

About This Report

Overview of the Report

This document is the 19th edition of the K-water Sustainability Management Report since its first publication in 2005. In this report, K-water endeavors to engage with and inform our various stakeholders about the Corporation's commitment to sustainability across the environmental, social, and governance dimensions. The report is written to foster transparency regarding K-water's sustainable management practices and implementation outcomes. It aims to offer a comprehensive overview of its management status and corporate value, detailing its progress toward becoming a "The world's best integrated water platform company," integrating nonfinancial and financial performance.

Report Principles

For better transparent disclosure of sustainability management performance, this report complied with the core options of the Global Reporting Initiative (GRI) Standards and was structured to reflect the main agenda of ISO 26000: Social Responsibility; the Korean Environmental, Social, and Governance (K-ESG) Guidelines; Sustainability Accounting Standards Board (SASB); Task Force on Climate-Related Financial Disclosures (TCFD), and UN Sustainable Development Goals (SDGs). The financial performance was reported according to the Korean International Financial Reporting Standards (K-IFRS). In addition, an independent verification organization confirmed the reliability and impartiality of the report's content, the results of which were seamlessly incorporated into the verification statement.

Period and Scope of Reporting

This report presents the performance results for the period of January 1, 2022, to December 31, 2022, supplemented by information up to the first half of 2023 if it is deemed significant for stakeholders. Quantitative outcomes are detailed for the most recent five most recent years, from 2018 to 2022, facilitating the identification of trends over this period. Data reflecting yearly changes is anchored to the accounting settlement date (December 31), and information on particular data collection periods is specified when it is necessary to be disclosed. The scope of this report centers on the environmental, social, and governance performance of the headquarters and its branches. Notably, some disclosed data extends to encompass the performance of overseas businesses (30 businesses across 14 countries as of September 30, 2023), subsidiaries, and supply chains.

Reporting Cycle Annual

Last Report Date December 2022

Report Verification KOSRI

Publisher Korea Water Resources Corporation (K-water)
200 Sintanjin-ro, Daedeok-gu, Daejeon

Date of Issue December 2023

Contact 34350
200 Sintanjin-ro, Daedeok-gu, Daejeon
K-water Management Innovation Office
Contact No.: 042-629-2407 – 2409

Cover Story

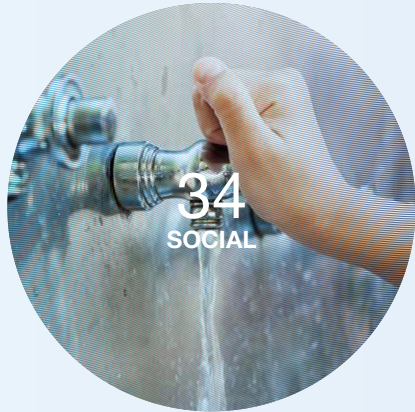
"The Soyanggang Dam, which has been with us for 50 years, will steadfastly accompany us even more reliably into the next 100 years."

2023 Water Love Contest Grand Prize "Kim Riha"

The cover image of the 2023 K-water Sustainable Management Report is the artwork that won the grand prize in the 2023 Water Love Contest. It depicts the Soyanggang Dam, which has been with us for 50 years, symbolizing its continued development alongside us in the future.

K-water's Sustainability Management Report is accessible for viewing and downloading on our website at <https://www.kwater.or.kr/>.
For additional details or inquiries, please feel free to contact us. We look forward to hearing feedback from our stakeholders.

Contents



INTRODUCTION

- 004 CEO Message
- 006 Company Profile
- 008 Main Business Area
- 012 Sustainability Highlights
- 014 Communication with stakeholders
- 017 Key Performance Indicators of K-water ESG Management
- 018 Materiality Assessment



ENVIRONMENTAL

Sustainable coexistence of humans and nature

- 022 Climate Change Responses
- 029 Conservation of Aquatic Ecosystems



SOCIAL

Aiming for communal goodness for mutual growth

- 036 Talent Management
- 042 Win-win Partnerships with the Community
- 048 Shared Growth
- 054 Health & Safety Management
- 057 Information Security and Personal Information Protection



GOVERNANCE

Communication-based clear decision-making

- 060 Corporate Governance
- 064 Ethics and Compliance Management
- 068 Risk Management



BUSINESS

Linking Nature and People

- 072 Water Resources Management
- 077 Innovative Growth Engine Management



APPENDIX

- 083 ESG Data
- 100 UN SDGs
- 101 GHG Verification Statement
- 102 Third-Party Assurance Statement
- 104 ISO 26000 Assessment Report
- 106 K-ESG Guidelines Index
- 107 GRI Content Index
- 111 SASB Index
- 112 TCFD Index
- 113 Memberships and Awards



INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water
ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

CEO Message

“

K-water is a Korean public institution representing Korea under the slogan of “Creating the Future and Sharing Happiness with Water.” First established in 1967 to promote national water safety and enhance water welfare for the nation, it has been a leading national industry through the comprehensive use and development of national water resources and its contribution to the enhancement of the quality of life and public welfare of the nation.

”



INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Dear stakeholders, Greetings.

This is Yun Seog Dae, the President of Korea Water Resources Corporation.

Today, humanity is on the brink of survival, with the climate crisis that has penetrated deep into our daily lives. Korea, too, has been experiencing extreme floods and droughts repeatedly, making us who dwell in the country feel such threats under our very skins. In this age of uncertainty, serving as the public institution representing Korea's water management, our Corporation seeks to put our efforts into the following aspects as we are committed to safeguarding the safety and health of the people, our utmost priority, along with realizing sustainable management.

First, we at K-water are committed to practicing carbon neutrality and strengthening our water environment management to overcome the climate crisis and become a leader in the forging of an environment in which humankind and nature coexist. K-water will continue to enhance the development of eco-friendly water-generated energy and green technology based on water resources. Furthermore, the Corporation will establish and apply a reuse-based water circulation system to create eco-friendly waterside cities. With these efforts, our commitment is to create a harmonious life for humankind and surrounding nature without destroying opportunities for our future generations while meeting current needs as well.

Second, our commitment to prioritizing public values positions us to encourage efficient management consistent with policy principles. K-water will prioritize business areas that directly impact public safety to take preemptive responses to various disasters. The Corporation will establish a stable smart water management system such as digital twin and innovate water management to enhance business efficiency while pursuing public welfare and strengthening financial soundness.

Third, as the public institution representing the Republic of Korea, K-water is committed to fostering innovation in its members and organization, upholding impartiality and integrity that meet the public's expectations. Water is a vital element for all living creatures. Organizations that manage water as a public resource must adhere to more rigorous integrity requirements and standards. As such, our Corporation endeavors to instill a heightened awareness of integrity among its members and cultivate a healthy organizational culture firmly grounded in fundamental principles.

The hottest issue both in Korea and in the international scene is sustainability. Humankind has been exploiting the environment to advance civilization, but also has been alarmingly draining resources fast. A forecast by the OECD tells us that water, the one resource of which abundance we have taken for granted, will be exhausted in 30 years and humankind will be suffering from its absence. In such a climate crisis, we at K-water remind ourselves of the gravity of our duties once again, and will continue our efforts in leading innovation for a sustainable water industry based on management that upholds our principles.

Thank you.



December 2023
CEO **Yun Seog-dae**

“

K-water strives to become a reliable public institution that specializes in water services that meet public demand, based on its water management know-how.

”



Company Profile

INTRODUCTION

CEO Message

• Company Profile

Main Business Area

Sustainability Highlights

Communication with stakeholders

Key Performance Indicators of K-water ESG Management

Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Introduction to the Corporation

K-water, Korea's sole water-specialized public corporation, was established according to Article 1 of the Korea Water Resources Corporation Act. Its mission is to facilitate the water supply, encompassing residential and industrial needs, through the comprehensive development and efficient management of water resources, and enhancing water quality to improve the quality of people's lives and promote public welfare. Aligned with its mission statement, "a future driven by water, happiness created by water," K-water aspires to safeguard people from water-related calamities, such as floods and droughts; supply clean water; and ensure that no area is excluded from water welfare benefits. Additionally, K-water aims to develop sustainable development engines. This commitment positions the corporation to lead in the era of climate crisis and carbon neutrality, ushering in a new generation of water management exclusive to K-water. This vision encapsulates a future where water is a vital resource and a catalyst for happiness and well-being.



Name of the Corporation	Korea Water Resources Corporation (K-water)
Date of Establishment	November 16, 1967
Head of the Corporation	Yun Seog Dae
Organization Type	A quasi-market public enterprise
Headquarters	200 Sintanjin-ro, Daedeok-gu, Daejeon
Website	https://www.kwater.or.kr
Organization	[Headquarters] President, Vice President, Auditors, 5 Divisions, 3 Head Offices, 36 Departments/Offices [On-Site Branches] 9 Head Offices (Divisions), 16 Departments/Centers, 82 Branches/Units
Employees	6,957 (as of December 2022)*

*The number of permanent employees (6,077 persons) and part-time actual employees (880 persons)

Sales (as of December 2022)



KRW 4,759,317 million

Liabilities (as of December 2022)



KRW 12,398,262 million

Credit Rating Korea **AAA** domestically



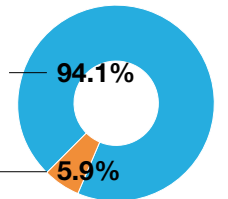
International Moody's **Aa2** (Reliable)

S&P **AA** (Reliable)

Shareholders (as of December 2022)

Government of the Republic of Korea **KRW 9,647.6 billion** 94.1%

Korea Development Bank, etc **KRW 608.4 billion** 5.9%



INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

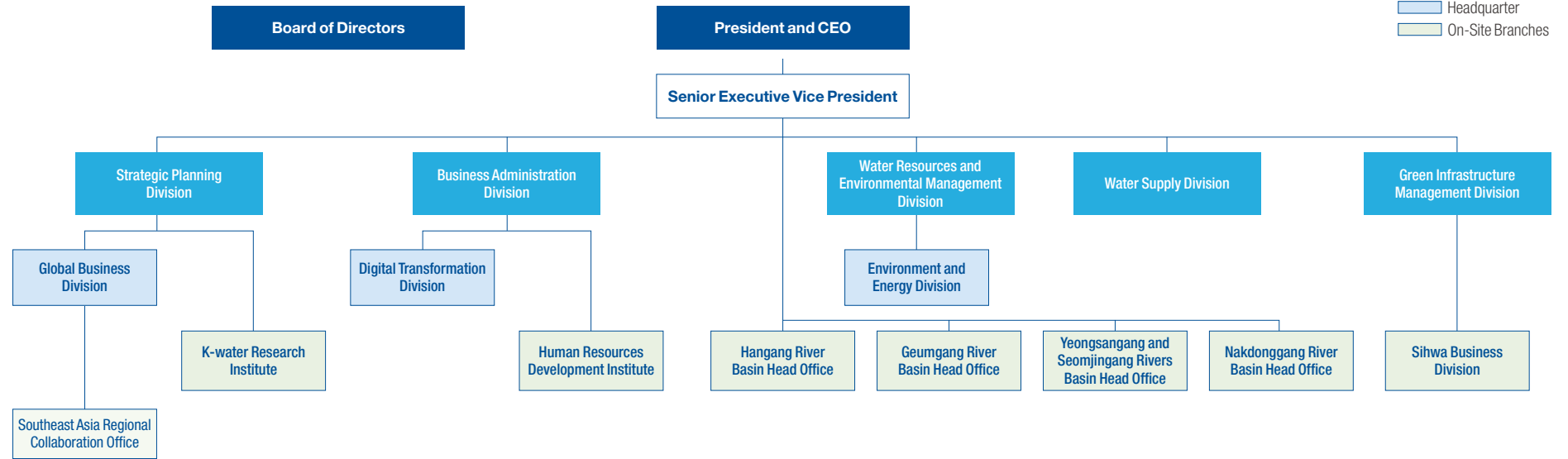
SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Organization



*Yeongsangang & Seomjingang Rivers - hereinafter referred as Yeong-Seom

Corporate History

1960~1980's

- Nov. 1967** Establishment of the Korea Water Resources Development Corporation
- Oct. 1973** Completion of the Soyang River Multipurpose Dam
- Feb. 1974** Foundation of the Industrial Sites and Water Resources Development Corporation
- Oct. 1974** Relocation of Headquarters from Seoul to Daejeon
- Oct. 1976** Completion of the Andong Multipurpose Dam
- Dec. 1979** Acquisition of nationwide industrial water facilities
- Dec. 1980** Completion of the Daechong Multipurpose Dam
- May 1981** Acquisition of phases 1 & 2 of the regional water supply systems in the metropolitan area
- Oct. 1985** Completion of the Chungju Multipurpose Dam
- Dec. 1987** Promulgation of Korea Water Resources Corporation Act
- Jul. 1988** Foundation of the Korea Water Resources Corporation

1990's~2000's

- May 1992** Completion of the Imha Multipurpose Dam
- Nov. 1992** Completion of the water supply facilities in Ilsan New Town
- Nov. 1993** Completion of the Phase 1 of the Ansan New Town construction project
- May 1996** Completion of the Buan Multipurpose Dam
- Nov. 1998** Completion of the Boryeong Multipurpose Dam
- Jan. 1999** Completion of the Phase 5 of the water supply system in the metropolitan area
- Oct. 2000** Completion of the Hoengseong Multipurpose Dam
- Feb. 2002** Establishment of a new water management center
- Dec. 2003** Signing of a consignment agreement for Nonsan City's local water supply
- Mar. 2004** Completion of the International Tap Water Comprehensive Testing Center
- Mar. 2006** Declaration of "K-water" CI
- Feb. 2007** Completion of the Metropolitan Waterworks Integrated Operation Center
- Aug. 2007** Commencement of the Sihwa Multi-Techno Valley Development Project
- Nov. 2009** Hope declaration ceremony for the Four Major Rivers Restoration Project

2010's

- Aug. 2011** Commencement of power generation at Sihwa Lake Tidal Power Plant
- Oct. 2011** Commencement of the floating solar power generation at the Hapcheon Multipurpose Dam
- May 2012** Opening of the Gyeongin Ara Waterway
- Apr. 2014** Signing of the promotion agreement for Paju City's Smart Water City Pilot Project
- Oct. 2014** Commencement of the commercial power generation at Angat Dam in the Philippines
- Apr. 2015** Establishment of the Asia Water Council (AWC)
- Feb. 2016** Completion of the floating solar power plant at Boryeong Dam
- Nov. 2016** Announcement of the new management policy for the 50th founding anniversary
- July 2017** Opening of the Water Industry Open Platform Center opened
- Jun. 2018** Transfer of affiliation under the Ministry of Environment according to the amendment of the National Government Organization Act
- Nov. 2019** Construction begins on Busan Eco Delta Smart City National Pilot City

2020's

- Nov. 2020** Declaration of the management for the climate crisis
- Mar. 2021** Declaration of ESG management
- Apr. 2022** Opening of the Songsan Global Education Center
- Jun. 2022** Commencement of the main construction for Daesan Coastal's Seawater Desalination Project



Main Business Areas

INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Water Sharing

Developing a climate change-proof integrated water management



- Creating a comprehensive water disaster response system through dam-river linkages
- Strengthening response capabilities against basin-wide climate change
- Reinforcing the integrated water management system in the basins
- Improving the water environment in the basin for the harmonious coexistence between humans and nature
- Pioneering the digitalization of basin water management

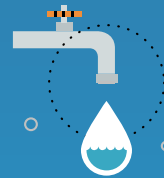
The leading multipurpose dam management in Korea

94%
of the flood control capacity

830
times the size of Seokchon Lake

Water Safety

Ensuring trustworthy drinking water supplies for all



- Committing to providing tap water that is safe and reliable, meeting the public's expectations
- Developing a robust system for utilizing basin water that contributes to the growth of the national industry
- Implementing innovative changes in the water supply system to address challenges posed by the climate crisis
- Ensuring equitable access to water services across regions and enhancing the overall reliability of tap water
- Establishing a smart water supply management system leveraging digital transformation technologies

No. 1 tap water supply in Korea

49%
of the nation's water facilities

34,000km
long water pipes

Water Convergence

Striving for global leadership in the water value nexus



Water-Integrated Cities

- Laying the foundation for creating climate-resilient environmental cities
- Leading innovative technology-integrated smart water cities
- Establishing carbon-neutral, sustainable cities

Smart-City

Development of Korea's first smart city

Residents experience innovative and improved technologies
Vitalization of living labs



Water-Integrated Energies

- Leveraging current water management facilities to expand water energy
- Harnessing emerging technologies, enhancing energy management, and engaging in new business ventures
- Transitioning systematically toward a net-zero society

No. 1 renewable energy producer in Korea

2,461 GWh

Annual consumption of
740,000
households



Global Platforms

- Securing global water cooperation initiatives
- Promoting significant international investment projects
- Utilizing global platforms to share and disseminate technologies

The world's only global water industry

30 projects in
14 countries

Implementation of overseas projects throughout the entire water cycle



INTRODUCTION

CEO Message

Company Profile

• Main Business Area

Sustainability Highlights

Communication with stakeholders

Key Performance Indicators of K-water
ESG Management

Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Water Sharing Water Safety Water Convergence



Leading the advancement of the global water industry



Securing natural circulation-type water without environmental load



Managing basin water environment for the coexistence of ecosystem and humans



Building resilient urban waterfront spaces



Developing 100% clean energy from water



Innovation in digital water management and water disaster response despite climate change



Securely supplying tap water while minimizing unnecessary water leakage



Producing carbon-neutral tap water



Treating wastewater with a 100% reclamation of contaminated water

Status of Integrated Water Management Facilities



Operation of **20** multipurpose dams and **5** flood control dam-regulating basins

- 61% of the national supply, water supply ability 12.5 billion m²/year
- 94% of the national supply, flood control volume 5.3 billion m²

Operation of **14** reservoir dams and **17** weirs as well as Ara Waterway

Operation of **50** metropolitan and industrial water supply facilities

- 49% of the nation, 1,856 m²/day

Operation of **23** regional water supply facilities

- Controls 4.9% of the nation (per the water-supplied population), 1,459 million m³/day

7 local councils

Operation of **27** sewage systems

- 453,000 m³/day

Operation of **110** power plants

(dams, weirs, metropolitan water treatment facilities, etc.)

- 10 water power plants (1,004.6 MW), 54 small hydro power (88.04 MW), 33 onshore solar power plants (11.93 MW), 9 floating solar power plants (50.07 MW), 1 tidal power plant (254 MW), and 3 wind power plants (8 MW)

Status of Domestic Investment Companies

KWECO Co., Ltd. (Non-surviving Company)

Location	Gimpo, Gyeonggi-do
Tasks and Functions	Maintenance of the Ara Waterway
Investment Amount (Shares / Stake Ratio)	KRW 5.9 billion (100%)
CEO	Woo Dal-sik
Tenure	Until the merger (May 8, 2023 – Nov. 30, 2023)

K-water OMC Co., Ltd. (Surviving Company)

Location	Daejeon
Tasks and Functions	K-water facility management
Investment Amount (Shares / Stake Ratio)	KRW 0.5 billion (100%)
CEO	Jeong Seung-yong
Tenure	Staff dispatched (Until the merger of subsidiaries)

K-water Technology Co., Ltd.

Location	Daejeon
Tasks and Functions	Inspection and maintenance of dams and water facilities
Investment Amount (Shares / Stake Ratio)	KRW 17 billion (100%)
CEO	Park Tae-hyeon
Tenure	2 years (Sep. 13, 2022 – Sep. 12, 2024)

Hapcheon Floatovoltaic Co., Ltd.

Location	Hapcheon, Gyeongnam
Tasks and Functions	Hapcheon floating solar power plant operations
Investment Amount (Shares / Stake Ratio)	KRW 7.8 billion (51%)
CEO	Kim Jong-rae
Tenure	3 years (Staff dispatched)

Imha Floating Solar Power Plant, Inc.

Location	Andong, Gyeongbuk
Tasks and Functions	Imha floating solar power plant operations
Investment Amount (Shares / Stake Ratio)	KRW 7.4 billion (100%)
CEO	Ryu Yeong-mo
Tenure	Concurrent positions

Yanggu Floating Solar Power Plant, Inc.

Location	Chuncheon, Gangwon-do
Tasks and Functions	Yanggu floating solar power plant operations
Investment Amount (Shares / Stake Ratio)	KRW 2.2 billion (71%)
CEO	Lee Tae-yeon
Tenure	Concurrent positions

INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX



INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Status of Overseas Projects



Overseas projects
14 countries / **30** projects / Investment of KRW **3,014.8** billion in progress

● As of September 30, 2023

● Invested projects
6 projects

- Pakistan, the Philippines, Georgia, Solomon Islands, Indonesia

● ODA, and others
17 cases

- Cambodia, Uzbekistan, the Philippines, Pakistan, Solomon Islands, Indonesia, Bangladesh, Laos, Ukraine

● Water market development support projects
6 projects

- Kazakhstan, Malaysia, Indonesia, Kenya, Vietna

● Technical support
1 case

- Indonesia

Status of Overseas Investment Companies

Investment Companies
7 cases

- Georgia, Pakistan, Solomon Islands, Indonesia, the Philippines

JSC Nenskra Hydro
 (Nenskra, Georgia)

Location Georgia
Tasks and Functions Hydropower in Georgia
Investment Amount KRW 226.9 billion (Shares / Stake Ratio) (92.7%)
CEO Bae Gyeong-un
Tenure Staff dispatched

STAR HYDRO POWER Ltd
 (Patrind, Pakistan)

Location Pakistan
Tasks and Functions Hydropower in Pakistan
Investment Amount KRW 125 billion (Shares / Stake Ratio) (100%)
CEO Oh Bong-rok
Tenure 3 years (May 1, 2022 - Apr. 30, 2025)

Tina Hydropower Ltd
 (Tina, Solomon Islands)

Location Solomon Islands
Tasks and Functions Tina River hydropower system in the Solomon Islands
Investment Amount KRW 4.7 billion (Shares / Stake Ratio) (80%)
CEO Jang Yong-hun
Tenure Staff dispatched

PT Karian Water Services
 (Karian, Indonesia)

Location Indonesia
Tasks and Functions Karian Metropolitan Waterworks
Investment Amount KRW 6.8 billion (Shares / Stake Ratio) (70%)
CEO Song Chi-ho
Tenure Staff dispatched

Angat Hydropower Corp
 (Angat, Philippines)

Location Philippines
Tasks and Functions Hydropower from Angat Dam in the Philippines
Investment Amount KRW 100.8 billion (Shares / Stake Ratio) (40%)
CEO Kang Dong-hyeong
Tenure 3 years (Staff dispatched)

Patrind O&M
 (Operation management in Patrind, Pakistan)

Location Pakistan
Tasks and Functions Hydropower operation management
Investment Amount KRW 0.5 billion (Shares / Stake Ratio) (99.9%)
CEO Park Jang-won
Tenure Staff dispatched

PT. Hasang O&M
 (Operation management in Hasang, Indonesia)

Location Indonesia
Tasks and Functions Hasang hydropower operation management
Investment Amount KRW 0.8 billion (Shares / Stake Ratio) (94.9%)
CEO Im Seung-hyeon
Tenure Staff dispatched



INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights**
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Sustainability Highlights

Hong Kong-based Global Awards "The Asset"

Awarded the 2022 Best Green Bond Prize

Adopted a Labor Director System

June, 2023

4 years

Ministry of the Interior and Safety

Achieved the highest rating of "Excellent" in the operation condition evaluation of the public data provision for four consecutive years in 2022

Sustainvest

Earned the highest rating (AA) in the ESG corporate evaluation in 2022

TOP 4

The Berkeley Springs International Water Tasting

Achieved the top 4 in the 33rd International Water Tasting Competition

2 years

Ministry of SMEs and Startups

Achieved an excellent rating in the corporate partnership evaluation for two consecutive years

Held the declaration ceremony of the Safety and Health Management Charter

January 27, 2023

Launched the digital twin water management platform, "Digital GARAM+"

Signed a business agreement to promote green hydrogen research with the Korea Institute of Energy Research

9th Porter Prize for Excellence in CSV

CSV-ESG Porter Prize Winner in the Public Enterprises and Public Institutions Category

Opened a metropolitan-provincial data-sharing web service

INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights**
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

2,465,677 MWh

Achieved renewable energy generation amounts (as of 2022)

Elected Asia Water Council (AWC) as a directorate of the World Water Council

RE100

Signed a joint development agreement for implementing RE100

Achieved the “Highest Grade” in the Ministry of Security and Public Administration’s records management corporate evaluation

Completed the demonstration project for the enhancement of hydrological measurement in Flores, Indonesia

Commenced commercial power generation from the Angat Dam’s power generation facility modernization project in the Philippines

Net-zero

Achieved carbon neutrality at the water purification plants in Cheonan and Asan

Ministry of SMEs and Startups

Selected as the host organization for the 2023 Initial Startup and Startup Takeoff Package

Selected as a “Partner Corporation,” an excellent corporation for voluntary win-win partnerships by the Ministry of SMEs and Startups in September 2022

Ministry of Education

Selected as a corporation with excellent educational donations

December, 2022

Ministry of Education

Received the Minister’s Commendation for nurturing innovative talents in the digital water industry

December, 2022

Awarded the Commendation of the Commissioner of the Korean Intellectual Property Office on the 58th Invention Day

INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS







APPENDIX

Communication with stakeholders

Going directly to a regular communication channel

Homepage 	
Blog 	
Facebook 	
Instagram 	
Youtube 	

K-water maintains communication channels designed to engage various stakeholders, actively collecting feedback and incorporating it into the management practices. Guided by strategic management regulations, the Corporation has instituted a policy mandating public participation in overall management decision-making. Furthermore, K-water has diversified communication channels for stakeholders by enhancing its public communication platforms, such as Danbi Talk Talk; public-private councils and water industry platforms. The establishment of online forums and digital water forums further contributes to this initiative. The Corporation defines citizens, customers, local communities, partner companies, the government, and its executives and employees, including labor unions, as its main stakeholders. In line with this, K-water established a foundation for stakeholder involvement in its management processes by implementing customized communication channels for each stakeholder

Category	Main Issues of Interest	Communication Channels	Communication Cycle
 Employees	<ul style="list-style-type: none"> • Unifying water management • Improving organizational culture 	Portal Communication with the CEO	Regularly
		Board meetings	Quarterly
		Staff management a	Monthly
		Talk Talk Collection	Regularly
		Bamboo Forest	Regularly
 Labor unions	<ul style="list-style-type: none"> • Adopted a Labor Director System • System reforms 	Labor management committee	Quarterly
		Joint TFT	Frequently
 Government (Central/Provincial), the National Assembly, experts	<ul style="list-style-type: none"> • Implementing national administrative agendas 	Policy meetings	Frequently
		Interviews, etc.	Frequently
 Relevant organizations, companies in partnerships	<ul style="list-style-type: none"> • Improving public services • Fostering the water industry 	Business conferences	Frequently
		MOU	Frequently
		Meetings	Frequently
		Platform centers	Regularly
		Corporate Growth Response Center	Regularly
 Citizens, customers	<ul style="list-style-type: none"> • Improving water services 	Website, social media	Regularly
		Supporters	Frequently
		National Communication Center	Regularly
 Communities	<ul style="list-style-type: none"> • Solving water problems in local communities 	Mutually Beneficial Partnership Committee	Quarterly
		Interviews	Frequently
		Local resident's meeting	Frequently
 Civic groups	<ul style="list-style-type: none"> • Opening the weirs of the Four Major Rivers • Restoring the ecosystem 	Local problem-solving platform, etc.	Frequently
		Mutually Beneficial Partnership Committee	Quarterly
 The press	<ul style="list-style-type: none"> • Water management issues 	Forums	Frequently
		Advisory groups, etc.	Frequently
		Press releases	Frequently
		Planned reports	Frequently
		Meetings	Frequently

Stakeholder communication examples

INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX



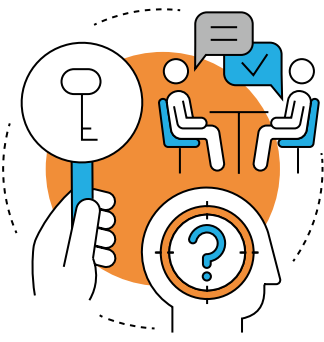
Mobile water services



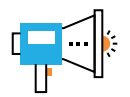
K-water established the K-water national design group, which comprises 17 members from K-water, the public, local governments, and service professionals, to explore innovative water services in which the public may participate to improve their convenience. In this process, a mobile water charge information service was designed, and based on service design techniques such as interviews and in-depth surveys, 10 meetings were conducted to conceive the real-time mobile water usage, charge information, and app designs that the public desired. Additionally, this service has established a system to quickly detect households that do not use tap water for an extended period, helping to ensure the citizens' safety, particularly elderly people living alone who may be at risk of dying alone. The Corporation has established an emergency contact system with local governments and social welfare centers to facilitate quick rescue and response in the event of an accident (Seosan City) and laid the groundwork for the provision of mobile services to 27,000 households across 11 local jurisdictions by 2022.

97%

The service satisfaction rate among mobile water service users (Seosan City's first survey)



Expanding public data disclosure to the public



K-water analyzes big data from 70,000 keywords on the Corporation's website and 462 materials from information disclosure requests during 2021 to proactively identify the needs of the public and reflect them in the preliminary information disclosure items, which allows the Corporation to provide public data at a level that satisfies the public with the information they need. Furthermore, we developed our own quality management system and data diagnosis algorithm and are operating a dedicated quality diagnosis council that constantly monitors data subject to focused management to achieve Grade 1 data quality. In addition to releasing 248 new categories of public data by 2025, the Corporation plans to create a mid- to long-term public data disclosure road map while working to fulfill the needs of the public and provide services from the perspective of consumers, especially those who are digitally vulnerable.

Opening information closely related to people's lives, including videos of birds, CCTV footage of dam releases, freeze-and-burst prediction maps, etc.

4 years

The highest grade received in the operation condition evaluation of the public data provision by the Ministry of the Interior and Safety for four consecutive years



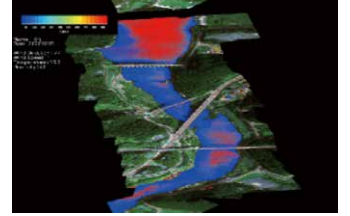
3 years

Excellent rating received in the comprehensive evaluation of the information disclosure by the Ministry of the Interior and Safety for three consecutive years



90%

Website Satisfaction rate achieved at 90% (5% up compared to 2021)



86%

Convenience of use achieved at 86% (4% up compared to 2021)



INTRODUCTION

CEO Message

Company Profile

Main Business Area

Sustainability Highlights

- Communication with stakeholders

Key Performance Indicators of K-water
ESG Management

Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Interviews with key stakeholders

President of the Korean Federation of
Water Science and Engineering Societies

Seo Il-won

“It is crucial to secure forward-thinking technology for water resource management that considers the entire water cycle. I hope it will uphold our societal responsibilities by developing and utilizing cutting-edge technology.”

As Korea's one and only public corporation specializing in water, K-water is accountable for providing clean water to all citizens and safeguarding them against natural calamities. It is imperative for K-water to build and run a water management system that addresses the full water cycle, from water sources to faucets, to meet its social obligations. K-water establishes an integrated water quality information system and makes use of several technologies, including a green algae management platform and an integrated urban flood control system, to manage water resources efficiently. Given that climate change has recently caused major floods and widespread droughts more frequently, it is time to address climate change by acquiring forward-thinking technology for water resource management instead of being complacent with existing technologies. K-water will be able to fulfill its societal responsibilities and successfully implement sustainable management when it develops cutting-edge technologies that can precisely analyze and control domestic rainfall and water cycle characteristics and actively utilizes a variety of digital technologies, such as artificial intelligence (AI), big data, internet of things (IoT), unmanned aircraft, and advanced sensing technologies.

Senior Researcher
at the Korea Environment Institute

Han Hye-jin

“K-water contributes to reducing greenhouse gas emissions and achieving carbon neutrality in several ways. I hope that it will pursue national public interests based on communication and coexistence.”

A national water management basic plan, a water accounting system, and carbon-neutral R&D are some of the water-related projects that K-water has collaboratively carried out and planned. K-water is actively expanding carbon sinks and developing various new renewable energies, such as floating solar power, hydrothermal energy, and tidal energy, utilizing its business characteristics to contribute in several ways to reduce greenhouse gas emissions and achieve carbon neutrality. Given that K-water does not produce much greenhouse gas emissions on its own, it is expected to effortlessly attain RE100, which it joined in 2021. However, it will be challenging for new renewable energy to take the lead in the previously established domestic carbon-neutral power market, as it currently does not generate much electricity. Therefore, it is essential to grow the energy conversion industry in overseas markets or look into brand-new, carbon-neutral ventures that K-water alone can execute in Korea. In addition, I hope that K-water will pursue sustainable growth as a company that seeks national public benefits by closely examining new interests that arise as it diversifies into different industries, such as water supply, aquatic ecosystems, and ultrapure water, and reinforcing the foundation for communication with the local communities, as well as mutual growth with its partners.

Worker Director at K-water



Kim Min-jeong

“Talent development is crucial for a sustainable K-water, and I hope it will lead to the development of education and welfare programs like K-Professional.”

K-water is creating new values by preventing water pollution and advancing the management system in response to the public's demands for high-quality tap water to improve tap water reliability and promote new ventures. All of its employees are doing their best to achieve this goal. Investment in hiring and nurturing talented individuals is essential for K-water to push its business boundaries and achieve qualitative growth. K-water is enhancing employees' job capabilities and nurturing experts in various areas, including ultrapure water, big data, and financial management, through the “K-Professional” education program. It must continue to enhance welfare programs in addition to such job training programs while developing a system to improve capabilities throughout the organization by strengthening non-face-to-face channels that can increase accessibility to its employees in all branches across the country. In addition to pursuing the internalization of sustainable management by fostering empathy and reducing the gap between executives and workers across various business sites, it should be able to operate its staff management and improve organizational culture to create a work environment that reflects employees' needs.

Labor Director at K-water



Kwon Yong-Beom

“Based on its financial resources and technological capabilities, K-water must make every effort to prevent natural catastrophes before they happen, respond to them when they occur, and safeguard the public and its workers.”

K-water became the first public company to implement a Labor Director System and improve labor-management communication channels in an effort to uphold the value of labor and advance the well-being of all employees. We are facilitating two-way communication between our management team and workforce by expanding the “Talk Talk Collection” and operating participation-oriented communication channels based on four main communication strategies: empathetic communication, participation assurance, non-face-to-face communication, and safety management.

K-water has a social obligation to promote the health and happiness of its employees internally and protect the public's safety and properties externally. It is crucial to implement proactive prevention and responses based on financial resources and technical capabilities to minimize mortality from natural disasters, which have lately become more common because of climate change. K-water also generates sustainable economic outcomes by taking on new challenges, such as ultrapure water and new renewable energies, and expanding the water industry ecosystem by exchanging technologies with private businesses. In addition to employing a digital twin technology to anticipate potential hazards and enhancing the effectiveness and security of managing water resources with AI water purification facilities, we will make efforts to deliver even better water services down the road.

Executive Director at
Sustinvest

Oh Seung-jae

“K-water will play a critical role in addressing the climate crisis and water risks that we will confront. I hope that it will improve the caliber of responses by accurately assessing the risks and setting clear goals.”

In addition to environmental impacts such as natural disasters, social inequalities, economic systems, and public health and safety are some of the many hazards, both specific and actual, brought on by climate change. At the same time, water risks are also getting more severe all around the world, which emphasizes the need for K-water to respond quickly and methodically. K-water announced its “climate crisis management” in 2020 and is actively carrying out a number of climate change-related initiatives. To enhance its effectiveness, a precise identification and analysis of the current climate change-induced crisis are necessary. It will be possible to achieve more realistic risk management of climate change if we recognize the severity of water risks resulting from the climate crisis on the Korean Peninsula, establish K-water's management strategy road map based on future scenario analysis, and set clear short-, mid-, and long-term goals to achieve. I hope that it will fulfill its societal responsibility as a company that practices sincere sustainable management with a management strategy that acknowledges the seriousness of climate risks.



Key Performance Indicators of K-water ESG Management

INTRODUCTION

CEO Message

Company Profile

Main Business Area

Sustainability Highlights

Communication with stakeholders

- Key Performance Indicators of K-water ESG Management

Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

No.	Relevant issues on Key Performance Index (KPI) selections	Category		Unit	2020	2021	2022		Implementation levels
		ESG Field	KPI Index		Goals	Performance	Goals	Performance	
1	Water uses	E	Dam water supply	100 million m ³	57.7	60.2	59.3	61.5	☺
2	Water uses	E	Tap water supply	100 million m ³	41.1	42.8	42.3	43.4	☺
3	Water use	E	Recycling of sewage waters	Thousand m ³ /day	137.1	137.8	144.3	146.1	☺
4	Water quality security	E	Dam water quality attainment level	%	94.8	89.7	94.0	88.6	☺
5	Water quality security	E	Attainment rate of global water quality standards	%	99.99	99.98	100	99.94	☺
6	Climate change	E	Conversion of new renewable energy generation Greenhouse gas reduction	Thousand tCO ₂ -eq	1,338	1,031	1,123	1,141	☺
7	Increasing consumer demands	E	Purchase performance of green products	KRW 100 million	378	399	375	376	☺
8	Transparency, environmental regulation, pollution prevention	E	Environmental performance evaluation index	Points	147	155	150	158	☺
9	Energy utilization	E	Facility capacity of renewable power generation	MW	1,364.60	1390.35	1,418.40	1,408.90	☺
10	Customer satisfaction with water management services	E, S	Attainment rate of the national expected water quality	%	91	93	95	93	☺
11	Customer satisfaction with water management services	E, S	Provision rate of tap water safety services	%	-	100	100	108	☺
12	Significance of occupational safety and health	S	Attainment rate of dam safety grades	%	90.0	93.5	90.3	93.5	☺
13	Customer satisfaction with water management services	S	Attainment level of the local water supply's flow rate	%	0.843	0.843	0.843	0.848	☺
14	Climate change, increasing consumer demands	E, S	Construction sizes of waterfront spaces	Thousand m ²	2,556	2,662	2,130	2,168	☺
15	Growth in partnerships	S	Success rate in startup businesses	%	0.790	0.952	1.000	0.987	☺
16	Growth in partnerships	S	Sales in SME support systems	KRW 100 million	410	549	1,000	1,007	☺
17	Growth in partnerships	S	Overseas expansions of SMEs in partnerships	Number	46	48	60	82	☺
18	Growth in partnerships	S	Number of new supported companies for water industry development	Sum	611	930	1,000	1,195	☺
19	Significance of occupational safety and health	S	Industrial accident rate	%	0.18	0.13	0.17	0.18	☺
20	Increasing consumer demands	S	Evaluation of information security management conditions	Points	75.4	81.6	80.0	81.0	☺
21	Customer satisfaction with water management services	S	Customer satisfaction	Grades	Outstanding	Outstanding	Outstanding	Normal	☹
22	Social contributions in communities	S	Social Contribution Index	Points	89.7	64.7	70.0	78.1	☺
23	Significance of occupational safety and health	S	Safety management grading system	Grades	4-1	3	3	3	☺
24	Significance of occupational safety and health	S	Risk management efforts	Points	98.0	98.2	98.4	98.6	☺
25	Significance of occupational safety and health	S	Accident reduction efforts	Person	0	1	0	0	☺
26	Ethical management, governance structure	G	Sales	KRW trillion	3.8	4.0	4.4	4.8	☺
27	Ethical management, governance structure	G	Debt ratio	%	152.6	137.0	127.0	115.0	☺
28	Ethical management, governance structure	G	Trust index	Points	75	75	85	76	☹
29	Ethical management, governance structure	G	Integrity level	Grades	Grade 4	Grade 3	Grade 3	Grade 3	☺
30	Corporate transparency	G	Results from integrated disclosure by the Ministry of Economy and Finance	Points	0.600	1.0	1.0(Perfect Score)	1.0	☺
31	ESG performance	E, S, G	ESG corporate valuation*	Grades	-	A	A(Outstanding)	AA(Excellent)	☺

* Evaluator: SUSTINVEST

- Changes in reported numbers may occur depending on factors such as adjustments to indicators compared to the previous year, modifications in performance calculation methods, and rounding resulting from the selection of ESG KPI indicators based on government management evaluation quantitative indicators, mid- to long-term strategic management plans, and self-management goals - For new indicators indicating past-year performance with "·."
- Dam water quality attainment levels: Attainment rates of national water quality management goals for the water quality parameters [total organic carbon (TOC) and total phosphorus (TP)] of each dam subject to K-water management
- Recycling of sewage waters: Change in performance calculation criteria to the facility capacity
- Implementation levels: Considered "Good" if 90% or higher than the target is achieved; otherwise, it is labeled "insufficient"



INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

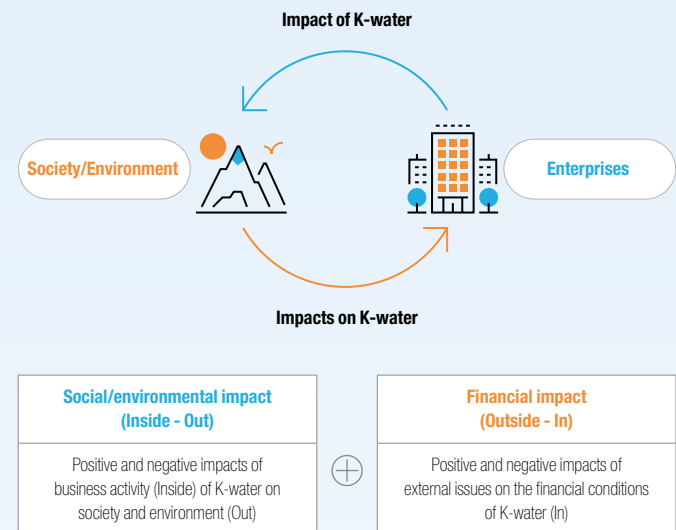
Materiality Assessment

Materiality Assessment Overview

Based on the global disclosure guidelines and K-water's ESG management system, the Corporation undertook a materiality assessment to gather input from its employees and other stakeholders in selecting the material issues for K-water's sustainable management. A double materiality assessment is carried out to identify important issues by analyzing the social and environmental impacts outside the organization as well as the financial impacts inside of it, deriving a pool of 30 issues that have significant impacts on the Corporation's ESG management and selecting 22 final major issues through validation.

* Double materiality assessment method

K-water conducted a double materiality assessment using the material issue assessment techniques from the European Sustainability Reporting Standards (ESRS) and the Global Reporting Initiative (GRI). The double materiality assessment is a method that evaluates a company's material issues and takes into account the environmental and social impacts of the company's business activities on the external environment (impact materiality) and the financial impact of external factors on the company (financial materiality).



Double Materiality Assessment Process

K-water used double materiality assessment surveys with internal and external stakeholders to prioritize a pool of 30 material problems that were obtained via media analysis and reviews of national and international disclosure rules. Over 22 material concerns were then chosen in the validation phase based on evaluations by external experts as well as internal reviews conducted by the Corporation.

STEP 1

Constructing an Issue Pool

A total of 30 issue pools were derived.

Around 30 issues out of the total of 51 were chosen to construct an issue pool by examining the following items:

- 1) Media**
An analysis was done on 14,925 K-water-related articles published between January 1 and December 31, 2022.
- 2) Benchmarking of domestic and foreign companies**
An analysis was done on the major issues targeting similar companies in the same industry (two domestic and four overseas companies).
- 3) Reviewing domestic and international disclosure standards**
Analyzing material issues in the industry, including MSCI, KCGS, Korea Exchange (KRX), K-ESG, GRI, SASB, etc.
- 4) Material issues selected in 2022**
An analysis was done on 20 material issues in 2022.
- 5) Interviews with stakeholders**
An analysis was done on the interviews with key stakeholders.

STEP 2

Prioritizing the material issues

Conducting the Double Materiality Assessment

Online surveys with stakeholders based on the issue pools were conducted.

- **Period:**
July 31, 2023 – August 13, 2023
- **Assessment targets:**
K-water's internal and external stakeholders, including its employees, partner companies, consumers, government and related organizations, local communities, shareholders and investors, and professional organizations
- **Response status:**
A total of 1,205 people responded (659 employees and 546 external stakeholders).

STEP 3

Validation

Selecting the final 22 material issues

Around 22 major issues were selected out of a pool of 30 via internal examinations and external expert reviews.

- 1) External expert reviews**
Expert reviews on sustainability management
- 2) Final selection after internal reviews**
Final approval of material issues after K-water's internal reviews





INTRODUCTION

- CEO Message
- Company Profile
- Main Business Area
- Sustainability Highlights
- Communication with stakeholders
- Key Performance Indicators of K-water ESG Management
- Materiality Assessment

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

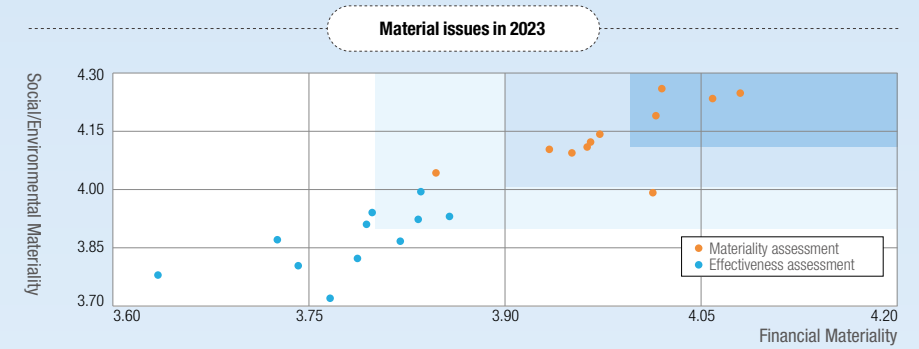
APPENDIX

Double Materiality Assessment Results

K-water derived 11 top issues out of 30 material issues via a double materiality assessment. We additionally selected 11 issues in the social and governance sectors, which were not identified as top issues during the validation but were deemed significant for the corporation's sustainability, and such issues were adjusted and integrated to meet the Corporation's sustainability management situation. This report is an open disclosure of the Corporation's primary initiatives and achievements pertaining to the 22 material issues in the final selection.

Category	No.	Material Issues	Social/environmental materialities	Financial materialities
Tier 1	1	Water resources management	Very High	High
	2	Drinking water quality safety	Very High	High
	3	Climate change responses	Very High	High
	4	Waste management	Very High	High
	5	Water quality of effluent from water purification plants	Very High	Medium
	6	Water stresses	Very High	Medium
	7	Greenhouse gas emissions	Very High	Medium
	8	Energy efficiency management	Very High	Medium
Tier 2	9	Circular economy, including saving and recycling resources	High	Medium
	10	Conservation of biodiversity	High	Low
	11	K-water future new business promotion plan	High	High
	12	Law and regulatory compliance	Medium	Low
	13	Health and safety of the public and consumers	Medium	Low
	14	Stable operations and management	Medium	Medium
	15	Product and service quality improvement management	Medium	Medium
	16	Creating economic achievements	Medium	Medium
	17	Sustainability management system	Medium	Low
Tier 3	18	Participation in developing the local community and social contribution	Medium	Low
	19	Risk management	Medium	Low
	20	Occupational safety and health of employees and partners	Medium	Low
Tier 4	21	Anti-corruption measures, including preventing the abuse of authority by individuals or organizations to pursue private interests	Medium	Low
	22	Participation and communication of stakeholders	Low	Low
	23	Growth in supply chain partnerships	Low	Low
	24	Bolstering governance transparency and board expertise	Low	Low
	25	Accessibility of services	Low	Low
	26	Recruitment and retention of talent	Low	Low
	27	Building mutually beneficial labor-management relationships	Low	Low
	28	Diversity and equal opportunity	Low	Low
	29	Human rights	Low	Low
	30	Employee welfare	Low	Low

- Tier 1** Social/Environmental Impact Materiality or Financial Impact Materiality 4.10 or higher
- Tier 2** Social/Environmental Impact Materiality or Financial Impact Materiality 4.0 or higher
- Tier 3** Social/Environmental Impact Materiality or Financial Impact Materiality 3.90 or higher
- Tier 4** Social/Environmental Impact Materiality or Financial Impact Materiality lower than 3.90



Category	Material Issues	GRI Topic	Report Pages
Materiality assessment	B 1. Water resources management	GRI 303	72~76, 89
	B 2. Drinking water quality safety	GRI 303	74, 75, 89
	E 3. Climate change responses	GRI 201	22~28, 112
	E 4. Waste management	GRI 306	28, 89
	E 5. Water quality of effluent from water purification plants (new)	GRI 303	29, 89
	B 6. Water stresses	GRI 303	75, 76, 89
	E 7. Greenhouse gas emissions (new)	GRI 305	24~27, 89
	E 8. Energy efficiency management	GRI 302	25~27, 89
	E 9. Circular economy, including saving and recycling resources	GRI 306	28, 89
	E 10. Conservation of biodiversity	GRI 304	29~33
	B 11. K-water future new business promotion plan	GRI 2	77, 85
Effectiveness assessment *	S 12. Participation in local community development and social contribution	GRI 413	42~47
	S 13. Talent recruitment and employee welfare	GRI 401, GRI 404	94, 95
	S 14. Industrial safety	GRI 403	38, 53~55, 95
	S 15. Growth in partnerships (start-ups in the water industry, etc.)	Organization-specific indicators	48, 49
	S 16. Supporting the supply chain (subsidiaries, partners, etc.)	Organization-specific indicators	49~52
	S 17. Labor-management co-prosperity (new)	Organization-specific indicators	38~39
	S 18. Business and human rights (new)	Organization-specific indicators	40
	S 19. Privacy and information security (new)	Organization-specific indicators	57
	G 20. Compliance and anti-corruption (ISO 37001, ethical management)	GRI 205	64~66, 99
	G 21. Transparency of governance and board expertise	GRI 2	60~62
	G 22. Risk management (new)	GRI 2	68, 69

* Local community, industrial safety and health, supply chain support, and mutual growth issues, which were not selected as top issues in the materiality assessment but the Corporation considers and manages as essential factors in its policy, and various issues that affect the sustainability of the Corporation such as human rights are also reflected.





INTRODUCTION

ENVIRONMENTAL

Climate Change Responses

Conservation of Aquatic Ecosystems

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

Sustainable coexistence of humans and nature

022 Climate Change Responses

029 Conservation of Aquatic Ecosystems

Environmental





- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Management Approach






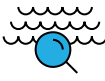
Approach

The emphasis on corporate environmental responsibility is bolstered due to the global environmental crisis caused by climate change. In addition to making various efforts toward RE100, K-water, as a public corporation that manages water, a crucial environmental element for humankind, has established the “K-water 2050 Carbon Neutrality Road Map” and a detailed action plan to lead in carbon neutrality. To secure global competitiveness, we are building a framework to support both the Corporation’s and domestic companies’ achievement of RE100. We will work with the local communities to establish a resource circulation economy and support a range of biodiversity preservation initiatives to secure a sustainable ecosystem.

Plan

- Reducing greenhouse gases by 7.06 million tons by 2050
- Achieving carbon neutrality in all 43 metropolitan water purification plants by 2030
- Switching electricity use to 100% renewable energy by 2050
- Achieving an annual green hydrogen production of 34,000 tons by 2050

Performance

<p>Signed a joint development agreement to achieve RE50 and implement RE100</p> 	<p>Began to establish the first Imha Offshore Solar Panel Collective Complex</p> <p>Generation scale 45 MW</p> 	<p>Reduced waste PET bottle generation with the establishment of a virtuous cycle</p> <p>14% year-over-year Reduced 12 tons</p> 	<p>Carbon emissions reduction by the use of renewable energy</p> <p>1,162 thousand ton/CO₂eq</p> 	<p>Juam Dam UPcycling governance execution effect</p> <p>Reduced carbon emissions by 183 tons</p> 	<p>Discharged water quality improvement with spent carbon</p> <p>Organic matter reduced by 17% Carbon emissions reduced by 575 tons</p> 
---	---	--	--	--	---

- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

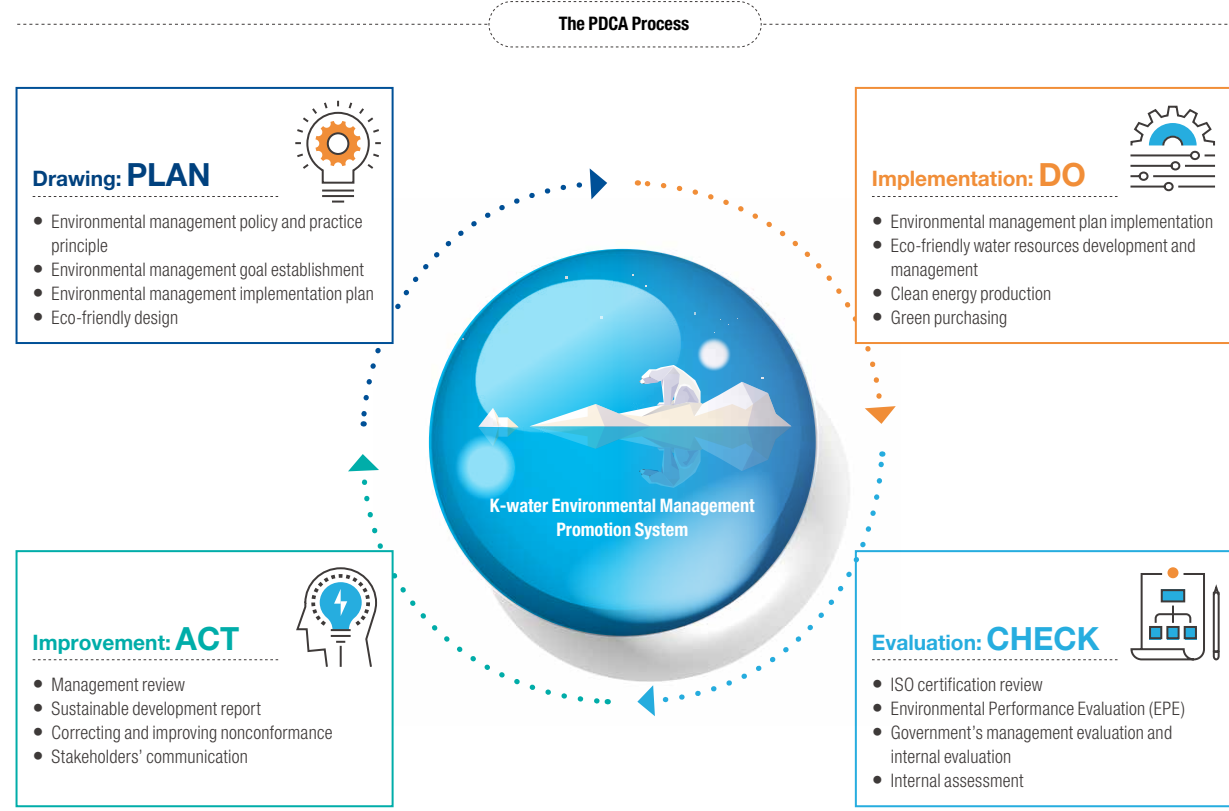
Climate change responses

Environmental management

Environmental management promotion system

Recently, as a result of rapid climate change, environmental regulations have been strengthened, and corporate obligations and responsibilities for environmental protection are increasing. Accordingly, starting in January 2022, K-water has been strengthening its public value as a public corporation specializing in water, solving global water issues in the era of climate change, and promoting environmental management by refining its

“Quality, Environment, and Green Management Policy” for citizen-centered water management. We are striving to improve environmental soundness through the entire water supply process in accordance with the Plan → DO → Check → Act (PDCA) approach, taking into account the environmental implications not only on the Corporation but also on the entire supply chain, including our partner companies and consumers.



Quality, Environment, Green Management Policy

품질·환경·녹색경영방침

우리는 쾌적하고 살기 좋은 환경 조성을 위하여 인간과 자연의 지속 가능한 공존을 추구하는 최선의 노력이 필요한 책임을 깊이 인식한다. K-water는 World Top 물기업 도약을 위해 공적 가치를 강화하고, 기후변화 시대의 글로벌 물 문제를 해결하며, 국민 중심의 물관리를 위해 모든 임직원의 의지를 모아 품질·환경·녹색경영 방침을 선언한다.

하나, 우리는 미래세대를 위한 깨끗한 물과 공기, 그리고 살기 좋은 자연환경을 보전하기 위하여 앞장선다.

하나, 품질·환경·녹색경영과 관련된 제약을 수립·시행함에 있어 다양한 이해관계자들의 의견 수렴과 정보공개제를 통한 역동적 소통을 실천하고, 투명한 의사결정으로 신뢰를 강화한다.

하나, 수자원 개발·관리, 상수도 공급 등 공사가 시행하는 사업 전 과정에 걸쳐 오염 예방, 자원의 선순환, 에너지 절약과 효율적 이용으로 온실가스 배출량을 저감하고, 신·재생에너지 개발 등을 통해 기후변화에 능동적으로 대응하며, 생물 다양성 보전과 생태계 보호에 앞장선다.

하나, 품질·환경·녹색경영 활동에 요구되는 사항에 대한 중수의무를 충실히 이행하고 성과 향상을 통한 지속적 개선으로 기관의 사회적 책임을 다하기 위해 노력한다.

K-water 전 임직원은 이 선언을 실천에 옮김으로써 공익적 상생으로 국민의 물 복지를 책임지고, 사회적 가치 향상을 통한 지속 가능한 성장을 위해 최선을 다한다.

2022년 1월 K-water 임직원 일동



- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Environmental Management Promotion Organization

K-water's environmental management and responses to climate change are divided into business management and project management components, which are promoted for efficient operations at each of the headquarters and basin locations. In terms of business management, the planning and management divisions at the headquarters promote environmental management, and they are in charge of creating an ESG management system, overseeing corporate regulations, operating a procurement program for goods bearing eco-friendly labels, and issuing ESG bonds. In terms of project management, the water resource environment, water supply, and green infrastructure divisions at the headquarters support environmental management, and they carry out tasks such as the national water management basic

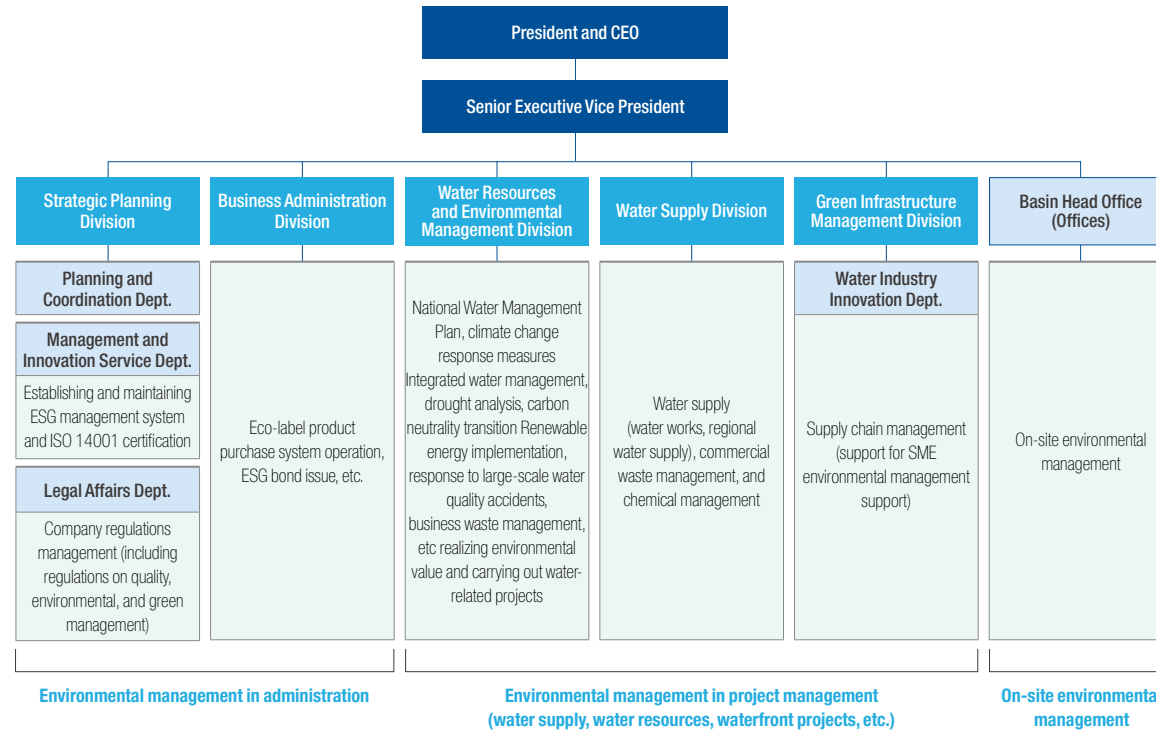
plan, climate change adaptation strategies, new renewable energy project promotion, water supply projects, and supply chain management. On-site environmental management promotes environmental management in line with company-wide policies from the basin headquarters to on-site chapters and implements pollution prevention, virtuous resource cycle, and energy conservation by managing and supervising environmental pollution factors generated at the sites. To strengthen the company-wide promotion of environmental management, the ESG Management Committee under the Board of Directors reviews and discusses major ESG-related management strategies, implementation plans, progress, and performance while facilitating decision-making on key environmental issues related to ESG.

Environmental Performance Evaluation (EPE)

K-water measures, diagnoses, and constantly improves environmental management performance through periodic environmental performance evaluations (EPEs) based on ISO 14031. Every department at the Corporation sets up customized performance indicators for every business area, then tracks and manages them as EPE indices, which are figures that show how much environmental performance has improved relative to the base year (2006) and quantify comprehensive environmental management performances in all aspects of management. The environmental performance assessment index in 2022 was improved by 58% to 158 points compared to the base year. With regular supervision of

management performance, the Corporation receives a certification for quality management and environmental management systems from the International Organization for Standardization (ISO). To maintain the ISO certification, internal employees are annually selected and trained as international standard certification auditors for quality and environmental management. As of December 2022, 210 auditors have received training for the ISO quality and environmental management certification. Each year, the quality and environmental management status at every business site is inspected and improved by these trained internal experts.

Environmental Management Organization Chart



Environmental Performance Evaluation Index (EPE)

(in points)

Category	2006	2008	2010	2012	2014	2016	2018	2020	2022
Environmental performance Index	100	126	135	145	153	153	158	147	158

ISO 9001 Certification



ISO 14001 Certification



- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Promoting carbon neutrality

Carbon neutrality road map and strategies

Ever since the Paris Agreement in 2015, the international communities have been working to limit the rise in average global temperature to below 1.5°C in comparison to preindustrial levels. Achieving carbon neutrality by 2050 has emerged as a global paradigm, and international regulations, such as the introduction of carbon border taxes, are being tightened. Accordingly, K-water launched the “K-water 2050 Carbon Neutrality Road

Map” and the accompanying “2050 Carbon Neutrality Detailed Action Plan” to spearhead national carbon neutrality, becoming the first public institution to proclaim climate risk management and ESG management. We have set a target to reduce greenhouse gas emissions by 7.06 million tons by 2050 by establishing four major strategies: zero-carbon water management, expansion of water energy, facilitation of green hydrogen, and creation of sinks.

Carbon Neutrality Practices Based on 4 Strategies

Net-zero water management



By increasing the utilization of renewable energy sources and implementing high-efficiency facilities, we are constructing a carbon-neutral water purification facility to support the goal of carbon neutrality in K-water’s water sector, which is responsible for 97% of its overall greenhouse gas emissions. As of July 2023, we have adopted renewable energy for carbon neutrality in 14 water purification plants and plan to expand and achieve carbon neutrality in all of our 43 regional water purification plants by 2030.

Expanding water energy



K-water became the first public institution to join RE100 in April 2021, and it aims to achieve 100% conversion of the power used in all of its business areas into renewable energy, such as floating solar power and hydrothermal energy, by 2050. To expand eco-friendly water energies like floating solar power and hydrothermal energy, we are supporting large-scale hydrothermal energy supply projects connected to cities, including the construction of the Imha Dam floating solar power complex and the establishment of a hydrothermal energy convergence cluster in Gangwon-do.

Facilitating green hydrogen



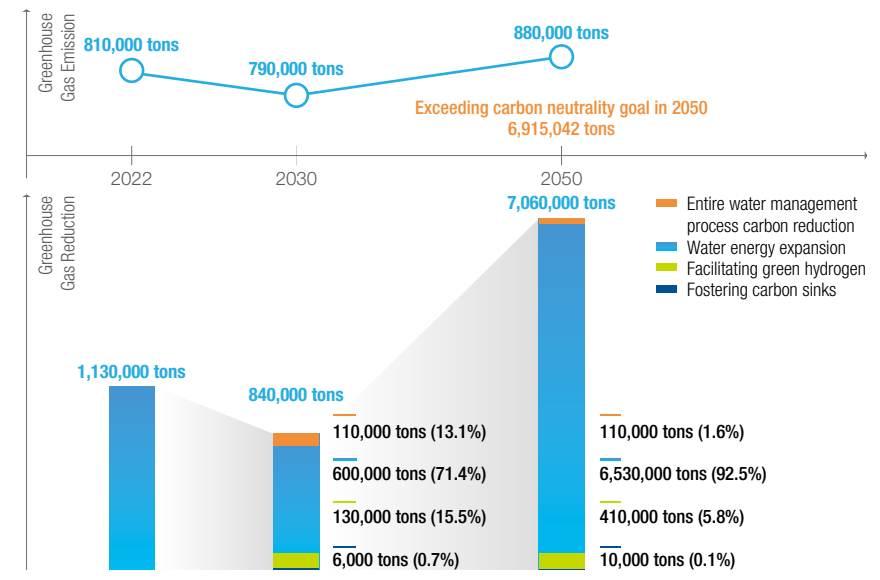
Beginning with the completion of the on-site green hydrogen demonstration facility at the Seongnam Water Purification Plant in 2023, we are speeding up the commercialization of green hydrogen technology by participating in follow-up demonstration research projects like the Ansan hydrogen infrastructure facility construction project and the national green hydrogen R&D.

Creating carbon sinks



We intend to secure a variety of carbon sink sources, such as creating carbon-absorbing forests utilizing a high-density planting model of a multilayer structure with high carbon absorption and producing carbon stores using dam floating matters. By creating carbon-absorbing forests and recycling waste resources, we anticipate lowering carbon emissions, reducing fine dust and heat islands, and enhancing water circulation.

K-water 2050 Carbon Neutrality Road Map



Four Key Strategies of the Carbon Neutrality Road Map

Net zero water management	Water energy expansion	Facilitating green hydrogen	Creating carbon sinks
<ul style="list-style-type: none"> Carbon-neutral metropolitan area water supply Carbon-neutral regional water supply Carbon-neutral transport and buildings 	<ul style="list-style-type: none"> Expansion of solar PV facilities Expanded deployment of hydrothermal energy Expansion of eco-friendly hydroelectric power generation 	<ul style="list-style-type: none"> Development of green hydrogen Expansion of green hydrogen Technology acquisition and commercialization 	<ul style="list-style-type: none"> Fostering carbon sinks at river basins Fostering green urban carbon sinks Creating new carbon sinks

INTRODUCTION

ENVIRONMENTAL

- Climate Change Responses
- Conservation of Aquatic Ecosystems

SOCIAL

GOVERNANCE

BUSINESS

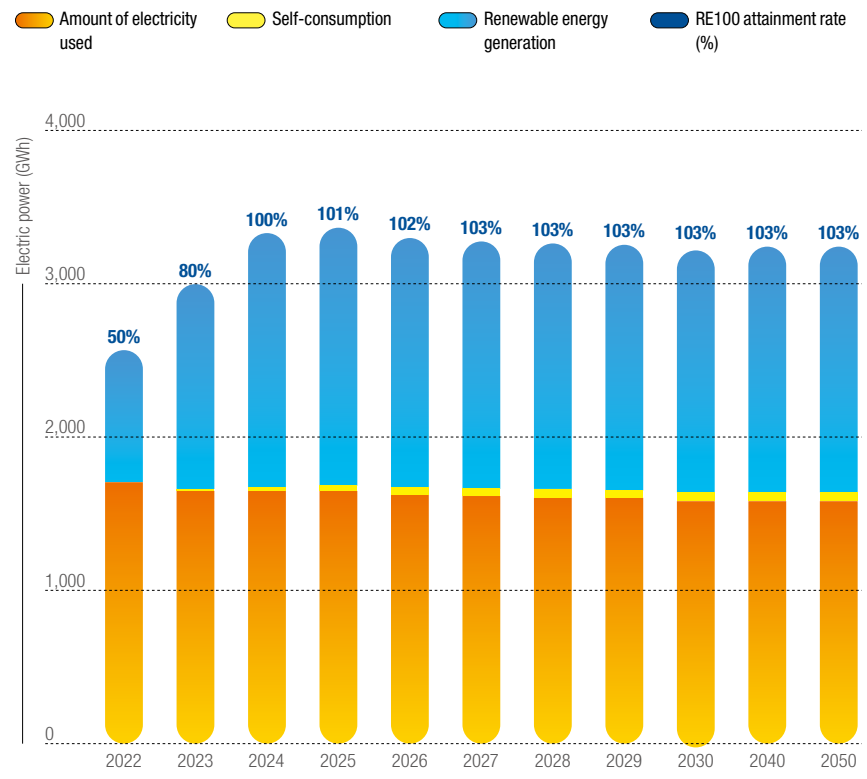
APPENDIX

Promoting RE100

K-water became the first public corporation and water-specialized organization to join RE100 in April 2021, addressing the climate crisis and securing its global competitiveness in the water sector by establishing a detailed implementation plan. The Corporation achieved RE50 in 2022 by reducing its energy consumption through efficient water management, adopting solar and hydrothermal energies for self-consumption using underutilized sites for water purification plants, developing energy resources, such as new floating solar power, and utilizing its own renewable energy.



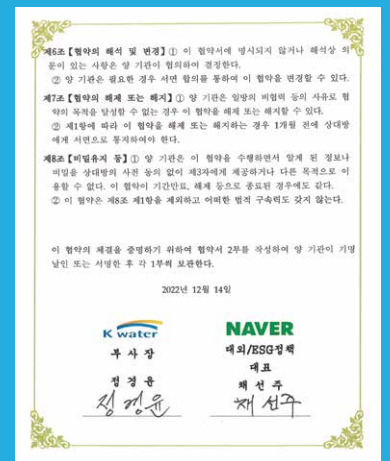
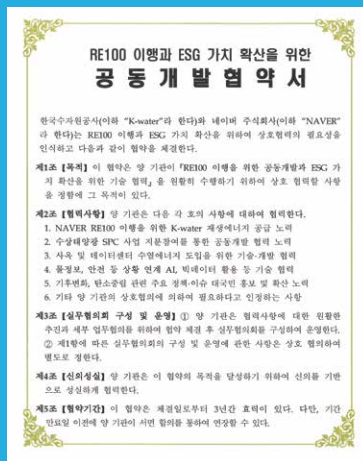
RE100 Detailed Implementation Plan



Best Practice

Implementation of RE100 in connection with key export companies

An increasing number of multinational corporations are pressuring domestic export companies to adopt RE100 as the importance of sustainable management grows, and international carbon emissions regulations become more stringent. However, the amount of renewable energy domestically produced is not sufficient to meet the electricity needs of domestic RE100 member companies. Therefore, K-water has created an RE100 support model for major export companies by utilizing both its existing and new renewable energy, and as part of this, it has signed a joint development agreement for RE100 implementation with Naver, a top domestic platform company. With its biggest renewable energy facilities in Korea, the Corporation uses its own capabilities and technology to assist major export companies in reaching RE100. By expanding and distributing hydrothermal energy to the private sector, the Corporation is helping to cut greenhouse gas emissions and the amount of energy used for heating and cooling buildings by 50%. Furthermore, by entering into a power purchase agreement (PPA) with major export companies, we intend to deliver K-water's renewable energy to RE100 companies and offer opportunities for equity participation in new developments. Going forward, the Corporation will make its best efforts to assist major export companies in achieving RE100 and promote national carbon neutrality.



- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Expanding eco-friendly energies

Expanding floating solar power

A floating solar power plant is an eco-friendly power generation facility that installs solar power modules on a dam reservoir’s water surface. Because it makes use of a vast public water surface, large-capacity power generation is possible. It is eco-friendly as it can be installed without causing damage to the forest, and it has higher power generation efficiency than land-based solar power by utilizing the natural cooling effect of water. In 2012, K-water commercialized the world’s first multi-purpose dam floating solar power plant at Hapcheon Dam. After a thorough verification of structural stability and environmental safety issues of the aquatic ecosystem, Korea’s largest floating solar power plant of 41.5 MW was completed at Hapcheon Multipurpose Dam in 2022. Through supporting a resident participation business model that shares power generation profits with local residents, we have helped to create jobs and revitalize the local economy. Beginning with Hapcheon Dam as an exemplary case, the Corporation has initiated the resident-participatory floating solar power project at Imha Dam, Korea’s first integrated complex, with a plan for its nationwide expansion in the future.

Building smart tidal power

Tidal power generation is a method of generating electricity that does not release carbon dioxide or pollutants by utilizing the difference between the tides that occur twice a day. K-water’s Sihwa Lake Tidal Power Plant, located in Ansan-si, Gyeonggi-do, is the world’s biggest tidal power plant, as well as the first of its kind in Korea, producing 552 GWh of energy annually and reducing greenhouse gas emissions by approximately 315,000 tons. As the Sihwa Lake Tidal Power Plant is planned to be developed as Korea’s largest energy cluster by

2030, producing approximately 435.6 MW of electricity, including offshore solar power, offshore wind power, fuel cells, and seawater heating and cooling, it is expected to supply 680 GWh of electricity annually while reducing greenhouse gas emissions by 320,000 tons. The Sihwa Lake Tidal Power Plant is currently run by AI-enabled “real-time automatic sluice operation AI” and “tidal power generation operation strategy AI.” It is scheduled to transform into a smart autonomous tidal power plant by 2024.

Facilitating hydrothermal energy

Hydrothermal energy is a type of eco-friendly renewable energy that uses water temperature to cool and heat indoor spaces via a heat pump, taking advantage of the fact that the water temperature is lower during summer and higher during winter than the air temperature. K-water is fostering national carbon neutrality by establishing Korea’s largest convergence cluster in Chuncheon, which makes use of deep water at the Soyang River Dam while making efforts to expand hydrothermal energy to local governments and the private sector as an operating organization for a pilot project to supply and support hydrothermal energy. Over 50% of the design and construction costs are supported by the national treasury, and we have currently attracted eight anchor facilities, including the World Trade Center Seoul and Sangju Smart Farm, through technical assistance. We anticipate a 19.3 GWh decrease in yearly electricity consumption and a 10,000-ton reduction in greenhouse gas emissions as a result of this.

Hapcheon Dam Floating Solar Power



Sihwa Lake Tidal Power Plant



Gangwon Hydrothermal Energy Convergence Cluster



Hydrothermal Energy Production Output

Category	2020	2021	2022
Hydrothermal Energy	3,699	249	590

(Unit: RT)

* Refrigeration Ton (RT): This refers to the capacity to freeze 1 ton of 0°C water into 0°C ice in 24 hours.

- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Promoting the securing of green hydrogen technology

K-water intends to create the “2050 Green Hydrogen Mid- to Long-Term Road Map” with the goal of supporting the national hydrogen economy through the annual production of 34,000 tons of green hydrogen by 2050. Green hydrogen is eco-friendly hydrogen produced by electrolyzing water using renewable energy. Because of its absence of geographical biases and carbon emissions, it is a source of energy that will be in demand in the future. Therefore, K-water plans to secure green hydrogen production and operation technology by facilitating an empirical research project at the Seongnam Water Purification Plant as the first phase of the mid- to long-term green hydrogen project. The Seongnam Metropolitan Water Purification Plant Empirical Research Project is the first project in Korea to construct a green hydrogen production facility powered by small hydropower. Because small hydropower can continuously produce a certain amount of electricity, it is more efficient than other renewable energy sources

in producing green hydrogen. K-water has finished the construction of a green hydrogen demonstration facility at the Seongnam Water Purification Plant, where cooperation between the public and private sectors is conducting a green hydrogen full-cycle model and empirical research. Upon completion, it is estimated to produce around 62 tons of green hydrogen per year. Additionally, we are pursuing a project to build green hydrogen infrastructure utilizing Sihwa wind power in Ansan City, which is anticipated to produce about 240 kg of green hydrogen per day. Furthermore, to expedite the commercialization of green hydrogen technology and facilitate research and development in this area, the Corporation signed a “Green Hydrogen Research Initiative Business Agreement” with the Korea Institute of Energy Research. Over the next three years, the Corporation intends to secure green hydrogen technology by stepping up research and exchanges on green hydrogen production technology using renewable energy.



Renewable Energy Production Output

2,461,041 MWh

2022 renewable energy generation amount



(Unit: MWh)

Category	2020	2021	2022
Solar energy	17,352	19,283	23,316
Tidal energy	457,251	454,961	423,839
Hydroelectric energy	2,431,949	1,763,275	2,008,583
Wind power energy	7,526	6,296	5,303
Total	2,914,078	2,243,815	2,461,041

Carbon Reduction according to Renewable Energy Production Output

1,162 thousand ton/CO₂eq

Carbon reduction according to renewable energy production output in 2022



(Unit: thousand ton CO₂eq)

Category	2020	2021	2022
Carbon Reduction according to Renewable Energy Production	1,339	1,031	1,162

* Including the total from the subsidiaries

- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Circular Economy

Establishing a virtuous cycle system for bottled tap water resources

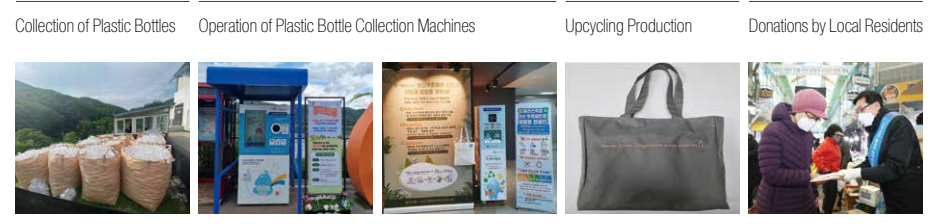
In the case of a disaster or other emergency, K-water provides the public with bottled tap water for emergency consumption. It is increasing waste recycling and creating a virtuous cycle system for the entire process of producing and collecting bottled tap water, starting in 2021. We have increased the manufacturing rate of large-capacity (1.8 L) bottled tap water, which uses 58% less plastic than small-capacity bottled tap water, in an effort to minimize the quantity of plastic used in bottling tap water. In addition, we installed PET bottle collection machines at the headquarters and Daechong Dam and collaborated with a public resource circulation institution, the Korea Resource Circulation Service Agency, to

establish a nationwide collection network for collecting 350,000 used PET bottles. Recycled plastic waste bottles are collected and turned into eco-friendly bags and umbrellas, which are then provided to local underprivileged groups. This practice benefits the environment and instills new values in the community. In 2022 alone, such efforts by the Corporation resulted in a 14% (12 tons) decrease in PET waste bottle production over the prior year and a 117-ton decrease in greenhouse gas emissions. The Corporation is committed to exploring and executing strategies that will bolster the virtuous cycle system of resources by eliminating plastic usage and promoting the circular economy.

Bottled Tap Water Production Output and Collection Rate

Category	2021	2022	Year-on-year difference
Bottled tap water production (bottle)	5.29 million bottles	3.96 million bottles	Down by 1.33 million bottles
Used PET bottles (ton)	86 tons	74 tons	Down by 12 tons
Bottled tap water collection (bottle)	370,000 bottles	350,000 bottles	Down by 20,000 bottles
Collection to production ratio (%)	7%	9%	2% ↑

Examples of Bottled Tap Water Collection and Recycling



Best Practice

Establishment of Juam Dam Upcycling Governance

K-water collected the waste around the dam basin through water plogging with residents and recycled 100% of it. Over 70% of the collected waste, made up of trees and plants, was recycled as firewood by local residents, and the remaining 30% of waste plastic and vinyl was upcycled by establishing the "Juam Dam Upcycling Governance," consisting of local residents, social enterprises, and K-water. Social economy companies use waste plastic and vinyl selected from river wastes collected by local residents around Juam Dam to create "upcycled" art pieces and exhibition goods, and local innovative companies turn "waste vinyl" into agricultural vinyl. The Corporation purchases and promotes upcycled products and supports local farmers through the purchase of agricultural plastic. In terms of securing jobs, fostering social enterprises, and ensuring the sustainability of governance, this sustainable circular economy success model is generating new values and positive impacts across the environment, society, governance, and local economy. By instituting Juam Dam's upcycling governance, the Corporation created 321 jobs, increased resident income by KRW 760 million, and reduced carbon emissions by 183 tons. The Corporation's achievements were acknowledged when it garnered the Minister of Environment's Award at the Social Economy Competition and received a commendation from the Jeollanam-do Governor for its role as a regional economic revitalization organization.

- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Conservation of aquatic ecosystems

Water quality controls for effluents

Developing eco-friendly water treatment technology

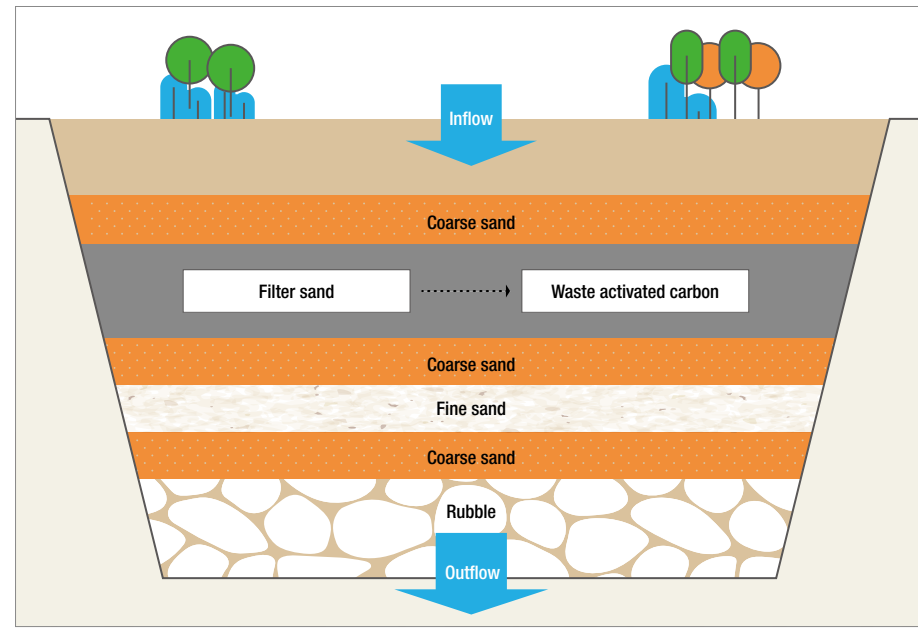
The term “eco-filtering,” which combines the terms “eco,” which means environmentally friendly, and “filtering,” which means filtration through natural filter media, refers to an environmentally friendly technology of treating water that enhances its quality by eliminating pollutants through a natural purification process that does not require additional chemical treatment. K-water promoted the development of eco-friendly water treatment technology by benchmarking overseas technologies to minimize chemicals and by-products in the water treat-

ment process and carrying out empirical research to verify the water treatment efficiency of eco-filtering. As a result of the study, the test bed installed in the Guhado section of Seungchon Weir in 2022 demonstrated an excellent removal effect of pollutants, and it will be utilized at the Busan Eco-Delta City facility for an upgrade. We will do our best to develop eco-filtering that works to relieve public concerns and supply clean water through practical applications like managing the environment of rivers by controlling effluent quality.

Replacing waste activated carbon in water purification plant filter media

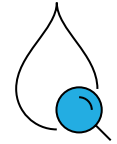
K-water developed a low-power, chemical-free gravity purification system and brought it to three areas, including Buan, in an effort to minimize carbon emissions generated by water purification chemicals and provide the facility with the capacity needed for effluent quality improvement. Furthermore, by substituting sand with spent carbon, which is relatively inexpensive and has a microbial purification function, as a measure to improve water quality and reduce costs, the effluent quality was raised from the previous fifth grade to the second grade, while costs were reduced by 91% and carbon emissions by 575 tons.

Gravity Purification Technology




Results of Replacing Spent Carbon in Water Purification Plant Filtering Media

Quality of discharge water




Grade **5** → Grade **2**

Costs




Reduced by **91%**

Carbon emissions



Reduced by **575 tons**

Organic matter



Reduced by **17%**

- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

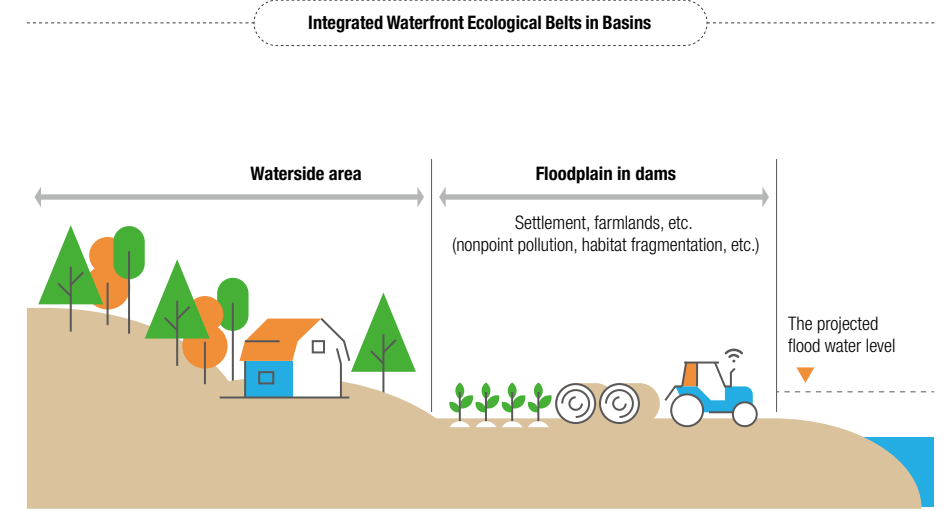
Restoring the health of the aquatic ecosystem

Creating a regionally customized waterfront ecological belt

K-water has built a “basin-integrated waterfront ecological belt” exploiting the floodplain located within the dam reservoir area in an effort to enhance water quality and restore the health of the aquatic ecosystem. The floodplain is an area of land adjacent to the dam surface used for flood control by temporarily storing water when the water level rises because of heavy rain or other events, and it has a substantial impact on water quality and biodiversity. The basin-integrated waterfront ecological belt combines the area being developed as a waterfront ecological belt with the floodplain of the dam to create waterfront purification forests, landscape grasslands, ecological wetlands, and biological habitats, which will prevent unauthorized cultivation and thus maximize the

natural purification of pollutants and ecological functions, and provide local residents space for leisure. The Corporation first established a dam floodplain waterfront ecological belt in the Seohwacheon area upstream of Daecheong Dam to foster consensus in the region in 2020. Starting in 2021, in collaboration with each of the basin environmental offices, it is currently creating an integrated waterfront ecological belt in the Daecheong Dam’s Shinsang District in the Geum River Basin and the Juam Dam’s Yuleo District in the Yeongsan River Basin. The Corporation intends to extend the integrated waterfront ecological belt to dams in all basins under its management and to maintain a healthy water environment in collaboration with the local community in the future.

Waterfront Ecological Belt in Daecheong Dam’s Shinsang District

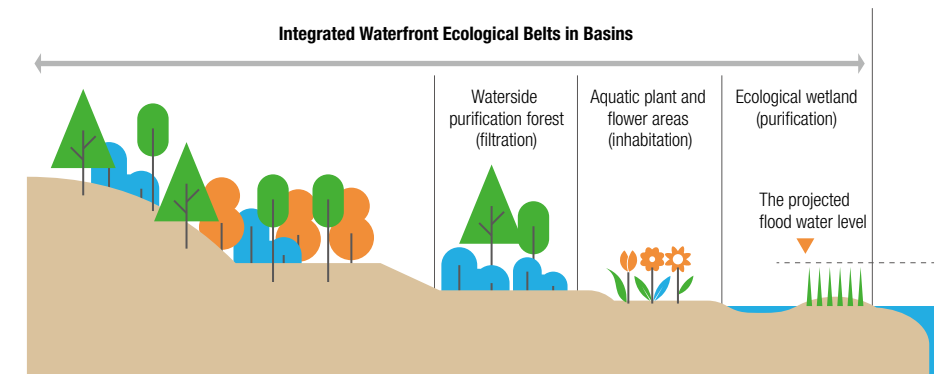


Existing

Water pollution caused by unauthorized cultivation and the accumulation of materials on the dam floodplain

Improvement

Ecological wetland for natural purification of pollution sources, fostering spaces for leisure of residents



- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Operating resident-participatory, superb villages with clean water

K-water is pushing the “Water Source Upstream Basin-Based Pollution Reduction Project” to reduce agricultural pollution sources, which are one of the primary nonpoint source pollutants, in an effort to enhance the quality of the water supply. During rainfall, compost that has been sprayed over agricultural land seeps into dams, where it provides nutrients, such as nitrogen and phosphorus, to green algae, which in turn grow and proliferate within the dam. Therefore, controlling agricultural pollution sources requires the participation of local residents more than anything else. The Corporation is establishing “superb villages with clean water” at three project sites, Yeongju Dam, Daecheong Dam, and Bohyeonsan Dam, while minimizing the amount of pollutants entering the upstream areas of the dams through the voluntary participation of local residents. As part of the establishment of the superb villages, we enhanced the autonomous management of the local residents by instituting resident-participatory governance, propagating eco-friendly farming methods according to agricultural aspects, offering hands-on training to residents, and organizing trips to more advanced areas. Additionally, we promoted programs that supported brand development and sales channels for local agricultural products, as well as village environment improvements, in an effort to rehabilitate the aquatic ecosystem and boost the local economy.



Rice paddies



Fields



Orchards



Water flow regulator

Facilities for efficient control of drainage from rice paddies



Controlled release fertilizer

Fertilizer that releases nutrients more gradually into the soil than common fertilizers when makes contact with water, reducing usage frequency



Soil banding and land cover

Cover field surfaces to reduce soil particle degradation and soil pore blocking, enhancing soil infiltration



Vegetative filter strips

Reduce the speed of runoff water from farmlands, leading to natural purification of soil particles, organic matter, etc.

- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

Furthermore, K-water proposed “deep placement fertilization,” a farming technique of putting compost close to the roots of trees to keep it out of rivers, to nearby orchard farmers. The Corporation verified the safety of the deep placement fertilization farming technique for local residents, offered incentives for participation, and promoted the farming technique by branding agricultural products that employed it. As a result, the number of locals near the Bohyeonsan Dam who participated in deep placement fertilization increased by 102% over the previous year, and the number of green algae was reduced by 80%, which resulted in achieving Grade 1 water quality for the first time since the dam’s desalination

and the Ministry of Environment’s awarding of the Grand Prize in the Social Economy Best Practice Competition. The Corporation expects that the establishment of the “superb villages with clean water” will maximize the impact on the improvement of water quality via residents’ voluntary management of agricultural pollutants, boost residents’ income from the development of eco-friendly agricultural product brands and experience programs, and contribute to ESG management, including securing sustainability in implementing environmental policies, such as nonpoint source pollution management, by establishing governance in cooperation with the government, municipalities, local residents, and enterprises.

Conserving biological diversity

Creating habitats for migratory birds and feeding them

The importance of preserving biodiversity and upholding ecological balance is growing in light of the Kunming-Montreal Global Biodiversity Framework (GBF) adopted by the 15th Conference of the Parties to the Convention on Biological Diversity (CBD COP 15), which took place in December 2022. K-water is engaged in a range of initiatives aimed at maintaining the value of biodiversity and reestablishing the health of ecosystems by utilizing the advantages of the water

resource management industry. The Corporation signed a business agreement to protect migratory birds and create their habitats in the Dalseong Wetlands within the Busan Eco-Delta City. It is also working to improve the habitat environment for migratory birds in several basins by creating wetland ecological parks and crane feeding grounds, as well as by hosting events to raise awareness of migratory bird protection and the sharing of migratory bird foods. The Corporation

Practical education for residents



Visiting advanced areas



Migratory Bird Habitat in Busan Eco-Delta City



Activities to improve the environmental conditions of small rivers



Superb Village with Clean Water Signboard Unveiling Ceremony



Signing a Business Agreement for Migratory Bird Protection

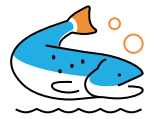


- INTRODUCTION
- ENVIRONMENTAL
 - Climate Change Responses
 - Conservation of Aquatic Ecosystems
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX



Protecting fish species and restoring ecosystems

In its capacity as a dam water surface manager, K-water is working on initiatives to manage the aquatic ecosystem and conserve fish species variety by eliminating foreign fish and reintroducing local fish. We are eliminating invasive fish species by capturing and/or purchasing from local fishermen while releasing 380,000 salmon seeds together with the Gyeongbuk Marine Science Park to preserve native fish species. As part of our efforts to safeguard fish species through partnerships with relevant organizations, we have also signed a business agreement with the Geumgang River Basin Environmental Office for the restoration of nationally protected fish.



Joint release of
380,000
 salmon hatchlings



Best Practice

Restoring the brackish water ecosystems by opening the Nakdong River Estuary Bank

The Nakdong River Estuary, where the Nakdong River Estuary Bank was built in 1987, is a brackish water area where the sea and river meet, with high biodiversity as a habitat and breeding ground for a variety of species, including migratory birds, fish, benthos, and vegetation. The Busan, Ulsan, and Gyeongnam areas depend on the estuary bank to supply water for agriculture, industry, and domestic use, as well as to prevent flooding. However, it has impacted the reduction of fish species found in the Nakdong River estuary and the loss of ecological functions by stopping the circulation between freshwater and saltwater. Restoration of the brackish water environment has become increasingly important as the public becomes more aware of the ecological significance of the Nakdong River Estuary. K-water is working to bring the estuary's ecosystem back to its previous state by establishing an integrated estuary operation center in collaboration with the Ministry of Environment and related organizations in 2021 and then developing a plan to restore the brackish water ecosystem of the Nakdong River Estuary in 2022 after conducting a trial opening of the estuary bank. As a result, we secured the necessary technologies to establish stable brackish water areas and confirmed, via monitoring, that it is possible to restore the brackish water ecosystem. The Corporation intends to pay attention to and actively assist the Nakdong River in the future to protect its biodiversity and return the environment to its pre-estuary bank state.

Panoramic view of the Nakdong River estuary



Seawater inflow (undercurrent)



Seawater inflow (overflow)



Ecosystem restoration project (Eriocheir japonica discharge)



Ecological restoration project (salmon discharge)



Local and international technology exchanges





INTRODUCTION

ENVIRONMENTAL

SOCIAL

Talent Management

Win-win Partnerships with the Community

Shared Growth

Health & Safety Management

Information Security and Personal Information Protection

GOVERNANCE

BUSINESS

APPENDIX

Aiming for communal goodness for mutual growth

- 036 Talent Management
- 042 Win-win Partnerships with the Community
- 048 Shared Growth
- 054 Health & Safety Management
- 057 Information Security and Personal Information Protection

Social





- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL**
- GOVERNANCE
- BUSINESS
- APPENDIX

- Talent Management
- Win-win Partnerships with the Community
- Shared Growth
- Health & Safety Management
- Information Security and Personal Information Protection

Management Approach

Approach

The key to corporate growth and innovation is our members. To foster individuals as future growth engines, we need to recruit and nurture talent, creating an environment where their capabilities can shine. It is essential to listen actively to both the professional needs and personal aspirations of our employees, offering diverse programs that reflect these aspects. Additionally, cultivating a work environment rooted in mutual respect is crucial for our collective success.

Plan

- Promoting inclusive recruitment practices for social equity
- Fostering a culture that values and respects human rights

Performance

<p>Employee Satisfaction Score</p> <p>Raised by 2.2% year-over-year 75.4 points</p>	<p>Expanding Employment Opportunities for People with Disabilities</p> <p>Received the True Company Gold Award (2023)</p>	<p>Employee Overall Welfare Satisfaction</p> <p>Increase for Three Consecutive Years 3.91</p>	<p>Cooperative Labor-Management Relations</p> <p>Received the Grand Prize in the Labor-Management Capacity Enhancement Category at the 1st Public Sector Labor Management Innovation Awards (2023)</p>	<p>Enhancing the Human Rights Protection System</p> <p>Human rights violations in the workplace decreased by 67%</p>	<p>Trust management index</p> <p>Record high 76 points</p>
---	--	---	---	---	---

INTRODUCTION

ENVIRONMENTAL

SOCIAL

Talent Management

Win-win Partnerships with the Community

Shared Growth

Health & Safety Management

Information Security and Personal Information Protection

GOVERNANCE

BUSINESS

APPENDIX

Talent Management

HR System Improvement



52 Personnel Operation Petitions (Talk Talk Collection)

Quantitative Promotion Evaluation System

- Comprehensive evaluations, including written tests, qualifications, and experience in difficult departments
- Ensuring employee autonomy concurrently with the promotion review process

Basin Rotation System

- Facilitating basin transfers by enabling individuals to specify their preferred basin
- Compulsory Service Duration Extension in Recruiting Basins (5→10 Years)

Cultivating Talent

Transparent Recruitment System

K-water operates a transparent recruitment system designed to be considerate of job applicants. To ensure fairness, we have implemented blind numbers for applicants at every stage of the recruitment process, introduced a Triple Check system, and expanded verification for external personnel involved in recruitment stages. These measures create an environment that prevents recruitment corruption.

Furthermore, we provide applicants with detailed scores for each section of the written examination, the interview committee's overall review, and feedback. We have promoted the convenience of applicants by disclosing the expected acceptance date for preliminary successful applicants. These system enhancements significantly contributed to a noteworthy increase in the Corporation's employment satisfaction rate, reaching 83.4% in 2022—a 2.4 percentage point improvement from the previous year. Notably, the government's inspection regarding hiring misconduct found no issues.

Fair HR System

K-water actively values input from its team members, incorporating their insights to foster a fair and transparent personnel system. In 2022, we implemented an HR System Innovation Task Force (TF) to enhance transparency in personnel operations, addressing 52 personnel-related petitions received through our communication platform "Talk Talk Collection." The HR System Innovation TF conducted comparisons and analyses of personnel systems in other institutions, surveyed preferred promotion methods, and inquired about desired work areas. Through the personnel communication channel "All HR," the TF shared meeting outcomes, personnel schedules, and publicly verified commendations, while also gathering improvement suggestions from members. As a result, K-water introduced a quantitative promotion system and increased the stability of members' work by adopting a Basin Rotation System. Such inclusive HR system improvements led to a 2.2% increase in employee satisfaction, reaching 75.4 points compared to the previous year.

Enhancing the Hiring Process for People with Disabilities

Pre-Recruitment

Position Identification

- Enhancement of asset management awareness instructor, dam drone pilot, etc.

Job Description Provision

- Provision of position overviews before application
- Provision of tailored job offerings

During Recruitment

Customized Training

- Provision of tailored job training programs for persons with disabilities before recruitment

Streamlined Convenience of Application Process

- Utilization of sign language interpreters, enlarged font

Post-Recruitment

Organizational Adjustment Assistance

- Consideration of disability characteristics, customized job placement, and providing auxiliary equipment support

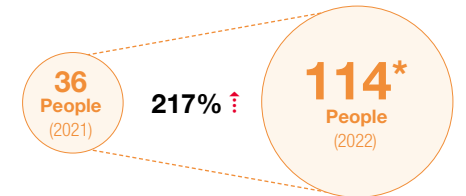
Organizational Culture Enhancement

- Implementation of an inclusive organizational culture through disability awareness education

Promoting inclusive recruitment practices for social equity

Employment of People with Disabilities ▶ In its commitment to advancing the employment of people with disabilities, K-water not only streamlined eligibility criteria and expanded bonus points but also implemented enhancements across the entire hiring process. This involved identifying suitable roles for people with disabilities and facilitating their smooth acclimation to the organization. Consequently, K-water achieved a significant milestone by hiring a record-breaking 114 persons with disabilities in 2022, more than doubling the figures from the previous year. In recognition of the company's diverse efforts and accomplishments, we proudly received the Gold Award at the 2023 True Company Awards, a testament to our commitment to being a trusted employer for the disabled. We will continue to actively identify areas for improvement, refine our systems, and promote the meaningful employment of the disabled.

Number of Disabled Employees

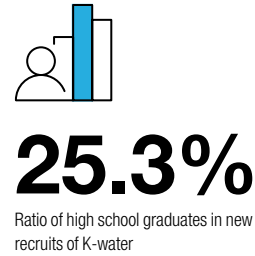


* Additionally hired 40 general staff, 3 field staff, and 71 part-time staff

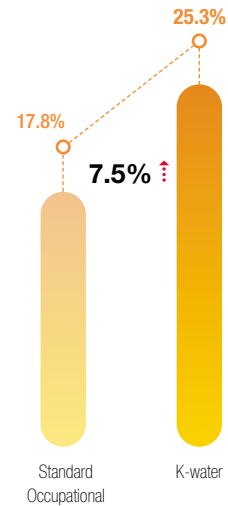


- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

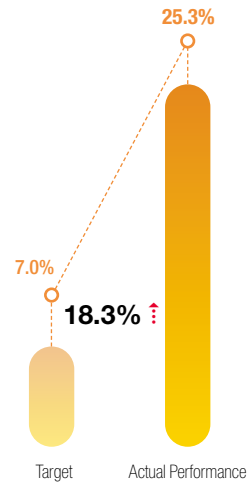
Employment of High School Graduates ▶ K-water set a goal of hiring 7% high school graduates in its mid-to long-term strategic management plan. In 2022, the company not only achieved but exceeded this target by 18.3 percentage points, bringing in 80 high school graduates. This percentage, standing at 25.3%, is higher than the average ratio of high school graduates in new hires among quasi-governmental corporations, which is 17.8%. To ensure the effectiveness and sustainability of employing high school graduates, K-water conducts communication meetings. These meetings help identify improvements such as expanding job development, focusing on departmental adjustments, and applying them in the field. Furthermore, the Corporation supports employees in obtaining a bachelor's degree in "Integrated Water Management," participates in the WorldSkills Competition in the "Water Treatment Technology" category, and assigns duties related to new growth businesses to enhance job capabilities. Notably, this effort has led to the promotion of outstanding employees to Grade 5.



Percentage of High School Graduates Among Total Hires



Performance Against Targets



Strengthening HRD Innovation Capabilities

At K-water, Korea's leading public institution for water management, we understand that the competitiveness of our team directly contributes to the organization's overall competitiveness. In response, we formulated an HRD (Human Resources Development) innovation plan to take the lead in the global water management industry. In March 2022, the company formed the HRD Innovation Task Force, comprised of core experts collaborating with external specialists from diverse fields. Their goal was to enhance the organization's capabilities through effective communication channels with employees, focusing on fostering core talents and driving infrastructure innovation. In its effort to boost employee competency, K-water introduced a growth-oriented education system for

practical and operational roles, extending mandatory job training up to the managerial level. To deepen our expertise in water management, we are running specialized programs like K-Professional and K-Study. Moreover, to address challenges in conducting in-person training, we developed an online education infrastructure, including a metaverse campus, microlearning platform, and VR safety experience facility. In April 2022, the Songsan Global Education Center was inaugurated, catering to educational needs and improving overall consumer satisfaction. These HRD innovations resulted in increased education satisfaction and work-related practical utility in 2022, scoring 4.61 and 4.55, respectively, compared to the previous year.

HRD Innovation Status

Educational System Reform	Innovating the education infrastructure
<ul style="list-style-type: none"> Establishment of a Growth Support Education System for Administrative and Operational Positions (Over 1,700 Employees) 	<ul style="list-style-type: none"> Metaverse Campus Microlearning Platform New Education Portal VR Safety Experience Center Songsan Global Education Center
<p>Education System</p>	
<p>Developing job competency</p> <ul style="list-style-type: none"> Mandatory Job Training Expansion (Stage II → IV) 	
<p>Basic Business Knowledge</p> <p>Entry Level, Assistant Manager (I-II)</p>	<p>Comprehensive Collaborative Problem-Solving</p> <p>Senior Manager, Senior Director (II-IV)</p>
	<p>Customized utilization of headquarters/centers based on accessibility and facility characteristics</p> <ol style="list-style-type: none"> Songsan Center <ul style="list-style-type: none"> Independent and collaborative education with international organizations and universities Tours of specialized infrastructure, including Sihwa Lake Tidal Power Plant, Hwaseong AI Water Purification Plant, and Songsan GC Daejeon Headquarters <ul style="list-style-type: none"> Implementation of water education based on K-water expertise Tours of dams and regional water supply core infrastructure Simultaneous practice using water pipe network sites



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Work-Family Balance

K-water has introduced a family-friendly initiative to enhance the working environment for our members and boost work efficiency by fostering a better work-family balance.

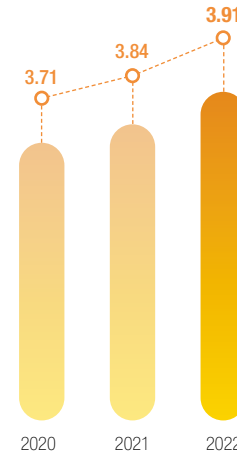
The company is progressively refining the existing nationwide rotation system, allowing members to rotate within the basin. New employees can now work continuously for up to 10 years in their preferred basin, a significant increase from the previous five years, ensuring housing stability for members.

Moreover, to support our members in terms of childbirth and childcare, the company has extended infertility-related leave to a maximum of four days per year for women and the newly introduced one day per year for men. We have expanded reasons for family care leave, such as the closure of daycare facilities, and additionally established a workplace day care center. In 2022, the usage rate of paternity leave rose by 1.2 percentage points to 4.9% compared to the previous year, with users of family care leave increasing by 13% to 1,443.

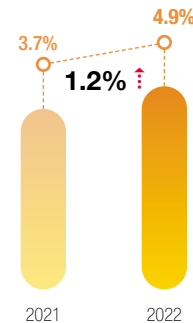
Furthermore, our efforts to enhance employee job satisfaction included creating a flexible work environment through the activation of digital workplaces (mobile work environment, etc.), allowing employees to work without constraints of time and space.



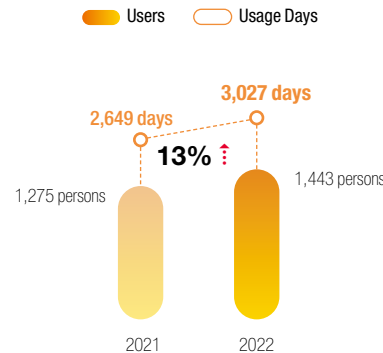
Employee Overall Welfare Satisfaction on the Rise for Three Consecutive Years



Male parental Leave Usage Rate



Family Care Leave Usage



Cooperative Labor-Management Relations

Establishment and Expansion of Mutually Beneficial Labor-Management Partnerships

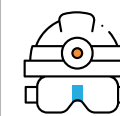
K-water is committed to the government's directives to enhance the efficiency of public institutions, the imperative to fortify the safety management system in line with the Serious Accidents Punishment Act, managing conflicts at construction sites, which is a blind spot in labor affairs, and implementing system improvements that cater to the needs of all our employees. Through an internal and external diagnosis as well as an analysis of the current situation, we aim to create a workplace at K-water that is both safe and enjoyable, fostering laughter and collaboration between labor and management. To achieve this, we have established a specialized consultation system by forming a task force (TF) related to innovations in employee welfare, future welfare systems, and labor director operations. We have implemented various communication channels, including on-site communication meetings, online platforms, and specialized training on new organizational culture. Additionally, a TF has been formed to address HR systems and compensation structures, aiming to enhance overall working conditions.

In September 2021, we provided support to newly established subsidiaries dedicated to the inspection and maintenance of water and dam facilities. The subsidiaries have been equipped with essential facilities such as offices, equipment, and dormitories. We have shared our expertise in operational infrastructure, labor-management cooperation, and safety management systems

to ensure business stability. Through mentorship programs across 38 areas and the creation of a specialized team focused on improving labor capabilities, the management capabilities of our subsidiaries were improved. The institutionalization of allocating 5% of our retained earnings to the Labor Welfare Fund has resulted in enhanced benefits for our members. Additionally, efforts such as promoting an annual four-party safety council involving the labor and management of the parent company, implementing Occupational Health and Safety Management Systems (ISO 45001), and allocating a new safety management fee of KRW 120 million have resulted in a significant 75% decrease in industrial accidents as well as zero occurrences of serious accidents within our subsidiaries. K-water remains committed to maintaining a cooperative relationship through smooth communication and consultation between labor and management, striving for sustainable growth together.

Implementing the Labor Director System

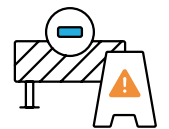
In December 2020, K-water became the first public institution to collectively announce the implementation of a labor director system, led by the chairman of the labor-management council. Subsequently, in June 2023, a labor director was appointed. The labor director plays a crucial role in fostering a collaborative labor-management relationship, actively representing the workers' perspectives on agenda items presented during the board of directors meetings, including matters related to personnel management and revisions to salary regulations. This initiative contributes to the enhancement of K-water's sustainability and the transparency of the Board of Directors.



KRW 120 million
Newly funded safety management expenses



Zero
Serious Disasters



75%
Preventing industrial disasters

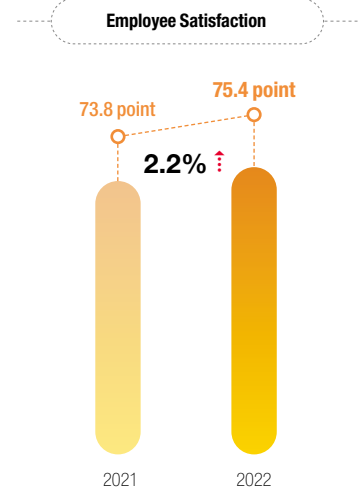
- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Introducing the Labor-Management Relations Special Training Program

In October 2022, K-water launched a special pilot training program for labor-management relations, focusing on improving communication across departments and enhancing capabilities, especially in fieldwork communication. This training, conducted jointly by management and the labor union, addressed labor-management conflicts through expert consultation and formulated improvement plans for each department based on self-diagnosis. Moreover, the program included sessions for sharing successful case studies in conflict resolution and fostering mutual understanding between labor and management through experiential learning methods such as role-playing. With 211 participants across two sessions, this special training aimed to establish labor-management relations grounded in trust and respect. This initiative contributed to strengthening the labor-management capabilities of various business departments. As a result, K-water was honored with the Grand Prize in the Labor-Management Capability Strengthening Category at the 1st Public Sector Labor-Management Innovation Awards organized by the Korea Certified Public Labor Attorneys Association in January 2023, highlighting our commitment to excellence in labor-management relations.

Personnel Innovation Task Force

To enhance working conditions, K-water has innovated its HR system to align with the needs of all employees, as determined through labor-management discussions. Focused on establishing a fair and transparent promotion system, as well as a stable and predictable transfer mechanism, the organization set up a joint labor-management task force for personnel innovation. Detailed improvement plans were formulated over 12 meeting sessions. K-water introduced a quantitative promotion system alongside the general promotion process, granting candidates freedom of choice. Additionally, a basin rotation system was implemented, allowing employees to work in their preferred basin. Consequently, the employee satisfaction level increased by 2.2% compared to 2021, reaching a score of 75.4 points.



Employee Council

Since 2006, K-water has maintained the employee council as a consultative body to engage with employees of different generations. The employee council is organized into three committees, considering experience and job titles. This structure facilitates the integration of innovative ideas and flexible thinking from employees into management practices, fostering various activities aimed at enhancing the capabilities of employees as future leaders. The employee council actively participates in pre-discussions related to the agendas of regular board meetings, engaging in discussions on key issues. Its focus is on building consensus within the organization, identifying and driving initiatives for management improvement, and ultimately striving to enhance awareness and understanding throughout the company.



Structure and Key Responsibilities of the Employee Council

Category	Participation Target	Key Responsibilities
Super Rookie (SR)	5 years or less of service, Equivalent to Grade 4 or below	<ul style="list-style-type: none"> Encouraging proactive change by leveraging innovative ideas from the new generation Providing mentorship to help new employees adapt to the organization
Junior Board (JB)	6 to 12 years of service, Equivalent to Grade 4 or below	<ul style="list-style-type: none"> Gathering honest opinions from organizational members and facilitating communication with management Proposing initiatives based on employees' innovative ideas and flexible thinking
Middle Board (MB)	Grade 2 or Equivalent to Grade 3	<ul style="list-style-type: none"> Serving as a communication bridge between different ranks and generations Taking a leadership role in fostering organizational culture innovation across the company

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Human Rights Management

Establishing a Human Rights Management Action Plan

K-water analyzed cases of human rights violations within the organization and developed a Human Rights Management Action Plan based on a Rights Protection Survey conducted in June 2022, encompassing all employees. Understanding that 90% of human rights violations over the past three years have originated from verbal expressions, we have established directions and tasks to foster a work environment where mutual respect is paramount. Through improvements in the human rights protection process, enhanced victim protection in cases of human rights violations, the promotion of a culture of respectful language, and the elimination of human rights blind spots, K-water will strive to instill a culture of respect for human rights across the organization.

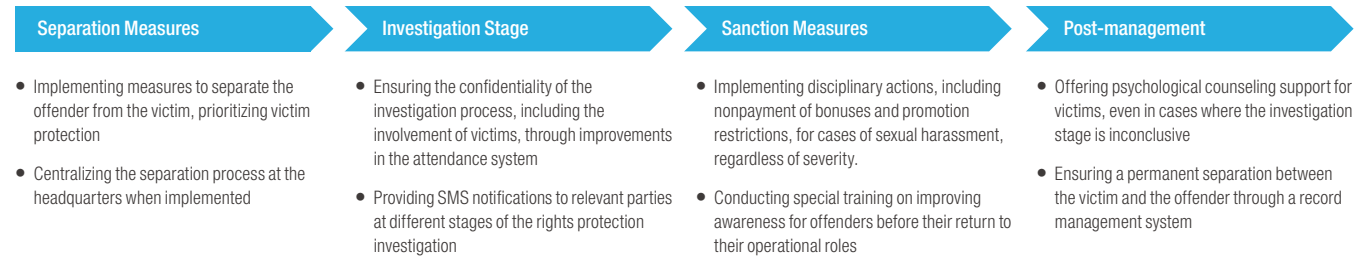
Enhancing the Human Rights Protection System

K-water achieved a 67% reduction in the occurrence of human rights violations within the organization by reinforcing human rights guidelines, refining reporting and investigative capabilities, and enhancing the effectiveness of the human rights protection system. We have improved our human rights management guidelines by promoting anonymous reporting, appointing a majority of external members to the seven-member Human Rights Committee, with over 57% being human rights experts, and expanding the roles of the audit office and external experts in investigations. Furthermore, in cases of human rights violations, protective measures have been implemented to protect the victim, along with diverse sanctions like disciplinary actions against offenders based on a zero-tolerance principle, and limitations on performance bonuses and promotions. Additionally, the company offers psychological counseling for the emotional recovery of the victims, initiates preventive measures through specialized awareness training before employees return to work, and ensures the permanent separation of offenders from victims through thorough record management. These enhancements in the company's human rights protection system resulted in a decrease in the number of human rights violation cases to 6 in 2022, down by 12 from the previous year. We aim to instill a culture of respect for human rights to prevent any future occurrences of human rights violations.

Human Rights Management Action Plan



Enhancing the Human Rights Protection System

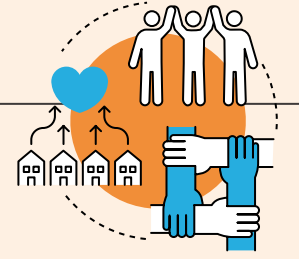


Best Practice

Respectful Language Do & Don't Campaign

In June 2022, following a comprehensive survey on the protection of rights and interests of all employees, K-water identified numerous instances of human rights violations related to work capabilities and titles. We collected alternative expressions preferred by our members and communicated them internally. In the assessment of higher-level positions, the harassment category caused by verbal expressions was assigned a score of 10 out of 100 points. Additionally, all employees participated in an online respect pledge, and a culture of respect was promoted through an oath ceremony for new department heads and senior directors. To further reinforce this culture, the Respectful Language Do & Don't Campaign was launched, encouraging the normalization of respectful language. These initiatives resulted in achieving a Leadership Trust Index of 76 points, the highest ever recorded.





- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL**
- Talent Management
- Win-win Partnerships with the Community
- Shared Growth
- Health & Safety Management
- Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Management Approach

Approach

K-water actively promotes its water management project by cultivating strong ties with the local community. Hence, to ensure successful basin management, it is crucial to have smooth communication and cooperation with the local community. Corporate social responsibility can be fulfilled by implementing a water management initiative that harmonizes with the local community, thus earning the understanding and trust of residents. Furthermore, we are committed to broadening the water industry ecosystem, enhancing our capabilities, and propelling collective advancement. This involves the stable management of a supply chain encompassing diverse small and medium-sized enterprises, laying the foundation for shared growth.

Plan

- Identifying Strategies for Addressing Rural Depopulation Challenges
- Restructuring Key Social Contribution Initiatives
- Increasing Awareness of Our Internal Social Contributions

Performance

<p>K-water Scholarship Program</p> <p>Every year 200 persons receive the support KRW 800 million fund</p>	<p>Global Social Contribution</p> <p>Donation of USD 70,000 to areas affected by heavy rain in Pakistan</p>	<p>Community development</p> <p>Recipient of the Minister's Award in the Active Administration Contest by the Ministry of the Interior and Safety (2022)</p>	<p>Bohyeonsan Dam Fertilizer Deep Placement</p> <p>From all farming households 53% participated, created 268 jobs, KRW 110 million income, achieved water quality Grade 1</p>	<p>Public Institute Joint Growth Evaluation</p> <p>Shared Growth Committee, 2 consecutive years of Grade Excellent(A) grade</p>	<p>Shared Growth Performance (2022)</p> <p>Sales of affiliated SMEs KRW 129.9 billion</p> <p>Joint technology development product purchase performance KRW 100.7 billion</p> <p>Export performance by companies that made inroads into overseas markets KRW 29.2 billion</p>
--	--	---	--	--	---



INTRODUCTION

ENVIRONMENTAL

SOCIAL

Talent Management

- Win-win Partnerships with the Community

Shared Growth

Health & Safety Management

Information Security and Personal Information Protection

GOVERNANCE

BUSINESS

APPENDIX

Win-win Partnerships with the Community

Social Contributions

Social Contribution Implementation System

In line with the mission of creating “a happier world through water,” K-water has formulated three core social contribution values and directions that encapsulate the company’s fundamental principles and management policies. Our Corporation is committed to being a contributor to the nation’s and local communities’ development by actively engaging in corporate sustainable development and fulfilling social responsibilities through various social contribution activities tailored to the unique characteristics and resources of the business. Furthermore, K-water has restructured its organization-wide system for community win-win activities, addressed challenges related to rural depopulation, and identified key social contribution initiatives. We actively worked to enhance communication and participation in social contribution activities by expanding programs like the Water and Love Sharing Club and employee engagement initiatives, which were temporarily scaled down during the pandemic.



Social Contribution Implementation System



Water and Love Sharing Club Organizational System





INTRODUCTION

ENVIRONMENTAL

SOCIAL

Talent Management

- Win-win Partnerships with the Community

Shared Growth

Health & Safety Management

Information Security and Personal Information Protection

GOVERNANCE

BUSINESS

APPENDIX

Status of Domestic Social Contribution Initiatives

K-water initiated the Water and Love Sharing Club, an employee volunteer organization, in July 2004, fostering a sustained commitment to diverse volunteer activities, including environmental preservation, disaster relief, aid for disadvantaged communities, and active contributions to the local community. To systematically support these efforts, employees voluntarily allocate a portion of their monthly salaries to create the Water and Love Sharing Fund, which is supplemented by a matching grant. This dedicated fund forms the budget for the group's activities and is managed through an efficient "social contribution system," ensuring real-time support and oversight throughout the entire volunteer process.



81 households
532 people

Water for Delivering Hope for Tomorrow Project
Improving water usage environments for low-income households and facilities



5,066 people

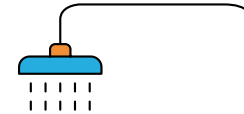
Job Sharing Initiative
Creating employment opportunities for the elderly in dam-surrounding areas



200 students

K-water Scholarship Program

Targeting middle and high school students in local communities
Continuous and comprehensive support for growth

103 sessions
837 households

Love Spring
Outreach services including mobile laundry and shower facilities



9
Dam-area Senior Welfare Centers
Operating senior welfare centers in dam-surrounding areas
Improving senior welfare

Key status of social contribution

134 clubs
Number of Clubs

10,498 hours
Volunteer Time

3,628 members
Number of Active Members

Employee Volunteer Club, Water and Love Sharing Club

Volunteer initiatives in rural communities, talent contributions Various social contribution activities including support for multicultural families and vulnerable groups

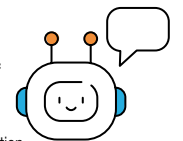


6

Social Enterprise Support
Strengthening corporate competitiveness through the commercialization funds and growth support of social enterprises



Improving the Quality of Life of Local Residents
Implementation of the AI Speaker Chat Service for the elderly, Promotion of local win-win community programs



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Domestic Social Contribution



K-water Scholarship Program

Starting in 2021, K-water introduced the “K-water Scholarship,” a future development scholarship aimed at supporting approximately 200 middle and high school students residing in K-water business areas and regions surrounding dams. The initiative is designed to nurture these students into future talents within the local community. The scholarship program provides sustained support throughout students’ academic journey until graduation, with new scholarship recipients selected proportionally to the number of graduates each year. In November 2022, the Corporation identified 40 first-year middle school students, recommended by their school principals, living in local governments or areas surrounding K-water dams and falling within the income bracket of less than 150% of the median income, as the “3rd Future Development Scholarship Students.” Selected recipients receive an annual scholarship of KRW 1.5 million for up to five years, along with a comprehensive growth support program encompassing mentoring, expert lectures, and career counseling tailored to their areas of interest.

(Unit: person, KRW million)

Category	2021	2022
Number of Scholarship Studen	100	200
Support Amount	Middle School Students	1.5
	High School Students	2.5

As part of our initiatives, K-water organized the “K-water Scholarship 2022 Communication Camp” from August 13th to 14th, inviting approximately 50 scholarship students to our Human Resources Development Institute under the theme “We are the future.” The camp featured diverse programs, including team activities such as the Golden Bell Quiz and a stock market simulation contest, insightful lectures by author Joo Ho-min, and special sessions by magician Choi Hyun-woo, aiming to foster a spirit of challenge and purpose among the scholarship students. Moreover, the camp facilitated meaningful interactions with approximately 50 college student mentors from Chungnam National University and Pusan National University, offering valuable insights and practical mentoring on career advancement paths.

Sharing campaign for the underprivileged

K-water designated the period from January 25 to February 11, 2022, as the “Lunar New Year Sharing Activity Period” and supported stakeholders facing challenges during the holiday season. The Corporation extended a 50% rent reduction until June 2022 for small business owners and SMEs affected by COVID-19. Efforts were made to address financial difficulties by promptly executing KRW 20 billion, including construction costs, before the Lunar New Year holiday. Throughout this period, 134 employee volunteer clubs nationwide, including those at K-water’s headquarters, actively participated. Collaborating with the Daedeok-gu Office in Daejeon, they engaged in proactive sharing, delivering winter supplies to about 200 households of senior citizens living alone, valued at around KRW 200 million. In honor of K-water’s 55th anniversary, the Corporation observed the third week of November 2022 as “Warmer Winter with K-water,” a month-long campaign supporting vulnerable groups during the winter. Around 70 employees, including the Corporation’s president and labor union chairman, participated in the “55th Anniversary Commemoration: A Joint Labor-Management Love and Kimchi Sharing Event” at the Jung-ri Community Welfare Center in Daejeon. The Corporation distributed approximately 3,600 heads of kimchi, with 10 kg each, to 720 vulnerable households in Daedeok-gu, Daejeon.

Employees from nine departments at the Geumgang River Basin Head Office and Nakdonggang River Basin Head Office organized a Relay Kimchi Sharing Event, visiting 320 vulnerable households individually in the region. Additionally, employees from six departments at the Hangang River Basin Head Office provided special meals to the youth in the region, ensuring a healthy and warm winter for them. Furthermore, eight departments of Gwangju’s Yeong-Seom (Yeongsangang & Seomjingu) River Basin Head Office collaborated with Good Neighbors to deliver play kits to children in islands and mountainous areas. We continue our commitment to ongoing sharing activities and seek new support measures to contribute to the local community.

(Unit: KRW million)

Category	2020	2021	2022
Support Amount	20	20	20



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Disaster Relief

In August 2022, K-water demonstrated its commitment to social responsibility by contributing KRW 100 million in employee donations to the Korea Disaster Relief Association for the recovery of areas impacted by recent heavy rainfall. The donated funds played a crucial role in providing relief items to individuals affected by the heavy rain in key regions, including Seoul, Gyeonggi-do, Gangwon-do, Chungcheongbuk-do, and Chungcheongnam-do, as well as supporting broader disaster recovery initiatives. Furthermore, K-water employees actively participated in distributing relief supplies, including essentials like bottled water, to the affected areas and also engaged in flood recovery efforts. Notably, approximately 250,000 bottles of drinking water were supplied to 17 local governments, covering areas such as Gyeonggi-do, Gangwon-do, and Chungcheong-do. The employee volunteer group from the Central Chungcheong-do branch visited Eunsan-myeon in Buyeo-gun, Chungcheongnam-do, engaging in flood recovery activities such as clearing soil from vineyards. In addition, relief goods valued at approximately KRW 30 million were delivered to Gangwon-do, funded through employee salary contributions from the Hangang River Basin Head Office, Gangwon Regional Cooperation Office, and Soyanggang Dam Branch.

(Unit: KRW million)

Category	2020	2021	2022
Total Disaster Relief Amount	3,300	-	200



Labor Assistance for Farmers

In May 2022, K-water initiated a company-wide effort to support agricultural communities in regions surrounding dams, addressing labor shortages during the farming season, starting with a carnation farm in Gokseong-gun, Jeollanam-do, and an apple farm in Jinan-gun, Jeollabuk-do. Approximately 100 employees, including the CEO, extended their support by visiting a ginseng and apple farm in Muju-gun, Jeollabuk-do, and by also engaging in tasks such as flower thinning. We are dedicated to fulfilling our corporate social responsibility by proactively promoting initiatives to assist farmers in areas surrounding dams, including Yeongdong-gun in Chungcheongbuk-do, Namwon-si in Jeollabuk-do, and Gurye-gun in Jeollanam-do.



Plogging Donation Challenge

From May 5 to June 4, 2022, K-water organized a Plogging (picking up litter + jogging) Donation Challenge in commemoration of the 100th Anniversary of Children's Day to support future generations. The event aimed to foster a spirit of sharing through everyday walking activities. K-water pledged to donate KRW 13 million once participants collectively achieved the challenge goal of 1 billion steps. Impressively, over 52,000 individuals participated in the initiative, collectively reaching an outstanding 12.2 billion steps. In July 2022, we fulfilled our commitment by delivering the donation to Save the Children's western regional headquarters. The funds were directed toward providing a "Heat Wave Preparation Kit" to approximately 100 children from low-income vulnerable families in the Daejeon area. The kit included functional summer bedding sets, cooling items, and hygiene essentials.



KRW 13 million

Plogging donation challenge donation amount



Global Social Contribution



Donation of USD 70,000 to areas affected by heavy rain in Pakistan

In August 2022, K-water took action in response to the devastating effects of unprecedented heavy rainfall in Pakistan. We made a donation of USD 70,000 to the Pakistani government to support the country's recovery efforts. The funds will be utilized for relief supplies and recovery projects in severely affected southern regions, including Balochistan, Sindh, and Gilgit-Baltistan in northern Pakistan, where there has been a significant impact on both human lives and infrastructure. Additionally, our employees actively participated in on-the-ground relief activities near the Patrind Hydropower Project in Pakistan. A total of USD 30,000 worth of relief goods, including blankets and essential items, were provided to approximately 500 households in the surrounding area. Our team also played a direct role in flood recovery operations, contributing to the restoration of roads and buildings. These efforts reflect our commitment to assisting the affected communities and facilitating their return to normalcy.



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Engaging in community development

Active administration contributing to the community

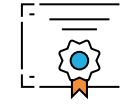
K-water has implemented a proactive administrative support system, revamping preliminary consultation procedures and exemption systems to ensure practical application on-site. Notably, K-water successfully preserved the downstream park of the Seongdeok Dam. The park faced demolition due to being classified as an illegal facility within an agricultural promotion zone, an omission in the designation cancellation process. This achievement was made possible through dialogues involving stakeholders, such as local governments and residents, and the Corporation's active administration. Ensuring the sustainability of the Seongdeok Dam downstream park as a space for various cultural and artistic events, generating an annual income of KRW 70 million for local residents, K-water pursued the deregistration of the park as an agricultural promotion zone. This not only added value to the local community but also resulted in a cost saving of KRW 5 billion for the

demolition and redevelopment project of the park. Additionally, in response to the pandemic-induced suspension of passenger operations, K-water has generously offered the unused space on the Ara Waterway to local young entrepreneurs and artists. In March 2022, we established a capacity-sharing governance model in related fields, leading to the launch of "Joyful Day"—a comprehensive support platform for youth entrepreneurship, culture, and the arts. To overcome the challenge of being unable to reduce rent for the Ara Waterway, a state-owned property, K-water actively navigated the situation by engaging in persuasive discussions with relevant ministries and conducting preliminary consultations. The governance structure, comprising K-water, Incheon Seo-gu Office, and Incheon Seo-gu Cultural Foundation, laid the foundation for rent reduction and extended support to young entrepreneurs and artists. Presently, the Ara Waterway hosts six teams of young entrepreneurs and three teams of artists, serving as a space for launching and exhibiting startup brands.

Sharing Mutually Beneficial Partnerships with the Community

Water Sharing Market

In commemoration of our 55th anniversary, K-water organized a series of five Water Sharing Markets throughout the year 2022 as a pivotal component of our regional win-win K-ESG management practice project. A noteworthy event within this initiative was the "Paldo Friends of Water Sharing Market," held for the 5th time, encompassing the Daejeon Head Office and all four basins: the Hangang, Geumgang, Yeongsangang-Seomjingan, and Nakdonggang basins. This initiative featured a direct agricultural product market and a community event, providing support to farmers in dam-surrounding areas nationwide. As part of this initiative, K-water allocated an additional KRW 40 million for the procurement of agricultural products, subsequently distributed to vulnerable groups across diverse regions. The Water Sharing Market, in 2022 alone, realized a remarkable total of KRW 300 million in product sales, making a significant and positive impact on income generation for farmers.



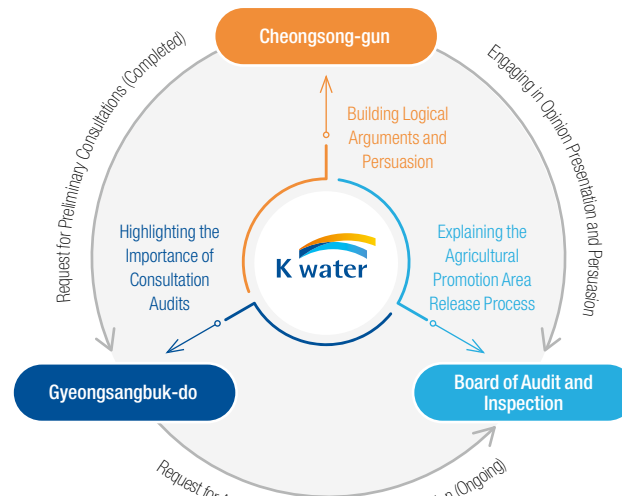
Recipient of the Minister's Award in the Active Administration Contest by the Ministry of the Interior and Safety

(2022)

Commendation from Incheon Metropolitan City (Seo-gu Office)

(March 2022)

laborative Preservation Framework for Seongdeok Dam Downstream Park



(Unit: KRW million)

Session	Date	Event Name	Participating Head Offices	Support Amount
1	Jan. 27, 2022	Apples pop-up store	Head Office, Hangang River, Geumgang River, Yeong-Seom, and Nakdonggang River	67
2	Mar. 7, 2022	Strawberries pop-up store	Head Office, Geumgang River, Yeong-Seom	23
3	May 4, 2022	Fresh ginseng and red ginseng pop-up store	Head Office, Geumgang River	59
4	Aug. 30, 2022	Peaches and pears pop-up store	Head Office, Hangang River, Yeong-Seom River	76
5	Oct. 19, 2022	Paldo Water Sharing Market	Head Office, Hangang River, Geumgang River, Yeong-Seom, and Nakdonggang River	76



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Best Practice

Local Problem-solving Platform

Bohyeonsan Dam Fertilizer Deep Placement Water Ranger

K-water has identified that approximately 82% of the recurring green algae issue at Bohyeonsan Dam stems from fertilizers originating in orchard farms in the upstream area of the dam, subsequently flowing into the river. In response, we have implemented an eco-friendly farming technique known as "Fertilizer Deep Placement" to minimize fertilizer usage by local farmers. In contrast to conventional surface fertilization, where compost is spread over the existing ground, the deep fertilization method involves drilling holes near the roots of fruit trees, placing the compost, and then covering the soil. This approach leads to a higher nutrient absorption rate, fostering improved crop growth, and reducing fertilizer usage to one-third of the traditional method. Consequently, this measure helps decrease the influx of pollutants into the upstream area of the dam.

Initially, residents' participation in this new farming method was limited to 20% due to concerns and inconvenience. In response, K-water collaborated with residents, local governments, and local social enterprises to establish a local problem-solving platform. This initiative led to the launch of the "Fertilizer Deep Placement Water Ranger" project. Since its inception, the project has witnessed an increase in farmers' participation in deep fertilization, a reduction in green algae issues, and the generation of new income for farmers.

The "Fertilizer Deep Placement Water Ranger" project aims to establish a brand and secure sales channels for agricultural products produced through eco-friendly deep fertilization. Aligned with the "consumption value" trend, this initiative seeks to enhance the market competitiveness of produce from this sustainable farming method, leading to increased income for local residents. Collaborating with social enterprises like Y-KNOTS Cooperative, we have worked to raise awareness among local residents about the importance of eco-friendly farming methods. By obtaining a Good Agricultural Practices (GAP) Certification as well as a low-carbon certification, we aim to boost the competitiveness of apples produced through deep fertilization. Utilizing a promotional strategy encouraging consumers to choose deep agricultural products, we have successfully secured new market channels, contributing to the revitalization of the region. As a result of these efforts, 53% of all farms participating in deep fertilization in 2022, representing an increase of approximately 93% compared to the three-year average, have created 268 resident jobs and generated KRW 110 million in income. Through the collaborative efforts of this local problem-solving platform, Bohyeonsan Dam achieved Grade 1 water quality in 2022 for the first time since desalination.

Gapcheon Basin Ecological and Cultural Exploration Program Development Project

K-water is actively engaged in the revitalization of the local community and job creation with its project to develop an ecological and cultural exploration program in the Gapcheon basin, in collaboration with Daejeon Metropolitan City and its citizens. After consolidating water management practices, we initiated a pilot project focused on discovering the ecological and cultural values of the rivers. The goal is to establish a sustainable model that contributes to the local community by exploring new added values. We developed storytelling narratives centered around the theme "Best Streams where Lights and Life Flow." for the three main streams in Daejeon Metropolitan City. Leveraging this narrative, K-water formulated a citizen-participatory model for river usage and meticulously designed and executed exploration programs for the three main streams. To start, we gathered a team of river enthusiasts from the local community. Through a service design workshop, we generated ideas for diverse river programs inspired by storytelling. Working hand in hand with cultural groups and youth enterprises in Daejeon, we transformed these ideas into the experiential program called "BanGapDaeYu," short for Gapcheon, Daejeoncheon, and Yudeungcheon. The programs, including Gapcheon's <Hello, Mihojonggae?>, Daejeoncheon's <Solo or Duo, walking along Daejeoncheon>, and Yudeungcheon's <Take a Stroll, and Meet Confucian Scholars>, which capture the distinctive features of the three major rivers, have received positive feedback and high satisfaction from the community. This success demonstrates the establishment of a sustainable business model for ecological and cultural revitalization.



Increased by
93%

2022 farming households that adopted fertilizer deep placement per 3 years of average

Grade 1
water quality

Bohyeonsan Dam, for the first time after desalination



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Shared Growth

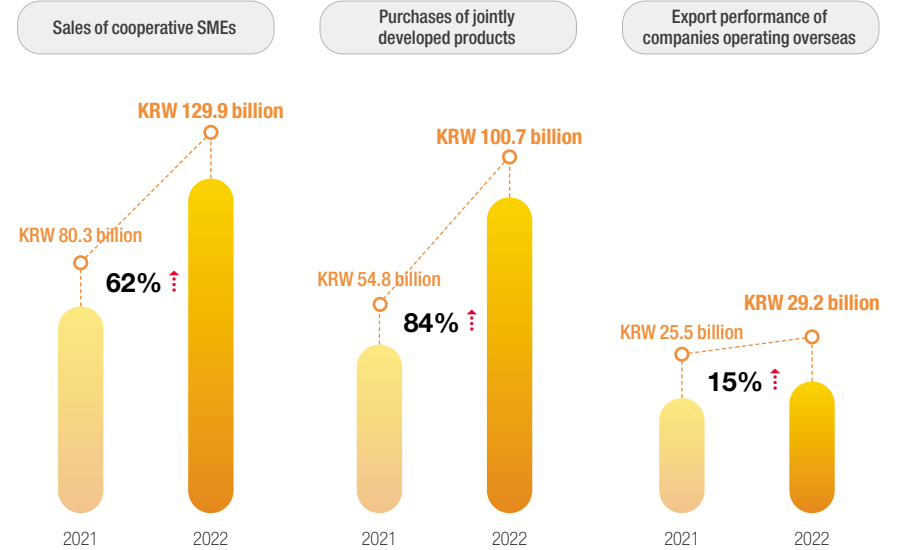
Shared Growth Promotion System

Shared Growth Promotion Organization and System

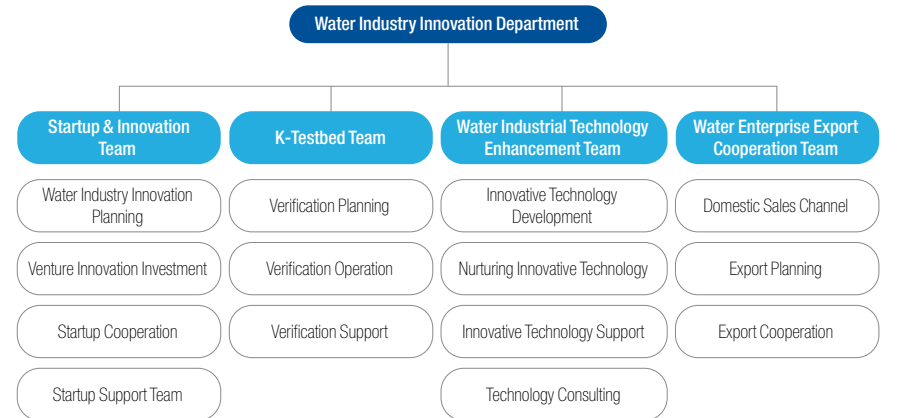
At K-water, South Korea's leading public institution for water management, we are committed to cultivating a robust industrial ecosystem by supporting companies at various stages—from the establishment of water industry startups to serving as test beds, engaging in technology development, and promoting overseas exports. Currently, numerous products crucial for national water management are sourced from small and medium-sized enterprises (SMEs) and venture companies. Enhancing the technological capabilities of these SMEs is crucial in addressing the climate crisis. To this end, we have established the Water Industry Innovation Department, dedicated to nurturing the water industry. The department has implemented a win-win growth promotion system and operates the "Water Industry Platform," which encompasses comprehensive support systems. Leveraging over 50 years of accumulated knowledge, technology, infrastructure, and networks in the water industry, K-water actively lays the foundation for SMEs and venture companies to thrive in the global water industry market, promoting shared growth.



Shared Growth Promotion Results

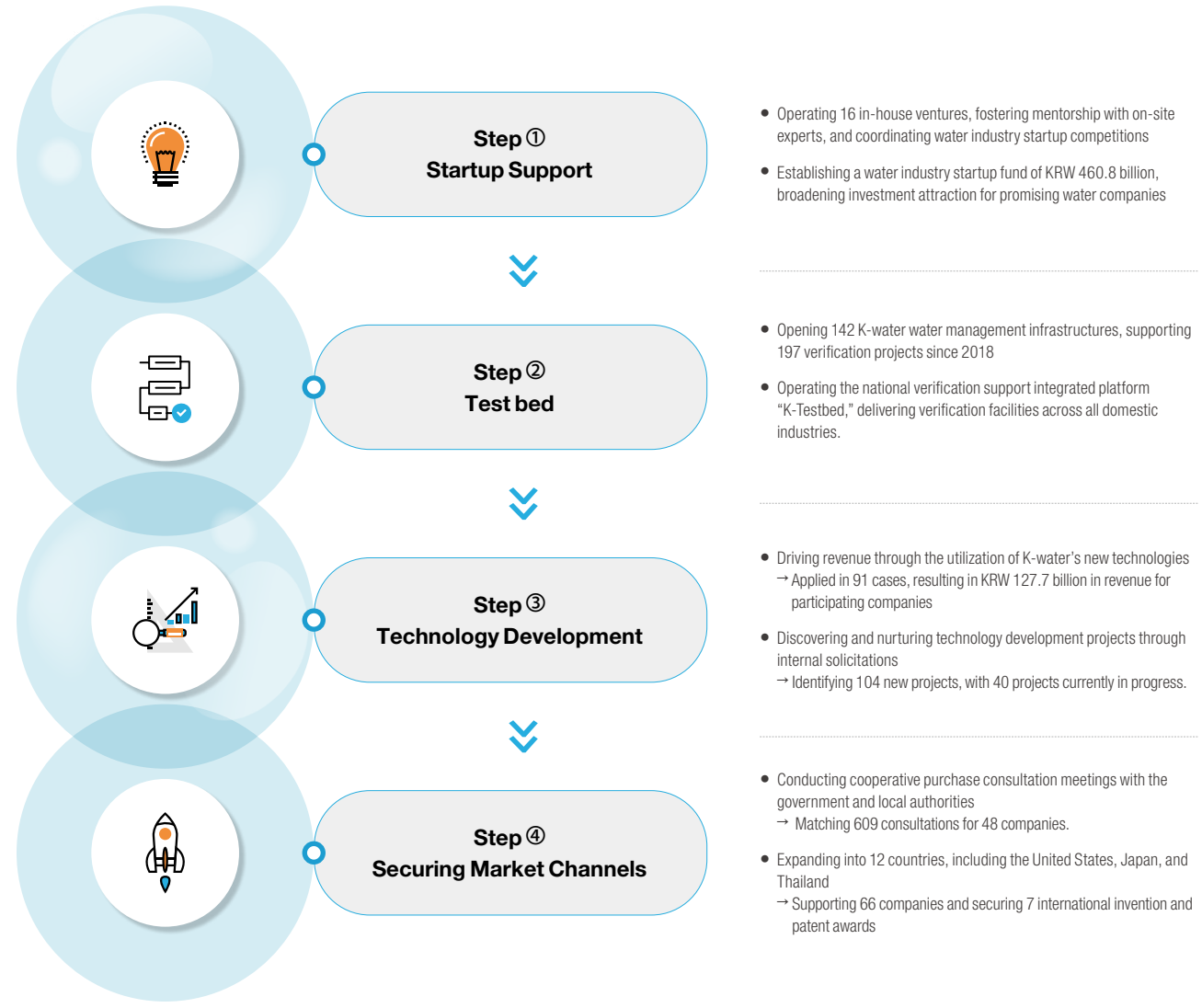


Shared Growth Promotion Organizational Chart



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Water Industry SMEs Development System



Supporting the enhancement of ESG capabilities for cooperative SMEs

K-water is dedicated to improving ESG awareness and enhancing the capabilities of SMEs collaborating with the Shared Growth Committee. We facilitated the training and consulting for 22 partner SMEs, allocating KRW 100 million. As a result, the ESG compliance rate of these companies surged by 49.2 percentage points, soaring from 36.6% to 85.8%, earning them ESG certifications by the Shared Growth Committee. ESG-certified firms receive additional support, including preferential interest rates and exclusive participation opportunities in overseas expansion projects.



Consistent achievement of an Excellent (A) grade in the Public Institution Shared Growth Evaluation for two consecutive years
Received commendation from the Minister of SMEs and Startups for Excellent Contributions to Shared Growth in 2023

ESG Management Certificate (Shared Growth Committee)



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Supporting social enterprises

K-water has launched diverse initiatives to enhance the competitiveness of social enterprises by improving their organizational structure and business dynamics. Through preliminary collaborative demand surveys, K-water bolstered industry connections, conducted assessments of corporate strategy and growth potential, and identified six companies to whom we provided KRW 30 million each in support. With a focus on tailored “practical mentoring” that considers the unique characteristics of each company, along with strategic marketing, public relations promotions, and the establishment of connections with distributors for effective sales channels, our goal was to ensure substantial revenue generation. Consequently, the total employment in the six supported social enterprises increased by nine employees in 2022 compared to 2021, totaling 30 employees. The total revenue for 2022 reached KRW 1.705 billion, marking a significant increase of KRW 214 million from the previous year.



increased by
KRW 214 million

Year-over-year total sales by 6 corporations



Social Enterprises Support Status

Social Enterprise	Support Content	Performance
Ansaram Lab Co., Ltd.	Development of the big game "Sky Pond" set in the background of the source of Nakdonggang River and Hangang River (A game played in the real world)	(Social) Revitalizing the region by developing content involving residents in Taebaek, which is facing population decline (Employment) Two new hires (Performance) Two design intellectual property rights, selection for the Water Citizen Network project → Received approximately 10 orders to produce content for environmental groups
Goraesil Co., Ltd.	Development of experiential mission games in the Daecheongho Sumol Village (Conducting promotions such as Farm Tours targeting social media influencers)	(Employment) Two new hires (Sales) 27% ↑ (KRW 510 million → KRW 650 million) compared to the previous year (Performance) Selected as the Operating Agency For Youth And Women's Rural Exploration and the Okcheon Village Academy contest project → Development of tourism assets such as the Sumol Village map and storybooks
Vecino Works Co., Ltd.	Crafting K-water souvenirs from eco-friendly waste materials (Bubble diffusers, Nakdonggang River ecological souvenirs, etc.)	(Employment) Two new hires (One person from a vulnerable group) (Sales) 50% ↑ (KRW 100 million → KRW 150 million) compared to the previous year (Performance) Obtained the KCL hazardous substance safety report for shell and fragrance → Entry and sales in online and offline concept shops
ChildrenFly Social Cooperative	Development of a children's creative water-themed playground. (Rainwater collecting "Sweet Rain Piggy Bank," ecological garden, etc.)	(Sales) 400% ↑ (KRW 16 million → KRW 80 million) compared to the previous year (Performance) Gyeonggi Peace Plaza regional collaboration project and AllArt31 → Entered the 36.5 Store of Korea Social Enterprise Promotion Agency
WeRide Co., Ltd.	Bicycle festival leveraging the infrastructure of cultural centers (Pilot program operation and sustainable content development)	(Development) Development of SlowRoll cycling routes and content near 28 K-water cultural centers (Employment) Two new hires (Performance) Slow Roll with 191 Participants, Reaches 250,000 Views Online
Korea Gap Year Co., Ltd.	Locally Specialized Job Experience Program "Local Stay" (Tourism content connected to job experiences such as local government internships)	(Development) Development of 46 locally specialized Local Stay Programs with participation from 135 individuals (Employment) Two new hires (Sales) 10% ↑ (KRW 640 million → KRW 700 million) compared to the previous year (Achievement) Selected for the Samsung Dream Scholarship Foundation Learning Center Education Support Project → Received the Amazon Social Enterprise Award (September 2022)

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Tailored Shared Growth

Creating win-win job opportunities

K-water facilitates the global expansion of SMEs, enabling them to overcome challenges arising from domestic constraints such as liquidity issues due to interest rate hikes, rising prices influenced by the volatile global economic climate, and the absence of new dam and waterworks construction projects. In pursuit of this goal, we have nurtured a water industry ecosystem that yields tangible management outcomes and job opportunities, achieved through financial support as well as technology development and verification for SMEs. Initially, K-water established an additional regional innovation venture fund totaling KRW 127.8 billion, investing KRW 38.2 billion in 39 water industry startup companies. Additionally, we contributed KRW 3.05 billion to the win-win fund for technology development support and extended financial assistance of KRW 3.7 billion through win-win cooperation deposits totaling KRW 15 billion. Furthermore, K-water oversees the operation of the national K-Testbed, facilitating verifications for 251 companies. By promoting a profit-sharing system and collaborative investment in technology development, we are laying the foundation for SMEs to enhance their competitiveness, particularly in logistics and production automation through smart factories. The number of jobs generated through K-water's support for SMEs stands at 4,529, including 719 direct hires and 3,810 through employment inducement.

Pinpoint support for partners

K-water acknowledges the challenges faced by 77% of domestic SMEs in complying with the Serious Accidents Punishment Act and the consequent difficulty in securing business contracts due to the absence of mandatory health and safety level assessments. To address these issues, we extend opportunities for our partners to secure orders, accompanied by support to alleviate the burden of safety-related costs. K-water has established its own criteria and procedures for health and safety level assessments. When collaborators fall short of the evaluation standards, we employ a positive approach wherein deficiencies and supplementary measures are presented, and support is provided until the standards are met before finalizing a contract. Additionally, exceptional companies with exemplary health and safety

standards are exempt from evaluations. For contracts valued below KRW 2 billion, we have streamlined our evaluation criteria to ease the assessment burden on our partners. Moreover, we have alleviated the safety cost burden on our collaborators by expanding the scope of safety management cost considerations, providing financial support, and facilitating the adoption of smart safety equipment that exceeds legal standards. K-water's positive approach to health and safety level assessments has broadened opportunities for SMEs to secure orders. In 2022, these businesses collectively secured orders totaling KRW 27.7 billion in projects.

Water Industry Fund Regional Innovation Venture Fund

Since 2018, K-water has outlined its strategy to establish dedicated funds for the water industry, investing approximately KRW 100 billion of its own capital. The objective is to operate this fund at a scale exceeding KRW 460 billion by 2025. In March 2021, we participated in the inaugural water industry fund, specifically the Chungcheong Region New Deal Fund, and signed agreements for the Southeast Region Innovation Venture Fund in the same year, the Daegu, Jeju, Gwangju Region Innovation Venture Fund in 2022, and the Jeonbuk, Gangwon Region Innovation Venture Fund in 2023. Over the three-year period from 2021, a total of six feeder funds were formed, combining KRW 88 billion from the master fund (including Fund of Funds at KRW 44 billion, K-water's contribution of KRW 30 billion, and KRW 14 billion from local governments) with private funds, resulting in the creation of a comprehensive fund exceeding KRW 129 billion. In January 2023, K-water officially confirmed and formalized a contract with Adbo Co., Ltd. and GongGong Co., Ltd. as the inaugural water company investment entities of the Southeast Regional

Innovation Venture Fund. This venture fund operates through collaborative investments from K-water, Ulsan Metropolitan City, Gyeongsangnam-do, and the Korea Venture Investment Corporation, aimed at revitalizing the water industry as well as the economy in the Gyeongsangnam-do and Ulsan regions. The selected investment companies in this round, Adbo Co., Ltd., which specializes in the commercialization of eco-friendly building structures, and GONGGONG Co., Ltd., a venture focusing on low-carbon air purification technology using water, are set to secure investments of KRW 1.5 billion and KRW 500 million, respectively. Moreover, we intend to offer support, including technology testing and verification through test bed provision, on-site application, mentoring, and participation in domestic and international business exhibitions, to facilitate the growth of the said companies. Going forward, K-water will proactively seek to provide effective support to nurture unicorn companies in the water industry and bolster the water industry ecosystem.



Invested
KRW 38.2 billion

Investment amount by 39 start-up companies



KRW 3.05 billion

Technological development support mutual growth fund

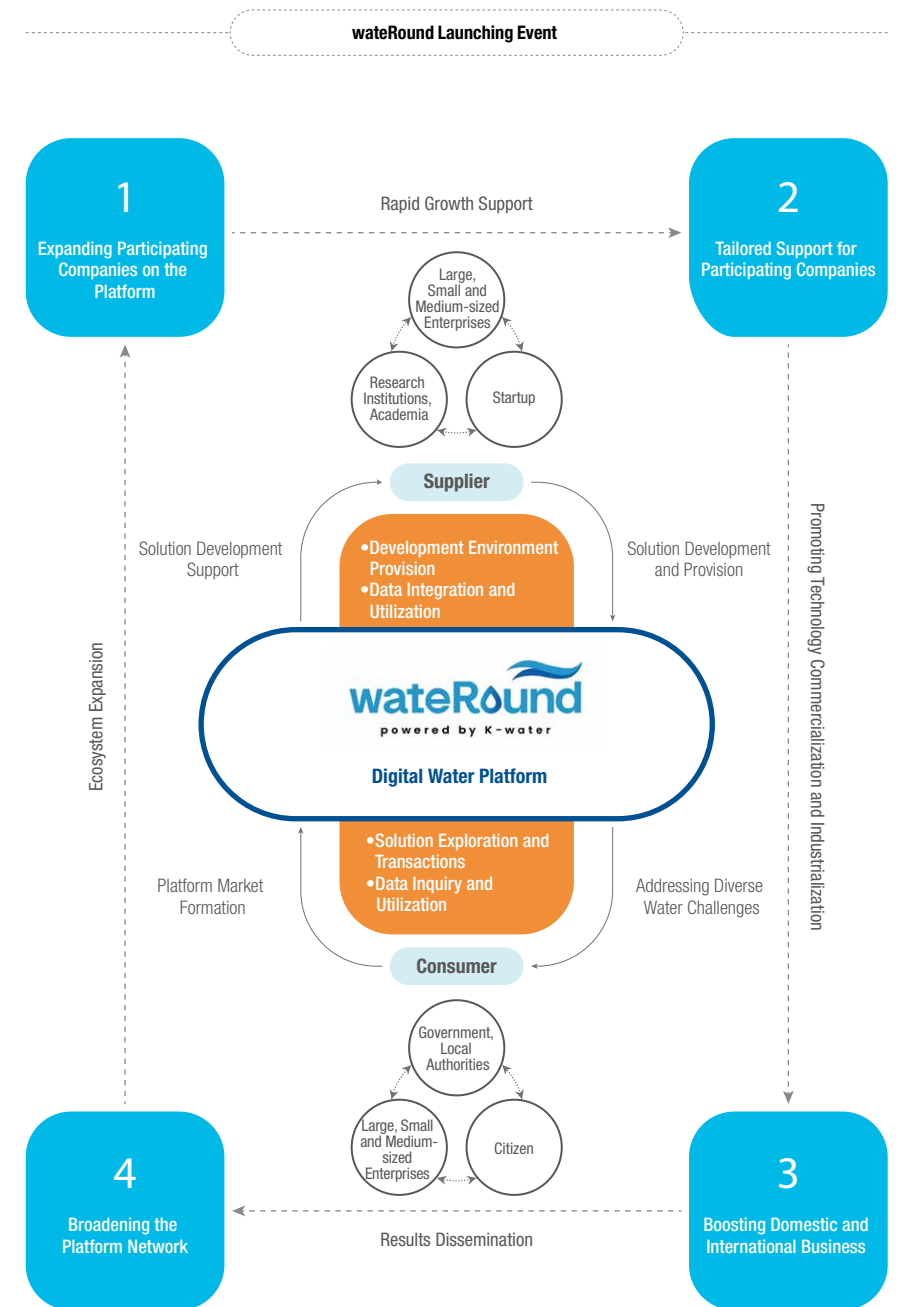


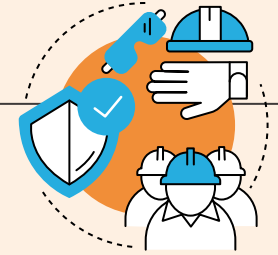
- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

wateRound

K-water operates wateRound, a cloud-based digital water platform that enables professionals from diverse fields, such as businesses, startups, and academia, to swiftly develop innovative solutions addressing diverse water challenges and offering global services. Launched at the 9th World Water Forum in March 2022, wateRound has been fully operational since July of the same year, aligning with the latest trends in smart innovation technology and the growth of the digital water industry. WateRound serves as a marketplace for purchasing and utilizing water-related solutions, providing essential data for solution development and analysis. The platform integrates a search feature for exploring water-related technologies and academic materials. It also facilitates the analysis, utilization, and implementation of water-related big data, offering an open community feature for collaboration. Currently, wateRound boasts 35 types of digital solutions for water-related challenges, including an intelligent water leakage management system and a digital twin-based integrated water management platform.

Furthermore, by leveraging wateRound, our objective is to pinpoint promising companies on both domestic and international levels, foster collaboration with global cloud and water enterprises, and evolve it into a comprehensive global water platform, fostering a digital water industry innovation ecosystem worldwide. Starting with the creation of an ecosystem through partnerships between industry, academia, research institutions, and the government, K-water is actively propelling the digital transformation of the domestic water industry and the rise of global enterprises. We are refining the entire support system, encompassing tasks ranging from solution planning to transactions and services. Concurrently, we are in the process of establishing a cutting-edge digital verification lab to deliver advanced solutions. K-water is executing a methodical global expansion support initiative to guide participating companies toward achieving unicorn status. At the same time, we are implementing an inventive talent development project within the digital water industry to secure skilled professionals in digital convergence. Drawing upon our proficiency in acquiring digital water industry technologies and fostering innovation ecosystems within the water industry, our aim is to contribute significantly to materializing a government digital platform and fortify the global water industry's competitiveness.





INTRODUCTION

ENVIRONMENTAL

SOCIAL

Talent Management

Win-win Partnerships with the Community

Shared Growth

Health & Safety Management

Information Security and Personal Information Protection

GOVERNANCE

BUSINESS

APPENDIX

Management Approach

Approach

Safety is a fundamental service that every company should offer to its stakeholders. Stakeholders should feel assured while using the diverse services provided by K-water, and this assurance extends to the physical safety of all members working on-site. Our commitment involves going beyond regulatory compliance, such as the Serious Accidents Punishment Act, and implementing an effective in-house safety management system to safeguard the lives and well-being of our members. Furthermore, there is a need to enhance our capacity to protect corporate assets and stakeholder information from sophisticated digital crimes, thus elevating the overall security of our operations.

Plan

Enhancement of the autonomous safety management system at the workplace

Implementation of an occupational health and safety management system under the management responsibility

Establishment of a 24-hour, 365-day uninterrupted integrated security monitoring system

Training and development of personnel in information security

Performance

<p>Declaration of Health & Safety Management Charter (August 2023)</p> 	<p>Risk Assessment Excellent Business</p> <p>84% Recognition Among All Workplaces</p> 	<p>Meticulous safety management</p> <p>Ministry of Employment and Labor, Public Institute Safety and Health activities Top Honors Award (2022)</p> 	<p>Information Security Management Condition Evaluation</p> <p>National Intelligence Service, 80.97points (Public Institute Average: 75.47 points)</p> 	<p>Assessment of Personal Information Management Level in Public Institutions</p> <p>Personal Information Protection Commission, 4 consecutive years Best Grade(S)</p>
--	--	---	---	---

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Health & Safety Management

Health & Safety Management Systems

Enhancement of the Health & Safety Management Systems

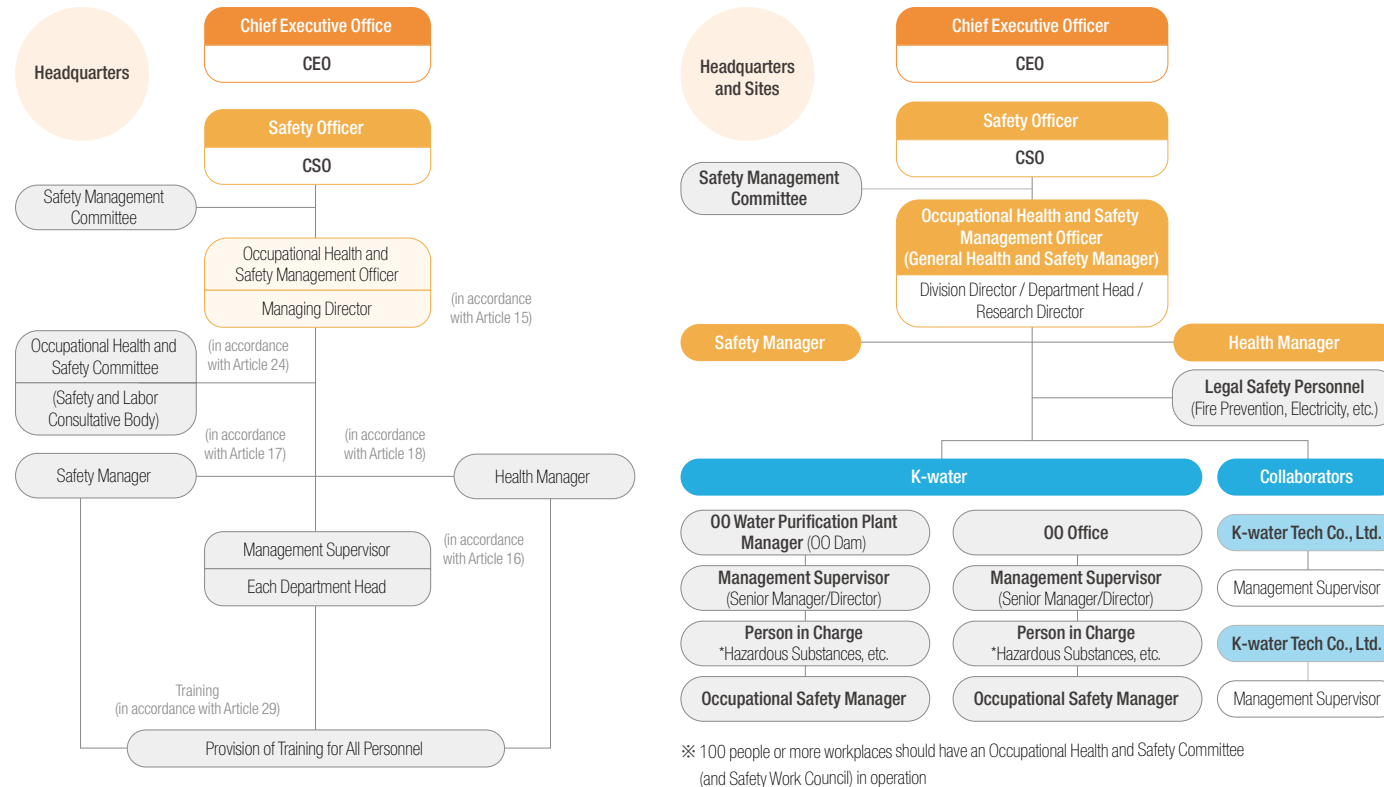
K-water has implemented an health & safety management system, consistently expanding budgets, organizational structures, and human resources to ensure a secure working environment for citizens and workers. The overall safety budget has been increased by 14%, reaching KRW 800.1 billion compared to the previous year. Immediate actions are being taken to incorporate this budget into measures addressing harmful and risky factors that could pose threats to citizens and workers.

We have established a dedicated safety organization within the headquarters to support on-site safety with an increase of 22 employees compared to the previous year, each with assigned roles within the headquarters. Reflecting the heightened expectations of the public, the Corporation operates its own health and safety standards that surpass legal requirements. All branch directors are designated as general health and safety managers, and the appointment of health and safety managers is mandatory.

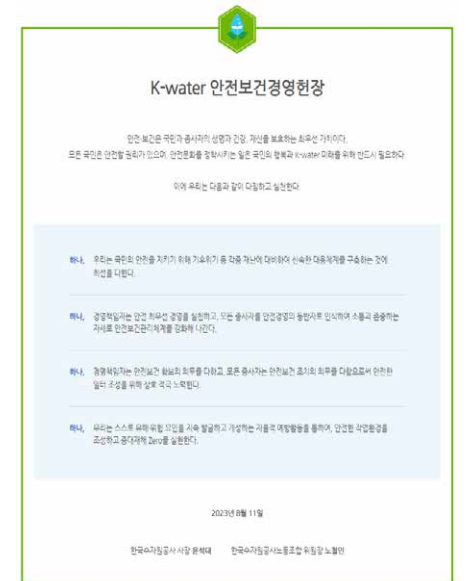
Health & Safety Management Charter

K-water places safety as its top management priority, aiming to protect the lives, well-being, and property of citizens and workers. In August 2023, the Corporation officially declared the K-water Occupational Health and Safety Management Charter, outlining the CEO's management policy and ensuring its communication throughout all levels of the organization.

Occupational Health & Safety Management System Diagram



Health & Safety Management Charter of K-water



INTRODUCTION

ENVIRONMENTAL

SOCIAL

- Talent Management
- Win-win Partnerships with the Community
- Shared Growth
- Health & Safety Management
- Information Security and Personal Information Protection

GOVERNANCE

BUSINESS

APPENDIX

Safety Management Committee

K-water has established a Safety Management Committee, led by a CSO (Chief Safety Officer), with participation from employee representatives and external experts. The committee conducts regular biannual meetings to address crucial matters related to worker health and safety. Discussions encompass various topics, including the outcomes of measures taken after a major accident, preventive strategies to avoid recurrence, annual plans and achievements in industrial accident prevention, and operational results of the Occupational Health and Safety Committee. Additionally, the committee holds ad hoc meetings for urgent agenda items.

Management Health and Safety Activities

To ensure effective safety management at our sites, K-water conducts workplace safety inspections led by the CEO, executives, and the respective head of the basin division. These inspections adhere to the Corporation's standards, which surpass legal requirements. The purpose of these inspections is to improve the safety of the working environment by assessing the status of safety facility installations and gathering employees' perspectives on safety.

* (CEO) Semi-annually → More than once per quarter, (Executives and the respective Head of Basin Division) Quarterly → More than once every two months

Worker health checkup support

Under Articles 129 and 133 of the Occupational Safety and Health Act, in relation to workers' health promotion, at K-water, we conduct workers' health checkups every year. The "Health Checkup Booking System" is operated to facilitate early bookings and efficient processes. After registering for a health checkup, individuals are encouraged to input their examination plans and completion status. For those who are diagnosed with diseases, K-water provides 100,000 won to those diagnosed with a disease to cover the cost of thorough examination.



Occupational Health and Safety Management

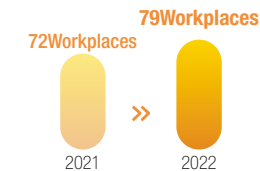
Risk Assessment Standardization

In adherence to Article 36 of the Occupational Health and Safety Act, which pertains to the implementation of risk assessments, K-water evaluates and determines the likelihood (frequency) and severity (intensity) of injuries or diseases resulting from harmful and risky factors in the workplace. The Corporation then implements measures for their reduction. To enhance the effectiveness of on-site risk assessments and contribute to the creation of a safer working environment, the Corporation employs a standardized risk assessment model. Furthermore, K-water has developed a standard risk assessment model and system that integrates unit work and risk factor reduction measures for each type of work into the safety management system. To reinforce the performance of risk assessments, we verify the implementation of risk reduction measures through self-education/inspections and conduct unannounced inspection visits.

The Corporation awards certificates of recognition to workplaces aligning with the risk assessment criteria and actively fosters a safety culture across the organization. To establish a secure workplace and promote a culture of safety, K-water conducts risk assessment training, workshops, and various initiatives. As of 2022, a total of 94 workplaces were subject to risk assessments, with 75 obtaining risk assessment certificates. Additionally, our commitment extends to eliminating workplace risk factors and preventing safety accidents through management strategies emphasizing on-site operability.

Recognition Among Risk Assessment Excellent Business

84% approved



Establishment of a Standard Risk Assessment Model

Development of a Standard Risk Assessment Model and System

220 Construction Types
1,401 Unit Operations
13,828 Risk Reduction Measures

Integration into safety management systems

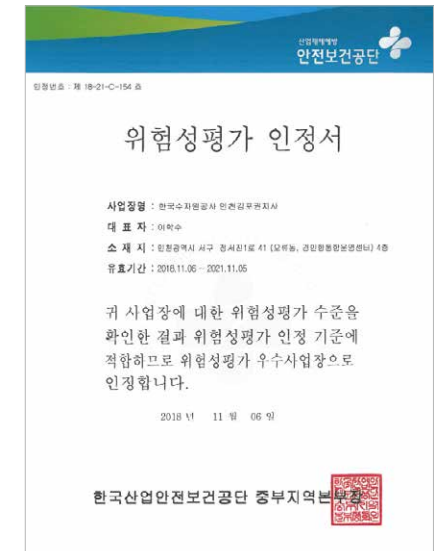
Strengthening the Risk Assessment Performance

Verifying the implementation of risk reduction measures
Conducting self-education/inspections and on-site visits according to the risk assessment implementation checklist

Safety Management Committee Organizational Chart



Risk Evaluation Certificate



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Smart Safety Management

K-water is actively improving safety on-site by expanding its smart safety infrastructure to address potential hazards and eliminate blind spots.

We monitor work situations in real time through our control systems, implementing effective safety management practices with various smart safety tools. These tools include real-time guidance broadcasts to workers during hazardous situations, AI CCTV for detecting risky behaviors, and a worker SOS reporting system for emergencies. Additionally, we are strengthening safety measures at construction sites by mandating the implementation of smart construction safety centers and advanced safety equipment. Our proactive safety initiatives in construction have resulted in a 44% reduction in accidents compared to 2022. This commitment to safety excellence is underscored by our recognition as a leading safety organization, receiving Top Honors in the 2022 Occupational Health and Safety Activities in Public Institutions Awards from the Ministry of Employment and Labor.

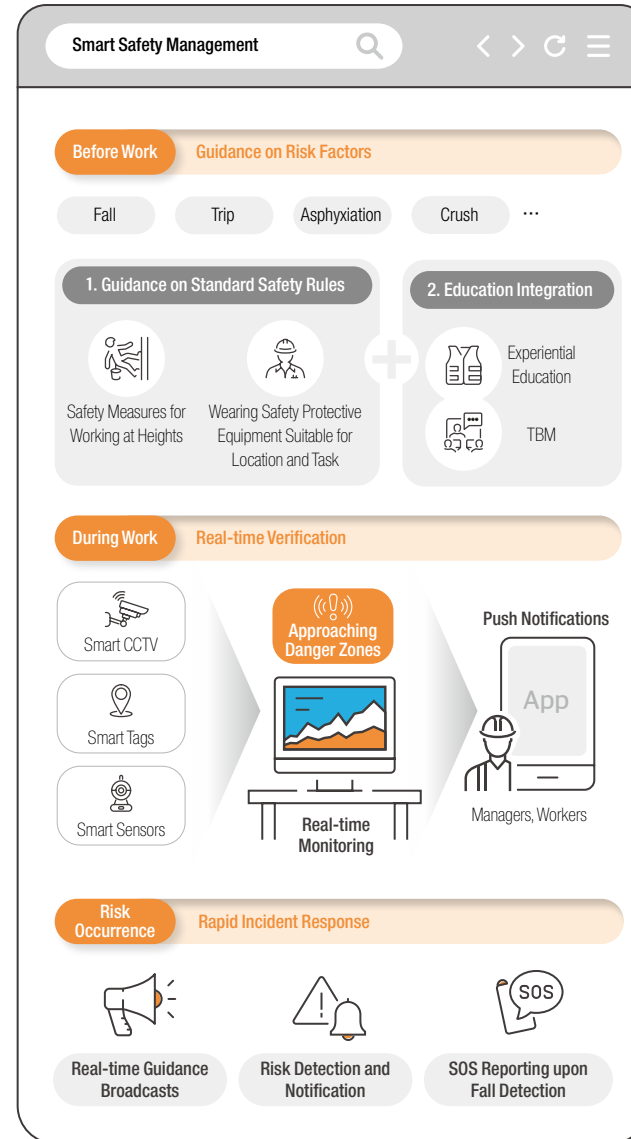


2022 Occupational Health and Safety Activities in Public Institutions Top Honors Award

from the Ministry of Employment and Labor (July 2022)



Smart Safety Management Initiatives Status



Smart Infrastructure Expansion

- Construction Sites**
 - Expansion of Smart Construction Safety Centers* (for all sites with a budget of over KRW 50 billion)
 - Real-time video surveillance through worker tags, mobile CCTV, etc.
 - Expansion of the mandatory adoption of smart safety equipment (beyond legal standards)
 - (Law) KRW 30 billion, (Internal) 2021 KRW 20 → 2022 KRW 5 billion or more workplaces
 - Direct support for small-scale construction sites (KRW 5 billion or less)
- Subcontracted Sites**
 - Construction of an integrated smart safety management platform is in progress (including mobile, to be completed by '25)

Cases

Smart Safety Control Center	Wireless Multi-Gas Concentration Measuring Devices (Ball Type, Wearable Type)	
Construction Safety Center (Unmun)	Mobile CCTV	Smart Safety Helmets

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
 - Talent Management
 - Win-win Partnerships with the Community
 - Shared Growth
 - Health & Safety Management
 - Information Security and Personal Information Protection
- GOVERNANCE
- BUSINESS
- APPENDIX

Information Security and Personal Information Protection



80.97 points

Information Security Management Condition
(Public Institutions Average: 75.47 points)
National Intelligence Service (2022)



Achieved the highest grade (S) for four consecutive years

Assessment of Personal Information Management Level in Public Institutions (2022)

Information Protection Promotion System

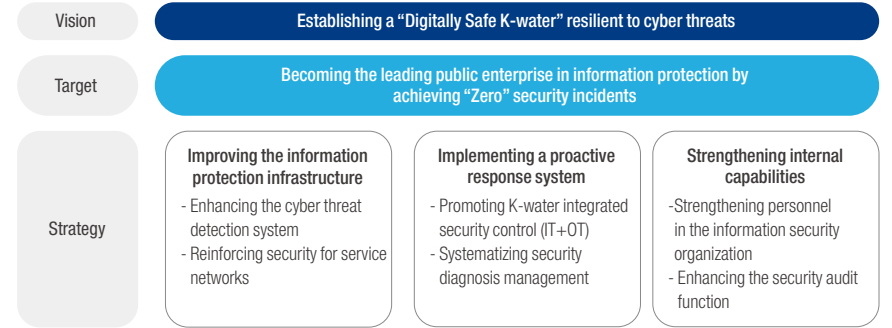
Information Security Promotion System and Strategy

In December 2021, K-water established the Information Security Department, dedicated to safeguarding information, to create a secure digital environment amid the rapid pace of digital transformation. Recognizing a notable increase in hacking attacks targeting infrastructure, the Corporation acknowledges the growing importance of infrastructure protection. To proactively address all cyber threats, K-water is expanding the scope of security monitoring from information systems to control systems. Additionally, efforts have been made to enhance employees' awareness of information security, including operating an in-house information security study group, organizing Information Protection Day events, and conducting online training for all employees. In recognition of its enhanced security level, K-water received a commendation from the Minister of Science and ICT. Achieving a score of 82.71 in the 2022 National Intelligence Service's "Information Security Management Condition Evaluation," K-water surpassed the average score of public institutions by 10% (75.47). This level of performance is significantly above the public sector's average. Looking forward, we are committed to continuous efforts, including the establishment of an uninterrupted 24/7 integrated security control system covering both information and control systems, along with ongoing training initiatives for information security personnel, to further elevate the standard of information security.

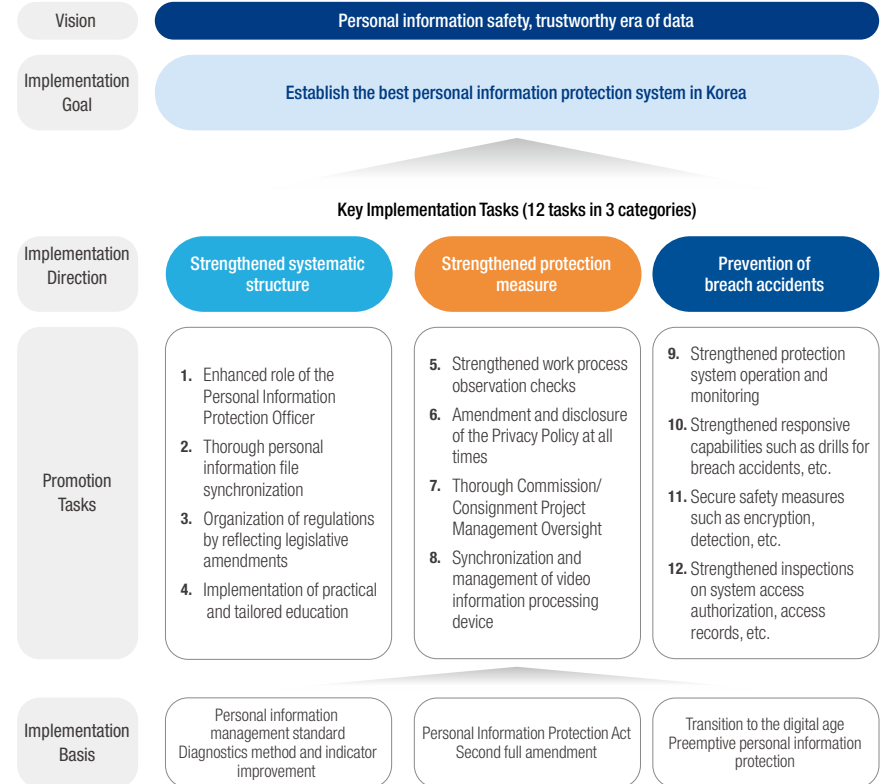
Personal Information Protection: Promotion System and Strategy

In its dedicated Information Security Department, K-water is responsible for safeguarding personal information, operating the country's highest level of personal information protection system. The Corporation is adapting to the era of digital transformation by actively enhancing diagnostic methods and indicators for personal information management, following the second comprehensive revision of the Personal Information Protection Act. These efforts have led to the achievement of the highest grade (S grade) in the 2022 Assessment of Personal Information Management Level in Public Institutions for four consecutive years.

Information Security Promotion System Diagram



Personal Information Protection Implementation Plan





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

Corporate Governance

Ethics and Compliance Management

Risk Management

BUSINESS

APPENDIX

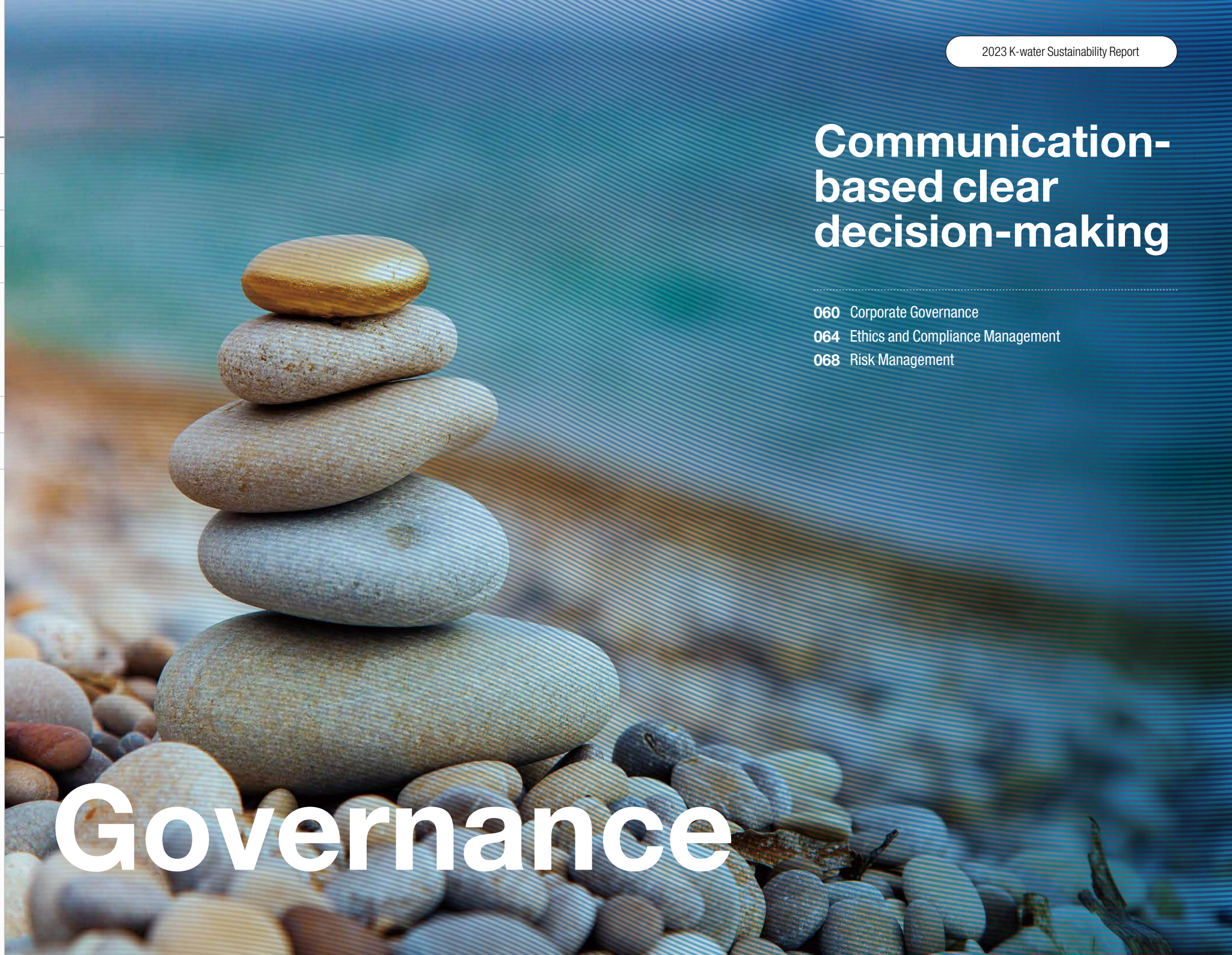
Communication-based clear decision-making

060 Corporate Governance

064 Ethics and Compliance Management

068 Risk Management

Governance





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

Corporate Governance

Ethics and Compliance Management

Risk Management

BUSINESS

APPENDIX

Management Approach

Approach

Corporate sustainability is rooted in effective governance, encompassing the organizational structure and the individuals shaping the organization. Transparent decision-making and dedication to compliance and corporate ethics among employees build trust and elicit support from stakeholders. Cultivating a corporate culture grounded in integrity and fairness not only enhances internal and external corporate value but also serves as a driving force for business and growth. Additionally, as a public enterprise, it is crucial to safeguard the lives and safety of the people by identifying risk factors in the overall business environment and enhancing the risk management system to address them efficiently.

Plan

Promoting a culture of ethical management

Enhancing employee awareness to prevent conflicts of interest

Performance

<p>BOD attendance</p> <p>Non-executive director attendance rate 97% (2022)</p> 	<p>First time in the Korean public sector "Workers-Board of Directors Participation System" operated</p> <p>Introduction of the Labor Director System (June 2023)</p> 	<p>Lead corruption risk management system</p> <p>First organization to receive the K-CP certification from the Anti-Corruption and Civil Rights Commission</p> 	<p>ZERO corruption</p> <p>External integrity 97.2 points</p> 	<p>Operation of the disaster management system</p> <p>Ministry of the Interior and Safety, Selected as an Excellent Institution in the Top Three Disaster Evaluations (2022)</p> 
---	--	---	---	---

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE**
 - Corporate Governance
 - Ethics and Compliance Management
 - Risk Management
- BUSINESS
- APPENDIX

Sound Governance

Composition of the Board of Directors

Board of Directors Composition Status

As of November 2023, the K-water Board of Directors comprises seven executive directors, including the president, and eight non-executive directors, including one labor director, making a total of 15 members. In line with Article 21 of the “Act on the Management of Public Institutions,” the Chairman is selected from the non-executive directors to ensure the independence of the Board. Furthermore, the number of standing directors is maintained at less than one-half (1/2) of the total number of directors, including the president.

Appointment of Directors

K-water’s president, auditors, and non-executive directors undergo appointment procedures facilitated by the Executive Recommendation Committee, adhering to the guidelines outlined in the “Act on the Management of Public Institutions.” This approach aims to enhance the leadership’s qualifications and expertise while ensuring the fairness of the appointment process. As trustees of the institution, outside directors are expected to fulfill their responsibilities from an independent and neutral standpoint, prioritizing the institution’s sound governance. Their appointment involves a meticulous evaluation based on specific criteria, including expertise in respective fields and a commitment to practicing integrity and ethical management. To ensure the independence and diversity of the Board of Directors, we are actively working toward achieving a balanced representation in terms of geographical location, expertise, and gender among outside directors.



Category	Name	Gender	Term	Position	Major Career
Executive Director	Yun Seog-dae	Male	Jun. 19, 2023 – Jun. 18, 2026	CEO	<ul style="list-style-type: none"> Senior Managing Director at Koscom Corporation Administrator of the 17th Senior Presidential Secretary for Political Affairs
	Lee Sam-gyu	Male	Nov. 14, 2023 – Nov. 13, 2025	Audit Committee Member	<ul style="list-style-type: none"> Outside Director and Chairman of the Board of Directors at AK Holdings, Inc., Senior Vice President at KDB Daewoo Securities, Vice President at the Korea Development Bank
	Koo Ja-young	Female	Oct. 30, 2023 – Oct. 29, 2025	Planning Department Director	<ul style="list-style-type: none"> Head of the Han River Weir office Branch Director of the Gunwi Dam Human Resource Management Department Head
	Ryu Hyung-joo	Male	Feb. 22, 2022 – Feb. 21, 2024	Management Division Director	<ul style="list-style-type: none"> Division Director of the Nakdonggang River Basin Office Planning and Coordination Department Head Future Strategy Department Head
	Jang Byeong-hoon	Male	Oct. 30, 2023 – Oct. 29, 2025	Director of the Water Resources and Environment Division	<ul style="list-style-type: none"> Division Director of the Geumgang River Basin Office Head of the Chungbuk Regional Collaboration Office
	Moon Sook-joo	Male	Oct. 30, 2023 – Oct. 29, 2025	Director of the Water Supply Division	<ul style="list-style-type: none"> Head of the Hanggang River Water Supply Service Center Head of the Water Resources Operations Department, Chungju Branch
	An Jeong-ho	Male	Mar. 3, 2022 – Mar. 2, 2024	Green Infrastructure Division Director	<ul style="list-style-type: none"> Digital Transformation Division Director Head of the Technology Planning Department Head of Engineering Department
Non-executive Director	Hwang Seok-tae	Male	Sep. 13, 2022 – Sep. 12, 2024	Non-executive Director, Chairman of the Board of Directors	<ul style="list-style-type: none"> Collaboration Professor, Division of Life Sciences, Korea University Living Environment Policy Department Head, Climate Change Policy Director, Air Quality Policy Director, Ministry of Environment
	Kwon Ji-hyang	Female	Mar. 7, 2022 – Mar. 6, 2024	Non-executive Director	<ul style="list-style-type: none"> Professor at the Department of Civil and Environmental Engineering, Konkuk University National Water Management Committee Member Vice President of the Korean Society on Water Environment
	Noh Jun-hwa	Male	Feb. 7, 2023 – Feb. 6, 2025	Non-executive Director	<ul style="list-style-type: none"> Professor at the Department of Business Administration (Accounting), Chungnam National University National Tax Service International Reviewer Chairman of the Accounting Audit Division of the Korean Accounting Association
	Bae Hoon	Male	Feb. 7, 2023 – Feb. 6, 2025	Non-executive Director	<ul style="list-style-type: none"> Vice President, Namdo Future Development Institute Chairman of the Peaceful Unification Rainbow Movement Council Advisory Member of the Peaceful Unification Advisory Council
	Hong Jong-gi	Male	Feb. 7, 2023 – Feb. 6, 2025	Non-executive Director	<ul style="list-style-type: none"> Advisory Member of the 20th Presidential Transition Committee Candidate for the 21st National Assembly (Suwon City Government, Gyeonggi Province) Attorney at the Samsung Electronics Legal Department
	Kim Myeong-yeon	Male	Jun. 14, 2023 – Jun. 13, 2025	Non-executive Director	<ul style="list-style-type: none"> Chairman of the Hope to the Future Forum Member of the 19th and 20th National Assembly (Ansan Danwon A, Gyeonggi-do) Secretary General of the United Future Party
	Jo Deok-jun	Male	Jun. 14, 2023 – Jun. 13, 2025	Non-executive Director	<ul style="list-style-type: none"> Associate Professor at the Department of Civil and Environmental Engineering, Dongseo University Auditor at the Korean Society of Hazard Mitigation Executive Member of the Korean Society of Civil Engineers, Busan-Ulsan-Gyeongnam Branch
	Kwon Yong-beom	Male	Jun. 14, 2023 – Jun. 13, 2025	Labor Director	<ul style="list-style-type: none"> Chairman of the K-water Labor Union Metropolitan Area Representative of the Federation of Korean Trade Unions and the Federation of Korean Public Industry Trade Unions Worked at K-water’s Planning and Coordination Office, Legal Affairs Office, and Audit Office

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
 - Corporate Governance
 - Ethics and Compliance Management
 - Risk Management
- BUSINESS
- APPENDIX

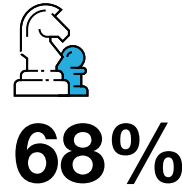
Board of Directors Operation

Operating a Transparent Board of Directors

K-water has improved its operational processes and expanded information disclosure both internally and externally to ensure a more transparent operation of the Board of Directors. The Corporation has optimized its operational procedures to facilitate two-way communication, enabling discussions on Board agendas. This includes gathering opinions from various stakeholders and providing feedback to the Board of Directors based on these collected opinions. Starting from February 2022, there has been an expansion in information disclosure as major comments and reflections on management proposals from preliminary Board deliberations are now disclosed in management disclosures. The performance and outcomes of various committees are also shared through preliminary information announcements. To minimize the information gap between executives and employees and address potential information asymmetry, the main agenda and recommendations of the Board of Directors are now made public through the Board of Directors portal. Through this, we aim to enhance internal access to information related to the Board of Directors, increase employee awareness of the Board's role, and ensure transparency in its operation by strengthening the understanding of management status and self-inspection functions.

Board of Directors Operation Status

In 2022, K-water's Board of Directors held a total of 16 meetings to discuss and make decisions on crucial matters for the company. The Corporation ensures that Board members have sufficient time to review agenda items in advance, fosters well-informed decision-making by arranging visits to business sites related to agenda topics, and verifies the implementation of deliberation outcomes to ensure the Board operates effectively. As a result, the attendance rate at Board meetings in 2022 reached 97%, the incorporation rate of management suggestions was 68%, and the average number of management suggestions during meetings increased to 8.9, compared to 2021.



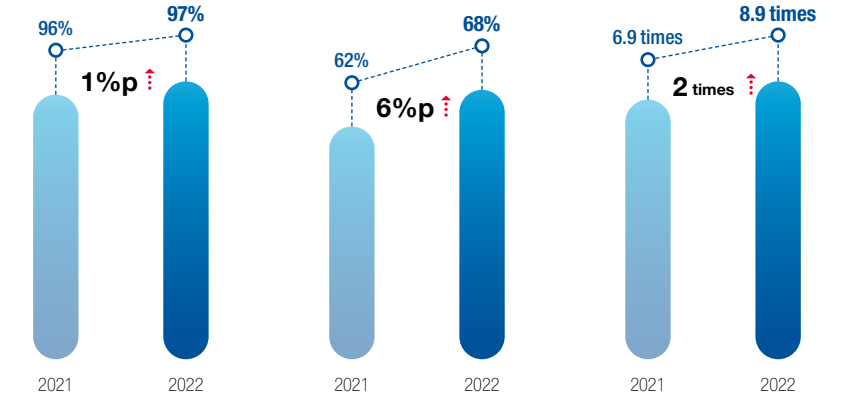
Management Suggestions Incorporation Rate



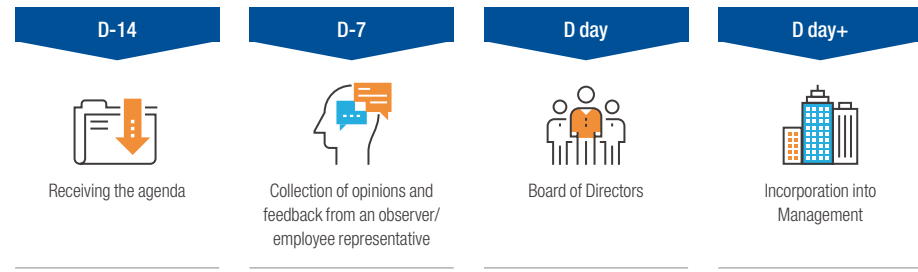
Board of Directors Operation Status



* Non-executive director attendance rate



Board of Directors Operation Process Improvement





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

- Corporate Governance

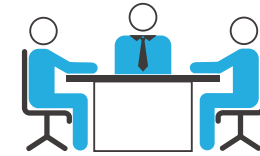
- Ethics and Compliance Management

- Risk Management

BUSINESS

APPENDIX

BOD Key Agenda and Attendance Rate



Session	Date	Main Agenda	Attendance Rate (%)
1	January 2022	<ul style="list-style-type: none"> Composition of the Executive Recommendation Committee (Draft) 	100
2	February 22, 2022	<ul style="list-style-type: none"> Amendment to the CEO's Performance Agreement (Draft) Revision of Executive Compensation Regulations (Draft) 2021 Audit Results Results of the 17th Collective Agreement 	87.5*
3	February 2022	<ul style="list-style-type: none"> Promotion Plan for Rate Reduction on Dam Water and Metropolitan Water due to COVID-19 	100
4	March 2022	<ul style="list-style-type: none"> Fiscal Year Closing and Surplus Disposal (Draft) 	100
5	April 26, 2022	<ul style="list-style-type: none"> Contribution to the Cooperative Fund for Large, Medium, and Small Businesses (Draft) Results Report on the Environmental Dispute Resolution Related to the 2020 Flood Damage Promotion Plan for Additional Rate Reduction for Dam Water and Metropolitan Water due to COVID-19 	100
6	June 28, 2022	<ul style="list-style-type: none"> Appointment of Non-executive Auditors for the Audit Committee (Draft) Medium to Long-Term (2022–2026) Financial Management Plan (Draft) Composition of the Executive Recommendation Committee (Draft) Improvement Project for the Management Building of Soyanggang Dam Branch (Draft) 	100
7	July 26, 2022	<ul style="list-style-type: none"> Amendment to the Board of Directors Operating Regulations (Draft) Revision of the K-water Articles of Incorporation (Draft) Amendment to the Executive Recommendation Committee Operating Regulations (Draft) 2021 Public Institution Management Performance Evaluation Results 2021 Internal Management Performance Evaluation Results 	100*
8	August 2022	<ul style="list-style-type: none"> Composition of the Executive Recommendation Committee (Draft) 	100

Session	Date	Main Agenda	Attendance Rate (%)
9	August 30, 2022	<ul style="list-style-type: none"> Contribution to the Employee Welfare Fund for the Year 2022 (Draft) Implementation and Investment Plan for Establishing a Special Purpose Company (SPC) for the Imha Dam Floating Photovoltaic System Project (Draft) Audit Results for the First Half of 2022 Accounts Closing for the First Half of the Fiscal Year 2022 	100
10	August 2022	<ul style="list-style-type: none"> Changes to the Operation Plan of the Metropolitan Water Autonomous Reduction Demand Adjustment System (Draft) 	100
11	October 25, 2022	<ul style="list-style-type: none"> Medium to Long-Term (2023–2027) Management Goals (Draft) Composition of the Executive Recommendation Committee (Draft) Establishment of Guidelines for the Management of Financial Assets (Draft) Improvement Project for the Hapcheon Dam Management Building (Draft) 	87.5
12	November 22, 2022	<ul style="list-style-type: none"> Medium to Long-Term (2023–2027) Strategic Management Plan (Draft) 2022 Results Report of Regular Institutional Audits by the Board of Audit and Inspection Results of the 2021 National Audit Results and Requests for Improvement 	100*
13	November 2022	<ul style="list-style-type: none"> Amendment to the Organizational Regulations (Draft) 	100
14	December 2022	<ul style="list-style-type: none"> Amendment to the Salary Regulations (Draft) Amendment to the Welfare Regulations (Draft) 	100
15	December 27, 2022	<ul style="list-style-type: none"> 2023 Safety Management Responsibility Plan (Draft) 2023 Budget (Draft) 2023 Operation Plan (Draft) 2023 Borrowing Plan (Draft) Revision of Executive Compensation Regulations (Draft) Utilization of the 2022 Reserve Funds (Management Evaluation Performance Bonus) 	100*
16	December 2022	<ul style="list-style-type: none"> Amendment to the Organizational Regulations (Draft) 	100

*Observation by a Worker Representative Recommended by the Labor Union

**INTRODUCTION****ENVIRONMENTAL****SOCIAL****GOVERNANCE**

- Corporate Governance
 - Ethics and Compliance Management
 - Risk Management

BUSINESS**APPENDIX****Board of Directors Performance Evaluation**

K-water conducts regular inspections and monitoring of the Board of Directors' performance indicators on a monthly, quarterly, and annual basis. To strengthen the correlation between executive compensation and management performance, we have implemented a performance-based salary system. The compensation package for executive directors includes a basic salary, performance bonus, and severance pay, with the performance bonus determined by the outcomes of annual management or job performance evaluations. The payment rate for the head of the institution's performance bonus aligns with the outcomes of the management performance evaluation, with the government establishing the limit and payment rate. Non-executive directors receive compensation in the form of an activity fee for researching the Board agenda and business development, along with an attendance allowance when participating in Board meetings. The activity fee and attendance allowance adhere to the "Guidelines for Remuneration of Executives of Public Corporations and Quasi-Governmental Institutions)."

Committees within the Board of Directors

After declaring ESG management in March 2021, K-Water established an ESG Management Committee within the Board of Directors to deliberate on ESG management plans and review detailed task implementation results. The operating regulations of K-Water's ESG Management Committee explicitly outline the reporting and resolution items handled by the committee. Currently, the ESG Management Committee consists of five non-executive directors and one director from the planning department, totaling six members. It convenes once a quarter, with additional meetings scheduled as needed, to enhance the Corporation's ESG capabilities and expertise. Additionally, the Corporation operates an audit committee as its independent internal audit department, addressing current issues related to the organization's finances, accounting, and other internal controls, as well as making crucial decisions. The audit committee actively appoints accounting and financial experts, outlining the criteria in the operating regulations.

Introduction of the Labor Director System

In 2019, K-water became the first public institution in Korea to implement the "Workers-Board of Directors Participation System." From 2021 to 2022, we operated a joint labor-management task force (TF) to prepare for the introduction of the labor director system. The TF held regular meetings, built a consensus on system operation through joint training of labor and management officials, analyzed and advised on cases from other organizations, and established the foundation for the stable performance of labor directors' duties. By July 2022, we revised relevant regulations, including procedures for recommending labor director candidates, union rules, and Board regulations, fulfilling the conditions for appointment, which involved providing training related to the duties and performance of labor directors. In February 2023, the Executive Recommendation Committee was formed, and in June 2023, a labor director was appointed.

Board of Directors Compensation Status

(Unit: KRW million)

Category	2020	2021	2022
Executive Auditor	167.6	176.6	154.0
Executive Director	157.8	171.6	156.1
Non-executive Director	29.7	29.6	29.3
Highest Compensation Amount (A)	211.9	231.9	211.7
Average Employee Compensation (B)	81.6	83.7	82.9
Compensation Ratio (A/B, %)	2.59	2.77	2.55

Labor Director System Implementation Process

Workers-Board of Directors Participation System Operation
Jan. 2019



Joint declaration of the introduction of the Labor Director System
Dec. 2020



Reflected collective agreement
Dec. 2021



Reached an agreement to amend corporate regulations
Jul. 2022



Composition of the executive recommendation committee
Feb. 2023



Initial Executive Recommendation Committee
Mar. 2023



Secondary Executive Recommendation Committee
Apr. 2023



Appointment of Labor Director
Jun. 2023



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE**
 - Corporate Governance
 - Ethics and Compliance Management
 - Risk Management
- BUSINESS
- APPENDIX

Ethics and Compliance Management

Ethics and Compliance Management System

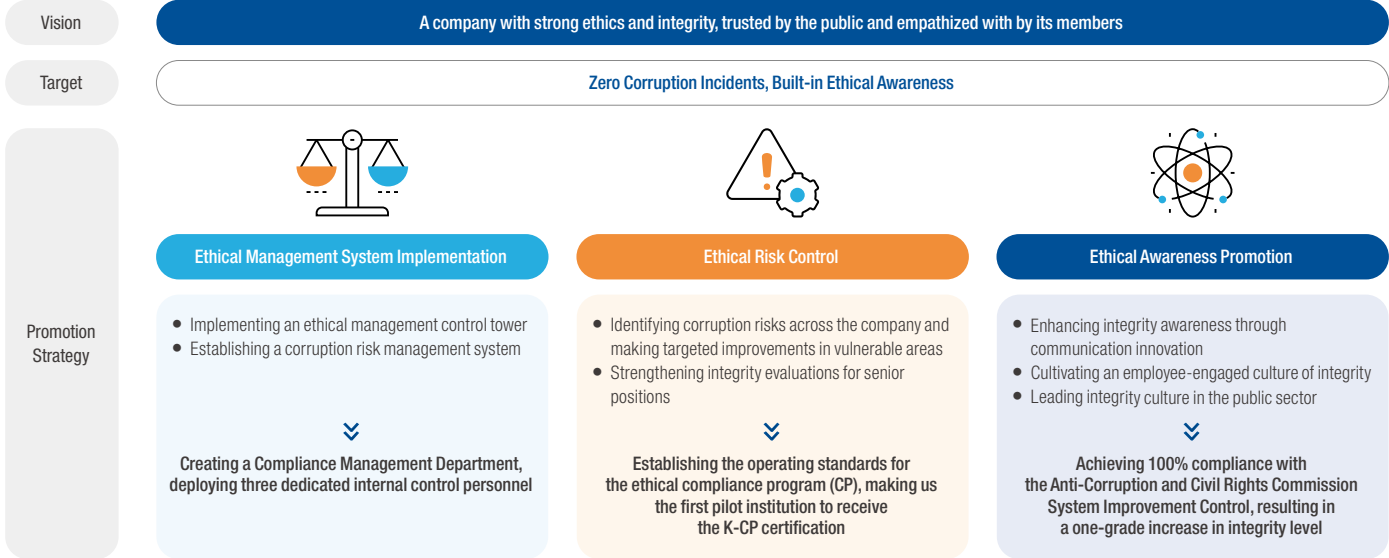
Ethics and Compliance Management System Promotion Strategies

K-water operates with an ethics and compliance management system, not only prioritizing economic and legal responsibilities but also emphasizing ethical values in line with social norms. The goal is to cultivate a culture of integrity and ethics throughout the company. The Corporation appointed the Chairman of the Integrity and Ethics Committee, the highest decision-making body in this realm, as the CEO to reinforce its dedication to ethical management. Additionally, we established a Compliance Management Department within the Management Innovation Office. This initiative resulted in creating an internal control hub, helping to restructure the organization and encourage the adoption of corporate ethics

and respect for human rights throughout the company. Moreover, we have implemented internal systems such as the Employee Code of Ethics Agreement and integrity assessments for upper-level officials to actualize ethical management. As the Chairman of the Public Institution Integrity Society Council, the Corporation takes the lead in promoting a culture of integrity in the public sector. The operation of the Integrity Citizen Auditor System boosts public participation, and through active involvement in integrity campaigns and collaborative initiatives with local communities, K-water consistently strives to nurture a culture of ethical management.

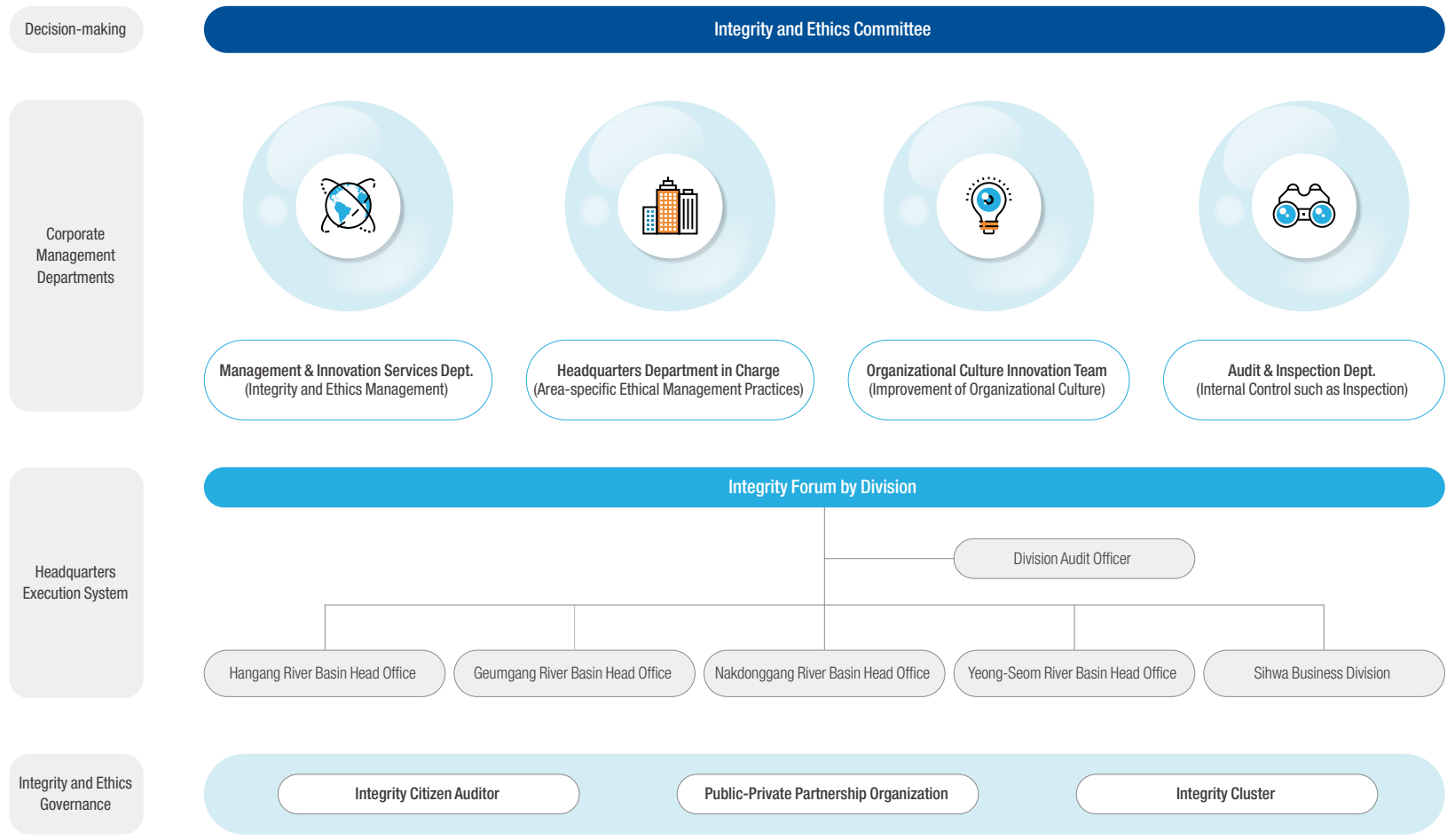


Ethics and Compliance Management System



- INTRODUCTION**
- ENVIRONMENTAL**
- SOCIAL**
- GOVERNANCE**
 - Corporate Governance
 - Ethics and Compliance Management
 - Risk Management
- BUSINESS**
- APPENDIX**

Ethical and Compliance Management Organizational Chart



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

Corporate Governance

- Ethics and Compliance Management

Risk Management

BUSINESS

APPENDIX

Establishment of CP Operation Standards for Integrity Ethics Management

K-water recognizes that ethical management is both basic and essential in order to practice transparent and clean management trusted by the people. Accordingly, the corporation is carrying out ethical management by adding the CP operation standard for integrity ethics management in October 2022 to the existing code of ethics, code of conduct for executives and employees, and rules for operating the employee job integrity contract system. The CP operation standard is for the responsibility of public institutions and the practice of integrity ethics management. By preparing procedures such as creating an environment for integrity ethics management, mapping of corruption risks, and management of corruption risks, the corporation aims to comply with anti-corruption laws and manage corruption risks effectively. As the first pilot organization certified by the National Anti-Corruption and Civil Rights Commission, the corporation is taking the lead in introducing a corruption risk management system and identifying corruption risks that may occur in business at the enterprise level to control risk factors. The corporation has eliminated risk factors in advance by developing a checklist for 219 tasks classified as high-risk groups and reflecting them in the triple inspection system and audit plan consisting of the department in charge-general department-audit office. Through this corruption risk management, we have achieved zero corruption and 97.2 points in external integrity.



7,054 persons

Compulsory training for all executives and employees of 2022 institutions to prevent corruption

639 persons

2022 New and Prominent Persons Compulsory Education for Prevention of Corruption

Internalization of Integrity Ethics Management

Through internal and external diagnosis, K-water resolved conflicts arising from differences in perceptions among various members and increased internal integrity through sincere communication. The corporation conducted a total of 66 in-depth interviews with executives and employees and external communication experts for about 4 months from May to September 2022. The group interview for improving integrity was conducted in depth for 2 hours by organizing a total of 500 employees into groups of 8 people by series, job, and job level. In addition, in order to spread the culture of integrity, the corporation operates the Integrity Cultural Festival “In-

tegrity, Baro, Now” in which family members of executives and employees participate, the Department Head’s Integrity Quiz Contest “Department Head Will Buy,” and the Integrity Golden Bell in which all employees participate, and through these efforts, the internal integrity level exceeded the average of public companies as the awareness of internal integrity improved. In addition, the corporation strives to raise the awareness of the integrity of executives and employees by conducting mandatory education on preventing corruption for all executives and employees, including CEOs, every year.

Current Status of Implementation of Compulsory Corruption Prevention Education

All employees of institution	2021	2022
Number of people eligible for education (people)	6,554	7,385
Employees who training completion (people)	6,091	7,054
Training completion rate (%)	92.9	95.5

Target for face-to-face education (Attendance of head of institution)

High-ranking official	2021	2022
Number of people eligible for education (people)	7	6
Employees who training completion (people)	7	6
Training completion rate (%)	100	100

New/promoted employees	2021	2022
Number of people eligible for education (people)	691	684
Employees who training completion (people)	667	639
Training completion rate (%)	96.5	93.4

INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

Corporate Governance

- Ethics and Compliance Management

Risk Management

BUSINESS

APPENDIX

Conflict of Interest Prevention

Before the enforcement of the Conflict of Interest Prevention Act, K-water conducted a comprehensive assessment of conflict of interest risks throughout the organization. We pinpointed vulnerable areas and mitigated illicit risks associated with conflicts of interest in subsidiaries. Recognizing the potential for conflicts arising from employees concurrently serving in investment companies, we revised pertinent regulations. In domestic subsidiaries, non-executive directors of investment companies were completely replaced with unrelated employees. In overseas operations, employees were permitted to serve as executives of investment companies, taking into account business risks. These proactive measures effectively averted conflicts of interest, ensuring a robust business operation plan and achieving a zero-conflict status with subsidiaries. This accomplishment was acknowledged as an excellent case by the Anti-Corruption and Civil Rights Commission. Furthermore, the Corporation organized the Integrity Golden Bell quiz 12 times, targeting all employees to assess their understanding and awareness of conflict of interest prevention laws and regulations. In the 12th round, the correct answer rate reached 82%, marking a 24% increase from the 58% recorded in the 1st round. However, awareness among members of the MZ generation (Millennials and Gen Z) remained relatively low at 62%. In response, we intend to implement integrity initiatives tailored to the characteristics of each generation and maintain ongoing efforts to enhance awareness among employees regarding conflict of interest prevention.

Reporting corruption

At K-water, we have established internal corruption public interest reporting channels with the goal of eradicating both structural and covert corruption within our organization, cultivating a healthy and ethical public service environment. These reporting platforms are accessible to everyone and are independently overseen by an external organization to protect the identity of those reporting internal corruption. We have implemented security measures, such as utilizing technology to guarantee anonymity by not retaining the informant's IP information. Moreover, should an employee who reported a corrupt act be found to have been involved, disciplinary immunity is possible, and breach of confidentiality obligations does not apply. We offer various reporting methods, including postal mail, telephone, business trips, the company's website, and in-person visits, allowing individuals to report either anonymously or with identification. Following the receipt of a report, the audit office will communicate the investigation results to the reporter within 30 days, and such informant may raise objections within 7 days of notification.



Corruption Reporting Channel



The contents reported by employees are linked to the Korea Institute of Corporate Ethics (KBEI) site and processed anonymously, so the confidentiality of the reporter is fully guaranteed.

Category	Mode of Operation
Integrity Bamboo Forest	An online, one-on-one anonymous communication channel where concerns, complaints, reports, and inquiries can be shared without the fear of identity exposure during integrity-related processes and other related tasks
Talk Talk Collection	A platform for two-way, anonymous communication where opinions and suggestions on corporate issues and system improvements are collected, and if a majority agrees with the suggestions, the CEO confirms them, and the relevant department head directly responds
Concerns Consultation Counter	Anyone can seek counseling or report instances of rights violations (sexual misconduct, harassment). * Anonymity is guaranteed, and private investigations are conducted. (Internal) Rights & Interests Protection Portal: Top of Oasis-Protection-Report on Rights & Interests(External) External consultation and reporting channels are always open through specialized agencies entrusted with external reporting and counseling.
K-Whistle	A space to report employee misconduct anonymously and is managed by an external company to safeguard the whistleblower's identity, ensuring strict anonymity
Visiting Secret Special Report	Report all corruption activities through SMS, provided by an external consignment agency, accessible to all employees and external customers.
Safe Report Lawyer	To maintain confidentiality, the informant reports the misconduct to an external attorney, who then reports on their behalf while preserving anonymity.
Abuse of Power Damage Report Center	Anonymous or identified reporting on the Corporation's website regarding profit-driven practices by client agencies and individuals, as well as any unfair treatment at work
General Report Center by the Labor Union	Establishment of a Concerns Consultation Center within the labor union bulletin board to eradicate the culture of abuse of power and improve the organizational culture
Integrity Portal	The Integrity Portal reporting system from the Anti-Corruption & Civil Rights Commission is linked to K-water's website.

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
 - Corporate Governance
 - Ethics and Compliance Management
 - Risk Management
- BUSINESS
- APPENDIX

Risk Management

Corporate Risk Management

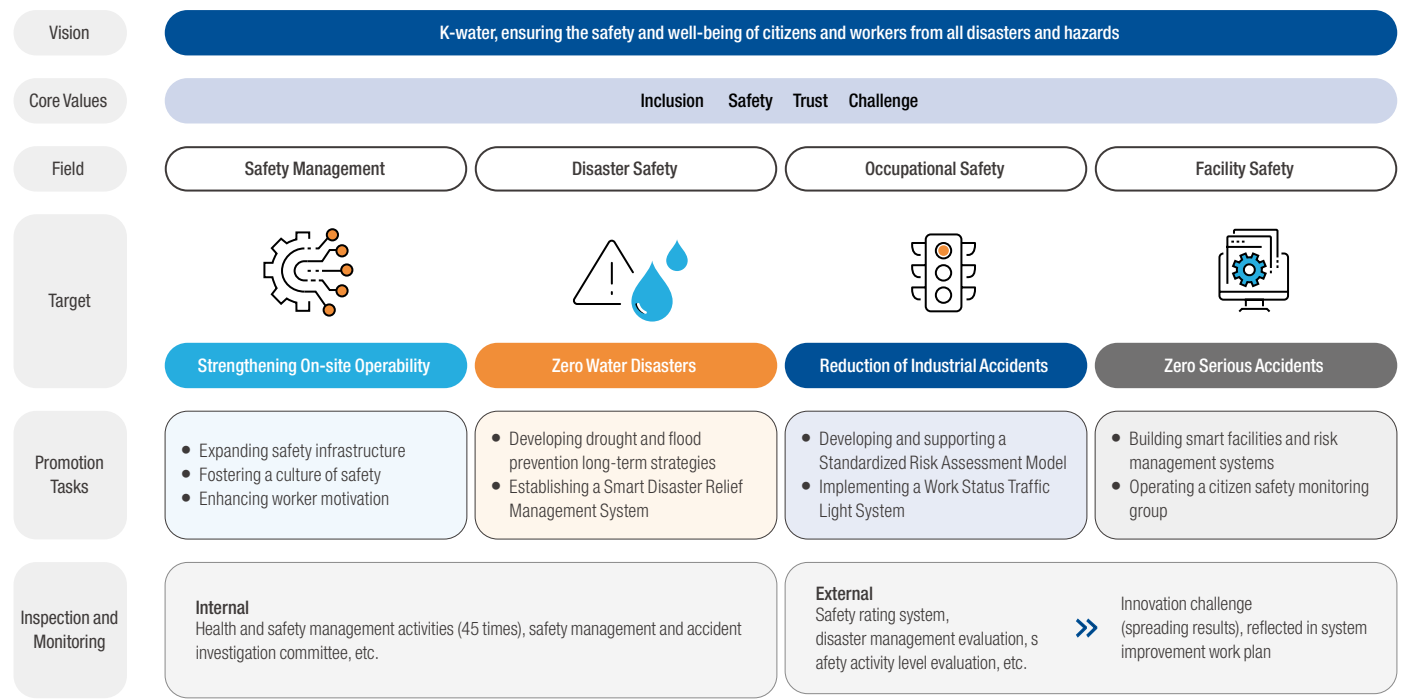
Disaster/Safety Management System

As the national water management organization, K-water has implemented and maintained a disaster management system, placing the utmost importance on protecting the lives and assets of citizens and employees against all potential disasters and hazards. Our core values of inclusion, safety, trust, and challenge underscore our commitment to creating a resilient and secure environment. January 2022 was marked by

a joint labor-management declaration of the K-water Occupational Health and Safety Management Charter, with the CEO emphasizing the importance of health and safety as our organization's top priority. In line with this commitment, K-water underwent a comprehensive transformation in its disaster and safety management system, emphasizing proactive prevention, voluntary participation, and the integration of digital and smart technologies. Clear objectives and promotion tasks were

established across multiple domains, including safety management, disaster safety, occupational safety, and facility safety. Throughout 2022, K-water enhanced internal and external inspections and monitoring by conducting 45 health and safety management activities, establishing a safety management and accident investigation committee, introducing a safety rating system, conducting disaster management evaluations, and assessing safety activity levels.

Disaster/Safety Management System Diagram



Zero serious accidents and water disasters, 25% reduction in industrial accidents
 Selected as an Excellent Institution in the Top Three Disaster Evaluations
 (Disaster Management Evaluation, National Core Infrastructure Evaluation, Safe Korea Exercise)

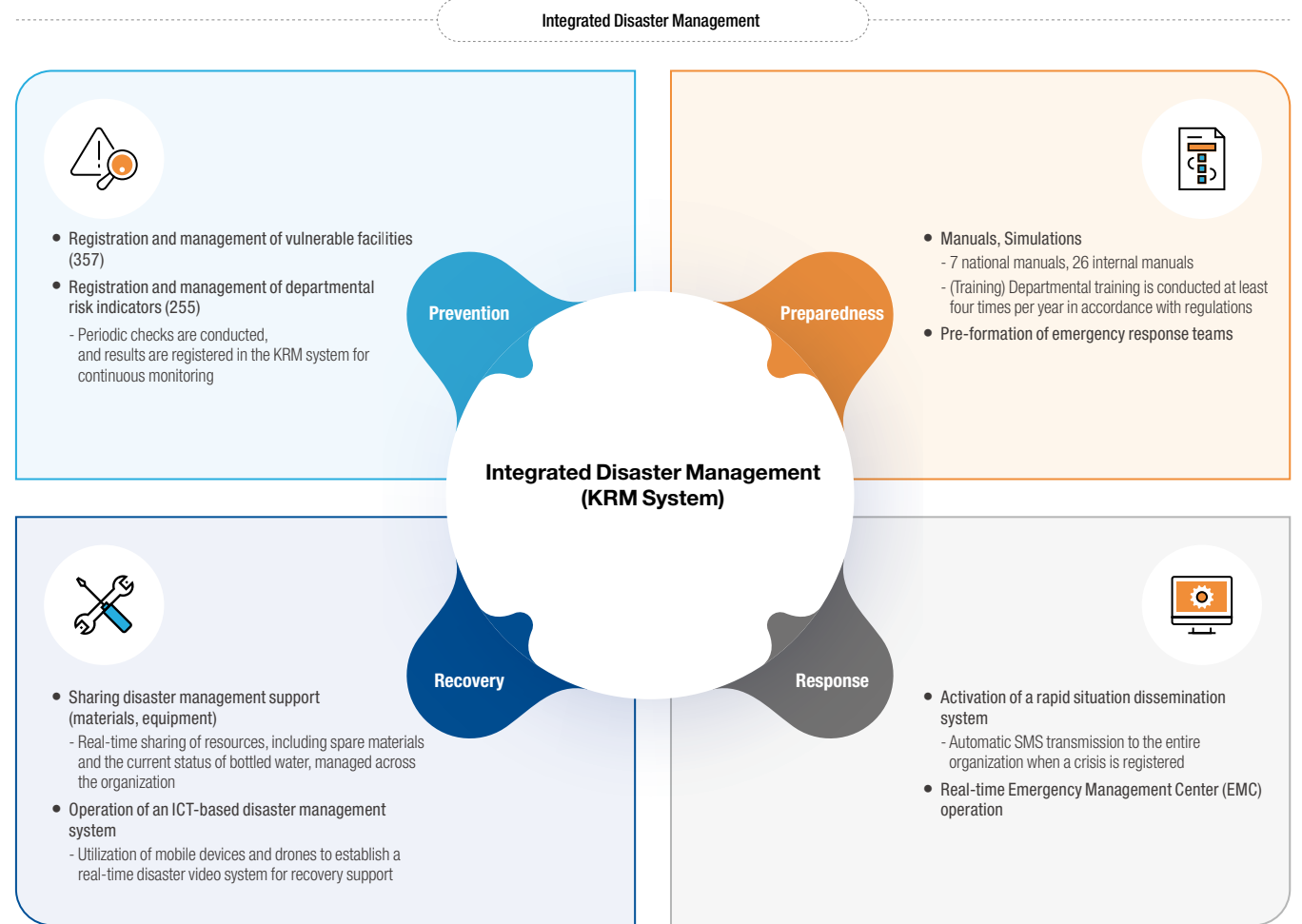


- INTRODUCTION**
- ENVIRONMENTAL**
- SOCIAL**
- GOVERNANCE**
 - Corporate Governance
 - Ethics and Compliance Management
 - Risk Management
- BUSINESS**
- APPENDIX**

As a result of these initiatives, we achieved Zero serious accidents, a noteworthy 40% reduction in accidents within the construction sector, and a significant 25% decrease in industrial accidents. This success has earned K-water recognition as an Excellent Institution in the Top Three Disaster Evaluations, encompassing Disaster Management Evaluation, National Core Infrastructure Evaluation, and the Safe K-Training.

KRM (K-water Risk Management) System

K-water has established and is operating the KRM (K-water Risk Management) system, focusing on integrated risk management during regular periods as well as effective response and recovery in the event of a disaster. The Corporation initially classifies 26 types of natural and social disasters directly impacting public safety, along with 7 types of management, media, and financial risks. Tailored strategies are then developed and implemented for each category. To minimize public damage during disasters, K-water is committed to maintaining constant readiness for disaster response by promptly addressing disasters, mastering recovery procedures, and ensuring smooth organic cooperation and collaboration among relevant organizations. In its role as a disaster management agency, K-water conducts Safe Korea Exercise for all types of disasters under its jurisdiction. Furthermore, following risk management regulations, the corporation conducts comprehensive crisis response simulations at the organizational level at least twice a year, with nearly 600 simulations across all departments to continually enhance disaster response capabilities.



National Disaster Preparedness Training Status

Category	2021	2022	2023
Training Type	Drinking Water Incidents	Drinking Water Incidents	Large-scale Water Quality & Drinking Water Incidents
Location	Hwasun Water Purification Plant	Wondong Water Intake Plant	Daecheong Dam + Cheongju Water Purification Plant





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

Water Resources Management

Innovative Growth Engine Management

APPENDIX

Linking Nature and People

072 Water Resources Management

077 Innovative Growth Engine Management

Business





- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS**
- APPENDIX

Water Resources Management
Innovative Growth Engine Management

Management Approach

Approach

The growth and advancement of the global water industry ecosystem are progressing as rapidly as the environmental shifts brought about by recent climate changes. Amidst the escalating environmental crisis, water, intricately linked to human life, has become an increasingly precious and indispensable resource. As a public enterprise entrusted with water management, it is crucial to safeguard the core value of water. Securing this fundamental value ensures that every citizen can have safe and convenient access to water. Equally important is strengthening our technological capabilities and driving initiatives to innovate within the water industry ecosystem.

Plan

- Expansion of Advanced Tap Water Purification Facilities Nationwide
- Expansion of Reservoir Dams to Alleviate Water Stress in Island Areas
- Diversification of Overseas Export Models such as the Digital Twin Water Management Platform
- Establishment of Ultrapure Water Platform Center

Performance

<p>Digital Twin Water Management</p> <p>Digital Twin Water Management Platform Launched Digital GARAM+</p>	<p>High-quality & smart Tap water supply system established</p> <p>Global water quality standards met by 99%</p>	<p>Semiconductor business's water deficit issue resolved</p> <p>Signed an MOU for supplying reused wastewater for semiconductor manufacturing</p>	<p>Led domestication of ultrapure water technology</p> <p>Localizing the ultrapure water Technology Establishment of plant</p>	<p>For 3 consecutive years as the Most Excellent In-house Venture Program</p> <p>Win the CES 2023 Innovation Award</p>
---	---	--	---	---

- Water Resources Management
- Innovative Growth Engine Management

Water Resources Management

Integrated Water Management

Smart Water Management (SWM)

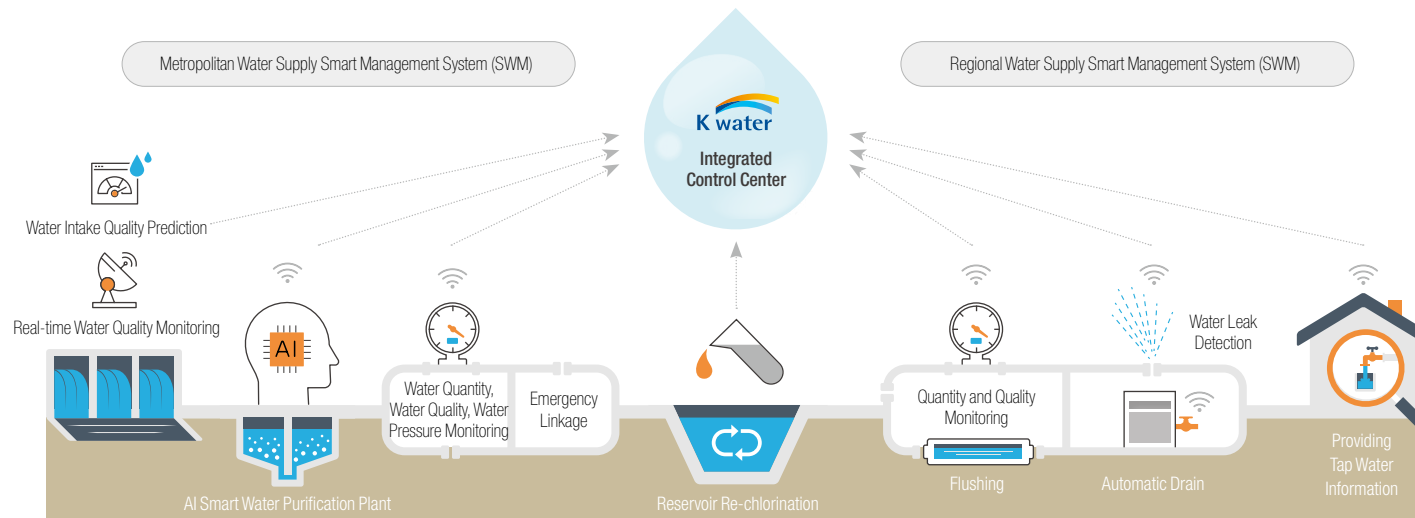
While tap water in South Korea meets excellent global quality and health standards, the drinking rate stands at only 49.4% due to a pervasive distrust in tap water. To address this issue and enhance public trust in tap water, we have developed a Smart Water Management System (SWM), focusing on strengthening water quantity and quality management throughout the entire tap water production and supply process. The Smart Water Management (SWM) system is an intelligent platform that oversees water information in real-time, leveraging information and communication technology across the

entire tap water supply process. Our goal is to establish a water supply system that consumers can trust and confidently use for drinking. To achieve this, we employ ten smart technologies to manage and monitor water quality, respond to crises, prevent recurrence, and ensure trust. Additionally, K-water is dedicated to providing clean and trustworthy tap water to the public. The introduction of the "Water Now" app is a testament to this commitment, delivering real-time water information to the public via smartphones, thereby enhancing accessibility to our services.

Water Now App



Smart Water Management System



10 Representative Smart Water Management Technologies

Water Quality Management	Chlorine Re-dispersion Facility
	Precision Filtration Device
Water Quality Monitoring	Automatic Water Quality Measurement Device
Crisis Response	Flushing Infrastructure
	Automatic (Remote) Drain
Recurrence Prevention	Small-scale Flow and Water Pressure Monitoring
	Smart Metering
	Real-time Water Pressure Gauge
Trust Enhancement	Smart Pipeline Facility Recognition System
	Tap Water Reassurance Service

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Digital Twin Water Management

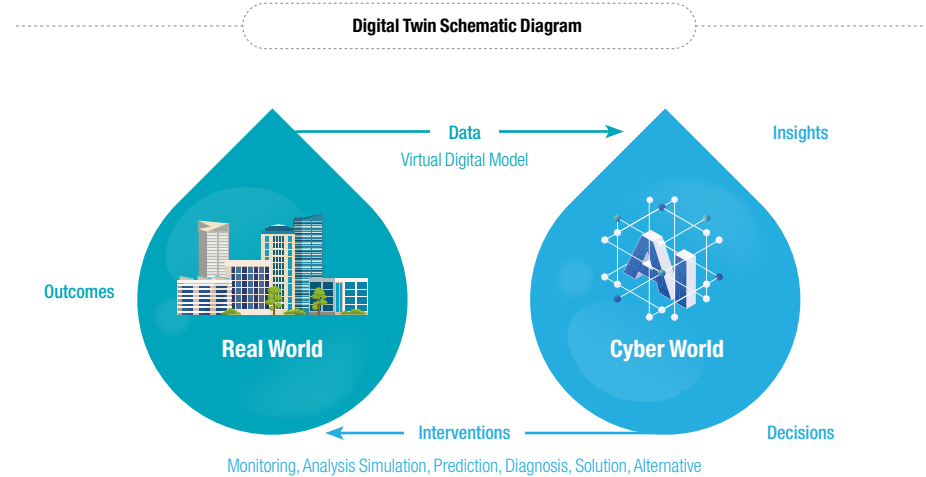
K-water is taking proactive measures to address potential risk factors arising from human errors and climate change, embracing cutting-edge smart technologies based on Industry 4.0. At the forefront of these technologies is the Digital Twin, a tool that mirrors the real world within a virtual digital space. This innovative system translates optimal solutions identified through simulations in the virtual realm into practical, real-world applications. In its commitment to fully leverage the digital twin technology, K-water introduced the water management platform "Digital GARAM+." This platform facilitates the acquisition of real-time data crucial for effective water resource management, ultimately reducing the likelihood of water-related disasters and enhancing the efficiency of dam operations. The platform takes into account various conditions, including hydrological status, conducting optimal analyses to predict ripple effects such as changes in water levels within dams and rivers as well as potential damages. This information is invaluable for making well-informed decisions regarding dam operations, particularly during flood seasons and

rainfall forecasts. By enhancing flood response capabilities and proactively addressing changes in dam water levels due to rainfall and downstream river conditions the Corporation aims to prevent fundamental damages. In 2021, we took a significant step forward by constructing a pilot version of the world's first digital twin water management platform in the Seomjingang River basin. The success of this initiative encouraged us to expand the platform's reach, covering the Hangang River, Geumgang River, Nakdonggang River, and Yeongsangang River basins in 2022. Building on these accomplishments, our goal is to implement an advanced digital water management system nationwide in South Korea by 2024. Additionally, we are strategically leveraging our expertise to lead the global arena in digital water management technology. This involves initiatives like exporting our digital twin water management technology worldwide through the establishment of a global technology cooperation system.

Expansion of AI-Digital Twin-based Smart Water Purification Plants

K-water is at the forefront of digitally transforming water facility operations and management in response to dynamic shifts in water quality due to climate change, human errors, and emergencies like pandemics. To achieve this, we have introduced South Korea's first AI-based Smart Water Purification Plant, leveraging digital twin technology. A smart (AI) water purification plant is an intelligent water purification plant that autonomously oversees the water purification process and optimizes the energy and main water supply facilities at business sites for enhanced operational stability. In April 2022, a successful pilot project was completed at the Hwaseong Water Purification Plant, showcasing a cost-saving effect of KRW 240 million in power expenses. The next step involves expanding this initiative to 43 metropolitan

water purification plants by 2024. Upon completion, annual operating costs for water facilities are projected to decrease by KRW 9.5 billion. Additionally, we are developing a forward-thinking water supply management system that integrates data and facilitates objective decision-making through simulation-based predictions, thanks to the ongoing pilot construction of the digital twin water purification plant at the Hwaseong Water Purification Plant. For real-time accident monitoring, such as pipe damage, K-water has pioneered the first AI Pipeline Damage Monitoring System in Korea. Following its successful deployment at four business sites, it detected two instances of pipe damage. Our goal is to digitally revolutionize water management by expanding the adoption of the AI Pipeline Damage Monitoring System throughout the organization by 2023.



AI – Digital Twin Water Treatment Plant (Hwaseong Water Purification Plant)



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

- Water Resources Management
- Innovative Growth Engine Management

APPENDIX

Water Information Portal Service (MyWater)

K-water has introduced a water information portal service designed to consolidate water-related data from various fields and organizations, offering valuable insights to the nation and its citizens. This service is tailored to users by identifying their access area, ensuring easy access to a variety of information, including educational materials on water history, drinking water supply routes, residential tap water quality, fees, and water flow rates. Given the substantial amount of data involved, we have developed a systematic data and content management system, including log management functions, to efficiently handle data and facilitate prompt updates to the portal. Moreover, we are continuously making efforts to expand data and enhance user convenience by broadening the scope of water quality information offered through the Water Information Portal Service, extending its coverage from the corporation to local governments nationwide.

Main Contents of the Water Information Portal Service

Category	Key Information
Water and Life	Water Knowledge, Educational Information
Operational Status	Real-time Data such as Water Quantity and Water Quality
Statistical Information	Domestic and World Water Statistics
Expert Information	Technological trends, relevant websites, etc.
Water Disaster Status	Drought, flood, green algae, etc.
Community	Bulletin boards, Q&A, etc

Water Information Portal Service



Drinking Water Quality Safety

Establishment of a High-quality Tap Water Management System

K-water has successfully achieved a 99.9% compliance rate with global water quality standards by implementing a high-quality and smart tap water supply system, ensuring the public has access to reliable tap water. Through improvements in hygiene management facilities throughout the entire tap water supply process and the establishment of a food hygiene level management manual, we have obtained the Food Safety Management Systems (ISO 22000) certification for all 39 metropolitan water purification plants. Furthermore, K-water has developed a tailored ISO 22000 standard model and a certification management system specifically for water purification plants to uphold certification sustainability. To address the increasing challenges related to abnormal water quality, we are actively expanding and implementing advanced water purification facilities nationwide. Advanced water purification facilities refer to water purification facilities that employ additional processes, such as activated carbon adsorption and ozone treatment, to eliminate taste and odor-causing substances, and trace organic impurities that may persist through conventional water purification methods. We have identified 23 water purification plants for introduction based on necessity and priority, with the initial implementation targeted at 12 sites urgently requiring improvements. Subsequently, the remaining 11 locations will follow, contributing to the optimization of water treatment processes at each purification plant.

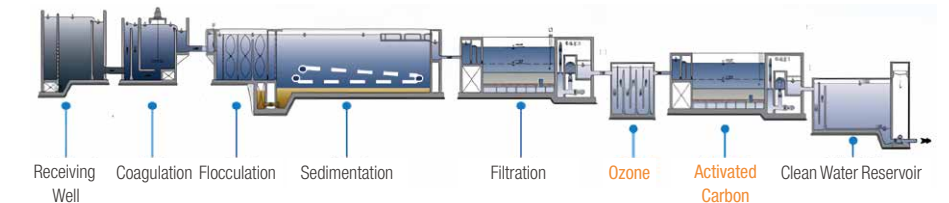
ISO 22000 Certificate



Facilities Improvement to Food Factory Standards



Advanced Water Treatment Process Schematic Diagram



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Operating the Safety Management System “K-WISH 500”

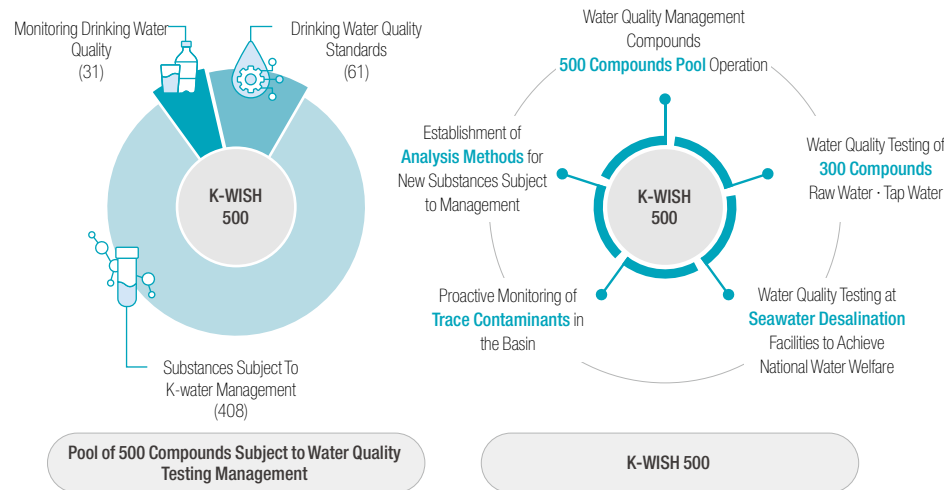
K-water operates the “K-WISH 500,” a global standard system for managing the safety of drinking water. The goal is to provide citizens with tap water that meets safety standards and to proactively adapt to the constantly evolving landscape of domestic and international water quality management. Until 2022, we have selected 500 compounds every year and established analysis methods for new substances. Out of these, 300 compounds are chosen for self-management, conducting yearly water quality monitoring for both the source and treated water at our water purification plants. Additionally, we are working to expand water quality monitoring centered on water purification plants, encompassing areas such as the Hangang River, Geumgang River, Nakdonggang River, and Yeong-Seom basins by 2024. This expansion aims to establish a safety management system that covers the entire water production process, from the basin and water intake source to the water purification plant.



Expansion of water quality monitoring centered on water purification plants

K-WISH 500

K-water's Water Investigation System of 500 compounds for Human Health



Water Stress

Development of Groundwater Dam Reservoir

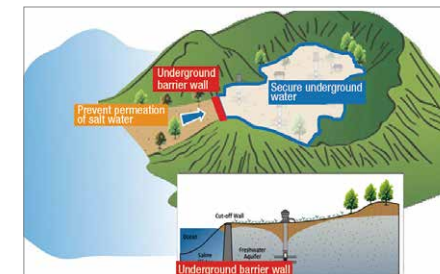
K-water is actively promoting the installation of groundwater reservoir dams in accordance with the revised “Groundwater Act” enacted in January 2012. This initiative is aimed at securing a reliable water supply using groundwater, particularly in areas facing challenges in water provision. Groundwater reservoir dams, functioning as eco-friendly water resource facilities, entail the installation of an artificial water barrier (cut-off wall) within the groundwater aquifer to store and utilize groundwater. In contrast to surface dams, these groundwater reservoir dams offer advantages such as lower evaporation loss, the absence of submerged areas, and reduced risk of water pollution. The Corporation prioritized island areas experiencing chronic water shortages for the initial phase of this project. Commencing with Daeijakdo Island in Ongjin-gun, reservoir dams were also strategically placed on Anmado Island in Yeonggwang-gun and Bogildo Island in Wando-gun.

This initiative successfully secured a stable drinking water source, supplying over 1,300m³ per day to approximately 9,000 residents across the three regions, effectively alleviating water scarcity. In response to the severe drought conditions in 2022, K-water accelerated the installation of key facilities for the underground reservoir dam on Bogildo Island, completing the project three months ahead of schedule. By the end of June 2023, a water supply of 152,000m³ delivered to the residents of Bogildo and Nohwado islands, provided relief for 61 days of limited water supply. Looking forward, we are dedicated to expanding the implementation of groundwater reservoir dams from islands to inland areas. The Corporation is actively involved in this effort, incorporating 80 potential locations in the 4th Groundwater Management Basic Plan and formulating a comprehensive mid- to long-term implementation strategy.

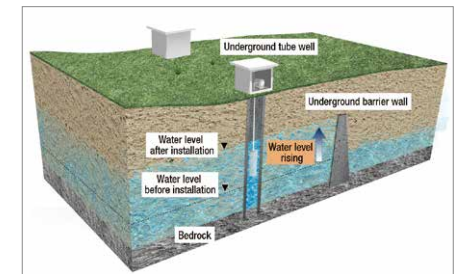
Groundwater Reservoir Dam Development Status

Category	Daeijakdo Island, Ongjin-gun	Anmado Island, Yeonggwang-gun	Bogildo Island, Wando-gun
Project Period	2018~2020	2018~2021	2019~2023
Water Supply (Population Receiving Water)	110 m ³ /Day (About 200 People)	100 m ³ /Day (About 200 People)	1,100 m ³ /Day (About 8,500 People)
Usage	For Daily Use	For Daily Use	For Daily Use

Conceptual Diagram of Groundwater Reservoir Dam in Island Areas



Conceptual Diagram of Groundwater Reservoir Dam in Inland Areas



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Seawater Desalination Project

As the global population grows and industrialization advances rapidly, along with the expansion of water scarcity areas due to climate change, the demand for alternative water resources is on the rise. Since 2004, K-water has been entrusted with the operation of 25 seawater desalination facilities across three cities and counties nationwide, addressing water scarcity challenges.

Seawater desalination, a water treatment process that eliminates dissolved substances, including salt, from seawater, is employed to secure water for both domestic and industrial purposes. Leveraging its water management expertise, K-water is actively addressing water shortages in the island and coastal regions, thereby contributing to the enhancement of water welfare in 25 island areas and benefiting 4,500 residents.

Wastewater Reuse

Wastewater reuse involves utilizing treated seawater that has undergone processing at public sewage treatment facilities before being released into rivers or the sea. This treated water serves various purposes, including residential use, industrial activities, agriculture, and landscaping. As an integral component of its commitment to addressing climate change, mitigating drought, and advancing corporate ESG management, K-water actively embraces wastewater reuse. The provision of treated wastewater for industrial applications offers similar benefits to constructing new dams, contributing to sustainable water management.

Seawater Desalination Business Status

Category	2020	2021	2022*
Seawater Desalination Business Status (Location)	36	30	25
Facility Capacity (thousand m ³ /day)	2,475	2,105	2,100
Water Supply (People)	5,469	4,901	4,513

Wastewater Reuse Business Status

Category	2019	2020	2021*
Wastewater Generation (10 thousand tons/year)	714,045	737,562	733,580
Reuse Volume (10 thousand tons/year)	114,866	114,471	112,699
Reuse Rate (%)	16.1	15.5	15.4

*The 2021 data is the latest available in the Ministry of Environment's wastewater statistics.

Best Practice

Signing an MOU for supplying reused wastewater for semiconductor manufacturing

On November 30, 2022, K-water entered into an MOU with Samsung Electronics, marking the world's largest-scale agreement for the supply of recycled wastewater dedicated to semiconductor manufacturing. Utilizing state-of-the-art wastewater reuse technology, K-water has presented Samsung Electronics with a tailored solution and business model. The proposed plan involves delivering 474,000 m³ of reused wastewater per day by the year 2030. This collaboration aims to establish an efficient and mutually beneficial relationship between K-water and Samsung Electronics, particularly in addressing the substantial industrial water requirements of the semiconductor manufacturing process. Overall, this initiative is anticipated to make a significant contribution to addressing water scarcity issues within the semiconductor industry.



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS**
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Innovative Growth Engine Management

Innovative Future Business Design

Future Water Management Innovation Task Force

K-water has established the Future Water Management Innovation Task Force to enhance our national water management capabilities, considering the evolving business landscape and the rapid impacts of climate change. Our goal is to establish an integrated water management system at the basin level, covering streams and rivers, emphasizing the enhancement of digital-based water supply stability and the achievement of water-energy-centered carbon neutrality through new and renewable energy sources. To achieve these objectives, we assembled a team of 18 experts for each business unit, implemented an Agile organization for 60 days, and developed 15 policy proposals (54 tasks) for

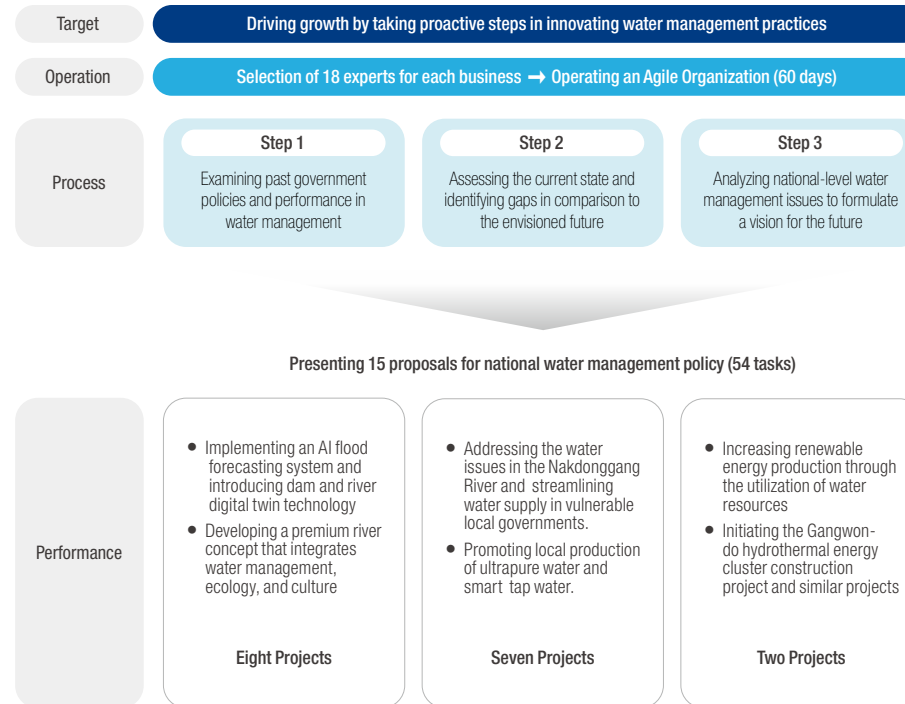
national water management. K-water has concretized 17 water management innovation tasks out of the 54 tasks by the first half of 2023 and plans to actively pursue subsequent tasks in the future.

Discovering Future 5-Star Growth Businesses

Adapting to changing business dynamics, K-water is focused on identifying and nurturing businesses within five key domains that align with the corporation's core strengths and show promising market growth potential. The selected areas for 5-star future growth projects include Ultrapure Water, Water Energy, Green Hydrogen, Climate-resilient Environmental Cities, and Digital Water Platforms. We have outlined a comprehensive mid- to

long-term plan, aiming to achieve 30% of total sales in these sectors by 2030, supported by a planned investment of KRW 2.5 trillion an increase of 32% from the current budget. Through active business promotion and increased investments, we have achieved a RE50 rating for the first time as a public institution, accomplishing milestones such as activating the digital water platform ecosystem and operating an ultrapure water demonstration plant. Looking ahead, our commitment remains steadfast in pursuing future growth projects and exploring new business opportunities, staying true to our role as South Korea's leading water management specialist.

Future Water Management Innovation Task Force Promotion System



Future Growth Business Promotion System

Business	Promotion Contents	Major Achievements
Water Energy	<ul style="list-style-type: none"> Forming the Climate Carbon Business Division (Green Hydrogen, Solar Power, and Geothermal Integration) 	<ul style="list-style-type: none"> The First Public Institution to achieve RE50 Korea's First Imha Dam Floating Photovoltaic System (45 MW)
Green Hydrogen	<ul style="list-style-type: none"> Expanding the Energy Business team by 2 personnel 	<ul style="list-style-type: none"> Constructing an Integrated Complex Establishing the Seongnam Green Hydrogen Demonstration Facility
Climate-resilient Environmental Cities	<ul style="list-style-type: none"> Reorganizing the Eco-city Installing and Operating the Water Circulation/ Smart City R&D Demonstration Center Reinforcing Personnel by threes in Urban Planning and related fields 	<ul style="list-style-type: none"> Carbon-neutral Urban Water Circulation Launching Research on Standardized Models Full operation of the Living Lab for the Smart City Technology Innovation
Digital Water Platform	<ul style="list-style-type: none"> Establishing the Digital Platform Department (Integration of Digital Planning Platform Business) 	<ul style="list-style-type: none"> Digital Water Platform, Global Launch (March 2022) Activating the Platform Ecosystem waterRound (Participating Companies 3.7 times ↑)
Ultrapure Water	<ul style="list-style-type: none"> Restructuring the Future Water Resources Department (The ultrapure water function and development department of the Future Water Resources Department were consolidated, and concurrently, the industrial water team within the department was separated into a distinct Industrial Water Department. This restructuring was undertaken to enhance the momentum of the ultrapure water business). 	<ul style="list-style-type: none"> We are presently supplying a first-stage ultrapure water demonstration plant, designed and built using domestic technology for the first time in Korea. (Additionally, we are in the process of constructing a second-stage demonstration plant using domestically sourced equipment).

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Localizing the ultrapure water Technology

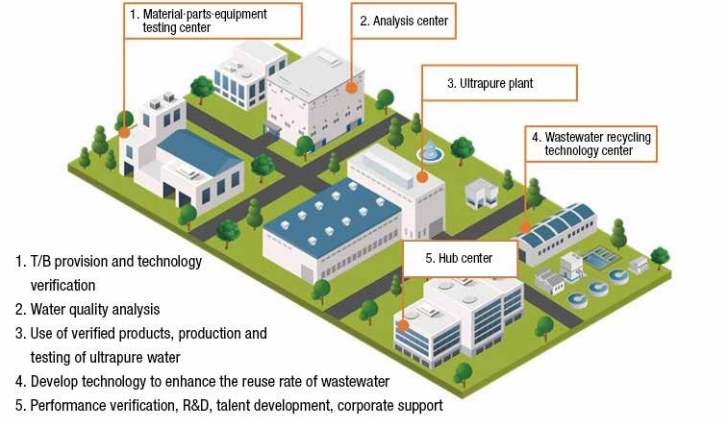
K-water is dedicated to creating a new growth engine for the country and contributing to economic development by spearheading the local production of ultrapure water technology. This effort is aimed at enhancing the competitiveness of the semiconductor industry, the leading export item for the country. Ultrapure water, defined as water devoid of any substances other than pure water, demands highly intricate water treatment technology for its production. Given the substantial initial investment costs and entry barriers for demand companies, only a select few developed countries currently possess this production technology. Aligned with the government's support for cultivating high-tech strategic industries through the National Advanced Strategic Industry Act starting in 2022, and with the water industry designated as one of the three major green new businesses by the Ministry of Environment in 2023, K-water plans to localize ultrapure water design, construction, operation technology, and key equipment by 2025. The plan also includes the domestic production of key equipment. Since 2011, in collaboration with SMEs, the Corporation has constructed its own ultrapure water production pilot plant for semiconductors in 2013 and conducted research on validation technology, resulting in a patent application. Furthermore, an operational program has been established to predict production water quality and operating costs for each unit process of the ultrapure water plant in real time. The Corporation is actively involved in the business of producing pure water and supplying it to companies with specific demands. Furthermore, acknowledging its expertise in the localization of ultrapure water technology, K-water was chosen as a research institute for the "Ministry of Environment's

Ultrapure Industrial Water Localization Technology Development Project" in June 2021. The corporation is actively promoting the localization of ultrapure water in collaboration with 21 public and private entities. In 2021, in partnership with the Ministry of Environment and the Korea Testing Laboratory, K-water initiated the construction of a high-purity ultrapure water validation plant located within SK siltron, with test operations scheduled to commence in December 2022. Starting from May 2023, k-water have successfully provided SK Siltron with 1,200 tons of ultra-pure water per day for semiconductor wafer production. In the ongoing efforts, the Corporation plans to build a second-stage validation plant (1,200 tons/day) using domestically sourced equipment. The goal is to achieve 100% localization of ultrapure water design and operation technology and 70% localization of construction technology and core equipment by the year 2025. Additionally, K-water plans to establish an Ultrapure Water Platform Center starting in 2021, with the goal of completing it by 2030. This center aims to cultivate the ultrapure water industry through collaborative networks involving industry, academia, and research. Serving as a key hub, the Ultrapure Water Platform Center is geared toward achieving domestic independence in ultrapure water technology, covering materials, components, equipment, and performance scalability. It will feature an ultrapure water analysis center, a performance certification center, an ultrapure water plant, a talent technology development center, and a wastewater reuse technology center. This initiative aims to create a foundation for the self-sufficiency of domestic ultrapure water technology and facilitate the development of the ultrapure water industry ecosystem.

Inside the Ultrapure Water Validation Plant



Establishment of the Ultrapure Water Platform Center (Draft)



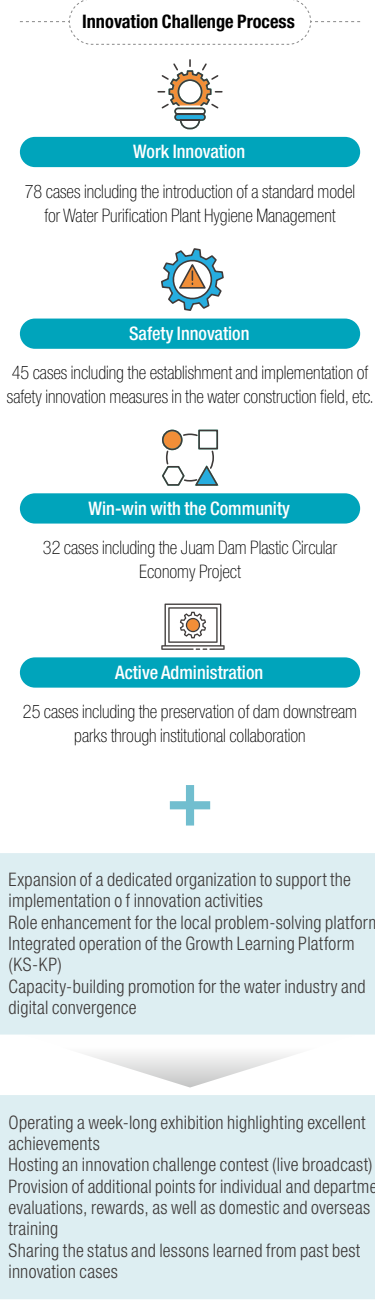
Ultrapure Water Technology Localization Promotion Process

2011	2021~2023	2025	2030
<p>Ultrapure Water Production Pilot Plant Construction and Validation Research</p>	<p>Construction of Ultrapure Water Validation Plant Stages 1 and 2 (2,400 tons/day)</p>	<p>Ultrapure Water Design-Construction-Operation Process and Localization of Key Equipment</p>	<p>Establishment of the Ultrapure Water Platform Center</p>

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Innovation Challenge

K-water identified four key areas of innovation in response to changes in the business environment and launched an Innovation Challenge to boost internal engagement and interest. The challenge, conducted as a self-driven process open to all employees, featured a compensation and sharing system for outstanding performance. A total of 180 innovative ideas were discovered and implemented, reflecting an active response from participants. The Innovation Challenge produced significant results, with 78 completed cases, including the introduction of a standard model for Water Purification Plant Hygiene Management, 45 cases focusing on safety innovation measures in the water construction field, 32 cases related to the Juam Dam Plastic Circular Economy Project, and 25 cases addressing the preservation of dam downstream parks through institutional collaboration. The initiative not only enhanced internal and external collaboration for innovation network development but also established an infrastructure to reinforce future innovation capabilities. A national evaluation group of 5,148 individuals actively participated in the innovation process, ensuring that the resulting innovations were tangible and beneficial to the public. Evaluations by 28 external experts secured expertise and objectivity, while internal evaluation involved voting by all employees, confirming widespread support. To showcase excellent performance internally and externally, K-water hosts an annual Innovation Week. This event features exhibitions of outstanding achievements, innovation challenge contests, and initiatives encouraging members to lead in tackling challenges and contributing to organizational growth through effective personnel management, organizational development, rewards, and performance-focused training. At K-water, we are dedicated to providing opportunities for our members to thrive and contribute to innovation.



In-house Ventures

K-water actively supports in-house ventures by harnessing the expertise and technical know-how of our employees. This initiative contributes to the growth of the water management industry and the establishment of a comprehensive water industry ecosystem. The organization's members, recognized experts in the water industry, adeptly navigate the stages of identifying business opportunities, implementing technology, and achieving sales, capitalizing on their market knowledge and networks. For each in-house venture, K-water provides substantial support, including up to KRW 170 million in funding, dedicated office space, and personnel appointments, allowing employees to fully focus on their ventures. Individuals selected for in-house ventures undergo a one-year training

program before embarking on the establishment of their own businesses. Importantly, even in the event of venture failure, the company values this period as valuable experience and guarantees reemployment. To date, K-water has nurtured 16 in-house venture teams through five rounds. Particularly noteworthy is the success of ventures established in 2019, boasting an impressive 80% survival rate over four years. This success rate significantly surpasses the 33.8% survival rate for five-year startups reported by the Ministry of SMEs and Startups in 2023, marking a 46.2%p higher success rate. Additionally, the company actively supports the global expansion of these ventures, paving the way for potential recognition with an innovation award at CES 2023.

Category	Team Name	Business Overview
1st Round	Career Chain	Equipment for real-time remote monitoring of pipe networks with built-in flow rate generator for monitoring water pipe networks and analyzing water leakage in real-time.
	Sejong Rain	A precipitation measurement system employing a mix of conductive and weight-based technology, meeting international standards with an accuracy of "0.1mm."
	Water Friend	A fully automatic tumbler washer integrating ultrasonic technology and sterilizing plasma technology
	Pumpcare	Tailored device for adjusting impellers, specifically designed to conserve energy for large pumps exceeding 250kW
	Water Eyes	A system utilizing IoT technology for real-time monitoring, employing a pipe-mounted multi-sensor capable of measuring multiple parameters
	Water-Tech	A simulator designed to diagnose and ensure the stability of the pump-pipe system by simulating water impact devices
	SURGETEC	A high-accuracy lightning protection equipment diagnostic tool adopting a resistive leakage current detection method
2nd Round	Habaek Soft	Development of an "Intelligent River Flow Measurement" device for precise dam inflow measurements and a "prototype model" for numerical river flow forecasting
	WI.Plant	Development of an intelligent water leak management platform service
3rd Round	Water Info Labs	Development of an AI deep learning-based solution for interpreting images to ensure the safety of water resource facilities
	E-Trading Sys.	Introduction of a "Small-scale Power Brokerage Transaction" service, leveraging power generation forecasts through K-water weather forecasts and an integrated solar power monitoring system
4th Round	Hanbit Ecotech	Implementation of a solution to protect water and land from livestock waste through a packaged livestock waste treatment system
	RNS	Production and supply of certified standard materials for environmental analysis using proprietary production technology
	Filab	Development of "Easy-pure," an advanced tap water treatment device
5th Round	KTSM	Development of the Monitoring and Sharing Board (MNSB) dedicated to water resources facilities such as dams, multi-function weirs, water supply, and wastewater
	UIM	Development of an AR-based underground life cycle integrated management system using ICT technology

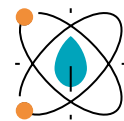
- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
 - Water Resources Management
 - Innovative Growth Engine Management
- APPENDIX

Strengthening global competitiveness

Generating new value from water and securing global competitiveness

K-water significantly contributes to enhancing the global competitiveness of both the country and private enterprises through its proactive efforts in anticipating and generating new values associated with water. The 「OECD Environmental Outlook to 2050」 report indicates a rapid tripling of water demand in the global manufacturing sector by 2050 compared to 2020, with 40% of global water demand potentially facing instability by 2030. This situation poses an escalating water risk for domestic companies. Moreover, the failure to adopt key global management trends, such as the RE100 initiative for sustainable management and business standards for environmental disclosure, could impede domestic companies from securing managerial stability, thereby impacting their export capabilities. In response to these challenges, K-water is actively involved in supporting private enterprises in addressing concerns related to water scarcity. Additionally, our objective is to strengthen their global competitiveness by facilitating the smooth implementation of initiatives like RE100.

To start, K-water successfully completed the Chungju Dam System Industrial Water Supply Project, enabling a daily water supply of 200,000 m³. Additionally, we played a leading role in the establishment of the national water basic plan to ensure the timely provision of water. Looking forward, we are actively pursuing the Daejeon Seawater Desalination Project, intending to secure alternative water sources by 2024. Furthermore, part of our strategic plans involves maximizing the utility of the Paldang Dam and Hwacheon Dam, initially designed for power generation in the Hangang River basin. Through



Leading the country toward carbon neutrality

Commendation from the Prime Minister for Carbon Neutral Green Management (November 2022)

collaborative efforts among institutions, our objective is to optimize these dams for multiple purposes, ensuring a water quantity that aligns with the anticipated water demand of domestic companies.

Furthermore, the Corporation has constructed a production line currently in the commissioning phase, aiming to deliver 1,200 m³ per day starting in November 2022. This line developed entirely with domestic technology, is dedicated to the production of ultrapure Water essential for the semiconductor industry. Looking ahead to 2030, there are plans to establish an Ultrapure Water Platform Center to localize ultrapure water technology and foster growth within the ultrapure water industry ecosystem. To foster talent in this field, several initiatives have been launched. In March 2022, K-water inaugurated a degree program at KAIST, resulting in the recruitment of nine engineers. As part of the government's 2023 Innovation Talent Cultivation Program, the organization intends to choose one university to establish a Master's program, including the ultrapure water field to cultivate experts in this domain.

Going beyond our own RE100 commitment, as the leading organization in renewable energy production, K-water has received the hydropower Renewable Energy Certificate (REC). This initiative aims to lead the country's carbon neutrality efforts by supporting private companies in achieving their RE100 goals. We are actively involved in directly supplying renewable energy, creating new business models, promoting private joint investments in renewable energy, and supporting the establishment of RE100 industrial complexes.

As a result of these efforts, K-water entered into an agreement in November 2022 to supply recycled wastewater (474,000 m³ per day) with Samsung Electronics. Furthermore, in December 2022, we established the first RE100 support agreement for private companies with NAVER, contributing to mitigating management risks for private companies.

Identifying overseas business models

Responding to escalating risks in overseas project pursuits due to the global economic downturn and geopolitical instability, K-Water has identified a new, low-risk business model to ensure sustained growth in the overseas division. The Corporation directly proposes large-scale constructions by enhancing existing small-scale ODA* projects requested by developing countries. Furthermore, a model has been established to create added value by linking follow-up projects, leading to the successful export of a water purification plant valued at KRW 28.5 billion to the new capital of Indonesia. Team Korea, formed through partnerships involving 12 public and private entities, including K-water, presented an AI and carbon-neutral water purification plant model to the Indonesian government. An MOU was signed between the Korean and Indonesian ministers in March 2022. Further discussions in July 2022 during a summit between the two countries focused on strengthening cooperation to build a new water supply system in In-

donesia, identifying opportunities for follow-up projects valued at KRW 500 billion.

Additionally, K-Water has transformed its overseas project development process, actively pursuing new investment projects and participating in government-selected initiatives, totaling eight overseas projects amounting to KRW 784 billion. These efforts aim to stabilize the business development system, centered on overseas hubs, diversify business models with eco-friendly energy development and energy reduction technologies, and reduce risks through participation in joint business development and complex financial resource projects. In 2022, the Corporation's overseas business sales reached KRW 35.9 billion, surpassing the target by 123.4%. Looking ahead, we plan to strengthen risk management by enhancing overseas business through objective and professional verification.

*ODA: Official Development Assistance

Business	Funds	Project Scale
3 cases including SWM in Semarang, Indonesia	EDCF Loan + PPP Model	KRW 265.3 billion
Honduras Choluteca Basin Development Project	EDCF Loan + PPP Model	KRW 2.6 billion
3 cases including the Pumped Storage Power Plan in Uzbekistan	Cooperation Model with EDF (Electricity of France)	KRW 500 billion
Solomon Islands Floating Photovoltaic System Project	International Greenhouse Gas Reduction Pilot Model	KRW 16.1 billion

MOU Agreement for the Solomon Islands Floating Photovoltaic System Project



Kick-off Meeting for the Semarang City SWM Project Promotion



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

Water Resources Management

- Innovative Growth Engine Management

APPENDIX

Best Practice

Received the CES 2023 Innovation Award

In January 2023, K-water collaborated with 14 domestic water companies at “CES 2023,” a global water industry exhibition in Las Vegas, USA. As South Korea’s leading water management institution, K-water showcased 10 technologies, including the Digital Twin-based Basin Management (Digital Garam+), Smart Dam Safety and Algae Management, Smart Water Purification Plants, Smart Cities and Villages, and waterRound. These innovations received recognition for their ingenuity, contributing to the promotion of the Korean water industry and the collective growth of water companies. Operating a booth in the Eureka Park section, dedicated to exhibiting innovative technologies and products, K-water presented a variety of cutting-edge technologies under the theme of “Water-Energy-City, Nexus,” covering everything from water quality and indoor air quality IoT monitoring solutions to Digital Twin-based Smart City service 3D platforms.

During the event, SURGETEC and WI.Plat, nurtured and supported by K-water as in-house ventures, received the “CES Innovation Award” from the Consumer Technology Association (CTA), the exhibition’s organizer. They also conducted over 680 export consultations and negotiated contracts worth USD 9 million, gaining recognition from both domestic and foreign partners for outstanding domestic water technology and the growth potential of the future water industry. K-water actively participates with water companies in global exhibitions such as CES 2023, AWWA ACE in the US, and WETEX in Dubai. The organization diversifies support for export channels through initiatives like localization pilot projects and public-private cooperation projects. As a comprehensive water platform company, K-water aims to disseminate the innovative technologies of Korean water companies and support their growth into global unicorn companies.

CES 2023 Global Water Industry Exhibition





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

- ESG Data
- UN SDGs
- GHG Verification Statement
- Third-Party Assurance Statement
- ISO 26000 Assessment Report
- K-ESG Guidelines Index
- GRI Content Index
- SASB Index
- TCFD Index
- Memberships and Awards

-
- 083** ESG Data
 - 100** UN SDGs
 - 101** GHG Verification Statement
 - 102** Third-Party Assurance Statement
 - 104** ISO 26000 Assessment Report
 - 106** K-ESG Guidelines Index
 - 107** GRI Content Index
 - 111** SASB Index
 - 112** TCFD Index
 - 113** Memberships and Awards

Appendix





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

- ESG Data

- UN SDGs

- GHG Verification Statement

- Third-Party Assurance Statement

- ISO 26000 Assessment Report

- K-ESG Guidelines Index

- GRI Content Index

- SASB Index

- TCFD Index

- Memberships and Awards

ESG Data

Economic Performance

1. Condensed Statement of Financial Position (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Total	21,796,758	22,254,750	22,904,104	23,437,063	23,180,331
Assets					
Current Assets	8,208,278	8,505,568	9,353,516	9,669,123	9,475,507
Non-current assets	13,588,480	13,749,182	13,550,588	13,767,940	13,704,824
Total	14,009,630	13,919,329	13,834,938	13,547,279	12,398,262
Liabilities					
Current Liabilities	2,901,471	3,202,178	4,109,364	4,668,683	4,945,790
Non-current liabilities	11,108,159	10,717,151	9,725,574	8,878,596	7,452,472
Capital	8,486,338	8,900,966	9,349,188	9,804,111	10,255,972
Others	△740,756	△614,136	△314,209	41,183	503,185
Total	7,787,128	8,335,421	9,069,166	9,889,784	10,782,069
Capital					
Owner's Equity of Dominant Firm	7,745,582	8,286,830	9,034,979	9,845,294	10,759,157
Non-controlling interests	41,546	48,591	34,187	44,490	22,912

2. Condensed Income Statement (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Revenue (Sales Amount)	3,391,568	2,971,690	3,751,754	4,011,448	4,759,317
Cost of Sales	2,745,361	2,436,367	2,990,048	3,334,068	3,933,596
Selling & Administrative Expenses	170,185	206,574	212,278	225,540	236,796
Operating Profit	476,022	328,749	549,428	451,840	588,925
Other Revenues	140,705	40,729	45,143	62,912	303,898
Other Expenses	20,146	75,336	42,565	76,513	46,739
Other Profit	441	289	1,880	5,834	△201,537
Financial income	64,617	149,240	123,720	193,993	219,658
Financial cost	380,958	333,777	303,803	285,649	332,594
Profit Related to Firms Subject to Equity Method, etc.	△7,141	△6,197	△7,558	△2,636	△54,914
Net profit before income taxes	273,540	103,697	366,245	349,781	476,697
Income tax expenses	33,366	△26,877	47,604	7,650	69,286
Net Profit During the Term	240,174	130,574	318,641	342,131	407,411
Other comprehensive income	△31,259	646	△30,957	22,179	33,697
Total Comprehensive Income	208,915	131,220	287,684	364,310	441,108
Net profit during the term belonging to the owner of the dominant firm	240,449	128,240	321,634	319,539	428,854
Net profit during the term belonging to the non-controlling ownership	△275	2,334	△2,993	22,592	△21,443

3. Added Value (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Total	1,929,303	1,743,535	1,978,258	1,979,182	2,001,431
Operating profit & loss	273,539	103,697	366,492	343,931	180,433
Bed debt expense	1,098	3,133	6,309	5,514	26,661
Personnel expenses	521,118	621,246	652,268	668,819	689,303
Net financial expenses	402,051	323,599	275,634	202,051	205,185
Tax & Public Dues	89,188	99,948	100,000	102,977	125,596
Depreciation cost	642,309	591,912	577,555	655,890	774,253

* Operating profit & loss prepared as net profit before income taxes



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

- ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

4. Balance Sheet of Major Business Performance Indicators (Statement of Earnings)

4-1. Summary of Overall Business Sectors (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Water Resource Management (IWRM, Integrated Water Management, Water Resource)	478,004	494,232	509,514	565,163	583,913
Tap Water Production (Healthy Water)	1,327,239	1,328,604	1,345,043	1,363,754	1,396,313
Waterfront Town Development	572,864	265,562	757,146	831,180	1,151,685
Clean energy generation	270,073	246,943	244,927	257,606	545,091
Overseas Project	9,064	7,887	7,825	7,098	3,889

4-2. Sales Amount (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Sales Amount (a)	3,391,568	2,971,690	3,751,754	4,011,448	4,759,317
Private Investment Amount (b)	491,109	298,086	393,028	324,392	341,758
a-b	2,900,459	2,673,604	3,358,726	3,687,056	4,417,559

4-3. Sales Amount of Water Supply Business (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Total	1,327,239	1,328,604	1,345,043	1,363,754	1,396,313
Total (a-b)	1,142,325	1,155,254	1,161,230	1,196,901	1,212,642
Water-works					
Sales Amount (a)	1,172,142	1,185,053	1,197,028	1,232,617	1,256,373
Sales Discount (b)	-29,817	-29,799	-35,798	-35,716	-43,731
Total (a-b)	160,591	145,303	153,905	138,604	157,134
Local Water Supply					
Sales Amount (a)	161,428	146,372	155,770	139,362	158,333
Sales Discount (b)	-837	-1,069	-1,865	-758	-1,199
Total (a-b)	24,323	28,048	29,907	28,249	26,537
Sewage					
Sales Amount (a)	24,323	28,048	29,907	28,249	26,537
Sales Discount (b)	0	0	0	0	0

4-4. Sales Amount of Water Resource Business (Excluding power generation related to the dam, Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Total	478,004	494,232	509,514	565,163	583,913
Subtotal	295,754	293,177	298,504	301,060	308,765
Dam Water					
Sales Amount	295,754	293,180	298,507	306,746	314,551
Sales Discount	0	-3	-3	-5,686	-5,786
Dam Management	44,429	65,084	48,828	49,002	61,190
Water Resource Development	73,308	71,826	98,876	134,245	153,447
4 Major Rivers	25,573	36,022	31,627	34,731	29,558
Ara Waterway	38,940	28,124	31,679	46,126	30,953

4-5. Sales Amount of Waterfront Business (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Sales Amount (a)	572,882	265,579	757,196	831,191	1,155,175
Sales Discount (b)	-18	-17	-50	-11	-3,490
Total (a-b)	572,864	265,562	757,146	831,180	1,151,685

4-6. Sales Amount of Clean Energy Business (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Total	270,073	246,943	244,927	257,606	545,091
Power Generation	187,459	151,701	177,683	171,834	401,942
New & Renewable Energy	78,449	84,775	60,997	79,319	142,673
CER Sales Profit	4,165	10,467	6,247	6,453	476

4-7. Sales Amount of Overseas Business (Unit: KRW million)

Classification	2018	2019	2020	2021	2022
Sales Amount	9,064	7,887	7,825	7,098	3,889



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

[\(Link to formula 4-1-4-7\) Balance Sheet Income Statement \(Unit: KRW\)](#)

Classification		2018	2019	2020	2021	2022
Income from sales of goods	Parcel-out income	572,863,588,615	265,562,422,286	757,145,537,352	831,179,620,840	1,151,684,978,805
	Water supply income	1,142,324,992,369	1,155,253,618,899	1,161,230,271,191	1,196,901,164,524	1,212,642,072,928
	Dam water supply income	295,754,255,058	293,176,866,388	298,503,905,631	301,060,216,801	308,765,314,020
	Power generation income	203,927,354,678	151,700,509,302	177,683,040,324	171,834,256,862	401,942,170,387
	Dam management income	44,428,975,850	65,083,816,631	48,828,018,161	49,001,934,959	61,190,203,270
	Ara Waterway operational income	38,939,997,492	28,123,864,676	31,678,832,653	46,125,599,340	30,952,517,430
	Renewable energy income	78,448,826,136	84,775,074,627	60,996,667,163	79,318,563,946	142,672,827,647
	Carbon credit	4,164,965,000	10,467,087,700	6,246,800,000	6,453,470,000	475,500,000
Subtotal	2,380,852,955,198	2,054,143,260,509	2,542,313,072,475	2,681,874,827,272	3,310,325,584,487	
Income from providing services	Regional water supply income	160,590,884,002	145,302,961,017	153,905,188,194	138,603,557,125	157,133,834,224
	Sewage business income	24,323,432,158	28,047,606,899	29,907,168,697	28,249,197,097	26,537,177,423
	4 Major Rivers management income	25,572,727,273	36,021,818,182	31,627,356,840	34,730,500,944	29,557,848,373
	Subtotal	210,487,043,433	209,372,386,098	215,439,713,731	201,583,255,166	213,228,860,020
Construction contract income	Water resources development income	73,308,462,316	71,825,551,898	98,876,338,313	134,244,984,775	153,447,153,161
	Sewage construction income	5,642,837,693	9,463,019,513	5,668,210,398	17,508,257,962	7,916,199,734
	Private investment construction income (Water supply)	440,707,365,034	253,207,325,718	341,409,198,569	293,682,748,554	307,943,123,934
	Private investment construction income (Dam)	46,570,808,826	42,447,818,929	39,094,913,354	30,709,594,275	33,814,822,330
	Private investment construction income (Regional)	0	0	0	0	0
	Private investment construction income (4 Major Rivers)	0	0	0	0	0
	Private investment construction income (Seoul-Incheon)	3,830,910,312	2,430,662,149	12,523,409,399	0	0
Subtotal	570,060,384,181	379,374,378,207	497,572,070,033	476,145,585,566	503,121,299,159	
Other revenue	Overseas business revenue	9,063,714,686	7,887,580,566	7,825,307,181	7,098,391,532	3,889,117,873
	Aggregate business revenue	16,591,184,886	0	0	0	0
	Subsidiary business revenue	204,512,917,909	320,912,150,866	488,603,810,513	644,746,885,074	728,752,240,552
	Subtotal	230,167,817,481	328,799,731,432	496,429,117,694	651,845,276,606	732,641,358,425

5. Wastewater Reclamation & Reusing System Reduction Quantity and Amount

Classification		2018	2019	2020	2021	2022
Wastewater Reclamation & Reusing System	Reduction Quantity (1,000m ³)	168,542	161,373	141,162	130,598	112,888
	Reduction Amount (KRW million)	4,095	3,900	3,388	3,209	2,818

ESG Data

Environmental Performance

1. Renewable Energy Operation & Development Status

Classification	Unit	2018				2019				2020				2021				2022			
		Operating Status		Development Status		Operating Status		Development Status		Operating Status		Development Status		Operating Status		Development Status		Operating Status		Development Status	
		Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity	Detailed Contents (No. of Sites)	Facility Capacity
Total		112 sites	1,357.5	12 sites	83.0	112 sites	1,364.0	10 sites	-	114 sites	1,364.6	8 sites	-	125 sites	1,413.35*	48 sites	402.1	148 sites	1,421.5	37 sites	71.2
Hydroelectric	Large Hydro-power MW	9 sites including Soyanggang Dam, etc.	1,000.6	-	-	9 sites including Soyanggang River, etc.	1,004.6	-	-	9 sites including Soyanggang River, etc.	1,004.6	-	-	9 sites including Soyanggang River, etc.	1,004.6	-	-	9 sites including Soyanggang River, etc.	1,004.6	-	-
	Small Hydro-power MW	53 sites including Andong Small Hydropower, etc.	80.4	7 sites including Seomjingang Dam and Chungju Reservoir, etc. (Continued Project)	11.0	53 sites including Andong Small Hydropower, etc.	82.5	7 sites including Seomjingang Dam and Chungju Reservoir, etc. (Continued Project)	8.0	53 sites including Andong Small Hydropower, etc.	83.0	4 sites including Chungju Reservoir, etc. (Continued Project)	7.2	54 sites, 94 units including Chungju No.3 Small Hydropower, etc.	88.0	4 sites including Soyanggang Dam and Jamsil Underwater Beam, etc.	3.7	54 sites, 94 units including Chungju No.3 Small Hydropower, etc.	88.0	4 sites including Soyanggang Dam and Jamsil Underwater Beam, etc.	3.7
Tidal Power MW		1 site including Sihwa Tidal Power	254.0	-	-	1 site including Sihwa Tidal Power	254.0	-	-	1 site including Sihwa Tidal Power	254.0	-	-	1 site including Sihwa Tidal Power	254	-	-	1 site including Sihwa Tidal Power	254.0	-	-
Wind Power MW		3 sites including Sihwa Bangameori, Gyeongin Port, and Gampo Dam	8.0	-	-	3 sites including Sihwa Bangameori, Gyeongin Port, and Gampo Dam	8.0	-	-	3 sites including Sihwa Bangameori, Gyeongin Port, and Gampo Dam	8.0	-	-	3 sites including Sihwa Bangameori, Gyeongin Port, and Gampo Dam	8.0	-	-	3 sites including Sihwa Bangameori, Gyeongin Port, and Gampo Dam	8.0	-	-
Photovoltaic MW		33 sites including Boryeong Floating Photovoltaic, etc.	14.5	5 sites including Hapcheon Dam and Yongdam Dam, etc. (Continued Project)	72.0	34 sites including Boryeong Floating Photovoltaic, etc.	14.9	Floating Photovoltaic and Onshore Photovoltaic including Hapcheon Dam (Continued Project)	132.1	34 sites including Boryeong Floating Photovoltaic, etc.	14.9	Floating Photovoltaic and Onshore Photovoltaic including Hapcheon Dam (Continued Project)	147.4	40 sites including Boryeong Floating Photovoltaic, etc.	58.713	(Floating) 16 sites including Imha Dam, etc. (Onshore) 27 sites on carbon neutrality	398.4	52 sites including Hapcheon Dam, etc.	66.8	(Floating) 3 sites including Imha Dam, etc. (Onshore) 29 sites on carbon neutrality	67.5
Hydrothermal (Temp. Difference) RT		13 sites including Hagya Purification Plant, etc.	3,673.0	-	-	13 sites including Hagya Purification Plant, etc.	3,673.0	Hydrothermal cluster in Gangwondo Province, Samsung Medical Center, etc.	-	14 sites including Hagya Purification Plant, etc.	3,693.0	Busan EDC Smart Village, Hydrothermal Cluster in Gangwondo Province, Samsung Medical Center, etc.	-	Total of 18 sites including Lotte Tower, Han River Flood Control Office, and K-water sites (16 sites)	4,069.0	1 site including hydrothermal cluster in Gangwon-do Province	16,500	Total of 29 sites including Lotte Tower, Han River Flood Control Office, and K-water sites (26 sites)	4,478	1 site including hydrothermal cluster in Gangwon-do Province	16,500

* Hydrothermal energy is excluded from the renewable energy operation and development status facilities capacity total as it has a different usage unit.
 * 2021 operational status facilities capacity subtotal's decimal places have been changed according to the changes in the round up method



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX
 - ESG Data
 - UN SDGs
 - GHG Verification Statement
 - Third-Party Assurance Statement
 - ISO 26000 Assessment Report
 - K-ESG Guidelines Index
 - GRI Content Index
 - SASB Index
 - TCFD Index
 - Memberships and Awards

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

- ESG Data
- UN SDGs
- GHG Verification Statement
- Third-Party Assurance Statement
- ISO 26000 Assessment Report
- K-ESG Guidelines Index
- GRI Content Index
- SASB Index
- TCFD Index
- Memberships and Awards

2. Project Performance on Renewable Energy

Classification	Unit	2018	2019	2020	2021	2022
Clean energy generation	MWh	2,436,755	2,103,507	2,914,078	2,243,871	2,461,041
Forced outage rate of generating unit	%	0.85	0.18	0.21	0.35	0.55

4. CDM Registration Status

Classification	Target	UN Registration Date (Year, Month)	2018			2019			2020			2021			2022		
			Annual Energy Production (MWh)	Emission Factor (tCO ₂ /MWh)	CO ₂ Reduction Amount (tCO ₂ /Year)	Annual Energy Production (MWh)	Emission Factor (tCO ₂ /MWh)	CO ₂ Reduction Amount (tCO ₂ /Year)	Annual Energy Production (MWh)	Emission Factor (tCO ₂ /MWh)	CO ₂ Reduction Amount (tCO ₂ /Year)	Annual Energy Production (MWh)	Emission Factor (tCO ₂ /MWh)	CO ₂ Reduction Amount (tCO ₂ /Year)	Annual Energy Production (MWh)	Emission Factor (tCO ₂ /MWh)	CO ₂ Reduction Amount (tCO ₂ /Year)
Total			803,236	-	459,445	803,236	-	459,445	799,799	-	457,598	782,206	-	448,355	768,262	-	440,024
Sihwa tidal power	Sihwa tidal power	'06.06 (Renewed in '18.07)	483,143	0.5197	251,089	483,143	0.5197	251,089	483,143	0.5197	251,089	483,143	0.5197	251,089	483,143	0.5197	251,089
Sihwa hydro power	Sihwa hydro power	'07.11 (Renewed in '17.04)	3,839	0.6567	2,521	3,839	0.6567	2,521	3,839	0.6567	2,521	3,839	0.6567	2,521	3,839	0.6567	2,521
Small hydro power 1	Andong, Jangheung, Seongnam 1st Plant	'06.10 (End of certification in 2020)	15,473	0.6007	8,103	15,473	0.6007	8,103	15,473	0.6007	8,103	-	-	-	-	-	-
Small hydro power 2	Daecheong, Juam, Dalbang, Seongnam 2nd plant	'07.02 (End of certification in 2022)	13,944	0.5975	8,331	13,944	0.5975	8,331	13,944	0.5975	8,331	13,944	0.5975	8,331	-	-	-
Small hydro power 3	Gosan, Pangyo Plant	'09.11 (End of certification in 2020)	5,557	0.5375	2,987	5,557	0.5375	2,987	2,120	0.5375	1,140	-	-	-	-	-	-
Small hydro power 4**	Seongdeok, Gimcheonbuhang plant	'10.10	4,963	0.5561	2,759	4,963	0.5561	2,759	4,963	0.5561	2,759	4,963	0.5561	2,759	4,963	0.5561	2,759
Small hydro power 5**	Angye, Hoengseong 2nd plant	'12.04	4,603	0.6735	3,100	4,603	0.6735	3,100	4,603	0.6735	3,100	4,603	0.6735	3,100	4,603	0.6735	3,100
Hydro power 6**	Ipo, Yeosu, Gangcheon weir	'12.10	76,406	0.6645	50,772	76,406	0.6645	50,772	76,406	0.6645	50,772	76,406	0.6645	50,772	76,406	0.6645	50,772
Hydro power 7**	Sejong, Gongju, Baekje, Sangju	'12.09	57,541	0.6645	38,237	57,541	0.6645	38,237	57,541	0.6645	38,237	57,541	0.6645	38,237	57,541	0.6645	38,237
Hydro power 8**	Nakdan, Gumi, Chilgok, Gangjeong Goryeong weir	'12.09	58,170	0.6645	38,654	58,170	0.6645	38,654	58,170	0.6645	38,654	58,170	0.6645	38,654	58,170	0.6645	38,654
Hydro power 9**	Changnyeong, Changnyeong-Haman, Seungchon, Juksan weir	'12.09	79,597	0.6645	52,892	79,597	0.6645	52,892	79,597	0.6645	52,892	79,597	0.6645	52,892	79,597	0.6645	52,892

** Hydrogen power 4 to water power 9 are reported separately in planned values due to the changes in the RPS calculation formula

3. Renewable Energy Use Ratio

Classification	Unit	2018	2019	2020	2021	2022
Total Power Use	MWh	1,575,617	1,550,261	1,561,290	1,665,197	1,753,687
Renewable Energy Generation Amount	MWh	2,439,832	2,106,944	2,917,515	2,247,308	2,465,677
Renewable Energy Use¹⁾	MWh	3,077	3,437	3,437	3,437	876,036
Environment Mark Certified Power Generation²⁾ (Hapcheon, Boryeong, Chungju)	MWh	7,464	7,076	6,463	6,890	6,620

1) Renewable Energy Use = Self-consumption Renewable Energy (49 sites including photovoltaic and hydrothermal, 3.4MW) Facility Capacity X Unit Energy Generation Amount (Guidelines on Renewable Energy Facility Support, etc., Annex10, 2022.04.05)
 2) EPD certified by the Ministry of Environment for products with outstanding environmental reliability regarding the electricity produced in the power plant is acquired (Hapcheon Floating Photovoltaic System: 0.5MW, Boryeong Floating Photovoltaic System: 2MW, Chungju Floating Photovoltaic System: 3MW)





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

5. CDM Credit Sales

Classification	2018	2019	2020	2021	2022
Project Title	Sihwa tidal power, small hydropower 1, 2, 3				
CERs	178,019	361,516	178,900	225,172	13,900
Sales Profit (KRW 100 million)	41.65	104.67	62.47	64.53	4.76

* Simple data, not cumulative data

6. Greenhouse Gas Emission

Classification	Unit	2018	2019	2020	2021	2022	
Total	tCO ₂	736,676	724,800	730,407	769,197	808,742	
Korean Won Unit	tCO ₂ /KRW million	0.22	0.24	0.19	0.19	0.17	
Emission	Direct	tCO ₂	4,420	4,657	4,829	5,921	6,794
	Indirect	tCO ₂	732,256	720,143	725,578	763,276	801,948
	Carbon Cleanliness	tCO ₂ /TOE	20.36	20.03	20.19	21.26	20.09
	Reduction Target	tCO ₂	141,292	129,416	161,815	154,870	190,615
	Estimated Emission	tCO ₂	736,676	724,800	730,407	769,197	808,742
	Total Permissible Emission	tCO ₂	601,818	648,722	573,387	614,327	618,127
Reduction	Initial Permissible Emission	tCO ₂	595,384	595,384	568,592	614,327	614,327
	Additional Permissible Emission	tCO ₂	6,434	53,338	4,795	0	3,800
	Permissible Emission Variation	tCO ₂	6,434	53,338	4,795	0	3,800
	Early Reduction Amount-Use	tCO ₂	0	0	0	0	0

7. Energy Consumption & Reduction Amount

Classification	Unit	2018	2019	2020	2021	2022	
Consumption Intensity (Unit: KRW)	TJ/KRW 100 million	4.47*	5.02	4.02	4.00	3.55	
Consumption	Consumption (Total)	TJ	15,150	14,905	15,069	16,064	16,886
	Direct	TJ	73	77	81	74	85
	Indirect	TJ	15,077	14,828	14,988	15,990	16,801

* Redescription of past data

8. Energy Usage

Classification	Unit	2018	2019	2020	2021	2022
Kerosene	kcal/KRW million	101.6	120.1	80.7	72.7	63.8
Diesel	kcal/KRW million	2,141.7	2,592.5	1,868.0	1,581.1	1,307.4
LNG	kcal/KRW million	2,436.3	2,881.5	2,588.5	1,965.0	2,063.3
LPG	kcal/KRW million	3.0	0.0	21.0	319.7	346.5
Electricity (Consumption)	kcal/KRW million	1,063,863	1,194,639	952,982	950,605	842,069
Electricity (Generation)	kcal/KRW million	1,530,350*	1,507,718	1,654,423*	1,191,451	1,101,422

* Energy Usage = (Energy Use x Total Caloric Value)/Sales Amount

* Updating past data information

9. Dust Generation (Unit: kg)

Classification	2018	2019	2020	2021	2022
Fine Dust	238	239	223	207	212
SO_x	1,525	1,528	1,388	1,259	1,241
CO	1,050	1,069	1,092	953	1,072
HC	204	210	225	194	228
NO_x	5,115	5,224	5,452	4,832	5,566

10. Environmental Management Performance

Classification	2018	2019	2020	2021	2022
Environmental Performance Evaluation (EPE) Index (Point)	158	151	147	155	158
Green product purchase amount (KRW 100 million)	381	309	378	399	376



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

11. Environmental Management Performance (Unit: mg/L)

Classification		Basis	2018	2019	2020	2021	2022
Purification Plant Drainwater	BOD	Measurement Value	2.1	1.7	1.5	1.9	2.3
	COD (~2020)		4.7	4.7	5.2	5.0	-
	TOC (2022~)		-	-	-	-	3.5
Sewage Treatment Facility	SS	Measurement Value	2.0	1.8	1.7	1.7	2.9
	BOD		6.0	5.1	4.8	4.4	4.3
	SS		4.9	5.0	5.0	5.1	4.4
Sewerage Treatment Facility	BOD	- (Average)	2.8	3.4	2.7	2.7	2.0
		5 (Zone 1~2)	1.1	1.3	1.0	1.2	1.0
		10 (Zone 3~4)	4.1	4.6	4.3	4.1	2.7
	COD (TOC, 2021~)	- (Average)	9.6	10.6	9.1	6.1	7.5
		20 (COD Zone 1~2) 15 (TOC Zone 1~2)	7.4	7.4	7.1	5.8	6.0
		40 (COD Zone 3~4) 25 (TOC Zone 3~4)	11.3	12.5	11.1	6.5	8.7
		- (Average)	2.4	2.8	2.9	2.9	2.2
SS	10 (Zone 1~2)	1.6	1.6	1.5	1.7	1.5	
	10 (Zone 3~4)	3.0	3.4	4.2	4.1	2.7	

* For sewerage treatment facilities' COD, TOC values have been input from 2021 as the survey items have been changed from COD to TOC starting from 2021

12. Chemical Substance Management

Classification		Substance Classification	2018	2019	2020	2021	2022
Chemical Substance Discharge Amount (kg)		Chlorine	6,402.4	5,201.7	5,339.0	2,498.9	304.7
		Aluminum and its compounds	70.0	135.7	29.5	35.3	39.6
		Sodium Hydroxide	0.0	0.0	0.0	0.0	0.0
		Sulfuric Acid	0.0	0.0	0.0	0.0	0.0
		Hydrogen Peroxide	0.0	0.0	1.4	0.0	0.2
		Fluorosilicic Acid	0.0	0.0	0.0	0.0	0.0
Chemical in Won Unit (KRW/m ³)	Living Water	Raw Water	8.4	8.6	9.3	9.7	11.4
		Meter Reading	8.8	8.9	9.9	10.2	12.0
	Industrial Water	Raw Water	7.7	7.4	7.3	6.7	8.2
		Meter Reading	7.3	7.0	6.8	6.3	7.6

* The chemical intensity reflected the changes in the intensity of the previous year with the changes in the inspection volume.

13. Waste Generation Amount & Recycling Rate

Classification		2018	2019	2020	2021	2022
Water Purification Plant Sludge	Amount Generated (Ton)	138,603	131,660	154,277	149,058	139,620
	Generation in Won Unit (Ton/KRW million)	0.05	0.04	0.04	0.00	0.03
	Recycling Rate (%)	100.0	100.0	100.0	100.0	100.0
Sewage Sludge	Amount Generated (Ton)	166,554	69,529	106,273	106,256	48,070
	Generation in Won Unit (Ton/KRW million)	0.06	0.02	0.03	0.00	0.01
	Recycling Rate (%)	49.0	91.8	100.0	100.0	98.1
Floating Matter Debris	Total Amount Generated (m ³)	151,440	66,282	203,541	38,797	65,385
	Generation in Won Unit (m ³ /KRW million)	0.04	0.02	0.05	0.01	0.01
Construction Waste	Total Amount Generated (Ton)	1,464,438	232,525	5,141,653	646,340	674,896
	Generation in Won Unit (Ton/KRW million)	0.49	0.06	1.28	0.14	0.14

* Corrected previous year's data of the treatment facility sludge generation per Allbaro System input data

14. Environmental Improvement in Project Area

Classification		Unit	2018	2019	2020	2021	2022		
Postenvironmental Impact Assessment (Water Quality)	Hantangang Dam	BOD (mg/L)	0.7	1.5	1.0	0.9	Not applicable (Assessment Period ~ 2021)		
		COD (mg/L)	1.7	3.7	2.0	1.9			
	Gimcheon Buhang Dam	BOD (mg/L)	2.0	2.1	Not applicable (Assessment Period ~ 2019)				
		COD (mg/L)	3.3	3.6	Not applicable (Assessment Period ~ 2019)				
	Seongdeok Dam	BOD (mg/L)	1.8	1.6	1.3	1.1	Not applicable (Assessment Period ~ 2021)		
		COD (mg/L)	2.9	3.0	2.3	2.1			
	Yeongju Dam	BOD (mg/L)	2.2	1.7	2.3	2.0	1.5		
		COD (mg/L)	3.6	3.5	4.8	4.2	4.1		
	Bohyeonsan Dam	BOD (mg/L)	3.8	4.4	3.1	3.2	Not applicable (Assessment Period ~ 2021. 7)		
		COD (mg/L)	7.1	6.9	7.5	7.1			
Postenvironmental Impact Assessment (Water Quality)	Hantangang Dam	PM10 (μg)	Not applicable (On operation)						
		NO ₂ (ppb)	Not applicable (On operation)						
	Gimcheon Buhang Dam	PM10 (μg)	70	Not applicable (Assessment Period ~ 2018)					
		NO ₂ (ppb)	12	Not applicable (Assessment Period ~ 2018)					
	Seongdeok Dam	PM10 (μg)	Not applicable (On operation)						
		NO ₂ (ppb)	Not applicable (On operation)						
	Yeongju Dam	PM10 (μg)	47	45	Not applicable (On operation)				
		NO ₂ (ppb)	12	15	Not applicable (On operation)				
	Bohyeonsan Dam	PM10 (μg)	42	35	20	48	Not applicable (Assessment Period ~ 2021. 7)		
		NO ₂ (ppb)	11	13	12	11			
Postenvironmental Impact Assessment (Noise & Vibration)	Hantangang Dam	Noise(dBA)	Not applicable (On operation)						
		Vibration(dBV)	Not applicable (On operation)						
	Gimcheon Buhang Dam	Noise(dBA)	44	Not applicable (Assessment Period ~ 2018)					
		Vibration(dBV)	25	Not applicable (Assessment Period ~ 2018)					
	Seongdeok Dam	Noise(dBA)	Not applicable (On operation)						
		Vibration(dBV)	Not applicable (On operation)						
Postenvironmental Impact Assessment (Mammal)	Yeongju Dam	Noise(dBA)	43	42	Not applicable (On operation)				
		Vibration(dBV)	21	15	Not applicable (On operation)				
	Bohyeonsan Dam	Noise(dBA)	53	42	44	46	Not applicable (Assessment Period ~ 2021. 7)		
		Vibration(dBV)	27	26	28	28			
Postenvironmental Impact Assessment (Mammal)	Hantangang Dam	Total No. of Species (Type)	15	13	9	11	Not applicable (Assessment Period ~ 2021)		
		Legal Protected Species (Type)	2	1	2	2			
	Gimcheon Buhang Dam	Total No. of Species (Type)	13	12	Not applicable (Assessment Period ~ 2019)				
		Legal Protected Species (Type)	2	2	Not applicable (Assessment Period ~ 2019)				
	Seongdeok Dam	Total No. of Species (Type)	14	13	12	11	Not applicable (Assessment Period ~ 2021)		
		Legal Protected Species (Type)	2	2	2	2			

Classification		Unit	2018	2019	2020	2021	2022
Postenvironmental Impact Assessment (Mammal)	Yeongju Dam	Total No. of Species (Type)	12	11	13	13	15
		Legal Protected Species (Type)	2	2	2	2	2
	Bohyeonsan Dam	Total No. of Species (Type)	13	14	14	9	Not applicable (Assessment Period ~ 2021. 7)
		Legal Protected Species (Type)	2	2	2	2	
	Hantangang Dam	Total No. of Species (Type)	23	21	19	17	Not applicable (Assessment Period ~ 2021)
		Legal Protected Species (Type)	0	2	1	1	
	Gimcheon Buhang Dam	Total No. of Species (Type)	14	14	Not applicable (Assessment Period ~ 2019)		
		Legal Protected Species (Type)	0	0	Not applicable (Assessment Period ~ 2019)		
Postenvironmental Impact Assessment (Fish)	Seongdeok Dam	Total No. of Species (Type)	17	19	21	19	Not applicable (Assessment Period ~ 2021)
		Legal Protected Species (Type)	0	0	1 (Culter brevicauda)	1	
	Yeongju Dam	Total No. of Species (Type)	24	20	18	25	27
		Legal Protected Species (Type)	0	0	0	0	0
	Bohyeonsan Dam	Total No. of Species (Type)	13	15	12	10	Not applicable (Assessment Period ~ 2021. 7)
		Legal Protected Species (Type)	0	0	0	0	
	Hantangang Dam	Total No. of Species (Type)	12	11	9	9	Not applicable (Assessment Period ~ 2021)
		Legal Protected Species (Type)	0	0	0	0	
	Gimcheon Buhang Dam	Total No. of Species (Type)	12	13	Not applicable (Assessment Period ~ 2019)		
		Legal Protected Species (Type)	0	0	Not applicable (Assessment Period ~ 2019)		
Postenvironmental Impact Assessment (Amphibian & Reptiles)	Seongdeok Dam	Total No. of Species (Type)	14	12	11	11	Not applicable (Assessment Period ~ 2021)
		Legal Protected Species (Type)	0	0	0	0	
	Yeongju Dam	Total No. of Species (Type)	13	16	14	14	15
		Legal Protected Species (Type)	0	0	1	1	0
	Bohyeonsan Dam	Total No. of Species (Type)	13	14	13	13	Not applicable (Assessment Period ~ 2021. 7)
		Legal Protected Species (Type)	0	0	0	0	
	Hantangang Dam	Total No. of Species (Type)	45	49	47	46	Not applicable (Assessment Period ~ 2021)
		Legal Protected Species (Type)	2	4	2	3	
	Gimcheon Buhang Dam	Total No. of Species (Type)	51	50	Not applicable (Assessment Period ~ 2019)		
		Legal Protected Species (Type)	5	2	Not applicable (Assessment Period ~ 2019)		
Postenvironmental Impact Assessment (Birds)	Seongdeok Dam	Total No. of Species (Type)	55	50	46	44	Not applicable (Assessment Period ~ 2021)
		Legal Protected Species (Type)	3	2	1	3	
	Yeongju Dam	Total No. of Species (Type)	66	67	56	55	73
		Legal Protected Species (Type)	6	7	7	5	9
	Bohyeonsan Dam	Total No. of Species (Type)	48	46	46	36	Not applicable (Assessment Period ~ 2021. 7)
		Legal Protected Species (Type)	2	2	3	3	



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

15. Ecological Restoration in the Project Area (Unit: No. of sites)

Classification		2018	2019	2020	2021	2022
Total	Alternative Habitat	53	53	46	46	46
	Fish Spawning Ground	13	11	11	11	11
	Ecological Corridor	116	116	107	100	107
	Artificial Marsh	20	20	20	27	21
	Fishway	5	5	5	5	5
Gunwi Dam	Alternative Habitat	5	5	5	5	5
	Fish Spawning Ground	5	3	5	5	5
	Ecological Corridor	3	3	3	3	3
	Artificial Marsh	3	5	5	5	5
Gunnam Dam	Fishway	0	0	0	0	0
	Alternative Habitat	3	3	3	3	3
	Fish Spawning Ground	0	0	0	0	0
	Ecological Corridor	0	0	0	0	0
	Artificial Marsh	2	2	2	2	2
Hantangang Dam	Fishway	1	1	1	1	1
	Alternative Habitat	0	0	0	0	0
	Fish Spawning Ground	0	0	0	0	0
	Ecological Corridor	7	7	7	7	7
Hantangang Dam	Artificial Marsh	0	0	0	0	0
	Fishway	0	0	0	0	0

Classification		2018	2019	2020	2021	2022
Gimcheon Buhang Dam	Alternative Habitat	12	12	10	10	10
	Fish Spawning Ground	3	3	1	1	1
	Ecological Corridor	46	46	46	46	46
	Artificial Marsh	4	4	4	4	4
	Fishway	3	3	3	3	3
Seongdeok Dam	Alternative Habitat	24	24	24	24	24
	Fish Spawning Ground	3	3	3	3	3
	Ecological Corridor	45	45	45	45	45
	Artificial Marsh	2	2	2	2	2
Yeongju Dam	Fishway	0	0	0	0	0
	Alternative Habitat	0	0	0	0	0
	Fish Spawning Ground	1	1	1	1	1
	Ecological Corridor	1	1	1	1	1
	Artificial Marsh	3	3	3	3	3
Bohyeonsan Dam	Fishway	1	1	1	1	1
	Alternative Habitat	4	4	4	4	4
	Fish Spawning Ground	1	1	1	1	1
	Ecological Corridor	5	5	5	5	5
Bohyeonsan Dam	Artificial Marsh	4	4	4	4	5
	Fishway	0	0	0	0	0



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

• ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

ESG Data

Social

1. Customer Satisfaction

Classification	2018		2019		2020		2021		2022	
	Evaluation Group Average	K-water	Evaluation Group Average	K-water	Evaluation Group Average	K-water	Evaluation Group Average	K-water	Evaluation Group Average	K-water
Customer Satisfaction (Point)	88.7	91.7	88.8	95.0*	85.4	94.2	84.7	93.8	87.8	91.9

* Adjusted values according to the adjustment of figures in the decimal places

2. Customer Communication

Classification	2018	2019	2020	2021	2022	
No. of Civil Complaints (EA)	Document	280	206	205	153	275
	Electronic	1,789	3,088	3,801	2,240	2,195
Rate of Timely Handling of Civil Complaints (%)	99.7	99.6	99.4	99.6	99.3	

3. Guarantee on Right-to-Know of the Customers

Classification	2018	2019	2020	2021	2022
Disclosure rate of Information Disclosure request (%)	86.0	76.0	76.0	82.7	81.3



4. Employee Distribution

Classification	2018		2019		2020		2021		2022				
	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)			
Permanent Position Ratio		89.3		89.1		89.6		100.0		100.0			
Total No. (including 7 executive directors)	4,966		5,204		5,426		5,597		5,657				
Total	5,293	-	5,556	-	5,732	-	5,861	-	6,077	-			
Total	Age	Age 20 or lower	930	17.6	1,097	19.7	1,241	21.7	1,453	24.8	1,387	22.8	
		Age 30~40s	2,898	54.8	2,952	53.1	2,971	51.8	3,042	51.9	3,157	51.9	
		Age 50 or higher	1,465	27.7	1,507	27.1	1,520	26.5	1,366	23.3	1,533	25.2	
	Gender	Male	4,472	84.5	4,599	82.8	4,670	81.5	4,674	79.7	4,793	78.9	
		Female	821	15.5	957	17.2	1,062	18.5	1,187	20.3	1,284	21.1	
	Total	6	-	3	-	6	-	6	-	6	-		
	Executives	Age	Age 20 or lower	-0	0.0	-0	0.0	-0	0.0	0	0.0	0	0.0
			Age 30~40s	-0	0.0	-0	0.0	-0	0.0	0	0.0	0	0.0
			Age 50 or higher	6	100	3	100	6	100	6	100	6	100
		Gender	Male	6	100	3	100	6	100	6	100	6	100
Female			-0	0.0	-0	0.0	-0	0.0	0	0.0	0	0.0	
Total		3,953	-	4,138	-	4,275	-	4,393	-	4,504	-		
General Position		Age	Age 20 or lower	590	14.9	756	18.3	889	20.8	1,088	24.8	986	21.9
			Age 30~40s	2,359	59.7	2,369	57.2	2,367	55.4	2,434	55.4	2,517	55.9
			Age 50 or higher	1,004	25.4	1,013	24.5	1,019	23.8	871	19.8	1,001	22.2
		Gender	Male	3,340	84.5	3,403	82.2	3,442	80.5	3,431	78.1	3,464	76.9
	Female		613	15.5	735	17.8	833	19.5	962	21.9	1,040	23.1	
	Total	820	-	841	-	909	-	939	-	1,031	-		
	Management Position	Age	Age 20 or lower	333	40.6	321	38.2	340	37.4	360	38.3	396	38.4
			Age 30~40s	382	46.6	410	48.8	438	48.2	451	48.0	478	46.4
			Age 50 or higher	105	12.8	110	13.1	131	14.4	128	13.6	157	15.2
		Gender	Male	645	78.7	666	79.2	727	80.0	756	80.5	833	80.8
Female			175	21.3	175	20.8	182	20.0	183	19.5	198	19.2	

Current No. of Employees*

Classification	2018		2019		2020		2021		2022				
	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)			
Total	207	-	237	-	235	-	217	-	229	-			
Professional	Age	Age 20 or lower	7	3.4	20	8.4	12	5.1	5	2.3	4	1.7	
		Age 30~40s	150	72.5	169	71.3	166	70.6	156	71.9	156	68.1	
		Age 50 or higher	50	24.2	48	20.3	57	24.3	56	25.8	69	30.1	
	Gender	Male	176	85.0	194	81.9	192	81.7	177	81.6	190	83.0	
		Female	31	15.0	43	18.1	43	18.3	40	18.4	39	17.0	
	Total	307	-	337	-	307	-	306	-	307	-		
	Special	Age	Age 20 or lower	-0	0.0	-0	0.0	-0	0.0	0	0.0	1	0.3
			Age 30~40s	7	2.3	4	1.2	-0	0.0	1	0.3	6	2.0
			Age 50 or higher	300	97.7	333	98.8	307	100.0	305	99.7	300	97.7
		Gender	Male	305	99.3	333	98.8	303	98.7	304	99.3	300	97.7
Female			2	0.7	4	1.2	4	1.3	2	0.7	7	2.3	
No. of Employees		912	-	908	-	911	-	911	-	927	-		
Total	846	-	849	-	871	-	886*	-	880	-			
Unlimited Contract	Age	Age 20 or lower	70	8.3	75*	8.8	82*	9.4	91*	10.3	70	8.0	
		Age 30~40s	488	57.7	500*	58.9	565*	64.9	606*	68.4	628	71.4	
		Age 50 or higher	288	34.0	274	32.3	224	25.7	189*	21.3	182	20.7	
	Gender	Male	697	82.4	697	82.1	712	81.7	725*	81.8	727	82.6	
		Female	149	17.6	152	17.9	159	18.3	161*	18.2	153	17.4	

Current No. of Employees*

* Current No.: As the current number in the standard of regular employees, workers in consignment project and employees in paternal leave and in military service excluded in the Alio Disclosure are included

* Permanent Position Ratio = (Total No. of Workers at the End of the Relevant Year - Temporary or Non-regular Workers - Part-time Worker - Workers in the form of dispatch, service and call, etc.) / Total No. of Workers as of the End of the Relevant Year

* Recalculation by age and recalculation of the current number of staff



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

5. Non-permanent Position Status

Classification	2018		2019		2020		2021		2022		
	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	
Total	221.75	4.65	313.00	6.28	564.25	10.61**	608.13	8.27**	597.75	7.91	
Type	Non-regular Worker	220	4.62	312	6.26	559	10.53	605	8.23**	596	7.89
	Part-time Worker	1.75	0.04	1.00	0.02	5.25	0.11	3.13	0.05	1.75	0.03

* Ratio (%) = Non-permanent / (Non-permanent + Unlimited Contract + Permanent)

** Recalculation of the ratio according to the number adjustment and 2021 permanent contract employees' current number changes

6. Job Transfer Status

Classification	2018		2019		2020		2021		2022		
	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	
Total	83*	1.67*	103*	1.85*	78*	1.36*	123	2.10	96	1.58	
Total	Male	58	1.17	77	1.39	62	1.08	98	1.67	69	1.14
	Female	25	0.50	26	0.47	16	0.28	25	0.43	27	0.44
Total	1	0.02	1	0.02	0	0.00	3	0.05	1	0.02	
Executives	Male	1	0.02	1	0.02	0	0.00	3	0.05	1	0.02
	Female	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	58	1.17	73	1.31	59	1.03	67	1.14	60	0.99	
General Position	Male	38	0.77	51	0.92	45	0.79	47	0.80	39	0.64
	Female	20	0.40	22	0.40	14	0.24	20	0.34	21	0.35
Total	9	0.18	11	0.20	5	0.09	25	0.43	13	0.21	
Management Position	Male	5	0.10	9	0.16	4	0.07	22	0.38	11	0.18
	Female	4	0.08	2	0.04	1	0.02	3	0.05	2	0.03
Total	5	0.10	4	0.07	6	0.10	8	0.14	6	0.10	
Professional	Male	4	0.08	2	0.04	5	0.09	6	0.10	3	0.05
	Female	1	0.02	2	0.04	1	0.02	2	0.03	3	0.05
Total	10	0.20	14	0.25	8	0.14	20	0.34	16	0.26	
Special	Male	10	0.20	14	0.25	8	0.14	20	0.34	15	0.25
	Female	0	0.00	0	0.00	0	0.00	0	0.00	1	0.02

* Changed the calculation standard with the data excluding nonvoluntary resignation (e.g., regular retirement, dismissal, termination of employment contract, death, layoff, expulsion, dismissal from position, etc.)

7. Paternal Leave & Reinstatement Rate

Classification	2018	2019	2020	2021	2022
Total	165*	150	154*	172	225
Target (person)	165	150	154	172	225
Leave of Absence (person)	100	100	100	100	100
Reinstatement Rate (%)	100	100	100	100	100
Maintenance Rate (%)	100	100	100	100	100
Male	32	26	35*	52	79
Target (person)	32	26	35*	52	79
Leave of Absence (person)	100	100	100	100	100
Reinstatement Rate (%)	100	100	100	100	100
Maintenance Rate (%)	100	100	100	100	100
Female	133	124	119	120	146
Target (person)	133	124	119	120	146
Leave of Absence (person)	100	100	100	100	100
Reinstatement Rate (%)	100	100	100	100	100
Maintenance Rate (%)	100	100	100	100	100

* Changed the calculation method for 2018 and 2020 in all subjects to the Ministry of Economy and Finance's integrated disclosure manual's calculation method

8. Grievance Handling Performance

Classification	2018	2019	2020	2021	2022
Total No. of Grievances (Case)	73	39	56	46	43
No. of Grievances Handled (Case)	69	39	56	46	43
No. handled after the following year even when received previously (Case)	0	0	0	0	0
Handling Rate (%)	94.5	100	100	100	100

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX
 - ESG Data
 - UN SDGs
 - GHG Verification Statement
 - Third-Party Assurance Statement
 - ISO 26000 Assessment Report
 - K-ESG Guidelines Index
 - GRI Content Index
 - SASB Index
 - TCFD Index
 - Memberships and Awards

9. Female and social equity talent recruitment status

Classification	2018		2019		2020		2021		2022		
	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	
Total New Recruitments	365.5	6.91	478	8.60	377	6.58	472	8.05	316	5.20	
New Recruitment Index	1.08		1.45		0.70		1.25		0.66		
Type	Flexitime (No. of Employees)	9	0.17	0	0.00	0	0.00	0	0.00	0	0.00
	Female	90.5	1.71	168	3.02	123	2.15	159	2.71	107	1.76
	Disabled Employees	1	0.02	4	0.07	0	0.00	36	0.61	40	0.66
	Talents in Non-capital Region	197	3.72	252	4.54	195	3.40	272	4.64	193	3.18
	High School Graduates	148.5	2.81	68	1.22	29	0.51	58	0.99	80	1.32

* New Recruitment Index = ((New Recruitment in the Relevant Year / New Recruitment in the Previous Year) / (Added Value in the Relevant Year/Added Value in the Previous Year))
 ** Ratio (%): Calculated in the standard of current number; especially for recruitment of the disabled, efforts are made to increase the recruitment through employment consulting of the disabled along with the Korea Employment Agency for the Disabled

10. Status of Flexible Work (Unit: persons)

Classification	2018	2019	2020	2021	2022	
Flexi-time	Recruitment	9	0	6	5	4
	Conversion	16	32	39	40	36
Flexible Work	Staggered Hour Type	2,427	2,656	0	0	0
	Working Hour Selection Type	595	2,156	3,591	3,578	3,714
	Intensive Work Type	10	7	4	0	0
	Discretionary Work Type	0	0	0	0	0
Remote Work	Telecommuting	8	15	4,879	5,488	4,267
	Smart Work Type	3	1	0	0	0

11. Labor-Management Relations & Employee Satisfaction

Classification	2018	2019	2020	2021	2022
Labor Union Membership Rate (%)	83	83	82	82	83
No. of Labor Union Disputes (Case)	0	0	0	0	0
Labor-Management Relations Satisfaction Level (%)	93.0	93.1	93.7	94.6	94.8
Compensation Welfare Satisfaction Level (%)	3.3	3.5	3.7	3.8	3.9

12. Occupational Safety

Classification	2018		2019		2020		2021		2022	
	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)	Personnel (EA)	Ratio (%)
Injury	11	0.18	9	0.14	13**	0.17	8**	0.10	12	0.15
Occupational Disease*	1**	0.02	0	0.00	1**	0.01	1	0.03	2	0.04
Industrial accident rate	12	0.20	9	0.14	14	0.18	9**	0.13	14	0.18
Prevalence Rate	588**	10.47	621	10.10	609	9.54	640	9.50	651	9.17

* National health checkup type D2 (e.g., high blood pressure, diabetes, hyperlipidemia, hepatitis, anemia, etc.)
 ** According to the "Accident Rate Certificate Issue System Amendment" (October 2022, Ministry of Employment and Labor), it has been reorganized to check the accident rates and disease rates separately, and drafted accidental industrial accidents (injuries) and disease industrial accidents (occupational disease) separately

Prevalence Rate

Classification	2018	2019	2020	2021	2022	
Industrial Accident	Industrial accident rate (%)	0.23	0.13	0.18	0.13	0.18
	No. of Accidents (person)	12	9	14	8	14
No. of Deaths (person)	Employee	0	0	0	0	0
	Direct	0	0	0	0	0
	Subcontract	0	0	0	0	0
Disease Occurrence	Construction Order	3	2	0	1	0
	Prevalence Rate (%)	10.5*	10.1	9.5	9.5	9.2
	Disease Occurrence	588	621	609	640	651

* Corrected due to the error in the 2022 data





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

- ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

13. Welfare Status Such as Flexitime, etc

Classification	2018	2019	2020	2021	2022
Expansion of flexible work set-up	<ul style="list-style-type: none"> Secured smart work centers and remote work for the day between two holidays Operation of short-time working systems and various flexible working systems 	<ul style="list-style-type: none"> Introduction of flexitime based on the task 	<ul style="list-style-type: none"> Substantial expansion of non-face-to-face work type of remote work transcending time and place restrictions due to the change in environment such as COVID-19, etc. (14 cases in 2019 → 53,058 cases in 2020) Increase in utilization by improving the autonomy (frequent change possible) of selecting the working hours (2,156 persons in 2019 → 3,591 persons in 2020) 	<ul style="list-style-type: none"> Create an immersive working culture by spreading the operation of flexitime throughout the enterprise Operation of various flexible work system types (Flexible work, remote work and flexitime, etc.) Provide Smart remote working environment through Cloudbased PC 	<ul style="list-style-type: none"> Expansion of work immersion culture with selective working hours and flexible working hours (Flexible work, remote work, and working time selection system) Vitalized mobile work environment (video conference, email, schedule-sharing, etc.) by providing cloud-based PCs and work laptops
Improvement of work-related practices	<ul style="list-style-type: none"> Family Day Program (every Wednesday) Implementation of weekday 9:00 p.m. shutdown (power off) and PC-off (power supply off) and weekend PC-off (power supply off) Implementation of simplified work processes Improvement of meeting culture 	<ul style="list-style-type: none"> Labor-management agreement on introducing the "Total Working Hour System" linked with flexitime; for efficient change in the working method, simplification and efficiency of the "Company Rules, Standard, and General Work" through official duties of all employees in "Removing Work Procedures with Low Added Value" 	<ul style="list-style-type: none"> Total working hour system linked to the personal work schedule and total hours of PC use is introduced to guarantee the right to rest of the employee by granting 1.5 times of compensation leave on overtime work 	<ul style="list-style-type: none"> Efficient work process improvement through RPA (Robotic Process Automation) Simplification and efficiency of "Company Rules and General Work" by receiving ideas from all employees on "Removing Work Procedures with Low Added Value" 	<ul style="list-style-type: none"> Created a pleasant working environment with the introduction of the free seating arrangement Simplified and automated (RPA) tasks that create little added value by collecting opinions from all employees Implemented enhancement of work efficiency by installing a chatbot in finance/education areas
Following childbirth support policy	<ul style="list-style-type: none"> Increased number of days for spouse maternity leave, increased recognition of maternity leave period as included in the valid work period 	<ul style="list-style-type: none"> Operation of maternity leave, maternity leave notice system, and workplace nursery (expand number by converting idle facilities into nursery facilities) 	<ul style="list-style-type: none"> (Preparation for Pregnancy) New separate establishment of regulations on use of infertility leave and support for infertility treatment (During Pregnancy) Reduced working hours for pregnant employees, improvement of prenatal diagnosis leave, adjustment of the number of holidays according to miscarriage and new establishment of vacation for the spouse 	<ul style="list-style-type: none"> (Preparation for Pregnancy) Separate operation of regulations on use of infertility leave and support for infertility treatment (increase in number of holidays and new establishment of vacation for the male employees) (During Pregnancy) Improve operation system for reduced working hours for pregnant employees 	<ul style="list-style-type: none"> (Preparation for Pregnancy) Increased days of leave for infertility treatments (2→4 days), newly established leave for men (During Pregnancy) Increased grounds of approval for split use of pre/postnatal maternity leave (90 days) (e.g., premature delivery, etc.) Increased grounds for carer's leave (e.g., medical clinic visits for children, official consultations, etc.)
Support for work-family life balance	<ul style="list-style-type: none"> Implement family-participatory training (e.g., couple consultation, fatherhood school, etc.) Continued securing of additional recreational facilities (e.g., increased support for good use of leisure, cultural performances, etc.) 	<ul style="list-style-type: none"> Operation of "TF on Improvement of Quality of Life" such as reorganization of flexitime for balance between work and life, improvement of family-friendly welfare system, etc. 	<ul style="list-style-type: none"> Recognition of vacancy from the holiday date when using parental leave for 1 or more times New establishment of holiday for family care Improvement of holiday for childcare 	<ul style="list-style-type: none"> Establishment of 1:1 consultation channel for parental leave 100% arrangement of employee reinstated from parental leave to original position Expansion of reason for childcare in the holiday for care Provide methods for expanding the nursery in the company for each basin 	<ul style="list-style-type: none"> Introduction of circular internal mobility within the region (previously national) Increased continued employment of new recruits at their preferred region (5→10 years) Support for dual-income households with in-house day care centers Newly built hub-style studio residences in remote business sites that are difficult to secure corporate housing



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

14. Remuneration and wage ratio (K-ESG S-3-2 women's wages ratio)

Classification		2018	2019	2020	2021	2022	
Average remuneration (KRW 1,000)	Permanent employees	Per person average	76,002	78,826	81,655	83,679	82,915
		Male	79,669	82,750	85,304	87,359	86,972
		Female	55,046	58,255	63,643	67,386	66,573
	Part-time employees	Per person average	37,804	36,058	40,912	43,108	48,925
		Male	38,166	37,033	41,009	42,951	49,727
			Female	36,220	31,770	40,466	43,855
Wage ratio (%)							
Permanent employees	Male	104.8*	105.0	104.5	104.4	104.9	
		Female	72.4*	73.9	77.9	80.5	80.3
	Part-time employees	Male	101.0*	102.7	100.2	99.6	101.6
			Female	95.8*	88.1	98.9	101.7

* Corrected due to the error in the Excel formula

15. Education & Training Status

Classification		2018	2019	2020	2021	2022		
No. of Trainees (person)		19,774	21,700	33,686	50,182	52,177		
Education & Training Hours per capita (Hour)*	Total	79	80	75	88	101		
	Gender	Male	79	80	74	83	98	
			Gender	79	80	75	93	111
	Per Employment Type	Executive	55	58	29	48	55	
			General Post	83	85	90	100	108
			Special Post	39	11	7	6	9
Educational Investment per Employee (Unit: KRW thousand)		1,950	1,534	685	1,017	956		

* Calculated by dividing the total confirmed hours such as internal training (time calculated with the training portal system) and external training (certificate of completion) by the number of people who completed training

16. Social Contribution

Classification		2018	2019	2020	2021	2022
Social Contribution Activity Index (Point)		87.0	89.7	82.7	64.7	78.1
Social Contribution Participation Level	No. of Participating Employees (person)	3,364	3,358	2,495	3,598	3,628
	Ratio Compared to Current No. (%)	63.6	60.4	43.5	61.4	59.7
	Total Participation Hours	33,481	32,248	20,436	12,270	10,498
		Participation Hours per Employee	10.0	9.6	8.2	3.4
Social Contribution Investment Scale	Amount (KRW 100 million)	658.6	696.6	738.0	724.0	792.7
	Ratio Compared to Sales Amount (%)	1.9*	2.3*	2.0	1.8	1.7

* Correction of figures to data input error

17. Technology Development for Win-win Cooperation (Unit: No. of cases)

Classification		2018	2019	2020	2021	2022
Patent	Application	28	29	46	42	40
	Registration	25	38	23	33	37

* Correction of figures in the previous year's report including cases that were applied and registered before the internal review



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

● ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

18. Purchase Performance of SME Products

Classification	2018	2019	2020	2021	2022
Total Purchase Amount (KRW million)	744,371	1,517,079	1,683,203	1,801,101 *	2,012,732
SME Product Purchase Amount (KRW million)	466,627	949,691	1,077,890	1,255,851	1,431,322
Ratio (% , SME Product Purchase Amount/ Total Purchase Amount)	62.69	62.60	64.04	69.73	71.11

* Corrected the total purchase amount figures in 2021

19. Female Enterprise Product Purchase Performance

Classification	2018	2019	2020	2021	2022
Total Purchase Amount (KRW million)	744,371	1,517,079	1,683,203	1,801,101 *	2,012,732
Purchase Amount from Female Enterprise (KRW million)	35,076	64,470	100,961	117,268	137,826
Ratio (% , Female Enterprise Product Purchase Amount/Total Purchase Amount)	4.71	4.25	6.00	6.51	6.85

* Corrected the total purchase amount figures in 2021

20. Social Enterprise Product Purchase Performance

Classification	2018	2019	2020	2021	2022
Total Purchase Amount (KRW million)	310,611	685,568	775,336	903,312	1,002,882
Purchase Amount from Social Enterprise (KRW million)	14,945	21,227	23,464	27,115	32,358
Ratio (% , Social Enterprise Product Purchase Amount/Total Purchase Amount)	4.81	3.10	3.03	3.00	3.23

21. Purchase Performance of Products by the Severely Disabled

Classification	2018	2019	2020	2021	2022
Total Purchase Amount (KRW million)	310,611	685,568	775,336	903,312	1,002,882
Purchase Amount of Products by the Severely Disabled (KRW million)	15,936	13,298	11,551	15,473	15,742
Ratio (% , Purchase Amount on Products by the Severely Disabled/Total Purchase Amount)	5.13	1.94	1.49	1.71	1.57

22. Research & Professional Manpower Status

Classification	2018	2019	2020	2021	2022
Research task (EA)	140	134	134	165	180
R&D Cost (KRW 100 million)	160	170	171	227	235
No. of Research Paper Presentations (EA)	363	300	212	203	218
Total (person)	250	235	196	208	208
Bachelor (%)	29	29	30	31	31
Master's (%)	36	31	26	26	24
Doctor's (%)	35	40	44	43	46
General Post (%)	34	39	37	34	38
Entrusted Research Post (%)	29	23	25	27	18
Research Expert (%)	37	38	38	39	44

* Some figures have been changed due to the application of public data standards announced by ALIO

23. Risk Management

Classification	2018	2019	2020	2021	2022
Effort for Risk Management (Point)	97.3*	97.8*	98.0	98.2*	98.6
Efforts for Reducing Accidents (No. of Deaths)	3	2	0	1	0

* Correction of figures to data input error

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

- ESG Data
 - UN SDGs
 - GHG Verification Statement
 - Third-Party Assurance Statement
 - ISO 26000 Assessment Report
 - K-ESG Guidelines Index
 - GRI Content Index
 - SASB Index
 - TCFD Index
 - Memberships and Awards

Status on Violation of Laws·Regulations

1. Status Regarding Violation of Laws·Regulations Related to Society

Classification	2018	2019	2020	2021	2022
No. of Violations	2	3	1	-	3
Violation Details	Occupational Safety & Health Act	Occupational Safety & Health Act	Occupational Safety & Health Act		Occupational Safety & Health Act

2. Status Regarding Violation of Laws·Regulations Related to Environmental

Classification	2018	2019	2020	2021	2022
No. of Violations	0	0	3	4	2
Violation Details			Water Environment Conservation Act, Wastes Control Act	Water Environment Conservation Act, Wastes Control Act	Water Environment Conservation Act
Details of the violation			Non-compliance with reporting changes in wastewater discharge facilities (Geoje), exceeding the system entry deadline (Milyang & Boryeong)	Failure to maintain operation logs for wastewater discharge facilities (Geoje), exceeding effluent water quality standards (Chungnam Central), violations in waste management (Chungju), exceeding drinking water quality standards (Gumi)	Exceeded pH discharge standard (Buan), Failure to keep wastewater discharge facility operational daily records (Central Chungnam Region)

3. Status of Violations of Laws and Regulations Related to Governance

Classification	2018	2019	2020	2021	2022
No. of Violations	0	0	0	0	0
Violation Details					

* Governance Related Laws & Regulations: Transactions with affiliates and other specially related parties', 'organization and operation of the board of directors', 'organization and operation of an audit organization', and 'disclosure of management information', etc. stipulated by Commercial Act, Financial Investment Services and Capital Markets Act, Act on Corporate Governance of Financial Companies, and other related laws and regulations

4. Disclosure of Violations of the Code of Ethics (Alio+Integrity Portal)

Classification	2018	2019	2020	2021	2022
No. of Violations	0	0	0	0	0

* Violations related to the Code of Ethics: Actions that violate the behavioral methods covered by the ethical norms stipulated by the organization, and behaviors that violate socially accepted ethical standards
 ex) Conflict of interest, receiving money, valuables or entertainment, abuse of job competence and position, non-compliance with fair trade regulations, unfair competition, violation of antimoney laundering, violation of important information management, unauthorized use of internal information, violation of quality standards, Workplace bullying and Discrimination and other antienvironmental and anti-social behavior


- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

- ESG Data
- UN SDGs
- GHG Verification Statement
- Third-Party Assurance Statement
- ISO 26000 Assessment Report
- K-ESG Guidelines Index
- GRI Content Index
- SASB Index
- TCFD Index
- Memberships and Awards

UN SDGs

The UN Sustainable Development Goals (SDGs), established during the 70th UN General Assembly in 2015, set out a vision for achieving sustainable development by 2030. These goals outline the trajectory for humanity across five crucial areas: People, Planet, Prosperity, Peace, and Partnership, encompassing 17 main objectives and 169 specific targets. In line with its commitment to contributing to the realization of the UN SDGs, K-water has incorporated these goals into its sustainability management strategy, guiding its business practices. K-water's projects and major activities, in correlation with the UN SDGs, are aligned with the following specific goals: Goal 1: Reducing poverty and strengthening the social safety net Goal 2: Strengthening food security and sustainable agriculture Goal 3: Ensuring a healthy and happy life Goal 4: Quality education for everyone Goal 5: Ensuring gender equality Goal 6: Healthy and safe water management Goal 7: Eco-friendly production and consumption of energy Goal 8: Expanding good jobs and economic growth Goal 9: Promoting industrial growth, innovation, and building social infrastructure Goal 10: Resolving all forms of inequality Goal 11: Sustainable cities and residences Goal 12: Sustainable production and consumption Goal 13: Climate change and response Goal 15: Conservation of terrestrial ecosystems For detailed insights into key activities related to each goal, please refer to the respective sections in this report.

Goal	Main Activities	Page
	<ul style="list-style-type: none"> Sharing Campaign for the Underprivileged Plogging Donation Challenge 	44, 45
	<ul style="list-style-type: none"> Operating a Resident-participatory, Clean Water Luxury Village 	31
	<ul style="list-style-type: none"> Work-Family Balance 	38, 94-96
	<ul style="list-style-type: none"> K-water Scholarship Program 	44
	<ul style="list-style-type: none"> Appointment of Directors 	60
	<ul style="list-style-type: none"> Water Quality Management of Discharged Water Integrated Water Management Drinking Water Quality Safety 	29, 72-75
	<ul style="list-style-type: none"> Expansion of Eco-Friendly Energy 	8, 13, 17, 24-27, 80, 110

Goal	Main Activities	Page
	<ul style="list-style-type: none"> Promoting inclusive recruitment practices for social equity Supporting social enterprises Creating win-win job opportunities 	36, 37, 95 50, 98 51
	<ul style="list-style-type: none"> Localizing the ultrapure water Technology 	78
	<ul style="list-style-type: none"> Enhancing the Human Rights Protection System Water Stress 	40 75
	<ul style="list-style-type: none"> Establishment of a local problem-solving platform Discovering Future 5-Star Growth Businesses 	47 77, 78
	<ul style="list-style-type: none"> Circular Economy 	21, 28
	<ul style="list-style-type: none"> Environmental Management Promoting Carbon Neutrality 	22, 23, 88 24, 25
	<ul style="list-style-type: none"> Preserving Biological Diversity 	32, 33, 91

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX
 - ESG Data
 - UN SDGs
 - GHG Verification Statement
 - Third-Party Assurance Statement
 - ISO 26000 Assessment Report
 - K-ESG Guidelines Index
 - GRI Content Index
 - SASB Index
 - TCFD Index
 - Memberships and Awards

GHG Verification Statement



GHG Verification Statement
Independent Verification Statement

K-WATER
Place of business in Korea : total of 71 business establishments (33 establishments of metropolitan area and 38 establishments of non-metropolitan area)
Total of 10 areas(Seoul Capital City, Chungcheong, Gyeongnam & Busan, Gwangju & Jeonnam, Daegu & Gyeongbuk, Jeonbuk, Gangwon, Head Office, Gyeonggi & Incheon, Sihwa)
The Korea Management Registrar Inc. (hereinafter "KMR") has conducted the verification on the greenhouse gas (hereinafter "GHG") emission (Scope 1, 2) of K-WATER (hereinafter "the Company") in 2022.

SCOPE
Verification of all places of business and emission facilities under the control of the company.

STANDARDS

- ISO 14064-1:2018, ISO 14064-3:2019
- IPCC Guidelines for National Greenhouse Gas Inventories
- Guidelines for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading Scheme

PROCEDURE
We conducted a risk analysis approach and on-site verification based on data evaluation, and we identified the appropriateness of the data and factors applied to GHG emission calculations based on objective evidence. The verification team verified the GHG emissions during the reporting period in a reasonable way based on the verification guidelines.

INDEPENDENT
KMR does not have any stake in the verified entity and does not conduct verification with biased opinions/views. We have drawn an independent and objective verification conclusion based on the verification standards, and reviewed the every aspect of the verification we performed throughout the entire verification process through internal review

LIMITATIONS
The verification team verified the related reports, information and data presented by the audited institution by sampling or enumeration methods. As a result, there are many inherent limitations, and there may be disagreements in the interpretation of appropriateness. Although we have tried to faithfully perform verification that meets the verification standards, we suggest that errors, omissions, and false statements that could not be found may be latent as the limitations to the verification.

KMR_GHG_23020
#1204, Acahightechnoly 1-ilbong, 775 Kyanginno, Yeongdeungpo-gu, Seoul, 07296, Korea



GHG Verification Statement
Independent Verification Statement

OPINION

- GHG verification has been performed to meet the reasonable assurance level according to the verification standards.
- We express that no significant errors were found in the calculation of emissions during the verification process, and that relevant activity data and evidence were appropriately managed and calculated. As a result, we express an "unmodified" opinion.
- Criticality: meets the criterion, which is less than 5%
- GHGs Emission(All places)

GHGs Emission	Direct emission (Scope1)	Indirect emission (Scope2)	Total (tCO ₂ e)
2022	6,828	804,004	810,797

Energy Consumption	Fuel	Electricity	Steam	Total (TJ)
2022	85	16,801	-	16,851

* Note : There is a difference in the total amount of emissions and emissions by greenhouse gas and by workplace. (Total emissions are cut to a decimal point for each workplace unit and emissions are summed up for each workplace unit.)

RESULTS

- We confirm through verification that the emissions from major emission facilities have been calculated and reported without omission.

▪ The abovementioned company is responsible for preparing verification data in accordance with the "Guidelines for Reporting and Certification of Emissions in the Greenhouse Gas Emissions Trading System (Ministry of Environment Notice No. 2021-278)" and KMR's responsibility is limited to the party in the verification contract according to the agreed contract terms and is not responsible for other decisions, including investment decisions based on this verification statement.
* The abovementioned company must comply with the use of the certification and logo marks under the contract entered into with KMR.

November 3rd, 2023
Authorized By



CEO Eun Ju Hwang







KMR_GHG_23020
#1204, Acahightechnoly 1-ilbong, 775 Kyanginno, Yeongdeungpo-gu, Seoul, 07296, Korea





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

● Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

Third-Party Assurance Statement

To. The Stakeholders of Korea Water Resources Corporation (the “K-water”)

KOSRI (the “Assurance Provider”) has been asked to assure the 2023 K-water Sustainability Report (the “Report”). This assurance statement is based on the information included in the report, assured with internationally recognized assurance methodologies. The opinion is provided to K-water’s management and stakeholders. K-water is responsible for all information and assertions made in the Report.

Scope of Assurance

The assurance provider assured the environmental, social, and governance performance of the headquarters and some aspects of overseas operations, subsidiaries, and parts of the supply chain for the period from January 1, 2022, to December 31, 2022 (including the first half of 2023 for information deemed important to some stakeholders; quantitative performance data covers a five-year period). The financial information included in the report’s appendix and data and information about external organizations, such as K-water’s partners and contractors, outside the reporting boundary, were excluded from the scope of assurance.

Assurance Standards

The assurance provider checked the Type 2 and Moderate levels of AA1000AS v3 to confirm compliance with the four principles set forth in AA1000AP (2018) and the reliability and quality level of the information. The assurance provider assured that the report conforms to the Universal and Topic Standards of the GRI Standards (2021) and includes diagnostic items in the areas of information Disclosure, Environmental, Society, and Governance of the K-ESG Guidelines.

GRI Standards

- **Universal Standards**
 - GRI 1 : Foundation 2021
 - GRI 2 : General Disclosure 2021 (2-1 to 30)
 - GRI 3 : Material Topics 2021 (3-1 to 3)
- **Topic Standards**
 - 201-1, 2. 205-1, 2. 302-1, 3, 4, 5. 303-1, 2. 304-2, 3. 305-1, 2, 4, 5, 7. 306-2, 3, 4. 401-1, 3. 403-1~10. 404-1. 413-1. 416-1, 2.
 - Organization-specific metric (Inclusive Growth, Human Rights Management, Labor Relations, Supply chain support, Privacy and Security)

Methodology of assurance

The assurance provider conducted the assurance in the following ways

- Reviewed the sustainability management plan and implementation system
- Reviewed the method of engaging and approaching stakeholders
- Reviewed the appropriateness of the materiality assessment process and the material issues identified
- Reviewed the report data for errors, omissions, and misstatements and considering whether they are reflected
- Reviewed the quality and reliability of data related to performance figures and certifications
- Interviewed practitioners about their sustainability management systems and data management

**INTRODUCTION****ENVIRONMENTAL****SOCIAL****GOVERNANCE****BUSINESS****APPENDIX**

ESG Data

UN SDGs

GHG Verification Statement

- Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

Result of assurance

The assurance provider has confirmed that this report is in accordance with the GRI Standards (2021) and has complied with the diagnostic section of the K-ESG Guidelines, and did not find any errors or inaccuracies in the detailed indicator content. Confirming the reliability and quality of the information provided, comments on the assurance principles of AA1000AP(2018) are as follows.

► Inclusivity

K-water recognized the importance of stakeholder's participation in sustainability management and identified and classified its key stakeholders as employees, labor unions, government-parliament-experts, related organizations-partner companies, citizens-customers, local communities, civil society organizations, and the media for diverse communication and participation.

► Materiality

K-water selected core issues through a double materiality assessment process, utilizing media, domestic and international benchmark companies, domestic and international disclosure standards, 2021 core issues, and stakeholder interviews and the process and results are linked to sustainability performance and disclosed throughout the report.

► Responsiveness

K-water established a sustainability management strategy to respond to stakeholders' demands and interests, creating business performance through communication networks with key stakeholders and properly described it in its report.

► Impact

K-water considered the social impact of material issues and discloses in its reports its activities to manage water resources and respond to climate change.

Independence and Qualifications

The assurance provider does not share any interest with K-water that could compromise its independence and impartiality other than to perform the assurance engagement on the report. The assurance provider has a license agreement with AccountAbility, a global consulting and standards organization, to assure AA1000 reports and is the publishing partner for the Korean version of AA1000AS v3. All assurance findings have been responsibly reviewed by appropriately qualified assurance auditors based on their work history and expertise in sustainability.

Limitations

The assurance provider focused on confirming the validity of the information and data presented in the report under the assumption that they are complete and sufficient. The assurance provider assured the Report based on the information and evidence provided according to the contract.

Recommendations

The assurance provider confirmed K-water's commitment and practice in ESG management through the Report. However, to improve the quality of the information, We recommend to establish ESG data management system and standards of supply chain management.

- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX

ISO 26000 Assessment Report



Assessment standard
As part of the service provided to the Korean Agency for Technology and Standards, the Korea Standard Association developed an assessment checklist for evaluating the material performance results on social responsibility. This Assessment Report provides the performance assessment and results of K-water's social responsibility management process and seven core subjects.

Assessment scope
We assessed K-water's processes and performance related to social responsibility, and then checked K-water's long-term strategy and execution, stakeholder engagement, social responsibility activities, etc.

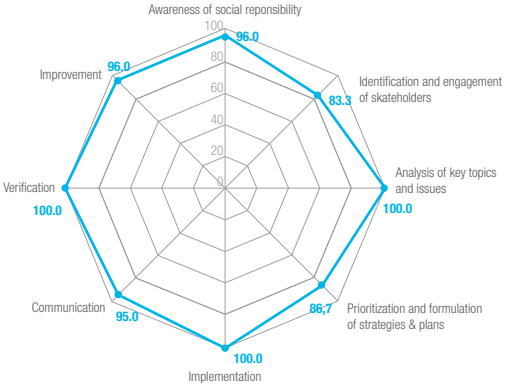
Assessment method
We performed the following activities to collect the essential, material data and information based on the assessment criteria of ISO 26000.

- Review of internal data on K-water's socially responsible management activities and performance;
- Interviews with people in charge of each social responsibility management issue of K-water

I. Assessment Results of Each ISO 26000 Social Responsibility Process
K-water actively pursues sustainable management practices as a leading public enterprise. Since 2005, the corporation has annually published sustainability reports to disclose its ESG (Environmental, Social, and Governance) performance to stakeholders. K-water has established ESG management principles aimed at resolving social issues and achieving sustainable growth for future generations. The vision is to become the world's premier comprehensive water platform company, with the goal of maximizing positive impacts throughout the entire water services process. To realize this vision, K-water has formulated ESG strategies through 2027, integrating them into the overall management and business operations. Efforts to establish a performance management system based on ESG management ratings were also evident.

Stakeholder engagement is at the core of sustainable management, and given the diverse stakeholders both domestically and internationally due to the nature of its business, K-water suggests taking a step further from departmental stakeholder management to integrated management through organization-wide stakeholder engagement activities. To achieve this, K-water proposes the development of stakeholder engagement policies and strategies based on global guidance such as AA1000 SES and ISO 26000. By formulating consistent and integrated stakeholder engagement methods, the corporation aims to enhance its level of sustainable management.

Assessment Results of Social Responsibility Process



Awareness of social responsibility	Examination of the current level of organizational awareness based on management's commitment
Identification and engagement of stakeholders	Examination of stakeholders' interests and demands, with strategies formulated to promote their participation
Analysis of key topics and issues	Generation of a list of core topics through examination of issues and analysis of internal competencies
Prioritization and formulation of strategies & plans	Establishment of priorities of issues to be improved, goals, and execution plan based on the organizational competency
Implementation	Execution of the strategies, vision, goal, and implementation plans, along with regular monitoring of social responsibility performance
Communication	Communication with stakeholders through performance reports
Verification	Activities and reporting for enhancing the reliability of performance results
Improvement	Periodical evaluation of performance results for continued improvements

II. ISO 26000 Performance Assessment Report by Seven Core Subjects

Organizational governance K-water has established and is operating an ESG Management Committee under the Board of Directors to perform the deliberative function on key management strategies, implementation plans, progress, and outcomes related to ESG. Particularly, in order to enhance the expertise and diversity of the board, a pool of personnel with expertise in conjunction with priority projects has been formed, and the ratio of female directors has been increased from the existing 25% to 40% to strengthen the professionalism and diversity of the board. As a result, efforts to secure expertise and diversity were evident through the appointment of environmental experts and female directors associated with business responsibilities. In the future, it is expected that the organizational governance evaluation process will be further advanced by including evaluation criteria such as 'diversity in the composition of the board' and 'diversity in discussions' in the organizational governance assessment.

Human rights K-water has been conducting human rights impact assessments since 2018. Reflecting the nature of its operations, the corporation has undertaken human rights impact assessments in the construction sector as a key area of focus. Recently, recognizing the increased risks of emotional labor and disability rights at points of customer interaction, the corporation has conducted human rights impact assessments with a focus on culture. It is noteworthy that in the human rights impact assessments of major business sectors, the evaluation has been extended not only to the corporation's employees but also to employees of subsidiary companies and partner firms directly involved in the respective projects. Going forward, it is anticipated that, based on the results of human rights impact assessments conducted on subsidiary companies and partner firms, the corporation will analyze potential human rights risks within the supply chain, implement preventive and mitigating measures, and actively provide support activities such as human rights education and campaigns to subsidiary companies and partner firms.

Labor practices K-water has been formulating a five-year roadmap for job creation annually since 2017, considering both quantitative expansion of employment and the establishment of a high-quality job creation strategy that takes into account factors such as wages, working hours, and tenure. As a leading public enterprise in the country with exemplary labor practices, it is crucial for the corporation to disseminate its labor practices not only within the organization but also to subsidiary and partner companies. Moreover, I recommend that K-water, recognizing the demands for global labor practices, goes a step further by formulating and implementing labor policies that surpass domestic laws and government requirements. This proactive approach can contribute to setting a benchmark in labor practices. Additionally, I encourage continuous improvement in the industrial safety management system through ongoing enhancement activities. Strengthening safety risk management within the corporation, as well as among subcontractors, can contribute to preventing occupational accidents and improving overall safety standards.



- INTRODUCTION
- ENVIRONMENTAL
- SOCIAL
- GOVERNANCE
- BUSINESS
- APPENDIX
 - ESG Data
 - UN SDGs
 - GHG Verification Statement
 - Third-Party Assurance Statement
 - ISO 26000 Assessment Report
 - K-ESG Guidelines Index
 - GRI Content Index
 - SASB Index
 - TCFD Index
 - Memberships and Awards

Environmental K-water is actively engaged in addressing climate change, enhancing waste management, and promoting biodiversity. The corporation is pursuing a hydropower business and striving for net-zero achievement in all water purification plants by 2030. To reduce greenhouse gas emissions in existing water treatment plants, K-water is incorporating high-efficiency pump facilities and energy management systems into the design. To meet the demands of renewable energy, K-water has initiated community-based floating solar power projects. The corporation has established goals such as “Creating a watershed water environment where humans and nature coexist, contributing to national carbon neutrality and economic revitalization.” Additionally, K-water has outlined tasks for water quality improvement, ecosystem restoration activities, climate change adaptation, and promoting a circular economy. Efforts extend beyond environmentally friendly energy production, as K-water is actively involved in regional economic revitalization. The corporation has entered into public-private development agreements with private enterprises, including the RE100 commitment, to supply renewable energy to the private sector and secure stakes in renewable energy. Future proposals include upgrading management systems for advanced identification of environmental law compliance risks and strengthening environmental education to enhance compliance with environmental regulations.

Fair Operating practices K-water has established a dedicated internal control team, the Compliance Management Division, to strengthen ethical management practices. Additionally, the corporation has formulated the Clean Ethics CP Operating Standards, conducted a comprehensive identification and evaluation of corruption risks across the organization, and is in the process of preparing for anti-corruption management system certification. Going forward, it is expected that proactive corruption risk assessments will help identify and implement preventive and mitigating measures within the organization. Within the context of the ESG (Environmental, Social, Governance) issues, which are widely recognized both domestically and internationally, K-water is making efforts to assess the ESG performance levels of its supply chain. Specifically, the corporation is actively managing and overseeing subcontractors, especially those involved in construction projects exceeding a certain contract amount, by conducting post-inspections and addressing any identified violations. The expectation is to expand the scope to cover a broader range of collaborators and enhance the ESG assessment indicators, thus establishing a robust ESG audit and management system for the supply chain. Furthermore, it is recommended to implement policies to enhance the awareness of social responsibility management among collaborators and introduce support measures for best practices, technical capabilities, and capacity building.

Consumer issues K-water as a public enterprise, actively discloses information across various fields through public institution management disclosures, pre-information disclosure on its website, and the Ministry of Public Administration and Security’s information disclosure portal. In order to engage in proactive communication with local residents, customers, and citizens, the corporation manages the processing of Voice of Customer (VOC) through various channels such as the Ministry of Public Administration and Security’s

Citizens’ Complaints, K-water’s website, and the Citizens’ Communication Center. Furthermore, to ensure the safety and health of the ultimate water consumers, the corporation has established a food safety management system at all metropolitan drinking water purification plants and introduced ISO 22000 certification. Continuous improvement activities are being implemented to ensure hygiene and safety. As a public institution, K-water is committed to enhancing water accessibility for all citizens. The corporation is actively engaged in various activities to supply water to remote mountainous areas and regions without tap water, and it is expanding sustainable education for the residents of local communities.

Community Engagement and Development K-water is actively engaged in strategic social contribution activities under the mission of “Creating a Happier World with Water.” The corporation has established three key directions for its strategic social contribution initiatives: promoting local self-sufficiency through

job creation and income generation for residents through business and local resource linkages, revitalizing local communities through the discovery of regional charms and the creation of relationships, and improving the quality of life for residents by addressing welfare blind spots through tailored support. K-water unfolds its strategic social contribution activities through 134 Water Sharing Volunteer Groups, focusing on unique tasks, social contribution activities, and support projects around dams. These initiatives are expected not only to address local community issues but also to positively impact the value creation of K-water. Despite the corporation’s efforts, conflicts with local residents are likely due to the nature of its operations. Therefore, it is hoped that enhanced communication with local residents will be fostered within a systematic stakeholder engagement strategy.

III. Assessment Conclusion

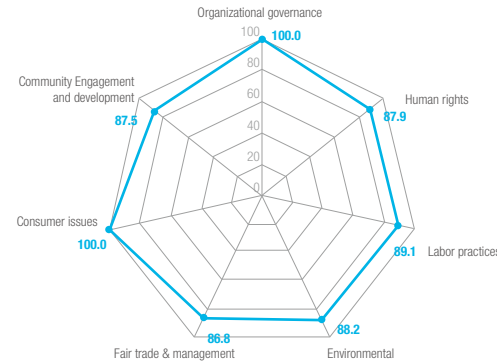
According to the assessment results for Korea Water Resources Corporation’s ISO 26000 compliance level, the organization has been evaluated at Level 4, with a total score of 913.5 out of a possible 1,000 points, comprising 336 points out of 360 for the process aspect and 577.5 points out of 640 for the performance aspect. This level indicates a high level of awareness among organizational members regarding social responsibility, with operational systems, policies, and practices reasonably well-established. It suggests a stage that requires continuous maintenance and enhancement of social responsibility within the organization’s sphere of influence, strengthening solidarity with the local community. To advance further from the current level, it is recommended to consider incorporating the ‘Stakeholder Engagement Principles and Processes’ based on global standards in the process aspect. On the performance aspect, there is an expectation that the ongoing efforts to expand corporate social responsibility management activities will extend to subsidiary and partner companies.

September 2023
President, Korea Standards Association



The Korea Standard Association (KSA) is a special public corporation founded in 1962 pursuant to Article 32 of the Industrial Standardization Act, and it is a knowledge service-providing organization that promotes and provides industrial standardization, quality management, sustainable management, and KS/ ISO certifications to industries. KSA contributes to the sustainable development of Korean society as the official advisory organization in Korea for ISO 26000, GRI-designated educational institutions, the AA1000 qualification agency, Korean Sustainability Index (KSI)-operating organization, UN CDM operating organization, as well as the organization for certifying the Greenhouse Gas Target Management System.

Social Responsibility Performance Assessment Results



Organizational governance	Respecting social responsibility principles and integrating them into existing systems, policies, and practices
Human rights	Respecting, protecting, and promoting human rights within the organization and its sphere of influence
Labor practices	Policies and practices that affect the working environment of employees within the organization and its collaborating partners
Environmental	Activities that comprehensively consider the meaning of organizational decisions and actions to reduce the organization’s impact on the environment
Fair Operating practices	Activities that focus on the ethical behavior of transactions between the organization and partners, suppliers, and other organizations.
Consumer issues	Consumer education, ensuring fair and transparent marketing information and contracts, and promoting sustainable consumption, among other activities for consumer rights protection.
Community Engagement and development	Activities aimed at recognizing and respecting the rights of the local community, and striving to maximize support and opportunities for them.





K-ESG Guidelines Index

INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

● K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

Area	Category	Classification No.	Assessment Item	Page	
Information disclosure (P)	Information disclosure type	P-1-1	Information disclosure method	2	
		P-1-2	ESG information disclosure cycle	2	
		P-1-3	Scope of ESG information disclosure	2	
	Contents of information disclosure	P-2-1	Core Issues and KPIs for ESG	17	
	Audit of information	P-3-1	Audit of ESG information disclosure	102, 103	
Environmental	Environmental management goals	E-1-1	Establishment of environment management goal	23, 24	
		E-1-2	Environmental management promotion system	22, 23	
	Raw & subsidiary materials	E-2-1	Raw & subsidiary material usage	N/A	
		E-2-2	Recycled raw & subsidiary material ratio	N/A	
	Greenhouse Gas (GHG)	E-3-1	Greenhouse gas emission (Scopes 1 & 2)	88	
		E-3-2	Greenhouse gas emission (Scope 3)	-	
		E-3-3	Audit of greenhouse gas emission	101	
	Energy	E-4-1	Energy Use	88	
		E-4-2	Renewable energy use ratio	87	
	Water	E-5-1	Water Usage	See ALIO	
		E-5-2	Reuse water ratio	See ALIO	
	Waste	E-6-1	Waste discharge amount	89	
		E-6-2	Waste recycling ratio	89	
	Pollutant	E-7-1	Air pollutant emission	88	
		E-7-2	Water pollutant discharge	89	
	Violations of environmental laws/regulations	E-8-1	Violations of environmental laws / regulations	99	
	Environmental labeling	E-9-1	Eco-friendly certification product and service ratio	88	
	Social	Goal	S-1-1	Goal establishment and disclosure	35, 36
		Labor	S-2-1	New recruitment and maintenance of employment	36, 94, 95
S-2-2			Ratio of regular employees	93	
S-2-3			Voluntary turnover	94	
S-2-4			Education & training expenses	97	
S-2-5			Welfare benefits	96	
S-2-6			Guarantee the freedom of association	38, 39	

Area	Category	Classification No.	Assessment Item	Page
Social	Diversity & gender equality	S-3-1	Ratio of female employees	93
		S-3-2	Female salary ratio (compared to the average salary)	97
		S-3-3	Employment rate of people with disabilities	95
	Occupational safety	S-4-1	Health & safety promotion system	54
		S-4-2	Industrial accident rate	95
	Human rights	S-5-1	Establishment of human rights policies	40
		S-5-2	Human rights risk assessment	40
	Win-win growth	S-6-1	ESG management of vendors/suppliers	48
		S-6-2	ESG support to vendors/suppliers	48
		S-6-3	ESG management of vendors/suppliers	48
	Community	S-7-1	Strategic social contribution	42
		S-7-2	Volunteer participation by the employees	42~47
	Information protection	S-8-1	Establishment of information protection system	57
		S-8-2	Infringement of personal information and its relief	57
	Violations of civil laws/regulations	S-9-1	Violations of civil laws/regulations	99
Governance	Composition of the Board of Directors	G-1-1	Introduction of ESG agendas in the Board of Directors (BOD)	62
		G-1-2	Ratio of non-standing/external directors	63
		G-1-3	Separation of CEO from the BOD Chairman	60
		G-1-4	Gender diversity of BOD	60
		G-1-5	Expertise of non-executive directors	60
	BOD activity	G-2-1	Attendance rate of standing directors	61, 62
		G-2-2	Attendance rate of executive directors	61, 62
		G-2-3	Committees under purview of the Board of Directors	63
		G-2-4	Effective agenda handling by the BOD	See ALIO
	Ethical management	G-4-1	Disclosures of the violation of code of ethics	67
	Audit organization	G-5-1	Formation of the internal audit department	67
		G-5-2	Expertise of the audit organization (Accounting/ financial experts on the audit organization)	67
	Violations of Governance Laws/ Regulations	G-6-1	Violations of Governance Laws/Regulations	99



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

● GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

GRI Content Index

Statement of use

“K-water has reported in accordance with the GRI Standards for the period from Jan. 1st 2022 to Dec. 31st 2022”

GRI 1 used GRI 1: Foundation 2021

Applicable GRI Sector Standard(s) : N/A

Topic	Index	Disclosures	Page
GRI 2 : General Disclosure 2021			
The organization and its reporting practices	2-1	Organizational details	6, 7
	2-2	Entities included in the organization's sustainability reporting	6
	2-3	Reporting period, frequency and contact point	2, 3
	2-4	Restatements of information	83~99
	2-5	External assurance	102, 103
Activities and workers	2-6	Activities, value chain and other business relationships	8~11
	2-7	Employees	93
	2-8	Workers who are not employees	93
	2-9	Governance structure and composition	60, 61
	2-10	Nomination and selection of the highest governance body	60
Governance	2-11	Chair of the highest governance body	60
	2-12	Role of the highest governance body in overseeing the management of impacts	63
	2-13	Delegation of responsibility for managing impacts	63
	2-14	Role of the highest governance body in sustainability reporting	63
	2-15	Conflicts of interest	67
	2-16	Communication of critical concerns	15~17
	2-17	Collective knowledge of the highest governance body	63
	2-18	Evaluation of the performance of the highest governance body	63
	2-19	Remuneration policies	63
	2-20	Process to determine remuneration	63
	2-21	Annual total compensation ratio	97



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

● GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

Topic	Index	Disclosures	Page
Strategy, policies and practices	2-22	Statement on sustainable development strategy	100
	2-23	Policy commitments	100
	2-24	Embedding policy commitments	17
	2-25	Processes to remediate negative impacts	65
	2-26	Mechanisms for seeking advice and raising concerns	63
	2-27	Compliance with laws and regulations	64
	2-28	Membership associations	113
Stakeholder engagement	2-29	Approach to stakeholder engagement	14~16
	2-30	Collective bargaining agreements	38
GRI 3 : Material Topics 2021			
Material Topics 2021	3-1	Process to determine material topics	18
	3-2	List of material topics	19
Topic Standards-Economic Disclosures (GRI 200)			
Material Topics 2021	3-3	Management of material topics	77
Economic Performance 2016	201-1	Direct economic value generated and distributed	83~85
Material Topics 2021	3-3	Management of material topics	22~28
Economic Performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	112
Material Topics 2021	3-3	Management of material topics	64
Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	64, 99
	205-2	Communication and training about anti-corruption policies and procedures	66
Topic Standards-Environmental Disclosures (GRI 300)			
Material Topics 2021	3-3	Management of material topics	25~27
Energy 2016	302-1	Energy consumption within the organization	88
	302-3	Energy intensity	88
	302-4	Reduction of energy consumption	25~27
	302-5	Reductions in energy requirements of products and services	25~27



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

● GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

Topic	Index	Disclosures	Page
Material Topics 2021	3-3	Management of material topics	29, 72~76
Water and Effluents 2018	303-1	Interactions with water as a shared resource	72~76
	303-2	Management of water discharge-related impacts	89
Material Topics 2021	3-3	Management of material topics	29~33
Biodiversity 2016	304-2	Significant impacts of activities, products and services on biodiversity	29~33
	304-3	Habitats protected or restored	29~33
Material Topics 2021	3-3	Management of material topics	24, 25
Emissions 2016	305-1	Direct (Scope 1) GHG emissions	88
	305-2	Energy indirect (Scope 2) GHG emissions	88
	305-4	GHG emissions intensity	88
	305-5	Reduction of GHG emissions	24~27, 88
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	88
Material Topics 2021	3-3	Management of material topics	28
Waste 2020	306-2	Management of significant waste-related impacts	28
	306-3	Waste generated	89
	306-4	Waste diverted from disposal	89
Topic Standards-Environmental Disclosures (GRI 400)			
Employment 2016	401-1	New employee hires and employee turnover	94, 95
	401-3	Parental leave	94
Material Topics 2021	3-3	Management of material topics	54~56



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

● GRI Content Index

SASB Index

TCFD Index

Memberships and Awards

Topic	Index	Disclosures	Page
Occupational Health and Safety	403-1	Occupational health and safety management system	53, 54
	403-2	Hazard identification, risk assessment, and incident investigation	55
	403-3	Occupational health services	55
	403-4	Worker participation, consultation, and communication on occupational health and safety	38
	403-5	Worker training on occupational health and safety	55
	403-6	Promotion of worker health	55
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	55
	403-8	Workers covered by an occupational health and safety management system	55
	403-9	Work-related injuries	95
	403-10	Work-related ill health	95
Training and Education	404-1	Average hours of training per year per employee	97
Material Topics 2021	3-3	Management of material topics	42~47
Local Communities	413-1	Operations with local community engagement, impact assessments, and development programs	42~47
Material Topics 2021	3-3	Management of material topics	74
Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	75
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	99
Material Topics 2021	3-3	Management of material topics	48, 49
Win-Win growth	Organization-specific indicators	Win-Win growth Promotion System	48, 49
Material Topics 2021	3-3	Management of material topics	49~52
Supplier Support	Organization-specific indicators	Supplier Support	49~52
Material Topics 2021	3-3	Management of material topics	38, 39
Labor-Management Relations	Organization-specific indicators	Labor-Management Relations	39
Material Topics 2021	3-3	Management of material topics	40
Human Rights Management	Organization-specific indicators	Human Rights Management Plan	40
Material Topics 2021	3-3	Management of material topics	57
Personal information protection and information security	Organization-specific indicators	Information protection promotion system	57



SASB Index

Category	Code	Activity Metric	Unit	Response
Energy management	IF-WU-130a.1	(1) Total energy consumption	(1) TJ	(1) 16,886TJ
		(2) Percentage grid electricity	(2) %	(2) 18.7%, Purchased grid electricity consumption* (877,651MWh) / Total energy consumption(16,886TJ)
		(3) Percentage renewable	(3) %	(3) 18.7%, Renewable energy consumption (876,036MWh) / Total energy consumption (16,886TJ)
Distribution network efficiency	IF-WU-140a.1	Water pipe replacement	%	102.7%, Performance of water pipe replacements 380km / Water pipe replacement plan 370km
	IF-WU-140a.2	Volume of non-revenue real water losses	m ³	N/A (Measurement unavailability of water loss due to dam water supply and water distribution volume)
Effluent quality management	IF-WU-140b.1	Number of incidents of noncompliance with water effluent quality permits, standards, and regulations	case	1case
	IF-WU-140b.2	Discussion of strategies to manage effluents of emerging concern	-	K-water has been advancing the development of water treatment technologies benchmarked against overseas technologies to manage the quality of discharged water and minimize pollutant emissions. They conducted empirical research to validate the efficiency of eco-filtering in water treatment. Research findings confirmed excellent pollutant removal effects from the pilot test bed installed in the Suengchonbo Guhado section in 2022, with plans for implementation at the Busan Eco-City facility. Moreover, by substituting the residual sludge in water treatment plants with spent activated carbon possessing microbial purification capabilities, they achieved a remarkable improvement in the quality of discharged water and significant reduction in carbon emissions.
Fair pricing and access	IF-WU-240a.4	Discussion of external factors, including the economic situation in the service area, affect the adequacy of water prices for customers	-	K-water calculates the production cost associated with supplying drinking water annually in accordance with relevant laws and regulations. They submit a verified cost calculation report, audited by accounting experts, to both the Ministry of Environment and the Ministry of Economy and Finance. If adjustments to the water rates are deemed necessary considering the production cost levels, they apply for approval of the rate adjustment to the Minister of Environment. After deliberation by the Water Pricing Deliberation Committee, the Minister of Environment, in consultation with the Minister of Economy and Finance, decides on and approves the water rates. K-water then charges customers based on the rates approved by the Minister of Environment.
Quality of drinking water	IF-WU-250a.1	Number of drinking water violations based on (1)acute health-based, (2)non-acute health-based, and (3)non-health-based criteria	case	0 cases, No violations of drinking water quality standards
	IF-WU-250a.2	Discussion on strategies for managing contaminants in drinking water	-	K-water has established a "High-Quality and Smart Drinking Water Supply System" to provide the public with trustworthy drinking water, achieving a 99.9% compliance rate with global water quality standards. They obtained Food Safety Management System (ISO 22000) certification for all 39 metropolitan water purification plants. Furthermore, K-water developed a tailored ISO 22000 standard model and certification management system for these plants, ensuring the sustainability of certifications. In addition, they have expanded the installation of advanced water treatment facilities nationwide and implemented the "K-WISH 500" drinking water safety management system, conducting annual water quality monitoring on source and treated water at purification plants.
Water scarcity	IF-WU-440a.1	Total volume of water supplied in severely or highly water-stressed areas, proportion purchased from third parties	m ³ , %	N/A (No ratio of water supplied from water-scarce areas or purchased from third parties)
	IF-WU-440a.2	Amount of sewage reuse (reproduction of sewage into industrial water)	m ³	Facility capacity standards 137천m ³ /일
	IF-WU-440a.3	Discussion of management of risks associated with the quality and availability of water resources	-	K-water is making diverse efforts to secure water resources and alleviate water scarcity, even in emergency situations such as natural disasters and pollutant influx. They are actively promoting the installation of underground reservoir dams in water-supply vulnerable areas and managing 25 seawater desalination facilities in three cities and counties across the nation. Additionally, they recycle treated wastewater for various purposes such as domestic, industrial, agricultural, and landscaping uses. They have also signed MOU for supplying reused wastewater for semiconductor manufacturing, contributing to resolving persistent water scarcity issues within the semiconductor industry.
Network resiliency & impacts of climate change	IF-WU-450a.1	Daily sewage treatment capacity for areas situated in a 100-year flood zone	m ³ /day	
	IF-WU-450a.2	(1)Number of sewer overflow incidents (2)Volume of sewer overflow (3)Sewer overflow recovery rate	(1) case (2) m ³ (3) %	N/A (K-water does not own sewage treatment facilities)
	IF-WU-450a.3	(1) Number of unexpected service interruptions (2) Number of affected customers by duration period	case	0 water outage in 2022 (Affected population: 0, Affected time: 0)
	IF-WU-450a.4	Discussion of efforts to identify and manage risks and opportunities related to the impact of climate change on the distribution network	-	K-water is actively striving to prevent the physical risks associated with climate change by adopting smart technologies based on the fourth industrial revolution. Through the water management platform 'Digital GARAM+', they monitor real-time data essential for water resource management and conduct optimal analyses. This enables them to predict and respond to potential damage caused by fluctuations in dam and river water levels, as well as occurrences such as floods.

*Purchased grid electricity consumption (KEPCO purchased power): Total electricity usage - Renewable energy usage

INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

• SASB Index

TCFD Index

Memberships and Awards





INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

● TCFD Index

Memberships and Awards

TCFD Index

The Task Force on Climate-Related Financial Disclosure (TCFD) is a global body established by the Financial Stability Board (FSB) in response to the request from the G20 to disclose climate-related information. K-water discloses its major activities categorized into governance, strategy, risk management, indicators, and reduction targets in accordance with TCFD recommendations. We will continue efforts to identify and manage the substantial and potential impacts of climate change on the company and to respond to them.

	TCFD Recommendations	Main Activities
Corporate governance	a) Supervision of the BOD on the risks and opportunities related to climate change is described	In March 2021, K-water declared its commitment to ESG management and established an ESG Management Committee within the board of directors to oversee ESG management plans and the implementation results of specific tasks. The ESG Management Committee holds quarterly meetings (ad-hoc meetings as necessary) and is currently composed of 6 members, consisting of 5 non-executive directors and 1 director from the planning department.
	b) Role of the management on evaluating and managing the risks and opportunities of climate change is described	K-water, in accordance with the Carbon Neutrality Basic Act, submits every five years to the Ministry of Environment its public institution's climate crisis adaptation measures, a roadmap for achieving carbon neutrality by 2050, and detailed execution plans for carbon neutrality, formulated under the review of departmental directors.
Strategy	a) Risks and opportunities related to climate change verified in short and mid to long terms are described	The climate crisis adaptation measures involve evaluating the climate change risks for watershed management facilities in specific river basins (Nakdong River, Han River, Yeongsan River, Seomjin River, Geum River) based on the latest climate change scenarios. These risks are assessed according to climate factors (heavy rainfall, drought, heatwaves, cold waves, heavy snowfall, strong winds) and various timeframes (short-term 5 years, medium to long-term 20 years) to establish priority risk levels. Based on these priority risk levels, climate crisis measures (maintenance, adjustments, environmental aspects of water, management systems) are formulated and implemented.
	b) Description of the risks and opportunities related to climate change having impact on the business, strategy and financial planning of the enterprise	K-water has declared climate crisis management and integrated climate change risks and opportunities into the organization's operations and strategies by establishing the 2050 carbon neutrality roadmap and detailed execution plans for achieving carbon neutrality. Based on four major strategies: carbon-zero water management, expansion of water-related energy, activation of green hydrogen, and development of carbon sinks, K-water aims to reduce 7.06 million tons of greenhouse gases by 2050. Furthermore, they've identified the impact of climate change on the organization's facilities and operations, formulating relevant response strategies. Sixteen strategic tasks and twenty detailed tasks (including 3 management systems, 9 maintenance, 4 adjustments, and 4 environmental aspects of water) have been established. To achieve these goals, K-water plans to invest a total of KRW 5.2 trillion over a five-year period (from 2023 to 2027).
	c) Description of the flexibility of management strategies considering the scenario related to climate change	K-water analyzes and monitors risks related to climate change while preparing for potential risks. Identified risks are reported to the ESG Management Committee on a quarterly basis and, when necessary, ad-hoc reporting is conducted, ensuring flexibility in business strategy.
Risk management	a) Process description of the enterprise that evaluates and identifies the risks related to climate change	K-water has established its own risk assessment method by utilizing guidelines for public institution climate crisis adaptation (KEI), IPCC risk assessment system, and K-water's medium to long-term management strategies. The evaluation targets include K-water's water management facilities, broadly categorized as multipurpose dams, water supply dams, flood control dams, multifunctional weirs, and water supply systems, totaling 102 facilities. Through a self-developed risk assessment method utilizing formulas and indicators, K-water identifies and assesses climate crisis-related risks.
	c) Description of the method of integrating the process of identifying, evaluating and managing the risks related to climate change on the overall risk management	The K-water Risk Management (KRM) system, established to integrate the management of risks on a regular basis, incorporates the management of natural disasters caused by climate change.
Index & reduction goal	a) Disclosure of the index used for evaluating the risks and opportunities related to climate change	K-water utilizes key indicators such as renewable energy usage, greenhouse gas emissions, energy consumption and reduction, renewable energy usage, chemical discharge, waste generation, and recycling rates to measure and manage climate-related risks. This report discloses a five-year dataset of these indicators in the environmental sector.
	b) Disclosure of greenhouse gas emission (Scope 1, 2, 3)	This report discloses a five-year dataset of Scope 1 and Scope 2 greenhouse gas emissions in the environmental sector.
	c) Description of the goal used by the enterprise for managing the risks and opportunities related to climate change, and performance compared to the goal	K-water aims to reduce greenhouse gas emissions by 840,000 tons by 2030 and by 7.06 million tons by 2050, aiming beyond carbon neutrality towards carbon negativity. To drive carbon neutrality in the water supply sector, which accounts for 97% of K-water's total greenhouse gas emissions, the goal is to achieve carbon neutrality in all 43 metropolitan water purification plants by 2030. As of July 2023, carbon-neutral purification facilities have been established in 14 plants. Additionally, as the first public institution to join RE100, K-water has formulated a detailed implementation plan to achieve RE100 by 2050 and has achieved RE50 in 2022.



INTRODUCTION

ENVIRONMENTAL

SOCIAL

GOVERNANCE

BUSINESS

APPENDIX

ESG Data

UN SDGs

GHG Verification Statement

Third-Party Assurance Statement

ISO 26000 Assessment Report

K-ESG Guidelines Index

GRI Content Index

SASB Index

TCFD Index

● Memberships and Awards

Memberships and Awards

Memberships

Year Joined	Association
1971	Association of Great Dams
1974	Korean Society of Civil Engineers
1976	Korea Electric Association, International Contractors Association of Korea
1993	Korea Water Resources Association
1995	Korean Society of Environmental Impact Assessment
1996	Korean Federation of Water Science and Engineering Association, Korean Institute of Landscape Architecture
1997	Korea Electric Engineers Association
1999	Korea Disaster Prevention Association
2001	Korea New and Renewable Energy Association
2002	Korea Water and Wastewater Works Association
2003	Korean Society on Water Environment
2005	Korea Engineering and Consulting Association
2006	Ethical Management Forum, River Association, Korea Society for Environmental Analysis
2007	Korea Society of Environmental Restoration Technology, American Water Works Association, International Water Association, UN Global Compact
2008	Korean Society of Environmental Engineers, Membrane Society of Korea, Korean Society of Environment and Ecology
2010	Korean National Committee on Irrigation and Drainage, Korean Society for Fluid Machinery
2011	Society of Air Conditioning, Refrigerator Engineers of Korea
2012	Korea Environmental Policy and Administration Society
2013	Architectural Institute of Korea
2014	Korea Society of Mechanical Engineers, Korea Society of Climate Change Research, Korea Photovoltaic Industry Association, Korea Society of Quality Management, International Hydropower Association (IHA), Korea Association of Conflict Studies
2015	Korean Society of Ecology and Infrastructure, Korea Society of Hazard Mitigation
2016	Asia Water Council, International Water Resources Association
2017	Society of Korea Industrial and Systems Engineering, Korean Society of Public Enterprise
2019	Korean Solar Energy Society, Korean Society of Safety
2020	Korean Society For Quality Management, Korean Association For Public Administration, Korean Society of Civil Engineers, Korean Society of Soil and Groundwater Environment

Awards

Classification	Date	Award	Agency
ESG	April 2022	Grand Prize Company G ESG Innovation Award	Sisa Journal
	June 2022	Excellence Award in Korea ESG Management Awards Public Enterprise Category	The Korea Economic Daily
	September 2022	Top Honors in the Korea ESG Innovation Policy Awards (G division)	The Korean Association for Policy Studies
	November 2022	Top Honors Grade (AA) in the ESG Overall Grade	Sustainvest
Environmental	January 2022	Encouragement Award in the Korea Green Climate Awards	The National Assembly Forum on Climate Change
	June 2022	Grand Prize in the Citizen's Network for Tap Water	Ministry of Environment
	October 2022	Excellence Award in the 46th WorldSkills Competition for Water Treatment Technology	WorldSkills Committee
	October 2022	Selected as one of the Top 20 Environmental Technology Development Achievements (Water Management Field)	Ministry of Environment
	November 2022	Prime Minister's Commendation for Carbon-Neutral Green Management	Ministry of the Interior and Safety
	December 2022	Top Honors for General Water Service Business Operation Management Status Evaluation	Ministry of Environment
	June 2022	Selected as an Excellent Educational Donation Institution	Ministry of Education
	July 2022	Best Practice Award for Public Institution Health and Safety Activities	Ministry of Employment and Labor
Social	July 2022	Presidential Commendation for Contribution to Local Public Enterprise Development	Ministry of the Interior and Safety
	July 2022	Minister's Commendation for Contribution to Information Protection on Information Protection Day	Ministry of Science and ICT
	September 2022	Chairman (Minister level)'s Commendation on Personal Information Protection Day	Personal Information Protection Commission
	September 2022	Selected as an Excellent Organization for Voluntary Win-win Cooperation "Companion Business"	Ministry of SMEs and Startups
	November 2022	Certified as a Leisure-friendly Management Company	Ministry of Culture, Sports and Tourism
	November 2022	Certified as an Excellent Safety Management Laboratory	Ministry of Science and ICT
	November 2022	Minister's Award at the Active Administration Contest for Best Practices	Ministry of the Interior and Safety
	November 2022	Selected as an Excellent Institution in National Core Disaster Evaluations	Ministry of the Interior and Safety
	December 2022	Prime Minister's Award for Contribution to Safety Culture	Ministry of the Interior and Safety
	December 2022	Selected as an Excellent Institution for Safe Country Training In Disaster Response	Ministry of the Interior and Safety
	December 2022	Minister's Award for Best Practices in Public Sector Space Innovation	Ministry of the Interior and Safety
	December 2022	Best Practice Award and Encouragement Award for Best Practices in Revitalizing Social Economy	Ministry of Environment
	December 2022	Porter Award CSV Process Category	The Institute for Industrial Policy Studies
	Governance	April 2022	Excellent Grade in Public Data Provision Operation Status Evaluation
June 2022		Acquired the Data Management Certification Level 4	Korea Data Agency
September 2022		Grand Prize in the Korea Big Data Awards	Ministry of Science and ICT
December 2022		Excellent Grade in Comprehensive Information Disclosure Evaluation	Ministry of the Interior and Safety
December 2022		Top Honors Grade in Records Management Agency Evaluation	National Archives of Korea

Your True ESG Partner

