

K-water



K-water Green Financing Framework
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1. K-water at a Glance

Korea Water Resources Corporation (“**K-water**” or the “**Company**”) is the only governmental agency in South Korea specializing in water and was established in November 1967, for the comprehensive development and efficient management of national water resources. In addition, K-water aims to protect public safety from disasters such as drought and flood, to improve the public livelihood, and enhance public welfare by providing public access to water resources. As a public enterprise, K-water will continue the innovation amid the rapid climate change and low-carbon era with the motto of “Opening the Future with Water, Sharing Happiness with Water.” By pioneering with an indomitable spirit, K-water aims to be the world’s top water company meeting the global water management standards.

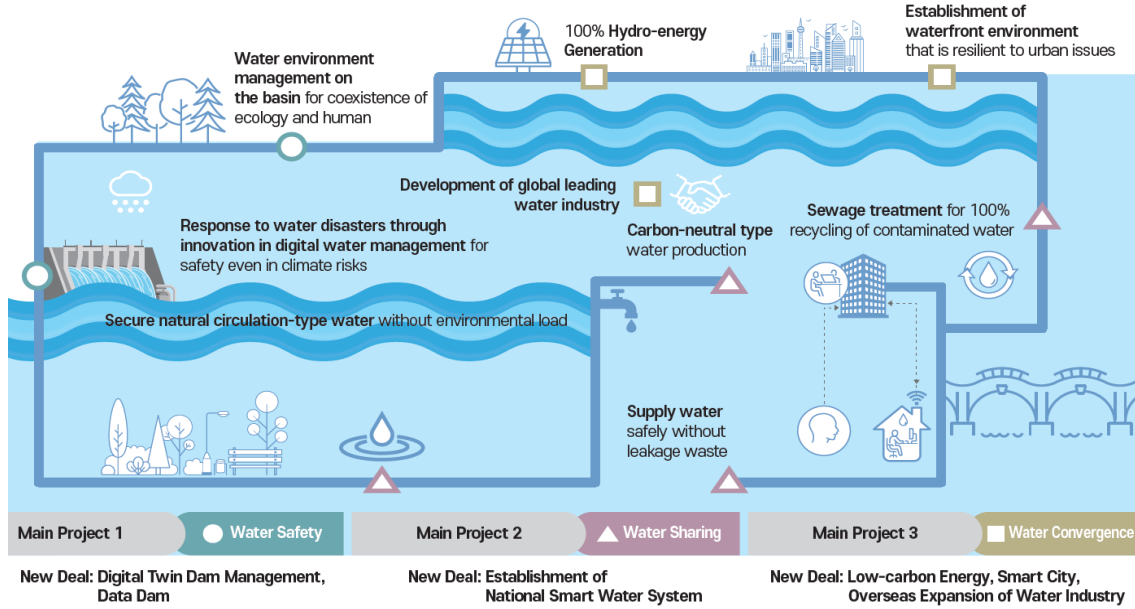
Furthermore, K-water understands the importance of achieving environmental, social, and corporate governance management to mitigate climate change through the Company’s specialty of water resources management. Hence, K-water has been actively engaging and contributing to local and international campaigns and governance groups on the climate change topic. Such efforts include:

- Signing of the Declaration of Climate Crisis Management (2020)
- Company became the first public enterprise in South Korea to join RE100, which is led by CDP to promote the goal of using 100% eco-friendly renewable energy by 2050 (2021)
- K-water also declared an expanded ESG management plan, in which K-water identified opportunities and risks related to climate change that can impact the company, implemented a low-carbon economic system, and established mid-to-long-term ESG management strategies and goals (2021)
- As a member of the TCFD, K-water strives to lead the ESG management system and to support the recommendations of TCFD

(i) Water Management and Main Projects

K-water is committed to securing public trust and realizing continuous growth as a “World-Leading General Water Platform Enterprise” by establishing an optimal water cycle system encompassing water quantity, quality, and aquatic ecology, strengthening its capability to take the lead in solving global water-related issues caused by climate change and water shortage, and focusing on the renewable energy field in the low-carbon era. The Korea Water Resources Corporation Act was amended in 2020 to reestablish the role of K-water in the national waterworks management, while also expanding the company’s investment in renewable energy field.

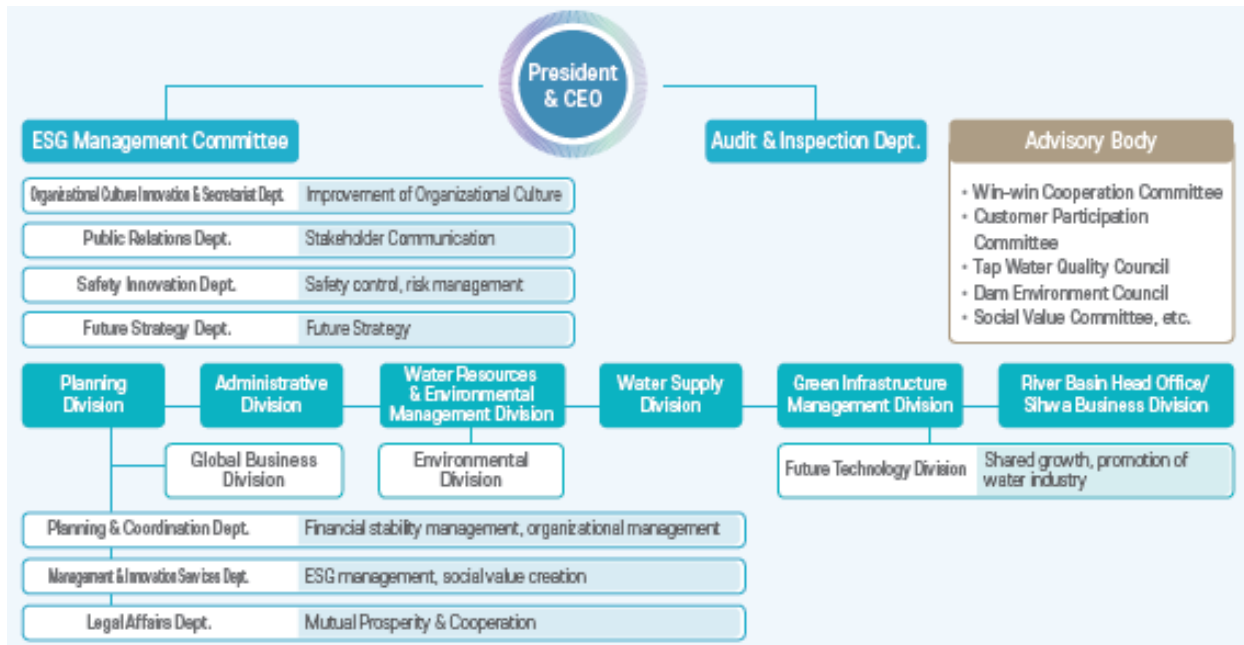
The main project focuses of K-water are largely classified into 3 categories: water safety, water sharing, and water convergence (water related services other than safety or sharing, i.e. clean energy etc.) as detailed in the following diagram:



(ii) ESG Management at K-water

As a water specialist agency, K-water pursues ESG management by establishing a new direction with 4 core values including inclusiveness, safety, trust, and challenge. They were newly reflected to the strategic system to enable balance between public concern and profitability. As a result of these continuous efforts, K-water was the first unlisted public enterprise to receive an ESG rating from Sustainvest. K-water’s ESG rating is among the highest among public enterprises.

The following is K-water’s organizational structure to oversee, promote and execute ESG management:



(iii) Overarching Strategic Goals of K-water

K-water has established strategic goals until 2026 to create a future growth engine by reinforcing connectivity with the strategic business units. Furthermore, K-water was the first public enterprise to establish an ESG management and implementation system by establishing an ESG value system and incorporating it into the corporation's management strategy and installing an ESG management committee within its Board of Directors. Based on the recent national consensus on the importance of water management, K-water proclaimed the vision as the "World-Leading General Water Platform Enterprise" to improve the role of K-water and to lead the global water market based on the core values of "inclusiveness, safety, trust, and challenge."

Strategic Direction	Strategic Goal	Present	2026	
Business Strategy	Realization of integrated water management that is safe against climate change Safe Water Project (Water Environment)	Achieve water quality goal of Grade I (20 multi-purpose dams and 14 water supply dams)	87%	100%
		Diversification of water intake sources	42.03 million m ³ /year (cumulative)	90.31 million m ³ /year (cumulative)
		Target achievement rate of water disaster prevention	91.4%	100%
		Linked projects between water resources	2 projects (cumulative)	8 projects (cumulative)
		Digital Twin Construction Rate ① Smart Safety Management System on 37 dams ② Water Management Platform on 5 River Basins	0%	100%
	Secure supply of water that everyone can trust and drink Water Sharing Project (Metropolitan)	No. of people benefiting from water welfare	10,500EA (cumulative)	28,600EA (cumulative)
		Achievement rate of preventing the discontinuance of water supply	100%	100%
		Tap Water Drinking Rate (Including indirect drinking)	44.5%	70%
		Integrated monitoring of waterworks nationwide	44 local governments (cumulative)	All 161 local governments
		Achievement rate of Smart Infrastructure construction (Wide-area and local SWM)	96% (Local 60)	100% (Wide-area 48, Local 74)
	Realization of global leading water value NEXUS Water Convergence Project (Green Infrastructure, Global)	Participation in Overseas Projects such as MDB cooperation project, etc.	2 projects (cumulative)	14 projects (cumulative)
		Floating photovoltaics, Hydrothermal Energy & Green Hydrogen Supply	47MW(cumulative) 0 ton/year	3.3GW(cumulative) 266 tons/year
		Construction of climate-resilient eco-city	1 project (cumulative)	10 projects (cumulative)
		Development of preliminary unicorn* for the water industry (* Corporate value of KRW 100 billion or more)	1 project (cumulative)	5 projects (cumulative)
		Application of digital water platform	2 projects (cumulative)	40 projects (cumulative)




2. K-water Green Financing Framework

K-water Green Financing Framework (the “**Framework**”) presented to ensure K-water’s potential Green Bonds and Green Loans are in line with (i) the Green Bond Principles 2021 published by International Capital Market Association and (ii) the Green Loan Principles 2021 jointly issued by the Loan Market Association, Asia Pacific Loan Market Association and Loan Syndications and Trading Association. The four key pillars of this Framework are:

- i. Use of proceeds
- ii. Process for project evaluation and selection
- iii. Management of proceeds
- iv. Reporting




(i) Use of proceeds

An equivalent amount to the net proceeds from any **Green Financing Instruments** including Green Bonds and/or Green Loans issued by K-water will be used exclusively to finance and/or re-finance, in whole or in part, new or existing projects (“**Eligible Projects**”) from any of the eligible project categories (“**Eligible Project Categories**”) as defined below:

Eligible Green Project Categories	Eligible Criteria and Description	Main Environmental Objectives	Main Alignment to UNSDG ¹
Renewable Energy	<ul style="list-style-type: none"> • Acquisition, construction, development, deployment, operation, maintenance and upgrade of infrastructure related to renewable energy including: <ul style="list-style-type: none"> ○ Solar energy (e.g. Floating photovoltaic power facilities) ○ Tidal energy (e.g. Tidal power generation facilities or dedicated transmission infrastructure and support facilities) ○ Hydropower (e.g. Small hydro plants and facilities such as dams, with a power density > 10 W/m² or life-cycle GHG emissions threshold < 100gCO₂e/kWh) ○ Hydrothermal energy (e.g. Hydrothermal energy convergence cluster) ○ Green Hydrogen 	Climate Change Mitigation	
Sustainable Wastewater Management	<ul style="list-style-type: none"> • Construction, development, operation, maintenance and upgrade of wastewater treatment facilities or pumping stations, subject to the relevant net energy consumption levels² for new plants • Renovation or upgrade work for wastewater treatment facilities achieving an expected 20% reduction in energy consumption 	Pollution Prevention and Control; Climate Change Mitigation	 

¹ Full alignment please refer to: <https://www.icmagroup.org/green-social-and-sustainability-bonds/mapping-to-the-sustainable-development-goals/>

² ≤ 35 kWh per population equivalent (p.e.) per annum for treatment plant capacity below 10 000 p.e.;
 ≤ 25 kWh per p.e. per annum for treatment plant capacity between 10 000 and 100 000 p.e.;
 ≤ 20 kWh per p.e. per annum for treatment plant capacity above 100 000 p.e.

<p>Sustainable Water Management</p>	<ul style="list-style-type: none"> Construction, development, operation, maintenance, renovation and upgrade of water supply infrastructure to increase efficiency, accessibility and management of water delivery systems subject to the following criteria: <ul style="list-style-type: none"> Net average energy consumption for abstraction and treatment ≤ 0.5 kWh per cubic meter produced water supply; or Leakage level: Infrastructure Leakage Index (ILI) ≤ 1.5 <p><u>Examples:</u></p> <ul style="list-style-type: none"> Construction of water purification plant and pumping station to adjust or redistribute water supply; Renewal or replacement of old water facilities such as water transmission pipelines to reduce leakage; Upgrade of water infrastructure to improve water flow rate by replacing dysfunctional measuring apparatus, or establishing automation systems 	<p>Natural resource Conservation</p>	 
<p>Climate Change Adaptation</p>	<ul style="list-style-type: none"> Development of nature-based waterways and adjoining waterfront areas to achieve flood prevention and control, and preservation of aquatic biodiversity for flood mitigation including the “Waterfront city” projects in Busan Eco-Delta City, Sihwa Multi-Techno Valley, and Songsan Green City Research and development of climate change adaptation technology, including climate information / modelling and disaster response systems 	<p>Climate Change Adaptation; Biodiversity conservation</p>	

Exclusion Criteria

Assets that do not fall into the Eligible Green Asset Categories as listed above will not be eligible under this Framework. Explicitly, K-water commits to not knowingly allocating the net proceeds from Green Financing Instruments to the following sectors and activities:

- Sectors which are prohibited by laws and regulation in Korea
- Activities which are in relation to hazardous chemicals or waste
- Fossil fuel related projects

(ii) Process for project evaluation and selection

The project evaluation and selection process ensures that the net proceeds from the K-water’s Green Financing Instruments are allocated to projects that meet the eligibility criteria set forth in the Use of Proceeds section of the Framework. K-water shall establish a dedicated Green Finance Working Group (the “**Working Group**”) which implicate the following teams within the K-water to ensure that allocations are made to Eligible Projects as specified above:

- The Investment Committee
- The Finance Department
- The ESG Management Team
- The Investment and Funding Review Committee

Based on K-water's internal "Strategy Business Regulation", members of the Investment Committee include:

- President & CEO,
- Senior Executive Vice President,
- Director of each Division,
- Head of Division within the K-water headquarter,
- Head of Planning Team and Evaluation Team,
- Head of K-water Convergence Research Institute,
- Head of Human Resources Development Institute, and
- Any other employees (with rank of Team Head) assigned by the President

The ESG Management Team, which consists of a maximum of 9 people including 1 non-executive director and the director of Planning Division, is responsible for conducting the overall ESG strategic and systematic administration, and is in charge of the K-water's overall ESG management, including setting up ESG business plans based on K-water ESG Management Principles, executing those ESG business plans and the verification of ESG projects.

Key steps for project evaluation and selection include:

- Review of the proposed projects by the Investment Committee
- The ESG Management Team selects the Eligible Projects relevant to the K-water's ESG management strategy and confirms their compliance with the Framework
- The Finance Department, as the final decision maker, reviews and approves the selected Eligible Projects to conduct financing
- Post-evaluation on the pool of Eligible Projects by the Investment and Funding Review Committee composed of experts in various sectors / fields (e.g. investment, finance, accounting, legal etc.)

The Working Group shall replace Eligible Projects that no longer meet the eligibility criteria as defined in the Use of Proceeds section of the Framework (e.g. divestment, liquidation, concerns regarding alignment of underlying activity with eligibility criteria, etc.). The above key steps will be involved in reviewing and validating new investments or projects to be included in the pool of Eligible Projects. The Working Group is also responsible for verifying and validating the annual reporting for Green Financing Instruments regularly.

Refinancing of Eligible Projects will have a look-back period of no longer than 2 years from the time of issuance.

Respective teams within K-water responsible for the nominated green project(s) would identify the environmental and social risks associated with the projects and provide an analysis to the Working Group, according to internal environmental and social risk management policies and frameworks.

Post-allocation, the proceeds allocation from the Green Financing Instruments will be reviewed by the Working Group at least on an annual basis or as necessary, to ensure that the proceeds are fully earmarked to a portfolio of Eligible Green Assets in alignment with the eligibility criteria throughout the tenor of the Green Financing Instruments. Allocated assets that no longer fulfil the eligibility criteria will be replaced by other Eligible Green Assets on a timely basis.

(iii) Management of proceeds

K-water's Finance Department shall track internally the allocation of the net proceeds to Eligible Projects by establishing and maintaining a dedicated ledger (the "**Ledger**"). The Ledger will record, track and manage the allocation of the proceeds from each Green Financing Instrument issuances. The net proceeds of each Green Financing Instruments will be earmarked against the Eligible Projects pool identified in the Ledger.

The Ledger will contain, but not limited to, the following information:

- Information of issuances of the Green Financing Instruments, including the issuance date, maturity date, coupons / interest rate, currency, amount, ISIN (for Green Bonds) etc.;
- Information of the allocated Eligible Green Projects, including:
 - The aggregate amount of allocated proceeds to each eligible green project;
 - Project summary and its eligible green project category;
 - The expected environmental benefits;
- Allocation of proceeds by Eligible Green Categories; and
- Amount of unallocated proceeds

Pending the full allocation of the proceeds, the balance of unallocated proceeds shall be earmarked and held in the form of cash or cash equivalent sustainable investment instruments ("Green Bonds") in line with K-water treasury management.

On the best effort basis, K-water is committed to fully allocate the net proceeds of Green Financing Instruments within 24 months after launch or drawdown. K-water will strive to maintain an aggregate amount of Eligible Projects that is at least equal to the aggregate net proceeds of all outstanding Green Financing Instrument.

In case of divestment or cancellation of an allocated asset, or if an allocated asset no longer meets the eligibility criteria, K-water shall reallocate the proceeds to other Eligible Assets.

(iv) Reporting

For Green Bonds:

Until full allocation of the Green Bonds proceeds, K-water shall disclose publicly the information of allocation reporting and impact reporting on an annual basis in the annual Sustainability Report or in a standalone annual Green Bond Report, and thereafter in case of any material change to

the allocation. The annual Sustainability Report or standalone annual Green Bond Report are accessible publicly on K-water's website (English version).

K-water is committed to conduct independent external reviews on the post-issuance allocation and impact reporting.

Allocation Reporting

The allocation reporting shall include but not limited to the following information:

- The percentage of allocated proceeds versus the total amount of proceeds
- The percentage of proceed allocation by Eligible Project Categories
- Remaining balance of unallocated proceeds
- The proportion of proceeds allocated to financing and/or refinancing
- Case studies of selected allocated eligible green project, subject to confidentiality

Impact Reporting

When available, K-water shall disclose the relevant information on the expected environmental benefits and actual impact in the best effort basis, and point out the key environmental objectives of the allocated green projects by Eligible Project Categories. K-water is committed to disclose the relevant calculation methodologies and assumption on the reporting. Below are examples of impact indicators that may be reported recommended under the Harmonized Framework for Impact Reporting:

Eligible Green Project Categories	Potential Impact Indicators
Renewable Energy	<ul style="list-style-type: none"> • Installed capacity in MW • Annual GHG emissions avoided in tons of CO_{2e} • Annual renewable energy production in MWh
Sustainable Water Management	<ul style="list-style-type: none"> • Avoided water leakage in m³ • Number of people and cities served
Sustainable Wastewater Management	<ul style="list-style-type: none"> • Amount of wastewater treated in m³ • Number of people and cities served • Improvement of wastewater quality
Climate Change Adaptation	<ul style="list-style-type: none"> • Flood control capacity in m³ • Number of waterways and length in km • Expected decrease of flooding probability • Green waterfront areas built /restored in m³ • Improvement in river water quality aquatic biodiversity

For Green Loans:

Subject to respective loan agreement, K-water may disclose information on the allocation of proceeds, and provide relevant information on the expected and/or actual environmental impacts of Eligible Green Assets where feasible and available. Subject to the agreement and preference of the lenders, K-water may disclose the relevant information in the annual Sustainability Report or in a standalone Green Loan Report.

(v) External Review

K-water has appointed both Sustainalytics and S&P as independent third parties to provide Second Party Opinions on this Framework to confirm the Framework's alignment with the Green Bond Principles 2021, and the Green Loan Principles 2021. The respective Second Party Opinion reports are publicly available on K-water's website (English version).