and quality in real-time and pushing forward with automated water service,.

Outsourcing Operation of Seawater Desalination Facilities on Islands

K-water has been carrying out the outsourcing operation of 39 seawater desalination facilities in eight municipalities since Seosan City in 2004. The company endeavors to relieve people on islands whom suffer from droughts by supplying 1,915m$^3$ of drinking water.
K-water Reaches Every Corner of Korea

Development of an Integrated Flood Control System For River Branches
K-water is active about preventing flood damages to municipalities, by helping them with its ICT-based scientific flood management technology, and related experience. Its integrated flood control system for river branches is spreading nationwide from Narwoon, Hap and Gunsan.

Providing Drinking Water to Elementary and Middle Schools
K-water is supplying safe and clean drinking water by building membrane filtration facilities at 37 elementary and middle schools in uncountrizied areas where people drink unhealthily drinking water.

Linking Tap Water Branch Outlets to Local Tap Water Pipes for Marginalized’s Homes near Dams
K-water is paying the fees associated with linking the tap water branch outlets to local tap water pipes for homes with safety and hygiene problems due to old water supply facilities.

Improving the Operations and Management of Management of Small-Scale Waterworks
Small-scale waterworks in small towns are hard integrate with local watersystems due to geographical characteristics and are vulnerable in terms of the management of water quantity and quality. Therefore, K-water is running and managing an ICT-based integrated operation system to monitor water quantity and quality in real-time and pushing forward with automated water services.

Efforts to Address Global Water Problems
As a water specialist, K-water is fulfilling its responsibilities as a global leader while making efforts to develop waterworks, provide educational support, repair public buildings and enhance people’s quality of life through its technology and experience in nations with water shortages.

The company has steadily implemented drinking water resources development and life support projects for localities in nations that have trouble using safe drinking water such as Tajikistan, East Timor, Cambodia, Mongolia, Vietnam and the Philippines under the theme of creating a happier world with K-water in 2015, about 59 employees and college student supporters “shared love” with locals by building waterworks facilities (water tanks, pipelines, wells and water purification facilities) in Bulacan of the Philippines and in Salinji of Myanmar, providing medical, educational and financial support to people there.

Status of Overseas Social Contribution Activities [Last year]

<table>
<thead>
<tr>
<th>Participants</th>
<th>Country</th>
</tr>
</thead>
<tbody>
<tr>
<td>36</td>
<td>Nepal, Laos</td>
</tr>
<tr>
<td>33</td>
<td>Philippines, Laos</td>
</tr>
<tr>
<td>10</td>
<td>Philippines, Myanmar</td>
</tr>
</tbody>
</table>

Key Results of K-water’s Social Contributions in 2015

K-water led a water management paradigm based on the Smart Water Management (SWM) which applies with cutting-edge ICT and existing water management technology, and it also played an important role in the water industry by helping small and medium-sized businesses, such as supporting technology development, providing financial support, and finding sales routes. Along with these efforts, K-water embarked to expand the water welfare benefits for the public through various activities, including desalinating seawater on islands, expanding water supply in metropolitan cities, and repairing water facilities used by the vulnerable. All of K-water’s efforts have been duly recognized.

For Korean thanksgiving day, Chuseok, K-water provided groceries and provided lunch to the disabled and local residents. K-water employees were engaged in volunteer activities such as delivering money to buying washing machines for the army troops located in Jemnep, receiving the Trade, Industry and Energy Minister Award at the "Third Beloved Korean Company Awards".

"Sharing Corporate Love" event for a Lunar New Year day
K-water designated 20 days around the Lunar New Year as the "Love Sharing Weeks for Lunar New Year" and exercised love and service through various programs, such as providing necessities to the vulnerable, sharing holiday food, offering opportunities for multi-cultural families to experience traditional Korean culture, and buying senior citizens who live alone, with the help of 152 voluntary groups known as "Water Love Sharers."

K-water has implemented the "Happy Water Project" to improve the quality of lives through healthy water by improving the water use environment of the needy. This year, 126 K-water branch are endeavoring to make a happier world with water.
Pledge 5. Enterprise for and of Public Users

As a representative public water management institution in Korea that is directly connected to citizens’ lives, K-water seeks to provide the best water services to the public. K-water will become a company for and of the public users.

Key activities for K-water’s sustainable management

- Establish a new Corporate Culture office that will focus on innovating organizational culture
- Practiced preventive ethical management to which stakeholders’ needs were addressed
- Spread work capability-oriented employment culture
- Gathered social responsibility via the dissemination of ethical management
- Reinforced the preemptive crisis management system

Future plans for K-water’s sustainable management

- Will enhance work-life balance via expansion of family-oriented management
- Will realize HR development with a focus on work and achievements
- Will reinforce shared growth via a nurturing system for small and mid-sized companies
- Will promulgate safety patrol activities

The Autonomously Positive, and Dynamic Corporate Culture of K-water

The general public is calling for a new corporate culture where people realize work-life balance due to an increase in desire for self-realization and personal activities outside their workplaces. K-water is putting forth efforts to establish a self-regulatory, positive and dynamic corporate culture and earn more trust from its members.

Five Activities for Smart Organizational Culture Innovation

K-water fosters competent employees based on an autonomous, positive, and dynamic work culture. In January 2015, the company set up an organizational culture secretariat dedicated to organizational culture innovation and established five smart innovation models for an autonomous, positive, and dynamic workplace culture. Labor and management are working together to create a happy and enriching workplace such as reducing overtime work by focusing on work and improving the family-friendly system.

The Autonomous, Positive, and Dynamic Corporate Culture of K-water

As a representative public water management institution in Korea that is directly connected to citizens’ lives, K-water seeks to provide the best water services to the public. K-water will become a company for and of the public users.

Key activities for K-water’s sustainable management

- Establish a new Corporate Culture office that will focus on innovating organizational culture
- Practiced preventive ethical management to which stakeholders’ needs were addressed
- Spread work capability-oriented employment culture
- Gathered social responsibility via the dissemination of ethical management
- Reinforced the preemptive crisis management system

Future plans for K-water’s sustainable management

- Will enhance work-life balance via expansion of family-oriented management
- Will realize HR development with a focus on work and achievements
- Will reinforce shared growth via a nurturing system for small and mid-sized companies
- Will promulgate safety patrol activities

The Autonomously Positive, and Dynamic Corporate Culture of K-water

The general public is calling for a new corporate culture where people realize work-life balance due to an increase in desire for self-realization and personal activities outside their workplaces. K-water is putting forth efforts to establish a self-regulatory, positive and dynamic corporate culture and earn more trust from its members.

Five Activities for Smart Organizational Culture Innovation

K-water fosters competent employees based on an autonomous, positive, and dynamic work culture. In January 2015, the company set up an organizational culture secretariat dedicated to organizational culture innovation and established five smart innovation models for an autonomous, positive, and dynamic workplace culture. Labor and management are working together to create a happy and enriching workplace such as reducing overtime work by focusing on work and improving the family-friendly system.

Performance

- Received the Prime Minister Award for Promoting Gender Equality
- Received the Prime Minister Award for Family Friendly Company
- Awarded the grand prize at the 100 Good Work Place(Gwp) Awards
- Recognized by the Ministry of Commerce, Industry and Energy’s Prize at the Korea’s Reliable Company Awards
- Awarded the Minister of Commerce, Industry and Energy’s Prize as an excellent company in shared growth
- Recognition by the Prime Minister Award for 100:1 Organizational Culture and Ethics Award

Spread of Communications and Trust

- Running K-Pub*, a communication platform for CEOs and employees in all aspects of management issues and organizational culture
- Operating ROD with participation of employees for promotion of various members’ participation in management and communications

Classification: Participants

<table>
<thead>
<tr>
<th>Classification</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Board</td>
<td>K-water’s ranking system, employees who have a grade of lower ranking and worked for 10 years or less for K-water and creative thinking and doing enthusiasm to create improvement in work</td>
</tr>
<tr>
<td>Middle Board</td>
<td>Team leader and managerial-level employees with passion for organizational innovation</td>
</tr>
<tr>
<td>Senior Board</td>
<td>Employees who are heads of departments of higher and have worked for K-water for a longer period and can take lead in organizational culture and make suggestions and give advice using the accumulated experience</td>
</tr>
</tbody>
</table>

- Collecting various opinions through online communication channels such as a CEO 1:1 Online Dialogue and an anonymous bulletin board
- Disseminating activities by using everyday spaces such as toilets, outdoor signs, and computer screen savers among others

Results (as of November 2016)

<table>
<thead>
<tr>
<th>Results (as of November 2016)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of data requests decreased 89% compared to 2014</td>
</tr>
<tr>
<td>Meeting satisfaction (efficiency): 10% increase compared to 2014 (7%)</td>
</tr>
<tr>
<td>Survey results of meeting participants</td>
</tr>
<tr>
<td>Approval time reduced by 50% compared to 2014 (57%)</td>
</tr>
<tr>
<td>Flexible work system utilization rate: 14.4% increase compared to 2014</td>
</tr>
<tr>
<td>Members’ trust of organization: 67% increase compared to 2014</td>
</tr>
</tbody>
</table>

* K-water’s communication events between management and staff which CEO take the lead in

K-Pub: K-water’s communication platform for CEOs and employees in all aspects of management issues and organizational culture

K-water is implementing systematic monitoring by developing a new data submission system (Establishment and operation of a schedule management system) since 2015.

<table>
<thead>
<tr>
<th>Classification</th>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Junior Board</td>
<td>Activities</td>
</tr>
<tr>
<td>Middle Board</td>
<td>Activities</td>
</tr>
<tr>
<td>Senior Board</td>
<td>Activities</td>
</tr>
</tbody>
</table>

* K-water is implementing systematic monitoring by developing a new data submission system (Establishment and operation of a schedule management system) since 2015.

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Streamlining meetings</td>
</tr>
<tr>
<td>Expansion of a flexible working system based on demand surveillance</td>
</tr>
<tr>
<td>Realization of employees’ overwhelming such as turning PCs off (power off after work hours)</td>
</tr>
<tr>
<td>Participating in public-private corporate culture improvement companies for first time as public corporation</td>
</tr>
</tbody>
</table>

* K-Pub: K-water’s communication platform for CEOs and employees in all aspects of management issues and organizational culture

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disseminating activities by using everyday spaces such as toilets, outdoor signs, and computer screen savers among others</td>
</tr>
</tbody>
</table>

* K-water is implementing systematic monitoring by developing a new data submission system (Establishment and operation of a schedule management system) since 2015.

<table>
<thead>
<tr>
<th>Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conducting various opinions through online communication channels such as a CEO 1:1 Online Dialogue and an anonymous bulletin board</td>
</tr>
<tr>
<td>Disseminating activities by using everyday spaces such as toilets, outdoor signs, and computer screen savers among others</td>
</tr>
</tbody>
</table>

* K-water is implementing systematic monitoring by developing a new data submission system (Establishment and operation of a schedule management system) since 2015.
Maternity Protection and Family-Friendly Management

In order to improve the working condition of employees through maternity protection and family-oriented management, K-water is also boosting the morale of employees through the improvement and operation of various systems such as the expansion of periods and the division of the childcare leave system, the implementation of short-term paid work during female employees’ pregnancy, posting those who want parental leaves where they want to work. Therefore, in 2015, the company was awarded the Prime Minister’s Prize for the Promotion of Gender Equality and the Prime Minister’s Prize for a Family-Friendly Company and was selected as the best company in gender equality practice, and was recognized as one of the top 100 Great Work Places.

Parental Leave Status

<table>
<thead>
<tr>
<th>Classification</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel applied for leaves</td>
<td>37</td>
<td>33</td>
<td>43</td>
</tr>
<tr>
<td>(person)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel on leave</td>
<td>37</td>
<td>33</td>
<td>43</td>
</tr>
<tr>
<td>(person)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinstatement Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Maintenance Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel applied for leaves</td>
<td>4</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>(person)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel on leave</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>(person)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinstatement Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Maintenance Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Classification</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel applied for leaves</td>
<td>31</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>(person)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personnel on leave</td>
<td>31</td>
<td>32</td>
<td>35</td>
</tr>
<tr>
<td>(person)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reinstatement Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Maintenance Rate (%)</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Business and Human Rights

As the nation’s leading public institution responsible for water resources, K-water has accepted human rights management as its legal obligation and has been actively working to prevent human rights abuses for sustainable management. K-water hires employees without any discriminatory views on matters such as race, religion, disability, gender, place of birth, and political opinions in order to respect employee rights. To guarantee freedom of association and collective bargaining, K-water allowed employees to freely organize a labor union and is scrupulous in creating no disadvantages to employees due to their participation and activity in the labor union.

As well, K-water continues to make constant efforts to create a safe and hygienic work environment and makes every effort not to violate the rights of residents living in areas where K-water conducts business management activities. K-water is engaged in numerous activities to protect consumer rights and fully respects consumer privacy by solidifying personal information protection systems.

Labor Union Joining Rate

<table>
<thead>
<tr>
<th>Classification</th>
<th>2015</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>All employees became labor union</td>
<td>83</td>
<td>83</td>
<td>84</td>
</tr>
<tr>
<td>members due to the union shop</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>system</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

We provide safe and transparent water services to consumers and protect customer value such as personal information collected during our business activities.

We will take a responsible attitude to protect and respect the human rights of all stakeholders involved in our management activities and pledge to do our best to establish and spread human rights management.

All employees of K-water
As the globalization process has deepened, business ethics, such as human rights, labor, environment, and anti-corruption, are being emphasized as a focal point for business management. As a result, social expectations have increased for public enterprises, and K-water is also required to implement and adhere to high ethical management practices. To live up to the expectations, K-water has been selecting and implementing ethical tasks appropriate to the demand of stakeholders since 2014 in order to strengthen the implementation of social responsibilities through advanced ethical management and work. K-water has established the ethical management system and entered the advanced stage wherein value is shared with stakeholders.

K-water focuses on the spread of its unique ethical culture through constant training and mailing for employees in order to establish an ethical corporate culture. In 2015, K-water conducted corporate-wide ethical activities in which management showed leadership in ethical activities and employees voluntarily participated in those activities, and it established ethical rules for non-executive directors for the first time among public enterprises. While promoting the spread of internal ethical culture through various activities, such as revising personnel policies, establishing guidelines for an integrity code of conduct by positions and duties, making ethics-oriented posters, and operating data request systems, K-water strengthened its confidentiality and integrity culture so that corrupt acts could be precluded or avoided through an internal corruption reporting hotline and informant protection efforts. Besides these efforts, K-water constantly endeavors to curb corrupt acts and solidify its internal ethical culture by annually improving, developing and measuring the K-water ethics index (KEX) to which its management environment was applied.

**Pledges of ethical practice by all employees**

- **2015**
  - 91.1% participated
  - A total of 4,179 people pledged

**Vitalization of Whistle-blowing and internal audits for Clean K-water**

K-water’s Five Pledges for Sustainable Management

Appendix

69
Achievement of the Highest Grade (AAA) in KoBEX-SM Index for Five Consecutive Years

K-water has achieved 100% against its plan by making 54 agreements to transfer intellectual property rights (IPR) technology, such as water pipe automatic flushing equipment, to realize ethical management with partnering companies, and its achievement on the performance test has exceeded the previous year. Furthermore, K-water has been involved in the transparent society implementation network in order to better perform as a morally upright public enterprise by taking in anti-corruption promotion activities. K-water is expanding networks with civil society and public institutions for sustainable integrity activities and is fulfilling its social responsibilities as a public enterprise and spreading anti-corruption and integrity culture by collaborating with both the public and private spheres.

Implementation of Proactive Ethical Management by Applying the Needs of Stakeholders

K-water aims to establish advanced ethical management through communication with outside stakeholders and the internalization of an ethical culture. K-water has increased the number of ethical management implementation tasks from 26 in 2014 to 33 in 2015 by expanding the scope of direct and indirect stakeholders and strengthening these tasks.

Implementation of Proactive Ethical Management

<table>
<thead>
<tr>
<th>Target</th>
<th>Achievement</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>People</td>
<td>Provision of the responsible management teamwork to the public</td>
<td>Increase of 93% in ethical behavior per day (based on the previous year)</td>
</tr>
<tr>
<td>Employee</td>
<td>Provision of safety and integrity with employee system to prevent corruption</td>
<td>Make fewer times (no annual)</td>
</tr>
<tr>
<td>Customer</td>
<td>Incorporation of customer’s comments in service quality</td>
<td>Excellent customer satisfaction rating for the consecutive year</td>
</tr>
<tr>
<td>Partners</td>
<td>Development of excellent support to the local communities</td>
<td>A development of an excellent project for collaboration with public organizations</td>
</tr>
<tr>
<td>Community</td>
<td>Provision of specialized social contribution</td>
<td>Certified by the National Policy Management Awards</td>
</tr>
<tr>
<td>Future Generation</td>
<td>Transformation of strategic development to combat against climate change</td>
<td>Achieving goals of development in 2015</td>
</tr>
</tbody>
</table>

Results of Ethical Management

<table>
<thead>
<tr>
<th>Performance Index</th>
<th>Cycle</th>
<th>Evaluation</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>KEX Points</td>
<td>Annual</td>
<td>Ministry of Strategy and Finance</td>
<td>93.2</td>
<td>96.2</td>
<td>97.7</td>
</tr>
<tr>
<td>Customer satisfaction with government-run firms</td>
<td>Annual</td>
<td>Ministry of Strategy and Finance</td>
<td>93.2</td>
<td>96.2</td>
<td>97.7</td>
</tr>
<tr>
<td>Integrity of public organization</td>
<td>Annual</td>
<td>Ministry of Strategy and Finance</td>
<td>96.7</td>
<td>99.2</td>
<td>99.4</td>
</tr>
<tr>
<td>Trust Management Index**</td>
<td>Annual</td>
<td>Internal/Institutional Evaluation and Competition</td>
<td>64.1</td>
<td>69.0</td>
<td>68.9</td>
</tr>
<tr>
<td>Systems of advanced information disclosure</td>
<td>Annual</td>
<td>Ministry of Strategy and Finance</td>
<td>229 cases</td>
<td>226 cases</td>
<td>296 cases</td>
</tr>
</tbody>
</table>

KoBEX-SM Index***

<table>
<thead>
<tr>
<th>Evaluation</th>
<th>Index</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Institute for Inclusive Policy Studies (IPIC)</td>
<td>97.3</td>
<td>98.2</td>
<td>98.5</td>
<td></td>
</tr>
<tr>
<td>Highest grade (AAA)</td>
<td>98.2</td>
<td>98.5</td>
<td>98.5</td>
<td></td>
</tr>
</tbody>
</table>

Ethical Management Tasks

- Providing customized services to customers
- Establishing customer-oriented innovation, such as increasing water engagement culture
- Providing high-quality tap water (“Quality Tap Water”) for customers

- Establishing a human right impact evaluation and implementation plan
- Establishing a preemptive risk prevention system
- Increasing public purchase rate by improving customer-centered system, etc.

- Budget execution standard verification and frequent evaluation
- Establishing company culture to work effectively and jointly develop individuals and the organization
- Increasing management efficiency through clear and clear work instructions
- Protecting whistleblowers and increasing corruption control system efficiency
- Controlling public funds for water-related infrastructure development and alleviating illegal activities
- Making rewards and welfare reasonable through communication
- Increasing public support for systemic transparency
- Increasing public’s trust to management through systematic transparency
- Establishing systems and measures for empowered society

- Developing clean energy from water-related energy sources
- Increasing K-water brand value through the creation of eco-friendly spaces
- Boosting shared growth by developing small and medium businesses
- Making water-welfare expansion project agreements
- Conducting projects to improve water service for military bases
- Creating new water projects (local dams) through communication and agreement
- Expanding local community flood and disaster management projects
- Campaigning for water-related infrastructure development and sensitizing
- Providing high-quality tap water (“Healthy Tap Water”) for customers
- Increasing public support for systemic transparency
- Establishing systems and measures for empowered society

- Stabilizing facilities and enhancing disaster response capabilities
- Making efficient use of water and environment management solutions for islands

* KOBEX-SM index (composite of 8 items; 39 items) developed to measure comprehensive ethical management results. ** Trust Management Index. Index to measure the level of the management for “Trust Management” which make up of five areas (trust, respect, fairness, pride, and fun) and 59 items. *** KoBEX-SM Index (composite of 8 items; 39 items) developed to measure comprehensive ethical management results which cannot be measured by external indices.
The productivity of an organization is directly related to the involvement of its employees. For sustainable management and successful business implementation, K-water endeavors to create an optimum work environment for its members. As a public enterprise, K-water is implementing social responsibility and productivity improvement activities in an effort to create jobs for young people and operate a salary and welfare system that satisfies government policy and citizens’ expectations for a public enterprise.

Reinforcement of the Performance-Based Pay System
K-water has been enhancing its performance-based pay system to improve management performance and help increase productivity through fair and systematic performance management and differential rates of pay. While connecting a salary with evaluation results in terms of personal capability, duty difficulty, and work performance, and enhancing the credibility of the evaluation results through the operation of the corporate performance management system (K-REP), the adjustment of evaluation indicators in advance, and the post-valuation procedure of filing an appeal, K-water operates a leading evaluation and feedback system which encourages the improvement of personal and organizational performance by providing performance-improvement consulting and refresher training courses. The excellence of K-water’s performance-based compensation system has been recognized as a good example of a public institution at workshops in 2015 and 2016.

Expansion of Open Employment
Not all K-water employees have college and as such, it endeavors to continuously create customized opportunities to meet the job qualifications of employees with a high school diploma and women whose career experience has lapsed. K-water changed the existing recruiting system, which gives additional points and preferential treatment by personal advantages, to a recruitment goal system. The company improves the diversity of social members and tries to contribute to social integration through measures such as hiring people based on social equity by increasing employment opportunities. These results show the company improves the diversity of social members and tries to contribute to social integration through measures such as hiring people based on social equity by increasing employment opportunities. These results show the company improves the diversity of social members and tries to contribute to social integration through measures such as hiring people based on social equity by increasing employment opportunities.

New Recruitments (Unit: persons)

<table>
<thead>
<tr>
<th>Year</th>
<th>High School Graduates</th>
<th>None</th>
<th>Full-time New Employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>441</td>
<td>541</td>
<td>263</td>
</tr>
<tr>
<td>2014</td>
<td>107</td>
<td>199</td>
<td>261</td>
</tr>
<tr>
<td>2015</td>
<td>109</td>
<td>192</td>
<td>220</td>
</tr>
</tbody>
</table>

Status of overseas secondments

<table>
<thead>
<tr>
<th>Year</th>
<th>Institution</th>
<th>Country</th>
<th>Relevant Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>DECCO</td>
<td>France</td>
<td>Analysis of global water and green growth policy</td>
</tr>
<tr>
<td>2014</td>
<td>UNESCO</td>
<td>France</td>
<td>Research, etc. on urban water management in preparation for climate change</td>
</tr>
<tr>
<td>2015</td>
<td>ADB</td>
<td>The U.S.</td>
<td>Research on international water resource projects</td>
</tr>
</tbody>
</table>

Link of Human Resources Development and Management

<table>
<thead>
<tr>
<th>Job training</th>
<th>Competency Reinforcement Plan (CRP*)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self-directed learning – evaluation of capability – training/selection of need of individual</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Long-term training</th>
<th>Providing opportunities of study and work training abroad in order to enhance global work forces</th>
</tr>
</thead>
<tbody>
<tr>
<td>HR operation</td>
<td>HR (Human Resources) assignment management by assigning high-performing employees in each job area to appropriate positions</td>
</tr>
</tbody>
</table>

Global Talent Development
In line with its efforts to expand the overseas businesses, K-water is making efforts to strengthen global expertise of its employees. The company is creating opportunities for talent-exchange programs with international institutions including MDBs (Multilateral Development Banks) through the development of a network with international professional institutions in water industry, K-water conducts education and training customized for each role (new → working→ management staff) and actively supports the improvement of global working capabilities for its employees (e.g. providing a variety of foreign language classes). By assigning trained workers to relevant jobs by considering their accumulated job expertise and work performance, the company is realizing talent- and performance-based human resource development and management, linking the talent training with duty assignment.

Talent Development Index

<table>
<thead>
<tr>
<th>Year</th>
<th>Target</th>
<th>Performance</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>42%</td>
<td>42.5%</td>
<td>101%</td>
<td>111%</td>
</tr>
</tbody>
</table>

K-water’s Five Pledges for Sustainable Management

Pledge 1. Intelligent Water Management and Satisfied Customer
Pledge 2. New Water Values for All
Pledge 3. Leading Global Water Management Company
Pledge 4. Global Sharing of Water-related Welfare
Pledge 5. Enterprise for and of Public Users

Appendix
New Recruitments (Unit: persons)
K-water is performing various activities to present itself as a global company through mutual cooperation and social responsibility implementation.

K-water’s Shared Growth Implementation System

Every year, K-water reviews its shared growth plan and selects major tasks through SWOT analysis for strategic management, analysis of the environment at home and abroad, feedback, and possessed capabilities. Under the goal of systematically implementing shared growth, K-water established a control center and organized a shared growth team by utilizing the shared growth taskforce team under the leadership of the vice president. By going beyond shared growth efforts in the domestic market, K-water played an important role in 2015 to help small and medium-sized businesses in the water industry enter the overseas market by expanding its overseas business division’s taskforce team, which is responsible for such duties.

*SWOT: A tool for a corporate to analyze its strength, weakness, opportunity, and threat

Master plan for a water industry SMEs* growth system developed by K-water

---

**External Commentaries**

Commended by Ministry of Governmental Affairs for promoting SMEs (Ministry of Health, Labor and Welfare for the disabled (August))

Commended by Ministry of Commerce, Industry and Energy for promoting SMEs (November)

Commended by Ministry of Commerce, Industry and Energy for commercialization of new technology (November)

Commended by Minister of SMEs Growth for promoting SME products (December)

---

Implementation of Benefit-Sharing Product Certification to Help Small and Medium-Sized Businesses Expand their Market at Home and Abroad

K-water evaluated SME products, which were developed and verified through the benefit-sharing system, in 11 categories, such as corporate credit rating, A/S infrastructure, and user. The purpose of implementing this system is to mitigate the difficulties SMEs experience in having sales channels in the domestic market and in entering the overseas market due to their low brand awareness. By accrediting benefit-sharing products with an official certification emblem based on a thorough evaluation, K-water is enabling small and medium-sized businesses to use their brand recognition and is actively supporting these businesses to increase sales channels in Korea and overseas. In 2015, K-water shared growth with small and medium-sized enterprises by approving the certification of 12 companies, including Techni (high concentration sodium hypochlorite generator).

---

Official Emblem of K-water Accredited Excellent Products

---

Shared Growth Promotion Organization

Senior Executive Vice President

---

K-water Accredited Excellent SME Products in 2015

<table>
<thead>
<tr>
<th>No.</th>
<th>SME Name</th>
<th>Technology Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Youngju IH</td>
<td>Sodium hypochlorite water treatment</td>
</tr>
<tr>
<td>2</td>
<td>Bank Recharging Corp.</td>
<td>Online diagnosis/monitoring system/intelligent controller</td>
</tr>
<tr>
<td>3</td>
<td>SME Technology</td>
<td>Small-size equipment for retrofit renovation/substrains</td>
</tr>
<tr>
<td>4</td>
<td>Technology</td>
<td>High concentration sodium hypochlorite generator</td>
</tr>
<tr>
<td>5</td>
<td>SME Technology</td>
<td>Equipment for supplying water apparatus into water supply networks</td>
</tr>
<tr>
<td>6</td>
<td>SME Technology</td>
<td>Water-treatment equipment for concrete structure using FR sheet</td>
</tr>
<tr>
<td>7</td>
<td>SME Technology</td>
<td>Membrane filtration/blend water treatment</td>
</tr>
<tr>
<td>8</td>
<td>SME Technology</td>
<td>Educting electric Systems/mechanical treatment for powder/liquid</td>
</tr>
<tr>
<td>9</td>
<td>SME Technology</td>
<td>Self-feeding equipment for solid/liquid</td>
</tr>
<tr>
<td>10</td>
<td>SME Technology</td>
<td>Low-pressure spray equipment/control</td>
</tr>
<tr>
<td>11</td>
<td>SME Technology</td>
<td>Energy-saving technology</td>
</tr>
</tbody>
</table>
Meetings twice a year

Pledge 1. Intelligent Water Management and Satisfied Customer
Pledge 2. New Water Values for All
Pledge 3. Leading Global Water Management Company
Pledge 4. Global Sharing of Water-related Welfare
Pledge 5. Entrepreneur for the Aid of Public Users

Appendix

making consistent efforts to address the remaining nine tasks.

Continued Efforts to Address Unfair Trade Practices Toward Subcontractors

K-water endeavors to promote a fair trade culture by strengthening the effectiveness of mutual growth by considering site conditions to address fundamental unfair trade practices between project owners and subcontractors at construction sites. For this, K-water designated 93 tasks to improve unfair trade practices in 2015, and 84 of those tasks have been completed. K-water is making consistent efforts to address the remaining nine tasks,

Nurturing Small but Competitive Global Companies via K-water’s “SME Development Ladder” Program

STEP A

Strengthening Capabilities of SMEs by Jointly Entering Overseas Markets

• (Background) Difficult to enter overseas due to low awareness of SMEs
• (Challenge) Development and provision of certification brand (emblem) to excellent SMEs which allows them to utilize the K-water brand for promotional materials on agreed terms
• (Evaluation) Evaluation of SMEs through K-water’s certification system

STEP B

Increasing Brand Value of Products Entering Overseas Markets

• (Background) Difficult to enter overseas due to low awareness of SMEs
• (Challenge) Difficult to enter overseas due to difficulty entering markets

STEP C

Increasing Overseas Sales Routes

• (Background) Difficult to enter overseas due to low awareness of SMEs
• (Challenge) Difficult to enter overseas due to low awareness of SMEs

Organizational Structure

K-water opened the New Technology Counseling Center to support small and medium-sized enterprises, which have difficulty in securing initial sales routes due to on-site workers’ lack of confidence in construction-related new technology. To increase the interest and awareness of registered new technology, K-water conducted 57 new technology exhibits and four presentations. By selecting 25 new technologies with high possibilities to be applied to K-water’s business, the company provided 1:1 matching opportunities for small and medium-sized businesses to meet with K-water employees who are responsible for placing orders.

Gratuitous Transfer of Unused Intellectual Property Rights

Small and medium-sized businesses in the water industry have difficulty in securing customers and developing new technology due to a shortage of research infrastructure. K-water enhances the technical competitiveness of small and medium-sized businesses and facilitates their growth through the gratuitous transfer of its unused intellectual property rights in order to support the development and growth of small and medium businesses by fulfilling its responsibility as a public enterprise. In 2015, K-water selected 31 intellectual property rights for gratuitous transfer for the first time among public enterprises and transferred three intellectual property rights to two companies. K-water will continue to promote the foundation for intellectual property in the water industry and the revitalization of technology transfer.

Continued Efforts to Address Unfair Trade Practices Toward Subcontractors

K-water endeavors to promote a fair trade culture by strengthening the effectiveness of mutual growth by considering site conditions to address fundamental unfair trade practices between project owners and subcontractors at construction sites. For this, K-water designated 93 tasks to improve unfair trade practices in 2015, and 84 of those tasks have been completed. K-water is making consistent efforts to address the remaining nine tasks.
Formulation Process of Risk Management Plans

<table>
<thead>
<tr>
<th>Identification</th>
<th>Selection</th>
<th>Continuation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request of risk indicator identification</td>
<td>Enhancement of risk management strategy (to be charge)</td>
<td>Disaster &amp; safety management department</td>
</tr>
<tr>
<td>Identification of risk indicators</td>
<td>Implementation of risk management plan (to be charge)</td>
<td>Governing department</td>
</tr>
<tr>
<td>Making the risk management plan and selecting risk indicators (to be charge)</td>
<td>Receiving indication of risk management</td>
<td>Managing department</td>
</tr>
<tr>
<td>Making the management plan and selecting risk indicators</td>
<td>Receiving indication of risk management (March)</td>
<td>Sending official documents (to all departments)</td>
</tr>
</tbody>
</table>

Companywide Risk Management System

With the aim of developing risk management strategies every year, K-water analyzes and revises existing plans under the direction of the Senior Executive Vice President.

As K-water’s role in providing safe and healthy water expands in Korea, the risk of disaster is also increasing. As such, K-water is reinforcing its capabilities to cope with risk by introducing a companywide risk management system implemented by all departments with the Technology and Safety Office under the direction of the Senior Executive Vice President.

Companywide Risk Management Strategy

With a view to protecting people from water-related disasters, K-water is reinforcing and advancing the preemptive crisis management system. Under the goal of scoring 95 points or higher in the Level of Risk Management, a corporate key performance index, we began to build a companywide crisis management system. The direction of the system is based on sight strategic tasks in order to secure prevention-oriented management, enhance practical risk resolution capabilities, and reinforce conflict management capabilities.

Advancing KRM (K-water Risk Management System)

K-water has been building a prevention-oriented crisis management system by making a companywide risk management plan which includes proper management of risk indicators, companywide drills to cope with crisis and manual availability. The company is expanding its practical crisis response capabilities by establishing an emergency response system, routinizing drills, strengthening a collaboration system among departments and improving the ICT-based KRM. In 2015, the results of drills were applied to the KRM system, which boosted the effectiveness of crisis management and user convenience.

Classification | Main Contents | Remarks
--- | --- | ---
Measures to Improve Alerting System | Making function to send short messages to external organizations (local governments and fire stations among others) (February) | Supplemental
| Identifying short message senders and inquiring sending histories (February) | Supplemental |

Measures to Scale up System Utilization | Improving the KRM practical features to ensure crisis routines effectively (EMC* systematization of individual risk management units) | Supplemental
| Building history management system during whole process | Supplemental |

Measures to Improve the System | Opening of Emergency Management Center (to provide real-time broadcasting and near-site information) | Newly Introduce
| For information sharing and communication | Newly Introduce
| New functions to manage and delete contents registered in the system (to all departments) | Newly Introduce |

* EMC: Emergency Management Center - a system to provide real-time broadcasting and near-site information such as recovery materials, an emergency countermeasure team and evacuations reports in the event of a crisis.
### Establishment and Diffusion of Companywide Safety Work Culture

K-water designated “K-water Safety Check Day” on the 4th day of every month, operating programs to eradicate poor safety precautions of veering away from customary safety management. By doing so, the company is putting forth efforts to raise employees’ awareness of safety and establish a safety culture. For pan-national communication on establishing establish a safe work culture, we are carrying out activities such as a campaign to find out risk factors, participation in safety checks and drills and contests of innovative ideas for safety, while holding “Safety Check Day with People”

### Activities of Safety Check Day

- Inspection of facilities vulnerable to disasters
- Safety prevention training and PR activities
- Conduct safety campaigns

### Implementation of Safety Patrol Activities

With an eye towards discovering and eliminating hidden risk factors, K-water assembled “Safety Patrols” with employees in the Technology & Safety Management Department, departments in charge or on-site duties, who have expertise and experiences; K-water Safety Patrols are taking a role of discovering management in safety control, safety inspections, addressing grievances, and investigating the causes of accidents. As well, the company is tentatively operating the certified corporate Safety & Health Management System (KOIShA 18001) even at small-scale construction sites. The company is removing risk factors in advance and inducing sound management for construction sites through on-site regular inspections and guidances by composing “Safety Quality Supervisors” with experienced employees and internal specialists.

### Establishing a Worksite-led Quality Management

- Implementing activities to determine the causes of deterioration and improve quality with the participation of main parties (K-water, contractors, subcontractors, and laborers)

### Periodic Risk Assessment → Meeting → Training, Activities → Check, Evaluation

### Risk Management Process

#### Risk management (before crises break up)

- **Identification:** Detecting potential risks
- **Evaluation:** Impact / probability
- **Risk Response:** Departmental / Companywide Management
- **Companywide Management**
  - Main risk
  - Crisis Response Manual
  - Determination of the Crisis Level
  - Occurrence of Crisis (Incidents, accidents)
  - Investigation & Monitoring
  - Field crisis center: head of each department / Head of regional HQ
  - Field crisis center: senior executive vice president / senior executive vice president
  - Approval by the board of directors: head of crisis management (President)

#### Risk management (after crises break up)

- **Risk Management:** Response activities
- **Companywide Management**
  - Main risk
  - Crisis Response Manual
  - Determination of the Crisis Level
  - Occurrence of Crisis (Incidents, accidents)
  - Investigation & Monitoring
  - Field crisis center: head of crisis management at the department level
  - Field crisis center: head of crisis management at the department level
  - Approval by the board of directors: head of crisis management (President)

### Major Outcomes of Risk Management in 2015

K-water actively responded to the prevention of risk by discovering and managing 291 KPI cases at workplaces and 287 vulnerable facilities for advanced risk management. As a result, the company confirmed the effectiveness of its crisis response system by responding to crises such as quick notification of 355 incidents in 2015, the most since the KRM system was introduced and obtained a score of 89.58 points in reports within one hour and 90.99 in measure completion.

### Key Outcomes of Risk Management in 2015

<table>
<thead>
<tr>
<th>Risk-triggered risk indicator</th>
<th>Management</th>
<th>PR</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workplace-related cases</td>
<td>100</td>
<td>21</td>
<td>102</td>
</tr>
<tr>
<td>Companywide management</td>
<td>100</td>
<td>21</td>
<td>102</td>
</tr>
</tbody>
</table>

### Classification

- **Risk prevention**
  - Proper risk management rate
  - Proper management rate of vulnerable facilities

- **Crisis Management**
  - Proper reporting rate
  - Companywide management rate of vulnerable facilities

<table>
<thead>
<tr>
<th>Classification</th>
<th>Achievement rate (%)</th>
<th>Evaluation standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper risk management rate</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Proper management rate of vulnerable facilities</td>
<td>100.00</td>
<td>100.00</td>
</tr>
<tr>
<td>Proper reporting rate</td>
<td>89.58</td>
<td>89.58</td>
</tr>
<tr>
<td>Companywide management rate of vulnerable facilities</td>
<td>89.58</td>
<td>89.58</td>
</tr>
</tbody>
</table>

---

### Approach to Sustained by K-water’s Five Pledges for Sustainable Management

- **Pledge 1. Intelligent Water Management and Satisfied Customer**
- **Pledge 2. New Water Values for All**
- **Pledge 3. Leading Global Water Management Company**
- **Pledge 4. Global Sharing of Water-related Welfare**
- **Pledge 5. Enterprise for and of Public Users**

### K-water’s Five Pledges for Sustainable Management

- **Approach to Sustainability**
- Implementing activities to determine the causes of deterioration and improve quality with the participation of main parties (K-water, contractors, subcontractors, and laborers)
Future Created with Water

Creating a future of hope for next 100 years

APPENDIX

- Sustainability Highlights 84
- Third Party Assurance 96
- GRI G4 INDEX/ISO 26000 99
- UN Global Compact’s 10 Principles Support 104
- Questionnaire to Collect Readers’ Opinions 105
**Sustainability Highlights**

**Economic Performance**

**Financial Performance**

**Statement of Financial Position** [Unit: KRW in millions]

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Asset</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current assets</td>
<td>5,213,014</td>
<td>5,785,518</td>
<td>5,631,464</td>
<td>6,024,545</td>
<td>7,024,944</td>
</tr>
<tr>
<td>Non-current assets</td>
<td>19,602,369</td>
<td>19,819,881</td>
<td>19,607,618</td>
<td>21,042,910</td>
<td>21,695,352</td>
</tr>
<tr>
<td>Total</td>
<td>24,815,383</td>
<td>25,603,907</td>
<td>25,449,082</td>
<td>27,067,455</td>
<td>28,719,397</td>
</tr>
<tr>
<td><strong>Liabilities</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Current liabilities</td>
<td>2,722,666</td>
<td>3,358,548</td>
<td>2,161,443</td>
<td>2,795,626</td>
<td>4,195,000</td>
</tr>
<tr>
<td>Non-current liabilities</td>
<td>11,055,255</td>
<td>10,639,904</td>
<td>11,299,992</td>
<td>10,477,544</td>
<td>10,035,804</td>
</tr>
<tr>
<td>Total</td>
<td>13,777,921</td>
<td>13,998,452</td>
<td>13,461,435</td>
<td>13,273,170</td>
<td>14,230,804</td>
</tr>
<tr>
<td><strong>Equity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital stock</td>
<td>6,815,621</td>
<td>6,898,731</td>
<td>7,016,965</td>
<td>7,196,145</td>
<td>7,547,082</td>
</tr>
<tr>
<td>Others</td>
<td>4,411,461</td>
<td>4,697,176</td>
<td>4,945,222</td>
<td>-942,043</td>
<td>-975,013</td>
</tr>
<tr>
<td>Equity attributable to owners of the Company</td>
<td>11,227,082</td>
<td>11,595,907</td>
<td>11,962,187</td>
<td>6,254,102</td>
<td>6,572,069</td>
</tr>
<tr>
<td>Non-controlling interest</td>
<td>11,380</td>
<td>9,548</td>
<td>15,477</td>
<td>23,367</td>
<td>26,225</td>
</tr>
<tr>
<td>Total</td>
<td>11,238,462</td>
<td>11,605,455</td>
<td>11,977,664</td>
<td>6,277,469</td>
<td>6,598,294</td>
</tr>
</tbody>
</table>

* Consolidated statement as per application of Korea-International Financial Reporting Standards (K-IFRS) since 2011

**Condensed Income Statement** [Unit: KRW in millions]

<table>
<thead>
<tr>
<th>Category</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015 (1st Half)</th>
<th>2015 (Total)</th>
<th>2016 (1st Half)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Revenue (Sales)</strong></td>
<td>3,668,445</td>
<td>3,645,387</td>
<td>3,698,372</td>
<td>1,682,380</td>
<td>3,777,345</td>
<td>1,647,891</td>
</tr>
<tr>
<td>Cost of sales</td>
<td>3,117,070</td>
<td>2,989,350</td>
<td>3,178,494</td>
<td>1,397,124</td>
<td>3,288,664</td>
<td>1,409,611</td>
</tr>
<tr>
<td>Selling, general and administrative expenses</td>
<td>117,048</td>
<td>123,920</td>
<td>129,419</td>
<td>71,111</td>
<td>139,064</td>
<td>63,508</td>
</tr>
<tr>
<td><strong>Gross profit</strong></td>
<td>434,327</td>
<td>532,117</td>
<td>390,459</td>
<td>214,145</td>
<td>349,617</td>
<td>174,772</td>
</tr>
<tr>
<td>Other income</td>
<td>296,308</td>
<td>315,516</td>
<td>323,280</td>
<td>176,025</td>
<td>349,076</td>
<td>8,150</td>
</tr>
<tr>
<td>Other expenses</td>
<td>3,856</td>
<td>43,087</td>
<td>6,826</td>
<td>6,743</td>
<td>7,437</td>
<td>4,736</td>
</tr>
<tr>
<td>Other gain</td>
<td>-5,296</td>
<td>2,078</td>
<td>-13,221</td>
<td>-16,032</td>
<td>-6,295,565</td>
<td>-52,560</td>
</tr>
<tr>
<td><strong>Financial income</strong></td>
<td>195,182</td>
<td>97,870</td>
<td>91,264</td>
<td>37,904</td>
<td>85,503</td>
<td>34,732</td>
</tr>
<tr>
<td><strong>Financial costs</strong></td>
<td>515,371</td>
<td>449,185</td>
<td>400,656</td>
<td>186,296</td>
<td>370,962</td>
<td>180,316</td>
</tr>
<tr>
<td><strong>Share of profit of equity accounted investees</strong></td>
<td>395</td>
<td>1,565</td>
<td>33,248</td>
<td>-1,520</td>
<td>-8,058</td>
<td>102</td>
</tr>
<tr>
<td><strong>Profit before income tax</strong></td>
<td>401,689</td>
<td>456,874</td>
<td>417,548</td>
<td>217,482</td>
<td>-5,897,826</td>
<td>-19,856</td>
</tr>
<tr>
<td>Income tax expense</td>
<td>93,394</td>
<td>108,756</td>
<td>118,222</td>
<td>31,866</td>
<td>-102,186</td>
<td>-2</td>
</tr>
<tr>
<td><strong>Net profit</strong></td>
<td>308,295</td>
<td>348,118</td>
<td>299,326</td>
<td>185,617</td>
<td>-5,795,638</td>
<td>-19,854</td>
</tr>
<tr>
<td><strong>Other comprehensive income</strong></td>
<td>13,386</td>
<td>-9,901</td>
<td>18,874</td>
<td>-10,511</td>
<td>-8,023</td>
<td>-8,521</td>
</tr>
<tr>
<td><strong>Total comprehensive income</strong></td>
<td>321,681</td>
<td>338,217</td>
<td>318,200</td>
<td>175,106</td>
<td>-5,803,661</td>
<td>-28,375</td>
</tr>
</tbody>
</table>

**Creation and Distribution of Management Performance** [Unit: KRW in millions]

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Creation of economic value(1)</td>
<td>6,354,088</td>
<td>3,694,659</td>
<td>3,682,884</td>
<td>3,739,658</td>
<td>3,825,466</td>
</tr>
<tr>
<td>a) Net sales</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>b) Interest income, rent, sale of assets, etc.</td>
<td>-</td>
<td>20,532</td>
<td>26,278</td>
<td>37,876</td>
<td>48,206</td>
</tr>
<tr>
<td>Others (Government subsidy)</td>
<td>-104,376</td>
<td>-104,376</td>
<td>-104,376</td>
<td>-104,376</td>
<td>-104,376</td>
</tr>
<tr>
<td>Distributed economic value(2)</td>
<td>6,159,814</td>
<td>3,590,283</td>
<td>3,578,408</td>
<td>3,635,282</td>
<td>3,721,190</td>
</tr>
<tr>
<td>a) Operating cost: manufacturing cost, asset purchase cost</td>
<td>Partner</td>
<td>3,463,373</td>
<td>2,892,275</td>
<td>2,203,412</td>
<td>2,578,935</td>
</tr>
<tr>
<td>b) Wages and welfare: Labor costs</td>
<td>257,121</td>
<td>360,581</td>
<td>377,361</td>
<td>358,206</td>
<td>452,173</td>
</tr>
<tr>
<td>c) Capital cost: Interest paid, dividend</td>
<td>Shareholders, Financial institutions, etc.</td>
<td>349,615</td>
<td>329,674</td>
<td>341,200</td>
<td>351,615</td>
</tr>
<tr>
<td>e) Community investment: donations, contributions</td>
<td>Customers, Local communities</td>
<td>54,685</td>
<td>75,677</td>
<td>73,775</td>
<td>79,910</td>
</tr>
<tr>
<td>Surplus economic value(3-2)</td>
<td>-214,098</td>
<td>-202,207</td>
<td>-423,587</td>
<td>-383,946</td>
<td>-368,046</td>
</tr>
</tbody>
</table>

* Consolidated statement as per application of Korea-International Financial Reporting Standards (K-IFRS) since 2011
Sustainability Highlights

Economic Performance

Sustainable Growth through Innovation

Business Revenues (Unit: KRW in millions)

<table>
<thead>
<tr>
<th></th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Integrated Water Resource Management (IWRM)</td>
<td>785,374</td>
<td>907,729</td>
<td>891,207</td>
<td>744,644</td>
</tr>
<tr>
<td>Healthy Tap Water Supply Business</td>
<td>983,458</td>
<td>1,071,776</td>
<td>1,322,580</td>
<td>1,175,910</td>
</tr>
</tbody>
</table>

Employee Education Status

- Educated employees (person) & Average investment in education per person (KRW in thousands) & Average time of education per person (hour)

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Educated employees</td>
<td>71</td>
<td>69</td>
<td>69</td>
<td>69</td>
<td>69</td>
</tr>
<tr>
<td>Average investment in education per person (KRW in thousands)</td>
<td>1,640</td>
<td>1,549</td>
<td>1,660</td>
<td>1,718</td>
<td>1,756</td>
</tr>
<tr>
<td>Average time of education per person (hour)</td>
<td>27,283</td>
<td>22,627</td>
<td>21,393</td>
<td>20,793</td>
<td>20,156</td>
</tr>
</tbody>
</table>

Average Time of Education per Employee (Unit: hour)

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>70</td>
<td>75</td>
</tr>
<tr>
<td>Female</td>
<td>83</td>
<td>75</td>
</tr>
</tbody>
</table>

Employment Status

- Executives
- General officers
- Specialists
- Appointed researcher

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor degree holder</td>
<td>38%</td>
<td>38%</td>
</tr>
<tr>
<td>Master degree holder</td>
<td>35%</td>
<td>38%</td>
</tr>
<tr>
<td>PhD</td>
<td>22%</td>
<td>21%</td>
</tr>
</tbody>
</table>

Patent and Research Projects Achievement

- Application for a patent (case)
- Registered (case)
- Research projects (case)
- Research development budget (KRW 100 millions)
- Number of research paper publication (case)

<table>
<thead>
<tr>
<th>Year</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application for a patent (case)</td>
<td>86</td>
<td>81</td>
<td>78</td>
<td>80</td>
<td>77</td>
</tr>
<tr>
<td>Registered (case)</td>
<td>79</td>
<td>81</td>
<td>75</td>
<td>82</td>
<td>74</td>
</tr>
<tr>
<td>Research projects (case)</td>
<td>52</td>
<td>56</td>
<td>49</td>
<td>52</td>
<td>50</td>
</tr>
<tr>
<td>Research development budget (KRW 100 millions)</td>
<td>37</td>
<td>39</td>
<td>43</td>
<td>40</td>
<td>42</td>
</tr>
<tr>
<td>Number of research paper publication (case)</td>
<td>24</td>
<td>21</td>
<td>17</td>
<td>18</td>
<td>20</td>
</tr>
</tbody>
</table>

Secure R&D expertise

- Total
- Researcher
- In-charge researcher
- Researcher 1
- Researcher 2
- Researcher 3

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>218</td>
<td>221</td>
</tr>
<tr>
<td>Researcher</td>
<td>69%</td>
<td>72%</td>
</tr>
<tr>
<td>In-charge researcher</td>
<td>34%</td>
<td>31%</td>
</tr>
<tr>
<td>Researcher 1</td>
<td>34%</td>
<td>31%</td>
</tr>
<tr>
<td>Researcher 2</td>
<td>32%</td>
<td>31%</td>
</tr>
<tr>
<td>Researcher 3</td>
<td>31%</td>
<td>32%</td>
</tr>
</tbody>
</table>
**Sustainability Highlights**

**Environmental Performance**

**Enhanced Environmental Management over the Entire Corporate Supply Chain**

<table>
<thead>
<tr>
<th>Input</th>
<th>Eco-friendly Product Purchasing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Total purchase amount (KRW 100M)</td>
</tr>
<tr>
<td></td>
<td>Eco-friendly product purchased amount (KRW 100M)</td>
</tr>
</tbody>
</table>

**Output**

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>Discharge standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-regional waters</td>
<td>BOD (㎎/ℓ)</td>
<td>2.3</td>
<td>2.4</td>
<td>2.3</td>
<td>2.2</td>
<td>2.2</td>
</tr>
<tr>
<td>Sewage treatment plant</td>
<td>COD (㎎/ℓ)</td>
<td>2.9</td>
<td>3.1</td>
<td>3.0</td>
<td>2.9</td>
<td>2.9</td>
</tr>
<tr>
<td>Waste processing facility</td>
<td>COD (㎎/ℓ)</td>
<td>5.0</td>
<td>5.2</td>
<td>5.1</td>
<td>5.0</td>
<td>5.0</td>
</tr>
</tbody>
</table>

**Effort to Improve & Protect Local Environment**

**Water rate discount for customers who induce grey water reuse system**

<table>
<thead>
<tr>
<th>Water usage (thousand ℅)</th>
<th>Discounted amount for users of grey water (KRW in millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>2014</td>
</tr>
<tr>
<td>34,797</td>
<td>34,797</td>
</tr>
<tr>
<td>25,801</td>
<td>25,801</td>
</tr>
<tr>
<td>135,356</td>
<td>135,356</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Waste disposal in dam reservoirs and rivers</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>River waste (ℓ)</td>
<td>138,305</td>
<td>138,305</td>
<td>138,305</td>
<td>138,305</td>
<td>138,305</td>
</tr>
<tr>
<td>Dam waste (ℓ)</td>
<td>6,374</td>
<td>6,374</td>
<td>6,374</td>
<td>6,374</td>
<td>6,374</td>
</tr>
<tr>
<td>Total (ℓ)</td>
<td>144,679</td>
<td>144,679</td>
<td>144,679</td>
<td>144,679</td>
<td>144,679</td>
</tr>
</tbody>
</table>

**Ace Layer**

- Discharge standard for "Water Quality and Aquatic Ecosystem Conservation Act" and "Sewage Act"
Creating local eco-cultural spaces (Ecological Restoration Measures Taken, 2014–2015)

<table>
<thead>
<tr>
<th>Category</th>
<th>Hantan River Dam</th>
<th>Gimcheon-Buhang Dam</th>
<th>Seongdeok Dam</th>
<th>Youngju Dam</th>
<th>Boheonsan Dam</th>
<th>Environmental standard*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water quality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BOD (㎎/ℓ)</td>
<td>1.4</td>
<td>1.1</td>
<td>2.3</td>
<td>1.2</td>
<td>0.9</td>
<td>3 below</td>
</tr>
<tr>
<td>COD (㎎/ℓ)</td>
<td>3.1</td>
<td>2.9</td>
<td>4.2</td>
<td>2.5</td>
<td>3.1</td>
<td>5 below</td>
</tr>
<tr>
<td>PM-10 (㎍)</td>
<td>45</td>
<td>40</td>
<td>39</td>
<td>36</td>
<td>37</td>
<td>100 below</td>
</tr>
<tr>
<td>NO2 (ppb)</td>
<td>9</td>
<td>13</td>
<td>7</td>
<td>14</td>
<td>11</td>
<td>60 below</td>
</tr>
<tr>
<td>Noise/Vibration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Noise (dBA)</td>
<td>45</td>
<td>45</td>
<td>48</td>
<td>47</td>
<td>46</td>
<td>65</td>
</tr>
<tr>
<td>Vibration (dBV)</td>
<td>30</td>
<td>26</td>
<td>24</td>
<td>23</td>
<td>24</td>
<td>65</td>
</tr>
</tbody>
</table>

* Highest standard among the standards required by the Environmental Impact Assessment of projects

Environmental Performance

Post Environmental Impact Study on Construction Sites in 2015

Environmental Highlights

Sustainability Highlights

Social Performance

Impressing customers beyond customer satisfaction

Customer Satisfaction (last point)

- Hantan River Dam
- Gimcheon-Buhang Dam
- Seongdeok Dam
- Youngju Dam
- Boheonsan Dam

Customer Communication

- Written (all complaint case)
- Electronic (all complaint case)
- Civil complaint processed in a timely manner rate%

Highest level of personal information security and management

- Minimizing leakage risks
- Enhanced monitoring
- Building system to monitor personal information access histories
- Protecting personal information such as switching out for strange phenomena including abnormal connections in real time

Selected as an excellent company in personal information management in an evaluation by the Ministry of Government Administration and Home Affairs. Honored as the best organization in mock training to cope with crises by the National Intelligence Service

Selected as an excellent company in personal information management in an evaluation by the Ministry of Government Administration and Home Affairs. Honored as the best organization in mock training to cope with crises by the National Intelligence Service

Selected as an excellent company in personal information management in an evaluation by the Ministry of Government Administration and Home Affairs. Honored as the best organization in mock training to cope with crises by the National Intelligence Service
Sustainability Highlights

Social Performance

Horizontal Cooperation, Vertical Growth

Local Business, Contract Amount
- Total contract amount (KRW in millions)
- Local business contract amount (KRW in millions)
- Ratio (%), local business contracted/Total contracts

Socially Disadvantaged Scoring Program Operation Result
- Total contracts (case)
- Reviewed contracts by the Socially Disadvantaged Scoring Program (case)
- Ratio of reviewing contracts by the Socially Disadvantaged Scoring Program

Cooperation with Local Communities

Social Contribution
- Social Contribution Participation
  - Ratio of participating employees (%)
  - Participated hours per employee
- Social Contribution Investment
  - Total amount (KRW 100 millions)
  - Ratio against sales (%)

Fair and Diversified Workplace

Employee Composition [Unit: person]
- Full-time total number of employees
- Current total number of employees

Employee Composition Ratio according to Employment Type in 2015
- Gender
  - Male
  - Female
- Age
  - Below 20s
  - 20~40s
  - Above 50s

Notes:
* K-water has calculated the number of employees who directly participated in social contribution activities since 2014
* Employees working overseas were excluded although they indirectly participated in raising social contribution funds among others.
Sustainability Highlights

Social Performance

Vulnerable Class Employment

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>173</td>
<td>222</td>
<td>252</td>
<td>247</td>
<td>225</td>
</tr>
<tr>
<td>Male</td>
<td>91</td>
<td>112</td>
<td>138</td>
<td>134</td>
<td>126</td>
</tr>
<tr>
<td>Total new recruits</td>
<td>264</td>
<td>334</td>
<td>390</td>
<td>381</td>
<td>351</td>
</tr>
</tbody>
</table>

* Ratio based on current total number of employees (%)

Non-Regular Employment

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fixed-term employees</td>
<td>469</td>
<td>344</td>
<td>308</td>
<td>318</td>
<td>334</td>
</tr>
<tr>
<td>Short-term employees</td>
<td>203</td>
<td>150</td>
<td>147</td>
<td>137</td>
<td>137</td>
</tr>
<tr>
<td>Other non-regular employee</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total non-regular employees</td>
<td>672</td>
<td>494</td>
<td>455</td>
<td>455</td>
<td>471</td>
</tr>
</tbody>
</table>

* Ratio(%) = Non-regular employee / (non-regular employee + non-fixed-term contracted employee + regular employee)

Turnover

<table>
<thead>
<tr>
<th>Total (person)</th>
<th>Female (person)</th>
<th>Male (person)</th>
<th>Total employee turnover (%)</th>
<th>Female employee turnover (%)</th>
<th>Male employee turnover (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>2012</td>
<td>2013</td>
<td>2014</td>
<td>2015</td>
<td></td>
</tr>
<tr>
<td>2.05</td>
<td>2.95</td>
<td>3.59</td>
<td>4.88</td>
<td>2.8</td>
<td></td>
</tr>
<tr>
<td>2.79</td>
<td>2.55</td>
<td>2.87</td>
<td>2.6</td>
<td>2.3</td>
<td></td>
</tr>
<tr>
<td>2.13</td>
<td>1.95</td>
<td>1.90</td>
<td>2.1</td>
<td>2.1</td>
<td></td>
</tr>
<tr>
<td>2.85</td>
<td>2.73</td>
<td>2.67</td>
<td>2.0</td>
<td>2.0</td>
<td></td>
</tr>
</tbody>
</table>

* Ratio based on current total number of employees (%)

Happy Workplace where Work and Family are Harmonized

Creating Corporate Culture Where Work and Family are Harmonized

Flexible Working Hours

- Operate various types of flexible working hours and part-time works

Work Practice Improvement

- Run "Family Day" (On every Wed., all employees are encouraged to leave work at the regular time and have time with family members)
- Conduct shift-robin and PCS-off program on weekends after BPM, PCS-off on an weekend
- Increase task efficiency through improving work practices
- Medical Practice Improvement

Balanced Work and Family

- Support for access to cultural performance and recreational facilities

Workplace Safety

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injury</td>
<td>0.14</td>
<td>0.23</td>
<td>0.22</td>
<td>0.16</td>
<td>0.16</td>
</tr>
<tr>
<td>Occupational Disease</td>
<td>0.03</td>
<td>0.05</td>
<td>0.04</td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Industrial Accident</td>
<td>0.10</td>
<td>0.22</td>
<td>0.06</td>
<td>0.06</td>
<td>0.25</td>
</tr>
<tr>
<td>Premises</td>
<td>9.2</td>
<td>7.1</td>
<td>7.3</td>
<td>6.7</td>
<td>6.7</td>
</tr>
</tbody>
</table>

Flexible Working

<table>
<thead>
<tr>
<th>Unit: person</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Changed from full-time</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Flexible work schedule</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Compensated work schedule</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Labor and Management Relationship

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labor Disputes</td>
<td>82</td>
<td>82</td>
<td>83</td>
<td>83</td>
<td>84</td>
</tr>
<tr>
<td>Labor union (joining rate%)</td>
<td>81.3</td>
<td>81.3</td>
<td>81.3</td>
<td>81.3</td>
<td>81.3</td>
</tr>
</tbody>
</table>

* All employees became labor union members due to union shop system

Labor Practices Grievance Resolving Performance

<table>
<thead>
<tr>
<th>Category</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total cases</td>
<td>77</td>
<td>78</td>
<td>78</td>
<td>74</td>
<td>54</td>
</tr>
<tr>
<td>Resolved cases</td>
<td>52</td>
<td>74</td>
<td>53</td>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>Cases submitted</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>But resolved in the same year</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
<td>125</td>
</tr>
<tr>
<td>Resolving rate (%)</td>
<td>71.2</td>
<td>71.8</td>
<td>84.1</td>
<td>80.2</td>
<td>96.9</td>
</tr>
</tbody>
</table>
To K-water’s stakeholders
K-water commissioned the Korea Productivity Center (the “Assurer”) to provide an independent assurance of its 2016 Sustainability Re- port (the “Report”).

Responsibility and Integrity
K-water is responsible for the reliability and accuracy of all information and opinions presented in this “Report”. The Assurer holds the responsibility that lies solely in providing third party verification of the content in the “Report”. As an independent assurance agency, the Assurer was neither involved in the process of preparing this “Report” with K-water nor in any conflicts of interest that may undermine our independence.

Assurance Standards
The independent verification process was planned and performed in accordance with the AA1000AS (2008) Assurance Standard to provide Type 2 moderate level of assurance. This is achieved through the evaluation of the organization’s adherence to the AA1000AS Accountability Principles (2008) of Inclusivity, Materiality, and Responsiveness, Additionally, the assurance was performed to ascertain the organization’s adherence to the Global Reporting Initiative (GRI) G4 Guidelines.

Assurance Limitations
Based on the aforementioned assurance standards, the Assurer performed verification of the organization’s sustainability performance and credibility from 2015 to November 2016. We verified financial data by way of financial statements audited by auditing institutions and publicly disclosed data. In terms of environmental and social data, we conducted verification activities through a sampling-based checking process so that such activities honored the Type 2 verification standard (moderate level). As for some environmental data such as greenhouse gas emissions and the amount of water usage, we finally confirmed the data approved by a third verifier. Site inspection was performed at the head office in Daejeon. Therefore, the Assurer clearly states that any additional verification conducted in the future may issue varied results.

Assurance Methodology
The assurance was undertaken by following the methodology specified below.
1. Verified compliance with the requirements for Core Options in the GRI G4 Guidelines.
2. Verified consistency with the principles dictating the content and quality of sustainability reports based on the GRI G4 Guidelines.
3. Verified the appropriateness of identifying key issues and the responsiveness to the content presented in the Report by the various analysis methodology.
4. Verified the appropriateness of the report content with other sources and searched for incorrect information through comparative analysis.
5. Onsite verification at the head office and plant has been conducted to confirm evidence for key data and information as well as internal processes.

Findings and Conclusions
It is the Assurer’s opinion that the Report fairly and accurately presents the sustainability efforts and performance of K-water. It is also verified that the Report complies with the requirements for Core Options in the GRI G4 Guidelines. In terms of General Standard Disclosures, the Report is found to comply with the requirements for Core Options. For Specific Standard Disclosures, Disclosure on Management Approach (DMA) and Indicators for material issues drawn by the decision process, the items for the Report are as follows.
The Sustainability Management Center of the Korea Productivity Center is an assurance agency officially certified by Accountability, which established AA1000, the international standards for Stakeholder engagement and verification, and has qualifications to perform independent assurance engagements. Our Assurance Committee is also comprised of competent experts who have in-depth experience in sustainability management consulting and assurance and completed the relevant professional training.

2. It is an encouraging achievement for K-water to disclose 2026 management goals connected with its newly established management strategy. We recommend that K-water continuously review results and goals under a more regularized management system.

The Sustainability Management Center of the Korea Productivity Center is an assurance agency officially certified by Accountability, which established AA1000, the international standards for Stakeholder engagement and verification, and has qualifications to perform independent assurance engagements. Our Assurance Committee is also comprised of competent experts who have in-depth experience in sustainability management consulting and assurance and completed the relevant professional training.
### Specific Standard Disclosures

<table>
<thead>
<tr>
<th>Material Aspects</th>
<th>Reference Contents of Index</th>
<th>ISO 26000</th>
<th>Page</th>
<th>Note</th>
<th>EN/ES/(\hat{\text{E}}) Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Economy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-DM1</td>
<td>Generic DMA</td>
<td>26, 12</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Economic Performance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EC1</td>
<td>Direct economic value generated and distributed</td>
<td>6.6.1-4, 6.7.1-7, 6.8.9</td>
<td>64-96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EC2</td>
<td>Financial implications and other risks and opportunities for the organization's activities due to climate change</td>
<td>6.5.5</td>
<td>6-9, 12-24</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Indirect Economic Impacts</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EC7</td>
<td>Development and impact of infrastructure investments and services supported</td>
<td>6.6.7, 6.6.8, 6.6.9, 6.9.3, 6.9.4, 6.9.5, 6.9.6, 6.9.7</td>
<td>45-51, 53-57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EC8</td>
<td>Significant indirect economic impacts, including the extent of impacts</td>
<td>6.6.7, 6.6.8, 6.6.9, 6.9.3, 6.9.4, 6.9.5, 6.9.6, 6.9.7</td>
<td>45-51, 53-57</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Procurement Practices</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-DP1</td>
<td>Generic DMA</td>
<td>64</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Environment</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-DM1</td>
<td>Generic DMA</td>
<td>26, 84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>Energy consumption within the organization</td>
<td>6.5.4</td>
<td>36-37, 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN6</td>
<td>Reduced energy consumption</td>
<td>6.4.5, 6.5.1</td>
<td>36-37, 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Water</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>Total water withdrawn by source</td>
<td>6.5.4</td>
<td>10-12</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN10</td>
<td>Water sources significantly affected by withdrawal of water</td>
<td>6.5.4</td>
<td>None of the water sources were significantly affected by withdrawal of water</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Biodiversity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>Habitats protected or restored</td>
<td>6.5.4</td>
<td>26-28</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Emissions</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>Direct greenhouse gas(GHG) emissions (scope 1)</td>
<td>6.5.7-8</td>
<td>37, 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN16</td>
<td>Indirect greenhouse gas(GHG) emissions (scope 2)</td>
<td>6.5.7-8</td>
<td>37, 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN18</td>
<td>Reduction of greenhouse gas(GHG) emissions</td>
<td>6.5.5</td>
<td>28, 37, 88</td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN20</td>
<td>Emissions of Ozone-depleting substances</td>
<td>6.5.5</td>
<td>- No process to emit ozone-depleting substances such as freon gas</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effluents and Waste</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>NOx, SOx, and other significant emissions</td>
<td>6.5.3</td>
<td>68</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Compliance</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>Generic DMA</td>
<td>26, 84</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>G4-EN1</td>
<td>Total number of substantiated complaints regarding breaches of customer privacy and loss of customer data</td>
<td>6.7.7-8, 269, 77</td>
<td>91</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>
K-water is a business of the people that contributes to the quality of life of all citizens and the development of the country by developing, managing, and preserving Korea’s water resources to be sustainable in environmental, economic, and social aspects and by providing the best products and services. Based on our experience, know how, and advanced technology, we promise the following to become a global professional water business.

We accomplish our missions through creative thinking and challenges and make efforts to actualize transparent management by processing tasks with an honest and fair attitude. We recognize that the Earth is a precious heritage for our offspring and is a healthy and clean shelter of and as such, we are obligated to practice eco-friendly management.

As a part of the local community, we respect the tradition and the culture of the community and enrich the lives of local residents by contributing to the development of the local community.

Our company, which handles water, the source of life, declares the policy of green management with the participation of all employees in order to become an eco-friendly business that receives the trust and love of citizens by developing and managing water resource in eco-friendly ways.

We deeply recognize that this is a time that needs the best effort to make sustainable development that harmonizes with environment in order to create a clean and livable environment. Our company, which handles water, the source of life, declares the policy of green management with the participation of all employees in order to become an eco-friendly business that receives the trust and love of citizens by developing and managing water resource in eco-friendly ways.

We proactively involve ourselves in protecting water sources, air and the environment. We take the responsibilities and duties of preventing natural pollution, promptly addressing natural pollution that occur from business activities, while always keeping in mind that these kinds of practices are the foundations of our business ethics. We secure a healthy consumption culture of saving and reusing resources and energy, and seriously consider them at all times so that we will not destroy the environment through inadvertence. We reflect the opinions of the citizens as best we can in making plans that relate to the environment, and we disclose information and materials so that we will increase the trust on the organization as well as the transparency of the task. We fully take responsibility of our obligations to prevent environmental damages, if and when environmental damage occurs, we place utmost effort to resolve the damage. We provide continuous environmental education, so that our activities reflect our code of ethics and we make our best efforts for research development of conserving and improving the environment.

All employees of K-water practice this declaration so that future generations will enjoy prosperity in a clean environment.

K-water will make best efforts to practice customer-oriented management by approaching its customers based on the management philosophy ‘The values of customers are our values.’ We will provide information and services for the safety and ownership protection of customers even before customers request them, We will always be open to the advice and suggestions of customers, regularly accept opinions, and use them for the improvement of customer services. We will perform our tasks without any discrimination to any customers and secure the profit of customers to the maximum by seeking the most efficient management.

We promise that we will set the best service performance standards that K-water can provide and practice them in order to realize ideal goals on the side of customers. We will perform our tasks without any discrimination to any customers and secure the profit of customers to the maximum by seeking the most efficient management.

We declare the following in order to provide clean and safe water to citizens, protect the lives and properties of citizens from water-related disasters, and to become the best water service organization through continuous changes and innovations.

We place customer-satisfaction management first in everything we do; we ensure customer-oriented values are embedded in our values, our code of conduct, and systems. In order to become a trusted public enterprise, we process tasks in an honest and fair manner without violating conscience, common sense, or the law, and actively participate in social contribution activities in order to be together with the local community. With confidence and passion that do not fear change, we will secure global-level competency to accomplish the vision and establish a continuous and stable foundation for growth.

By putting this declaration into action, we focus all of our capabilities to make K-water a business that does its job well, a business that has competitiveness, and a business that is loved by the citizens.
UN Global Compact’s 10 Principles Support

The UN Global Compact’s Ten Principles are derived from the following international agreements.

• The Universal Declaration of Human Rights
• The International Labor Organization’s Declaration on Fundamental Principles and Rights at Work
• The Rio Declaration on Environment and Development
• The United Nations Convention Against Corruption

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

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

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

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

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

K-water practices and complies to the ten principles of UN Global Compact.

Questionnaire to Collect Readers’ Opinions

We welcome your valuable opinions,
With a view to publishing a better sustainability report in the future, K-water wants to hear the opinions of various stakeholders including our readers about the 2016 sustainability report. Please complete the following and send it to the address listed on the bottom of this questionnaire by mail or fax.

1. What kind of groups do you belong to?
- Customers □ Employee □ Government □ Local residents □ Partners □ NGOs and Civic Groups □ Specialized organizations □ Others(□)

2. How did you find this sustainability report?
- K-water’s home page □ Media such as newspapers □ Web surfing □ K-water’s employees □ Seminars/lectures □ Others(□)

3. For what purpose do you use this report? (Multiple responses are possible)
- To get information about K-water □ To understand K-water’s sustainability management activities □ To compare and analyze the characteristics of the industry to which K-water belongs □ For research and education □ Others(□)

4. Which section was most interesting to you in this report? (Multiple answers are possible)

5. Which pledge requires more supplementing information? (Multiple answers are possible)

6. Was this report helpful for you to have a better picture of K-water’s sustainable management activities?
- Very □ A little □ Neutral □ Not □ Not at all

7. How satisfied are you with this report?

8. Feel free to write your opinions about the overall configuration and contents of the report.

Send to
Management Services Innovation Team, K-water Sintanjin-Ro 200, Daedeok-Gu, Daejeon 34350, Republic of Korea
TEL. 82-42-629-2356~8 / Fax. 82-42-629-2399