

# THINK LIVING AND ENVIRONMENT

KD Navien Sustainability Report 2023



# About this Report

## Report Overview

This is KD Navien's 2023 sustainability report, encompassing the financial, environmental, and social efforts and values we generate through our corporate activities, under our philosophy to social contribution through business. We commit to publishing sustainability reports annually, maintaining communication with stakeholders, and transparently disclosing ESG performance and activities.

## Reporting Principles

This report was prepared based on the Global Reporting Initiative (GRI) Standards 2021 (In accordance with), reflecting the indicators required by the Electrical & Electronic Equipment standards of the Sustainability Accounting Standards Board (SASB) and the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

## Reporting Period

This report covered financial, environmental, and social performance from January 1, 2023, to December 31, 2023. Some performance information extends up to March 2024, and quantitative performance includes figures for the past three years for trend analysis.

## Reporting Scope

The financial performance and greenhouse gas data in this report are prepared on a consolidated basis, while the non-financial performance, excluding greenhouse gases, is prepared on a separate basis, covering KD Navien's domestic business sites, including the Seoul office, research institute, and production sites (Seotan, Pyeongtaek, Songtan, Gasan). It also includes environmental and social performance from key affiliates such as KD Everon, KD Polym, KD TS, and Navien, Inc.

## Report Assurance

This report underwent independent assurance from the Korea Management Registrar (KMR) to ensure transparent disclosure of sustainability management activities to stakeholders. The assurance statement can be found on page 104~105 of this report.

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# CEO Message



## Dear valued stakeholders,

In 2023, KD Navien faced significant challenges amidst the global instability and sluggish economic recovery. However, we remained committed to providing sustainable technology solutions to our global customers. As a result, we achieved record sales of KRW 1.2043 trillion and an operating income of KRW 105.9 billion, marking a 3.7% growth compared to the previous year and the highest sales and operating income in our history.

On top of that, we expanded our efforts in GHG emission management and actively participated in global initiatives such as the Task Force on Climate-related Financial Disclosures (TCFD) and the Carbon Disclosure Project (CDP) to ad-

dress climate change. With the support of the global market and various stakeholders, we will continue our endeavors to create comfortable residential environments for our customers while protecting the global environment for future generations.

**Firstly, we are committed to strengthening our Environmental, Social, and Governance management through company-wide efforts.**

We have designated 2024 as the first year of advancing ESG management and have reorganized our ESG Operating Committee to include the participation of the CEO and key management executives. Centered on the Value based Management Group, we laid the foundation for ESG management by forming an ESG Consultative Body comprising 11 parts, including environmental management, climate strategy, and human rights management. This year, we will implement strategies to achieve goals such as RE100 and expand our GHG Scope 3 coverage based on our accumulated capabilities and infrastructure. Furthermore, we will actively engage in ESG management by expanding the application of independent assurance of GHG emissions and providing practical support for ESG management among our suppliers.

**Secondly, we will lead the way in reducing carbon emissions through sustainable technologies, particularly condensing technology.**

Since pioneering the development of condensing boilers in Asia in 1988, we have been committed to reducing carbon emissions through technological innovation and expansion. Last year, we introduced the Condensing Hydro-furnace to the North American market, offering energy savings and environmental protection through innovative heating technology. Unlike regular furnaces commonly used in North America that directly heat indoor air with combustion gas, this system

uses water to heat the air, preventing it from becoming dry and uncomfortable, with no risk of hazardous gas inflow. It is receiving positive responses in the United States, where climate change-related policies are being strengthened, as it increases energy efficiency and effectively reduces NOx and CO<sub>2</sub> emissions by incorporating condensing technology. We plan to connect this with a high-efficiency heat pump that reduces carbon emissions, offering more sustainable and differentiated heating services.

**Thirdly, we contribute to creating a better world through the implementation of socially responsible management practices.**

We aim to comply with the norms set by the international community and governments. We plan to implement the norms and guidelines set by the international community and governments to recognize and fulfill our responsibilities and roles concerning both actual and potential factors arising from our business activities. Additionally, we aim to establish preventive and mitigative measures to minimize these risks. We are committed to creating a non-discriminatory HR system and fostering an organizational culture that values diversity and inclusiveness. As we continue our journey towards a sustainable future, we deeply appreciate your ongoing support for KD Navien, your smarter living environment partner.

Thank you.

**Kim Jong-uk**  
CEO of KD Navien

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# Corporate Profile

## Company Overview

Name	<b>KyungDong Navien Co., Ltd.</b> NAVIEN : Navigator + Energy Environment
CEO	Sohn Yeon-ho, Kim Jong-uk
Established	March 16, 1978
Head office	95 Suwolam-gil, Seotan-myeon, Pyeongtaek-si, Gyeonggi-do
Business areas	Boiler, water heater, furnace, air purifying ventilation system, heated mattress pad, smart home system, etc.
Website	<a href="https://www.kdnavien.co.kr">https://www.kdnavien.co.kr</a>

**KD Navien creates a smarter living environment by offering products and services that impact the temperature and quality of our water and air, including boilers, water heaters, air conditioners, and ventilation systems.**

Since our establishment in 1978, we have grown into Korea's premier boiler manufacturer. Pioneering high-efficiency condensing technology in Asia in 1988, we began exporting in 1991 and have held the No. 1 position in exports for 31 years, leading Korea's boiler industry.

Driven by our commitment and passion for the environment, society, and technology, we focused on developing advanced condensing technology to reduce fine dust ahead of everyone else. Subsequently, we expanded our offerings beyond boilers to introduce heated mattress pads for optimal sleeping environments and air purifying ventilation systems that provide clean and fresh air for children, realizing our vision as a partner for a more comfortable living environment.

We will continue advancing towards a better future, prioritizing customers' health and happiness with convenient, reliable technologies, thoughtful innovation, and a firm commitment to environmental preservation.



**Total assets** KRW **1.0606** trillion



**Sales** KRW **1.2043** trillion



**Number of employees**

**1,646**

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## Our Affiliates

### Partners that Create Value in Energy and Environment

The five KD Living Environment Partners strive to become world-class companies in their respective fields through continuous technological development and creative thinking, while also achieving the common goal of enriching customers' lives.

#### Overview



The holding company of the Group and a company leading the development of eco-friendly construction and commercial material and home network systems



Developer and manufacturer of core components for energy appliances



Developer and manufacturer of core components, including water pipe modules for boilers, water heaters, and heated mattress pads



Service-oriented company that leads the protection of customers' rights and interests by providing service for all KD's products and fostering excellent technicians

#### Description

Launched in 2010 as a holding company overseeing investment and brand management activities of each affiliate, KD One completed an absorption merger with KD Ceratech, a leader of eco-friendly material development, and home network system specialist KD Network to achieve management rationalization. Through the merger, KD One maximizes synergy by combining the corporate capabilities of the three companies, positioning itself as a leading company in future living environments and pioneering energy conservation.

KD Everon is a manufacturer of core components for various energy appliances. KD Everon, which develops boiler components such as heat exchangers and burners, is recognized for its technological prowess. The world's first plate-type condensing stainless steel heat exchanger, a core component of the Navien Condensing Boiler, was developed by KD Everon. In 2023, we acquired Time Engineering Asia Co., Ltd., a company that designs and manufactures automated control devices, to enhance quality and ensure stable component supply, thereby establishing a value chain for critical component procurement.

Specializing in the production of highly functional electronic components, KD Polyum standardizes the entire process from plastic material input to molded item extraction, ensuring high-quality products. The company enhances cost competitiveness by modularizing each part of the water pipe, a key component for boilers, water heaters, and heated mattress pads.

KD TS, or KD Total Solution and Service, is a service-oriented company that specializes not only in boilers and water heaters but also in air purifying ventilation system, and home network systems. Fostering outstanding service technicians through training, KD TS aims to improve customer service quality and protect customers' rights and interests. Evolving from a domestic to a global service company under consumer-oriented management, KD TS is committed to providing exceptional service worldwide.

#### Performance<sup>1)</sup>

2021 Sales	<b>99,082,206</b>
2022 Sales	<b>119,025,247</b>
2023 Sales	<b>131,648,859</b>

2021 Sales	<b>212,378,547</b>
2022 Sales	<b>204,221,318</b>
2023 Sales	<b>197,153,226</b>

2021 Sales	<b>70,117,740</b>
2022 Sales	<b>106,843,918</b>
2023 Sales	<b>88,807,584</b>

(Unit: KRW thousand)

2021 Sales	<b>16,291,626</b>
2022 Sales	<b>19,493,505</b>
2023 Sales	<b>23,295,849</b>

1) Separate basis

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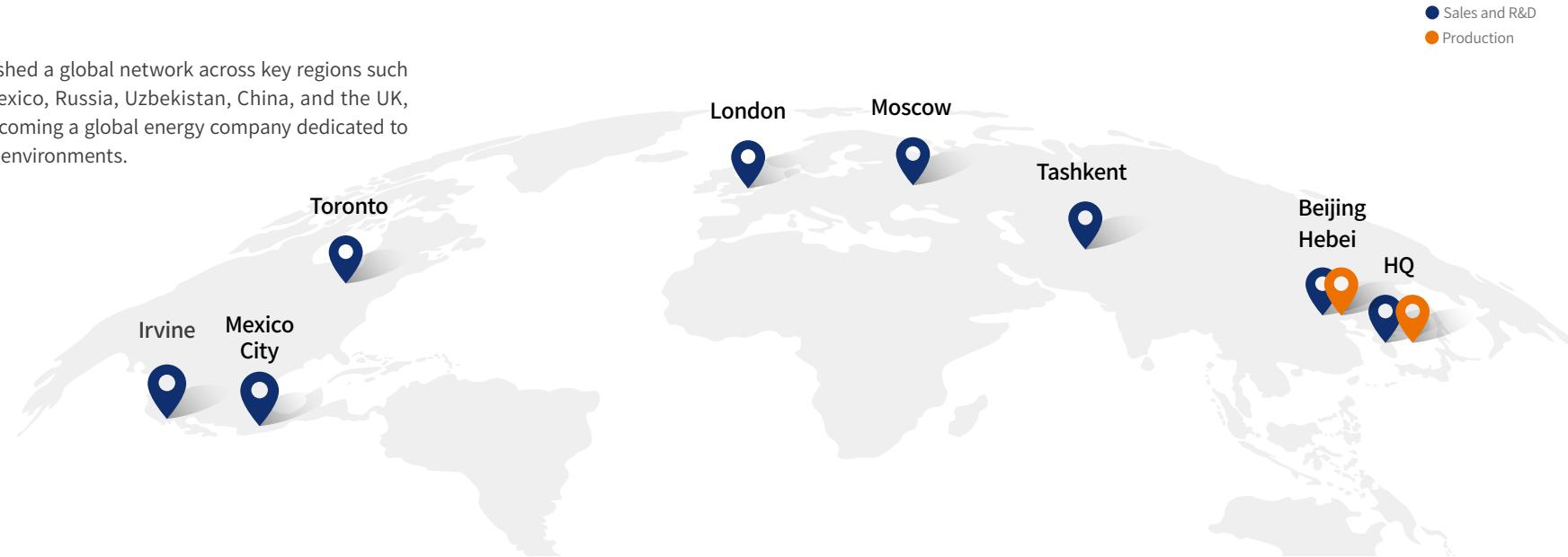
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## Global Network

KD Navien has established a global network across key regions such as the US, Canada, Mexico, Russia, Uzbekistan, China, and the UK, advancing towards becoming a global energy company dedicated to creating smarter living environments.



### Domestic

Name	Site	Address
KD Navien	Seoul Office	22 Gukhoe-daero 76-gil, Yeongdeungpo-gu, Seoul
	Seotan Factory	95 Suwolam-gil, Seotan-myeon, Pyeongtaek-si, Gyeonggi-do
	Research Institute	15 Gyeongin-ro 53-gil, Guro-gu, Seoul
	Pyeongtaek Factory	663 Gyeonggi-daero, Pyeongtaek-si, Gyeonggi-do
	Songtan Factory	57 Sandan-ro 121beon-gil, Pyeongtaek-si, Gyeonggi-do
KD Everon	Gasan Factory	104 Sappyocheon-ro, Seonjang-myeon, Asan-si, Chungcheongnam-do
	Chungju Factory	1334 Gagok-ro, Angseong-myeon, Chungju-si, Chungcheongbuk-do
	Asan Factory	331 Asanho-ro, Yeongin-myeon, Asan-si, Chungcheongnam-do
KD TS	Human Resources Development Institute	110 Chudam-ro, Pyeongtaek-si, Gyeonggi-do

### Overseas

Country	Name	Address
USA	Navien, Inc.	20 Goodyear, Irvine, CA 92618
Canada	Navien Canada, Inc.	555 Hanlan Road, Unit 7, Woodbridge, Ontario, Canada, L4L 4R8
Mexico	Navien Mexico, S.A. de C.V.	Presa Pabellón 38, Col. Irrigación, Miguel Hidalgo, 11500 Ciudad de México, México
Russia	Navien RUS LLC	117342, Moscow, Profsoyuznaya st. 65K1, 16F, Russian Federation
Uzbekistan	Navien UBK LLC	2a, Kichik Khalka Yuli st., Yakkasaray district, Tashkent city, Republic of Uzbekistan
China	Beijing KyungDong Navien Heat Energy Equipment Co., Ltd.	Mapo Juyuan Gong Ye Qu, Juyuan Dong Rd #27, Shunyi District, Beijing
	Hebei KyungDong Navien Heat Energy Equipment Co., Ltd.	Kua Yue Rd West Side and Patriotic Rd South Side, High-tech Industrial Development Zone, Weixian Country Xingtai City, Hebei Province
UK	Navien UK Ltd	Building 2, Guildford Business Park, Guildford, GU2 8XH

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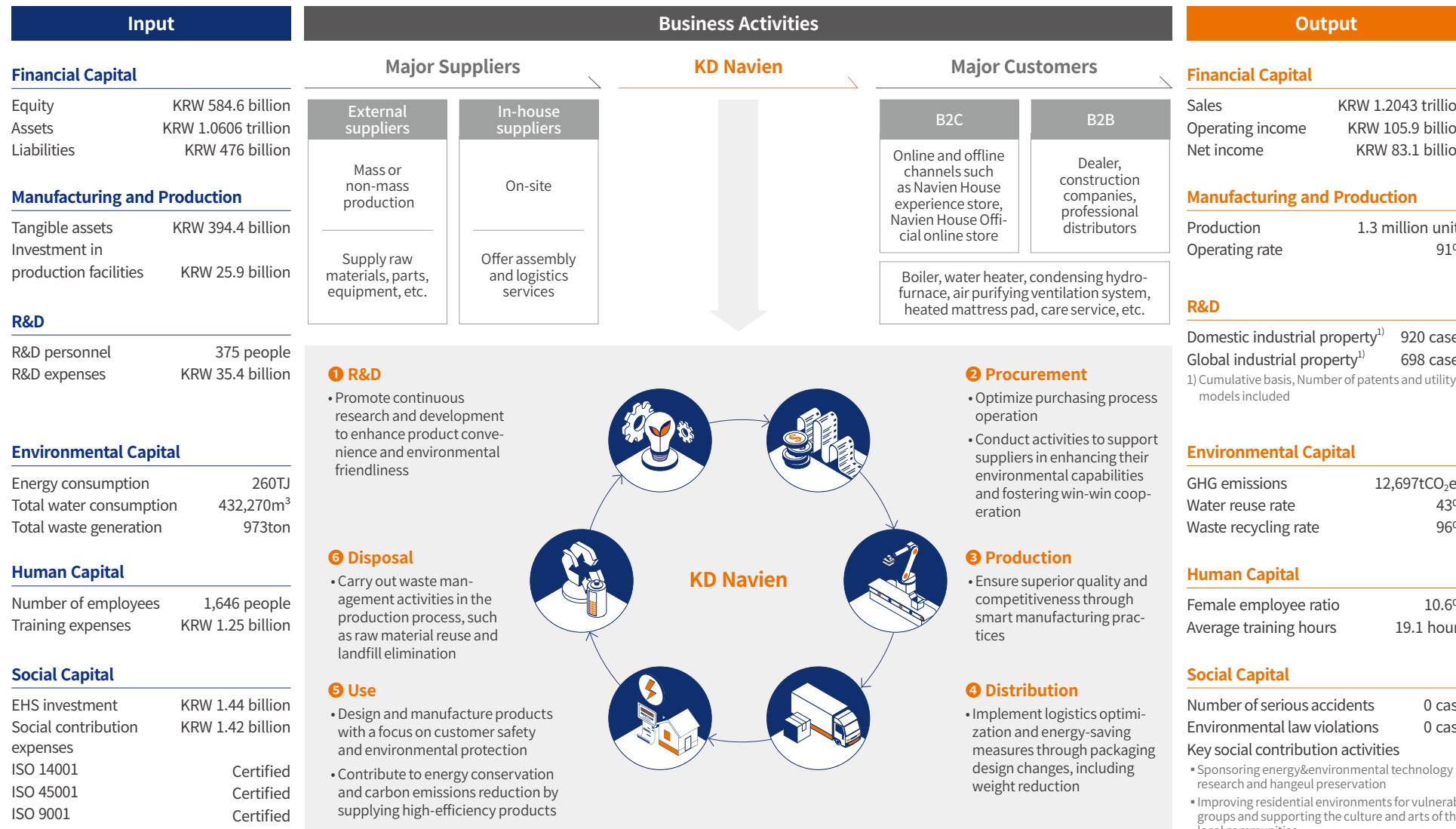
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**Think Living and Environment**

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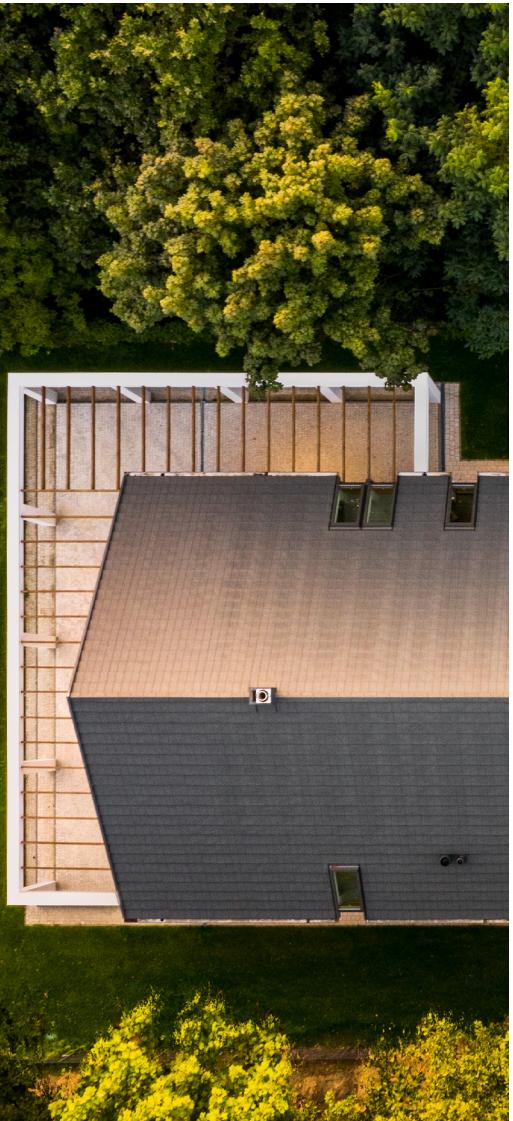
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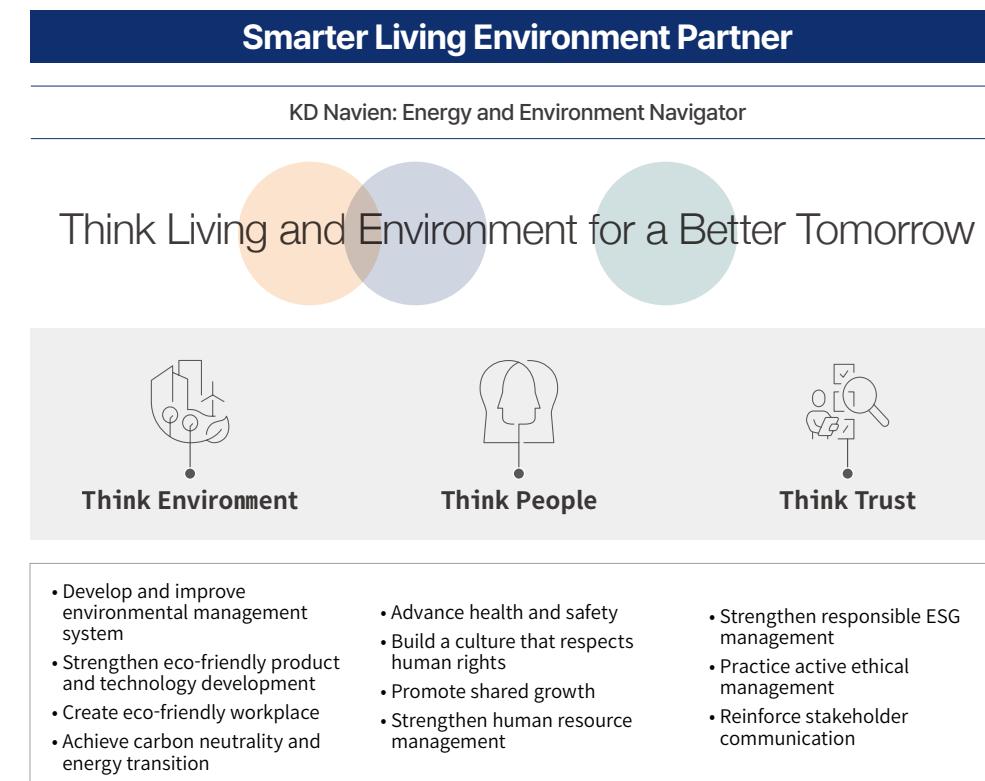
# ESG Strategies of KD Navien



## ESG Strategy System

Based on the pursuit of principle, KD Navien strives to improve the quality of life for all customers, growing steadily to achieve harmony among energy, environment, and living. To advance as a “Smarter Living Environment Partner” and create sustainable values amid rapidly changing domestic and international management environments, we have established the ESG strategy system that contains our identity and directions. Under our ESG slogan “Think Living and Environment for a Better Tomorrow,” we will internalize the ESG strategy system consisting of the three pillars of environment, people, and trust and 11 key management areas across our activities, implementing key tasks in gradual steps.

- Vision
- Name
- ESG Slogan
- ESG Pillar
- ESG Key Management Areas



# ESG Strategies of KD Navien

## ESG Governance

KD Navien has reorganized its ESG governance system to ensure the continuity of ESG operations and establish an effective ESG management system. This includes the operation of an ESG Operating Committee in which management participates and an ESG Consultative Body to promote ESG tasks.

### ESG Operating Committee

The ESG Operating Committee, with the participation of CEO and key management executives, approves major ESG strategies and plans and oversees related performance. If deliberation/reporting by the highest decision-making body related to ESG operations is necessary, the matter is submitted to the board of directors' agenda.

### ESG Consultative Body

The ESG consultative body, consisting of 11 parts including environmental management, climate strategy, human rights management, supply chain ESG, and governance, is composed of the lead teams for each part. They regularly discuss the direction and plans for each part and share updates on implementation status and performance.

### Value based Management Group

The Value based Management Group under the Management Planning Division serves as the ESG planning/management roles across the organization, including establishing ESG governance, responding to evaluation, and external disclosure.



## ESG Training

In December 2023, KD Navien conducted ESG management training for 37 employees from relevant teams of the ESG Consultative Body, including R&D, EHS, and HR, to increase their awareness of ESG management. The training included theories on external ESG trends and issues, global guidelines, and a business value chain analysis exercise in the form of a team workshop. We also spread the significance of sustainable management by producing card news on various topics such as the background of ESG, the environment, and health and safety. In 2024, we plan to conduct in-depth training on detailed topics including environmental management, human rights management, supply chain management, and local communities to improve ESG competency.



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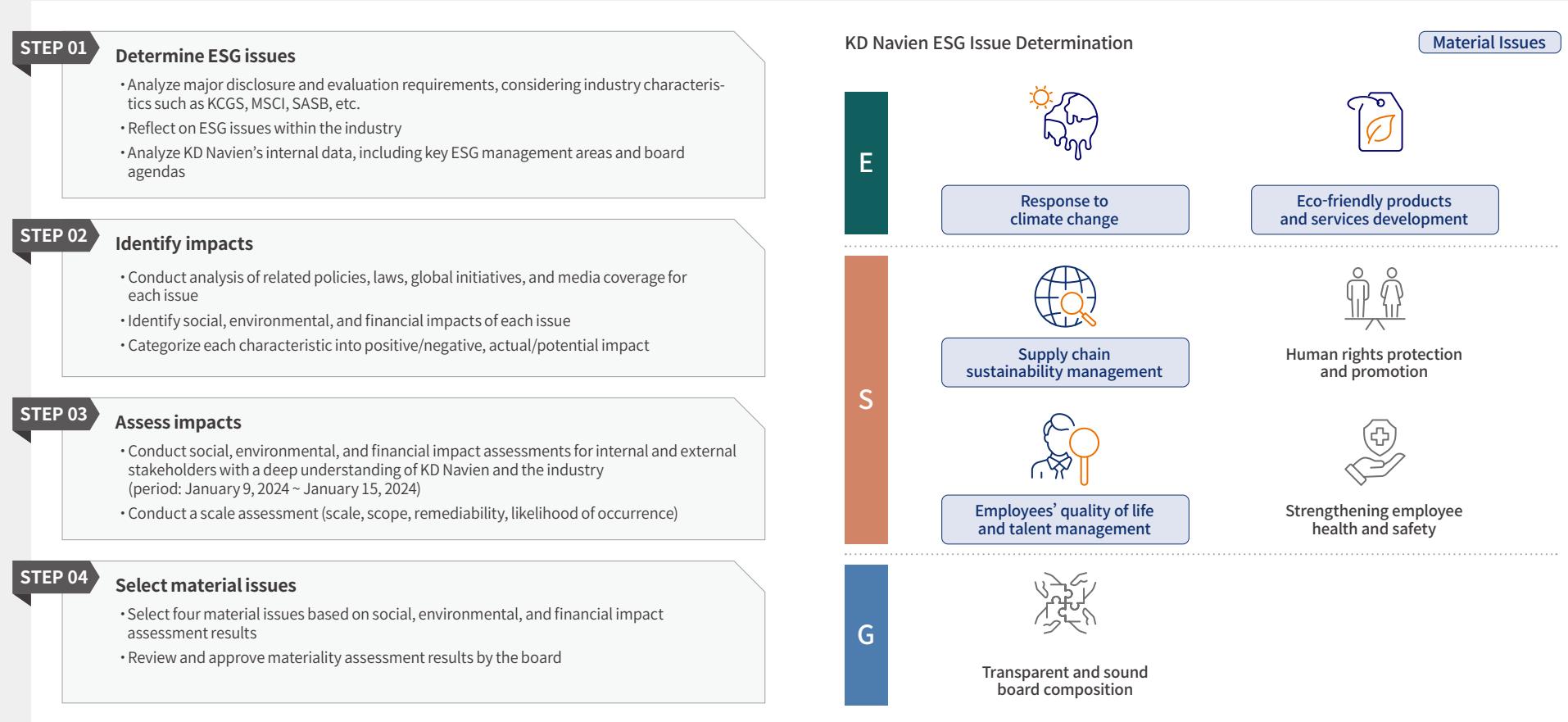
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# Materiality Assessment

## Materiality Assessment Process

Since 2022, KD Navien has been conducting a materiality assessment to identify business-related sustainability management issues and incorporate them into the company's management strategies and goals. In 2023, in response to global disclosure trends, we redesigned the assessment process to incorporate the concept of double materiality required by the revised GRI Standards 2021 and the European Union's (EU) Corporate Sustainability Reporting Directive (CSRD). Using this updated materiality assessment process, we comprehensively evaluated the impact of our management activities on society and the environment, as well as the impact of sustainability issues on our financial performance.



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# Materiality Assessment

## Materiality Assessment Results

The 2023 materiality assessment identified “Response to climate change”, “Eco-friendly products and services development”, “Supply chain sustainability management”, and “Employees’ quality of life and talent management” as material issues. The selection of “Response to climate change” and “Eco-friendly products and services development” this year indicates that eco-friendly business is becoming a significant growth engine for the company in light of the global carbon neutrality trend. “Supply chain sustainability management”, as well as “Employees’ quality of life and talent management”, were also identified as highly impactful, reflecting strong social interest in both supply chain and talent management.

Material Issues	Type	Impact	Attributes	Impact Level	Evaluation Results
Response to climate change	Social and environmental impact (Inside-out)	• Reducing workplace carbon emissions and managing environmental impacts by voluntarily building a GHG inventory and establishing a roadmap to carbon neutrality	positive-actual	●●●	●●●
		• Reducing power and energy consumption through process optimization and the introduction of renewable energy generation facilities	positive-actual	●●●	
	Financial impact (Outside-in)	• Increasing sales of key products such as boilers	opportunity	●●●	
		• Increasing GHG emissions and energy procurement-related expenses	risk	●●○	
		• Damaging asset value due to natural disasters near business sites	risk	●○○	
		• Reducing air pollutant emissions during product use by improving the eco-friendliness of existing flagship products	positive-actual	●●●	
Eco-friendly products and services development	Social and environmental impact (Inside-out)	• Spreading consumer awareness by promoting and distributing the use of green products	positive - potential	●●○	●●●
		• Creating new income sources through sales of non-fossil fuel-based products such as hydrogen boilers and electric heat pumps	opportunity	●●●	
	Financial impact (Outside-in)	• Increasing costs due to the transition to environmentally friendly products, including use of eco-friendly materials	risk	●●●	
		• Continuing R&D to enhance technology, diversify the condensing product lineup, and develop new energy-based products such as hydrogen	risk	●●●	
		• Creating a sustainable supply chain environment and preventing ESG risks in the value chain by upgrading the supply chain management system	positive-actual	●●●	
		• Undermining stakeholder trust in the company due to non-compliance with legal requirements related to suppliers and the supply chain	negative-actual	●●●	
Supply chain sustainability management	Social and environmental impact (Inside-out)	• Securing export competitiveness and increasing sales and profits through compliance with global supply chain regulations	opportunity	●●●	●●●
		• Incurring financial and non-financial support costs for improving suppliers’ ESG capabilities	risk	●●○	
	Financial impact (Outside-in)	• Developing global industry talent, such as engineers, by providing tailored training for each job	positive-actual	●○○	
		• Improving employee work engagement and happiness by operating a fair and systematic evaluation and compensation system and establishing a family-friendly corporate culture	positive-actual	●○○	
		• Increasing number of resignations, and costs for securing replacement workers and recruiting talent, in the event of talent management failure	risk	●●●	
		• Increasing operating costs due to the expansion of specialized and in-depth training, such as partnerships with external education programs	risk	●○○	
Employees’ quality of life and talent management	Social and environmental impact (Inside-out)	• Reducing workplace carbon emissions and managing environmental impacts by voluntarily building a GHG inventory and establishing a roadmap to carbon neutrality	positive-actual	●●●	●●○
		• Reducing power and energy consumption through process optimization and the introduction of renewable energy generation facilities	positive-actual	●●●	
	Financial impact (Outside-in)	• Increasing sales of key products such as boilers	opportunity	●●●	
		• Increasing GHG emissions and energy procurement-related expenses	risk	●●○	

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# Management Approach

Based on the materiality assessment, KD Navien selected the top four material issues by identifying topics with significant social, environmental, and financial impact. These material issues were reported and approved at the Board of Directors meeting held in February 2024.

Material Issues	Impacts and Reasons for Selection	Management Plan	2023 Performance	UN SDGs	Page
<b>Response to climate change</b>	<ul style="list-style-type: none"> <li>As countries around the world declare carbon neutrality and implement GHG reduction policies, establishing climate change response strategies becomes increasingly necessary for companies.</li> <li>Scope 3 GHG emissions management and disclosure are required in accordance with mandatory climate disclosure trends and customer demands.</li> </ul>	<ul style="list-style-type: none"> <li>Set a roadmap for climate change and carbon neutrality</li> <li>Carry out GHG emissions reduction activities</li> <li>Respond to climate change initiatives</li> </ul>	<ul style="list-style-type: none"> <li>Established Scope 1+2 reduction goals</li> <li>Underwent Scope 1 and 2 GHG emissions calculation and verification, and expanded the Scope 3 GHG emissions calculation scope</li> <li>Voluntarily participated in CDP Climate Change (received a B-grade)</li> </ul>		19~31, 33
<b>Eco-friendly products and services development</b>	<ul style="list-style-type: none"> <li>Demand for eco-friendly products continues to increase due to the strengthening of global environmental regulations related to buildings, such as the ban on new gas boiler installations and zero-energy construction.</li> <li>For KD Navien, which has a high proportion of exports, expanding its eco-friendly product lineup and switching to clean fuels like hydrogen have emerged as important tasks for strengthening competitiveness amid changes in global environmental regulations and markets.</li> </ul>	<ul style="list-style-type: none"> <li>Establish eco-friendly R&amp;D roadmap</li> <li>Develop eco-friendly boilers and expansion of product lineup</li> <li>Strengthen the eco-friendliness of existing products</li> </ul>	<ul style="list-style-type: none"> <li>Implemented R&amp;D to popularize condensing hydrogen boilers</li> <li>Launched condensing hydro-furnace in the US</li> <li>Navien Condensing ON AI won the Energy Saving Award at the 26th Energy Winner Awards</li> </ul>		16~18, 34
<b>Supply chain sustainability management</b>	<ul style="list-style-type: none"> <li>Supply chain management has emerged as a critical issue due to the nature of the manufacturing industry, where stable supply and quality of parts and materials are significant.</li> <li>As the scope of corporate responsibility expands throughout the supply chain, including mandatory supply chain due diligence, strengthening the ESG capabilities of suppliers and managing risk are emerging as important tasks for companies.</li> </ul>	<ul style="list-style-type: none"> <li>Introduce a supply chain ESG evaluation and review the establishment of a policy for managing both high and low-performing suppliers</li> <li>Expand support for suppliers</li> <li>Operate supplier VOC channel</li> </ul>	<ul style="list-style-type: none"> <li>Reviewed the implementation of ESG evaluation for new/trading suppliers</li> <li>Carried out financial support, competitiveness enhancement, and training support activities for suppliers</li> <li>Operated and upgraded supplier VOC channels for each topic such as ethics, health and safety, quality, and system</li> </ul>	-	63~67
<b>Employees' quality of life and talent management</b>	<ul style="list-style-type: none"> <li>The management of employee quality of life is becoming increasingly essential for increasing employee satisfaction and improving organizational productivity.</li> <li>Talent management, such as providing learning opportunities and supporting career development and self-actualization through fair performance management, has emerged as a key means of securing corporate competitiveness in a rapidly changing business environment.</li> </ul>	<ul style="list-style-type: none"> <li>Operate and establish employee competency development system</li> <li>Expand employee benefits</li> <li>Conduct surveys to improve employee satisfaction with the organization</li> </ul>	<ul style="list-style-type: none"> <li>Training completion rate: 93.5%</li> <li>Expanded the scope of support for employee health checkups</li> <li>Conducted organizational culture surveys and promoted workplace etiquette campaigns</li> </ul>		45~50

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# Stakeholder Communication

We consider any party who has a direct or indirect impact on our management activities as a stakeholder, and we prioritize improving communication among them. Since our corporate philosophy is based on “Social Contribution through Business Success”, we use various communication channels to engage with our stakeholders including customers, investors, executives and employees, supplies, local communities, government, and academia.

Category	Goal	Communication Channels
Customers	<ul style="list-style-type: none"> <li>Introduce technology</li> <li>Provide brand experience</li> <li>Understand customer needs</li> <li>Fulfill responsibilities for products and services</li> </ul>	<ul style="list-style-type: none"> <li>Global exhibitions (AHR EXPO, Installer Show, etc.)</li> <li>Navien House experience store</li> <li>Navien House official online store, Sweetdream store, Navien LIVE commerce</li> <li>Customer service center, website</li> </ul>
Shareholders and Investors	<ul style="list-style-type: none"> <li>Protect shareholder and investor rights</li> <li>Disclose financial performance through business reports</li> <li>Promote transparent governance disclosures</li> <li>Reinforce the role of ESG Management</li> </ul>	<ul style="list-style-type: none"> <li>General Shareholders' Meeting</li> <li>Reports (business report, audit report, corporate governance report, sustainability report)</li> <li>IR meeting (Conference, in-person meeting)</li> <li>Website</li> </ul>
Employees	<ul style="list-style-type: none"> <li>Develop employee capabilities and ensure diversity</li> <li>Guarantee a safe, healthy working environment</li> <li>Form healthy labor-management relations</li> <li>Share management performance and information</li> <li>Implement security and compliance pledge across the company</li> </ul>	<ul style="list-style-type: none"> <li>Communication channel “KyungDong in”</li> <li>Grievance handling system and online whistleblowing channel</li> <li>Labor-Management Council, on-site meetings for each position</li> <li>Employee training and workshops</li> <li>In-house clubs</li> <li>Job-related education and training (KD Academy)</li> <li>Health care and welfare programs</li> <li>Company-wide security and compliance pledge</li> </ul>
Suppliers	<ul style="list-style-type: none"> <li>Create shared growth value</li> <li>Strengthen supplier communication and capabilities</li> </ul>	<ul style="list-style-type: none"> <li>Programs to enhance supplier competitiveness (training, technical, safety support, etc.)</li> <li>Supplier grievance handling channel (SRM, online whistleblowing channel, etc.)</li> </ul>
Local Communities	<ul style="list-style-type: none"> <li>Promote the local economy and support cultural activities</li> <li>Improve the residential environment and heating</li> <li>Protect the environment of local communities</li> </ul>	<ul style="list-style-type: none"> <li>Sponsorship of cultural organizations</li> <li>Support for vulnerable groups</li> <li>Establishment and sponsorship of the Condensing Environmental Fund</li> </ul>
Government	<ul style="list-style-type: none"> <li>Promote faithful tax payments</li> <li>Comply with statutes and regulations</li> <li>Respond to air pollutant discharge regulations</li> <li>Promote anti-corruption and ethical management</li> </ul>	<ul style="list-style-type: none"> <li>Reports (business report, audit report, corporate governance report, sustainability report)</li> <li>Website</li> <li>Ministry of Environment</li> </ul>
Academia	<ul style="list-style-type: none"> <li>Cooperate in R&amp;D on eco-friendly and living environment product technology</li> <li>Support academic advancement</li> </ul>	<ul style="list-style-type: none"> <li>Industry-academia research cooperation on technology (Developing hydrogen boilers, etc.)</li> <li>Establishment of the Condensing Environmental Fund and sponsorship of academic societies</li> </ul>

## 2023 Stakeholder Communication Highlights

<b>Customers</b>	<p><b>Korea Energy Show</b></p>  <ul style="list-style-type: none"> <li>Exchanged information on new products and technologies, focusing on improved energy efficiency, etc.</li> <li>Showcased products such as high-efficiency condensing Hydro-furnaces to target the global HVAC market and hydrogen boilers for energy transition readiness</li> </ul>	<p><b>Relationship-centered marketing</b></p>  <ul style="list-style-type: none"> <li>Launched an Navien House experience store for consumers to directly view and experience products</li> <li>Organized events like the Clean Air Live Concert, Sweet dream Counseling Center, Cooking Class, and Navien LIVE commerce</li> </ul>
<b>Local Communities</b>	<p><b>Old housing improvement project</b></p>  <ul style="list-style-type: none"> <li>Participated in a public-private partnership project to improve old housing and sponsored condensing boilers to enhance the living environment of vulnerable groups</li> </ul>	<p><b>Restoration activities in flood-affected areas</b></p>  <ul style="list-style-type: none"> <li>Provided emergency recovery services to support residents in Chungbuk and Gyeongbuk regions affected by heavy rain during the summer</li> </ul>
<b>Government</b>	<p><b>Hydrogen city creation in Pyeongtaek</b></p>  <ul style="list-style-type: none"> <li>Formed a business agreement with Pyeongtaek City to collaborate in establishing a hydrogen city and joined a pilot project to promote zero-energy construction and transition to a hydrogen city</li> </ul>	<p><b>Green Consumer Week hosted by the Ministry of Environment</b></p>  <ul style="list-style-type: none"> <li>Took part in the 2023 Green Consumption Week hosted by the Ministry of Environment and the Korea Environmental Industry &amp; Technology Institute, conducting a campaign</li> </ul>
<b>Academia</b>	<p><b>Promoted hydrogen boiler development</b></p> <ul style="list-style-type: none"> <li>Initiated the development of condensing hydrogen boiler technology through R&amp;D collaboration with academia, including KAIST</li> <li>Passed the H2 Ready certification test in the UK</li> </ul>	

# Smarter Living Environment Partner



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**Focus Area**

# Sustainable Product Development

Under the vision of being a “Smarter Living Environment Partner,” KD Navien has contributed to creating a comfortable home environment and a healthier global environment through innovative technology. Since successfully developing Asia’s first condensing boiler in 1988, we have continuously accumulated technological capabilities. Today, we are developing sustainable products, including Hydro-furnaces, electric heat pumps, and hydrogen boilers to promote energy savings and carbon neutrality.

## Hydro-furnace

Our Hydro-furnace is an eco-friendly low-NOx product that saves more than 17% of energy compared to a regular furnace, meeting US SCAQMD<sup>1)</sup> standards. It eliminates the risk of carbon monoxide poisoning, supplies heated air according to heating requirements and operates quietly, enhancing safety and convenience.

1) South Coast Air Quality Management District, an air quality management organization under the California state government

## Condensing Boiler

Our condensing boiler incorporates an eco-friendly, low NOx certified burner, reducing NOx emissions by 79%, the leading cause of fine dust. The NCB753 model provides hot water in less than 10 seconds, saving approximately 20 tons of water per year that would have been wasted waiting for hot water to start flowing.

## Electric Heat Pump

Electric heat pumps use electrical energy and absorb surrounding heat simultaneously. This product yields twice as much energy efficiency as using fossil fuels, reducing energy consumption substantially. To minimize environmental impact, we are developing technology to convert to eco-friendly refrigerants and promoting the development of safety logic systems to minimize risks.

## Hydrogen Boiler

Our hydrogen boilers utilize green hydrogen, produced from renewable energy and water electrolysis, as fuel, emitting no air pollutants such as CO<sub>2</sub>. They boast high product accessibility, as fuel can be supplied through the existing natural gas pipe network.



Smarter Living Environment Partner

**Focus Area**

# Sustainable Product Development

KD Navien is making various efforts to provide customers with comprehensive home appliance products that are eco-friendly, safe, and convenient. We are expanding investments in air purifying ventilation systems and kitchen appliances to comprehensively manage indoor air quality and provide customers with comfortable air quality, while also releasing a variety of heated mattress pads to ensure customers enjoy a comfortable sleep.

## Kitchen Appliance

Kitchen Plus, linked with our Total Air Care (TAC) systems and a 3D air hood, quickly eliminates fine dust and harmful substances generated during cooking. It reduces ultrafine dust by 97% in the kitchen and 91% in the living room, maintaining comfortable air quality throughout the home.

## Water Heated Mattress Pad

Our Water Heated Mattress Pad enhances sleep efficiency by up to 18.6% by providing optimal sleep temperatures in real-time. Using this heating mat at a low indoor temperature can reduce energy costs by about 21%.

## Air Purifying Ventilation System

Our Air Purifying Ventilation System uses a total heat exchange element to prevent energy loss during the heat exchange process, saving up to 67% of energy in winter. Additionally, it is possible to enhance energy efficiency and customize air quality management through the Zone controllable Air purifying ventilation system, which allows for selective operation of the required spaces.

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# TCFD Report



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# Governance

## Board and Management Roles

KD Navien has established climate change response governance to address climate change effectively. The Board of Directors oversees climate change-related issues, while the ESG Operating Committee, comprising the CEO and management, manages climate change activities. In 2023, we strengthened the implementation system for internalizing ESG across the company by establishing an ESG Consultative Body directly under the CEO.



### Role of the Board of Directors

The Board of Directors manages and supervises issues related to climate change response. They regularly receive reports on related matters at semi-annual meetings. They approve major activities such as climate change strategy review, budget allocation, evaluation and disclosure, and monitor climate change-related goals, performance, and risk management status through the board's agenda.

### Role of the Management

Active cooperation from management is essential for an systematic response to climate change. The CEO, who holds ultimate decision-making authority for all management activities, including climate change issues, participates in the ESG Operating Committee and plays a leading role by reviewing agendas such as assessment, risk management, and response measures for climate change issues.

Board of Directors' Climate Change Activities	
Date	Agenda
February 28, 2023	Report on the management plan for material issues <ul style="list-style-type: none"> <li>Report on the performance of climate crisis response and GHG emissions management</li> <li>Report on supply chain ESG management performance</li> </ul>
August 11, 2023	Report on regular publication of the sustainability report <ul style="list-style-type: none"> <li>Report on the CDP CC response</li> <li>Report on the establishment of a dedicated ESG team</li> </ul>

### ESG Operating Committee

The ESG Operating Committee, comprised of the CEO and Executive in charge<sup>1)</sup>, is in charge of setting key ESG tasks each year and holds regular meetings quarterly and as needed to manage the performance of ESG activities. The committee receives reports on the status of ESG-related activities, including climate change issues, performance against goals, and risk management status. Major details are reported to the Board of Directors semiannually.

1) Executives at an ESG-related division or department, who oversees ESG strategies in each of the 11 responsible areas and reports to the CEO

### ESG Consultative Body

The ESG Consultative Body is responsible for establishing, executing, and supervising company-wide ESG strategies, including climate change. Comprised of working-level staff from relevant teams, the consultative body includes climate strategy, environmental management, eco-friendly products, green R&D, and supply chain ESG parts. It continuously evaluates progress toward climate change goals and reports the results to the ESG Operating Committee monthly.

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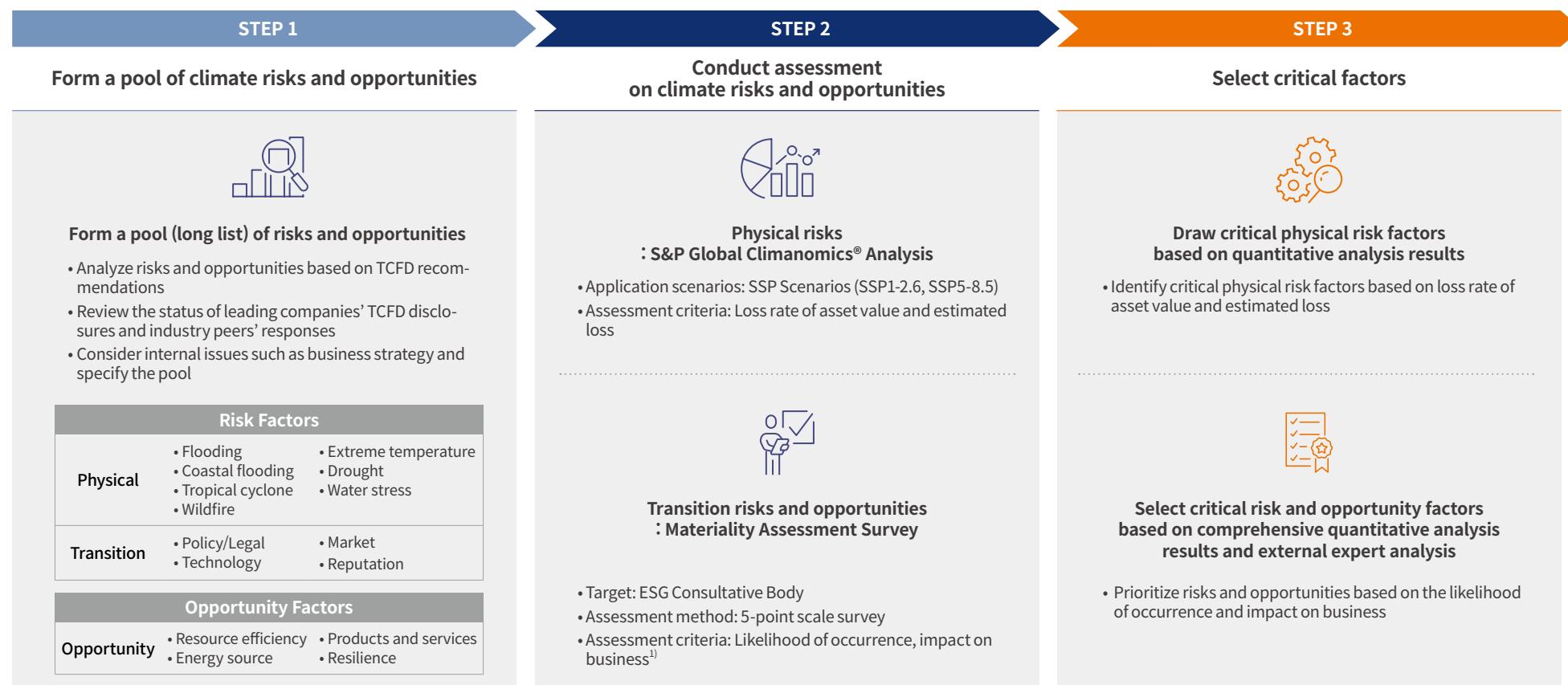
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## Risk and Opportunity Identification and Assessment

### I Identification Process

Based on the TCFD recommendations, KD Navien analyzed the response status of industry peers and leading companies' TCFD disclosures. We also took into account internal issues to identify a pool of 22 risks and opportunities critical to KD Navien. We utilized a specialized climate modeling tool and conducted a survey with internal stakeholders to assess the significance of transition risks and opportunities in order to analyze the financial impact of physical risks. Thereby we finalized the prioritization of risks and opportunities. Based on this assessment, we are currently developing a response strategy to strengthen our approach's resilience.

#### Climate Risk and Opportunity Identification Process



<sup>1)</sup> Impact on business: Connectivity with the management strategy and financial impact are comprehensively assessed

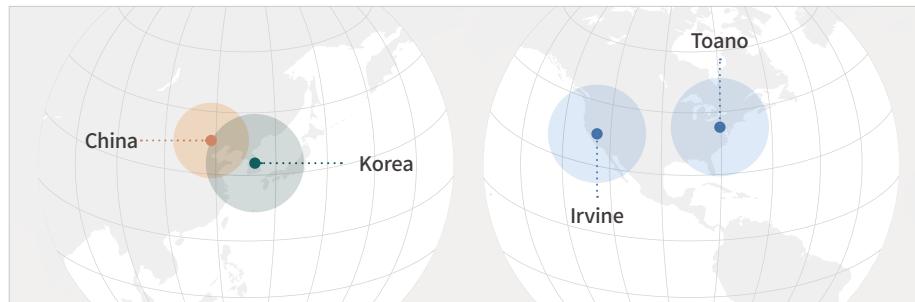
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## Physical Risk

### Analysis Method

As abnormal weather events due to climate change become more frequent, the physical risks that damage the asset value of companies are also increasing. In response to this trend, the TCFD recommends that organizations analyze the financial impact of climate change-related risks on companies using various scenarios, including a below 2°C scenario, to demonstrate their resilience. Following TCFD recommendations, KD Navien reviewed the financial impact of physical risks at our 11 key business sites, including those of KD Navien and its subsidiaries.

### Analysis Target



#### Korea

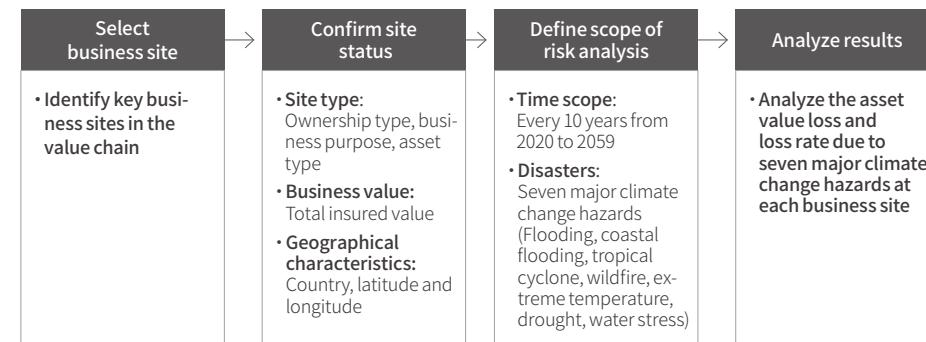
Seoul	Seoul Office, Research Institute
Pyeongtaek	Seotan Factory, Pyeongtaek Factory, Songtan Factory
Asan	Gasan Factory, Asan Factory (KD Polym)
Chungju	Chungju Factory (KD Everon)

#### USA

Irvine	US Sales Corporation
Toano	US Sales Corporation Warehouse
<b>China</b>	
Beijing	Beijing Production Corporation

### Analysis Process and Scenario Description

KD Navien utilized S&P Global's Climanomics® Hazard Modeling Tool to analyze the asset value loss rate across seven major climate factors over a 10-year period from 2020 to 2059.



Incorporating the SSP scenarios outlined in the 6th IPCC report, KD Navien considered the extreme scenarios of SSP1-2.6, which is expected to pose the least physical risk, and SSP5-8.5, which is anticipated to maximize physical risk. These scenarios were applied separately to short term (2020-2029), mid-term (2030-2039), and long-term (2040-2059) analysis points.

### SSP Scenario Types

Type	Definition	Adaptation Efforts	Earth Temperature in 2100
✓SSP1-2.6	Powerful carbon emission reduction scenario	Where eco-friendly and sustainable economic growth is possible due to the development of renewable energy technology	+1.8°C
SSP2-4.5	Moderate carbon emission reduction scenario	Where climate change mitigation and socioeconomic development are in the intermediate stage	+2.7°C
SSP3-7.0	Scenario where the carbon emissions double at the end of the century	Where the social structure is vulnerable to climate change due to passive climate change mitigation policies and slow technological development	+3.6°C
✓SSP5-8.5	Scenario where the carbon emissions double at the end of 2050	Where fossil fuel use is high and indiscriminate development expands due to the focus on rapid industrial technology development	+4.4°C

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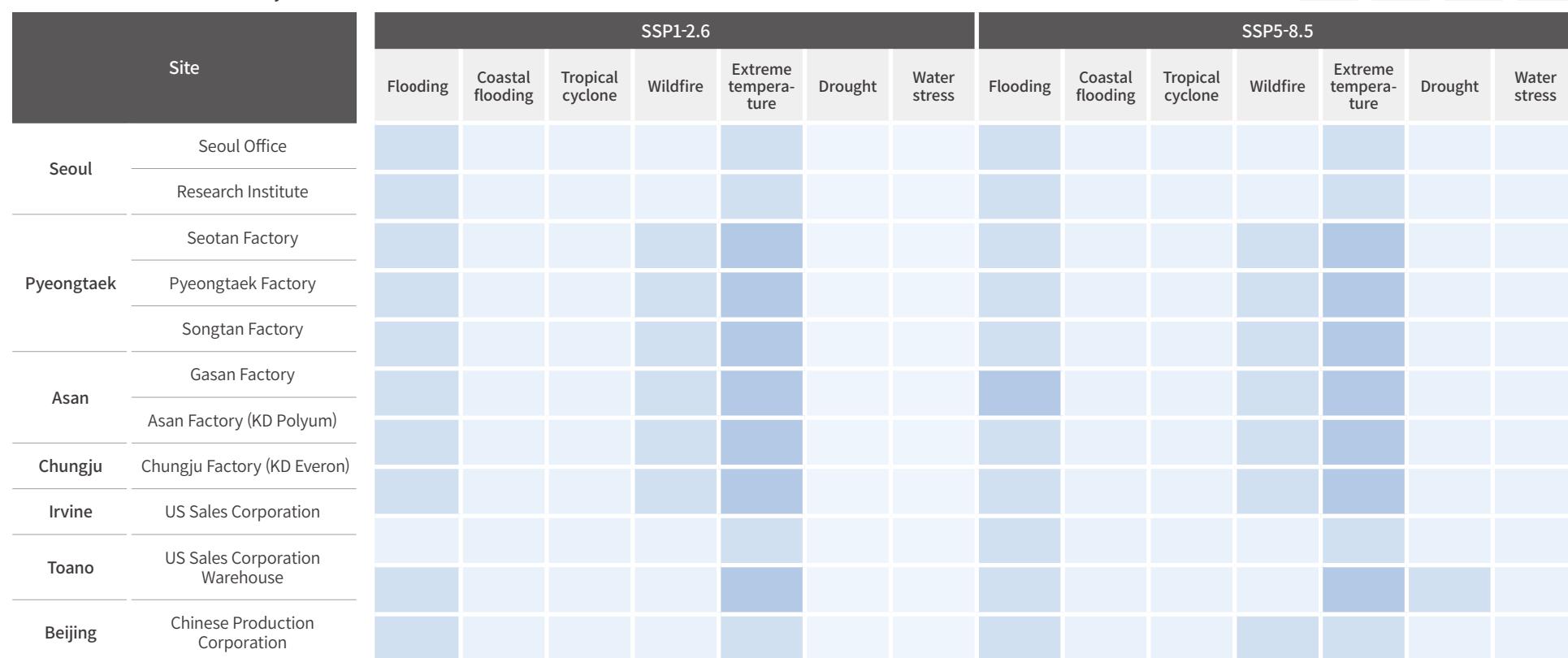
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## Physical Risk

### Financial Impact Analysis

In both the SSP1-2.6 and SSP5-8.5 scenarios, KD Navien confirmed that the asset value loss rate due to climate factors for all business sites in the 2050s was less than 3%, except for the Gasan Factory. While production facilities such as the Seotan Factory and Gasan Factory recorded a higher loss rate of asset value compared to non-production facilities like research institutes and warehouses, business sites were not exposed to high risk overall. Through analysis of asset value loss rates attributed to climate factors, extreme temperature and flooding emerged as major hazard factors among the seven primary factors. The asset value loss rate for five factors—coastal flooding, tropical cyclone, wildfire, drought, and water stress—was found to be less than 1%.

2050s Business Site - Loss Rate by Climate Factor



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## Physical Risk

### Detailed Analysis by Major Hazards

Extreme temperature and flooding were identified as major hazards posing physical risks to KD Navien's key business sites, with extreme temperature causing the largest proportion of losses. In the SSP5-8.5 scenario, it was confirmed that losses due to extreme temperature in the 2050s would account for approximately 68% of total losses.

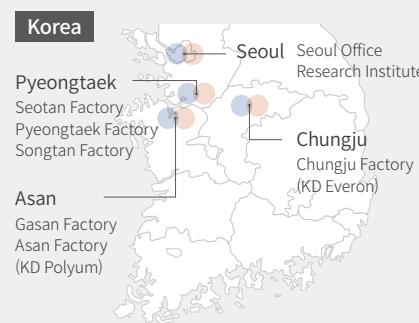
#### Extreme Temperature

As climate change worsens, extreme temperatures are becoming more frequent and intense. Financial losses from these temperatures were calculated, considering labor productivity loss due to heat-related illnesses and increased power costs from air conditioner usage.

According to the SSP5-8.5 scenario analysis, the loss of asset value due to extreme temperature is predicted to steadily increase from 5.6 billion won in the 2030s to 8.4 billion won in the 2050s. While the loss rate due to extreme temperature at each business site in the 2050s was confirmed to be less than 2%, production facilities in Pyeongtaek, Asan, Chungju, and Beijing showed relatively high rates, necessitating countermeasures. Therefore, KD Navien is actively implementing heat-related illness prevention activities, such as establishing company-wide guidelines and providing annual training on preventing heat-related illnesses.

**Extreme Temperature Physical Risk<sup>1)</sup>**

Category	Percentage
Low (<0.1%)	Low
Low-Medium (0.1~1%)	Low-Medium
Medium (1~2%)	Medium
Medium-High (>2%)	Medium-High



#### Flooding

With heavy rains becoming more frequent due to climate change, the number of flooding incidents caused by drainage failures is increasing. Financial losses from flooding were calculated based on operational interruption and facility repair costs.

According to the SSP5-8.5 scenario analysis, the physical risk due to flooding is minimal, less than 1%, at all business sites except the Gasan Factory near Gokgyocheon. However, the asset value loss due to flooding is predicted to gradually increase from 1.7 billion won in the 2030s to 3.1 billion won in the 2050s, requiring preemptive prevention activities. To mitigate this, KD Navien is conducting preventive measures such as monitoring flooding risks at major sites and revising the crisis management manual.

**Flooding Physical Risk<sup>1)</sup>**

Category	Percentage
Low (<0.1%)	Low
Low-Medium (0.1~1%)	Low-Medium
Medium (1~2%)	Medium
Medium-High (>2%)	Medium-High

**Flooding Physical Risk<sup>1)</sup>**

Category	Percentage
Low (<0.1%)	Low
Low-Medium (0.1~1%)	Low-Medium
Medium (1~2%)	Medium
Medium-High (>2%)	Medium-High



#### Flood Risk Map by Key Business Site Location<sup>2)</sup>



##### Seoul

- Location: Flood-affected areas and adjacent areas
- Nearby rivers: Hangang River, Anyangcheon Stream, Dorimcheon Stream



##### Pyeongtaek

- Location: Flood-affected area
- Nearby rivers: Anseongcheon Stream and Jinwicheon Stream (flood warnings issued regularly)



##### Chungju

- Location: Flood-affected area
- Flooding and landslide risks (given the 570 damages from landslides and flooding in Chungju in 2023)



##### Asan

- Location: Flood-affected areas and adjacent areas
- Nearby rivers: Sapygyocheon Stream and Gokgyocheon Stream (flood warning issued every year)

1) SSP5-8.5 in the 2050s

2) Ministry of Environment Flood Risk Map Information System(2023)

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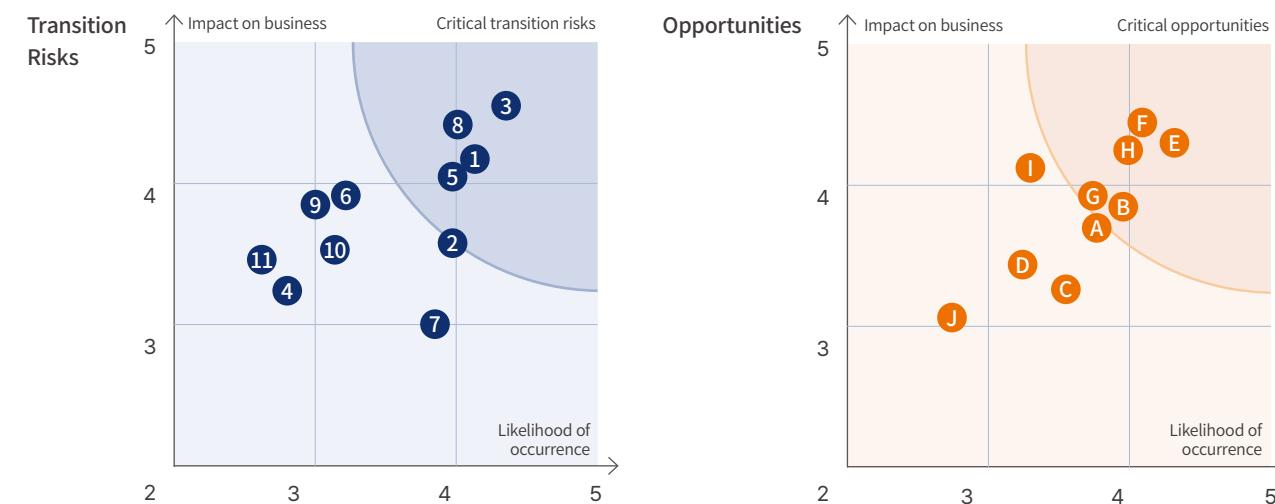
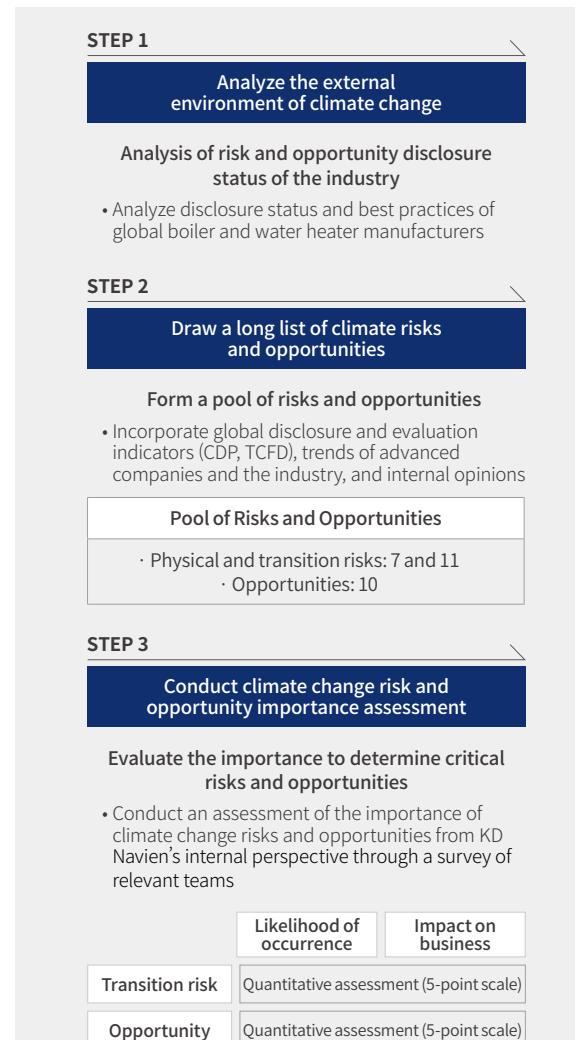
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## Transition Risks and Opportunities

### Assessment Process

#### Climate Risks and Opportunity Importance Assessment Process



Type	No.	Risk	Type	No.	Opportunity
Policy and Law	1	Carbon pricing system	Resource efficiency	A	Utilization of highly efficient production and logistics systems
	2	Enhanced requirements for disclosing greenhouse gas emissions		B	Transition to high-efficiency and eco-friendly buildings
	3	Implementation of obligations and regulations for existing products and services		C	Reduction of water resource consumption
	4	Exposure to litigation risks		D	Recycling and reuse
Technology	5	Emergence of low-carbon alternatives to existing products and services	Energy source	E	Utilization of low-carbon energy sources
	6	Failure to invest in new technology		F	Development of low-carbon products and services
	7	Transition costs associated with low-carbon technology		G	Development of climate change adaptation measures
Market	8	Changes in customer behavior	Products and Services	H	Innovation in new products and services through R&D
	9	Changes in consumer preferences		I	Changes in consumer preferences
Reputation	10	Preconceived notions about the business field	Resilience	J	Resource securing and diversification
	11	Stakeholder concerns and negative perceptions			

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## Transition Risks and Opportunities

### Impact and Response Direction by Critical Opportunities and Risks

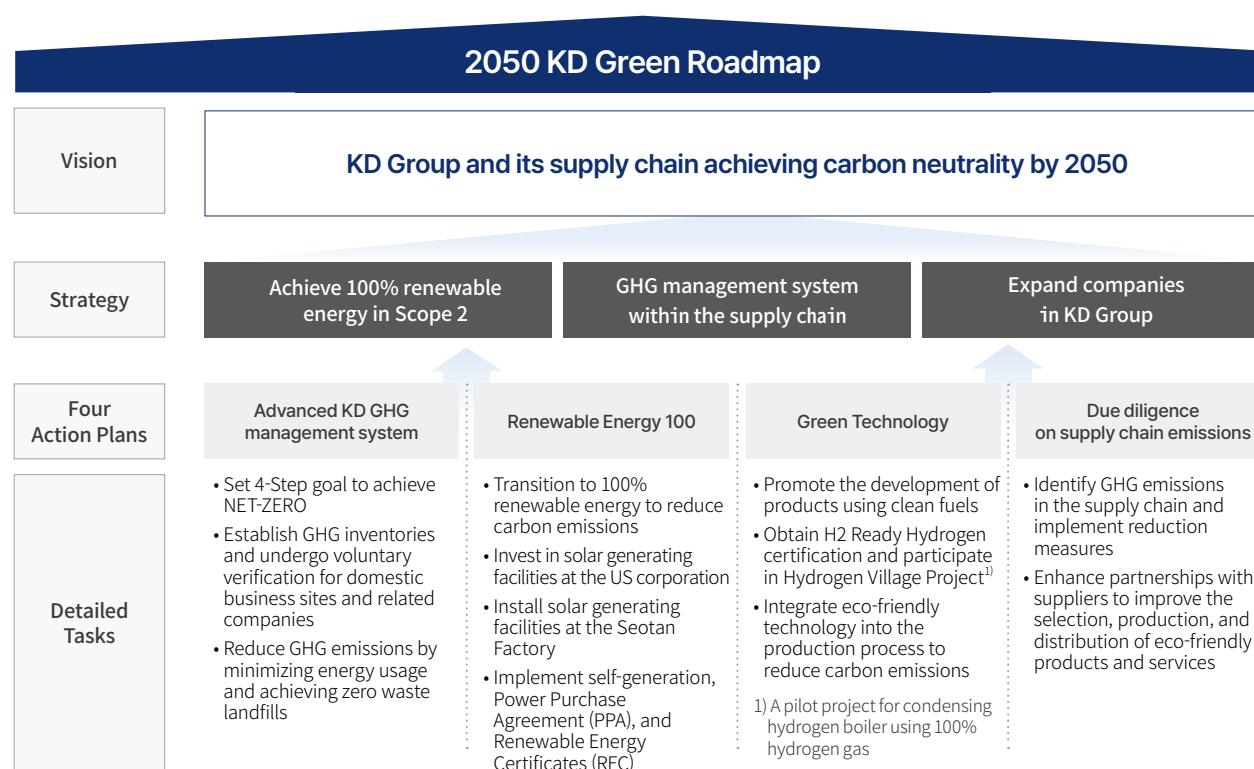
According to the comprehensive assessment of transition risks and opportunities due to climate change, the implementation of obligations and regulations for existing products and services and changes in customer behavior were identified as the most significant risks, while the utilization of low-carbon energy sources and the development of low-carbon products and services were seen as the most significant opportunities. KD Navien has established a management system to respond to policy changes and to meet regulations and the demand for eco-friendly products by enhancing the eco-friendliness of our offerings. Furthermore, we are addressing climate change impacts by promoting eco-friendly R&D to strengthen corporate competitiveness and gain market dominance.

category	Type	Issue	Factor	Financial Impact	Duration	Importance		Response Direction
						Likelihood of occurrence	Impact level	
Risk	Policy and Law	1 Carbon pricing system	<ul style="list-style-type: none"> <li>Application of GHG emissions trading system</li> <li>Introduction of internal carbon pricing system</li> <li>Strengthened Carbon Border Adjustment Mechanism(CBAM)</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in profits due to increased production costs</li> <li>Increase in investment costs for greenhouse gas emission reduction facilities</li> </ul>	Mid-term	●●●	●●●	<b>Establishment of management system</b> <ul style="list-style-type: none"> <li>Establish a monitoring and management system for external trends such as environmental policies</li> <li>Review the upgrade of the carbon neutrality roadmap</li> <li>Disclose transparent and proactive climate information through CDP response and publication of sustainability reports, etc.</li> <li>Introduce solar generating facilities (US corporation and Seotan Factory)</li> </ul>
		2 Enhanced requirements for greenhouse gas emissions disclosure	<ul style="list-style-type: none"> <li>Expansion of workplaces subject to reporting GHG emissions</li> <li>Increased need for emissions reporting to comply with CBAM</li> </ul>	<ul style="list-style-type: none"> <li>Costs incurred establishing GHG emission management process</li> <li>Increase in GHG verification response costs</li> </ul>	Short-term	●●●	●●○	
Opportunity	Resource efficiency	B Transition to high-efficiency and eco-friendly buildings	<ul style="list-style-type: none"> <li>Reduced sensitivity to changes in carbon costs following the transition of eco-friendly facilities</li> </ul>	<ul style="list-style-type: none"> <li>Reduction in operating costs by reducing energy procurement costs</li> <li>Reduction in exposure to future fossil fuel price increases</li> </ul>	Short-term	●●○	●●○	<b>Enhancement of product eco-friendliness</b> <ul style="list-style-type: none"> <li>Review LCA performance on key products</li> <li>Enhance the energy efficiency and eco-friendliness of main condensing models</li> <li>Diversify the eco-friendly product portfolio and increase production volume</li> </ul>
Risk	Policy and Law	3 Implementation of obligations and regulations for existing products and services	<ul style="list-style-type: none"> <li>Limited product sales based on fossil fuels due to strengthened global regulations on boilers* *Restrictions on gas product installation and raising boiler NOx emission standards, etc.</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in profits due to decreased demand for existing products</li> <li>Decrease in the value of existing assets due to policy changes</li> </ul>	Short-term	●●●	●●●	
	Market	8 Changes in customer behavior	<ul style="list-style-type: none"> <li>Increased customer demand for enhanced eco-friendliness of products</li> <li>Declined market competitiveness of existing gas products</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in profits due to decreased demand for existing products</li> </ul>	Long-term	●●●	●●●	<b>Green R&amp;D</b> <ul style="list-style-type: none"> <li>Establish a mid to long-term roadmap and development process for eco-friendly products</li> <li>Increase investment in energy transition</li> <li>Develop a decarbonized energy source heating system (hydrogen boiler, electric heat pump)</li> <li>Promote introduction of eco-friendly refrigerants</li> </ul>
Opportunity	Energy source	E Utilization of low-carbon energy sources	<ul style="list-style-type: none"> <li>Increased demand for eco-friendly products due to strengthened global low-carbon policy *Installation of eco-friendly boilers, zero energy buildings, mandatory condensing of household water heaters (US DOE minimum efficiency regulations), etc.</li> </ul>	<ul style="list-style-type: none"> <li>Increase in profits due to increased sales of eco-friendly products</li> </ul>	Short-term	●●○	●●○	
	Products and Services	G Development of climate change adaptation measures	<ul style="list-style-type: none"> <li>Increased demand for services and products that help adapt to climate change, such as air purifying ventilation system</li> </ul>	<ul style="list-style-type: none"> <li>Increase in sales through product and service launches in line with customer interests and market trends</li> </ul>	Short-term	●●○	●●○	<b>Green R&amp;D</b> <ul style="list-style-type: none"> <li>Establish a mid to long-term roadmap and development process for eco-friendly products</li> <li>Increase investment in energy transition</li> <li>Develop a decarbonized energy source heating system (hydrogen boiler, electric heat pump)</li> <li>Promote introduction of eco-friendly refrigerants</li> </ul>
Risk	Technology	5 Emergence of low-carbon alternatives to existing products and services	<ul style="list-style-type: none"> <li>Intense competition in eco-friendly boilers/water heaters and market shrinkage of existing products</li> </ul>	<ul style="list-style-type: none"> <li>Decrease in sales due to decreased demand for existing products</li> <li>Rise in R&amp;D costs related to new technologies</li> </ul>	Mid-term	●●●	●●●	
Opportunity	Products and Services	H Development of new products and services through Innovation	<ul style="list-style-type: none"> <li>Development and commercialization of clean energy products such as hydrogen boilers and electric heat pumps</li> </ul>	<ul style="list-style-type: none"> <li>Increase in profits through eco-friendly products launches</li> <li>Strengthening corporate competitiveness by reducing Scope 3 emissions</li> </ul>	Mid-term	●●○	●●○	
		F Development of low-carbon products and services	<ul style="list-style-type: none"> <li>Strengthened market competitiveness through sales of low-carbon products such as hydro-furnaces, condensing boilers, and water heaters</li> </ul>	<ul style="list-style-type: none"> <li>Increase in sales due to increased demand for low-carbon products</li> <li>Strengthening market competitiveness by enhancing product eco-friendliness</li> </ul>	Short-term	●●○	●●○	

# Strategy

## Transition Risks and Opportunities

### 2050 KD Green Roadmap



Although KD Navien is not subject to domestic GHG reduction systems such as the GHG emissions trading system and emission verification requirements, we expanded our emissions calculations to include domestic consolidated companies in 2023 to proactively and voluntarily address climate change as an eco-friendly company. We have established a broader GHG inventory by conducting third-party verification of Scope 1 and 2 and internal calculation of Scope 3 (limited categories), and we promote various GHG reduction tasks, including the review of LCA of major products. To carry out continuous GHG management and reduction activities, we established the 2050 KD Green Roadmap with the goal of carbon neutrality, with plans to gradually advance it.

### Resilience

KD Navien is currently reviewing the resilience of our strategy through scenario analysis to effectively respond to risks and opportunities related to future climate change. As part of this effort, we have established a 2050 KD roadmap to carbon neutrality and are carrying out R&D to develop eco-friendly products. Based on the SSP scenario, we analyzed the asset value loss rate of our major business sites. While we confirmed that we will not face serious physical risks under the SSP5-8.5 scenario, we anticipate increased risks due to extreme temperature. We plan to reflect the results of the physical risk analysis in our business facility management plans. In the future, we aim to enhance our resilience to climate change by conducting scenario analysis on both physical risks and transition risks and opportunities, and incorporating the results of the financial impact analysis due to climate change in establishing long-term management plans and strategies.

Scenario	Definition	Adaptation Efforts	Earth Temperature in 2100
SSP1-2.6	Powerful carbon emission reduction scenario	Where eco-friendly and sustainable economic growth is possible due to the development of renewable energy technology	+1.8°C
SSP5-8.5	Scenario where the carbon emissions double at the end of 2050	Where fossil fuel use is high and indiscriminate development expands due to the focus on rapid industrial technology development	+4.4°C

#### Strategy Resilience

- According to S&P Global's Climonomics® Hazard Modeling analysis, even under the SSP5-8.5 scenario, the asset loss rate for all businesses in the 2050s was found to be less than 3%.
- However, as the rate of asset loss due to extreme temperature is expected to continue increasing until the 2050s, reaching up to 20.93%, we will proactively manage this by incorporating it into our business facility management plan.

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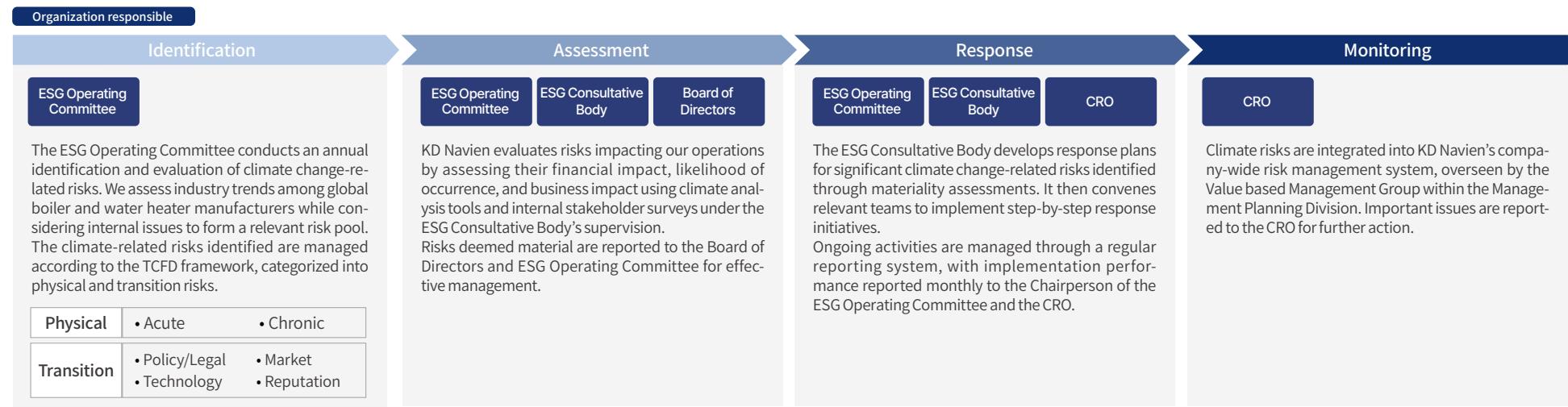
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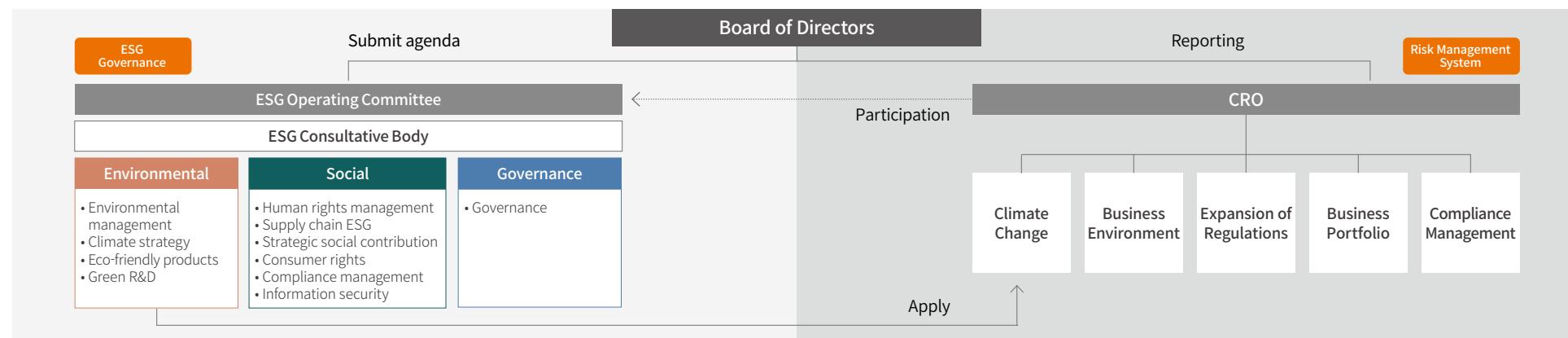
# Risk Management

## Climate Risk Management Process

To address climate change-related risks at the company level, KD Navien has integrated these risks into our company-wide risk management system. We conduct regular identification, evaluation, and management of climate risks annually. Identified risks are closely monitored by the Chief Risk Officer (CRO), and significant issues are reported to the Board of Directors and the ESG Operating Committee.



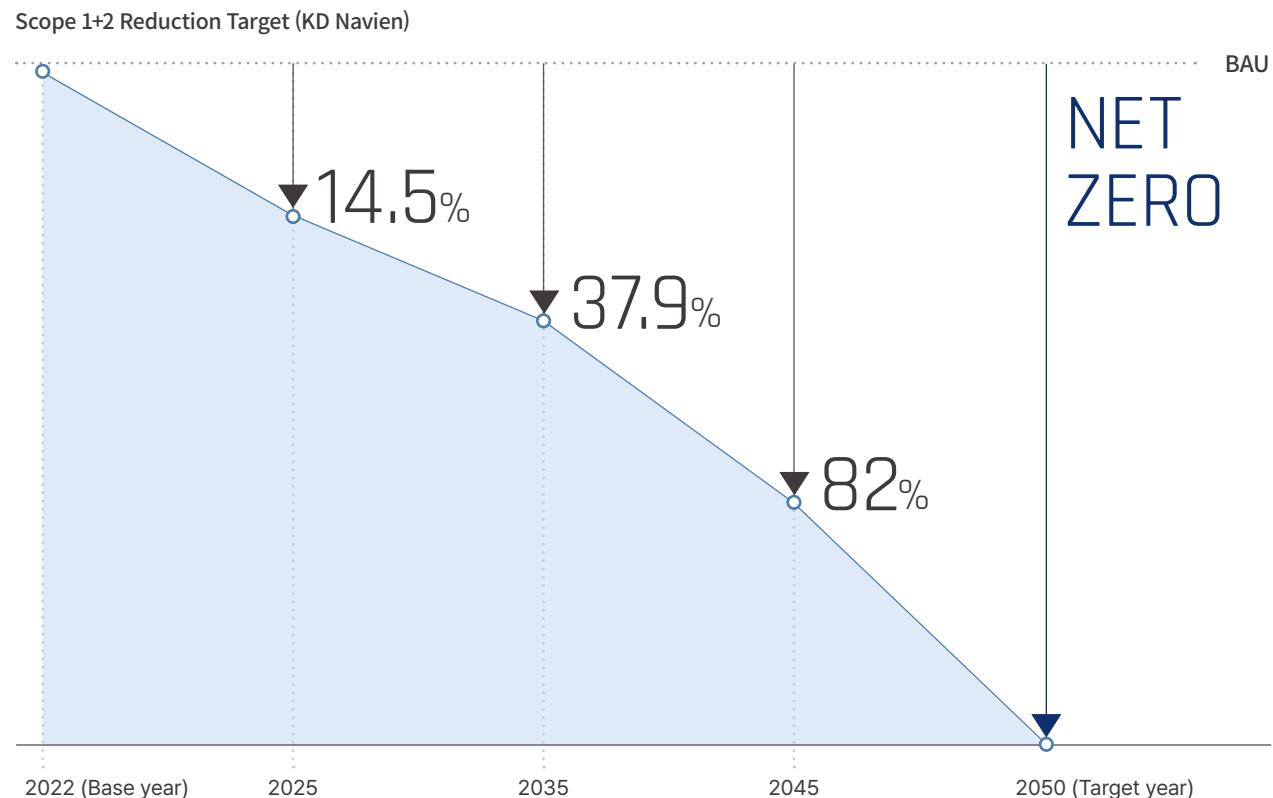
## Climate Risk Management Process



# Metrics and Targets

## Scope 1, 2, 3 Emissions

To proactively respond to climate change, KD Navien establishes and manages GHG emission reduction target for domestic business sites on a separate basis. To reduce Scope 1 and 2 GHG emissions, we plan to implement strategies such as vehicle electrification, transition renewable energy generating facilities. In the future, we aim to upgrade our GHG management system by including all domestic and overseas business sites and expanding the management of Scope 3 GHG emissions.



## Scope 3 Emissions

Since 2022, KD Navien has been managing indirect Scope 3 GHG emissions from our value chain, even though we do not directly own or control these sources. In 2023, we expanded our GHG management scope compared to the previous year, identifying emissions for six out of 15 Scope 3 categories, with plans to continuously expand our disclosure items.

Scope 3 GHG Emission Management<sup>1)</sup> (Unit : tCO<sub>2</sub>eq)

Category	Emissions
C1 Purchased goods and services	136,236 (0.4%)
C2 Capital goods	11,295 (0.0%)
C4 Upstream transportation and distribution	11,054 (0.0%)
C5 Waste generated in operations	64 (0.0%)
C9 Downstream transportation and distribution	2,929 (0.0%)
C11 Use of sold products	32,173,509 (99.5%)
<b>Total</b>	<b>32,335,088 (100%)</b>

1) Based on KD Navien's internally generated data on a separate basis, however, C11 (Use of sold products) includes the data of North America region (US/Canada corporation)

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# Metrics and Targets

## Climate Change-related Metrics and Targets

### I GHG Emissions and Energy Use

KD Navien manages GHG emissions metrics to measure the performance of climate change response activities. We annually monitor major indicators to effectively implement climate change response strategies. By setting mid to long-term targets for GHG emissions, we track our progress towards achieving these goals, aiming for carbon neutrality for Scope 1 and 2 by 2050. Moving forward, we plan to expand our management system to include the monitoring of emissions generated by our affiliates.

KD Navien (separate basis)	Metrics		Performance			Mid to Long-Term Goals		
	Management Metrics	Unit	2021	2022	2023	2035	2045	2050
Greenhouse Gas	Scope 1	tCO <sub>2</sub> eq	3,973	3,582	3,244	7,582	1,910	ZERO
	Scope 2	tCO <sub>2</sub> eq	9,135	9,477	9,455	10,546	7,803	ZERO
	Scope 3	tCO <sub>2</sub> eq	168	147,646 <sup>1)</sup>	32,335,088 <sup>2)</sup>	-	-	-

1) Data corrected due to the application of the revised Scope 3 emissions calculation method starting from 2022

2) Includes C11 (use of sold products) emissions for North America region (US/Canada corporations)

### I Climate Change Management Incentives

Recognizing that climate change response and transition plans are viable through company-wide commitment to environmental protection, KD Navien has included climate-related items in the KPIs for the department manager under the CSO (head of division), employees of the environmental subcommittee of the ESG Consultative Body, and relevant teams. Basic salary and incentives are also paid differently depending on the level of achievement regarding climate change and performance management metrics.

Target	Incentive	KPI
Department Manager (Under CSO) (NA Safety Division Head)	Monetary compensation (differential basic salary and incentives)	Compliance rate of ESG process establishment goals • TOC management level • GHG emissions • ESG Environmental subcommittee tasks • Introduction of solar power generation, etc.
ESG Consultative Body Employees of the teams relevant to the environmental subcommittee	Monetary compensation (differential incentives)	Environmental management targets

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# Metrics and Targets

## GHG Reduction Activities

In 2023, KD Navien emitted a total of 12,697tCO<sub>2</sub>eq of Scope 1+2 GHGs from domestic business sites. Scope 2 emissions from electricity use accounted for approximately 74%, while Scope 1 emissions from production and research activities and mobile combustion accounted for approximately 26%. More than 74% of our total GHG emissions correspond to indirect emissions (Scope 2) from electricity use, making the conversion to renewable energy a top priority for carbon neutrality. In the short term, we plan to reduce Scope 2 emissions by installing solar generating facilities on underutilized land at our Seotan Factory, our domestic production base. For the remaining emissions, we plan to implement alternative reduction methods such as power purchase agreements (PPAs) and purchasing certificates.

KD Navien's GHG Reduction Activities		
<b>SCOPE 1</b>		Electric forklift conversion
To reduce fossil fuel (diesel) usage at our business sites, we've replaced diesel forklifts with electric models, resulting in a reduction of approximately 5,600 liters per year. Building on this, we are currently reviewing plans to further decrease mobile combustion.		
<b>SCOPE 2</b>		Conveyor process improvement
We have reduced the number of forklifts used for logistics movement by introducing boilers and automated raw material supply facilities <sup>1)</sup> . This has improved both energy use and production efficiency, and we aim to expand these applications in the future.		
<b>SCOPE 2</b>		Solar Generating Facility
As part of the design for our new factory at the Seotan, we are exploring the installation of solar generating facility <sup>3)</sup> that can generate about 3,700 kWh of new and renewable energy within a 30,000 m <sup>2</sup> space.		
<b>SCOPE 2</b>		High-efficiency lighting upgrade
We are improving energy efficiency by upgrading our lighting systems. In 2023, we replaced 56 lights <sup>2)</sup> at the Gasan Factory with LEDs, with plans to continue this project throughout 2024.		
<b>SCOPE 2</b>		Air leakage inspection measures
We conducted inspections on air leaks in our production facilities to mitigate unnecessary power consumption. After identifying leakage areas, we replaced parts such as fittings, nipples, and couplers. In 2023, we completed a total of 127 cases <sup>4)</sup> , resulting in improved compressor energy usage and reduced facility load.		

1) Conveyors, continuous and reciprocating lifts, P&P loaders, etc.

2) 54 inside and outside the Building 4, two inside the Building 8

3) Completion targeted in December 2025

4) 84 cases in Seotan Factory, 11 cases in Pyeongtaek and Songtan Factory, 32 cases in Gasan Factory

KD Navien's GHG Emissions (%)



### Solar Generating Facility in the US corporation

KD Navien's US corporation installed a solar generating facility capable of procuring approximately 370 kWh of new and renewable energy with an area of 1,985 m<sup>2</sup> and underutilized land in the parking lot on the roof of a building. The plant began temporary operations in July 2023, and we plan to officially operate the power generation facility in March 2024 to supply electricity used in the building. In the future, we intend to introduce solar power generation facilities at our domestic business sites to actively carry out GHG reduction activities.



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# Environmental Management

## Environmental Management System

### Organizational Structure

Under the guidance of the ESG Task Force Team (TFT), KD Navien divided the environmental area into four parts: Environmental Management, Climate Strategy, Eco-Friendly Products, and Green R&D to carry out ESG-related tasks. The key tasks identified in each part are actively managed by monthly written reporting and semiannual accounts and performance reporting.

In the environmental management part, the EHS Planning Team and the EHS Team focus on analyzing environmental management impact indicators, developing tasks, and setting deadlines for each goal. During our monthly reports to the CSO, we monitor the key performances of each business site, including improvements in environmental facility efficiency and the identification and mitigation of environmental risks.

### Environmental Management Governance



### Environmental Management Policy

KD Navien's management policy aims to build a smarter social environment and a healthy living environment based on pursuit of principle for people and society. In line with this, we have established an environmental management policy to implement ESG management activities throughout our entire corporate operations and product life cycle, providing value and enjoyment to customers.

[Environmental Management Policy](#)



### Environmental Management System

To effectively manage the environmental impacts related to our products and services, KD Navien has acquired ISO 14001 and regularly monitor and improve these impacts. ISO 14001-certified sites undergo annual internal audits and evaluations by third-party certification agencies, with renewal evaluations conducted every three years. Our affiliates are also acquiring environmental management system certifications, promoting structured environmental management across the organization.

### Environmental Compliance

#### Regular Inspection

In 2023, KD Navien conducted special inspections to assess potential risks at our business sites. We also implemented a crisis management response system for handling air, sewage, and chemical leaks, and established a step-by-step response manual. For 2024, we plan to conduct regular monthly inspections and enhance facility efficiency using our internal inspection system.

#### Monitoring Regulations

KD Navien monitors global ESG regulations such as the California Climate Disclosure and Corporate Sustainability Reporting Directive (CSRD) and review response measures. By monitoring environmentally hazardous substances in our global products, we establish response strategies and internal management plans to manage risks. The established hazardous substance action plan is incorporated into our hazardous substance guide standards to check for hazards when testing and analyzing products subject to management. In 2023, we implemented management standards for two enacted and revised regulations and distributed them to relevant teams. Furthermore, we observed no violations of environmental laws in 2023.

### Global Initiative Participation

KD Navien participates in global initiatives to fulfill environmental and social responsibilities aligned with international standards. Since 2023, we have transparently disclosed information such as climate change strategies and GHG emissions through participating in the Carbon Disclosure Project (CDP). We are disclosing climate-related information in accordance with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) to enhance transparency regarding the assessment and response measures to climate change risks and opportunities. In the future, we plan to strengthen our capabilities to respond to global initiative guidelines, aiming to improve our implementation of climate change, circular economy, and biodiversity practices.



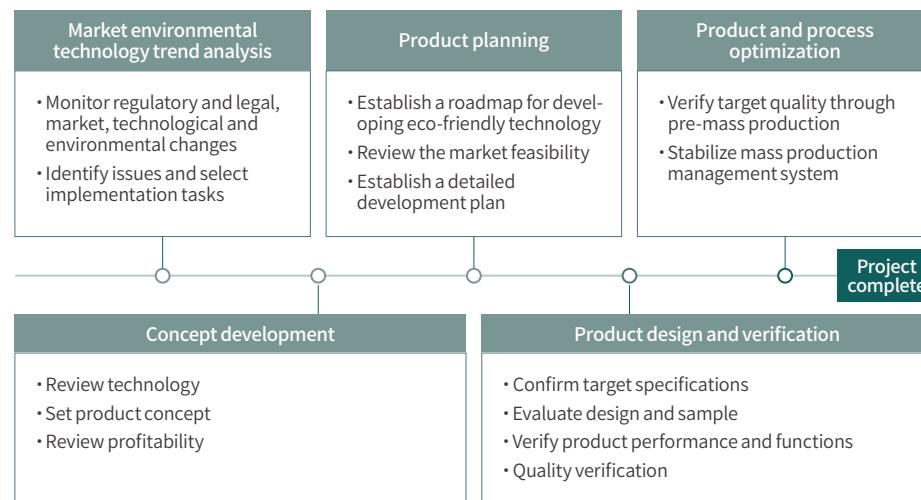
# Environmental Management

## Environmental Management Activities

### Green R&D

As a living environment solutions provider, KD Navien reviews major environmental risks and opportunities during the development and investment in eco-friendly technologies, seeking ways to improve the energy efficiency of our products to provide a smarter living environment for customers. Building on our domestic presence, we are expanding into international markets to showcase the excellence of K-boiler and water heater products. By launching customized products tailored to the characteristics of each region, we have achieved our highest overseas sales in the history of our company, and laid the foundation for sustainable growth by developing not only boiler and water heater products but also heated mattress pads and air purifying ventilation systems. We intend to lead the rapidly changing ESG consumption trend by accelerating the development of hydrogen boilers and facilitating the transition to a carbon-neutral hydrogen economy.

### Eco-Friendly Product R&D Roadmap



### Environmental Certifications

KD Navien continues to improve the energy efficiency and eco-friendly materials of our products through technological innovation, while maintaining certifications in each country for products with enhanced energy efficiency and proven eco-friendliness.

#### Environmental Certification Status

(As of December 31, 2023)

Certification	Number of Certifications (registered models)	Country	Product Line
Eco Label	11 cases (186 models)	Korea	Gas boilers
Environmental Product Declaration	12 cases (12 models)	Korea	Gas boilers
Green Technology Product	2 cases (17 models)	Korea	Air purifying ventilation systems
Certificate of High Efficiency Product	16 cases (16 models)	Korea	Gas vacuum water heater
ENERGY STAR	29 cases (29 models)	US	Gas boilers, gas water heaters
CQC (Environmental Protection)	3 cases (6 models)	China	Gas boilers
CQC (Energy Conservation)	3 cases (6 models)	China	Gas boilers

### Eco-Friendly Sales

KD Navien has defined our own eco-friendly product compliance standards<sup>1)</sup> that align with third-party certifications for products such as condensing boilers and condensing water heaters. In 2023, eco-friendly products accounted for 66% of our sales, maintaining a sales ratio of over 60% for three consecutive years. We will continue to provide competitive eco-friendly products to the market.

1) Includes products certified under the Air Control Zone Act Type 1 in Korea, Energy Star certified products in the US, etc.

#### KD Navien Eco-Friendly Sales

(Unit: KRW million)

Category	2021	2022	2023
Eco-friendly sales	740,836	802,678	794,908
Consolidated sales	1,102,947	1,160,861	1,204,313
Proportion	67%	69%	66%

# Environmental Management

## Environmental Management Activities

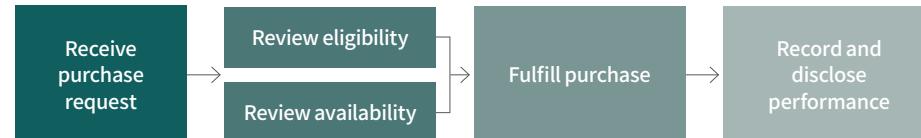
### Green Procurement

KD Navien has established a green procurement policy to minimize negative environmental impacts and foster a sustainable management culture through efficient resource use. This policy outlines the roles and responsibilities of each team, including the EHS Planning Team, Procurement Planning Team, and General Affairs Team. It also defines the green purchasing policy, its scope, and the purchasing process.

#### KD Navien Green Procurement Policy

- One. We fulfill our social responsibilities and comply with environmental preservation regulations through green procurement activities.
- One. We strive to continuously secure a pool of suppliers and establish organic relationships to ensure stable green procurement activities.
- One. We prioritize purchasing green products when they meet the same quality and conditions, to promote a green procurement culture except in unavoidable circumstances.
- One. We continue to make efforts to identify eco-friendly products to expand green procurement.

#### Green Procurement Process



### Environmental Training

KD Navien provides environmental training to our employees to emphasize the importance of environmental protection and support job performance that aligns with environmental values. In 2023, we offered training to enhance environmental practice capabilities for environmental management and environmental affairs personnel, as well as ESG awareness training for executives, team leaders, and relevant staff, underscoring the importance of sustainable management. In 2024, we plan to deliver in-depth environmental training tailored to specific work environments for members of the environmental management part. Additionally, we will efficiently manage environmental performance through ISO 14001 internal auditor training for environmental affairs personnel.

#### 2023 Environmental Training Status

Name	Target	Type	Details	Number of Participants
Environmental practice competency training	Members of the environmental management part	One-day lecture led by an expert	Environmental sector evaluation standards and energy efficiency activity training	33
Legally mandatory training for environmental technicians	Related employees	Online and offline learning hosted by the Environmental Conservation Association	Legal training on water quality, air quality, waste, noise and vibration, etc.	7
ESG awareness training	ESG Consultative Body members	Offline learning led by experts (training, workshops)	Global ESG guidelines and business value chain analysis practice	37

#### Resource Saving Campaign

The KD Navien Research Institute conducted a campaign to reduce water and electric energy usage in response to climate change. We focus on saving water and electricity that are unnecessarily used in daily life. Practical guides, such as closing faucets, closing valves, turning off multi-outlets, and disconnecting unused equipment, are provided to encourage employees to actively engage in energy reduction and implement these practices.



# Environmental Impact Management

## Pollutant Management System

### ■ Pollutant Management Policy

KD Navien sets our own standards for pollutant emissions and manage them to ensure they do not exceed internal and legal limits. We have developed an EHS SYSTEM<sup>1)</sup> to comply with domestic laws and regulations and effectively manage pollutants.

#### KD Navien's Pollutant Emission in Comparison to Legal Requirements

Air Pollutants	Water Pollutants
• NOx : Within 85%	• TOC : Within 35%
• SOx : Within 30%	• BOD : Within 95%
• THC <sup>2)</sup> : Within 80%	• SS : Within 30%
• PM : Within 70%	• Other <sup>3)</sup> : Within 40%

1) Environmental Health and Safety System

2) Total hydrocarbons

3) T-P/T-N, N-H

### ■ Management Goals

To improve wastewater treatment efficiency, KD Navien plans to increase the frequency of activated carbon filter replacements from semi-annually to quarterly. This adjustment aims to enhance our management of environmental pollutant risks and achieve our pollutant emissions reduction goals by improving the high-concentration wastewater treatment process.

Category	Indicators	Performance Against 2023 Goals		Mid to Long-Term Management Goals
		Goal	Performance	
Air Pollutants	NOx		44% reduction <sup>1)</sup>	Maintain maximum efficiency and real-time monitoring
	SOx	Apply internal emission standards (within 30% of legal standards)	14% reduction <sup>1)</sup>	Meet the standards for treated water reuse and domestic water quality
Water pollutants	TOC		14% reduction <sup>1)</sup>	40% reduction <sup>1)</sup>
	BOD			Expand harm reduction activities
Hazardous chemicals	Number of mitigation measures	More than 3 (MDI, styrene, chloroalkane, etc.)	3 (MDI, styrene, chloroalkane)	

1) Reduction compared to 2022

## Pollutant Management Activities

### ■ Air Pollutants

KD Navien reduces air pollutant emissions by implementing internal standards more stringent than the emission standards required by the Clean Air Conservation Act and by changing the raw materials and improving the efficiency of prevention facilities. To ensure the proper operation of our prevention facilities, we have installed Internet of Things (IoT) measuring devices that monitor air emissions and prevent systems in real time for efficient pollutant management.

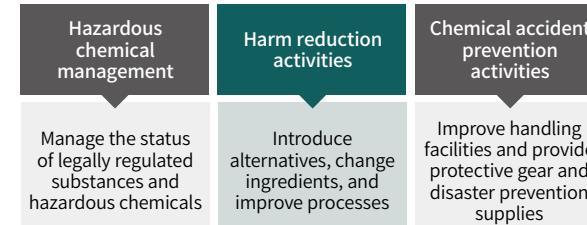
### ■ Water Pollutants

To manage wastewater generated from our production activities, KD Navien applies internal discharge standards more stringent than those required by the Water Environment Conservation Act. We also have a system in place that performs real-time monitoring of wastewater treatment facilities and responds promptly to any issues. In 2023, we switched the wastewater treatment chemical from red ferric chloride to colorless polyaluminum chloride. By changing water treatment chemicals and adjusting the dosage, we have mitigated the risk of color issues in discharged water and improved the quality of treated water, thereby minimizing adverse effects on the aquatic ecosystem.

### ■ Hazardous Chemicals

As part of our chemical management process, KD Navien operates a pre-screening and health environment management system before using chemical substances, and control chemical products containing hazardous chemicals through prior screening before using chemical substances. We have also developed and introduced CMS<sup>1)</sup> to prevent and manage accidents caused by chemical substances.

#### Health and Environmental Management System



Name	Initiation Date	Estimated Completion Date
MDI		
Styrene	June 2021	September 2023
Chloroalkane		2nd review
Methanol	December 2022	
Zinc oxide		June 2024

1) Chemical Management System

# Environmental Impact Management

## Water Resources Management System

### Water Resources Management Policy

KD Navien manages water resources with the goal of minimizing the use of external water sources in business operations and establishing a water-neutral system through the treatment of rainwater and self-contaminated water. We collect and analyze the consumption of utility water, groundwater, and recycled water each month, set goals for the usage rate of recycled water, and report monthly performance to management to guide potential policy improvements.

### Management Goals

To improve water use efficiency, KD Navien reviews the process of recycled water and monitor utility water consumption at major facilities. Our future plan is to achieve 100% reuse of our process water by pursuing strategic activities, such as reviewing the recycled water process and expanding applicable facilities.

Strategy	Detailed Strategy			
Review the process of recycled water	Secure reliability of recycled water data through improvement of measuring instruments			
Category	Indicators	Performance Against 2023 Goals		Mid to Long-Term Management Goals
		Goal	Performance	
Water consumption	Intensity	40m <sup>3</sup> /KRW 100 million or less	43.44m <sup>3</sup> /KRW 100 million	Reduce water consumption
Water reuse	Reuse rate	40%	43%	Process water reusage rate 100%

## Water

### Water

#### Management Process

KD Navien has an effective water resource management process, which includes the installation of measuring instruments at the Seotan Factory to monitor water status daily at each stage.



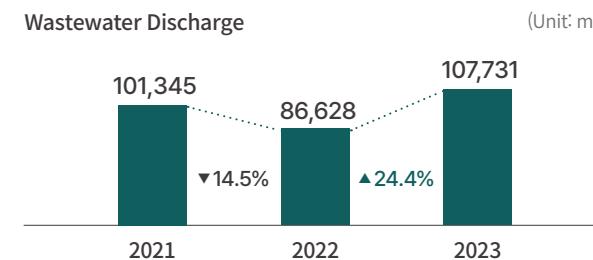
#### Consumption Reduction Activities

The Seotan Factory is building an eco-friendly production environment by converting the water supplied for wet cleaning vehicles on-site into recycled water. By mixing chemicals in the sewage and wastewater treatment process and changing filter backwash water to reused water, KD Navien has transformed the water treatment center into the first WATER REUSE facility at Seotan Factory. We are also establishing a water-neutral workplace by using treated sewage water (discharged water) for washing facilities within the treatment process.

### Wastewater

#### Management Process

KD Navien has established and operates a systematic wastewater management process to reduce the environmental impact of wastewater discharge.



#### Wastewater Reduction Activities

KD Navien's total wastewater discharge<sup>1)</sup> increased by about 24% compared to the previous year, with recycled water discharge rising by about 45% and actual wastewater discharge increasing by about 2%. However, the Seotan Factory, KD Navien's production hub, managed to reduce about 6% in actual wastewater discharge compared to the previous year, through continuous monitoring of major wastewater discharge facilities and setting the optimal water input for the production process. We plan to further minimize discharge volume across all our business sites and invest in facilities to enhance the quality of reused water.

1) The total amount of wastewater discharge is calculated by adding the amount of reused water discharged and the actual amount of wastewater discharged.

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# Environmental Impact Management

## Waste Management System

### I Waste Management Policy

KD Navien minimizes resource waste throughout the value chain covering production, sales, consumption, disposal, and recycling—by adhering to the Extended Producer Responsibility (EPR) system, waste charge system, and environmental guarantee system. Our ultimate goal is to recycle all waste by fulfilling our recycling obligations and responsibilities.

### I Management Goals

In our pursuit of zero landfill waste, KD Navien has been building a zero landfill business site at the Seotan Factory since 2022. We plan to expand this initiative to all domestic business sites to improve the recycling rate and achieve zero landfill waste<sup>1)</sup> certification.

Strategy	Details
	Establish ZERO landfill business site
	Obtain ZWTL <sup>1)</sup> certification
	Expand recycling
Landfill ZERO	Achieve 100% recycling rate

1) ZWTL, Zero Waste to Landfill

Category	Performance Against 2023 Goals		Mid to Long-Term Management Goals
	Goal	Performance	
Recycled rate	Over 95%	96%	100%

## Waste Recycling

### I Waste Recycling

#### Pallet Waste Reduction Activities

To reduce waste generation and increase the reuse rate, KD Navien collects and reuses waste pallets discarded after use in production and transportation. By reusing wood pallets discarded from the STS combustion chamber welding workshop in other processes, we achieved a 50% reduction in wood waste.

#### Wood waste reduction rate

50 %

#### Recycling Castable Production Waste

At the Seotan and Pyeongtaek factories, KD Navien stores castable waste in ton bags instead of disposing of it in landfills in gunny sacks, reducing landfill waste by about 6.5 tons per year.

#### Landfill waste reduction

6.5 tons

### I Waste Reduction

#### Material Waste Reduction

Through continuous quality improvement activities such as daily settlement and Q-bank, KD Navien achieved a waste rate of 0.89% for materials like heat exchangers and stators. We set an annual waste rate goal and monitor volume trends. Our goal for 2024 is to achieve a material disposal rate of 0.63% through various management activities.

#### Material disposal rate

0.89 %

#### Waste Plastic Reduction

KD Navien is continuously implementing improvement activities, such as optimizing the plastic used in connected flow packaging, to reduce vinyl waste. By converting from 13m/ea small packaging plastic to 10m/ea large packaging plastic, we expect to reduce plastic waste by about 24%.

#### Waste reduction rate<sup>1)</sup>

24 %

1) Estimated figures as reduction measures are currently in progress

#### Packaging Improvement

To further reduce waste that causes environmental pollution, KD Navien is continuously updating packaging specifications, such as downsizing the size of water heater products and reducing the height of packaging boxes.

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# Think People for the Sustainability



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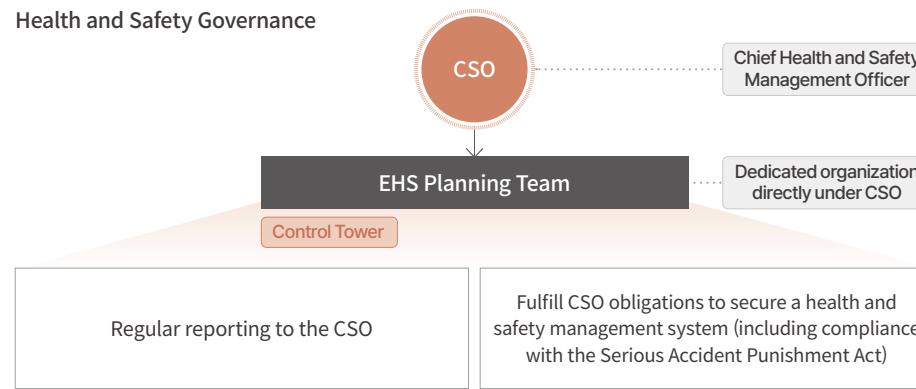
# Health and Safety Management

## Health and Safety Management System

### I Organizational Structure

KD Navien established the EHS Planning Team, a dedicated organization directly under the CSO to oversee the operation of the health and safety management system. This team leads the promotion of our health and safety management system.

#### Health and Safety Governance



### I Health and Safety Management Policy

To foster company-wide initiatives and expand health and safety management for employees, KD Navien has implemented a health and safety management policy.

#### KD Navien's Health and Safety Management Policy

KD Navien declares the following to conduct management with the highest priority on health and safety for all worksites and stakeholders by minimizing health and safety-related hazards and risks occurring in the course of management activities and those caused by products:

- We uphold health and safety management as the uncompromisable and highest value in corporate activities.
- We thoroughly comply with health and safety-related statutes and management system requirements.
- We actively provide HR, budget, and investment support to achieve improvement or innovation regarding health and safety issues.
- Based on ESG management, we fulfill our social responsibilities as a global corporate citizen.
- We maintain and develop partnerships with suppliers, strengthening the win-win cooperation system for health and safety.

### I Occupational Health and Safety Management System

KD Navien obtained ISO 45001 health and safety management system certification, with the aim of operating a top safety management system. We continuously enhance our health and safety performance through internal audits and annual third-party reviews conducted by certification agencies.

#### Percentage of ISO 45001 certified business sites<sup>1)</sup>

100 %

1) Based on domestic production sites, office, and research institute



### I Management Goals

KD Navien promotes health and safety management by setting health and safety goals and policies. We plan to expand the application of the health and safety management system by enhancing safety training to cultivate a secure workplace.

2024	2025	2026
Serious occupational accidents : 0 case Target accident rate : 0.05	Serious occupational accidents : 0 case Target accident rate : 0.03	Serious occupational accidents : 0 case Target accident rate : 0.03
<b>System</b> • Establish and operate a company-wide EHS integrated system	<b>Culture</b> • Establish a safety management system • Implement safety management systems for suppliers • Analyze and verify the effectiveness of safety activities	<b>Operate an Active Self-management System</b>
<b>Risk Management</b> • Implement a tailored preventive management system to address environmental changes, such as the introduction of new businesses • Predict risks through risk assessment and risk reduction activities		
<b>Win-win Partnership</b> • Establish organizational diagnosis and health and safety management systems for small business sites, providing EHS support • Manage worker communication channels		

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# Health and Safety Management

## Zero Safety Accidents

### Working Environment Improvement

#### Quarterly Theme Maintenance

KD Navien strives to create a safer working environment by selecting high-risk themes in the business sites every quarter and regularly inspecting, discovering, and improving the types of accidents that may occur by the themes.

#### Checklist

- Machinery and Equipment Safety**  
Prevent pinching accidents by identifying the machines and equipment used and inspecting/improving the corresponding protective devices
- Risk Assessment**  
Identify hazards and risk factors at the business site and implement mitigation measures
- Accident Prevention**  
Prevent fires by selecting fire risk areas in the workplace and mitigating associated risks
- Chemicals**  
Prevent health hazards by identifying the chemicals handled and implementing risk mitigation measures

#### Preliminary Safety Assessment System

KD Navien evaluates the safety of facilities from the design stage, such as the introduction, relocation, and structural changes of facilities that may affect accidents through preliminary safety assessment, to secure fundamental safety in advance and eliminate legal risks.

#### Critical Management Facility Risk Assessment

In order to intensively manage high-risk production processes, KD Navien calculates risk grades based on frequency and intensity when estimating production processes, conducts process risk assessments according to the grading cycle, and eliminates risks. Based on the results of the process risk assessment, the grade is redetermined semiannually.

#### Floor Height Limit Guidelines

Our ventilation care service is provided in compliance with health and safety standards. We established standards to ensure safe service performance according to the height of the installed units. In addition, regular investigations of hazardous factors are conducted, and workers' opinions are frequently collected to continuously improve a healthy and safe working environment.

#### Mitigating the Risk Forklift-Worker Collisions

KD Navien conducts risk assessment based on the frequency and intensity of safety accidents.

In 2023, to mitigate the risk of forklift-worker collisions that may occur during the process of entering and leaving the material storage area, the worker aisle was divided into separate forklift work spaces and worker walkways. As a result, the incidence frequency score of the risk assessment decreased by about 33% compared to before, confirming the effectiveness of the mitigation measures and reducing the safety risk of employees due to the risk of collision.



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# Health and Safety Management

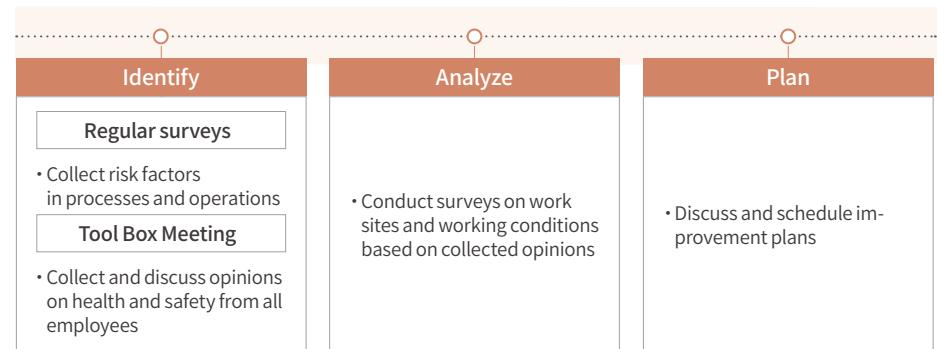
## Zero Safety Accidents

### I Working Environment Improvement

#### Listening to Health and Safety Opinions

To identify and improve risk factors at our business sites, KD Navien conducts surveys to gather opinions from employees and hold Tool Box Meetings to continually collect feedback on health and safety from all workers, including in-house suppliers. For factors identified as high-risk, we establish and implement work environment improvement plans. We will continue to listen directly to our workers and take remedial measures to create a safe working environment.

#### Feedback Collecting and Handling Process



#### Hazardous Work Permit System

To prevent safety accidents during hazardous works such as commissioning, inspection, and maintenance in the workplace, KD Navien operates the Hazardous Work Permit System. This system standardizes hazardous works into eight categories and requires approval before work begins if it involves hazardous works. Safety training is provided using 22 teaching methods prior to work, and safety risks are managed throughout the entire process through thorough on-site supervision.

#### **Hazardous work accidents<sup>1)</sup>**

1) The number of occupational accidents out of 559 hazardous work permits in 2023



### I Health and Safety Management of Suppliers

Based on our health and safety management policy, KD Navien strives to improve the health and safety management system of both employees and suppliers through effective communication. We are strengthening our health and safety win-win cooperation system with suppliers, leading to sustainable mutual growth through supporting them in securing their own health and safety capabilities.

#### Supplier Health and Safety Management Activities

Name	Details
Supplier qualification assessment	Confirm the health and safety management capabilities of suppliers through an initial evaluation and annual renewal evaluations
Hazardous work permit and workplace inspection	Conduct daily health and safety inspections on hazardous work for in-house suppliers or contractors to frequently identify and mitigate harmful risk factors
Council composition and operation	Manage communication with all in-house suppliers, including monthly meetings to gather opinions on health and safety
Quarterly joint inspection and evaluation	Establish an inspection group of contractors and contractees to conduct joint health and safety inspections quarterly, aiming to enhance the health and safety system
Support for the establishment of a health and safety system	Develop a health and safety system to improve the autonomous management capabilities of suppliers

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# Health and Safety Management

## Internalizing Crisis Management Response System

### I Proactive Risk Management

KD Navien has established a proactive crisis management system to strengthen prevention activities and raise safety awareness. We have internalized a proactive crisis management response manual, along with specific manuals for various situations. We have established training plans and conduct regular drills at each business site to improve our ability to respond to emergencies. We continuously verify the effectiveness of these manuals to ensure the safety of our employees and stakeholders, making it our top priority.

#### Proactive Crisis Management Response Training

Subject	Details	Training Type	Date
Health and Safety	Occupational accidents	Serious accident drill	November
		Confined space training	May, November
	Situational first aid tips	Defibrillator and CPR	June
Environment	Air pollutant spill	Air prevention facility accident response training	October
	Wastewater spill	On-site customized training Water treatment center spill response training	November
	Chemical spill	Chemical spill response drill	March
Accident prevention		Public-private joint fire drill	June
	Fire outbreak	Emergency evacuation simulation drill in case of fire	December
		Fire brigade training	May-August
	Gas explosion and leak	Gas leak response training	October
	Storm and flood damage	Storm and flood damage response tips	April

Public-private joint fire drill



Situational first aid tip



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# Health and Safety Management

## Creating a Safety Culture Across the Organization

### I Spreading Safety Culture Among Employees

#### VR Training

In addition to theoretical training on health and safety, KD Navien provides VR practice sessions that deliver virtual experiences of accidents, raising safety awareness among employees by simulating accident scenarios that are difficult to experience in real life.



#### Walkathon and Mini Health Contest

KD Navien holds walkathon and mini-health contest, encouraging active participation from employees to raise health awareness.



### I Health and Safety Training

KD Navien has established regular internal and external training plans at the company level and provide customized training tailored to the characteristics of each worker to strengthen safety competencies.

#### 2023 Training

New Employee Reminder Training	Hearing Protector Training	Job Stress Training
Reminder training for new employees to manage human error accidents (EAP, health and safety quiz, etc.)	Training on noise-induced hearing loss prevention and the need for hearing protectors for workers in high-noise (85dB) workplaces	Leadership training, including workplace bullying prevention activities, to prevent and manage job stress

participants .....	70	participants .....	104	participants .....	160
times .....	6	times .....	2	times .....	3

### I Health Improvement Activities

#### Cerebrovascular Disease Prevention

To prevent cerebrovascular diseases among employees, KD Navien manages a cerebral heart high-risk group every quarter. We regularly collaborate with the physical therapy room to conduct a circuit program to improve muscle, respiratory, and circulatory function to prevent cerebral heart disease.

#### 2023 Programs

Regulator Testing	Evaluation of metabolic syndrome, hypertension, etc.
Cerebral Heart Reassessment	Assessment of the risk of developing cerebrovascular disease
Red Circle Campaign	Blood pressure, blood sugar, and cholesterol tests



#### Musculoskeletal Disorders Prevention

KD Navien conducts individualized musculoskeletal diagnostic EX-BODY tests and operate a physical therapy facility to carry out preventive activities addressing both worsening and early symptoms. We follow up through continuous interviews with those suffering from musculoskeletal diseases and operate a health promotion room for exercises preventing forward head posture and low back pain.



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# Talent Management

## Talent Management System

### HR Management Direction

KD Navien provides ample growth opportunities based on trust, enabling members to equip themselves with competencies and strive to achieve results. We aim to create the best-performing company and the most rewarded employees by linking a strong performance-oriented HR system with organizational operations that perfectly balance responsibility and autonomy.



### Talent Development Direction

To improve practical applicability, KD Navien designs the basic curriculum using the Action Learning method to link learning with hands-on tasks.

KD Navien has established a self-directed continuous learning system to support external content desired by our members and are building an on-demand integrated learning platform by creating work know-how as content.

Through our mentoring system, we promote the smooth integration of new employees (mentees) and strengthen the leadership capabilities of mentors.



Field tasks linked to learning  
**“Action Learning”**



Work and knowledge sharing system  
**“On-Demand Learning Platform”**



Self-directed full-time learning system  
**“Individual Development Plan”**



Mentoring program  
**“Mentoring”**

### Management Goals

KD Navien supports employees in adapting to the changing business environment and developing their competencies to promote corporate values.

#### Talent Management Goals

##### Develop leadership training programs

- Business Insights, lectures to grow insight
- Coaching programs to improve strengths-based leadership skills

##### Implement in-house training to strengthen job competencies

- Mandatory job-related training for all employees
- Learning system that provides necessary education, including external job training, e-learning, and foreign language lessons over the phone
- In-depth job training for each division through in-house experts

##### Conduct training and campaigns to raise ESG awareness

- Trainings and campaigns to raise employees' ESG awareness
- Promotion of a sound company culture through legally mandatory training (prevention of harassment in the workplace, prevention of sexual harassment, awareness of persons with disabilities, privacy training, occupational health and safety courses, etc.)

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# Talent Management

## Human Resource Management

### I Talent Recruitment

Based on our ideal talent vision, “KD People Marching Toward the World and the Future as One,” KD Navien defined detailed ideal employee profiles. This guides our recruitment process, evaluating applicants’ competencies comprehensively.



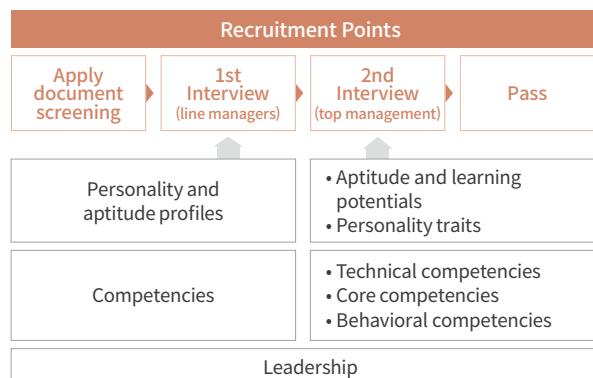
### Open and Occasional Recruitment

In addition to our annual open recruitment, KD Navien secures necessary human resources for each team through occasional recruitment.

### Year-Round Recruitment

KD Navien also operate a year-round human resources database for proactive recruitment, aiming to hire highly qualified talent in advance. When recruitment is needed, applications from the database are prioritized and considered.

### Recruitment Process



### I Employee Assessment

#### Fair Assessment

KD Navien strengthens the alignment between company goals and individual objectives, operating a fair assessment process to assist each employee in setting and attaining clear goals. Our assessment system identifies individual strengths through feedback, boosting motivation. We ensure fairness in assessment, avoiding bias based on characteristics like gender, and provide equitable compensation based on performance. Assessment outcomes directly reflect on compensation and are extended to employees striving for competency and performance enhancement.

### Assessment Process



### Expanding Employment of People with Disabilities

To expand employment opportunities for persons with disabilities, we have signed business agreements with the Korea Employment Agency for Persons with Disabilities and the Pyeongtaek Korea Paralympic Committee. Through the establishment of the KD Disabled Sports Team, we are continuously striving to create jobs where both people with and without disabilities can collaborate.



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### I Organizational Culture Diagnosis

In 2023, KD Navien conducted a 5-point scale survey on the culture of respect and workplace etiquette to gauge changes in mutual respect within the organization. We diagnosed and analyzed the findings, focusing on establishing a foundational culture of respect necessary for fostering a positive organizational culture.

### Organizational Culture Results

Through ongoing efforts to cultivate a horizontal organizational culture, such as restructuring the HR system and simplifying job roles, KD Navien saw an average increase of 9.1% across three evaluation areas related to the organization's culture of respect in 2023 compared to the previous year. Notably, the Culture Establishment Level, which assesses the organizational culture at division and department levels, recorded the highest increase rate of 11.4%.

### Scores by Section



### I Organizational Culture Creation

#### Workplace Etiquette Campaign

Recognizing the link between workplace etiquette and job competencies, KD Navien is carrying out activities to raise awareness about workplace etiquette to enhance employees' efficiency. In the first half of 2024, we organized a slogan contest, encouraging employee participation to underscore the importance of workplace etiquette. The selected slogans were turned into physical posters distributed across all business sites, fostering a culture of mutual respect and communication. We plan to carry out more activities to create a culture of mutual respect and communication in the future.



### Junior Board

In 2024, KD Navien plans to launch the KD Junior Board initiative to foster horizontal communication among its members, nurture a healthy organizational culture, and harness fresh ideas. This program, a revamped version of the former Young Board which was suspended due to COVID-19, aims to engage new employees in shaping the organizational culture and serves as a communication channel for innovation.



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## Human Resource Management

### I Benefits and Welfare

KD Navien implements various benefits and welfare programs to enhance employees' quality of life, boost work satisfaction, and improve work efficiency. We have established a dedicated family-friendly welfare policies to support employees in maintaining a healthy work-life balance. By extending these benefits to employees' families, we aim to create a family-oriented atmosphere within the company.

Category	Program	Details	
Family-friendly	Family Day	To promote work-life balance, we have designated either Wednesday or Friday as a no-overtime day each week. In addition, we have designated every Wednesday as a casual dress day.	
	Maternity and Parental Leave	We provide leave options before and after childbirth, in case of miscarriage or stillbirth, and guarantee parental leave and reduced working hours during childcare.	
	Family Care Vacation and Leave	Employees facing illness, accidents, or aging family members can utilize family care vacation and leave.	
	Employee Health Checkup	We have expanded our semi-comprehensive checkup, which was partially implemented, to a comprehensive one for all employees, with additional support for employees over the age of 41, including their families.	
	Tuition and Daycare Fee Assistance	We support college entrance and tuition fees for children of university students, as well as foster care fees for daycare centers and kindergartens for infants aged 2-5.	
Working	Company Loan System	To promote financial stability and improve the living environment, we implement a company loan system for our employees.	
	Refresh Vacation	To prioritize employees' mental and physical well-being and enhance work efficiency, we implement a system safeguarding the use of annual leave for up to five consecutive days per year, in line with company regulations.	
	Leisure	Condominium Membership	We utilize our condominium corporate membership to provide memberships to employees, providing an environment that facilitates ample rest and stress relief, supporting their overall well-being.
General	Leisure	Club Subsidies	Based on club activity performance, we offer monthly, quarterly, or yearly activity subsidies to encourage in-house club activities.
	Living	Product Discounts	Employee discounts are available on company products such as boilers and heated mattress pads.

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# Talent Management

## Human Resource Development

### I Training System

KD Navien fosters talents who strive to move “towards the future” by creating a self-learning environment and providing practical training programs tailored to each task.

#### Training System

Goals	Direction
Strengthening basic competitiveness	Product and technical training Enhance skills and work performance capabilities through the hands-on training
Internalizing brand core values	E-Campus Provide constant support of educational content for competency development
Digital transformation	Hybrid learning system Establish a virtual learning environment through the establishment of a metaverse training center

### I Training Programs

#### Employee Training Program

Required Training		
Training by position	Job competencies	Common competencies
<ul style="list-style-type: none"> <li>Introductory training for new employees (open position/occasional)</li> <li>Retention course for the second year (FY24 plan)</li> <li>Training for promotees (New team leaders, senior managers)</li> <li>Training by employees (open managers, managers)</li> <li>Leadership Training (executives, team leaders)</li> </ul>	<ul style="list-style-type: none"> <li>Quality mindset training (basic/advanced)</li> <li>Cost mindset training</li> <li>Product and technology training (Sales and Marketing related team)</li> <li>In-house instructor training course</li> <li>DT Training (data analysis basics)</li> <li>Expatriate training</li> </ul>	<ul style="list-style-type: none"> <li>Ethical management training</li> <li>Legally mandated training</li> <li>Core values internalization training</li> </ul>
Optional Training		
Global competencies	Job competencies	Common competencies
<ul style="list-style-type: none"> <li>Phone language learning</li> <li>Cyber language learning</li> <li>In-house language learning</li> </ul>	<ul style="list-style-type: none"> <li>External Specialized Institution Training</li> <li>Divisional (or Organizational) Training</li> </ul>	<ul style="list-style-type: none"> <li>Cyber training center (E-Campus)</li> </ul>
Other		
<ul style="list-style-type: none"> <li>Company-wide organization activation process</li> </ul>	<ul style="list-style-type: none"> <li>Training for Retirees</li> </ul>	<ul style="list-style-type: none"> <li>Departmental Workshops</li> </ul>

#### Effectiveness Assessment

After conducting core training for all employees at each level in 2023, KD Navien evaluated the training process, operational direction, and instructors for those who completed the training. We measured and managed satisfaction and achievement levels with the training, aiming to enhance the quality of the training program based on the obtained results.

#### Effectiveness Evaluation of Position-based Key Training

##### ► Assessments Purpose

Enhance competitiveness by supporting the growth and development of employees through acquiring specialized knowledge and skills related to each job

##### ► Evaluation Results

① Course	4.32	② Lecturer	4.39	③ Operation	4.27
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# Talent Management

## Labor-Management Council

### I Regulations

KD Navien has established the Labor-Management Council Regulations in accordance with the Act on Promotion of Worker Participation and Cooperation and operate the Labor-Management Council centered on employee participation to promote the common interests of labor and management. We aim to operate the council on an equal footing between labor and management based on the principles of mutual respect and good faith to foster a win-win cooperative relationship.

### I Composition Status

KD Navien's Labor-Management Council consists of five members from each side, totaling 10 members. During its quarterly meetings, various proposals such as wage increase rates and enhancements in benefits were discussed in 2023. Among them, we are fostering a positive and firm labor-management culture by addressing a range of issues, including expanding support for employee health checkups, broadening the scope of support for congratulatory events, increasing the meal allowance for employees, and expanding commuting routes, and wage negotiation. The agenda discussed at the labor-management council applies to all employees and is shared with them through internal groupware.

### I Activities to Achieve Labor-Management Harmony

#### Labor-Management Council

KD Navien holds labor-management meetings to establish win-win labor-management relations and carry out transparent and fair management activities. We share key management issues and freely exchange opinions on wage negotiations and employee welfare.

#### Meetings by Position

In 2023, KD Navien conducted four meetings for each position level to receive inconveniences and grievances in the on-site work process. As a result, a total of 32 items were handled, leading to improvements in the factory environment, the hiring of a new health manager, enhancements to the break room environment, and the addition of a new commuter route.

#### 2023 Labor-Management Council Performance

Category	2023 Activities	
	Meetings held	Agenda
Labor-Management Council and Labor-Management Meeting	9 times	20 cases
Meetings by Position	4 times	32 cases
Total	13 times	53 cases

#### Enhancing Pride

Every year, the Labor-Management Council conducts a family invitation event. KD Navien introduces our workplaces to our families, organize a kimchi-making program, and hold recreational activities to instill workplace pride in families and enrich the company life of our employees. We also hold a semi-annual group sports event to enhance our work life. In the future, we plan to develop various programs in collaboration with labor and management so that employees can carry out their work with pride.



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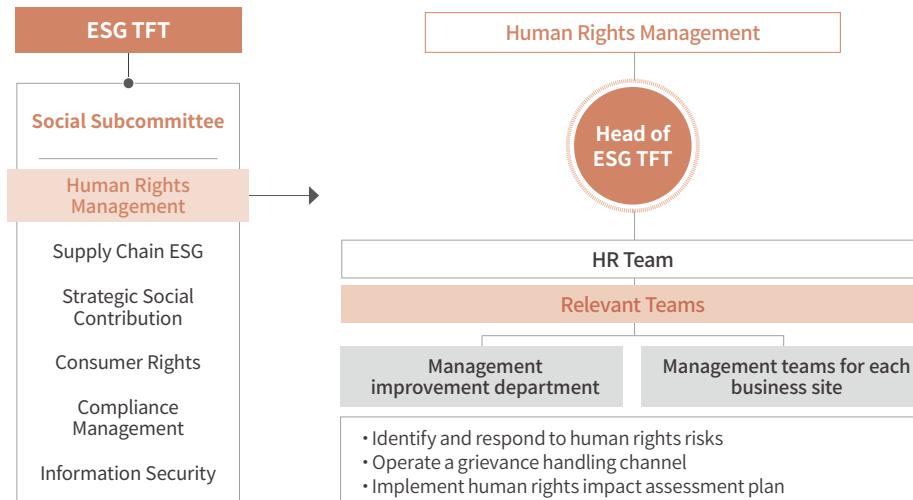
# Human Rights Management

## Human Rights Management System

### I Organizational Structure

Under the supervision of ESG TFT, KD Navien operates the Human Rights Management Part in the social sector to establish and implement related tasks, intensively managing the established key tasks every year through semiannual financial statements and performance reports. The Human Rights Management Part consists of the HR team, the Management Improvement Department, and the management teams for each business site, identifying and responding to human rights risks, and is responsible for managing grievance handling channels and implementing human rights impact assessment plans.

### Human Rights Management Governance



### I Human Rights Management Policy

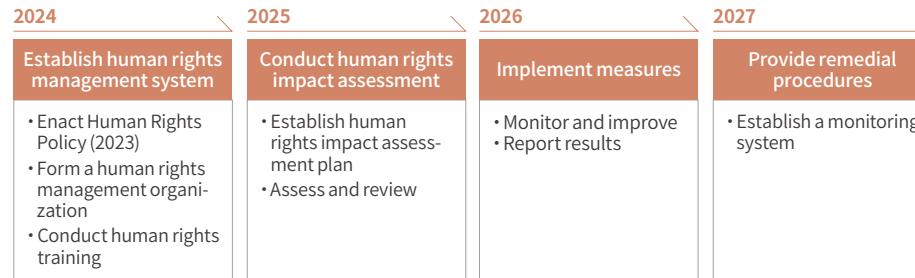
Based on the value of respecting human rights, KD Navien establishes and operates a human rights management policy approved by top management. By establishing the Supplier Code of Conduct, we strive to extend respect for human rights beyond the company to all stakeholders. We will continue to respect the human rights of all stakeholders exposed to human rights risks, such as employees and suppliers at all business sites, and promote win-win development.

[Human Rights Management Policy](#) <

### I Management Goals

KD Navien has established a mid- to long-term plan for human rights management to effectively manage human rights risks and practice human rights management.

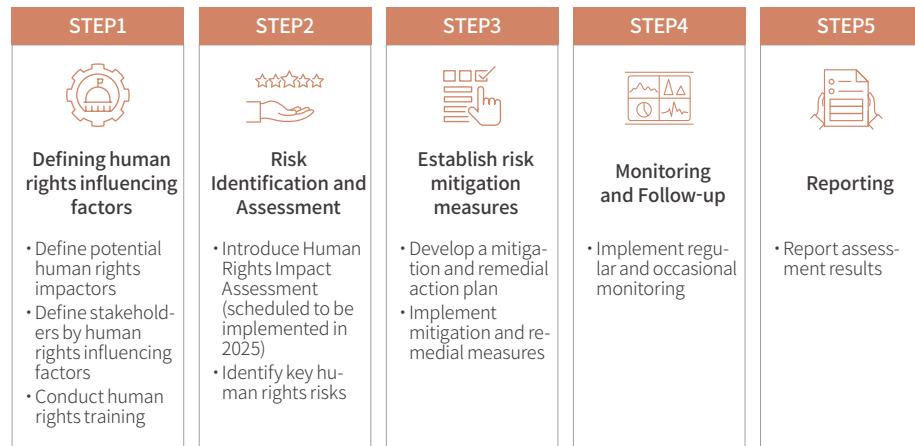
#### Mid to Long-Term Human Rights Management Plan



### I Management Process

KD Navien operates a human rights risk management process to minimize human rights risks that may occur during business operations.

#### Risk Management Process



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# Human Rights Management

## Human Rights Management Activities

### I Human Rights Impact Assessment

Following KD Navien's mid to long-term plan for human rights management, a human rights impact assessment will be conducted starting in 2025. Based on our Human Rights Management Policy and the Human Rights Management Guidelines and Checklist published by the National Human Rights Commission of Korea, we plan to design evaluation items to identify jobs or teams that are vulnerable to related risks for internal employees. In the mid to long term, we plan to expand the scope to various stakeholders such as suppliers.

#### Human Rights Impact Assessment Plan

Category	Details
Frequency	Once a year
Form	Self-assessment survey
Scope	Employees • Number of people using groupware: groupware electronic survey • Employees who do not use groupware (production staff, etc.): internet portal form
Evaluation items	Human Rights Management System, Non-Discrimination, Humane Treatment, Prohibition of Forced Labor, Labor for Children or Minors, Guarantee of Industrial Safety, Information Protection

### I Human Rights Management Training

KD Navien conducts human rights management training to cultivate human rights awareness among employees and spread a culture of respect for human rights. We provide employees with ethical management training to prevent workplace bullying, raise awareness of persons with disabilities, prevent sexual harassment, and practice corporate ethics. We plan to expand the training to raise awareness for human rights, establishing an organizational culture centered on respect for human rights.

#### Human Rights Management Training

Training	Details	Target
Sexual harassment prevention training	Sexual harassment prohibition guidelines	
Disability awareness training	Prohibition of discrimination against persons with disabilities, improve preconceptions	All members
Workplace harassment prevention training	Employee bullying prevention	
Information security training	Privacy guidelines	
Ethical management training	Ethics reporting, grievance handling	

### I Grievance Handling

#### Grievance Handling Channel

We utilize the internet, intranet, and labor-management organizations to collect the demands and opinions of various stakeholders, including employees and suppliers, regarding guaranteed human rights, working conditions, and the working environment. Received issues are forwarded to the team that communicates directly with each stakeholder, and the identity and personal information of the whistleblower are kept strictly confidential.

#### Reporting Channels by Business Site

Channel	Site	Department in charge
Online whistleblowing channel	Company-wide	Management Improvement Dept.
	Seoul Office, Seoul Branch	HR Team
Workplace harassment reporting	Research Institute	R&D Management Team
	Seotan, Pyeongtaek, Songtan, Gasan	each Plant Management Team
Workplace sexual harassment reporting	Seoul Office, Seoul Branch	Managers by site and HR Team
	Research Institute	
	Seotan, Pyeongtaek, Songtan, Gasan	
Labor-Management Council (Grievance Handling Committee)	Seotan, Pyeongtaek, Songtan, Gasan	each Plant Management Team

#### Grievance Reporting and Handling Status<sup>1)</sup>

KD Navien receives and handles grievances officially or unofficially through grievance handling channels, including the online whistleblowing channel and phone calls to the persons in charge. In 2023, we received 13 grievance reports and handled them by transferring them to the relevant teams.

Category	2021	2022	2023
Reports received	13 cases	14 cases	13 cases
Reports handled	13 cases	14 cases	13 cases
Handling rate	100%	100%	100%

1) Includes affiliates' performance

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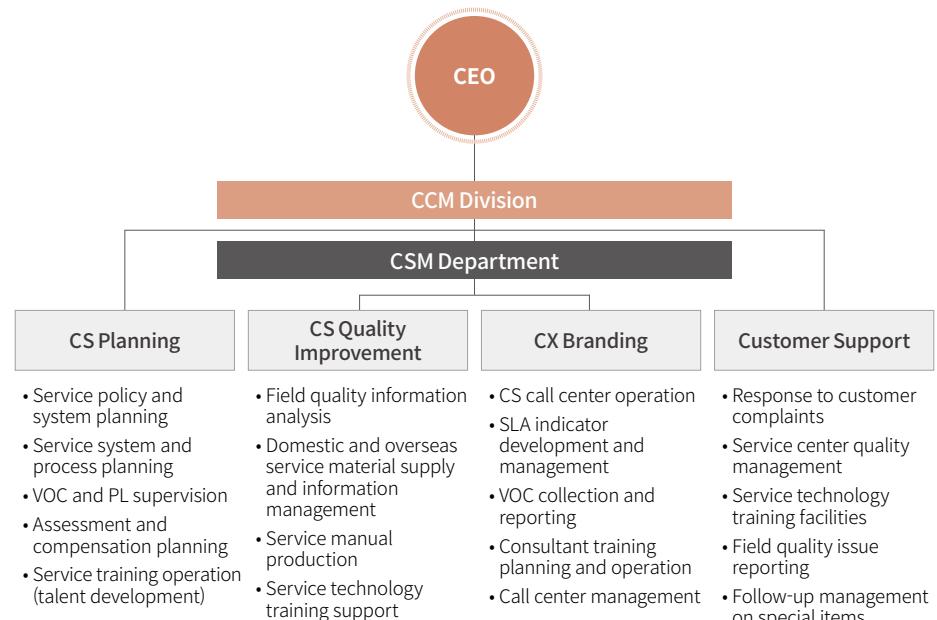
# Customer Value

## Consumer-Centered Management System

### I Organizational Structure

KD Navien provides effective consumer-centered service through transparent communication, strict service quality management, and content provision centered on customers.

#### Service Structure of KD Navien



### I Customer-Centered Management Policy

KD Navien established a customer satisfaction management policy and customer service charter approved by top management, allowing employees to actively participate in customer-centered management. We plan to continue promoting customer satisfaction by supplying the highest quality products and developing advanced technology as a smarter living environment partner.

[Customer Satisfaction Management Policy](#)

### I Management Goals

KD Navien establishes service strategy tasks centered on the service organization for customer satisfaction, and based on the results measured through regular evaluations, we set mid to long-term goals such as zero complaints related to unkindness and zero center service delays of more than three days.

Indicators	Status	FY24 Goals
Complaints related to unkindness	722 cases	500 cases
Expansion of Service Infrastructure <sup>1)</sup>	27 places	40 places
Handling of directly-managed center <sup>2)</sup>	20,200 cases	52,200 cases

1) Based on centers, branches, and mobile centers

2) Based on service delays at the service center exceeding three days

### I External Certifications

KD Navien operates a Customer-centered Management Operation Manual to promote customer rights and interests. We collect VOCs through various channels and establish a data system to analyze, resolve, and prevent complaints. Furthermore, we are effectively training and evaluating in-person service personnel and service centers to provide accurate service to consumers, and we are trying to improve service quality by introducing chatbots to overcome the human limitations of call center agents. Based on these efforts, as of 2023, we have been certified as an excellent service quality (SQ) company in Korea, and have maintained the title of CCM-certified company for 12 consecutive years. We are the first company in the industry to be selected as an excellent CCM-certified company in the Hall of Fame, receiving recognition from the CCM Fair Trade Commissioner.



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# Customer Value

## Customer Satisfaction Activities

### I Customer Satisfaction Services

KD Navien carries out various activities tailored to customers and operate customer participation programs to achieve customer satisfaction.

#### Customer Satisfaction Program

Program	Details
Sweetdream store	Provide direct and indirect product experience service as well as solutions for good sleep
Navien house (official online store)	<ul style="list-style-type: none"> <li>Provide benefits by planning events and promotions</li> <li>Answer consumers' questions by expanding communication channels including Navien LIVE</li> </ul>
Curation service	Recommend products according to consumers' lifestyles considering user environments and preferences
Air change service	Immediately provide replacement after receiving an A/S request and shorten the recall lead time
Commissioning center	Immediately provide replacement after receiving an after sales service request and shorten the recall lead time

#### Navien Sweetdream Store, a Platform for Good Sleep

#### Sweetdream Store

Navien Sweetdream Store is an online, relationship-focused communication platform promoting good sleep. It offers a variety of seasonal solutions to address sleep difficulties, including expert counseling, sleep-aiding products, and complimentary product trial services aimed at enhancing customer participation and experience. Since its launch a year ago, KD Navien has maintained active communication with customers, resulting in approximately 20,000 members, 750,000 visitors, and 40,000 event participants.



“If you are considering buying a water heated mattress pad, I recommend participating in next year's Sweetdream Experience. You will be able to experience how amazing it is before making a purchase. I also bought the one I tested this time and plan to purchase another one next year through Sweetdream Store!

Sweetdream Store Customer

### I Rights and Interest Protection

KD Navien makes our best effort to improve customers' access to products and information, and to protect individual customers' rights and interests.

#### Rights and Interest Protection Support Activities

Activity	Details
Support for persons with visual impairments	Support thermostat and interface for persons with visual impairments
Consultation service	Diversify consulting services such as AI consulting, standardized 24-hour consulting, 1:1 consulting, video consulting, and real-time chat service
Mobile center operation	Improve regional and physical accessibility to service
Free warranty period extension	Extend the free warranty period from two to three years
Information on standard service rates	Provide standardized price information, and secure transparency of information through the service app

#### Interface for Persons with Visual Impairments

To allow the visually impaired to use boilers conveniently, KD Navien has launched the boiler industry's first thermostat that supports voice guidance, braille stickers to check control functions, braille product guides, and voice manuals. In 2023, we expanded the release of thermostats that can be applied to entry-level products (NCB300 series), and we will continue to provide various interfaces to improve product accessibility for customers.



▲Premium  
(NR-67D)



▲Regular  
(NR-30S)

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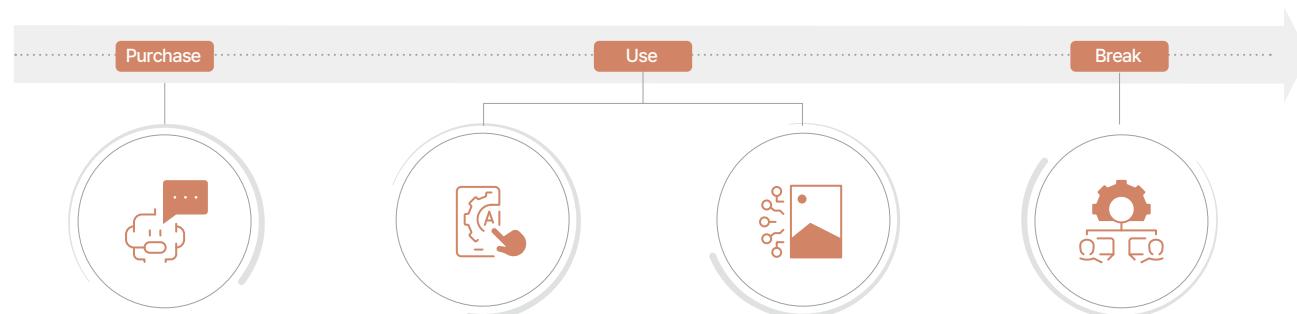
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# Customer Value

## Customer Satisfaction Activities

### AI Technology Development and Application

KD Navien develops and utilizes various AI technologies to eliminate pain points that may arise before using products, maximize customer experience, and promote customer convenience.



#### AI Procurement Consultation

Once our customers upload the nameplate, thermostat, and environment photos of their current boiler, regardless of the manufacturer, Navien House (official online store) will analyze the boiler information to recommend a KD Navien condensing boiler that suits the environment and capacity and send the results to nearby distributors to support easy and quick purchases.

#### Navien Smart App Service

KD Navien enhanced customer convenience by launching a service platform that can control IoT-related products such as boilers and heated mattress pad with one app. We plan to increase customer convenience by integrating air purifying ventilation system apps in the future.

#### AI Thermostat Quick Manual

When a customer uploads a photo of their thermostat, we analyze the indoor thermostat and provide customized user manuals for each product, enhancing convenience during product use.

#### AI A/S Reception

When customers upload a picture of their thermostat of the KD Navien boiler, it recognizes the error code and guides them through self-diagnosis methods, providing a one-stop service for A/S to reduce unnecessary in-person and phone consultation time.

#### Navien Condensing ON AI Boiler

KD Navien has developed products that incorporate AI to provide services tailored to different lifestyles and have obtained the industry's first AI+ certification based on its differentiated technology.



#### Use

##### Smart Operation

It learns consumers' hot water use patterns and preheats the hot water pipe in advance before using hot water to save wasted water and time. The condensing ON AI boiler is equipped with the FOTA<sup>1)</sup> function, which automatically updates the best algorithm in real-time.



#### Use

##### HEMS Monthly Report

Based on the results of learning and data analysis of hot water and heating use patterns, HEMS monthly reports are published that include recommended use methods and energy consumption status.



#### Break

##### Smart Diagnosis Service

The system is equipped with a function that allows customers to directly conduct a smart diagnosis of AI boiler operation, providing a visible and accurate response service by offering its own multi-kit when an issue occurs.



<sup>1)</sup> Firmware Over the Air

# Customer Value

## Customer Satisfaction Activities

### Customer VOC Management

#### Complaint Handling Process

KD Navien carefully listens to customers' grievances and feedback and operate a grievance-handling process to effectively handle them. The collected VOCs are shared with all executives through monthly reports, and various VOCs are made into videos and shared with employees. We actively reflect the needs and inconveniences of our customers to supply the highest quality products.

#### VOC Handling Procedure



#### Customer Damage Response Procedures

KD Navien operates a prompt and fair damage response procedure for damages. In case of an accident, the center's PL task force will investigate the incident. If further investigation is required, a company-wide PL task force is formed to conduct additional on-site investigations. After obtaining management approval for the Incident Report, we proceed with the settlement with the customer and provide compensation for the damages based on the determination of responsibility.

#### Damage Response Process



### VOC Handling

Every month, the customer service center gathers and analyzes the VOC receipt channels and the status of complaints compared to the same period of the previous year. KD Navien strives to understand customer complaints by reclassifying the main complaint VOC types by service center based on internal standards. Furthermore, we conduct internal discussions to seek improvement measures based on customer suggestions.

#### Number of VOCs Received<sup>1)</sup>

(Unit: case)

Activity	2021	2022	2023
Reports received	3,112	2,277	2,068
Reports handled	3,112	2,277	2,068
Handling rate	100%	100%	100%

1) Data calculated based on complaints among three management types: complaints, suggestions, and praises

### Visible ARS and AI Chatbots

KD Navien introduced Visible ARS and AI Chatbot to reduce the waiting time for consultations, which has been identified as a major complaint, and to improve the convenience of A/S reception and service blind spots. By quickly handling simple inquiries, the number of VOCs entering the call center agent has been reduced by about 20% per year on average, and by about 25% during the peak season, improving the operational efficiency of the contact staff. As a result, we have shortened the waiting time for consultations and provided high-quality service to a diverse range of customers, achieving a system satisfaction rate of 86%. We will continue to identify and alleviate customer inconveniences and enhance customer satisfaction through continuous system improvements.

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# Customer Value

## Securing Customer Safety

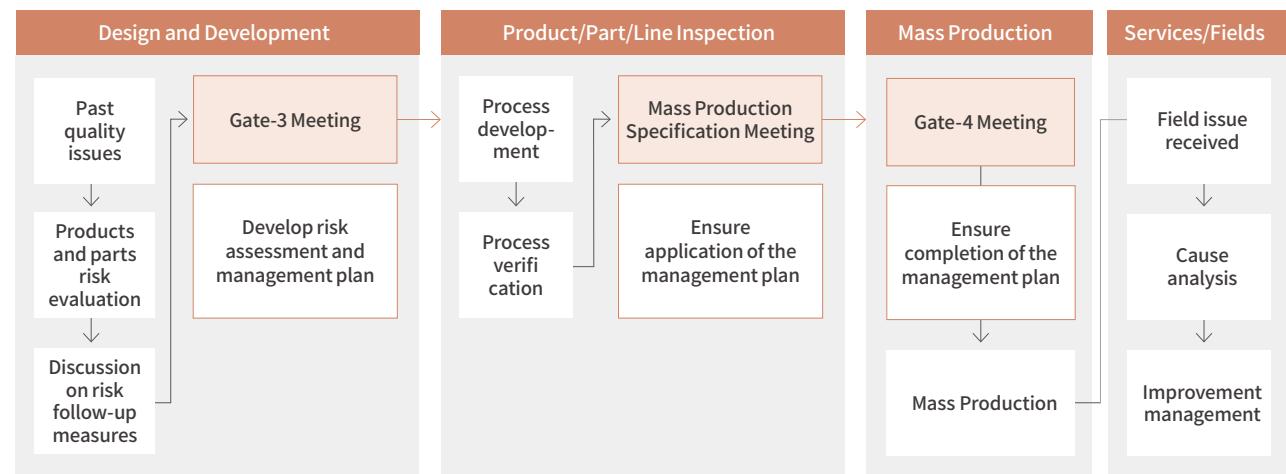
### I Health and Safety Impact Assessment

KD Navien strives to develop safe products and minimize safety issues through the Product Safety Quality Management System (PS QMS), by expanding 'quality'-centered quality management system to a 'customer safety'-centered Product Safety Quality Management System (PS QMS). When developing new products, we conduct risk assessments to identify possible accidents in advance and reinforce the verification stage to ensure the safety of our customers.

#### Assessment Process

KD Navien conducts risk assessments based on past quality issues, discuss the results with relevant teams, and establish management plans through the GATE-3 Meeting. We then confirm the application of the management plan at the Mass Production Specification Meeting and verify the actual application in the process through the GATE-4 Meeting to ensure the effectiveness of the evaluation process.

#### Health and Safety Impact Assessment Process



#### Examples of Product Impact Assessments

KD Navien conducted a health and safety impact assessment during the product design and development process to ensure customer safety. We conducted an impact assessment on each product and component for each risk level and established 53 improvement plans in design, inspection, and manuals.

Product	Improvement Details			
	Design	Inspection	Manual	Other
3D Air Hood 2 <sup>nd</sup>	●	●	●	
Zone Controllable Air Purifying Ventilation System	●			
Range Hood	●	●	●	
Heat Interface Unit System	●	●		●
Heated Mattress Pad	●	●		
Condensing Boiler Type 2	●	●		
Gas Boiler	●	●		
Condensing Gas Water Heater	●	●		

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## Securing Customer Safety

### Activities to Ensure Customer Safety

KD Navien manages and discloses information about environmental impact substances generated throughout the manufacturing process via product certification. We ensure customer safety by transparently providing information related to product installation and safe use.

### Product Labeling

KD Navien mandates and applies labeling processes in the product development phase for all products. This includes transparent disclosure of the country of origin, conditions of use, safety certification number, power consumption, and capacity.

Safety
<ul style="list-style-type: none"> <li>• Pipe leakage warning</li> <li>• Installation precaution information (ventilation, drain, gas leak, water leakage, etc.)</li> <li>• Cleaning, periodic inspection information</li> <li>• Pipe tunnel drilling caution information</li> <li>• Failure measures</li> </ul>

### Chemicals

Only chemicals that have passed chemical safety tests are used in the air purifying ventilation system dust collection filter cleaning service. Detailed information about these chemicals is available on KD Navien's website.

[Drug Types and Safety Guidelines](#) 

### Installation and Use Information

To prevent safety accidents such as fire, electric shock, gas leakage, and water leakage during product installation and use, KD Navien distributes a list of Precautions and Measures for Safety and provide detailed information for each risk classification.

#### Risk Classification

 <b>Danger</b>	Ignoring and misusing these markings poses a high risk of death, serious injury, or fire.
 <b>Warning</b>	Ignoring and misusing these markings poses a risk of death, serious injury, or fire.
 <b>Caution</b>	Ignoring and misusing these markings poses a risk of personal injury, or physical injury.

### Product Safety Certifications

To ensure consumer safety, KD Navien evaluates our products' safety through independent testing and certification organizations across different continents, including the Americas, Europe, Asia, and Oceania. Products developed, produced, sold, and serviced by KD Navien are tested and approved according to the laws and standards of various countries. We strictly manage product manufacturing and quality control to maintain the safety and performance standards specified by both domestic and international regulations. As of 2023, we have acquired 43 certifications and will continue to obtain safety certifications to ensure customer safety.

#### Key Certifications

Location	Certification			
Americas and Latin America	• ASME	• ETL	• FCC	• NB
	• CSA	• NSF	• SEC	• AHRI
	• UL	• UPC	• Energy Star	• AQMD
Europe	• CE	• WRAS	• UkrSEPRO	• FAC
	• UKCA	• EAC	• FC	
Asia and Oceania	• KC	• CCC	• SRRC	
	• KS	• CQC	• RCM	

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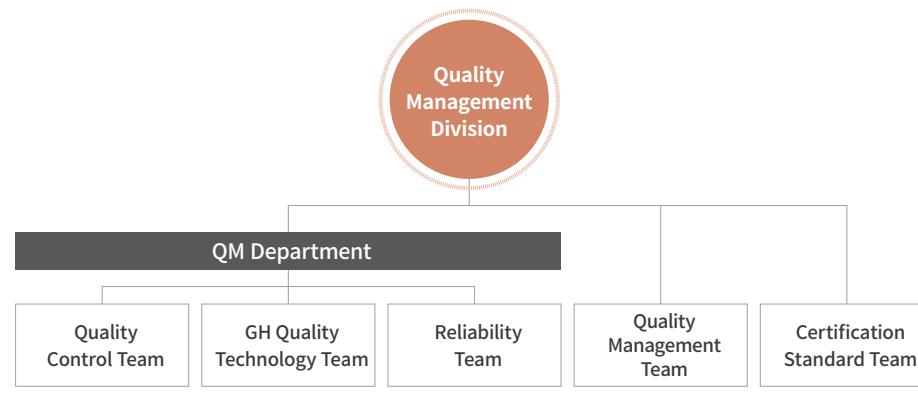
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# Quality Management

## Quality Management System

### I Organizational Structure

KD Navien has organized the Quality Management Division into teams such as Quality Management, Certification standard, In-house and Affiliate Quality Control, and Market Quality Control. By facilitating collaboration among these relevant teams, we ensure the quality of our goods and products.



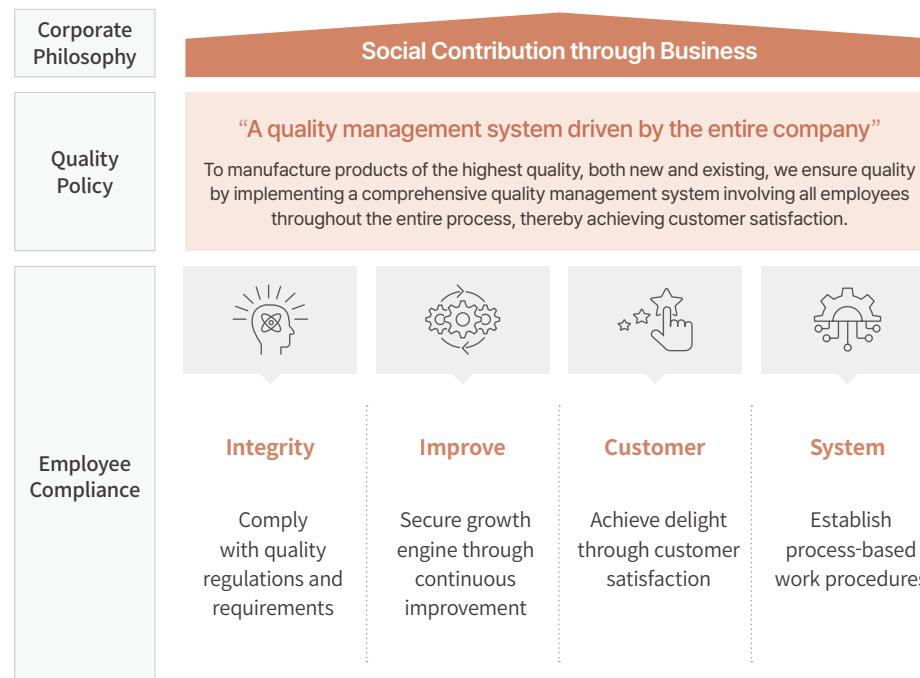
### Quality Management TFT Activities

In 2019, under the slogan “Beginning of Quality Innovation with QMS Practiced by All,” KD Navien launched the quality management system TFT within the company. We also engage in continuous improvement activities based on the duty responsibility system.

Launch of TFT	Inspection on Quality Management Implementation	Process Maintenance
<ul style="list-style-type: none"> <li>Selected 110 QMS activation tasks by area, conducting improvement activities</li> </ul>	<ul style="list-style-type: none"> <li>Inspect the QMS implementation status by business site</li> <li>Conduct improvement management activities</li> <li>Inspect the process implementation and improvement quality</li> </ul>	<ul style="list-style-type: none"> <li>Improve on process irregularities</li> <li>Analyze and address quality issues</li> <li>Provide quality training</li> </ul>

### I Quality Management Policy

With the approval of top management, KD Navien established a quality management system that involves the entire company, with our members actively participating in every stage from product design to production and service delivery. This commitment ensures that we provide the best products and services to our customers, securing the highest quality competitiveness globally. Concurrently, we are in the process of formulating our product safety quality policy and quality goals based on ISO 9001, 14001, and 45001 standards, while also outlining the responsibilities and authority for quality-related activities to prevent defects and nonconformities at all stages.



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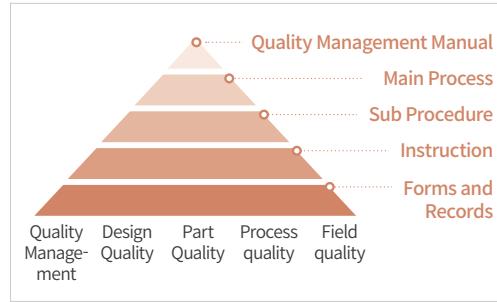
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# Quality Management

## Quality Management System

### I Quality Management System

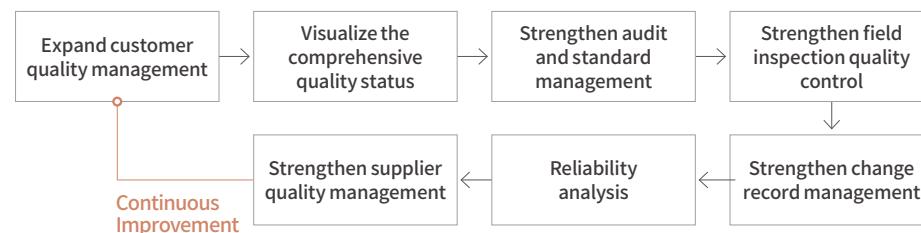
To secure a growth engine and ensure quality consistency, KD Navien has established 206 types of ISO-based quality management processes and are conducting improvement activities for each area. Additionally, we have expanded the application of our quality management system to overseas corporations and established a global QMS system to monitor and analyze quality information in real-time.



### Integrated Quality Management System

While maintaining the core functions of the existing quality management system, KD Navien is establishing a mutually organic information-sharing system to strengthen the integrated quality management system for mass-produced products. By visualizing potential quality risks in the process of product creation and connecting them to improvement activities, we are developing a virtuous cycle quality management system.

### Core Functions of Integrated Quality Management



### I Management Goals

In anticipation of entering the global market, KD Navien has made quality our primary focus and established detailed three-dimensional goals to lay the foundation for absolute quality.



### I Quality Certification

Over the past 46 years, KD Navien has acquired and maintained 10 KS certifications. In 2021, we were selected as one of Korea's KS Masters in recognition of our efforts to lead industrial innovation based on technology and quality by actively utilizing Korean industrial standards in the machinery and metals field. We intend to continue developing technology and improving quality based on KS certification, establishing ourselves as a living environment partner that accompanies our customers' lives.

#### KS Certification Acquisition Status

Product	Year Acquired
Oil Hot Water Boiler	1982
Gas Hot Water Boiler	1991
Condensing Gas Hot Water Boiler	1991
Heat Recovery Ventilation System	2013
Automatic Temperature Control System for Heating	2014

Product	Year Acquired
Instantaneous Gas Water Heater	2016
Water-Geothermal Heat Pump Unit	2017
Gas Stove	2020
Ventilator	2021

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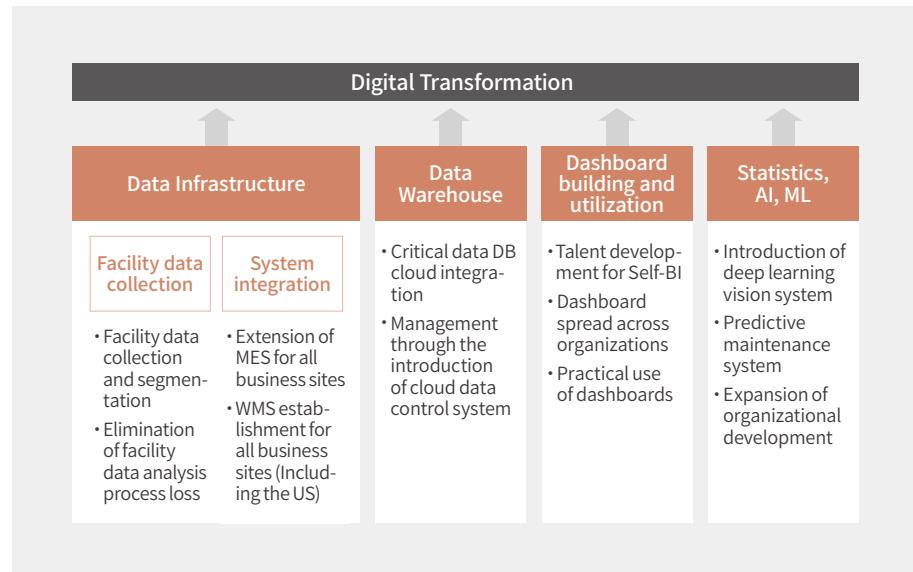
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# Quality Management

## Quality Control Activities

### I Digital Transformation

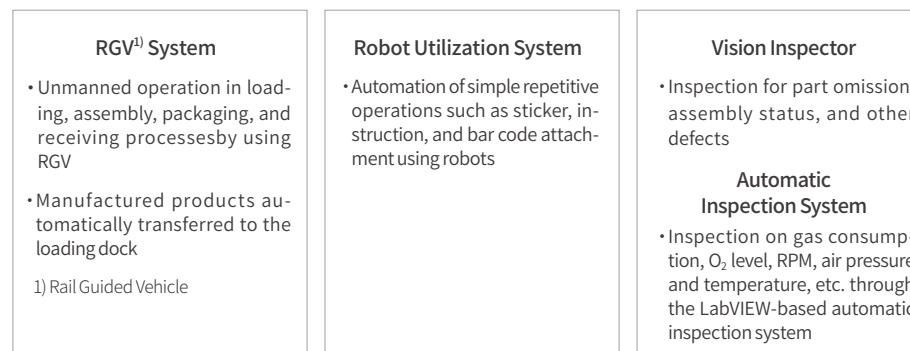
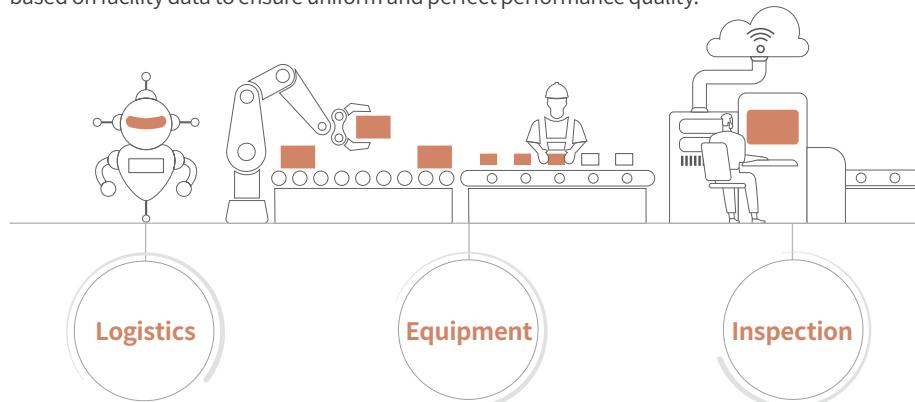
#### Data Utilization



KD Navien strives to achieve digital transformation by fostering related organizations, expanding our capabilities, and advancing our work. We continue to promote activities such as cloud utilization, line automation, data collection, and system integration to improve work efficiency and prepare for the digital era. In 2024, we set new advancement goals including building generative AI based on the collected data and information, and improving work methods through smart manufacturing. By enhancing our preexisting dashboard with data analysis, real-time monitoring, AI·ML technology through the advancement of the preexisting dashboard, we're improving work efficiency.

### Smart Manufacturing

To achieve KD Navien's vision of becoming a global No.1 boiler company, KD Navien has established Smart Manufacturing and secured perfect quality and manufacturing competitiveness to provide a smarter living environment to our customers. We have introduced automation facilities in the gas water heater and gas boiler manufacturing line produced at the Seotan Factory to collect manufacturing data, real-time monitoring, and analysis visualization for each worker. Through this, we have identified and eliminated waste elements and improved human errors based on facility data to ensure uniform and perfect performance quality.



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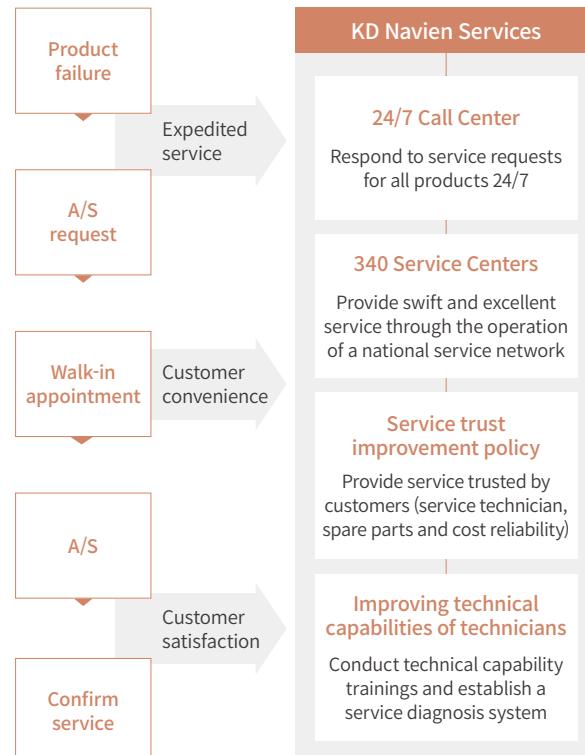
# Quality Management

## Quality Control Activities

### I Quality Complaints

KD Navien operates a management system to handle customer quality-related complaints, expedited service, customer convenience, and satisfaction. We aim to provide differentiated service by running a 24-hour call center and 340 service centers, implementing a service reliability improvement policy, and enhancing the technical capabilities of our technicians.

#### Handling Process



### I Quality Training

Since establishing the quality training system in 2018, KD Navien has provided quality training to all employees and on-site workers to increase their awareness of the importance of quality and their understanding of the quality management system. This training is particularly focused on on-site workers and suppliers, covering everything from development and mass production processes which are fundamental to manufacturing, to product and part quality management. In 2023, we delivered a total of 18 customized trainings for 190 new hire, on-site, and managerial positions. These trainings included sessions to strengthen mindsets, inspire a sense of work ownership, and demonstrate quality success and failure cases. We plan to continue offering tailored quality training for each position and field to promote advanced quality training.

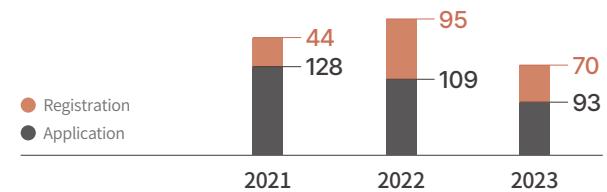
#### 2023 Quality Training

Target	Training	Times Conducted
On-site	On-site quality mind-up	2
New hire	Training for new employees of Quality Management Division	1
Managerial	New and existing employees quality mindset and 9 others	15

### I Patent Status

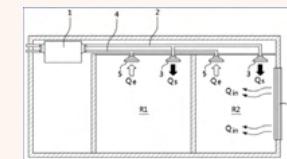
KD Navien continuously applies for and registers domestic and international intellectual property rights, driven by its quality-oriented management. In 2023, we recorded over 160 patent applications and registrations. We are actively pursuing various initiatives, aiming for over 100 patent registrations in 2024.

#### Patent Application and Registration Status



### Ventilation System that Maintains Positive Pressure

KD Navien has developed a control device for the ventilation system that can maintain positive indoor pressure to prevent the increase in indoor pollution concentration due to the influx of outdoor pollutants into the room. We plan to continue improving its quality and apply for patents to create a smarter living environment for our customers.



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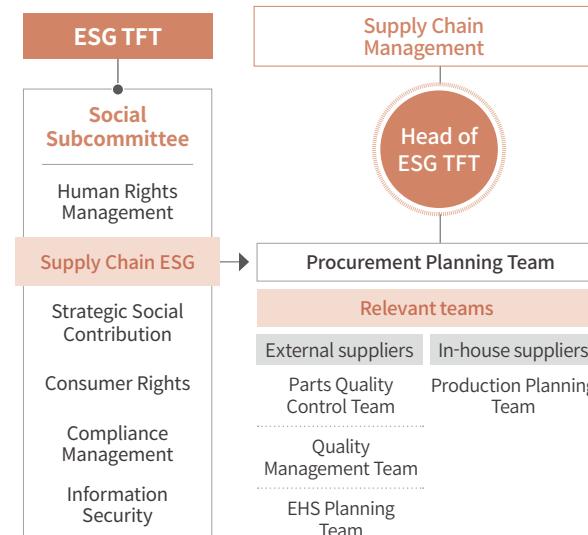
# Supply Chain Sustainability Management

## Supply Chain Management System

### I Organizational Structure

KD Navien has designated the Procurement Planning Team as the primary organization for sustainable supply chain management and manage suppliers under our supply chain management policy. The Supply Chain ESG Part of the ESG TFT, led by the Procurement Planning Team, develops and promotes detailed goals and tasks related to the assessment and management of suppliers.

### Supply Chain Management Governance



### Supply Chain Management System

- Oversee all supply chain management, including purchasing, procurement, manufacturing, transportation, inventory management
- Establish and revise supply chain policies
- Oversee supply chain assessment and develop incentive system
- Review the participation in external supply chain certifications or shared growth indexes

### I Supply Chain Management Policy

KD Navien implements supply chain management policies that have been approved by top management to create an excellent supply chain environment and prevent ESG risks. To respond to the global environment that emphasizes the importance of ESG competencies, it is essential to make efforts to create and build a sustainable business environment not only for us but also for our suppliers. We have established and declared the five areas—labor and human rights, ethical management, health and safety, environment, and management system—that suppliers must comply with, and we continue to emphasize the importance of cultivating ESG capabilities by mandating a pledge to comply with the Supplier Code of Conduct when entering or renewing contracts with suppliers.

[Supplier Code of Conduct](#) 

### I Management Goals

To effectively manage ESG for suppliers, KD Navien has reflected the ESG capability assessment items for new and existing suppliers in the integrated purchasing system, aiming to conduct assessments starting in 2024. To strengthen the level of ESG capabilities of suppliers, we have established detailed goals for advancing ESG assessment items and support and management policies, and we plan to carry out various activities to achieve these goals.



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# Supply Chain Sustainability Management

## Supply Chain Management Activities

### Supply Chain Status

KD Navien manages the current status of both domestic and overseas suppliers.

#### KD Navien Supply Chain Status

Category	Suppliers	Key Areas
Domestic	305	Products, parts, A/S, packaging materials, etc.
Overseas	43	Electronics, EMS, etc.

KD Navien is continuously expanding the pool of excellent suppliers with quality certification and quality management system capabilities (11 cases in 2022 and 7 cases in 2023, including potential suppliers) through regular recruitments. We support our suppliers in expanding their market presence by providing these opportunities. We are also working to increase trade opportunities with high-quality suppliers by introducing a new SRM system in 2024 with a new transaction suggestion feature and a global supplier search system to broaden the global supplier pool, allowing suppliers to freely propose transactions.

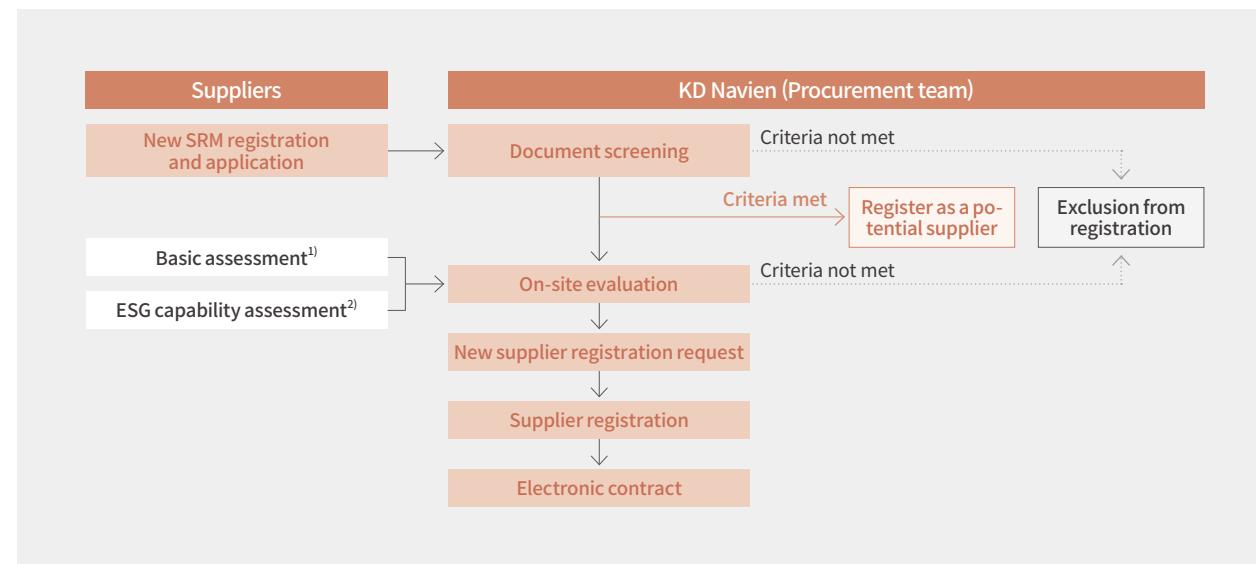
#### Registration of Suppliers through Recruitment Announcement

Year	Registered Suppliers	Note
2021	6	Registered: 2 Potential: 4
2022	11	Registered: 1 Potential: 10
2023	7	Registered: 1 Potential: 6

### Supplier Selection

KD Navien selects suppliers based on a transparent and fair process. We register suppliers who have passed a written assessment to review the relevance to the industry and financial stability and on-site evaluation to review quality control capability, procurement, purchasing, and management capabilities. We continue to conduct competency checks and risk management through regular assessments for selected suppliers. Moreover, we have further reorganized the ESG assessment items (ethical management, labor and human rights, environment, and health and safety management capabilities) to understand the ESG status of our suppliers, and established an integrated purchasing system to enhance the transparency and organicity of all supply chain-related work procedures, including information management for suppliers, supplier evaluation and registration, contract management including code of conduct management, and quotation.

#### Selection Process



1) More than 60 points in the areas of quality, procurement, and purchasing

2) To be implemented in the areas of ethics management, labor and human rights, environment, and health and safety

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# Supply Chain Sustainability Management

## Supply Chain Management Activities

### I Supplier Assessment

KD Navien assesses our suppliers and provides appropriate feedback to enhance the level of our supplier pool to prevent possible supply chain risks.

#### Assessment Structure

KD Navien conducts a comprehensive evaluation of our suppliers every year. The final grade is determined by adding up the scores of the yearly performance evaluation, yearly assessment, and yearly qualitative evaluation. To manage the ESG capabilities of suppliers, we incorporated ESG assessments in the integrated purchasing system, with plans to implement the assessment during the comprehensive evaluation in 2024. The ESG capability of suppliers will consist of four areas: ethics management, labor and human rights, environment, and health and safety. We plan to conduct ESG capability assessments for all suppliers in stages.

#### Supplier Assessment System and Key Assessment Items

Comprehensive Evaluation				ESG Capability Assessment			
Item	Details			Item	Details		
	Performance	Status	Qualitative		Performance	Status	Qualitative
Quality	<ul style="list-style-type: none"> <li>Acceptance quality</li> <li>Process quality</li> <li>Field quality</li> </ul>	<ul style="list-style-type: none"> <li>Process control</li> <li>Quality control</li> </ul>	<ul style="list-style-type: none"> <li>PL defective, SHIP BACK occurs</li> <li>LOT quantity rework</li> <li>4M Undeclared</li> </ul>	Labor and Human Right	Prohibition of forced labor, prohibition of child labor, working hours and wages, humane treatment, non-discrimination, freedom of association, etc.		
Procurement	<ul style="list-style-type: none"> <li>Cost reduction rate</li> <li>Increase in the proportion of purchases</li> </ul>	<ul style="list-style-type: none"> <li>Delivery date observance</li> <li>Logistics operation capability</li> </ul>	<ul style="list-style-type: none"> <li>Sales dependency</li> <li>Credit rating</li> <li>Business cooperation</li> </ul>	Health and Safety	Occupational safety, emergency preparedness, accident management, physically demanding work management, safety management of machinery, equipment, facilities, etc.		
Purchase	<ul style="list-style-type: none"> <li>Absence time</li> </ul>	<ul style="list-style-type: none"> <li>Financial stability</li> <li>Management system</li> </ul>		Environment	Environmental permits and reporting, hazardous chemical management, waste management, air pollutant management, wastewater management, response to climate change, etc.		
				Ethics Management	Prohibition of unfair profits, protection of intellectual property rights, compliance with fair trade, protection of identity and prohibition of retaliation, protection of personal information, prohibition of use of conflict minerals, etc.		

#### ESG Capability Assessment Process



### Follow-Up Management

Based on the previous year's comprehensive evaluation of suppliers with low grades, quality issues, key physical properties, and other issues, KD Navien selects an average of 30 suppliers for the assessment every year. For suppliers that do not meet the criteria for the assessment, we establish an improvement plan and conduct a reassessment within 3 months with the agreement between both companies to promote the improvement of the suppliers' capabilities. According to the comprehensive evaluation, we provide incentives such as the expansion of business opportunities, increase in volume, and award excellent suppliers to suppliers with excellent grades (grades A and B), and assign penalties such as the reduction of volume to suppliers requiring improvement (grades C and D) to enhance the competitiveness of suppliers. We plan to continuously check the ESG capability assessment results, and grant additional points for excellent suppliers to the comprehensive evaluation and provide consulting and training for those requiring improvement.

#### Follow-up Actions by Comprehensive Evaluation Grade

Grade	Follow-up Actions
A 85 points or more	<ul style="list-style-type: none"> <li>Provide an opportunity to participate in new part development</li> <li>Preferentially apply volume upgrade when adjusting trading volumes in the industry</li> <li>Award the Good Supplier certification plaque</li> </ul>
B 75-84 points	
C 65-74 points	<ul style="list-style-type: none"> <li>Reduce trading volume</li> <li>Impose penalty</li> </ul>
D 64 points or less	

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# Supply Chain Sustainability Management

## Supply Chain Management Activities

### I Supplier Assessment



# Supply Chain Sustainability Management

## Win-Win Cooperation

### I Supplier Support

KD Navien recognizes the importance of shared growth in building a sustainable management environment and securing differentiated competitiveness. We implement various support policies to foster a culture of cooperation, enabling us to grow together with our suppliers.

Category	Activities	2023 Performance
Financial assistance	Accounts receivable system	<ul style="list-style-type: none"> <li>Minimize suppliers' burden of financial interest by providing credit, etc.</li> </ul>
	Improved payment terms	<ul style="list-style-type: none"> <li>Pay the transaction amount in cash to help suppliers secure fund liquidity when requested</li> </ul>
	Operating a paid subcontracting system	<ul style="list-style-type: none"> <li>Prevent suppliers' issues in raw and subsidiary material supply by operating the paid subcontracting system for items with large price fluctuations</li> </ul>
Competitiveness strengthening support	Quality improvement guidance	<ul style="list-style-type: none"> <li>Support quality improvement technology, quality guidance for suppliers, and system improvement</li> </ul>
	Supporting inspection infrastructure	<ul style="list-style-type: none"> <li>Establish inspection/production infrastructure and support inspection</li> </ul>
	Managing chemical substance	<ul style="list-style-type: none"> <li>Establish hazardous substance analysis DB for supplies</li> </ul>
Training support	Supplier evaluation and guidance	<ul style="list-style-type: none"> <li>Evaluate process control related to hazardous substances</li> </ul>
	Supplier environmental mind-up training	<ul style="list-style-type: none"> <li>Conduct training to respond to environmental regulations</li> </ul>
	Suppliers quality training	<ul style="list-style-type: none"> <li>Provide training for guidance on hazardous substance management system</li> </ul>
4M change training	4M change training	<ul style="list-style-type: none"> <li>Provide training on enhancement measures for return defect management and basic quality incident case</li> </ul>
	Partners' Day	<ul style="list-style-type: none"> <li>Conduct 4M change manual training</li> </ul>
	System and process training	<ul style="list-style-type: none"> <li>Conduct quality training for representatives of suppliers and award excellent quality companies</li> </ul>
		<ul style="list-style-type: none"> <li>Conduct training to improve familiarity with the new purchasing system and quality process</li> </ul>
		<ul style="list-style-type: none"> <li>Conducted training for 348 suppliers</li> </ul>

### I Dealer Support and Protection

KD Navien carries out various support activities for dealers who provide differentiated services at the forefront of customer interactions.

Category	Activities
Financial support	<ul style="list-style-type: none"> <li>Sales strategy, new product, and installation training</li> <li>Support advertising expenses for on-site marketing in multifamily residential buildings</li> <li>Supply store display products and sales promotion materials</li> <li>Operate online supplier system (online and offline win-win model)</li> <li>Award excellent dealers</li> <li>Introduce new dealers incubation system</li> <li>Support interior costs for newly opening or relocating dealers</li> </ul>
Welfares	<ul style="list-style-type: none"> <li>Holiday gift set</li> <li>Work uniforms</li> <li>Office supplies such as diaries</li> </ul>
Dealer protection	<ul style="list-style-type: none"> <li>Use Fair Trade Commission's standard agency agreement</li> <li>Guarantee the right to request contract renewal</li> </ul>

### I Supply Chain VOC Management

KD Navien continues to strengthen the communication system with our suppliers through various channels. Our Procurement Planning Team reviews the received details within seven days and immediately forwards them to the relevant teams after assessing the contents, providing guidance on improvement plans and results.

#### VOC Channel

Category	Activities	2023 Performance
Ethics	Online whistleblowing channel	Receive reports on violations of the Subcontracting Act and employees' unethical conduct 0 case
Health and Safety	Health and Safety Council	Receive VOCs including health and safety improvements and grievances within the business sites from executives, employees and workers from suppliers Handling rate: 62.5% (5 cases completed, 3 cases in progress)
General Management	SRM System	Receive VOCs such as complaints and requests regarding the purchase system, operating system, and other operations from external suppliers 0 case
	Surveys	Receive VOCs such as complaints and requests regarding the purchase system and operating system from in-house suppliers through surveys 13 cases received and completed
	Quality Improvement Measures Meeting	Receive reports on defect-related issues and difficulties through monthly in-person meetings 142 cases (for 64 companies)
	Meetings and CRM <sup>1)</sup> System	Receive management-related grievances through regular meetings with owners of dealers 52 cases received and handled

1) Customer Relationship Management

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# Information Security

## Security Management System

### I Organizational Structure

In compliance with relevant laws such as the Act on Promotion of Information and Communications Network Utilization and Information Protection, and the Personal Information Protection Act, KD Navien appointed the head of the business management division as the Chief Information Security Officer (CISO) and Chief Privacy Officer (CPO). We established an information protection dedicated organization directly under the CISO to enhance expertise and responsibility, aiming to prevent loss, theft, leakage, alteration, or damage of personal information through administrative, technical, and physical security measures.



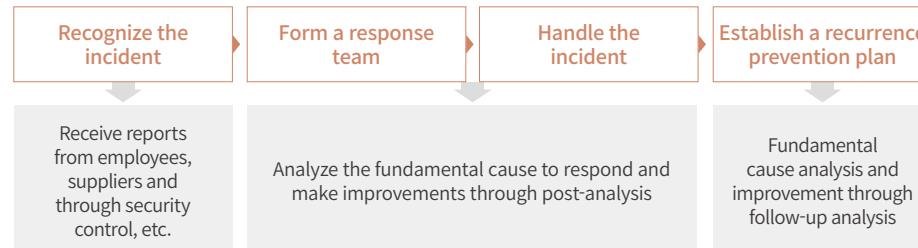
### I Information Security and Privacy Policy

With the final approval of top management, KD Navien has established information security and privacy policies and operated relevant organizations to safeguard the company's critical assets, including business strategy, core technology, research information, and personal information. The Information Security Policy includes enforcement rules and detailed manuals, such as Information Security Management Regulations, Information System Security Rules, and Physical Security Rules, applicable to employees, suppliers, and external parties. The Privacy Policy consists of enforcement rules and detailed manuals like the Personal Information Internal Management Plan, Image Information Processing Equipment Operation Management Rules, and Personal Information Processing Consignment and Provision Management Rules. These policies are made accessible to employees and all suppliers and are posted on the company's website and systems for information subjects to check our personal information management status.

### I Incident Response System

To minimize the damage caused by infringement incidents, such as information security breaches and personal information leaks, KD Navien has established incident response rules compliant with relevant laws such as 'Act On Promotion Of Information And Communications Network Utilization And Information Protection', 'Personal Information Protection Act'. Upon receiving reports or detecting incidents through security control, initial response actions are taken, followed by the organization of an incident response team to investigate the incident's scale, analyze its cause, and facilitate recovery. After closing an incident case, a thorough follow-up analysis is conducted to identify the root cause and implement improvement measures to prevent similar incidents in the future.

#### Incident Response Process



### Consumer Data Protection

In 2023, KD Navien conducted a comprehensive investigation of electronic and paper documents to identify whether there were conventional instances of customers' resident registration numbers being recorded during the service agreement process. We took steps to discard all instances of customer resident registration number entry and provided training and nationwide campaigns for service centers on handling sensitive information. Furthermore, we strengthened the review process for the collection of customers' personal information and procedures for the use to prevent infringement incidents with the support of a information protection dedicated organization.

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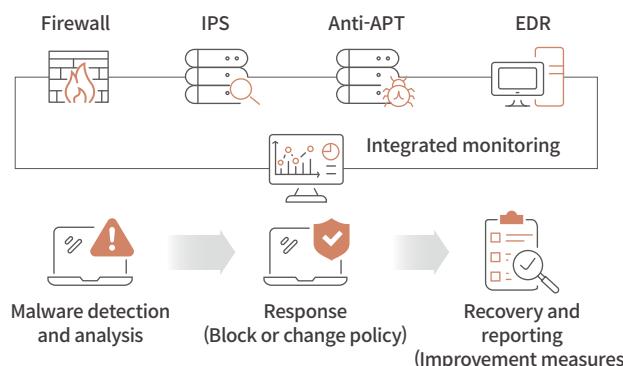
# Information Security

## Security Enhancement Activities

### I Strengthening External Intrusion Response

In 2023, KD Navien upgraded our security system to protect our major information assets from rapidly increasing cyber attacks. We enhanced our security measures by advancing systems such as the Intrusion Prevention System (IPS), Advanced Persistent Threat defense system (Anti-APT), and Endpoint Detection and Response (EDR). We also established a continuous security monitoring system that enables real-time detection and rapid response to external attacks through the introduction of control services from security specialists.

#### External Intrusion Response Security Control



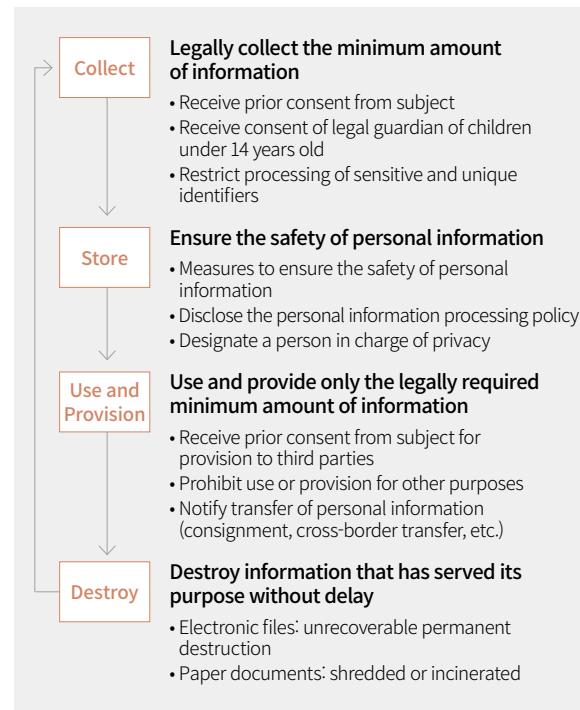
### I Strengthening Information Leakage Prevention

To prevent infringement incidents and information leaks, KD Navien protects key information assets through continuous security investments. These include expanding multi-factor authentication (MFA) for VPNs and servers, introducing network Data Loss Prevention (DLP), and strengthening backup systems. In the event of a suspected information leak, we take measures such as requesting explanations and warnings. For serious violations, we conduct additional audits and convene a personnel committee to take disciplinary or legal action if necessary.

### I Personal Information Lifecycle Management

KD Navien regularly manages the personal information lifecycle from collection, storage, use and provision, to the destruction of personal information processed in our personal information processing systems. This approach ensures clear communication of the status of each processing stage and guides the implementation of appropriate management, technical, and physical protection measures. For new or modified personal information processing systems, we mandate a checklist to comply with privacy laws, ensuring the protection of privacy.

#### Personal Information Management Process



### I Training and Campaigns

#### Information Protection Training

To raise employees' awareness of privacy and information protection, KD Navien conducts regular training at least once a year. For new hires, we promote compliance and roles related to information protection within the company through mandatory training and information protection training, assigning responsibilities to prevent information protection risks. We also provide specialized training on privacy to teams handling personal information, aiming to prevent incidents such as personal information leakage. We further raise awareness by inspecting the training and implementation status of cooperating companies, such as service stores.

#### Information Protection Campaign

KD Navien conducts a quarterly PC personal information clean campaign to encourage information destruction and file password setting. In 2023, we introduced security rules and announced revisions to our information security policy due to the use of AI chatbots. We also carried out activities to prevent information leaks and infringements that may occur while using email.

### I Information Protection Monitoring Activities

KD Navien aims to detect infringement incidents, such as data leakage, in advance to ensure the safe protection of our main assets, including business strategy, core technology, and personal information. In the event of an unforeseen infringement incident, we conduct regular inspections and analyze the status to promptly recognize and minimize damage.

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# Local Communities

## Local Community Management System

### I Organizational Structure

KD Navien establishes social contribution goals and directions annually through a dedicated social contribution organization, and then formulates strategies based on these objectives.

### Local Community Management Governance



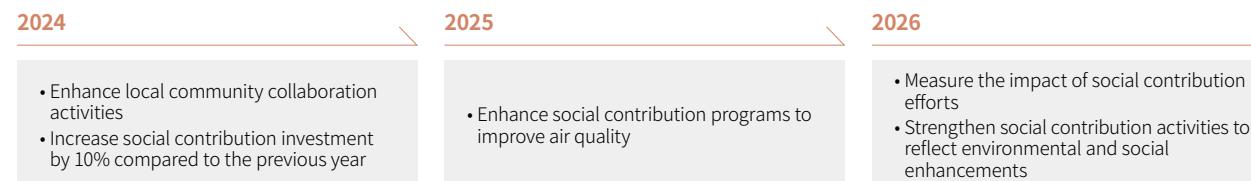
### I Strategy

In line with our management philosophy of 'Social contribution through business', KD Navien strives to create a warmer life and a cleaner world. Our efforts are centered around three core business areas: improving the living environment, supporting future generations, and fostering win-win cooperation with local communities. Together with the local community, all employees participate in social contribution activities. For instance, we enhance the living environment of vulnerable groups by providing boilers and heated mattress pads, and we contribute to a sustainable future by supporting energy technology research activities of undergraduate and postgraduate students through the non-profit organization Nulpurun. We also continue to support cultural and artistic endeavors to grow alongside our local communities, and we actively support the Hangeul Nuri Foundation to promote the spread of Hangeul worldwide.



### I Management Goals

KD Navien aims to strengthen our social contribution policy to harmonize environmental, social, and corporate decision-making by comprehensively considering current issues in local communities and their impact on the environment. We also plan to measure and analyze the impact of our social contribution activities and advance policies and programs accordingly.



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## Improving the Living Environment

### I Activities to Improve the Living Environment

To create a warmer world, KD Navien engages in both direct and indirect heating environment improvement activities for socially vulnerable groups. By participating in residential environment improvement projects with organizations like Habitat Korea and POSCO E&C, we aim to synergize efforts and provide warmth during winter by offering free emergency boiler inspections and service support to various stakeholders affected by natural disasters like flooding.

#### 2023 Residential Environment Improvement Activities

Activity	Details	Beneficiary Benefits <sup>1)</sup>
Sponsorship of the Habitat Korea Residential Environment Improvement Project	Contributed to the self-reliance of low-income, homeless households by providing boilers and water heaters to housing construction and repair sites	KRW 4,382,000
Sponsorship of the POSCO E&C Eco Dream Project	Reduced nitrogen oxide emissions by sponsoring eco-friendly condensing boilers, thereby reducing heating costs and improving the quality of life for low-income households, including shelters for female victims of abuse and elderly living alone	KRW 2,336,000
Sponsorship of KyungDong City Gas' Bring Warmth to Children's World project	With KyungDong City Gas, supported gas bills and improved the heating environment for vulnerable groups and welfare facilities in the Ulsan area through the Ulsan Branch of ChildFund Korea	KRW 2,901,000
Additional boiler replacements for low-income households	Covered the entire replacement cost exceeding the government subsidy for beneficiaries (low-income households, lower middle-income group) wishing to replace old boilers with eco-friendly condensing boilers	KRW 245,430,000
Donation of eco-friendly boilers to energy-vulnerable groups in Seoul	Signed an agreement with the Seoul Metropolitan Government to donate eco-friendly boilers and support their installation, improving heating conditions for energy-vulnerable groups	KRW 10,369,000
Restoration of flood-affected areas	Repaired and restorated damaged products caused by natural disasters	KRW 2,449,000 <sup>2)</sup>

1) Benefits acquired by beneficiaries through in-kind donations and social contribution activities

2) Repair costs for repair and restoration

### Restoration of Flood-affected Areas

In 2023, KD Navien Daejeon, Wonju, Daegu Center, and nearby service centers conducted four emergency recovery service activities in response to natural disasters such as torrential rains and typhoons. They supported a total of 211 product repairs and restorations. In recognition of these prompt support efforts, we received an official letter of appreciation and a plaque of recognition from the Mayor of Cheongju.



### I Supporting the Vulnerable Groups

KD Navien sponsors heating products to aid socially vulnerable groups, including the elderly living alone and low-income households who are particularly susceptible to cold weather. We distribute heated mattress pads to individuals facing economic hardships, ensuring they stay warm during the winter.



#### 2023 Activities to Support the Winter of the Vulnerable Groups

Activity	Details	Beneficiary Benefits <sup>1)</sup>
ChildFund Korea Sponsorship	Provided heating mats to alleviate the heated mattress pads for the underprivileged and low-income households	KRW 181,444,000
Sponsorship of Support Center for Senior Citizens Living Alone	Provided heating mats to support the heated mattress pad alone in preparation for the cold weather	KRW 271,630,000

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## Supporting Future Generations

### Energy and Environmental Technology Research Sponsorship

KD Navien carries out various practical projects for the future environment through the Nulpurun Foundation, which fosters social interest and revitalization in the energy sector while supporting projects to address environmental issues.

Established in April 2000 through a donation by KD Navien's CEO Sohn Yeon-ho, the Nulpurun Foundation is a non-profit public interest corporation under the Ministry of Environment. Its mission is to promote technological innovation for the coexistence of humans and nature, in line with the ethical guidelines of sustainability. Nulpurun is engaged in various projects to become a partner and leader for everyone concerned with energy and environmental issues, paving the way for a creative future.



### Promoting the Excellence of Hunminjeongeum and Hangeul

Through the Hangeul Nuri Foundation, KD Navien aims to accurately promote the birth of Hunminjeongeum and the excellence of Hangeul to people worldwide. Established in 2022 through a donation by CEO Sohn Yeon-ho, the foundation conducts its own research projects through the Hangeul Nuri Research Institute, while also supporting scholars and Hangeul research organizations, making every effort to lead Hangeul in serving as a global language.

### 2023 Hangeul Festa

Hangeul Nuri Foundation held Hangeul Festa in 2023 to showcase the excellence and potential of Hangeul. The contest involved people from around the world submitting their native languages written phonetically in Hangeul and Hunminjeongeum, aiming to promote the beauty of Hangeul and foster cultural exchange. This will be held every year as a Hangeul Festival for people around the world. Out of the 193 entries received from participants representing 45 countries, 99 were awarded, including the Grand Prize, the Chairperson's Award of the Korean Language Society, and the Second Prize. Awards were based on criteria such as the accuracy, efficiency, creativity of the writing, and the artistry of the video.



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# Local Communities

## Win-win Cooperation with Local Communities

### I Sponsorship on Arts and Culture

KD Navien has supported cultural and artistic development projects in local communities.

#### Sponsorship of Pyeongtaek Cultural Foundation

Since 2022, KD Navien has sponsored the Pyeongtaek Cultural Foundation to support the cultural development of Pyeongtaek, home to our Seotan Factory. In 2022, we were the sole sponsor of the Pyeongtaek Hangarak Festa which is a local festival, and in 2023, we sponsored the Josumi Concert In LOVE on New Year's Day, contributing to the cultural development of Pyeongtaek. We plan to continue sponsoring cultural initiatives in Pyeongtaek in the future.



#### Sponsorship of Messiah Philharmonic Orchestra

KD Navien sponsors the regular concerts of the Messiah Philharmonic Orchestra, a non-profit private organization composed of instrumental music majors. The orchestra holds concerts to raise funds for vulnerable groups, including individuals with mental and physical disabilities, households headed by minors, and the underprivileged elderly. They also perform traditional Korean music, works by Korean composers, and music commemorating patriotic martyrs to deliver hope, courage, and emotion to our marginalized community.



#### Korean Red Cross MOU Blood Drive

KD Navien has signed a Life Sharing agreement with the Korean Red Cross to promote shared growth with the local community and foster a healthy donation culture through regular blood drives. In 2023, 127 employees donated blood in three rounds, contributing 109 blood donation certificates to the local community, thereby stabilizing the blood supply. We plan to continue to organize blood drives at least twice a year, practicing social values by fostering a culture of respect and consideration through blood donation campaigns.



### I Global Social Contribution

KD Navien is actively engaged in various countries, including the United States, China, the United Kingdom, Uzbekistan, and Mexico, to contribute to local community development and promote our values of social contribution. In 2023, our Uzbekistan branch was recognized as an excellent company for CSR activities at the CSR forum co-hosted by the Embassy of the Republic of Korea in Uzbekistan and the Uzbekistan Chamber of Commerce and Industry.

Category	Activity	2023 Performance
US Corporation	Sponsored Koreatown Senior Communication Center	USD 5,000
	Sponsored environmental education activities at recycling centers in the US	USD 300
	Sponsored Korean Family Counseling Center and Korean families	7 water heated mattress pads
	Sponsored water heaters for the smooth operation of the US flower town	3 water heaters
	Supported residential improvement projects through US and Canada Habitat	23 water heaters
	Donated water heaters to support redevelopment of US corporation East Warehouse	1 water heater
Uzbekistan Corporation	Donated boilers to improve the living environment of the underprivileged Koryoin	10 boilers
	Promoted the installation of benches for the rest area of students of the Korea Education Institute	USD 2,800
	Sponsored youth taekwondo competitions to support youth and sports activities	USD 4,022

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# Governance

## Board Composition

### I Members

Recognizing that transparency, professionalism, and stability in governance are essential for sustainable growth, value increase, and protection of the rights and interests of stakeholders such as shareholders, KD Navien is committed to maintaining a corporate governance structure that aligns with the company's growth path and organizational culture, along with board-centered management. The full text of all internal regulations and activities related to corporate governance, such as the Board of Directors Operating Regulations and Board Committee Regulations, is disclosed on our website to help stakeholders understand the governance structure and promote transparency in governance practices. To ensure the board operates efficiently and smoothly, the CEO has been appointed as the Chairperson of the board. To implement a stable governance structure through checks and balances among members, the board includes three outside directors out of eight members, accounting for 37.5% of all members, which exceeds the one-fourth requirement mandated by the Commercial Act.

(As of March 31, 2024)

Category	Name	Gender	Date of Birth	Year of Appointment	Duties	Career	Board Committees
Executive Director	Sohn Yeon-ho <sup>1)</sup>	Male	Jul. 1951	Mar. 2024 (reappointed)	In charge of overall management	CEO & Chairperson of KD Navien	Management Committee (Chairperson)
	Kim Jong-uk	Male	Sep. 1964	Mar. 2024 (reappointed)	In charge of production, quality, development, safety and DT	(Former) Head of Hanwha Techwin R&D Center (Former) Vice President of KD Navien (Current) CEO & Vice President of KD Navien	Management Committee
	Sohn Heung-rak	Male	Jun. 1981	Mar. 2024 (reappointed)	In charge of CCM and procurement	(Former) Managing Director of KD Navien (Former) Vice President of KD Navien (Current) President of KD Navien	Management Committee
	Kim Yong-bum	Male	Apr. 1966	Mar. 2024 (reappointed)	In charge of sales and marketing	(Former) Managing Director of KD Navien (Former) Senior Managing Director of KD Navien (Current) Vice President of KD Navien	Management Committee
	Park Seong-keun	Male	Jul. 1964	Mar. 2024 (newly appointed)	In charge of management	(Former) Managing Director of Dongbu Express (Current) Vice President of KD Navien	Management Committee
Outside Director	Sohn Yang-hoon	Male	Sep. 1958	Mar. 2024 (reappointed)	Overall management	(Former) President, Korea Energy Economics Institute (Former) President, Korean Resource Economics Association (Former) Professor of Economics, Incheon National University (Former) Outside director and Audit Committee Member of E1 (Current) Outside Director of KD Navien (Current) Outside Director of SK Gas	-
	Hong Joon-kee	Male	Oct. 1958	Mar. 2024 (reappointed)	Overall management	(Former) CEO of Coway (Former) CEO of KD Navien (Current) Outside Director of Solum (Current) Outside Director of KD Navien	-
	Oh Sun-young	Male	Jan. 1967	Mar. 2024 (newly appointed)	Overall management	(Former) Executive Director of Samil PwC (Current) Full-time Auditor at Cosmax BTI (Current) Visiting Professor, Seoul National University Business School (Current) Outside Director of KD Navien	-

1) Chairperson of the Board

# Governance

## Board Composition

### Independence

KD Navien organized the board with members not representing any specific interests or occupational groups so that it can substantially exercise the function of keeping the management in check. To achieve transparent governance, we disclose details of operations, procedures, and results. We promote checks and balances among board members, management, and outside directors through internal regulations such as the Articles of Incorporation, the Board of Directors Operating Regulations, and other bylaws. The Chairperson/CEO of the company were appointed as a chairperson of the board by the Board of Directors to enhance operational efficiency. To ensure the board's independent supervision of the Company's management and to prevent conflicts of interest, the Board of Directors Operating Regulation were amended to appoint lead-independent directors as board members. Individuals with special interests in board resolutions are prohibited from exercising their voting rights. For matters subject to conflicts of interest under Article 397-2 (Prohibition of Appropriation of Company's Opportunities and Assets) and Article 398 (Transactions Between Directors and Company) of the Commercial Act, the Articles of Incorporation stipulate that resolutions require the approval of at least two-thirds of the directors.

KD Navien's Board Skills Matrix (BSM)

Category	Executive Director					Outside Director			Definition
	Sohn Yeon-ho	Kim Jong-uk	Sohn Heung-rak	Kim Yong-bum	Park Seong-keun	Sohn Yang-hoon	Hong Joon-kee	Oh Sun-young	
Leadership	●	●	●	●	●	●	●	●	Understanding of growth engines such as corporate strategy, human resource and organization management, and risk management
CEO experience	●	●	●				●		
Business	●	●		●	●	●	●		Corporate management experience or professional knowledge about corporate management
Economics and Finance					●				Proficient understanding and professional knowledge of domestic and international economic trends and financial market changes
Accounting and Corporate Finance				●		●			Knowledge and expertise in accounting standards and financial statements
Digital and IT		●							Professional expertise in digitalization and IT application in business processes
Industry	●	●	●	●	●	●	●		Industry-specific expertise (degree or business experience)
R&D	●	●		●					Experience in new product development through technology research and management
Supply Chain and Procurement	●	●	●						History of improving process efficiency across the supply chain from production to procurement and distribution
Global Business	●			●		●			Global business experience based on knowledge of global environmental, economic, and legal landscapes

# Governance

## Board Composition

### I Director Appointment Process

KD Navien operates a fair and transparent process to appoint directors who align with the interests of shareholders and stakeholders. Through reference checks and interviews of outside director candidates representing stakeholder groups, their eligibility is initially assessed to ensure compliance with the requirements outlined in the related legislations such as Commercial Act and the Public Service Ethics Act. Following this, they are appointed with comprehensive consideration of board diversity, the management environment, as well as their expertise, fidelity, and independence.



- Conduct pre-interview and reference check
- Assess expertise, fidelity and independence

- Appoint directors

- Disclose and register

### I Board Committees

For swift and efficient decision-making, KD Navien established the Management Committee. Drawing upon their professional management knowledge and experiences, the Management Committee members are comprised of five executive directors within the board, and are engaging in effective, in-depth deliberations on the company's general management issues, financial matters, and other important concerns delegated by the board. According to Article 14 of the Management Committee Operating Regulations and Paragraph 4, Article 393-2 of the Commercial Act, resolutions of the Management Committee are reported to each director. Upon receiving the report, directors have the option to request a board meeting, where the decision made by the Management Committee can be further deliberated. During the 50th general shareholders' meeting held on March 29, 2023, we laid the groundwork for the establishment of board committees, including the Outside Director Candidate Recommendation Committee, ESG Committee, Internal Transaction Committee, and Remuneration Committee, within the board through the revision of the Articles of Incorporation.

#### Role of the Management Committee

Category	Roles
General Management	<ul style="list-style-type: none"> <li>• Mid to long-term management goals and strategies</li> <li>• Determination of business planning and restructuring</li> <li>• Entry into, transfer, and withdrawal from overseas subsidiaries and branches</li> <li>• Establishment and abolition of important regulations</li> <li>• Mid to long-term technology development planning</li> <li>• Mid to long-term personnel management planning</li> <li>• Retirement allowance payout ratio for executives</li> <li>• Other important management issues</li> </ul>
Finance	<ul style="list-style-type: none"> <li>• Conclusion of contracts delegated by the board</li> <li>• Mid to long-term budgeting, accounting, funding plan</li> <li>• Financial practices, or financial transactions according to internal rules, etc. of external accounts (if proceedings equivalent to those of the BOD are required by external account regardless of scale)</li> <li>• Other important financial issues</li> </ul>
Other	<ul style="list-style-type: none"> <li>• Other important management issues and delegated matters by the board</li> </ul>

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## Board Operations

### Board Activities

Following the Board of Directors Operating Regulations, the board convenes regular (quarterly) and ad hoc (as necessary) meetings. Members receive notifications of the schedule and agenda items seven days prior to the meeting<sup>1)</sup> to Board of Directors and auditors. To ensure effective performance of duties, outside directors cannot hold positions as directors, executive officers, or auditors in two or more companies concurrently, as outlined in Subparagraph 3, Paragraph 5, Article 34 of the Enforcement Decree of the Commercial Act. In-person attendance is the default requirement, but if not possible, directors can participate in the resolution through virtual communication that transmits and receives voice in real-time<sup>2)</sup>. As per Article 15 of the Board of Directors Operating Regulation, minutes are prepared, documenting the agenda, progress, results, objections expressed, and the reasons for them, and signed by the directors and auditors present. The details are posted quarterly on the website, allowing shareholders easy access to the board's resolutions. In 2023, six board meetings were held, with 13 items presented as report agendas, including reports on management plans for material issues. 15 items were deliberated and approved, including the self-evaluation of the board and directors, and CEO succession regulations.

Year	Meetings Held (session)	Items deliberated/ Reported (case)	Average Attendance Rate (%)
2021	10	19/6	100
2022	6	20/9	100
2023	6	15/13	100

1) If all directors and auditors agree, the convening procedure can be omitted

2) The director is recorded as present in person

### Board Training

KD Navien develops and implements various training plans to support the effective performance of the Board of Directors. Training for board members is conducted through KD Business School, focusing on leadership, social change, and trends. Newly appointed directors are also invited to visit the Seotan Factory, our production base, to become acquainted with the company. In addition to management-related topics, we plan to provide training on ESG management, aiming to equip the board to make informed decisions for the sustainable growth of the company.

### Board and Director Assessment

KD Navien's board members conduct annual self-evaluations regarding the overall operation of the board. They then report the evaluation results to the board, utilizing them to improve its operation.

#### 2023 Board and Director Assessment Results

Category	Assessment Item	Score
Board Assessment	Board roles and responsibilities	4.6
	Board structure	4.0
	Board operations	4.1
	Incorporate evaluation results	4.1
Director Self-Assessment	Engagement	4.2
	Experience and knowledge	4.3
	Contributions to the Board	4.2
	Board accountability	4.4

### Board Remuneration System and Status

KD Navien's directors receive remuneration within the limits approved by the general shareholders' meeting. Following internal standards, the remuneration of outside directors is a fixed amount that considers the responsibilities and risks associated with their duties, as well as the range of remuneration for outside directors in other companies. The annual salary of executive directors is determined by their contributions to the company, while performance bonuses are determined and paid based on the company's sales and the performance level of each organization and individual.

#### Board Remuneration Status

(Unit: KRW million)

Year	Category	Number of Directors	Total Remuneration	Average Remuneration per person
2021	Executive Director	5	811	162
	Outside Director	2	84	42
2022 <sup>1)</sup>	Executive Director	5	1,301	325
	Outside Director	4	116	39
2023	Executive Director	4	1,109	277
	Outside Director	3	126	42

1) Includes one executive director and one outside director who resigned in 2022

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# Governance

## Shareholders' Rights

### I Dividend Policy

KD Navien balances business investment and shareholder returns for future growth through continuous profit generation, with stability and predictability as the criteria for our dividend policy. To avoid a downward revision of the dividend per share, we have implemented a stable dividend, ensuring it is at least the same or moderately increased compared to the previous year. Over the past years, we have consistently increased the dividend per share, with increments of KRW 50 for the 44th to 48th fiscal years, and a KRW 100 increase for the 49th fiscal year compared to the 48th fiscal year. In addition, we have increased the dividend per share for eight consecutive years, including a KRW 50 per share increase in the 50th and 51st fiscal years. We have also paid dividends for 30 consecutive fiscal years, providing shareholders with predictability regarding dividend payments.

Moving forward, we will continue to review our financial position, cash flow, changes in the business environment, and investment plans to pursue corporate growth, shareholder returns, and the maximization of shareholder value from a long-term perspective.

### I Composition of Shares and Shareholders

According to KD Navien's articles of incorporation, the total number of authorized shares is 30,000,000, with a par value of KRW 1,000 per share. As of now, 14,568,592 shares have been issued. Excluding 115,660 treasury shares, the number of circulating shares is 14,452,932 common shares. As of December 31, 2023, KD One is the main entity holding more than 5% of the shares.

#### Largest Shareholders and Related Parties

Category	Number of shares owned	Shareholding Ratio
KD One	8,263,287	56.72
Sohn Yeon-ho	129,262	0.89

#### Shareholders' Status

Category	Number of shares owned	Shareholding Ratio
Shareholders with more than 5%	KD One	8,263,287
Shareholders with less than 1%		4,605,962

### I Investor Communications

KD Navien continues to communicate with major investors to understand various stakeholders' needs and respond to their inquiries.

#### Communication with Key Investors in 2023

- Responding to inquiry calls from investors (year-round)
- Quarterly investor relations meetings (4 times/year)

### Resolution of the General Shareholders' Meeting

To enhance substantial shareholder value by strengthening shareholder rights, KD Navien has implemented an electronic voting system and proxy solicitation for eight consecutive years up to the 2024 General Shareholders' Meeting. Details about electronic voting and proxy solicitation rights are disclosed in the notice of the general shareholders' meeting and the proxy solicitation reference documents using the electronic disclosure system of the Financial Supervisory Service.

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# Risk Management

## Risk Management System

### I Organizational Structure

KD Navien is exposed to various environmental changes, including the rapid growth of overseas sales, the strengthening of environmental regulations, and the legal requirement of using eco-friendly products. To effectively respond to these regulations, such as decarbonization policies for building energy, we are reviewing the transition to a hydrogen gas grid and the application of electric heat pumps. We are also promoting expansion into B2C businesses such as the introduction of heated mattress pads and rental businesses.

While these rapid environmental changes and business expansions provide an opportunity for us to leap forward as a global leading company in the living environment, they also expose us to risks associated with each environmental change, posing challenges in securing response capabilities. The increase in operational risks due to geopolitical conflicts and the intensification of the climate crisis continuously increases uncertainties, making it challenging to predict future changes in the business environment. In response, we have appointed the head of business management as the Chief Risk Officer (CRO) and established a response system to manage these risks. We have built a planning team for each division tailored to the characteristics of products and businesses, with each division and department head responsible for risk management in their relevant sector while the CRO oversees company-wide risk management.

We conduct various meetings, such as monthly division strategy meetings, management committee meetings, and weekly executive meetings, to proactively inspect non-financial and financial risk factors, including laws and regulations related to the business environment and climate change. During these meetings, we report specific details and preemptively review and discuss response plans. Additionally, for risks that are difficult for a single team to address alone, we collaborate with relevant teams to jointly respond.

### Risk Management Governance



### Major Roles of Organization

Organization	Roles
Board of Directors	<ul style="list-style-type: none"> <li>• Review risks</li> <li>• Oversee and establish policies</li> </ul>
Chief Risk Officer	<ul style="list-style-type: none"> <li>• Oversee risk management</li> <li>• Assist the board and report significant matters</li> </ul>
Meeting bodies and each planning organization	<ul style="list-style-type: none"> <li>• Identify, prevent, monitor and respond to risks</li> <li>• Execute effective risk management plans</li> </ul>

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# Risk Management

## Risk Response Measures

### I Major Risks

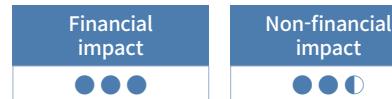
To ensure the safety of business operations, KD Navien identifies eight major risks, including financial and non-financial risks, and establishes and monitors response measures accordingly.

Category	Risk	Response Measures
All	Strategy and Operations	<ul style="list-style-type: none"> <li>Conduct company-wide reviews of economic, social, and environmental changes, as well as financial and non-financial risks, through weekly and monthly meetings of consultative bodies comprising key executives</li> </ul>
Financial	Foreign Exchange	<ul style="list-style-type: none"> <li>Establish an exchange risk management system to standardize foreign currency funding schedules</li> <li>Continuously monitor exchange rates for key transaction currencies (USD, EUR, CNY, etc.)</li> </ul>
	Interest Rate	<ul style="list-style-type: none"> <li>Monitor interest rates and fluctuation forecasts closely</li> <li>Adjust the balance between fixed and variable interest rate borrowings</li> </ul>
	Tax	<ul style="list-style-type: none"> <li>Highest priority tax policy: Strictly comply with tax policy, ensuring adherence to tax regulations and timely completion of tax payments</li> <li>Evaluate tax risks in advance and implement follow-up management with advice from accounting team and external experts</li> </ul>
Non-Financial	Environment	<ul style="list-style-type: none"> <li>Apply internal criteria stricter than statutory regulations for air and water polluting substances</li> <li>Establish a voluntary GHG emissions management system and expand renewable energy use through initiatives such as solar generating facilities installations</li> </ul>
	Health and Safety	<ul style="list-style-type: none"> <li>Strengthen response capabilities by appointing the Chief Safety Officer (CSO) as the top decision-maker for health and safety-related operations</li> <li>Give greater emphasis to fire occurrence risks and establish cooperative systems with local fire stations</li> </ul>
	Quality	<ul style="list-style-type: none"> <li>Establish and operate activities related to quality management systems</li> <li>Provide user manuals to consumers to minimize problems during product use</li> </ul>
	Regulatory	<ul style="list-style-type: none"> <li>Introduce a compliance officer system</li> <li>Utilize internal and external professional personnel and legal counsel effectively</li> </ul>

### I Potential Risks

KD Navien identifies potential risks based on external trends and analyze their financial and non-financial impact to establish a proactive response system.

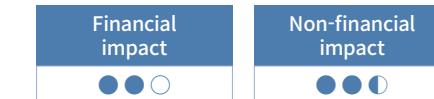
#### Carbon Neutrality-Related Industry and Market Changes



With the spread of the global carbon neutrality movement, the push for high efficiency and electrification of heating energy in the building sector is accelerating, and the International Energy Agency (IEA) is recommending a ban on new sales of fossil fuel boilers from 2025.

Despite the risk of increased initial investment costs due to the development of new technology during this transition process, KD Navien is promoting the development of hydrogen combustion technology, electric heat pumps, and high-efficiency technology, aiming to expand product opportunities based on non-fossil fuels and renewable energy. Moreover, we plan to identify market trends and establish proactive response strategies to strengthen our competitiveness in the future market.

#### Supply Chain Sustainability Management



As the importance of global supply chain sustainability management increases, driven by mandatory EU human rights and environmental due diligence, the scope of related regulations is expected to expand. Despite the rise in operating costs from activities to strengthen the capabilities of suppliers, KD Navien is striving to develop a sustainable supply chain environment by establishing a proactive regulatory response system and implementing gradual measures to mitigate negative impacts related to labor, human rights, and the environment.

We have also established a Supplier Code of Conduct to ensure supply chain sustainability management and are planning a comprehensive supply chain evaluation that encompasses labor, human rights, and environmental factors. We plan to continue managing negative impacts through the advancement of the evaluation system.

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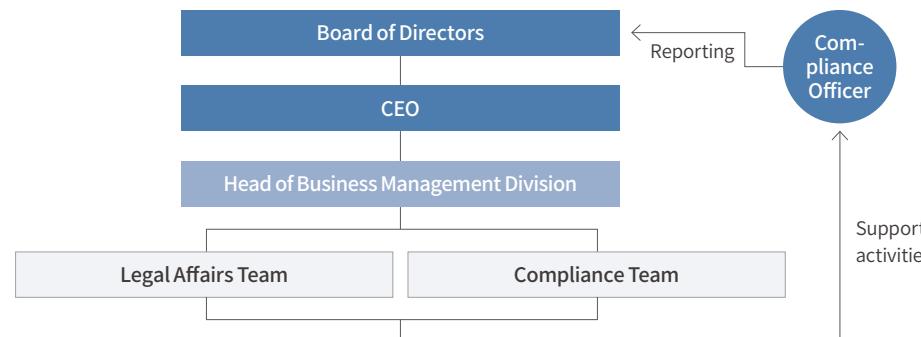
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# Compliance

## Compliance Management System

### I Organizational Structure

Under Article 542-13 (Standards for Compliance Control and Compliance Support) of the Commercial Act, KD Navien appointed a compliance officer at the Board of Directors meeting held on March 24, 2021. The Legal Affairs Team and Compliance Team assist the compliance officer, and the compliance officer conducts compliance inspections on the company's operations and employees, improving all possible violations, and reporting to the board.



### I Fair Trade Principles

KD Navien has set the founding philosophy of "social contribution through business" as a value to be pursued through corporate management activities. We present the value judgment and code of conduct that the company, employees, stakeholders, and customers should abide by as members through the Code of Ethics and Code of Ethics Practice Guidelines, requiring strict compliance with the Fair Trade Act.

By establishing and implementing compliance control standards approved by top management, we strive to promote fair and transparent business operations, securing the sound development of the company and the trust of our customers.

### I Internal Control Policy

KD Navien operates an internal control over financial reporting (ICFR) system to prevent errors and fraud that may cause the misstatement of financial statements and to prepare and disclose reliable financial statements. Based on the revised Act on External Audit of Stock Companies, the company introduced an internal control over financial reporting operation system that complies with the new model standards in 2021.

We established a separate internal control over financial reporting team to ensure independence as well as to test and evaluate the design and operating effectiveness. Furthermore, we have established performance evaluation standards in relation to the responsible operation of the internal control over financial reporting system. The CEO and internal control over financial reporting managers inspect the operating effectiveness of the system every fiscal year. The CEO reports the operational status directly to the audit director, the board of directors, and the general meeting of shareholders. The internal control over financial reporting is audited by an independent external auditor.

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# Compliance

## Compliance Management Activities

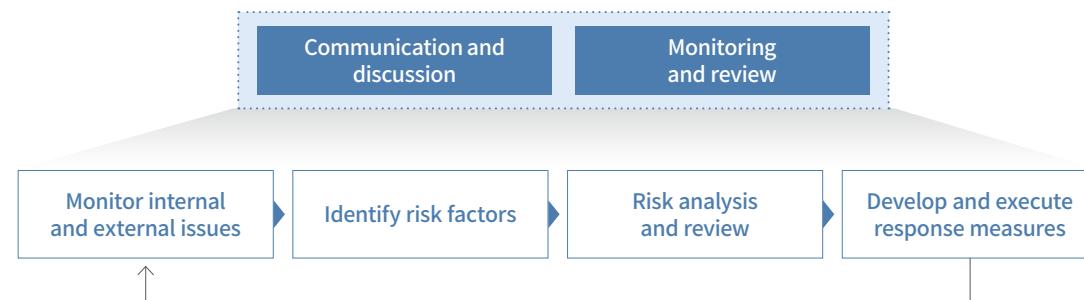
### | Fair Trade Management Activities

KD Navien constantly monitors amendments and updates of major fair trade laws and regulations every month and changes in government policies. In 2023, we prepared and provided opinions on various fair trade laws, such as the Agency Act, and distributed manuals on global legal affairs, construction, competition law, corporate groups, and companies in general, to help all employees cultivate fair trade awareness and carry out fair trade management activities. In 2024, we plan to promote the update of the company's standard contract, guide and monitor pending issues and compliance issues for the company and relevant teams, identify areas for improvement related to competition law, implement mitigation activities, and monitor them.

### | Fair Trade Risk Assessment

KD Navien identifies compliance issues for each transaction field and monitor the response status of relevant teams to the findings. In 2023, administrative regulations and laws related to business and products were reviewed in advance to check the status of the identified issues. With the implementation of the delivery price indexation system, we are managing risks by identifying the preliminary preparations and response status of relevant teams. We will systematically identify, analyze, review, and address significant internal and external issues and risk factors as they arise, aiming to minimize their impact on our business activities.

#### Risk Assessment Process



### | Compliance Training

To prevent legal risks and achieve work efficiency, KD Navien implements differentiated compliance training programs for employees for each job.

In 2023, we conducted two internal compliance trainings, excluding legally mandated training, to raise employees' awareness in compliance.

#### 2023 Compliance Training

Date	Details	Participants
May 2023	Administrative regulatory and legal system and review methods	30 people (Product and Policy Planning related teams)
September 2023	Company-wide compliance training	869 people

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# Ethics Management

## Ethics Management System

### I Organizational Structure

KD Navien permanently operates the Management Improvement Department as a dedicated team for internal audits. The Management Improvement Department conducts objective and transparent audits of the company's accounting and business, securing corporate value by enhancing fairness. Audit department members, including full-time auditors, contribute to the improvement of business procedures and cost reduction in line with ethical management based on their extensive work experience and deep understanding of work processes, constantly demanding audit recommendations. We also operate an independent and objective audit organization to establish an audit system that meets the best corporate governance standards. Through transparent expense execution and audits focused on business improvement, we develop an audit system aligned with principles of righteous management.



### I Ethics Regulations

KD Navien's ethics management aims to instill ethical awareness among individual employees and maintain customer relationships based on trust by defining the basic principles for rational and incorruptible management and the duties to be fulfilled by all employees. To this end, we established and declared the Code of Ethics, approved by the top management in 2004. We strive to enhance employees' ethical awareness by clearly disclosing detailed content and handling procedures related to the practice of workplace ethics through the 'Code of Ethics Practice Guidelines'.

#### Code of Ethics

To fulfill our social responsibility and comply with corporate ethics with all stakeholders, KD Navien has established a Code of Ethics that provides standards of correct value judgment and behavioral principles that all employees must follow. The Code of Ethics presents the Code of Conduct and value judgment criteria to be followed by employees of KD in their interactions with customers, society, suppliers, employees, the Company, and shareholders. All employees are obligated to observe the Code of Ethics, and stakeholders engaged in various relationships with KD are also strongly encouraged to comply with the Code of Ethics.

[KD Code of Ethics](#) <

#### Code of Ethics Practice Guidelines

The Code of Ethics Practice Guidelines was established to improve employees' ethical awareness. It prescribes the behavioral principles and necessary procedures for handling ethical issues that employees may face in everyday life. The guidelines contain behavioral principles concerning unfair trade practices, such as corruption, bribery, conflict of interest, antitrust and collusion, and unethical conduct such as money laundering.

[Practice Guidelines](#) <

#### Anti-Corruption Policy

KD Navien has established anti-corruption policies to enhance trust with various stakeholders, improve partnerships, and cultivate anti-corruption awareness among employees and suppliers. Our Anti-Corruption Policy advocates ethical and moral values to mitigate corruption and bribery risks, ensuring adherence to relevant laws and regulations. All employees are required to comply with these laws and regulations while performing their duties. In addition, our overseas subsidiaries are guided to perform operations transparently and fairly by complying with the local anti-corruption laws.

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# Ethics Management

## Ethics Management Activities

### I Ethical Risk Monitoring

KD Navien's Management Improvement Office establishes an annual audit plan and conducts regular/ad hoc audits to evaluate the overall status of management activities, suggesting improvement measures for inefficiencies and other issues. We also investigate ethical management violations by employees and take appropriate measures such as disciplinary action based on the outcomes. Performance audits are also conducted to check and manage the implementation of follow-up measures.

### I Reporting Process

KD Navien operates a website-based online whistleblowing channel to facilitate free reporting by internal and external stakeholders, including employees and suppliers. Other whistleblowing channels include phone and post. Through these channels, we take appropriate corrective measures in cases of employee corruption and irregularities, unfair conduct towards suppliers, conflicts of interest, violation of regulations, obstruction of sound organizational culture, and other conduct against the Code of Ethics. In accordance with the principle of whistleblower protection, the whistleblowers' identity and the content of their reports are kept strictly confidential. We also prohibit any discrimination, penalization, and retaliation against whistleblowers. Any violation of the principle of whistleblower protection is punished according to internal rules.

#### Ethics Management Whistleblowing

Subject to Report	Channel
<ul style="list-style-type: none"> <li>Employee corruption and irregularity</li> <li>Unfair conduct to suppliers</li> <li>Conflict of interest, including transactions with interested parties and loans between employees</li> <li>Other violations of ethics management</li> </ul>	<ul style="list-style-type: none"> <li>Online report  <a href="#">Online report</a></li> <li>Post: Management Improvement Department, 101, Yeouigongwon-ro, Yeongdeungpo-gu, Seoul, Republic of Korea</li> <li>Phone: +82-2-3489-2444, +82-2-559-8213</li> </ul>

### I Handling Status

In 2023, disciplinary measures were taken against 13 cases of ethical management violations, including misuse of company assets, acceptance or provision of money or gifts from/to stakeholders, document manipulation and false reporting, workplace harassment, and neglect of duty. Other reports such as customer complaints and A/S requests were forwarded to the relevant team to be handled, with the results confirmed by the Management Improvement Office.

### I Ethics Training

KD Navien provides regular ethics training to all employees to secure organizational integrity through the establishment of ethics management. In addition to mandatory training for all employees, we offer introductory training for new and experienced employees who join the company, and specialized training is offered for those in leadership positions. By segmenting the training curriculum, we aim to improve individual employees' ethics awareness.

In 2023, we conducted introductory training for new employees focusing on the basics of ethical management and the KD Code of Ethics and Practice Guidelines, along with online ethics management training for all employees.

#### 2023 Ethics Training Status (Unit: person)

Category	Attended	Completed	Completion Rate
Ethical management training	185	185	100%
	1,456	1,456	100%

1) Employee status at the time of training

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# ESG Performance Data

## Financial Data

### I Summarized Consolidated Statement of Financial Position

(Unit: KRW million)

Particulars	2021	2022	2023
[Current assets]	475,582	523,038	554,862
[Non-current assets]	458,303	494,982	505,696
Total assets	933,885	1,018,019	1,060,558
[Current liabilities]	434,731	423,564	410,012
[Non-current liabilities]	48,738	76,751	65,951
Total liabilities	483,469	500,315	475,963
[Equity attributable to owners of parent]	450,415	517,705	584,595
[Non-controlling interests]	0	0	0
Total equity	450,415	517,705	584,595
Sales	1,102,947	1,160,861	1,204,313
Operating income	64,296	59,771	105,911
Net income	80,658	53,582	83,149
Controlling interests	80,658	53,582	83,149
Non-controlling interests	0	0	0
Earnings per share (unit: KRW)	5,898	3,707	5,753
Number of consolidated companies	9	11	12

### I Consolidated Statement of Income

(Unit: KRW million)

Particulars	2021	2022	2023
Sales	1,102,947	1,160,861	1,204,313
Cost of sales	683,829	692,953	690,334
Gross profit	419,118	467,908	513,979
Selling, general, and administrative expenses	354,822	408,137	408,068
Operating income	64,296	59,771	105,911
Other income <sup>1)</sup>	29,375	7,014	10,267
Other expenses <sup>1)</sup>	7,892	6,566	5,279
Financial income <sup>1)</sup>	28,390	51,514	25,585
Financial expenses <sup>1)</sup>	12,117	39,008	29,192
Income before income tax expense	102,051	72,724	107,292
Income taxes	21,393	19,142	24,143
Net income	80,658	53,582	83,149

1) Past performance that reflect the changes in account items and calculation methods resulting from corrected business reports

### I Consolidated Cash Flow Statement

(Unit: KRW million)

Particulars	2021	2022	2023
Cash flow from operations	80,669	9,346	197,363
Cash flow from investing	(12,550)	(56,546)	(76,524)
Cash flow from financing	(63,079)	79,209	(113,622)
Difference by changes in foreign exchange rates	2,126	1,285	(2,135)
Increase(Decrease) in cash and cash equivalents	7,166	33,294	5,082
Cash and cash equivalents at the beginning of year	37,230	44,396	77,689
Cash and cash equivalents at the end of year	44,396	77,689	82,772

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GHG Verification Statement

Independent Assurance

Statement

# ESG Performance Data

## Environmental Performance

### Greenhouse Gas

	Category	Unit	2021 <sup>2)</sup>	2022 <sup>2)</sup>	2023				
					KD Navien	KD Everon	KD Polyum	KD TS	All
	<b>Total GHG emissions (Scope 1+2)<sup>1)</sup></b>	tCO <sub>2</sub> eq	13,108	13,059	12,697	15,086	3,051	359	31,193
	<b>Subtotal</b>	tCO <sub>2</sub> eq	3,973	3,582	3,244	279	0	136	3,659
Scope 1	CO <sub>2</sub>	tCO <sub>2</sub> eq	3,963	3,572	3,236	278	0	136	3,649
	By source	CH <sub>4</sub>	tCO <sub>2</sub> eq	3	3	2	0	0	3
		N <sub>2</sub> O	tCO <sub>2</sub> eq	7	7	6	1	0	7
	<b>Subtotal</b>	tCO <sub>2</sub> eq	9,135	9,477	9,455	14,809	3,051	223	27,539
Scope 2	CO <sub>2</sub>	tCO <sub>2</sub> eq	9,082	9,422	9,399	14,722	3,033	222	27,376
	By source	CH <sub>4</sub>	tCO <sub>2</sub> eq	1	1	2	2	1	5
		N <sub>2</sub> O	tCO <sub>2</sub> eq	52	54	54	85	18	158
	By type	Electricity	tCO <sub>2</sub> eq	9,135	9,477	9,455	14,809	3,051	27,539
	<b>Subtotal</b>	tCO <sub>2</sub> eq/ KRW 100 million	1.378	1.333	1.276	7.652	3.436	1.543	-
Intensity <sup>3)</sup>	Scope 1	tCO <sub>2</sub> eq/ KRW 100 million	0.418	0.366	0.326	0.141	0	0.585	-
	Scope 2	tCO <sub>2</sub> eq/ KRW 100 million	0.96	0.967	0.95	7.511	3.436	0.958	-
Reduction <sup>4)</sup>	<b>Subtotal</b>	tCO <sub>2</sub> eq	(1,364)	49	360	(704)	(318)	(31)	(693)
	Scope 1	tCO <sub>2</sub> eq	(469)	391	338	64	0	10	412
	Scope 2	tCO <sub>2</sub> eq	(895)	(342)	22	(768)	(318)	(41)	(1,105)
	Emissions	tCO <sub>2</sub> eq	168	147,646	32,335,088 <sup>6)</sup>	80,798	37,653	N/A	32,453,540
Scope 3 <sup>5)</sup>	1. Purchased goods and services	tCO <sub>2</sub> eq	41	147,577	136,236	78,954	36,982	N/A	252,172
	2. Capital goods	tCO <sub>2</sub> eq	N/A	N/A	11,295	1,829	671	N/A	13,795
	4. Upstream transportation and distribution	tCO <sub>2</sub> eq	N/A	N/A	11,054	N/A	N/A	N/A	11,054
	5. Waste generated in operations	tCO <sub>2</sub> eq	127	69	64	16	0.5	N/A	80
	9. Downstream transportation and distribution	tCO <sub>2</sub> eq	N/A	N/A	2,929	N/A	N/A	N/A	2,929
	11. Use of sold products	tCO <sub>2</sub> eq	N/A	N/A	32,173,509	N/A	N/A	N/A	32,173,509

1) There may be differences between total Scope 1+2 emissions and the sum of emissions by type, due to truncation of decimal places during aggregation

2) Based on a separate basis

3) Based on separate sales

4) Scope 1,2 GHG reduction compared to the previous year

5) Scope 3 emissions are based on internally generated data, and marked as N/A if not calculated.

6) Includes calculations for the North American region (US/Canada corporation)

# ESG Performance Data

## Environmental Performance

### I Eco-Friendly Business

Category		Unit	2021	2022	2023
Eco-friendly products and services	Sales from eco-friendly products and services	KRW million	740,836	802,678	794,908
Eco-friendly products and services	Sales ratio	%	67.17	69.15	66.01

### I Energy

Category		Unit	2021	2022	2023
	Total energy consumption	TJ	266.83	266.01	259.96
	Gasoline	TJ	1.21	1.18	1.29
	Diesel	TJ	2.91	2.79	1.38
Consumption	Direct	Kerosene	TJ	2.97	4.23
		LNG	TJ	68.44	58.89
		LPG	TJ	0.37	0.82
	Indirect	Electric power purchase	TJ	190.93	198.1
Intensity <sup>1)</sup>		TJ/KRW 100 million	0.028	0.027	0.026
Reduction <sup>2)</sup>		TJ	(27.47)	0.82	6.05

1) Based on separate sales

2) Energy reduction compared to the previous year

### I Air Pollutants<sup>1)</sup>

Category		Unit	2021	2022	2023
Nitrogen oxides (NOx)	Emissions	kg	3,240.9	2,005.9	2,652.5
	Emission concentration	PPM	15.0	28.7	9.8
Sulfur oxides (SOx)	Emissions	kg	243.2	0.1	448.5
	Emission concentration	PPM	8.0	0.4	4.2
Particulate matter (PM)	Emissions	kg	198.8	87.1	479.3
	Emission concentration	PPM	0.7	0.7	1.6

1) Due to changes in the calculation method, 2021 and 2022 data are corrected

### I Water Pollutants

Category		Unit	2021	2022	2023
Chemical oxygen demand (COD) <sup>1)</sup>	Emissions	ton	0.27	N/A	N/A
	Emission concentration	mg/L	5	N/A	N/A
Total organic carbon (TOC) <sup>1)</sup>	Emissions	ton	N/A	0.37	0.53
	Emission concentration	mg/L	N/A	7	5.19
Biochemical oxygen demand (BOD)	Emissions	ton	0.51	0.28	0.32
	Emission concentration	mg/L	3	5	5.08
Suspended solids (SS)	Emissions	ton	0.06	0.04	0.13
	Emission concentration	mg/L	0.6	0.4	3.25

1) Starting in 2022, TOC is disclosed rather than COD as a result of changes in legal measurement standards

### I Chemicals

Category		Unit	2021	2022	2023
	Total hazardous chemical consumption	ton	3.75	0	0.02
	Chemical discharge <sup>1)</sup>	ton	0.061	0.002	0.002

1) Due to changes in aggregation standards, 2021 and 2022 data are corrected

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## Environmental Performance

### ■ Water

Category	Unit	2021	2022	2023
All sites	Total water withdrawal	m <sup>3</sup>	475,531	467,714
	Groundwater	m <sup>3</sup>	96,275	99,429
	External organization	m <sup>3</sup>	201,817	170,830
	Reuse	m <sup>3</sup>	177,439	197,455
	Reuse rate <sup>1)</sup>	%	37	42
	Total discharge <sup>3)</sup>	m <sup>3</sup>	101,345	86,628
	Total consumption <sup>4)</sup>	m <sup>3</sup>	374,186	381,086
	Water consumption intensity <sup>5)</sup>	m <sup>3</sup> /KRW 100 million	39.34	38.9
	Total water withdrawal	m <sup>3</sup>	327,130	337,711
	Reuse rate <sup>1)</sup>	%	40,7985	40,7985
Seotan Factory	Groundwater	m <sup>3</sup>	64,152	70,536
	External organization	m <sup>3</sup>	85,539	69,720
	Total discharge <sup>3)</sup>	m <sup>3</sup>	94,061	80,276
	Total consumption <sup>4)</sup>	m <sup>3</sup>	233,069	257,435
	Total water withdrawal	m <sup>3</sup>	25,392	21,876
Pyeongtaek Factory	Groundwater	m <sup>3</sup>	25,392	21,876
	External organization	m <sup>3</sup>	0	0
	Total discharge <sup>3)</sup>	m <sup>3</sup>	7,284	6,352
	Total consumption <sup>4)</sup>	m <sup>3</sup>	18,108	15,524
	Total water withdrawal	m <sup>3</sup>	7,802	6,278
Songtan Factory	Groundwater	m <sup>3</sup>	6,731	6,112
	External organization	m <sup>3</sup>	1,071	166
	Total discharge <sup>3)</sup>	m <sup>3</sup>	0	0
	Total consumption <sup>4)</sup>	m <sup>3</sup>	7,802	6,278
	Total water withdrawal	m <sup>3</sup>	0	905
Gasan Factory	Groundwater	m <sup>3</sup>	0	905
	External organization	m <sup>3</sup>	0	5,667
	Total discharge <sup>3)</sup>	m <sup>3</sup>	0	0
	Total consumption <sup>4)</sup>	m <sup>3</sup>	0	905
	Total water withdrawal	m <sup>3</sup>	115,207	100,944
Research Institute	Groundwater	m <sup>3</sup>	0	0
	External organization	m <sup>3</sup>	115,207	100,944
	Total discharge <sup>3)</sup>	m <sup>3</sup>	0	0
	Total consumption <sup>4)</sup>	m <sup>3</sup>	115,207	100,944
	Total water withdrawal	m <sup>3</sup>	100,872	100,872

1) Reuse rate = total reuse volume / total water withdrawal

2) Due to changes in the calculation method, data are corrected

3) Based on freshwater

4) Total consumption = total water withdrawal - total discharge

5) Water consumption intensity = total consumption / separate sales

### ■ Waste

Category	Unit	2021	2022	2023
Generated	Subtotal	ton	950	897
	Designated waste	ton	40	37
	General waste	ton	910	860
	Subtotal	ton	115	53
	Designated waste	By type	Landfill	0
		By method	Incineration	32
		By type	Internal	0
		By method	External	32
	General waste	By type	Landfill	83
		By method	Incineration	0
Disposed	Subtotal	ton	835	844
	Waste-to-resource ratio	%	88	94
	Designated waste	By type	Preprocessed for reuse	0
		By method	Recycled	9
		By type	Internal	0
		By method	External	9
	General waste	By type	Preprocessed for reuse	142
		By method	Recycled	685
		By type	Internal	0
		By method	External	827
Intensity	Waste generation intensity	ton/KRW 100 million	0.100	0.092
				0.098

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## Social Data

### I Employee Status<sup>1)</sup>

Category		Unit	2021	2022	2023
<b>Total number of employees</b>		person	1,501	1,500	1,646
Subtotal		person	8	8	8
By gender		Male	8	8	8
Female		person	0	0	0
Registered executives <sup>2)</sup>		Under 30 years old	person	0	0
By age		30-49 years old	person	1	1
50 years old and above		person	7	7	7
Subtotal		person	1,493	1,492	1,638
By gender		Male	person	1,108	1,163
Female		person	136	151	173
By country		Korea	person	1,244	1,314
Employees	Full-time	China	person	0	1
		Under 30 years old	person	194	231
By employment type	Temporary	30-49 years old	person	889	919
		50 years old and above	person	161	164
By gender	Temporary	Male	person	219	158
		Female	person	30	22
By country	Temporary	Korea	person	249	178
		Male	person	124	141
Team leader and above <sup>3)</sup>	Temporary	Female	person	4	6
		Under 30 years old	person	0	0
By position	Team leader and above <sup>3)</sup>	30-49 years old	person	69	72
		50 years old and above	person	59	73
By gender	Team leader and above <sup>3)</sup>	Male	person	1,203	1,180
		Female	person	162	167
Staff <sup>4)</sup>	Team leader and above <sup>3)</sup>	Under 30 years old	person	333	320
		30-49 years old	person	919	924
By age	Staff <sup>4)</sup>	50 years old and above	person	113	103
		50 years old and above	person	121	997

Category		Unit	2021	2022	2023
Planning and support		By gender	Male	person	107
		Female	person	26	34
		Under 30 years old	person	21	41
By age		30-49 years old	person	91	101
		50 years old and above	person	21	19
Sales, marketing, and service		By gender	Male	person	191
		Female	person	41	54
		Under 30 years old	person	42	49
Employees By jobs		By age	30-49 years old	person	164
		50 years old and above	person	26	29
By gender		Male	person	736	675
		Female	person	69	49
Production and quality		By gender	Under 30 years old	person	213
		Male	person	486	452
		Female	person	106	103
By age		50 years old and above	person	293	296
		Male	person	30	34
R&D		By gender	Female	person	339
		Under 30 years old	person	57	61
By age		30-49 years old	person	247	244
		50 years old and above	person	19	25

1) Based on the number of employees in office at the end of the year

2) Includes one full-time auditor

3) Team leaders and above, excluding registered executives

4) Excludes team leaders and above

# ESG Performance Data

## Social Data

### I Diversity

Category	Unit	2021	2022	2023
Persons with disabilities <sup>1)</sup>	Number of employees with disabilities	person	7	7
	Employment rate of persons with disabilities	%	0.55	0.49
National veterans	Number of national veteran employees	person	11	10
	Employment rate of national veterans	%	0.73	0.67
Female	Number of female employees <sup>2)</sup>	person	136	151
	Female employee ratio <sup>2)</sup>	%	9.1	10.1
	Number of female executives <sup>2)</sup>	person	2	2
Female	Female unregistered executive ratio	%	9	8
	Number of female in managerial positions	person	4	4
	Number of female executives <sup>2)</sup>	person	2	2

1) Based on the "Korea Employment Agency for Persons with Disabilities (KEAD)" performance report

2) Based on full-time employees

3) Includes female registered and unregistered executives

### I Recruitment

Category	Unit	2021 <sup>2)</sup>	2022 <sup>2)</sup>	2023
New recruitment <sup>1)</sup>	Total number of new recruits	person	132	238
	New recruitment rate	%	11	18
	By gender	Male	111	196
		Female	21	42
	By age	Under 30 years old	72	108
		30-49 years old	59	128
	By region	50 years old and above	1	2
		Korea	132	238
	By region	China	0	0
		person	0	1

1) Based on full-time employees

2) Due to KD Navien's data aggregation using a separate basis, data are corrected

### I Retention<sup>1)</sup>

Category	Unit	2021	2022	2023
Average years of service	Subtotal	year	7.09	7.26
	By gender	Male	7.2	7.43
		Female	6.18	6.00 <sup>2)</sup>
		year		5.40

1) Based on full-time employees

2) Due to a typographical error, 2022 data are corrected

### I Turnover

Category	Unit	2021	2022	2023
Number of turnover	Total number of turnover	person	148	199
	By gender	Male	115	175
		Female	33	24
	By age	Under 30 years old	27	56
		30-49 years old	112	119
	By region	50 years old and above	9	10
		Korea	148	199
	Turnover rate	Total turnover rate	%	9.91
		Voluntary turnover rate	%	9.24

### I Parental Leave

Category	Unit	2021	2022	2023
Employees taking parental leave <sup>1)</sup>	Subtotal	person	8	23
	Male	person	6	14
	Female	person	2	9
	Subtotal	Person	11 <sup>2)</sup>	12 <sup>2)</sup>
		Male	6 <sup>2)</sup>	7 <sup>2)</sup>
	Employees who returned from parental leave	Female	5 <sup>2)</sup>	5
		Subtotal	11 <sup>2)</sup>	15
	Employees expected to return from parental leave	Male	6 <sup>2)</sup>	10
		Female	5 <sup>2)</sup>	5
	Employees with over 1 year of service since returning from parental leave	Subtotal	10	4
		Male	4	3
Return rate from parental leave	Female	person	6	1
	Subtotal	person	6	5
		%	100 <sup>2)</sup>	80 <sup>2)</sup>
	Male	%	100 <sup>2)</sup>	70 <sup>2)</sup>
		Female	100	100
	Subtotal	%	91	100
		Male	80	100
	Female	%	100	100
		Female	100	100

1) Based on the parental leave start date

2) Due to a counting error, data are corrected

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### I Equal Opportunity

Category	Unit	2021	2022	2023
Female salary ratio <sup>1)</sup>	G1	%	N/A	100
	G2	%	N/A	99
	G3	%	N/A	99
	G4	%	N/A	110
Average salary per person	Male	KRW million	55	67
	Female	KRW million	41	53
1) Due to the reorganization of the position levels, no data are available on the female-to-male salary ratio by position in 2021				
2) The ratio is based on the full-time G job group, with positions listed in order from G1 to G4.				

### I Non-Discrimination

Category	Unit	2021	2022	2023
Discrimination cases <sup>1)</sup>	Number of discrimination cases	case	0	0
	Under investigation	case	0	0
Discrimination case management status	Action plan established	case	0	0
	Action completed	case	0	0

1) Number of reports related to human rights issues

### I Labor-Management Relations

Category	Unit	2021	2022	2023
Labor-Management Council meetings held <sup>1)</sup>	session	5	9	9

1) From 2022 onward, the data includes both labor-council and labor-management meetings, due to a change in the council's operation.

### I Health and Safety Management System<sup>1)</sup>

Category	Unit	2021	2022	2023
Percentage of worksites with health and safety certification	%	100	100	100
Percentage of workers covered by health and safety certification	%	100	100	100

1) Based on all employees and non-affiliated workers

### I Occupational Accidents

Category	Unit	2021	2022	2023
Employees	Number of occupational accidents	case	3	1
	Occupational accident rate <sup>1)</sup>	%	0.2	0.07
	Lost-Time Injury (LTI)	case	3	1
	Lost-Time Incident Rate (LTIR) <sup>2)(5)</sup>	-	0.19	0.06
	Recordable Incidents (RI)	case	3	2
	Total Recordable Incident Rate (TRIR) <sup>3)(5)</sup>	-	0.19	0.12
	Fatality (FAT)	case	0	0
	Fatality rate <sup>4)</sup>	-	0	0
	Total working hours <sup>5)</sup>	hour	3,148,990	3,294,517
	Recordable Incidents (RI)	case	0	1
Non-affiliated workers	Total Recordable Incident Rate (TRIR) <sup>3)(5)</sup>	-	0	0.16
	Fatality (FAT)	case	0	0
	Fatality rate <sup>4)</sup>	-	0	0
	Total working hours	hour	1,163,126	1,234,627
				1,421,653

1) Occupational accident rate = (number of occupational accidents/number of employees) x 100

2) LTIR = (number of lost-time injuries/total hours worked) x 200,000

3) TRIR = (number of recordable incidents/total hours worked) x 200,000

4) Fatality rate = (total number of work-related fatalities ÷ total hours worked) x 200,000

5) Due to counting errors, 2021 and 2022 data are corrected

### I Occupational Diseases

Category	Unit	2021	2022	2023
Employees	Number of deaths caused by occupational diseases	case	0	0
	Number of occupational diseases	case	0	1
Non-affiliated workers	Number of deaths caused by occupational diseases	case	0	0
	Number of occupational diseases	case	0	1

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## Social Data

### I Employee Training

Category	Unit	2021	2022	2023
Training status <sup>1)</sup>	Total number of employees who completed training	person	1,400	1,524
	Training completion rate	%	94	102
	Total training hours	hour	22,257	37,289
	Average training hours per employee	hours/person	14.91	24.99
	Average training hours per person	hours/person	14.63	24.23
	Average training hours per person	hours/person	17.13	30.87
Training investment <sup>1)</sup>	By gender	Male	18.17	
	By gender	Female		
	By position	Managerial	26.23	
	By position	Staff		
	Total training costs	KRW million	310	599 <sup>2)</sup>
	Average training costs per employee	KRW million/person	0.21	0.40
Regular performance assessment <sup>3)</sup>	Percentage of employees who have undergone regular performance assessment	Subtotal %	90	90
	By gender	Male %	91	91
	By gender	Female %	82	85
	By position	Managerial %	71	74
	By position	Staff %	92	92
			91	

1) Based on all employees, including unregistered executives (calculated based on internal and external training hours)

2) Due to rounding to the nearest hundred thousand units, data are corrected

3) Based on the number of full-time employees

### I Marketing and Labeling

Category	Unit	2021	2022	2023
Violation of laws and regulations regarding labeling and advertising	Penalties	case	0	0
	Warnings	case	0	0
	Violation of internal regulations	case	0	0

### I Product Health and Safety Impacts

Category	Unit	2021	2022	2023
Health and safety impact assessment for key products	Percentage of key product groups for which health and safety impact assessment was conducted	%	100	100
Violation of health and safety laws	Penalties	case	0	0
	Warnings	case	0	0
	Violation of internal regulations	case	0	3
Recalls <sup>1)</sup>	Total number of recalls	case	0	0

1) Based on domestic cases (excluding voluntary recalls)

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## Governance Data

### I Board of Directors and Board Committees

Category		Unit	2021	2022	2023
Board of Directors	Meetings held	session	10	6	6
	Subtotal	person	7	7	7
	Executive directors	person	5	4	4
	Number of executive directors	person			
	Outside directors	person	2	3	3
	Number of outside directors	person			
	Percentage of outside directors	%	28.57	42.86	42.86
	Female directors	person	0	0	0
	Number of female directors	person			
	Percentage of female directors	%	0	0	0
Attendance rate	Subtotal	%	100	100	100
	Executive directors	%	100	100	100
	Outside directors	%	100	100	100
	Number of agendas	case	19	20	15
Board Committees	Percentage of revisions, modifications, and oppositions	%	0	0	0
	Subtotal	person	4	4	4
	Number of executive directors	person	4	4	4
	Number of outside directors	person	0	0	0
	Meetings held	number	11	22	11
	Number of agendas	case	13	25	14

1) Based on submitted agenda (excluding reported matters)

### I Audit

Category		Unit	2021	2022	2023
Audit	Subtotal	person	1	1	1
	Statutory auditor	person	1	1	1
	Non-statutory auditor	person	0	0	0
	Long-term Service	person	0	0	0
Audit training completion rate		%	100	100	100

### I Outside Director Expertise<sup>1)</sup>

Category		Unit	2021	2022	2023
Industry expertise	Number of outside directors with industry expertise	person	1	2	2
	Percentage of outside directors with industry expertise	%	50	67	67

1) Due to a change in the internal calculation method, 2021 and 2022 data are corrected

### I Compliance

Category		Unit	2021	2022	2023
Total payment	Violation of laws and regulations <sup>1)</sup>	case	1	1	0
	Monetary sanctions	case	0	0	0
	Non-monetary sanctions <sup>2)</sup>	case	0	0	0
	Amount incurred during the current period <sup>3)</sup>	KRW million	8	0	0
Total payment		Amount incurred during the previous period <sup>4)</sup>	KRW million	0	1,245

1) Based on violations of laws and regulations under the Fair Trade Commission

2) Based on the number of non-monetary sanctions beyond warning measures related to anti-competitive behavior concluded during the reporting period (excluding those combined with monetary sanctions)

3) Based on payments related to anti-competitive behavior cases that occurred and concluded during the reporting period

4) Based on payments related to anti-competitive behavior cases that occurred in the previous reporting period and concluded during the reporting period

# ESG Performance Data

## Social Data

### I Ethics and Fair Trade

Category		Unit	2021	2022	2023
Ethics	Ethics training	Number of executives who completed ethics training	person	5	5
		Percentage of executives who completed ethics training	%	62.5	62.5
		Number of employees who completed ethics training	person	1,395	1,429 <sup>1)</sup>
	Violation of code of ethics <sup>3)</sup>	Percentage of employees who completed ethics training <sup>2)</sup>	%	93.4	95.8
		Violations of code of ethics	case	4	10
		Number of employees who violated the code of ethics	person	15	15
Anti-corruption	Anti-corruption training	Number of executives who completed anti-corruption training	person	5	5
		Percentage of executives who completed anti-corruption training	%	62.5	62.5
		Number of employees who completed anti-corruption training	person	1,395	1,429 <sup>1)</sup>
	Integrity agreement and supplier code of conduct pledge	Percentage of employees who completed anti-corruption training <sup>2)</sup>	%	93.4	95.8
		Number of signed suppliers <sup>4)</sup>	number	259 <sup>1)</sup>	279
		Percentage of signed suppliers <sup>5)</sup>	%	85 <sup>1)</sup>	96
Anti-competitive behavior <sup>5)</sup>	Corruption cases	Corruption cases <sup>3)</sup>	case	1	4
		Disciplinary actions taken	case	4	3
		Dismissal	case	2	3
	Ongoing legal cases	Partner contract termination due to corruption case	case	0	0
		Corruption-related legal measures <sup>3)</sup>	case	0	0
		Ongoing legal cases	case	5 <sup>6)</sup>	1 <sup>6)</sup>
	Concluded legal cases		case	1	3

1) Data corrected due to typographical error

2) Due to a change in the calculation method, data are corrected

3) Due to KD Navien's calculation on a separate basis, data are corrected

4) Based on domestic suppliers who have an integrity agreement or a supplier code of conduct pledge

5) Based on administrative litigation for violations of major laws under the Fair Trade Commission, including the Fair Trade Act, Fair Transactions in Subcontracting Act, Fair Agency Transactions Act, Act on Fair Labeling and Advertising, etc.

6) Excludes legal cases resulting from non-compliance of regulations by other companies

### I Procurement Practices

Category		Unit	2021	2022	2023
	Percentage of local supplier expenses	%	59	58	63

### I Stakeholder Value Creation and Distribution

Category		Unit	2021	2022	2023
Government	Income Tax	Income before tax	KRW million	102,051	72,724
		Income tax expenses	KRW million	21,393	19,142
		Effective tax rate	%	21	26
		Income taxes paid	KRW million	19,812	45,468
		Rate of taxes paid	%	19	63
Shareholders and investors	Dividends		KRW million	6,504	7,226
		Interest Expenses	KRW million	3,334	7,336
Local communities	Donations		KRW million	359	1,112
		Subtotal	KRW million	79,822	97,967
Employees	Salary	Total salary	KRW million	73,080	88,927
		Percentage to legal minimum wage	%	164	158
		Total salary	KRW million	6,742	9,040
		Percentage to legal minimum wage	%	164	158
		Employee benefits <sup>1)</sup>	KRW million	19,184	22,590

1) Due to changes in the aggregation standards, data are corrected

### I Government Subsidies

Category		Unit	2021	2022	2023
R&D grants		KRW million	391	415 <sup>1)</sup>	334

1) Due to a typographical error, data are corrected

### I Retirement Pension<sup>1)</sup>

Category		Unit	2021	2022	2023
Present value of defined benefit obligation		KRW million	51,146	45,426	52,224
Fair value of plan assets		KRW million	55,286	59,445	60,104

1) Separate basis

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Category	Details			
Statement of use	KD Navien has reported in accordance with the GRI Standards for the period 1.1.2023-12.31.2023			
GRI 1 used	GRI 1: Foundation 2021			
Applicable GRI Sector Standard(s)	N/A			

GRI Standard	Disclosure	Content	Page	Note
<b>General disclosures</b>				
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2-24	Embedding policy commitments	33, 40, 51, 53, 59, 63, 68, 82, 84		
2-25	Processes to remediate negative impacts	52, 56, 62		
2-26	Mechanisms for seeking advice and raising concerns	15, 67, 85		
2-27	Compliance with laws and regulations	95		
2-28	Membership associations	102		
2-29	Approach to stakeholder engagement	15		
2-30	Collective bargaining agreements	50		

GRI Standard	Disclosure	Content	Page	Note
<b>Material topics</b>				
GRI 3: Material Topics 2021	3-1	Process to determine material topics	12	
	3-2	List of material topics	13	
<b>Eco-friendly products and services development</b>				
GRI 3: Material Topics 2021	3-3	Management of material topics	14, 17-18	
GRI 302: Energy 2016	302-5	Reductions in energy requirements of products and services	17-18	
<b>Response to climate change</b>				
GRI 3: Material Topics 2021	3-3	Management of material topics	14, 20-31	
GRI 201: Economic Performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	21-28	
	305-1	Direct (Scope 1) GHG emissions	30, 88, 103	
	305-2	Energy indirect (Scope 2) GHG emissions	30, 88, 103	
	305-3	Other indirect (Scope 3) GHG emissions	29-30, 88, 103	
	305-4	GHG emissions intensity	88, 103	
GRI 305: Emissions 2016	305-5	Reduction of GHG emissions	29-31, 88, 103	
	305-6	Emissions of ozone-depleting substances (ODS)	Not applicable	Not emitted
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	89	
<b>Supply chain sustainability management</b>				
GRI 3: Material Topics 2021	3-3	Management of material topics	14, 63-67	
GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	Not applicable	
	308-2	Negative environmental impacts in the supply chain and actions taken	66	
GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	64, 96	
	414-2	Negative social impacts in the supply chain and actions taken	Not applicable	
<b>Employees' quality of life and talent management</b>				
GRI 3: Material Topics 2021	3-3	Management of material topics	14, 45-50	
	401-1	New employee hires and employee turnover	92	
GRI 401: Employment 2016	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	48	
	401-3	Parental leave	92	
	404-1	Average hours of training per year per employee	94	
GRI 404: Training and Education 2016	404-2	Programs for upgrading employee skills and transition assistance programs	49	
	404-3	Percentage of employees receiving regular performance and career development reviews	94	

# GRI Content Index

GRI Standard	Disclosure	Content	Page	Note
<b>Non-material topics</b>				
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	6, 87, 96	
	201-3	Defined benefit plan obligations and other retirement plans	96	
	201-4	Financial assistance received from government	96	
GRI 202: Market Presence 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage	96	
GRI 203: Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	71~73	
	203-2	Significant indirect economic impacts	17~18, 71	
GRI 204: Procurement Practices 2016	204-1	Proportion of spending on local suppliers	96	
GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	83, 85	
	205-2	Communication and training about anti-corruption policies and procedures	84~85, 96	
	205-3	Confirmed incidents of corruption and actions taken	96	
GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	96	
GRI 207: Tax 2019	207-1	Approach to tax	80~81	
	207-2	Tax governance, control, and risk management	81	
	207-3	Stakeholder engagement and management of concerns related to tax	15	
	207-4	Country-by-country reporting	96	
GRI 302: Energy 2016	302-1	Energy consumption within the organization	89, 99	
	302-2	Energy consumption outside of the organization	Not applicable	
	302-3	Energy intensity	89	
	302-4	Reduction of energy consumption	89	
GRI 303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	36~37, 90	
	303-2	Management of water discharge-related impacts	36~37	
	303-3	Water withdrawal	90	
	303-4	Water discharge	90	
	303-5	Water consumption	90	

GRI Standard	Disclosure	Content	Page	Note
<b>Non-material topics</b>				
GRI 306: Waste 2020	306-1	Waste generation and significant waste-related impacts	38	
	306-2	Management of significant waste-related impacts	38	
	306-3	Waste generated	90	
GRI 403: Occupational Health and Safety 2018	306-4	Waste diverted from disposal	38, 90	
	306-5	Waste directed to disposal	90	
	403-1	Occupational health and safety management system	40	
GRI 403: Occupational Health and Safety 2018	403-2	Hazard identification, risk assessment, and incident investigation	41~43	
	403-3	Occupational health services	41~44	
	403-4	Worker participation, consultation, and communication on occupational health and safety	15, 42, 50	
GRI 403: Occupational Health and Safety 2018	403-5	Worker training on occupational health and safety	44	
	403-6	Promotion of worker health	44	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	41~43	
GRI 403: Occupational Health and Safety 2018	403-8	Workers covered by an occupational health and safety management system	40, 93	
	403-9	Work-related injuries	93	
	403-10	Work-related ill health	93	
GRI 405: Diversity and Equal Opportunity 2016	405-1	Diversity of governance bodies and employees	75, 91	
GRI 406: Non-discrimination 2016	405-2	Ratio of basic salary and remuneration of women to men	93	
	406-1	Incidents of discrimination and corrective actions taken	93	
GRI 416: Customer Health and Safety 2016	416-1	Assessment of the health and safety impacts of product and service categories	57, 94	
	416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	94	
GRI 417: Marketing and Labeling 2016	417-1	Requirements for product and service information and labeling	58	
	417-2	Incidents of non-compliance concerning product and service information and labeling	94	
	417-3	Incidents of non-compliance concerning marketing communications	94	

# SASB Index

## Resource Transformation (Electrical & Electronic Equipment)

### I Sustainability Disclosure Topics & Accounting Metrics

Code	Metric	Unit	2021	2022	2023	Note
Energy Management	RT-EE-130a.1 Total energy consumed	TJ	266.83	266.01	259.96	
	Percentage grid electricity	%	100	100	100	
	Percentage renewable	%	0	0	0	
Hazardous Waste Management	RT-EE-150a.1 Amount of hazardous waste generated	Metric tons (t)	40.34	37.37	30.71	
	Percentage of hazardous waste recycled	%	21	18	14	
	Number of reportable spills	number	0	0	0	
Product Safety	RT-EE-150a.2 Aggregate quantity of reportable spills	kg	0	0	0	No reportable spills
	Quantity of spills recovered	kg	0	0	0	
	RT-EE-250a.1 Number of recalls issued	case	0	0	0	Based on domestic cases (excluding voluntary recalls)
Product Lifecycle Management	RT-EE-250a.2 Total units recalled	number	0	0	0	
	RT-EE-410a.1 Total amount of monetary losses as a result of legal proceedings associated with product safety	KRW million	0	0	0	Based on business report
	RT-EE-410a.2 Percentage of products by revenue that contain IEC 62474 declarable substances	%	-	-	-	N/A
Materials Sourcing	RT-EE-410a.2 Revenue from eligible products certified to an energy efficiency certification	KRW million	557,902	633,054	611,972	Internal eco-friendly sales standards applied (US)
	RT-EE-410a.3 Revenue from renewable energy-related and energy efficiency-related products	KRW million	-	-	-	Refer to p.34
	RT-EE-440a.1 Description of the management of risks associated with the use of critical materials	N/A	-	-	-	N/A
Business Ethics	RT-EE-510a.1 Description of policies and practices for prevention of: (1) corruption and bribery and (2) anti-competitive behaviour	N/A	-	-	-	Refer to p.63-65, pp.82-85
	RT-EE-510a.2 Total amount of monetary losses as a result of legal proceedings associated with bribery or corruption	KRW million	0	0	0	Based on business report
	RT-EE-510a.3 Total amount of monetary losses as a result of legal proceedings associated with anti-competitive behaviour regulations	KRW million	8	1,245	0	Excludes costs incurred internally before litigation, fees paid to appraisers and agents, and costs following case conclusion

### I Activity Metrics

Code	Metric	Unit	2021	2022	2023	Note
RT-EE-000. A	Number of units produced by product category	number	1,488,665	1,332,007	1,338,814	
RT-EE-000. B	Number of employees	person	1,501	1,500	1,646	Includes registered executives

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# TCFD Index

Category	Recommended Disclosures	Page
Governance	Describe the board's oversight of climate-related risks and opportunities	20
	Describe management's role in assessing and managing climate-related risks and opportunities	20
Strategy	Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	21-22, 25-26
	Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	24, 26-27
	Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	26-27
Risk Management	Describe the organization's processes for identifying and assessing climate-related risks.	21, 25
	Describe the organization's processes for managing climate-related risks.	28
	Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	28
Metrics and Targets	Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	28
	Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	23-24, 26, 29-30
	Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	29, 31

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# UN SDGs

Goals	2023 Major Activities of KD Navien	Page
 No Poverty	<ul style="list-style-type: none"> <li>Assisted in the recovery of areas damaged by floods caused by natural disasters such as heavy rain and typhoons (repaired and restored 211 boilers)</li> <li>Supported winter heating items for seniors living alone and low-income households (provided 2,638 heated mattress pads)</li> </ul>	70~71
 Quality Education	<ul style="list-style-type: none"> <li>Implemented position-based Key Training for all employees and evaluated effectiveness</li> <li>Conducted ESG management theory training to raise ESG awareness (completed for 37 employees in the ESG consultative body and relevant teams)</li> </ul>	11, 45~50
 Clean Water and Sanitation	<ul style="list-style-type: none"> <li>Increased reused water usage through Seotan Plant water resource management process operations (reused water usage rate increased by 17% compared to the previous year)</li> <li>Improved wastewater quality by replacing wastewater treatment chemicals from red ferric chloride to colorless polyaluminium chloride</li> </ul>	36~37
 Affordable and Clean Energy	<ul style="list-style-type: none"> <li>Installed a 370kWh solar power generation facility within the US Corporation to reduce GHG emissions and transition to renewable energy</li> </ul>	17~18, 31
 Decent Work and Economic Growth	<ul style="list-style-type: none"> <li>Expansion of eco-friendly lineup of non-fossil fuel-based products, with the development of hydrogen boilers and electric heat pump technology</li> <li>Signed a business agreement with the Korea Employment Agency for Persons with Disabilities and the Pyeongtaek City Parasports Council to expand employment for persons with disabilities and formed the KD Parasports Team</li> <li>Handled grievances from employees and supplier companies through the operation of a grievance handling channel</li> </ul>	46, 52, 67
 Sustainable Cities and Communities	<ul style="list-style-type: none"> <li>Developed hydrogen boiler technology and expanded the eco-friendly lineup of non-fossil fuel-based products such as electric heat pumps</li> <li>Covered the cost for replacement and installation of eco-friendly condensing boilers for low-income households</li> <li>Provided local community support through the US and Uzbekistan Corporations</li> </ul>	17~18, 71, 73
 Responsible Consumption and Production	<ul style="list-style-type: none"> <li>Navien Condensing ON AI won the Energy Saving Award at the 26th Energy Winner Awards</li> <li>Implemented various activities to reduce the risk of hazardous chemical substances (MDI, styrene, chloroalkane)</li> <li>Reduced waste generation by changing waste recycling and processing methods (50% reduction in wood waste, 6.5 tons reduction in landfill waste)</li> </ul>	33~38
 Climate Action	<ul style="list-style-type: none"> <li>Implemented reduction activities for Scope 1, 2, 3 GHG emissions</li> <li>Participated in climate change response initiatives (TCFD disclosure, CDP, and obtained a grade B-)</li> </ul>	20~31, 33
 Peace, Justice and Strong Institutions	<ul style="list-style-type: none"> <li>Operated ethical management reporting channels and took disciplinary action for ethical violations (13 cases)</li> <li>Conducted ethical management training for new hires and all employees (100% completion rate)</li> </ul>	84~85

# Memberships and Awards

Name	Purpose of Membership
ASHRAE	Obtain information such as overseas academic papers
Connectivity Standards Alliance	Incorporate Zigbee global Standards (Matter) and secure CSA membership qualification
The Organization of Consumer Affairs Professionals in Business	Promote ideal relationships between consumers and enterprises
Korea Mechanical Construction Contractors Association	Renew the construction capability assessment and update the licenses upon modification through the reporting of specialized construction performance
The Korean Society of Mechanical Engineers	Obtain information on academic papers and technology-related theses
The Society of Air-conditioning and Refrigerating Engineers of Korea	Attend various seminars, and share information on academic symposiums, lectures and meetings
Smart Construction Confluence Association	Promote cooperation and information exchange with construction and smart technology companies
Korean Association of Occupational Health Nurses	Develop health manager capabilities, and identify areas requiring improvement
Fair Competition Federation	Collect information of the Fair Trade Commission trend and related data, submit opinions about amendment of statutes and administrative rules
Korea Advertisers Association	Share new media trends and build relationships with professional groups
Korea Association of Machinery Industry	Support member companies' R&D and foster mechanical industry service areas
Korea Management Association	Identify HRD-related trends
Korea Remodeling Association	Identify market trends through exchanges among members
Korea International Trade Association	Check trade-related issues such as exports and tariffs and suggest policies
Korea Industrial Technology Association	Maintain technology lab certifications (HEATING, TAC, SYSTEM, SH)
Korea Listed Companies Association	Obtain information on the enactment and amendment of related statutes and effectively respond to policies
Korean Association of Air Conditioning, Refrigerating, and Sanitary Engineers	Support research tasks for zone control system integrated heat interface unit
Korean Association of AI Smart Home	Promote and develop the Home Network business and advance related Smart Home initiatives
Korean Society for Indoor Environment	Obtain information related to indoor air quality
Korea Energy Appliances Industry Association	Promote mutual benefits and development among energy appliance manufacturers
The Korean Society of Combustion	Obtain information on academic papers and technology-related theses
Korea Information & Communication Contractors Association	Maintain on-site bidding qualifications for public organization projects and provide technological support for information and communication construction projects
Korea Products Safety Association	Obtain product safety technology information and address difficulties related to product safety certification
Korea Intellectual Property Association	Strengthen IP competitiveness and share information and expertise for IP management and patent dispute response plans
Korean Standards Association	Obtain information on KS and international standards (ISO, etc.) and manage completion of mandatory KS training
Korea Association of Ventilation Industry Companies	Prevent indoor air pollution through ventilation and gather information on air purification

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# GHG Verification Statement

## I Kyungdong Navien Co., Ltd.

95, Suworam-gil, Seotan-myeon, Pyeongtaek-si, Gyeonggi-do, Republic of Korea

## I Verification Goal

The goals of greenhouse gas (GHG) emission verification (hereinafter referred to as 'verification') conducted by the Korean Standards Association are as follows.

- Confirming the conformity with standards and procedures of GHG emission and GHG emissions calculated within the scope of verification
- Checking the validity of declarations related to the organization's GHG emissions or removals
- Confirming the effective implementation of the organization's management of GHG emissions or removals
- Confirming the conformity of processes for implementing, managing and improving the organization's GHG emissions or removals estimates

## I Verification Scope

Korean Standards Association conducted limited guarantee level verification for Scope 1, Scope 2 for Kyungdong Navien Co., Ltd.'s Greenhouse Gas declaration.

- Reporting Target : Kyungdong Navien Seotan Factory, Pyeongtaek Factory, Gasan Factory, Songtan Factory, Yeouido Office, Guro Technology Research Institute
- Boundary: Scope1 (Direct emissions), Scope2 (Indirect emissions)
  - Scope 1: Stationary combustion, Mobile combustion
  - Scope2: Externally purchased power
- Year: January 1, 2023 to December 31, 2023

## I Verification Criteria and Guidelines

Korean Standards Association provides verification at limited level of assurance to strengthen GHG management for your company's GHG emissions.

- On-site inspection : Visit to Kyungdong Navien Seotan Factory
- Method of confirmation :
  - Interview with greenhouse gas emissions manager and field staff
  - Review of the management system and data used to calculate greenhouse gas emissions during the reporting period
  - Tracking review of internal documents and basic data

Kyungdong Navien Co., Ltd. should provide fair data on information and evidence related to GHG emissions, and the KSA is limited to guaranteeing GHG emissions.

## I Verification Limit

GHG emissions can be affected by factors such as data limits and uncertainties in the scope of verification, and inherent limitations may exist accordingly.

## I Verification Conclusion

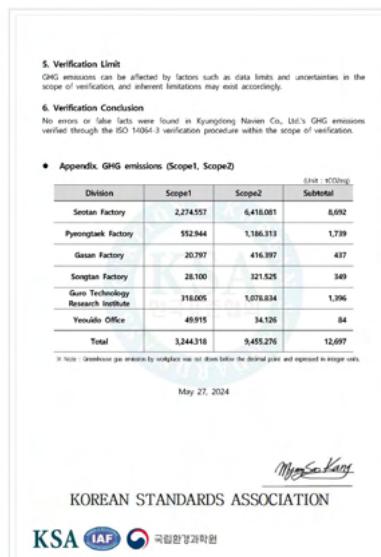
No errors or false facts were found in Kyungdong Navien Co., Ltd.'s GHG emissions verified through the ISO 14064-3 verification procedure within the scope of verification.

## Appendix. GHG emissions (Scope 1, Scope 2)

(Unit : tCO<sub>2</sub>eq)

Division	Scope 1	Scope 2	Subtotal
Seotan Factory	2,274.56	6,418.08	8,692
Pyeongtaek Factory	552.944	1,186.31	1,739
Gasan Factory	20.797	416.397	437
Songtan Factory	28.1	321.525	349
Guro Technology Research Institute	318.005	1,078.83	1,396
Yeouido Office	49.915	34.126	84
<b>Total</b>	<b>3,244.32</b>	<b>9,455.28</b>	<b>12,697</b>

※ Note : Greenhouse gas emission by workplace was cut down below the decimal point and expressed in integer units.



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Sustainability Report 2023

# Independent Assurance Statement

## To readers of 2023 KD Navien Sustainability Report

### I Introduction

Korea Management Registrar (KMR) was commissioned by KyungDong Navien to conduct an independent assurance of its 2023 Sustainability Report (the “Report”). The data and its presentation in the Report is the sole responsibility of the management of KyungDong Navien. KMR’s responsibility is to perform an assurance engagement as agreed upon in our agreement with KyungDong Navien and issue an assurance statement.

### I Scope and Standards

KyungDong Navien described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR’s assurance standard SRV1000. We are providing a Type 2, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process. We also confirmed that the report was prepared in accordance with the TCFD recommendations and SASB.

- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 201: Economic Performance
  - GRI 302: Energy
  - GRI 305: Emissions
  - GRI 308: Supplier Environmental Assessment
  - GRI 401: Employment
  - GRI 404: Training and Education
  - GRI 414: Supplier Social Assessment
- SASB Sustainability Disclosure Topics & Accounting Metrics
- TCFD recommendations

As for the reporting boundary, the engagement excludes the data and information of KyungDong Navien’ partners, suppliers and any third parties

### I KMR’s Approach

To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:

- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report’s performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service’s DART and public databases.

### I Limitations and Recommendations

KMR’s assurance engagement is based on the assumption that the data and information provided by KyungDong Navien to us as part of our review are provided in good faith. Limited depth of evidence gathering including inquiry and analytical procedures and limited sampling at lower levels in the organization were applied. To address this, we referred to independent external sources such as DART and National Greenhouse Gas Management System (NGMS) and public databases to challenge the quality and reliability of the information provided.

### I Conclusion and Opinion

Based on the document reviews and interviews, we had several discussions with KyungDong Navien on the revision of the Report. We reviewed the Report’s final version in order to make sure that our recommendations for improvement and revision have been reflected. Based on the work performed, it is our opinion that the Report applied the GRI Standards. Nothing comes to our attention to suggest that the Report was not prepared in accordance with the AA1000AP (2018) principles.

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# Independent Assurance Statement

## To readers of 2023 KD Navien Sustainability Report

### Inclusivity

KyungDong Navien has developed and maintained different stakeholder communication channels at all levels to announce and fulfill its responsibilities to the stakeholders. Nothing comes to our attention to suggest that there is a key stakeholder group left out in the process. The organization makes efforts to properly reflect opinions and expectations into its strategies.

### Materiality

KyungDong Navien has a unique materiality assessment process to decide the impact of issues identified on its sustainability performance. We have not found any material topics left out in the process.

### Responsiveness

KyungDong Navien prioritized material issues to provide a comprehensive, balanced report of performance, responses, and future plans regarding them. We did not find anything to suggest that data and information disclosed in the Report do not give a fair representation of KyungDong Navien's actions.

### Impact

KyungDong Navien identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

### Reliability of Specific Sustainability Performance Information

In addition to the adherence to AA1000AP (2018) principles, we have assessed the reliability of economic, environmental, and social performance data related to sustainability performance. We interviewed the in-charge persons and reviewed information on a sampling basis and supporting documents as well as external sources and public databases to confirm that the disclosed data is reliable. Any intentional error or misstatement is not noted from the data and information disclosed in the Report.

### Competence and Independence

KMR maintains a comprehensive system of quality control including documented policies and procedures in accordance with ISO/IEC 17021-2015 - Requirements for bodies providing audit and certification of management systems. This engagement was carried out by an independent team of sustainability assurance professionals. KMR has no other contract with KyungDong Navien and did not provide any services to KyungDong Navien that could compromise the independence of our work.



June 2024 Seoul, Korea

CEO *E. J. Hwang*

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