6th DEFINE STANDARD

2025 DS DANSUK SUSTAINABILITY REPORT

DS DANSUK

About This Report

Report Overview

DS DANSUK has been publishing an annual sustainability report since 2021 to actively communicate with stakeholders about the status and achievements of its sustainability management activities related to environmental, social, and economic responsibilities. This report is DS DANSUK's fifth sustainability report, aiming to transparently disclose the goals and strategies of ESG management, as well as the core ESG performance and activities.

Reporting Period and Frequency

This report contains environmental, social, and economic activities and achievements from January 1, 2024, to December 31, 2024, and includes information from the first half of 2025 for some achievements. Additionally, quantitative performance data from the past three years (2022 to 2024) has been used to show annual trends.

Reporting Scope

The financial and non-financial data in the report are collected and reported based on data encompassing DS DANSUK's major domestic business sites (Sihwa Plant, Pyeongtaek Bio Plant 1 & 2, Gunsan Recycling Plant, Gunsan Fine Chemicals Plant). The financial data has been prepared based on the Korean International Financial Reporting Standards (K-IFRS). For the reader's convenience, additional notes have been provided for some information that requires attention to the scope and boundaries of the report.

Reporting Standards

This report has been prepared in accordance with the GRI (Global Reporting Initiative) Standards 2021, the international guidelines for sustainability reporting. In particular, to report on key issues suitable for the characteristics of the industry, we followed the standards of the Sustainability Accounting Standards Board (SASB) and referred to the European Sustainability Reporting Standards (ESRS). We have aligned our goals, activities, and achievements related to climate change response with the TCFD (Task Force on Climate-related Financial Disclosures) recommendations.

Changes in Reporting Information

In cases where attention is needed regarding the scope/boundaries of the report and any changes based on the reporting point, we clearly indicate them in a separate note for the reference of stakeholders.

Report Assurance

To ensure the reliability of the report content, the assurance process was conducted by the independent external agency NICE D&B, and the report assurance was carried out in accordance with the international assurance standard AA1000AS(V3). The assurance results can be confirmed through the independent assurance statement in the Appendix of this report.

Cover Story

The 2025 Sustainability Report of DS DANSUK, marking its 60th anniversary, encapsulates the sustainable values that have traversed the years and the commitment towards the future. The design that horizontally connects the '6' and '0' on the cover symbolizes the history of DS DANSUK, which has continued for over half a century, and the continuity of sustainable management. In particular, various illustrated icons themed around ESG were used within the '0' to visually express the company's responsibility and commitment to action. The overall design was centered around DS DANSUK's brand colors to strengthen the consistency of its identity and message.

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Business Overview

CEO Insight

CEO Message

Dear valued stakeholders,

In 2024, DS DANSUK made vigorous efforts to secure the sustainability of its business amid a challenging management environment. Each business division established strategies to overcome vulnerabilities arising from market volatility and aimed for fundamental improvements to create higher economic and environmental value. Additionally, by completing the first phase of investments related to Hydrotreated Vegetable Oil (HVO), Lithium Ion Battery (LIB) recycling, and the Post-Consumer Recycled (PCR) plastic business, we were able to secure medium- to long-term growth momentum. Through this initiative, DS DANSUK aims to become a leader in the future resource recycling industry by producing and supplying raw materials for Sustainable Aviation Fuel (SAF) and recovering Black Mass. In this regard, we deeply embrace the idea that ESG management is a significant social responsibility of the company and a driving force for sustainable development, and we continue to implement actions to enhance ESG values in all our business activities.

This year, political and economic uncertainties remain significant both domestically and globally. Nevertheless, DS DANSUK is determined to overcome the challenges by actively and independently pursuing strategies in each business sector. In the business domain, we will pursue innovation and scalability that break down boundaries and accelerate digital transformation with AI integration, which entails predictability. Furthermore, we will make multifaceted efforts to enhance human rights and talent management, and to implement ESG management in the supply chain, in order to elevate our management standards.

The year 2025 is the 60th anniversary of DS DANSUK's founding and the year we will unveil a new vision towards 2030. DS DANSUK will pave the way for a new leap as a company that meets the expectations of its stakeholders while growing as a business.

Thank you.

DS DANSUK CO., LTD.
CEO and Chairman **Seung-uk Han**

CEO Insight

CEO Message

DS DANSUK prioritizes environment, safety, and health as its top values in all its business operations to ensure a sustainable future.

In particular, last year saw significant progress in the implementation of the environmental management roadmap. At the Sihwa and Gunsan Plants, we took a step towards the eco-friendly transition of the energy used at our facilities by establishing our own solar power generation systems. DS DANSUK plans to thoroughly review the establishment and achievement of medium- to long-term net-zero goals starting from this. Additionally, we are not neglecting investments that consider the environmental impact on the community.

In the safety and health division, we have continuously worked on establishing systems for self-discipline prevention and improving tasks according to individual management indicators. In addition, we are enhancing our overall management capabilities through activities such as obtaining board approval for annual safety and health plans and reinforcing the recognition of the importance of safety and health in our corporate culture.

Furthermore, we will make our utmost efforts in enhancing quality management to provide excellent products and services that meet customer needs, optimizing new businesses through continuous R&D and facility investments, and internalizing compliance management by pursuing the value of mutual growth. Through these efforts, DS DANSUK aims to secure sustainability as a company that grows together with its stakeholders. We ask for your unwavering support and encouragement.

Thank you.

DS DANSUK CO., LTD.
CEO & President **Jong-woan Kim**

New DS Wave

DS Philosophy

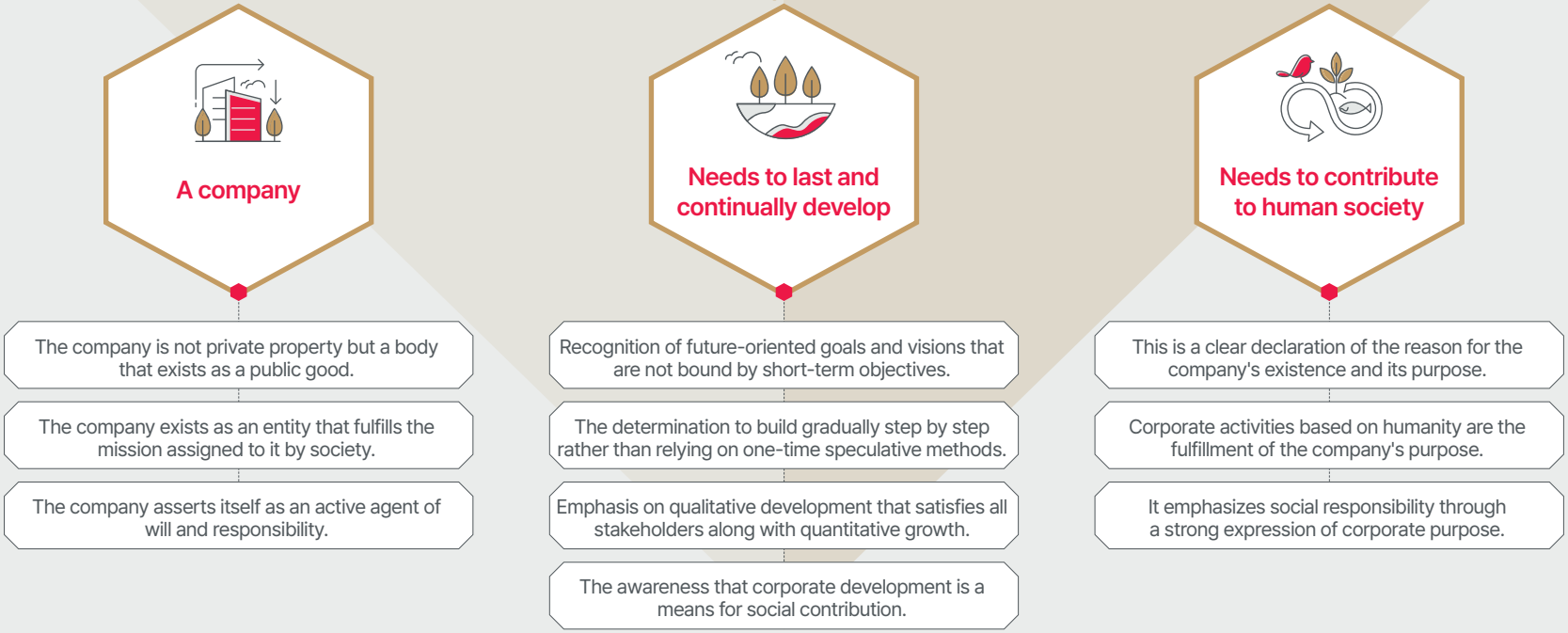
Define Business Standard

DS DANSUK is internalizing a unique value system within its corporate culture, based on a founding philosophy rooted in entrepreneurship. To form a company-wide consensus and realize the core mission, all employees deeply understand the values that DS DANSUK aims for and continuously pursue innovation and challenges. Through the meeting of new technologies and ideas, we are discovering unprecedented possibilities and establishing standards for a more prosperous life, while continuously creating a virtuous cycle of values that positively impact society and the environment. In the future, DS DANSUK will continue to faithfully fulfill its role and responsibility as a company in realizing a sustainable society, moving forward as a company that creates a better tomorrow together with everyone.

DANSUK Joo-il Han, founder

“If I have a wish, it is simply that DS DANSUK remains a company that contributes to the nation and society for a long time.”

Spirit



New DS Wave

History

Growth
1965~2000

Founded the company and laid the foundation for fine chemicals

- 2000 Awarded the Presidential Award for Productivity Improvement
- 1999 Designated as the 'Excellent Productivity Improvement Enterprise' (Ministry of Trade, Industry and Energy)
- 1998 Certified as a venture company
- Developed and manufactured lead silicate
- 1995 Relocated to Sihwa Plant
- 1990 Established the company-affiliated research center
- 1989 Renamed to DANSUK Industrial Co., Ltd.
- 1984 Developed and manufactured PVC Stabilizer
- 1973 Developed and manufactured red lead and litharge
- 1969 Developed and manufactured cuprous oxide and copper oxide
- 1965 Founded Nobel Chemical Industry Co.

Development
2001~2019

Challenges and Changes through Business Diversification

- 2019 Established a corporation in Malaysia
- 2018 Established a corporation in Pakistan
- 2017 Acquired affiliate Samil Innocom Ltd. (now DS PCR Yeongcheon Plant)
- 2016 Commenced operation of bio diesel facilities at Pyeongtaek Bio Plant
- 2014 Constructed bio heavy oil plant
- 2013 Constructed LDH plant
- Achieved 100 million USD in exports (KITA)
- 2011 Constructed recycled lead plant
- Awarded certificate of Time-honored Business (Korea Federation of Small and Medium Businesses)
- 2007 Constructed bio diesel plant
- 2001 Selected as a Superior Technology Company (Korea Technology Finance Corporation)
- Constructed fine chemical plant building

Leap
2020~Present

Securing future growth engines and globalization

- 2024 Completed construction of the HVO-PTU line at Pyeongtaek Bio Plant 1
- Awarded the Iron Tower Industrial Medal (2024 Korean Energy Awards)
- Launched DS PCR (subsidiary-merged corporation)
- Established a corporation in Shandong Province, China
- Completed construction of the LIB Gunsan Recycling Plant
- 2023 Listed on the Korea Stock Exchange (KOSPI)
- Renamed to DS DANSUK Co., Ltd.
- Acquired shares in DS WOOIL BIO, DS E&E (now DS PCR-Haman), and HIVE
- 2022 Achieved 300 million USD in exports
- First export of bio marine fuel (BMF) to Europe
- 2020 Achieved 200 million USD in exports

New DS Wave

DS Brand

The Future is in Our History

DS DANSUK reached its 60th anniversary in 2025. The founding principle of contributing to the world we live in through the sustainable growth of the company is now moving towards the grand dream of reaching the highest global standards. DS DANSUK, as a resource circulation energy company, will continue its journey towards becoming a centennial company by providing sustainable and eco-friendly values of recycliing, reduction, neutrality, and restoration to the market and society.

Spirit

"A company should keep developing and contribute to society"

Mission

"We create a clean world through sustainable resource circulation and energy"

2030 Vision (Dream)

Global Top Tier Resource Circulation Energy Company

Value Proposition

Recycling
Recycle limited resources

Reduction
Eco-friendly production and consumption

Neutrality
Carbon neutral, resource recovery from waste

Restoration
Restore and return resources to the ecosystem after use

Core Compe-tencies

- Proactive Leader
- Green Integrity
- AI-embedded
- Expertism
- Value Sharing

About Us

General Status

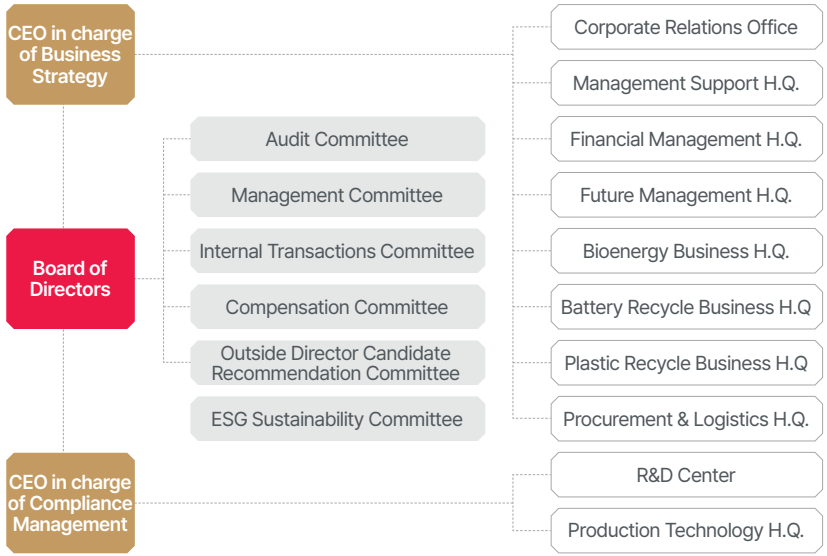
DS DANSUK, as a specialized company in eco-friendly energy and materials, is leading the establishment of a resource circulation economy system, focusing on its three main business divisions: bioenergy, battery recycling, and plastic recycling. In particular, by utilizing various waste resources and industrial by-products to create new value, we are providing practical solutions to the crises of climate change and resource depletion.

The Bioenergy Division produces and sells eco-friendly fuels such as bio diesel, bio heavy oil, and bio marine fuel by used cooking oil and by-products as raw materials. In 2024, we completed the Pre-Treatment Unit (PTU) for Hydrotreated Vegetable Oil (HVO) and began producing high-purity HVO and pre-treated feedstock for Sustainable Aviation Fuel (SAF). Accordingly, we have positioned ourselves as one of the few companies in the industry with upstream pre-treatment capabilities in the HVO supply chain. The Battery Recycle Division is recycling discarded lead-acid batteries collected from around the world to produce regenerated lead, which is supplied to major battery manufacturers both domestically and internationally. Additionally, based on accumulated technology and operational know-how, we have entered the lithium ion battery (LIB) market and have begun operating LIB recycling plants, extracting active materials (Black Mass) containing key minerals such as nickel, cobalt, and manganese from used LIBs. The Plastic Recycle Division produces and sells precision chemical products such as One Pack Stabilizer and is advancing the PCR (Post-Consumer Recycled) plastic business in collaboration with its subsidiaries. In the future, we will further solidify our position as a leading company in the resource circulation economy through business expansion in domestic and international markets and the advancement of eco-friendly technologies.

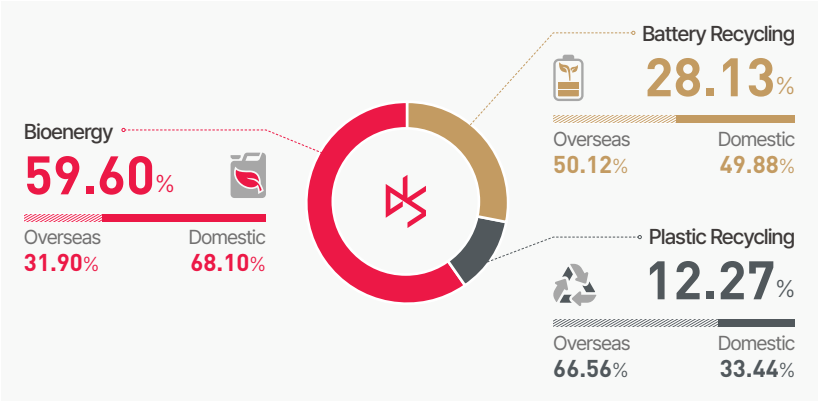
Company Overview

Company Name	DS DANSUK CO., LTD.
Established Date	July 1, 1965
CEO	Seung-uk Han, Jong-woan Kim
Number of employees	446 (as of December 31, 2024)
Location	Sihwa Head office - 165, Hyeomnyeok-ro, Siheung-si, Gyeonggi-do
Website	http://dsdansuk.com
Business Areas	• Bioenergy – Bio diesel, Bio heavy oil, Bio marine fuel, HVO pre-treated feedstock • Battery recycling – Recycled lead/lead alloy, Copper/copper alloys, Black Mass • Plastic recycling – PVC stabilizer, Layered double hydroxide (LDH), PCR plastic

Organization



Share of Sales in 2024

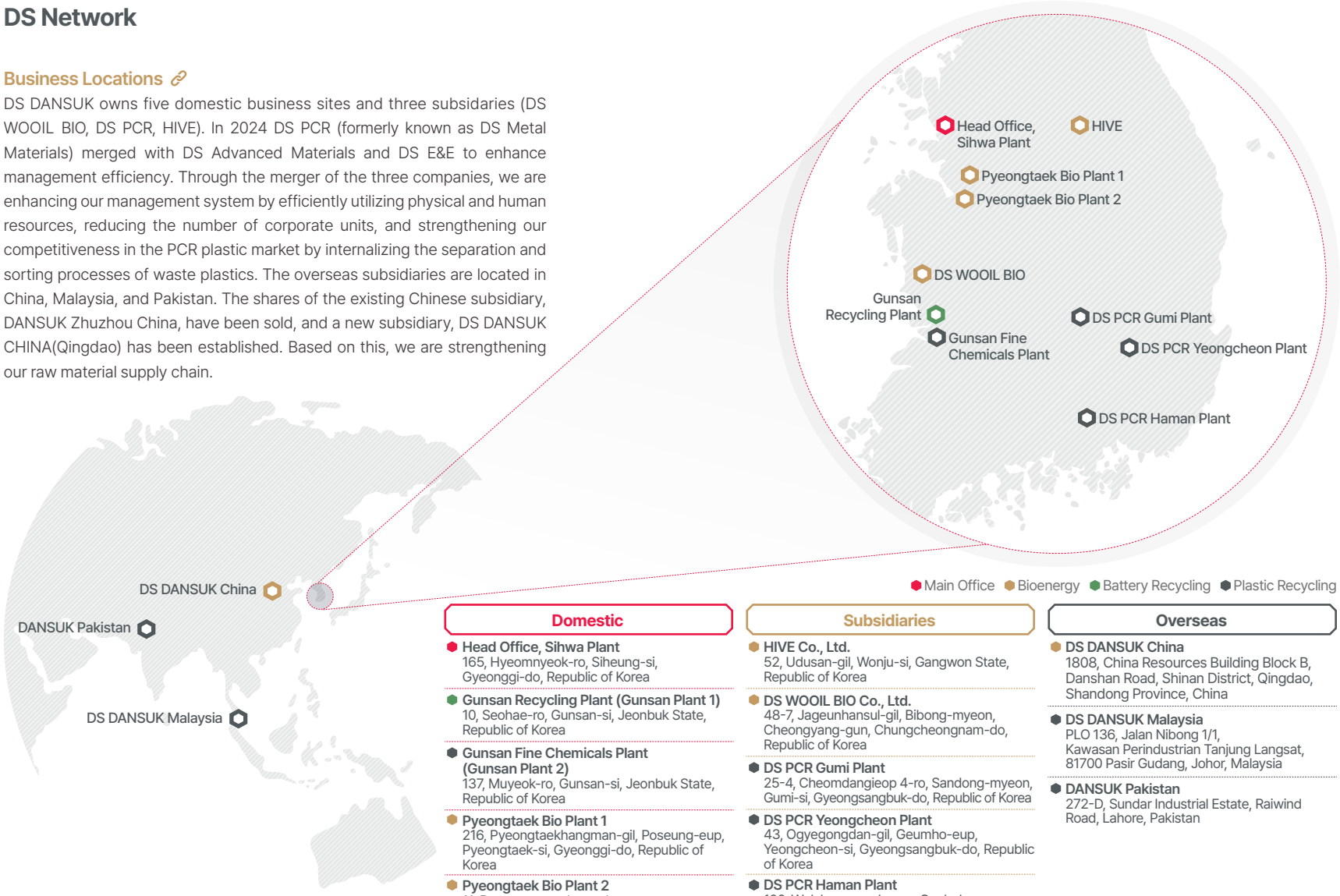


About Us

DS Network

Business Locations

DS DANSUK owns five domestic business sites and three subsidiaries (DS WOOIL BIO, DS PCR, HIVE). In 2024 DS PCR (formerly known as DS Metal Materials) merged with DS Advanced Materials and DS E&E to enhance management efficiency. Through the merger of the three companies, we are enhancing our management system by efficiently utilizing physical and human resources, reducing the number of corporate units, and strengthening our competitiveness in the PCR plastic market by internalizing the separation and sorting processes of waste plastics. The overseas subsidiaries are located in China, Malaysia, and Pakistan. The shares of the existing Chinese subsidiary, DANSUK Zhuzhou China, have been sold, and a new subsidiary, DS DANSUK CHINA(Qingdao) has been established. Based on this, we are strengthening our raw material supply chain.



Main Office · Bioenergy · Battery Recycling · Plastic Recycling

Domestic

- **Head Office, Sihwa Plant**
  165, Hyeomnyeok-ro, Siheung-si, Gyeonggi-do, Republic of Korea
- **Gunsan Recycling Plant (Gunsan Plant 1)**
  10, Seohae-ro, Gunsan-si, Jeonbuk State, Republic of Korea
- **Gunsan Fine Chemicals Plant (Gunsan Plant 2)**
  137, Muyeok-ro, Gunsan-si, Jeonbuk State, Republic of Korea
- **Pyeongtaek Bio Plant 1**
  216, Pyeongtaekhangman-gil, Poseung-eup, Pyeongtaek-si, Gyeonggi-do, Republic of Korea
- **Pyeongtaek Bio Plant 2**
  11, Poseunggongdansunhwan-ro, Poseung-eup, Pyeongtaek-si, Gyeonggi-do, Republic of Korea

Subsidiaries

- **HIVE Co., Ltd.**
  52, Udusan-gil, Wonju-si, Gangwon State, Republic of Korea
- **DS WOOIL BIO Co., Ltd.**
  48-7, Jageunhansul-gil, Bibong-myeon, Cheongyang-gun, Chungcheongnam-do, Republic of Korea
- **DS PCR Gumi Plant**
  25-4, Cheomdangieop 4-ro, Sandong-myeon, Gumi-si, Gyeongsangbuk-do, Republic of Korea
- **DS PCR Yeongcheon Plant**
  43, Ogyegongdan-gil, Geumho-eup, Yeongcheon-si, Gyeongsangbuk-do, Republic of Korea
- **DS PCR Haman Plant**
  100, Wolchongongdan-ro, Gunbuk-myeon, Haman-gun, Gyeongsangnam-do, Republic of Korea

Overseas

- **DS DANSUK China**
  1808, China Resources Building Block B, Danshan Road, Shinan District, Qingdao, Shandong Province, China
- **DS DANSUK Malaysia**
  PLO 136, Jalan Nibong 1/1, Kawasan Perindustrian Tanjung Langsat, 81700 Pasir Gudang, Johor, Malaysia
- **DANSUK Pakistan**
  272-D, Sundar Industrial Estate, Raiwind Road, Lahore, Pakistan

About Us

DS Value Chain

Communication of Stakeholders

DS DANSUK is striving to fulfill its corporate social responsibility through communication with various stakeholders. The main groups of stakeholders are categorized into customers, employees, local communities, shareholders and investors, partners, academic societies/associations, and government/local authorities. We are establishing various communication channels with each of these stakeholders and, based on this, we aim to continuously reflect the key interests and demands of the stakeholders in our management direction.

Value Chain — Management Strategy — R&D — Raw Material Supply — Production — Sales

Stakeholders	Partners	Government/ Local Government	Academic Societies/ Associations	Employees	Customers	Shareholders and Investors	Community
Definition of stakeholder	Stakeholders who have a mutually essential impact on the company's business activities through a strategic partnership with DS DANSUK	Stakeholders who manage and supervise DS DANSUK's regulatory compliance and support/evaluate the activities of companies under their jurisdiction, such as in the industry or region	Stakeholders who cooperate in building networks and research and development related to DS DANSUK's business	Human resources that make up DS DANSUK, stakeholders who are the future assets of the company	Stakeholders who receive products and services from DS DANSUK	Stakeholders who are affected by DS DANSUK's revenue performance and indirectly influence management through shareholder meetings, etc.	Stakeholders affected by DS DANSUK's management activities in terms of the local economy and environmental aspects.
Goal of communication	Mutual growth through fair trade and ESG cooperation	Building trust through compliance with regulations and policy responses	Establishing a cooperative system to address environmental and industrial issues	Improving engagement and satisfaction through communication and growth support	Improving satisfaction and trust through eco-friendly products and services	Securing trust and enhancing corporate value through transparent information provision	Expanding regional coexistence and social contribution
Communication channels	• Partner Briefings • Training for partner companies	• Public-private partnership programs • Visit to related institutions	• Academic conferences and seminars • Industry-Academia Collaboration Program • Regular meetings	• Groupware • Labor-Management Council (quarterly) • Safety and Health Committee (quarterly) • In-house communication program	• Website customer service • Customer satisfaction survey • Visit consultations • SNS channels	• Shareholders' meeting • Website • IR activities • Analyst Meeting	• Social contribution activities
Main interests	• Fair trade • Work environment	• Compliance with laws and regulations • Partnership • Community investment	• Industry/technology issues • Climate change	• Employee benefits • Fair evaluation and compensation • Work-life balance	• Quality • Price • Delivery	• Corporate Value/ Management Performance/Dividends • Growth strategy • Transparent governance structure	• Social responsibility • Environmental impact of business activities
Communication direction	• Communication for co-growth based on strengthening strategic partnerships	• Policy-linked communication related to relevant regulations and certifications	• Collaboration-based communication related to technology and environmental issues	• Two-way communication to enhance work immersion	• Strengthening customized communication based on feedback for specific issues	• Enhancing the provision of strategic information	• Community-oriented collaborative communication

Korea-Indonesia Investment Seminar

Hanyang University Energy Forum for Development Cooperation Countries

Analyst meeting

About Us

Value Creation

DS DANSUK is positively impacting customers, partners, local communities, and the environment through its eco-friendly business centered on bioenergy, battery recycling, and plastic recycling. Our business is based on converting waste resources into products, contributing to greenhouse gas reduction and the establishment of a resource circulation system. Customers utilize DS DANSUK's products to establish an eco-friendly business system and generate profits through this. Partners are supplying raw materials to us as a partner for mutual growth and cooperative development, thereby generating profits. The local communities are contributing by creating jobs and engaging in social contribution activities. Furthermore, they are also having a positive impact on the revitalization of the local economy.

(Based on consolidated financial statements)

Input

Financial Capital
- Total assets: **735,819** million KRW
- Capital raised (borrowings/issuance): **323,585** million KRW

Manufacturing Capital
- Scale of equipment investment: **75,602** million KRW
- Production capacity: **510,230** tons
- Equipment utilization rate: **60.9%**

Human Capital
- Total number of employees: **446**
- Number of new hires: **160** people
- Total training cost: **86** million KRW
- Total labor cost: **25,272** million KRW

Intellectual Capital
- R&D operating costs: **777** million KRW
- Research personnel: **12** people

Social and Relationship Capital
- Social contribution expenditure: **121** million KRW
- Number of suppliers: **279** companies

Natural Capital
- Energy consumption: **1,572** TJ
- Water usage: **311,573** tons

Value Creation Activities

Bioenergy Business

Used cooking oil/Animal fat/By-products, etc.
- Refining/Neutralization/Reaction/Separation → Bio diesel
- Reaction/Dehydration → Bio heavy oil
- Filter/Reaction → Bio marine fuel
- PE removal/Degumming/Adsorption → HVO pre-treated feedstock

Plastic Recycling Business

One Pack Stabilizer (extrusion): Raw material + Basic stabilizer → Mixer → Extrusion

LDH: Raw material dissolution → Primary reaction and maturation → Coating → Dehydration/Washing and drying

PCR plastic: Hand sorting → Crushing/Grinding → Gravity Separation → Dehydration → Electrostatic Separation → Color difference Separation → Mixing and extrusion

Battery Recycling Business

Recycled lead: Waste battery → Crushing/Separation → Paste, Grid → Reduction → Lead bullion → Refining → Recycled lead (ingot)

LIB: Waste LIB → Discharge → Crushing → Heat treatment → Gravity Separation → Particle sorting → Magnetic Separation → Gravity Separation
- Cu, Al
- Black Mass
- Fe
- LIB Separator (Plastic)

Output

Financial Capital
- Operating profit: KRW **12,187** million

Manufacturing Capital
- Sales revenue: KRW **961,722** million
- Final product production volume: **310,579** tons

Human Capital
- Average tenure: **4** years and **3** months
- Employee retention rate: **67.5%**
- Work engagement: **78.4%**
- Female management personnel (at the level of manager or higher): **9.1%**

Intellectual Capital
- Number of patents: **15**

Social and Relationship Capital
- Number of beneficiaries of the DANSUK Scholarship: **840** people (cumulative)
- Supply chain self-assessment implementation rate: **3.5%**

Natural Capital
- Greenhouse gas emissions: **86,023** tCO_2eq
- Incidents of hazardous chemical emissions: **0** cases
- Waste recycling rate: **35.1%**

Value Chain: Management Strategy | R&D | Raw Material Supply | Production | Sales

Our ESG Management

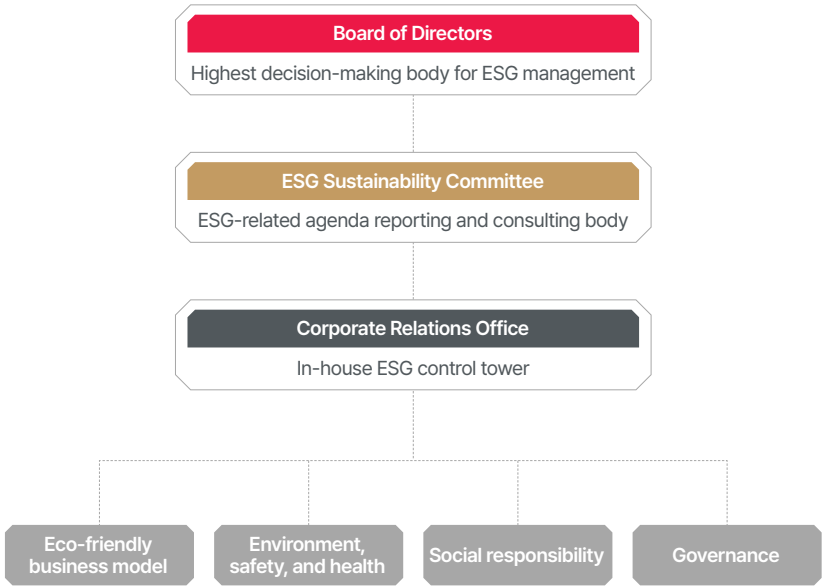
Governance

ESG Governance

Introduction to Governance

DS DANSUK operates an ESG Sustainability Committee composed of top executives, key management, and team leaders from each department to systematically manage various ESG issues and risks that may arise in overall management activities. To enhance ESG management, we periodically monitor industry trends and global ESG trends to identify and report improvement tasks and hold discussions on implementation once every six months. Major agendas and critical issues related to ESG are being set in terms of direction for ESG strategy through board meetings, incorporating stakeholders' opinions. We are carrying out these tasks company-wide through the Corporate Relations Office, which is dedicated to ESG.

ESG Governance Structure



ESG Sustainability Committee

DS DANSUK regularly holds an ESG Sustainability Committee in the form of an advisory body to systematically promote ESG management and review key ESG-related issues. This committee aims to enhance internal ESG awareness and strengthen execution capabilities, and when necessary, invites external experts to seek advice on specific ESG issues and conduct objective assessments of ESG management to explore strategic response directions. The committee is reporting on response measures to domestic and international ESG policy and regulatory changes, reviewing the status of ESG initiatives by business unit, and reporting on ESG activities in management areas such as environment, safety, and health. Additionally, the management is ensuring that practical ESG activities are carried out by identifying improvement tasks and providing feedback, thereby enhancing the alignment between the company's management strategy and ESG direction. In the future, the ESG Sustainability Committee plans to expand its role beyond that of an advisory body to become a substantive entity that deliberates and makes decisions on key ESG management-related matters.

Activities of the ESG Sustainability Committee

Date	Agenda
April 24, 2024	• Invite experts (Strategic approach to ESG management) • Report on ESG trends and internalization strategies • Report on the current status of ESG initiatives by each division
October 23, 2024	• Report on ESG trends • Advancement of disclosures and direction for promoting ESG management • Report on ESG Management Improvement Tasks

ESG Implementation System

DS DANSUK is carrying out annual strategic tasks under the company-wide ESG roadmap to enhance ESG management. We operate the ESG management improvement process through the establishment of short, medium, and long-term strategies and goals, as well as the annual routine of improvements. In the first half of the year, we aggregate and compile ESG performance data, report it to the ESG Sustainability Committee, and then disclose the information through the Sustainability Management Report. In the second half of the year, we consult and derive improvement tasks identified through in-depth interviews with the operational departments and incorporate them into the next year's management plan.

Strategy

Sustainability Management Strategy

ESG Sustainability Management Vision House

VISION: A Global Top Tier Resource Circulation Energy Company

Strategic Divisions	Business	ESG	Digital	GWP[1]
Sustainability Management Goals	Business Model Advancement	Eco-friendly & Smart Business Sites	Cooperation & Shared Growth	Strengthen ESG Governance
Practical Strategies	• Research and development and commercialization of new businesses - HVO pre-treated feedstock and HVO (SAF) process Technology development - LIB recycling and NCM precursors, development of LFP cathode materials - Manufacturing customer-specific PCR plastics • Diversification of raw materials and procurement - Securing recycled/reclaimed/waste materials - Strengthening partnerships in the raw materials market • Enhancing global market competitiveness - Certification of biofuels and expansion of export markets	• Greenhouse gas emission management - Management and disclosure of the company-wide greenhouse gas emissions trading system - Improvement of energy efficiency for greenhouse gas reduction and introduction of renewable energy • Establishing smart factories - Introduction of process automation and AI solutions - Advancement of process management systems • Advancement of environmental management - Reestablishment of environmental management policies and guidelines - Improvement of environmental management (water quality/air quality/waste KPI)	• Creating a sustainable work environment - Advancement of the occupational safety and health management system - Pursuit of zero safety accidents • Advancement of HR management - Establishment and evaluation of a human rights management charter - Establishment of a new performance evaluation system and improvement of the education system • Strengthening win-win cooperation activities - Expansion of social contribution activities (scholarship foundation, community donations, etc.) - Support for win-win cooperation with partners and the introduction of supply chain ESG evaluation • Development, supply, and quality control of customized products for customers	• Strengthening the transparency of the governance system - Enhancing the independence, expertise, and diversity of the board of directors - Expansion of governance activities centered on outside directors • Internalization of ethics and compliance management - Implementation checks of ethical norms (guidelines) and periodic training - Achieving zero anti-corruption risk through compliance support • Integrated risk management - Operation of the Audit Committee and Internal Audit Organization - Enhancement of the internal accounting management system and inspection of its operational status
Achievements of 2024	• Completion of HVO PTU and production of HVO pre-treated feedstock • Establishment of a new Chinese subsidiary to strengthen global raw material sourcing • Completion of LIB recycling plant and production of Black Mass • Launch of a subsidiary-merged corporation for the expansion of the PCR plastic business (DS PCR)	• Management of company-wide greenhouse gas emissions and participation in the emissions trading system, including compliance with obligations • Establishment of solar power generation facilities • Completion of the smart eco-factory construction project (Gunsan Recycling Plant) • Application of wastewater/heat recovery and recycling technology within the process	• Maintaining zero serious accidents at the workplace • Annual safety and health plan deliberation and approval by the board • Operation of the new performance evaluation system • Implementation of supply chain ESG management policy (Supplier Code of Conduct) • Establishment of a Human Rights Charter and Declaration of Human Rights Management (Jan. 2025)	• Continuation of the operation of board committees centered around outside directors (such as the Audit Committee) • Activation of the ethics reporting system and strengthening of monitoring • Strengthening compliance officer activities, including the distribution of fair trade guidelines • Strengthening the management process of the internal accounting control system

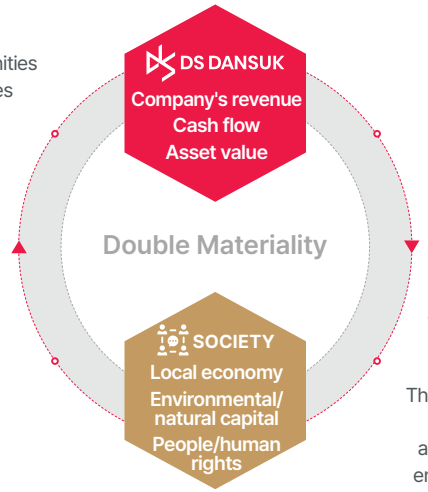
1) Great Work Place: Aiming to be a happy company that grows together with its employees

Risk Management

Double Materiality Assessment

DS DANSUK conducted a double materiality assessment in 2024 as a foundational task for establishing its medium- to long-term sustainable management strategy. This evaluation was conducted by referencing ESRS 1 and EFRAG Implementation Guidance (IG 1) presented in the European Sustainability Reporting Standards (ESRS), and it was internalized and applied in a manner suitable for the characteristics of the DS DANSUK business. The double materiality approach is an analytical framework that simultaneously considers the impact of social and environmental issues on a company's financial performance (financial materiality) and the influence of the company's business activities on society and the environment (impact materiality) to identify key management issues. This evaluation was restructured not based on the conventional categorical issues but using the 'risk-opportunity and impact unit' assessment method grounded in the business characteristics of DS DANSUK and the perspectives of ESG risks and opportunities. By comprehensively gathering opinions from relevant departments and external stakeholders (partners, customers, ESG experts, etc.) for each issue, we derived key sustainability topics. The evaluation results were finalized after review by the dedicated ESG organization and approval by the board of directors, and the identified material issues are reflected in DS DANSUK's strategy and risk management system, having a substantial impact on overall business operations. To address key issues, relevant ESG performance indicators (KPIs) have been established, and these indicators are reflected in the formulation of company-wide strategies and performance management.

Outside-in approach
The risks and opportunities that sustainability issues arising from the social environment pose to DS DANSUK
(Risk & Opp)



Inside-out approach
The positive/negative impact of DS DANSUK on society and the environment
(Impact)

Financial Impact
Financial Materiality
The positive and negative impacts of sustainability topics on a company's financial condition

Socio-environmental Impact
Impact Materiality
The positive and negative impacts of corporate activities on the external environment and people.

Materiality Assessment Process

Step 1. Formulate the Issue Pool

Based on ESRS1 & IG 1, we have compiled a long list and identified a total of 14 issues for the short list, taking into account various factors such as the fundamental major issues of DS DANSUK, ESG disclosure standards, evaluation agency management indicators, and benchmarking company issues.

Understand activities by corporate value chain	• Upstream: Agricultural products, waste management, fuel cells and industrial batteries, road transportation • Downstream: Automotive industry, air cargo and logistics, maritime transport, home appliance manufacturing
Formulate the issue pool	• Long List: All ESRS issues (93)
Select issues	• Global industry disclosure standards and evaluation analysis: SASB, MSCI, etc. • Global benchmarking: 5 domestic and international companies, including oil refiners and chemical manufacturers • Analysis of corporate disclosure reports and internal documents: materiality assessment results, business reports, sustainability management reports, internal reports, and policies
Short List	• Select issues based on criteria (14)

Step 2: Identify IRO

It was carried out with a focus on the issues included in the short list, considering both financial materiality and impact materiality simultaneously. In the issue identification process, external factors such as legal and regulatory changes, market and consumer perceptions, investor demands, and changes in industry and technology were broadly reflected. To enhance the consistency of the analysis, opinions from various stakeholders in relevant departments were gathered, and a multi-faceted screening procedure was conducted.

Identify social and environmental impacts (Inside-out)	• Analyze the positive and negative impacts of corporate activities on the environment and society (corporate environmental and social contributions and potential risks) to identify a total of 30 impact factors.
Identify financial impacts (Outside-in) Risks and opportunities	• Analyze the impact of ESG issue factors on the company's financial performance and operational stability to identify risk and opportunity factors (a total of 29 risk and opportunity factors identified). • Risk: Analyze the negative impacts that each ESG issue may have on the company (such as increased legal regulations, decreased market trust, and rising operational costs).

Risk Management

Step 3. Assess IRO

DS DANSUK conducted a comprehensive assessment of the social, environmental, and financial materiality of each ESG issue by considering the likelihood of occurrence and the scale, scope, and severity of their impact. To enhance the reliability and objectivity of the evaluation, practitioners from relevant departments with a deep understanding of the company and industry, as well as external experts in the fields of environment, society, and governance, were involved as evaluators, and a quantified evaluation process based on the ESRS guidelines was applied.

Financial Materiality Assessment		Impact Materiality Assessment	
Risk	Opportunity	Risk	Opportunity
Scale, likelihood*	Scale, likelihood*	Scale, range, likelihood*	Scale, range, likelihood*, irreversibility

*Short-term: 1 year or less, Medium-term: 2-5 years, Long-term: More than 5 years

Step 4. Select material issues

Through the IRO (Impact, Risk, Opportunity) assessment, we evaluated key ESG issues with financial materiality and impact materiality as the two axes. Each issue was assessed from two perspectives: likelihood of occurrence and impact. If the average score exceeded the threshold of 10% in either financial or social/environmental materiality, it was selected as a significant issue. According to these criteria, a total of five issues were confirmed as significant issues, and the identified issues were systematically classified into a 2X2 matrix based on their financial and socio-environmental importance, thereby establishing strategic response priorities for the company's ESG risks and opportunities.

Materiality assessment result

Financial Impact

Out of the **30** assessment targets, **6** were identified.

Socio-environmental Impact

Out of the **30** assessment targets, **7** were identified.

Communication and Participation of Stakeholders

DS DANSUK has established an objective and reliable materiality assessment system through stakeholder participation. First, based on the issues identified in the short list, we selected IROs that are highly relevant to the business characteristics through consultations with the department's practical staff. Subsequently, various stakeholders, including internal employees, external ESG experts, partners, and analysts, participated in quantitatively assessing the financial and social/environmental impacts. The final significant issues identified were confirmed through executive review and board reporting, and these were systematically reflected in the establishment of DS DANSUK's sustainable management strategy and the design of key ESG indicators.

Assessment Participants

Assessor classification	Assessment progress stakeholders	Assessment field
Internal expert	Executive team, Sustainable Management TFT	Issues related to each specialized field
Value chain	Partner	Supply chain-related issues
Financial stakeholders	Customers, shareholders, and investors	ESG financial impact
Social and environmental stakeholders	Academic societies, associations, government agencies, local governments, communities	Social and environmental issues
External expert	(New participant) ESG expert	Issues related to each specialized field

Main opinions of the assessment participants

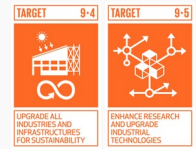
Field	Key opinions of stakeholders on the assessment process
ESG strategy	• Internal innovation and enhancement of the ESG management system • Strengthening the official ESG reporting system and responding to EU regulations
Environmental regulations	• Strengthening greenhouse gas regulations and proactive response to changes in environmental regulations are necessary. • Need for managing community environmental impacts and ensuring regulatory compliance • Need to strengthen cooperation to respond to the Carbon Border Adjustment Mechanism (CBAM)
Working environment	• Improvement of employee welfare and work environment • Enhancing psychological safety in the workplace through the creation of a healthy organizational culture and strengthening work-life balance
Occupational Safety and Health	• Strengthening employee health management and accident prevention • Establishment of a risk assessment system and strengthening of major accident response • Risk assessment at the contract stage and strengthening of safety and health regulations • Strengthening the safety of production facilities and managing carbon emissions
Supply chain	• Need to enhance the management of human rights and labor issues in the supply chain • Need to strengthen response to supply chain ESG risks and enhance workforce capabilities through expanded participation in ESG supply chain councils • Strengthening efforts to reduce carbon emissions within the supply chain

Risk Management

Strategies to Respond to Materiality Issues

Response Strategies for Financial Impact (Inward Impact) of Materiality Issues

(Value chain: ▼Down, ●Own, ▲Up)

ESG	Issue name	Main Risks & Opportunities		Materiality		Response strategies	Expected Effects	Period of occurrence[1]	Value chain	UN SDGs	Report pages
		Division	Factors	Likelihood	Impact						
E	Climate change response	Risk	Due to the expansion of battery and plastic recycling and the biofuel market, there has been an increase in market instability and raw material supply overheating as customers directly enter the market or new competitors emerge.	●●● ◐○	●●● ◐○	• Maximize the utilization of new low-grade raw materials (waste, by-products) through the advancement of production processes • Establish strategic partnerships with suppliers and strengthening mutual cooperation	• Break away from supply competition in the raw material market through proactive diversification of raw materials • Increase business sustainability through securing the supply chain	Medium-term	▼ ● ▲		24-31
	Pollutant management	Risk	Increased investment for facility improvements and management costs due to regulations related to air pollutants such as emission standards for business sites and the expansion of community demands.	●●● ◔○	●●● ○○	• Strengthen the management of air pollutant emissions • Investment in environmental facilities and operational efficiency	• Mitigate air pollution regulation compliance risks • Establish eco-friendly smart factories	Long-term	●		70-71, 74-77
	Eco-friendly raw materials	Risk	As various companies participate in the recycling markets for biofuels, batteries, and plastics, there is a possibility of raw material procurement disruptions or cost increases.	●●● ◐○	●●● ◐○	• Discover new raw materials and suppliers • Strengthen the supply chain through a bolt-on strategy	• Secure profitability through cost stabilization • Defend against supply chain risks	Medium-term	●		32-41
	Recycling and resource circulation	Opportunity	As regulations related to battery recycling, such as the EU Battery Regulation, CRMA, and IRA, are strengthened, the revenue from the battery recycling business is expected to improve.	●●● ○○	●●● ◔○	• Internalize battery recycling technologies such as Black Mass recovery and post-processing • Expand business areas such as Energy Storage Systems (ESS)	• Contribute to the establishment of a closed-loop system within the battery industry • Secure future growth engines	Long-term	●		32-41
S	Fair work environment and tolerance	Risk	Due to the increased risk of managerial punishment with the strengthening of the Serious Accident Punishment Act, there is a rise in the cost of investing in safety processes and the suspension of operations at some high-risk workplaces, leading to increased financial burdens.	●●● ◔○	●●● ◐○	• Achieve zero risk of major accidents through expanded investment in safety and health • Advance the safety and health management system and internalize corporate culture	• Strengthen the foundation for sustainable manufacturing operations • Reduce regulatory violation risks and industrial accident rates	Long-term	▼ ●		42-61

1) Period of occurrence: Short-term within 1 year, medium-term within 2-5 years, long-term over 5 years

Risk Management

Strategies to Respond to Materiality Issues

Response Strategies for Socio-Environmental Impact (Outward Impact) of Materiality Issues

(Value chain: ▼Down, ●Own, ▲Up)

ESG	Issue name	Main Impacts		Materiality		Response strategies	Expected Effects	Period of occurrence[1]	Value chain	UN SDGs	Report pages
		Division	Factors	Likelihood	Impact						
E	Climate change response	Positive	Contribution to the reduction of greenhouse gas emissions through the operation of an environmental management roadmap for carbon neutrality, including the enhancement of environmental management indicators (KPIs), achieving RE100, CCUS, and LCA.	●●● ◐○	●●● ◐○	• Invest in facilities and implementation of reduction activities at each site to reduce greenhouse gas emissions • Expand renewable energy adoption and establish greenhouse gas management systems (inventory, etc.)	• Minimize greenhouse gas emissions in the community • Contribute to achieving national NDCs and realizing global climate goals	Medium-term	▼ ● ▲		24-31
	Pollutant management	Positive	Contribution to the environmental performance of customers and the industry based on the air pollution and greenhouse gas reduction effects of biofuels.	●●● ◕○	●●● ●◔	• Establish next-generation biofuel production systems such as SAF and HVO • Obtain and maintain eco-friendly certification	• Expand contributions to greenhouse gas reduction in the industrial sector • Meet the expanded requirements for the transparency of pollutant information	Long-term	●		70-71, 74-77
	Eco-friendly raw materials	Positive	Leading the circular economy and enhancing the sustainability of resource use by expanding the influx of recycled-based resources and renewable raw materials	●●● ●◔	●●● ◕○	• Expand the supply of recyclable resources applicable to the process • Expand raw material purchases with secured eco-friendly certifications, etc.	• Strengthen the supply chain foundation that contributes to resource circulation • Reduce negative environmental risks within the supply chain	Medium-term	●		32-41
	Recycling and resource circulation	Positive	Minimizing the resource outflow of products and services while simultaneously enhancing resource circulation and environmental contributions by increasing the utilization and recycling rates of waste resources.	●●● ●◔	●●● ◕○	• Advance newly develop waste resource recycling technology • Raw materialization of industrial by-products and waste	• Contribute to the reduction of waste generated in local communities, industries, and client companies through the re-resourcing of waste • Reduce negative environmental impact through the recycling and minimization of waste emissions	Long-term	●		32-41
S	Fair work environment and tolerance	Positive	Attracting top talent and contributing to the local economy by creating quality local jobs based on a fair and safe working environment	●●● ◐○	●●● ◐○	• Strengthen talent management through fair evaluation, compensation, and improvement of corporate culture • Establish a human rights management system based on diversity and inclusion	• Improve job satisfaction • Strengthen community capacity through the influx of talented individuals	Long-term	▼ ●		42-61

1) Period of occurrence: Short-term within 1 year, medium-term within 2-5 years, long-term over 5 years

Metrics and Targets

2024 ESG Goals and Performance

ESG	GRI	ESG Topic	2025 Key Issue	Goal	Indicator	2024 Performance
B	-	Industrial Innovation	• Recycling and Resource circulation	• Internalize eco-friendly fuel (HVO) technology and establish in-house production system	• Construction of HVO PTU and initiation of pre-treated feedstock production	• Completion of HVO PTU (300,000 tons/year) and launch of global supply
	301	Resource Circulation	• Recycling and resource circulation • Eco-friendly raw materials	• Internalize and advance recycling technology by business	• Construction of LIB recycling facilities and improvement of Black Mass recovery rate	• Completion of LIB recycling plant (5,000 tons/year Black Mass production) • Recovery rate: 95-96%
E	305	Climate Change Response	• Climate change response	• Enhance the GHG reduction system	• Participation in emissions trading scheme and reporting • Phased application of product LCA	• Established monitoring/reporting system • Conducted LCA for biodiesel and recycled plastics
	302	Energy	-	• Implement smart eco-factories by site • Install renewable energy systems	• Application of wastewater/waste heat recovery and GHG reduction technologies • Achieve RE10 across all sites	• Applied resource recovery technologies • Completed smart eco-factory initiative • Achieved RE11 with solar installations
	403	Occupational Safety & Health	• Fair and inclusive work environment	• Advance safety governance and ensure safe work environment	• Zero major industrial accidents and board approval for safety and health plan	• Maintained zero major industrial accidents • Reported safety and health plan to board (Jan. 2025)
S	406	Human Rights	• Fair and inclusive work environment	• Declare and institutionalize human rights management	• Establishment of Human Rights Charter and roadmap • Planning of human rights impact assessment	• Human Rights Charter and roadmap completed • Human Rights Declaration issued (Jan. 2025)
	405	Talent Development	• Fair and inclusive work environment	• Operate a new performance evaluation system	• Competency-based evaluations (common, job-specific, leadership)	• Full implementation of new evaluation system for office workers across all sites
	206	Fair Trade	-	• Internalize fair trade and compliance management	• Establish and deliver fair trade guidelines • Conduct fair trade self-assessment	• Issued fair trade guidelines and self-checklists • Compliance training for employees (Apr. 2025)
G	205	Ethical Management	-	• Operate ethics reporting system and strengthen internal controls	• Revise ethics roadmap and operate reporting center • Advance internal accounting control	• Standardized ethics reporting procedures and enhanced monitoring • Strengthened internal controls per revised audit laws
	2	Board Composition	-	• Enhance board independence and expertise through governance framework	• Activate board committees	• Held 13 committee meetings (excluding management committee) and conducted training for audit committee

Metrics and Targets

2024 ESG Highlights

Contributing to GHG Reduction through Biofuel Supply

GHG reduction effect
707,611 tCO_2eq

Recycled Battery Volume

130,636 tons

Zero Major Industrial Accidents

2,870 days

Biofuel – Waste & Residue Feedstock Usage

226,030 tons

Eco-Friendly Business Expansion

HVO PTU completed and began production/supply of **HVO** pre-treated feedstock (Nov. 2024)

LIB Recycling Plant completed (Apr. 2024)

DS PCR Haman Plant Plastic Circulation Facility completed (May 2024)

Board Independence & Expertise

More than **1/4** of directors are outside directors (**3** out of **7**)

Held committee meetings (**13** times, excluding management committee)

Social Contribution Activities

KRW **121** million
(donation + scholarship)

Global ESG Initiatives

Joined **UNGC(UN Global Compact)**
(Jun. 2024)

Eco-Friendly Vehicles

10 eco-friendly vehicles out of **47** corporate vehicles (**21**%)

Distinctive Sustainability

TCFD Report: Climate Change Response

Management Approach

Material Issue

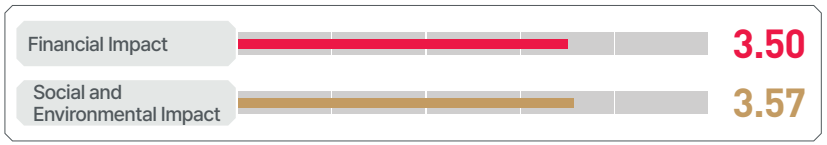
DS DANSUK recognizes climate change as a defining global challenge that fundamentally impacts human life and industrial structures. The company believes that proactive response to this issue is essential for achieving sustainable business growth. As an eco-friendly manufacturer based on resource circulation, DS DANSUK is committed to systematically managing both physical and transitional risks associated with the climate crisis, while also identifying new growth opportunities in the transition toward a low-carbon society. The company is developing practical implementation strategies for greenhouse gas reduction and energy transition from a mid- to long-term perspective. These include improving energy efficiency at each business site, expanding the use of renewable energy, and establishing a comprehensive carbon emissions management system across the supply chain to ultimately achieve Net-Zero.

UN SDGs

7.2 Significantly increase the share of renewable energy

7.3 Double the rate of improvement in energy efficiency

Impact of Climate Change Response on DS DANSUK



Governance

DS DANSUK regularly reports its climate change response activities and environmental management implementation status to the ESG Sustainability Committee. Based on these reports, the committee reviews the company's strategic direction. Major agenda items are presented to the Board of Directors for discussion, and the CEO and relevant departments share the finalized strategies and action plans across all business sites. This strengthens cross-organizational collaboration and enhances execution at the company-wide level.

Strategy

DS DANSUK plans to establish carbon reduction and carbon neutrality targets to contribute to the transition toward a carbon-neutral society and the achievement of the national NDC (Nationally Determined Contribution) goals. To this end, it will formulate actionable strategies such as improving energy efficiency, introducing renewable energy, and upgrading production processes to mitigate climate risks and strengthen its low-carbon competitiveness.

IRO	Description	Response Period			Response Strategy
		Short-term	Mid-term	Long-term	
Opportunity	Rising demand for biofuels due to strengthened international GHG regulations	●	●	●	Develop next-generation biofuels (e.g., SAF, BMF) and establish a low-carbon production foundation
Risk	Intensified competition and raw material supply shortages due to market growth	●	●		Improve processes and invest in utilizing low-grade raw materials; expand strategic partnerships with suppliers
Positive	Reduction in GHG emissions through implementation of environmental management roadmap	●	●	●	Gradual implementation of RE100, adoption of low-carbon raw materials, application of carbon capture, storage, and utilization technologies

Risk Management

Based on the environmental risk assessment procedures of ISO 14001, DS DANSUK has established a company-wide risk management system. In accordance with the TCFD framework guidelines, the company systematically identifies, assesses, and formulates response strategies for climate-related risks.

Metrics and Targets

TARGET Achieve RE30 by 2030 and establish a Net-Zero roadmap.

METRICS

Category	Unit	2025(Target)	2026(Target)	2030(Target)	2050(Target)
RE100 Achievement	%	11	20	30	100

Category	Unit	2022	2023	2024	2030(Target)
Greenhouse Gas Emissions	tCO_2eq	80,522.26	80,823.47	86,000.35[1]	Net-Zero target established

1) Figures exclude the Seoul Office and Jecheon Bio Plant (currently inactive).

TCFD Report: Climate Change Response

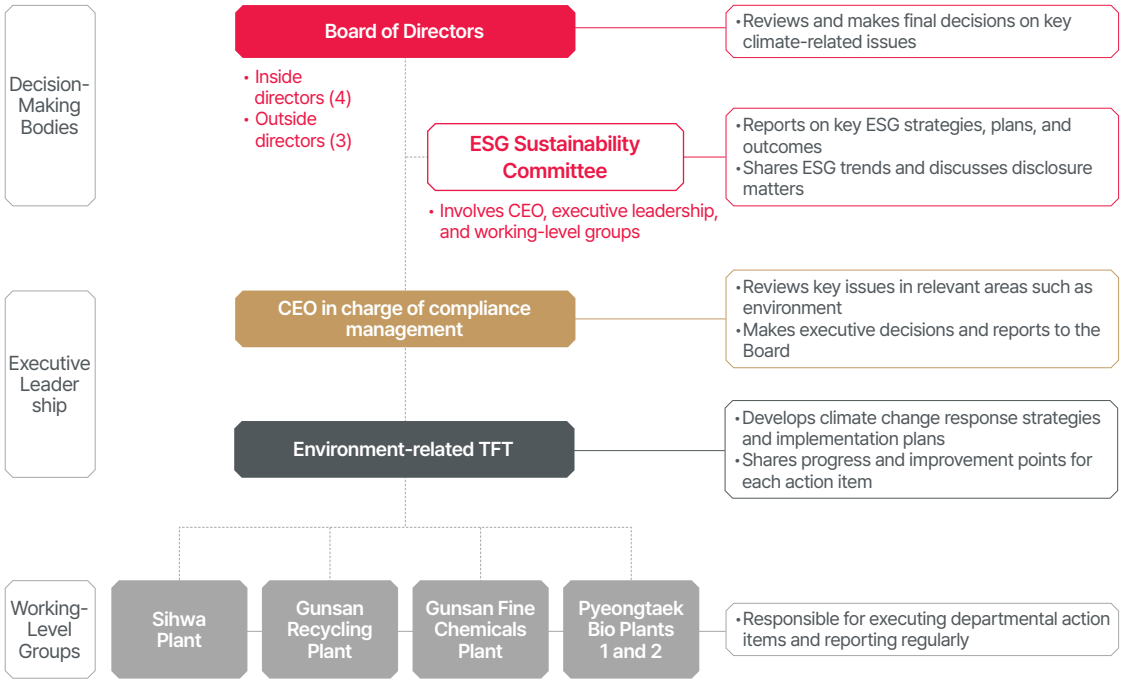
Governance

Climate Change Response Organization

DS DANSUK operates an environmental management governance framework centered around the ESG Sustainability Committee to systematically respond to environmental issues, including climate change. This committee regularly monitors climate risks and environmental performance, with key matters reported to the Board of Directors to ensure strategic execution. The implementation of environmental management is overseen by the CEO in charge of Compliance Management and carried out by dedicated environmental teams stationed at each business site. These teams manage key issues such as climate change response, greenhouse gas and energy management, air quality improvement, and waste and resource circulation. Each site's environmental officer is a trained specialist who works to achieve tangible, site-level results—from mid- to long-term strategic planning to annual action plans. Relevant actions are regularly reported to plant managers, reinforcing plant-level accountability. Progress on environmental strategic initiatives is reported semi-annually to the ESG Sustainability Committee, enabling regular company-wide performance reviews. Through this structure, DS DANSUK ensures a clear implementation system that extends from frontline teams to management and the Board, allowing for proactive risk management and enhanced sustainability.

Board Reporting Structure and Composition

DS DANSUK establishes and implements climate change strategies through a clear reporting and decision-making system composed of the Board of Directors and the ESG Sustainability Committee. The Board reviews and approves key climate-related matters such as investments and business plans, while the ESG Sustainability Committee comprehensively reviews strategies and performance across environmental, social, and governance (ESG) areas. The management team, led by the CEO, directly reviews key climate issues and supervises the implementation of action plans by the working groups. These working groups serve as the operational core, reporting to management on climate-related tasks and executing initiatives to help achieve company-wide goals. They are also continuously seeking proactive solutions to meet medium- and long-term targets.



TCFD Report: Climate Change Response

Climate Change Response System

DS DANSUK recognizes climate change as a core issue in corporate management and has adopted the TCFD (Task Force on Climate-related Financial Disclosures) framework to strategically respond to climate-related risks and proactively meet climate disclosure requirements. The company is also working to expand its disclosures to include Scope 3 emissions, aiming to provide reliable climate-related information to a broad range of stakeholders. In parallel, DS DANSUK is actively creating and operating environmentally friendly business sites by increasing the use of renewable energy and improving energy efficiency. The company is fully committed to minimizing greenhouse gas emissions and achieving carbon neutrality by 2050.

Climate Change Response Roadmap

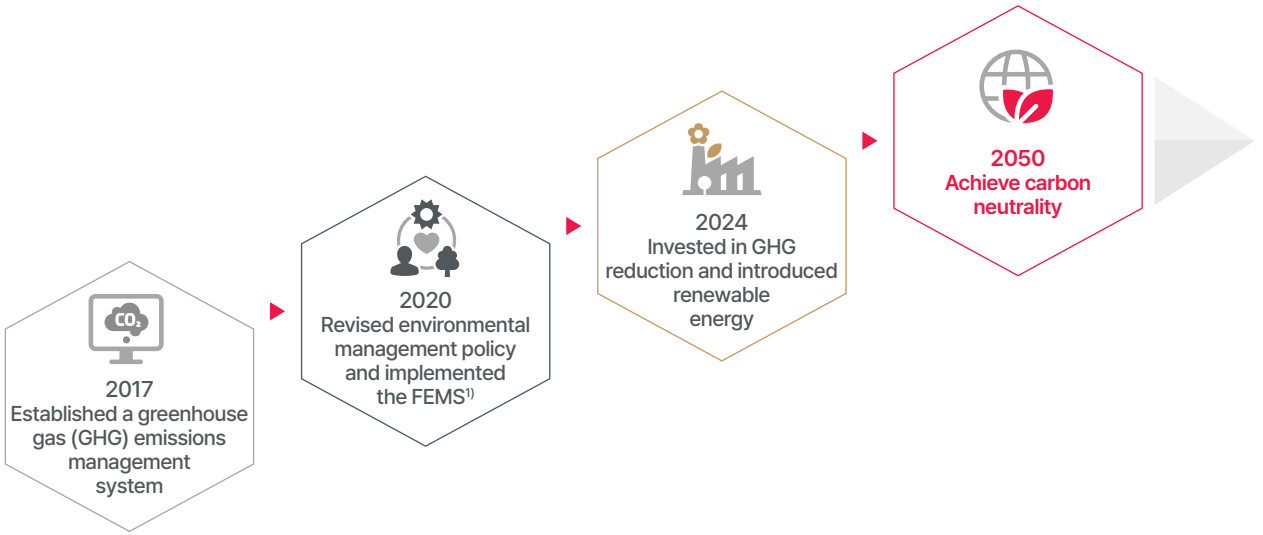
Phase 1 — 2025
- Operation of an integrated climate and carbon disclosure system
- Full-scale implementation of process optimization and energy-saving initiatives

Phase 2 — 2030
- Expansion of renewable energy adoption and reinforcement of resource circulation
- Establishment of a GHG inventory and Scope 3 reduction framework

Phase 3 — 2040
- Completion of low-carbon transition for major facilities
- Deployment of reduction technologies such as CCUS and establishment of an integrated response system

Phase 4 — 2050
- Full implementation of RE100 and achievement of carbon neutrality

DS DANSUK's Key Activities in Climate Change Response



Application of the TCFD Framework

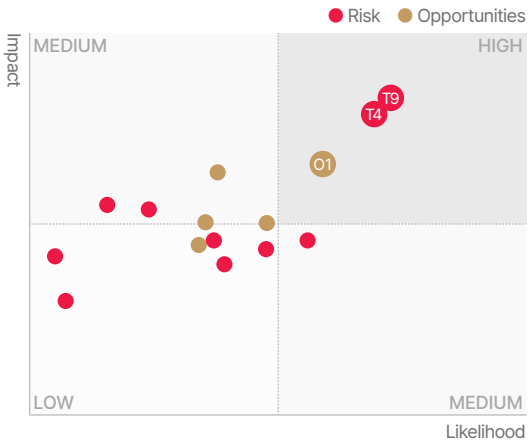
- To meet mandatory climate disclosure requirements, DS DANSUK has adopted the TCFD framework to disclose its climate response activities.
- The company plans to conduct climate risk impact analyses to clearly identify financial and socio-environmental effects, and to establish and disclose both short- and mid/long-term response strategies.
- DS DANSUK is internally reviewing a Net-Zero strategic roadmap aligned with Korea's 2030 Nationally Determined Contribution (NDC) targets.
- It will also disclose sustainability and environmental information in connection with financial statements and business reports.

1) Factory Energy Management System

TCFD Report: Climate Change Response

Climate Materiality Assessment

DS DANSUK has conducted a materiality assessment of climate-related risks and opportunities to clearly define its strategic direction for climate action. This assessment focused on both physical risks—those with a direct impact on assets and the supply chain—and transition risks arising from policy shifts and technological change. On the physical risk front, the most significant issue identified was the increasing frequency and intensity of extreme weather events such as heatwaves, heavy rains, and typhoons, which pose potential threats of damage to production sites and operational disruptions. These risks may lead to increased capital expenditures for facility upgrades and heighten complaints from local communities, highlighting the need for improved infrastructure and proactive response systems to enhance climate resilience. Key transition risks identified include the rising cost of carbon credits, customer demands for certifications to comply with regulations like the Carbon Border Adjustment Mechanism (CBAM), and intensifying competition in the recycling market. These factors require substantial investments in carbon reduction and the advancement of technologies to secure competitive advantage, emphasizing the need for strategic infrastructure investments. Conversely, global regulatory support for renewable energy, market expansion, and opportunities emerging from the battery and recycling industries were identified as positive factors aligned with DS DANSUK's green technology transition strategy. In response, the company is prioritizing the adoption of renewable energy facilities and strengthening resource circulation systems across its supply chain as core strategies, focusing on ensuring business sustainability through effective climate risk management.



Climate Risk Factors

ID	Topic	Sub-Topic	Impact			Risk Description	Risk Response Measures	Financial Impact
			Short-term	Mid-term	Long-term			
T4	Climate Change Response	Climate Change Mitigation	●	●		Intensified competition due to the expansion of the circular economy market	Investment in technology and infrastructure; strengthening risk assessment systems in response to climate change	• Legal penalties for non-compliance with regulations • Increased cost of capital due to ESG rating downgrade • Higher capital expenditures for early conversion to high-efficiency facilities
T9	Eco-Friendly Raw Materials	Resource Inflow	●	●		Increased raw material prices due to intensified competition for resource inflow	Expansion of applicable raw materials through advanced processing and production technologies	• Higher procurement costs and cost burden from rising demand and competition for raw materials • Increased certification risks from use of substitutes or lower-grade materials • Potential revenue loss due to production delays from supply disruptions

Climate-Related Opportunity Factors

ID	Topic	Sub-Topic	Impact			Opportunity Description	Realization Measures	Financial Impact
			Short-term	Mid-term	Long-term			
O1	Climate Change Response	Climate Change Mitigation	●	●		Expansion of demand and market for biofuels due to strengthened international regulations	• Investment in technology and infrastructure, and process advancement • Strengthening of raw material supply chains	• Expected increase in revenue from rising demand for eco-friendly products (e.g., sustainable materials, biofuels) • New revenue opportunities driven by expanded international regulations • Improved corporate value and financing conditions through recognition of biofuels as green economic activity

TCFD Report: Climate Change Response

Climate Change Response Strategies

DS DANSUK is implementing greenhouse gas reduction and energy efficiency improvement as core strategies in response to climate change. In 2024, the company strengthened its low-carbon production system by expanding the use of renewable energy and advancing process technologies, laying the foundation for achieving RE100 and long-term carbon neutrality goals.

Environmental Management Roadmap for Climate Change Response

2021~2025 — Environmental Management Foundation

- Strengthen GHG monitoring and management systems
- Enhance environmental impact/waste monitoring and management processes
- Advance environmental management KPI systems
- Improve process operations and adopt high-efficiency equipment for better energy efficiency
- Review RE100 implementation plans (e.g., self-generation via solar power)
- Establish and monitor a life cycle assessment (LCA) framework

2026~2030 — Environmental Management Integration

- Manage and reduce emissions including Scope 3 GHG
- Set energy consumption (unit-based) reduction targets
- Strengthen environmental risk management for suppliers
- Implement eco-friendly social contribution activities
- Gradual implementation of RE100 (achieve RE30 through renewable energy procurement)
- Conduct LCA impact assessments for all products

2031~2050 — Advanced Environmental Management

- Set RE100 achievement targets
  - Strengthen renewable energy production technologies/ infrastructure, such as fuel cells
  - Improve energy use efficiency through ESS (Energy Storage Systems)
- Expand adoption of carbon reduction technologies (e.g., CCUS) in processes
- Establish company-wide biodiversity goals and related initiatives
- Enhance support for climate change response across the ESG supply chain (including suppliers)

Climate Change Response Achievements

2024
- Invested in on-site renewable energy sourcing (Solar Roof)
- Completed life cycle assessments (LCA) for selected products
- Participated in Smart Eco-Factory Construction Project (installed high-efficiency environmental facilities)
- Introduced energy recycling system through waste heat recovery

2023
- Replaced aging FRP scrubber with STS304 material
- Upgraded to inverter-controlled air compressor and high-efficiency dust collectors

2017
- Established a greenhouse gas emissions management system
- Expanded air pollutant reduction facilities

Renewable Energy Implementation Strategy: Solar Power Facilities

In 2024, DS DANSUK initiated renewable energy-based power generation by installing solar power facilities (Solar Roof) at its Siwha and Gunsan plants. The installations were completed in the second half of 2024, followed by trial operations in March 2025 and full operation in April 2025, with a confirmed generation efficiency of 11%[1]. Power generation data is being measured regularly, and seasonal variations in solar radiation are continuously monitored. Based on these results, the company reviewed the possibility of expanding solar installations in line with new building construction at the Siwha and Gunsan Recycling Plants. It was found that each plant could increase its energy substitution rate by approximately 1%. Implementation will proceed following an investment feasibility analysis.

Beyond installation, DS DANSUK also introduced a monitoring system to check power generation efficiency in real time. Performance is reviewed weekly and monthly, and a comprehensive maintenance management system is in place to account for seasonal effects and potential efficiency declines. Structural safety inspections were conducted from the initial design stage to ensure long-term reliability and sustainability. Participation in renewable energy support programs by the government and local municipalities is also under consideration.

1) Based on total electricity consumption including sites without solar installations (Pyeongtaek Plants 1 and 2)

Solar Power Facility Operation Performance

Classification		Unit	Sihwa Plant	Gunsan Recycling Plant	Gunsan Fine Chemicals Plant
1 month	Electricity Consumption	kWh	783,748	1,344,973	955,046
	Solar Power Generation		135,750	240,483	190,753
	Carbon Reduction	tCO_2eq	60	106	84
RE Ratio		%	15	15	17

TCFD Report: Climate Change Response

Facility Investment and Operation Strategy: Eco-Friendly Process Innovation

DS DANSUK is advancing its greenhouse gas (GHG) reduction strategy through a two-pronged approach: direct reductions via physical facility investments and inherent reductions through process technology enhancement. This dual strategy aims to deliver not only short-term emissions reductions but also long-term improvements in energy efficiency and resource circulation capacity.

Carbon Reduction Through Physical Facilities

At the Gunsan Recycling Plant, DS DANSUK introduced high-efficiency environmental equipment in 2024 through the Smart Eco-Factory Construction Project. This led to improved energy efficiency, reduced GHG emissions, and enhanced waste treatment capabilities. The project was executed with a total budget of KRW 1.7 billion. By installing dust collectors and a waste heat recovery system, the facility achieved annual reductions of 324.8 tons of GHG emissions (tCO_2eq), with an energy saving effect of 679,264 kWh per year. The adoption of a twin compressor system also cut annual waste output by 667 tons. Additionally, a structural safety mechanism and an ICT-based monitoring system were implemented for the sulfuric acid tank to strengthen environmental risk prevention. The project focused on rapid implementation of tangible emissions reductions through facility investment and infrastructure upgrades.

Carbon Reduction Through Process-Based Technologies

Simultaneously, DS DANSUK is building a structurally sustainable emissions reduction system by enhancing its process technologies. In 2024, the Pyeongtaek Bio Plant 1 introduced new processes that allow for the recovery and reuse of wastewater and waste heat. Wastewater is analyzed for components and, if it fails to meet discharge standards, is reused as process water. Waste heat generated during operations is recovered and repurposed as a heating energy source. This system began trial operation in April 2024, and performance data is currently being collected. The recovered waste heat is reused as a heating source within the process, and going forward, DS DANSUK plans to set recovery and utilization rates as KPIs to ensure ongoing performance tracking and continuous improvement.

Climate Change Risk Management System

DS DANSUK systematically identifies and evaluates not only the physical and transitional risks associated with climate change but also related opportunities, integrating these insights into its company-wide business strategy and overall production operations. Recognizing the impact of climate change on the manufacturing sector, the company develops mid- to long-term strategies based on climate scenario analyses and historical disaster data by region and year, addressing risks such as heatwaves, heavy rainfall, cold waves, typhoons, and sea level rise. These analyses are translated into concrete strategies—such as factory recovery and response plans in the event of disasters, countermeasures against energy price volatility and power supply instability, and eco-friendly product certification in response to stricter GHG regulations—all aimed at minimizing the business impacts of climate risks.

Climate change risk management is a core element of DS DANSUK's ESG management approach. The company is working to establish a comprehensive risk management framework encompassing risk identification, impact analysis, strategy development, and performance monitoring. Based on this system, DS DANSUK plans to strengthen climate response capabilities at each site and division, thereby securing a sustainable manufacturing foundation.

Physical Risks

Identified Risks	Current Responses and Future Plans
Acute / Chronic • Increased frequency and intensity of extreme weather events (heavy rain, heatwaves, typhoons, etc.)	**Ensuring continuity of production facilities and reducing operational risks** ① Incorporation of drainage, insulation, and waterproof systems in facility designs to mitigate heatwave and heavy rain impacts ② Installation of emergency generators and redundancy in power infrastructure to secure supply stability ③ Enhancement and regular inspection of heat-sensitive components to prevent malfunctions during high-temperature periods **Improvement of energy efficiency and cooling/power load management** ① Expansion of waste heat recovery and high-efficiency inverter-based cooling systems ② Load mitigation and peak power suppression by operating certain processes during off-peak nighttime hours ③ Strengthening self-reliant response capabilities through rooftop solar power installations and the establishment of an Energy Monitoring System (EMS)

TCFD Report: Climate Change Response

Transitional Risks

Identified Risks	Current Responses and Future Plans
Regulatory / Medium-Term • Potential cost increases due to expansion of regulations such as the Greenhouse Gas Target Management System and Emissions Trading Scheme (ETS) • Need for high-efficiency, low-carbon upgrades to existing facilities amid accelerating transition to a low-carbon society, resulting in increased capital investment and short-term cost pressures	**Current Status** ① Gunsan Recycling Plant is designated as a participant in the ETS, prompting Scope 1-focused emissions monitoring and efficiency improvement activities to stay within allocation limits ② Established LCA-based GHG emissions accounting and emission source analysis system at each site ③ Promoting Scope 1 and 2 reduction activities through solar power installation, high-efficiency motors, and inverters ④ Enhancing energy efficiency through eco-friendly facilities such as waste heat recovery and high-efficiency thermal systems **Plans** ① To mitigate the risk of exceeding ETS allocations and needing to purchase additional credits, DS DANSUK will advance carbon inventory systems and scenario-based response planning ② Improvement plans for emissions intensity by production line will accompany company-wide reduction targets ③ Considering a policy to prioritize the application of high-efficiency, low-carbon equipment in new and expanded lines ④ Reviewing product/process conversion plans in line with the spread of global certifications (e.g., LEED, ISCC, GRS)
Technological / Medium-Term • Increased capital and operating costs due to transition to low-carbon, high-efficiency energy	① Analyze energy-intensive processes to identify high-return efficiency improvements and implement them first ② Expand use of renewable energy through in-house solar power and potential future Power Purchase Agreements (PPAs) ③ Apply a principle of adopting energy-saving equipment-such as high-efficiency motors, waste heat recovery, and thermal optimization-in all new and expanded lines
Technological / Medium-Term • Rising R&D costs for improving manufacturing facility efficiency	① Focus on key processes (e.g., black mass treatment, biofuel pre-treatment) to identify items with potential for efficiency upgrades ② Leverage in-house R&D capabilities to explore improvement directions such as heat loss reduction and process simplification for decarbonization ③ Promote joint projects and testbed development for deploying heat loss and energy reduction technologies

Transitional Opportunities

Identified Opportunities	Current Responses and Future Plans
Resource Efficiency / Medium-Term • Reduced operating costs through renewable energy adoption and energy efficiency improvements • Decreased energy consumption via low-carbon process implementation	① Expand application of high-efficiency motors, inverters, and waste heat recovery systems to key processes ② Improve energy self-sufficiency through in-house solar power systems and review long-term Power Purchase Agreements (PPAs)
Products & Services / Medium-Term • Increased revenue through expanded sales of eco-friendly products • Global market expansion opportunities via environmental certifications	① Acquire global certifications such as ISCC, GRS, and EPA to strengthen responsiveness to customer needs ② Promote broader disclosure of environmental product information based on carbon footprint and LCA; minimize infrastructure overlap and maximize resource utilization
Market & Resilience / Medium-Term • Market expansion through circular economy-based businesses • Customer acquisition through transition to a low-carbon, eco-friendly portfolio	① Establish a circular production system based on recycled LIBs and plastics ② Enhance capabilities to meet export buyer demands for carbon neutrality and energy transition

TCFD Report: Climate Change Response

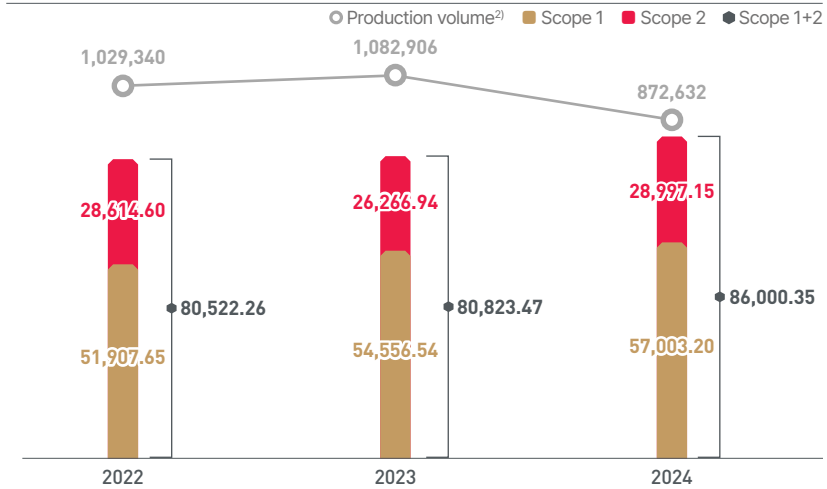
DS DANSUK Risk Management Framework

Step 1	Identification of Risks and Opportunities	Comprehensively identify climate-related factors that impact the business environment and derive potential risks.
Step 2	Risk Assessment and Analysis	Classify identified risks by type and conduct both quantitative and qualitative time-series analyses of their business and financial impacts.
Step 3	Risk Response	Establish execution strategies based on prioritized risks and continuously monitor implementation progress.
Step 4	Risk Management	Integrate climate risks into the company-wide risk management system and enhance operations by linking with ESG initiatives.

Goals and Indicators

As a company specializing in resource circulation, DS DANSUK has designated climate change response and the realization of Net-Zero as key long-term management priorities. The company has established and is implementing a company-wide reduction strategy. By focusing on improving energy efficiency in production processes and introducing high-efficiency equipment, DS DANSUK is strengthening its low-carbon operating system. Inverter controls and waste heat recovery systems are being applied to new and expanded facilities as part of this effort. In addition to operating its own solar power generation facilities, the company is also considering power purchase agreements (PPAs) to secure further potential for Scope 2 emission reductions. Through the enhancement of real-time energy monitoring based on its Energy Management System (EMS), the company analyzes energy consumption at the equipment level and optimizes replacement cycles for inefficient equipment to maximize energy-saving outcomes. Based on this integrated reduction strategy, DS DANSUK aims to drive the low-carbon transition of the resource circulation industry and establish itself as a responsible company that proactively responds to climate-related risks.

Three-year greenhouse gas emissions[1]



1) Although DS DANSUK continues to invest in GHG reduction and process improvement, the overall reduction performance was not clearly visible in 2024 due to a decrease in the production volume of low-emission products (while high-emission products increased). Additionally, new processes are expected to increase emissions. In response, DS DANSUK plans to establish a GHG inventory to clearly identify major emission sources and develop a systematic reduction plan. This will lay the foundation for achieving 2050 Net-Zero and developing a science-based reduction strategy, while actively managing GHG emission risks.
2) Includes reprocessing of intermediate materials.

Circular Economy and Industrial Innovation

Management Approach

Material Issue

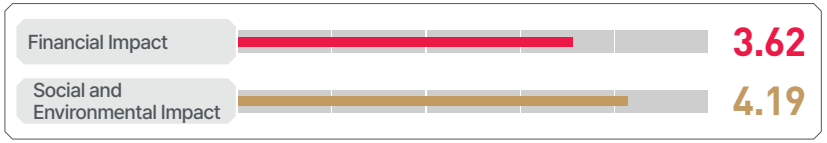
DS DANSUK aims to move beyond a resource-consumption-centered industrial structure and build an eco-friendly industrial ecosystem based on a circular economy. In 2024, the company focused not only on optimizing business operations and adding value to waste resources but also on improving process efficiency. Key business areas such as bioenergy, battery recycling, and plastic recycling are expanding into a closed-loop system. At the same time, DS DANSUK is pursuing both resource input minimization and productivity maximization through digital production management innovation and in-house R&D capabilities. Through these efforts, DS DANSUK is realizing a sustainable business model that combines environmental responsibility with industrial competitiveness.

UN SDGs

8.4
Improve resource efficiency and promoting sustainable consumption and production

12.5
Reduce waste and expanding the circular economy

Impact of recycling and resource circulation on DS DANSUK



Governance

DS DANSUK's executive leadership consists of the CEO in charge of business strategy (planning, sales, finance, etc.) and the CEO in charge of compliance management (production, environmental safety, R&D, etc.). Each CEO leads their respective areas based on domain expertise, ensuring a system that drives business strategy and technological innovation. This professional management structure strengthens the integrated linkage between planning, production, and research, allowing for a more sophisticated operation of the technology commercialization pipeline from R&D to market launch. In 2024, DS DANSUK further enhanced ESG-oriented decision-making by integrating environmental and social issue reviews, evaluating investment efficiency, and proactively managing business risks—thereby improving both transparency in decision-making and accountability in execution.

Strategy

DS DANSUK is accelerating technological advancement and high-value product development centered on bioenergy, battery recycling, and plastic recycling, while driving business diversification and market expansion. The company is also strategically responding to external environmental changes through LCA-based product management, compliance with domestic and international regulations, and the establishment of collaborative circular economy models. In addition, by diagnosing and supporting the improvement of supply chain risks, DS DANSUK is reinforcing a resource circulation system grounded in ESG principles. DS DANSUK aims to expand its global leadership by balancing technological competitiveness with sustainability.

IRO	Description	Response Period			Response Strategy
		Short-term	Mid-term	Long-term	
Risk	Potential restrictions due to risks such as Indirect Land Use Change (ILUC) associated with bioenergy feedstocks	●	●	●	Continue expanding production of biofuels based on waste and by-products such as used cooking oil
Risk	Increased participation in the recycling market may cause raw material supply disruptions and rising costs	●	●		Strengthen internal supply chains through the identification of new feedstocks and suppliers and adoption of a bolt-on strategy
Opportunity	Strengthened regulations on battery recycling expected to boost business revenue	●	●	●	Enter the LIB recycling market and promote the development of hydrometallurgical processing technologies
Positive	Contribution to the circular economy and environmental preservation through waste-based biofuel and recycling businesses	●	●		Expand the sourcing of recyclable waste and develop process technologies to maximize efficiency

Risk Management

DS DANSUK conducts integrated analyses of key issues from both financial and non-financial perspectives. Regular strategic meetings are held between relevant departments to proactively identify high-probability risks and opportunity factors. Based on these analyses, response strategies and implementation plans are established for each scenario. Core risks identified in each business project are reviewed from multiple angles, including business viability, regulatory compliance, and sustainability. Additionally, the outcomes and implementation status of risk responses are reported regularly to executive leadership and relevant committees or governance bodies, enabling company-wide feedback and adjustments.

Metrics and Targets

TARGET Increase the proportion of high value-added recycled products to over 60% by 2030.

METRICS

Category	Unit	2022	2023	2024	2025(Target)
Proportion of Recycled Products	%	52.0	51.3	**51.4**	**55.0**

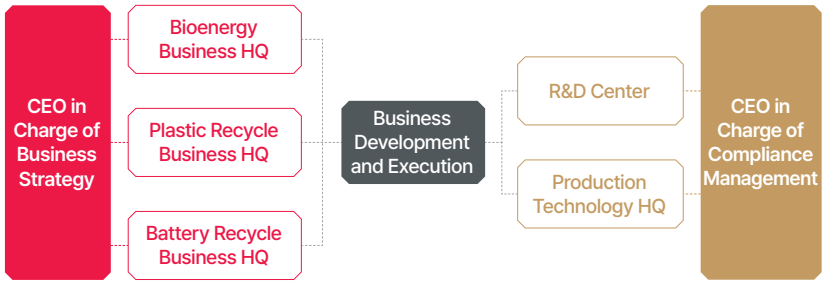
Circular Economy and Industrial Innovation

Circular Economy and Industrial Innovation Response System

Organizational Framework for Circular Economy and Industrial Innovation

DS DANSUK is advancing its company-wide governance and operational structure to systematically implement its core strategies of maximizing resource efficiency and driving technology-based industrial innovation. As of 2024, the company is operated under a dual-CEO system—one CEO overseeing business strategy and the other overseeing compliance management. Each CEO is responsible for leading areas focused on resource-circulating business models and technology internalization strategies. This structure enables seamless integration across planning, R&D, production, and sales, allowing for a sophisticated operation of the technology commercialization pipeline. Key strategic initiatives are managed through dedicated Task Force Teams (TFTs), which conduct pre-feasibility reviews, risk assessments, and investment efficiency evaluations prior to execution. In particular, the R&D Center and the Production Innovation Team play a central role in innovating recycling processes and developing high value-added product lines. The Certification Team and ESG departments lead efforts in LCA-based product management, ESG integration, and proactive compliance with EU regulations and other environmental and social demands. Company-wide strategies are regularly reviewed and approved by the board of directors and major committees to ensure transparency in decision-making. The execution teams focus on strengthening circular economy implementation capabilities through supply chain diagnostics, ESG risk response, and digitalization of production management. DS DANSUK remains committed to linking technology-driven circular economy models with corporate strategy, accelerating its transformation into a global leader that balances sustainability with scalable growth.

Industrial Innovation System for Resource Circulation



Circular Recycling and Industrial Innovation Solutions

Category	Bioenergy	Battery Recycling	Plastic Recycling
Business Status	• Producing bio diesel, bio heavy oil, bio marine fuel, and HVO pre-treated feedstock using used cooking oil, food waste oil, and by-products • Supplied to domestic and international oil refiners, power companies, and shipping companies	• Collecting spent lead-acid batteries to produce secondary and alloy lead • Producing copper and copper alloys • Constructed a LIB recycling plant and producing Black Mass • Sold to domestic and international battery manufacturers	• Producing PVC stabilizers and hydrotalcite • Established sorting and separation process for waste plastics • Expanding raw material sourcing • Sold to PVC window/ frame manufacturers and other plastic product makers
Business Direction	• Expanding HVO/SAF pre-treated feedstock production • Building HVO plant • Developing/producing high value-added products like SAF and bio-naphtha • Strengthening raw material supply chain	• Enhancing LIB recycling technology capabilities • Developing technologies for precursors and cathode materials • Strengthening competitiveness through overseas expansion and vertical integration	• Expanding PCR plastic application (e.g., automotive and building materials) • Securing small recycling centers
Ongoing & Planned Developments	• Developing SAF production process technology • Developing hydrogen production using natural gas and carbon reduction/capture technology	• Expanding LIB recycling plants • Establishing processes for LFP cathode materials, wet metal extraction, and Re-NCM precursors	• Advancing plastic separation and sorting technologies • Reviewing chemical recycling technologies such as pyrolysis oil • Securing biodegradable plastic technologies
Process Innovation	• Securing process technology adaptable to various waste and by-product feedstocks, improving yield	• Developing technology to extract Black Mass and recover high-purity metals from waste batteries (improving recovery rate)	• Advancing technologies for density, electrostatic, and color sorting of plastic waste
Resource Circulation IMPACT	• Contributing to waste reduction and carbon neutrality (establishing eco-friendly energy supply chain)	• Addressing resource depletion by recycling waste batteries and recovering valuable metals	• Reducing plastic waste and mitigating environmental pollution

Circular Economy and Industrial Innovation

Bioenergy

DS DANSUK has established a resource-circulating production system that converts various waste resources and industrial by-products into new energy sources. By actively adopting eco-friendly process technologies, the company is simultaneously enhancing resource efficiency and fulfilling environmental responsibilities. In particular, DS DANSUK produces and exports biofuels that meet global environmental standards, supported by certifications such as the EU's ISCC[1)] and registrations with the U.S. Environmental Protection Agency (EPA) and state-level programs. These efforts contribute to the global expansion of the circular economy. Furthermore, DS DANSUK is advancing beyond first-generation bio diesel to develop high-purity, high-efficiency fuels such as HVO (Hydrotreated Vegetable Oil) and SAF (Sustainable Aviation Fuel). This initiative aims to lead the transformation of industrial fuel structures, supporting decarbonization across various sectors. It also represents a strategic shift to secure a competitive edge in the next-generation biofuel market, reflecting DS DANSUK's vision of integrating resource circulation with tangible industrial innovation.

1) ISCC (International Sustainability and Carbon Certification): An international certification system for sustainability and low-carbon products.

Business Areas and Product Overview

Bio diesel

An eco-friendly transportation fuel made from used cooking oil and other feedstocks. Under the Renewable Fuel Standard (RFS), it is currently blended with regular diesel at a mandated ratio. It offers fuel performance similar to conventional diesel while contributing to greenhouse gas (GHG) reduction and lower emissions of harmful substances.

Bio Heavy Oil

A fuel that replaces conventional heavy fuel oil (B-C oil) used for power generation, in line with the Renewable Portfolio Standard (RPS). It is produced using various waste resources such as by-products from the bio diesel process (pitch), low-grade oils, and food waste oils. This product simultaneously promotes resource circulation and the eco-friendly transition of power generation fuels.

Bio Marine Fuel

An eco-friendly shipping fuel compliant with the International Maritime Organization (IMO)'s sulfur content and Carbon Intensity Indicator (CII) regulations. Developed with DS DANSUK's proprietary technology, the bio marine fuel meets international marine fuel standards and is recognized for its contribution to GHG reduction and fuel stability.

HVO Pre-treated Feedstock

A key feedstock for Sustainable Aviation Fuel (SAF), supporting the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) by the International Civil Aviation Organization (ICAO). DS DANSUK is expanding its presence in both domestic and international markets and has secured pre-treatment technology capable of producing high-quality feedstock based on global licensing process platforms.

Innovating the Cycle

Goals

Secure a leading position in the next-generation bioenergy market

- Stabilize production and expand the market for HVO pre-treated feedstock
- Build a plant for full-scale HVO & SAF production

Roadmap

DS DANSUK expanded its presence in the biofuel market by completing the first-ever export of bio marine fuel to Europe in 2022. To enter the HVO pre-treated feedstock market, the company began construction of a 300,000-ton-per-year HVO pre-treatment plant at the Pyeongtaek Bio Plant 1 in September 2023 and completed it in November 2024. In addition, DS DANSUK plans to build a second HVO pre-treatment plant and begin construction of an HVO production facility around 2026, aiming for simultaneous production of both first- and second-generation bio diesel. By 2030, the company plans to begin full-scale production of HVO and SAF, along with the operation of a hydrogen plant. Ultimately, DS DANSUK intends to grow into an eco-friendly energy company through phased investments in E-fuel R&D based on carbon capture technologies and green hydrogen production.

Phase 1: 2023~2025

Construction of HVO pre-treatment plant (300,000 tons per year)

Securing site for HVO plant

Phase 2: 2025~2030

Construction of 2nd HVO pre-treatment plant

Construction and full-scale production of HVO plant (300,000-500,000 tons of sustainable aviation fuel per year)

Construction of hydrogen plant (30,000 tons per year)

Phase 3: 2030~

Application of carbon capture, utilization, and storage (CCUS) technologies and E-fuel R&D

Establishing infrastructure for green hydrogen production and advancing related technologies

Circular Economy and Industrial Innovation

DS Bio Circularity Loop

1) Waste: Materials that have been discarded after use in residential or commercial activities.
2) Residue: Low-grade oils or by-products generated during production processes.

3) Source of GHG reduction calculation methodology: ISCC EU Methodology and others

Circular Economy and Industrial Innovation

DS Bio Innovation

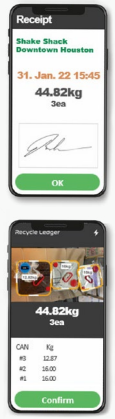
DS DANSUK is leading sustainable growth in the bioenergy industry by successfully commercializing technological innovations that enhance waste resource utilization, improve production efficiency, and enable the development of high-value fuels—thereby strengthening the sustainability and industrial competitiveness of its bioenergy business.

R&D

Research Project	Research Outcome	Expected Impact
Alcohol-Based Neutralization Pre-treatment Technology	Adopted a degumming-neutralization process using alcohol, improving impurity removal efficiency and enabling effective moisture elimination compared to conventional refining methods	Streamlines the refining process, reduces energy costs during drying, and prevents emulsification of waste oil
Ester Conversion Pre-treatment Technology	Secured pre-treatment technology capable of utilizing 100% difficult feedstocks such as high-acid used cooking oil, POME, and acid oil	Enables production of bio diesel entirely from waste resources and ensures process flexibility to handle diverse feedstock conditions
Wastewater Reduction Technology	Minimized wastewater generation by introducing water recovery and separation technologies, and applied pollutant reduction methods	Reduces wastewater volume by up to 90%, minimizes oil loss, and increases raw material recovery rate
Metal Removal Technology for Low-Grade Oils	Developed refining technology that effectively removes metal substances present in high-acid waste oils	Enhances utilization of low-quality feedstocks and ensures stable bio diesel quality
HVO Pre-treatment Technology	Established stable impurity removal technology for feedstocks such as used cooking oil and enabled the use of various low-grade feedstocks	Secures feedstock competitiveness and infrastructure for the production of next-generation high-value clean fuels (HVO, SAF)
Bio Marine Fuel Production Technology	Developed marine fuel in compliance with ISO 8217 and applied HBE-certified feedstocks	Enables entry into the marine fuel market and contributes to sustainable maritime transport through C14 bio-genic-based products

Digital Feedstock Traceability

In the bioenergy industry, securing feedstock traceability is not merely a matter of quality control but a critical requirement for global certifications such as ISCC EU and QAP verification. Used cooking oil, the main feedstock for bio diesel and PTU (Pre-Treatment Unit) refined oil production, was traditionally managed through paper-based transaction statements submitted to certification bodies. DS DANSUK has introduced a transformative digital traceability system by implementing a blockchain-based automated record system that utilizes mobile applications and GPS. This enables precise tracking of feedstock transportation routes, simplifies certification procedures, and automates data entry, significantly reducing the burden of document management. The system also allows for the provision of reliable feedstock history, enhancing buyer satisfaction and contributing to the credibility of the bioenergy industry. Ultimately, this innovation will strengthen DS DANSUK's position in the global market by boosting trust and transparency.



Risk Management

To proactively respond to the global trend toward renewable energy, DS DANSUK has obtained international certifications in advance, improving product credibility and paving the way for overseas market entry. Currently, bio diesel in Korea is blended with transportation diesel fuel at a mandatory rate of 4.0% under the Renewable Fuel Standard (RFS). However, the government's "Eco-Friendly Biofuel Expansion Plan" is expected to raise this blending ratio to 8.0% by 2030. In preparation for the anticipated increase in demand, DS DANSUK is actively working to secure a stable feedstock supply and expand its market share through strategic partnerships within the feedstock supply chain, the acquisition of new suppliers, and the implementation of a Bolt-on strategy.

Overseas Certification Status

- **EU** ISCC EU Certification (Since 2012)
- **US** EPA Registration (Since 2012)
- **US** California LCFS (Since 2014) Oregon CFP Registration (Since 2018)
- **Global** ISCC CORSIA Certification (Since 2023)

Circular Economy and Industrial Innovation

Battery Recycling

To promote the efficient use of finite metal resources and advance a circular economy, DS DANSUK is expanding its battery recycling business by converting used batteries into valuable resources. The company collects spent lead-acid batteries from around the world and refines them into recycled lead, which is then supplied to major domestic and international battery manufacturers. This process helps establish a circular ecosystem for metal resources. Lead-acid batteries, widely used in electric vehicle auxiliary systems and industrial energy storage, remain in high demand due to their strong recyclability and versatile applications. DS DANSUK has extended its operations beyond lead recycling to include copper and copper alloy production since 2023, evolving into a comprehensive non-ferrous metal recycling solution provider. In addition, DS DANSUK has proactively entered the lithium ion battery (LIB) recycling market in response to the surging demand driven by electric vehicle growth. This expansion aims to build a closed-loop system for critical raw materials and contribute meaningfully to carbon emissions reduction. Moving forward, DS DANSUK will strengthen its role as a leader in the circular economy by managing the entire lifecycle of used batteries and ensuring the stable recovery of high-purity metal resources—offering sustainable solutions in an era of resource scarcity.

Business Areas and Product Overview

Recycled Lead

Recycled lead, with a purity of over 99.97%, has properties identical to primary lead. As a product of the urban mining industry, it contributes to efficient resource reuse and environmental protection, while also offering economic benefits such as reduced raw material costs.

Lead Alloy

Lead alloy enhances the hardness of pure lead by adding antimony and tin to negate its softness. It is essential for creating terminals and bridges between the internal cells in automotive batteries.

Copper · Copper Alloy

Through continuous technological advancement, DS DANSUK supplies high-quality copper products-including tough pitch copper, cupro nickel, brass and red brass-used as core materials in cutting-edge industries such as electronics, electric vehicles, and aerospace.

Black Mass

Black mass is the powdered material obtained by mechanically crushing spent lithium ion batteries (LIBs). It contains valuable metals such as nickel, cobalt, lithium, and copper, which can be recovered for reuse.

Innovating the Cycle

Goals

2025

Plan to expand the LIB recycling facility within the Gunsan Recycling Plant

Establish dedicated facilities for producing high-purity Black Mass

2026

Construct hydrometallurgical processing facilities to extract valuable metals (e.g., lithium) from Black Mass

Roadmap

DS DANSUK has entered the LIB (lithium ion battery) recycling sector and is currently operating mass-production processes for Black Mass—the foundation of recycling operations. As the automotive industry transitions from internal combustion engines to electric vehicles, DS DANSUK aims to expand its LIB recycling business, building on its experience with lead-acid battery recycling. The company is exploring the expansion of crushing and separation processes, along with future plans for hydrometallurgical recovery and battery material manufacturing. In the mid-to-long term, DS DANSUK plans to establish localized crushing and separation centers in countries with high volumes of battery waste. It also aims to build Re-LFP cathode material and Re-NCM precursor plants using recovered lithium, nickel, cobalt, manganese, iron phosphate, and graphite from Black Mass. Through this, DS DANSUK seeks to evolve into a sustainably growing enterprise in step with the shifting trends of the secondary battery industry.

Phase 1

Establishing a domestic LIB recycling plant (8,000 tons of waste lithium ion batteries per year / 5,000 tons of black mass recovery per year

Phase 2

Establishing overseas LIB recycling plants (Southeast Asian and North-Central American markets)

Establishing a Re-LFP cathode material plant

Phase 3

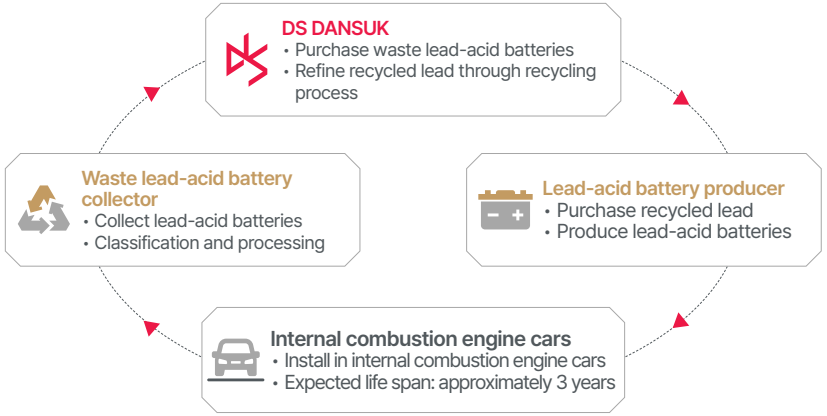
Establishing a hydrometallurgical extraction plant (Valuable metals Li, Ni, Co, Mn, Fe, PO4)

Establishing a Re-NCM precursor plant

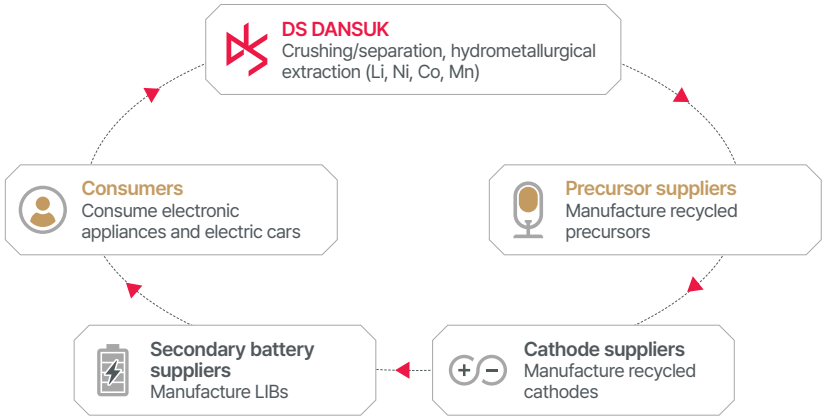
Circular Economy and Industrial Innovation

DS Battery Circularity Loop

Recycled Lead



LIB



DS Battery Innovation

LIB Recycling

LIB crushing and separation process and physical sorting technology

High purification and zero waste

Recycling of waste plastics generated after battery crushing and separation

Black Mass Production Mechanism

Preprocessing waste batteries
- Battery discharge and safe handling
- Battery disassembly and crushing

▶

Mechanical separation process
- Powder and particle size sorting
- Density and magnetic separation

▶

Collecting black mass
- High-concentration powder containing nickel, cobalt, lithium, copper, etc.
- Generally used to recover metals through the hydrometallurgy process

Main Components of Black Mass

Components	Ratio (%)	Components	Ratio (%)
Lithium (Li)	3~4	Copper (Cu)	0.5~5
Cobalt (Co)	5~10	Manganese (Mn)	5~10
Nickel (Ni)	10~20	Graphite (C)	20~30

Circular Economy and Industrial Innovation

Copper

DS DANSUK is securing future growth engines through the discovery of new businesses and the strengthening of research and development in a rapidly changing market environment. In particular, we aim to enter high-value-added markets such as electric vehicles, aerospace, and semiconductors, focusing on the development of eco-friendly materials and research on advanced industrial copper alloys.

New Project	Main Contents	Target Markets	Targets
Diversification of alloy items	Brass alloy with enhanced wear and corrosion resistance	Precision machine parts, electrical terminals	Add copper alloys
Entrance into cupro nickel round bar market	Marine and shipbuilding corrosion-resistant high-strength alloy	Shipbuilding, marine structures, electronic components	Register in 4M of the big three shipbuilders

Production and development of high value-added products

R&D

LIB recycling

- Valuable metal recovery technology
  - Recovery of black mass/ black powder
- By-product recycling technology
  - Cu and graphite resource recovery
- Development of hydrometallurgical process
  - In-house development of Li/Ni/Co/Mn wet smelting technology

Cu recycling

- Purification of low-grade scrap
  - Manufacturing high-purity Cu alloy using recycled scrap
- New Cu alloy manufacturing technology
  - In-house development of high-value-added alloy manufacturing technology

Pb recycling

- Development of eco-friendly processes
  - Reduction of environmental pollution emissions and maximization of valuable metal recovery
- Alloy lead manufacturing technology
  - Production of high-concentration Pb alloy and value addition
- Process by-product recycling technology
  - Utilizing dross and slag in processes other than waste batteries

Risk Management

According to global eco-friendly policies, the market is gradually shifting from fossil energy to eco-friendly energy and from internal combustion engine vehicles to electric vehicles. Accordingly, while battery production is expected to increase, the rise in the use of key minerals and the nationalization of strategic minerals in each country are anticipated to lead to increased supply chain risks for battery materials in Korea and the growth of the domestic LIB recycling industry. DS DANSUK plans to participate in the battery circular economy through LIB recycling and core material manufacturing, leveraging the technology and know-how accumulated from its traditional metal recycling business, the recycled lead business.
Starting in 2024, we will operate LIB recycling plants and subsequently review and promote precious metal extraction and materialization projects to expand our LIB business. During the market downturn caused by the chasm, we will secure competitiveness by maximizing the physical sorting efficiency of the LIB recycling plant and creating high value-added products.

IRA and CRMA Monitoring

IRA (Inflation Reduction Act, effective August 2022)

- A law enacted by the U.S. government aimed at addressing climate change, enhancing energy security, and promoting manufacturing
- Strengthening electric vehicle tax credit requirements

CRMA (Core Raw Materials Act, effective May 2024)

- A law introduced by the European Union (EU) to strengthen the supply chain of key raw materials essential for battery and semiconductor technologies, as well as renewable energy technologies
- Domestic production of raw material supply chains, designation of strategic raw materials, corporate investment and support

Domestic battery and materials companies are expanding production in the U.S. in response to the IRA and strengthening cooperation in Europe through the CRMA.

Continuous monitoring and flexible responses are necessary to prepare for the possibility of the IRA being reduced or abolished due to the change in U.S. administration.

Circular Economy and Industrial Innovation

Plastic recycling

DS DANSUK is focusing the supply of PVC stabilizers in the domestic construction materials market while promoting globalization and advancing the PCR plastic business for future growth. PVC stabilizers maintain a high market share through approximately 90 different items with advanced product customization capabilities, and they are exported to various countries including those in Asia, Africa, and the Middle East, in addition to the domestic market. Additionally, we are continuously pursuing technical collaboration for the development of new items and diversifying application areas such as tiles and windows. In particular, we are striving to enter the domestic and international Polyolefin markets and expand our product range.
Moreover, as plastic regulations continue to strengthen, DS DANSUK is expanding its PCR plastic business based on waste plastic sorting technology and plastic compounding technology. DS DANSUK will continue to focus on developing products that enhance plastic recyclability and on expanding its global distribution network, aiming to realize a sustainable material circulation system based on low carbon and low waste.

Business Areas and Products

Basic PVC Stabilizer

Basic PVC Stabilizer is used as an additive, serving both as a stabilizer and a lubricant. In the case of lead-free, it is sold in industries such as plastic molding and is also used as a key raw material for our One Pack Stabilizer. We are expanding our market share in the Polyolefin and masterbatch markets to grow the lead-free market.

One Pack Stabilizer

One Pack Stabilizer is a customer-customized additive that prevents physicochemical deformation during PVC thermal processing (extrusion, injection), improves processability, and enhances weather resistance by preventing oxidation and thermal degradation of molded products. We have developed a new composite stabilizer product for SPC tiles in addition to the existing window frame market, and we have launched it domestically. We are also collaborating to supply stabilizers to major SPC tile-producing countries overseas. We are also developing new sales channels in the African and Asian markets to boost the sales volume of the lead-based composite stabilizer.

Hydrotalcite/LDH (Layered Double Hydroxide)

Hydrotalcite is the most versatile product used as a PVC stabilizer, Spandex, and Polyolefin neutralizer. Hydrochloric acid (HCl) and chlorine (Cl) are rapidly captured within the interlayers of hydrotalcite through ion exchange, and when added to PVC resin, they prevent PVC degradation. In Spandex fibers, they provide anti-chlorine properties, thereby improving the elastic lifespan of the fibers. In the case of polyolefins, it removes the catalyst residues generated after polymerization to prevent the resin from decomposing.

PCR Plastic

Centered around its subsidiary of DS DANSUK, we are producing PCR plastic through physical recycling based on the separation and sorting technology of plastic types (PP, ABS, etc.) and colors from waste plastics. To internalize the PCR plastic value chain, DS E&E (now DS PCR Haman Plant) was incorporated as a 100% subsidiary, and through high-purity plastic sorting, we succeeded in commercializing PP and ABS, two of the five major general-purpose plastics, as PCR products. Additionally, the DS PCR Yeongcheon Plant produces various PCR plastic products using battery PP generated at the Gunsan Recycling Plant and PP and ABS from discarded electronic products produced at the DS PCR Haman Plant as raw materials.

Innovating the Cycle

Goals

- Quality improvement of PVC stabilizers, Spandex, and Polyolefin market-specific products
- Development of products composed of magnesium, aluminum, and other metal components for the expanded use of hydrotalcite
- Review of establishing new overseas factories due to increased demand for hydrotalcite

Roadmap

DS DANSUK plans to expand its business by enhancing high-purity waste plastic separation and sorting technology and commercializing new PCR products, starting with the completion of the expansion of the DS PCR Haman Plant's recycled plastic production facility in May 2024, in response to the tightening of plastic use regulations in the U.S. and EU. In the medium to long term, we plan to establish new plants, secure recycling centers, and review the promotion of overseas joint ventures to build an integrated platform for the PCR plastic business.

Step 1: 2023-2025	▶	Step 2: 2026-2027	▶	Step 3: 2028~
Plant expansion and technological advancement (15,000 tons per year)		Review of the expansion of the new plant in Gunsan		Business expansion and establishment of overseas joint ventures

Circular Economy and Industrial Innovation

DS Plastic Circularity Loop

PCR Business Directions

Investment, technology development, and commercialization

Expansion of supply chain and production infrastructure

DS Plastic Innovation

R&D

- PCR ABS development in progress (window company): Plastic + recycled plastic
  - Development of high-purity separation and sorting technology for ABS, PS, PP, etc.
- PCR plastic
  - Development and mass production of high-flow PP products tailored to the needs of automotive parts companies
  - Development of PCR plastic products for building materials
- Engineering plastics
  - Development and mass production of window products using metallic materials
- Development of high-quality LDH
  - Advancement of LDH product quality and optimization of synthesis/application expansion
- Automotive exterior/interior materials (weight and stability)
  - Securing MOS Whisker manufacturing technology and researching polymer composite materials

Risk Management

Various regulations for plastic recycling are being implemented worldwide. In the case of the EU, from 2025, the use of 25% recycled plastic in the production of PET has been made mandatory. California has legislated the Plastic Pollution Prevention and Packaging Producer Responsibility Act (SB 54), which includes the requirement to use 25% recycled content in all plastics, including PP and ABS, by 2025. In response, our subsidiary DS PCR is preparing for the surge in demand for certified recycled plastics through ISCC PLUS and GRS (Global Recycled Standard) certifications. In particular, through GRS certification, we transparently manage the sources and production processes of recycled materials, enhancing the sustainability of our supply chain and providing consumers with trust by clearly indicating the content of recycled materials.

GRS Certificate and ISCC Plus Certificate

Safety and Healthy Workplace

Management Approach

Material Issue

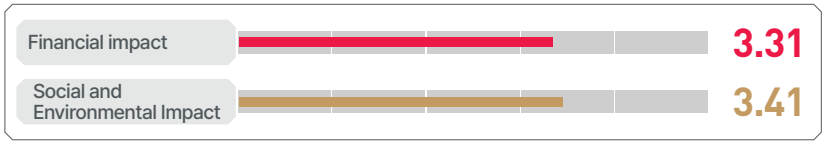
DS DANSUK is enhancing its safety and health management system and strengthening its execution capabilities to achieve a "zero-accident workplace" and reduce enterprise-wide risks. In 2024, we strengthened site-specific governance to establish a prevention-oriented safety culture in response to the Serious Accidents Punishment Act and expanded risk assessments for high-risk processes and hazardous chemical handling facilities. Additionally, we are actively promoting the establishment of digital-based infrastructure, including the implementation of site-specific safety training and the development of real-time inspection systems. We are also expanding our response to non-physical risk factors such as psychological safety, the prevention efforts for musculoskeletal disorders, and the protection of vulnerable groups. DS DANSUK plans to prioritize the protection of the lives and health of all employees and partner companies by establishing an organizational culture centered on accident prevention, fulfilling its role as a trusted sustainable company.

UN SDGs

3.4 Reduce premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being

8.8 Protect Labor Rights and Promote Safe Working Environments

The impact of occupational safety and health on DS DANSUK



Governance

DS DANSUK recognizes industrial safety and health as a core premise of corporate sustainability and is focusing on preventing major accidents and achieving accident-free workplaces by establishing a comprehensive governance system. Starting from 2025, the safety and health plans for the respective business year have been reviewed and approved by the board of directors. Each workplace has specialized safety organizations and responsible personnel in place to regularly inspect hazardous risk factors, and based on the results, we implement tailored improvement measures and educational programs. Additionally, we are continuously enhancing our prevention-focused safety and health system through integrated management of company-wide safety goals, the spread of site-centered autonomous safety culture, implementation of emergency response training, and strengthened communication.

Strategy

DS DANSUK is gradually implementing the establishment of an enterprise-wide risk-based management system, pre-analysis and improvement of hazardous risk factors by process, and the advancement of the safety and health education system, focusing on fostering a prevention-oriented safety and health culture. Additionally, to strengthen the execution capabilities of each department, we are implementing regular safety inspection guidelines and role-specific safety leadership training, and we are establishing a data-driven safety management system (Safety Analytics) to create an environment where signs of accidents can be detected in advance and early responses can be made. Accordingly, we are implementing effective industrial safety and health strategies, such as preventing major disasters, improving the work environment, and strengthening safety management for partner companies. Moving forward, we plan to continue these proactive measures with the top priority of ensuring a sustainable work environment and protecting the lives and health of all employees.

IRO	Detailed Description	Response Period			Response Strategy
		Short-term	Mid-term	Long-term	
Risk	Increased financial burden due to the rise in major disaster risks	●	●	●	Strengthen investment in safety and health and promote the internalization of corporate culture activities

Risk Management

DS DANSUK is establishing and operating a company-wide occupational safety and health risk management system based on industrial safety and health-related laws, international standard ISO 45001, and internal standards. In response to the rapidly changing industrial environment and the strengthening of legal requirements such as the Serious Accident Punishment Act, we are proactively identifying and regularly evaluating high-risk processes, the handling of hazardous chemicals, and potential risk factors within the workplace. Based on this, DS DANSUK has established effective response strategies such as customized preventive measures for each workplace, improvement of workplace safety equipment, enhancement of safety management systems for partner companies, and strengthening of early warning and emergency response processes, thereby minimizing the possibility of accidents and continuously enhancing the overall safety management capabilities of the organization.

Metrics and Targets

TARGET To achieve zero accidents through the enhancement of safety and health activities, set a basic plan to maintain a safety and health activity rate of over 2,500 per month and sustain performance.

METRICS

Classification	2022	2023	2024	2025(Target)
Safety and health activity rate	-	2,144	2,782	2,500
Number of risk assessments	8	38	60	59

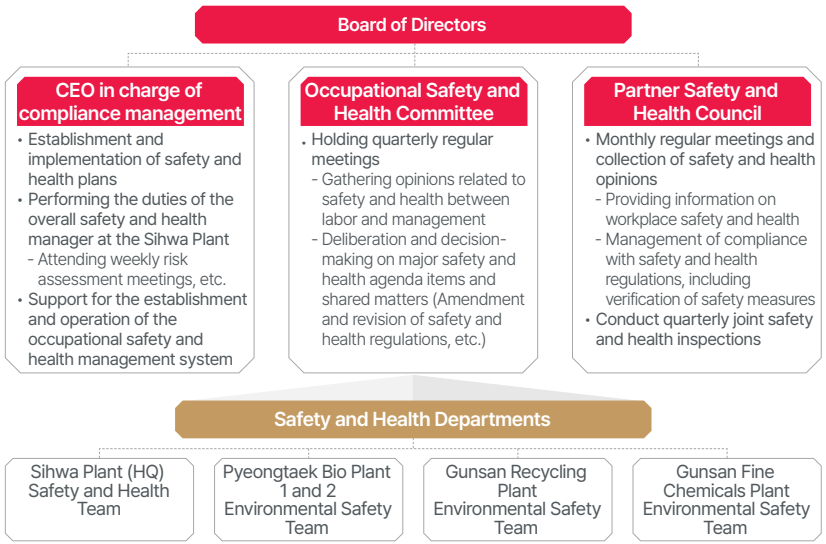
Safety and Healthy Workplace

Occupational Safety and Health Management System

Occupational Safety and Health Management Promoting Organization

DS DANSUK operates a company-wide safety and health governance and promotion organization based on the interest and leadership of top management. The Chief Safety and Health Officer, who is also the CEO responsible for compliance management, has established a system to promptly address on-site issues by personally reviewing daily workplace inspections and safety and health work logs, and providing immediate feedback. Additionally, through the Occupational Safety and Health Committee, which includes both employers and employees, we review safety and health-related policies based on communication and cooperation between labor and management. We also operate a cooperative safety and health council with partner companies to identify and improve common risk factors, thereby establishing a mutually beneficial safety management system. Each workplace is staffed with safety and health personnel exceeding the legal requirements to ensure comprehensive management without any blind spots, and the safety and health team at the Sihwa Head Office, as the dedicated HQ department, oversees all company-wide safety and health operations, collaborating organically with the safety and health officers at each site. Under this organizational foundation, DS DANSUK is continuously strengthening its safety and health promotion system to achieve 'Zero Major Accident.'

Occupational Safety and Health Management System



Activities of the Occupational Safety and Health Committee

DS DANSUK regularly holds quarterly Occupational Safety and Health Committee meetings to share and deliberate on important matters related to workplace safety and health, and the meeting results are transparently posted within the company for all employees to see. The Occupational Safety and Health Committee is operated with the participation of both employer and employee representatives, and practical discussions reflecting the characteristics and conditions of each workplace are conducted. Accordingly, the Committee directly gathers workers' opinions and functions as an important communication channel in various areas such as accident and health impairment prevention, fostering a safety and health culture, and maintaining and promoting workers' health.

Classification	Contents
Sihwa Plant	• Sharing the PSM Committee's operational plan • Sharing the results of the safety and health system establishment consulting • Sharing the plan to incorporate workers' opinions and practical measures regarding safety in the DS competition • Sharing safety measures for the introduction of regenerative thermal oxidizers(RTO) • Review and implement workers' feedback on low-sodium diets, changes to work uniforms, and the provision of wrist guards • Compliance with the submission deadlines to the Korea Occupational Safety and Health Agency based on MSDS manufacturing/import quantities, etc.
Gunsan Recycling Plant	• Proceeding with the agenda for equipment maintenance to improve work environment, including equipment upgrades and production • Sharing the amendments to the Occupational Safety and Health Act • Sharing changes to the employee chemical occupational disease prevention management system • Seasonal health management and hazard notifications • Sharing changes in TBM activities • Notice of the joint safety inspection schedule at the workplace
Gunsan Fine Chemicals Plant	• Cooperation in the operation of a collaborative system for the prior identification and response to harmful and hazardous factors • Discussion on strengthening the training and inspection system for supervisors • Operation of a regular safety improvement proposal and feedback system • Sharing the implementation of fire drills and confined space safety training focused on hands-on practice • Sharing of the results and improvements from the autonomous safety and health inspection
Pyeongtaek Bio Plant 1 and 2	• Sharing the results of the working environment measurement and safety inspection of hazardous and dangerous machinery and equipment • Inspection of fire operation functions and discussion of improvements • Sharing of accident cases and discussion of response measures • Conducting scenario training to enhance emergency response capabilities • Operation of the inspection and follow-up action implementation system based on the process safety report • Sharing of risk assessment results and improvements • Management and supervision of safety education for supervisors and special training recipients

Safety and Healthy Workplace

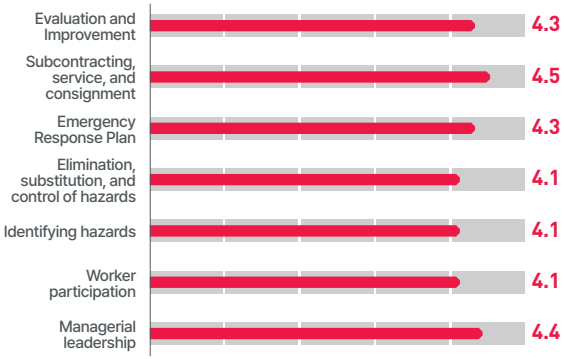
Occupational Safety and Health Management System

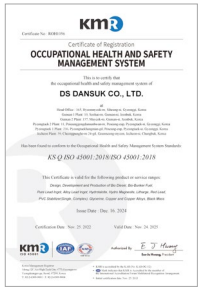
DS DANSUK continuously applies the PDCA cycle of 'Plan–Do–Check–Act' to enhance its ISO 45001-based occupational safety and health management system and autonomous occupational safety and health management system. The overall organization, the Sihwa Plant Safety and Health Team, conducts quarterly tours of all business sites, performs self-inspections, and assesses the status of safety and health management to systematically accumulate a company-wide safety and health database. Additionally, through an intranet-based real-time communication system, we share policies, management know-how, and safety and health issues among workplaces, thereby establishing a culture of safety and health collaboration. In the case of the Sihwa Plant, it participated in the "Occupational Safety and Health Management System Establishment Consulting" supported by the Ministry of Employment and Labor in 2024 and received an assessment of its occupational safety and health management level from a third party. In the consulting, the Sihwa Plant received an average score of 4.3 out of 5 in six categories, including managerial leadership, worker participation, and the identification and control of hazardous and risky factors. This result is shared with each workplace to encourage the voluntary spread of a self-regulatory prevention system.

Operating Procedure for the Occupational Safety and Health Management System

Identification of safety and health risks, verification of operational status, and selection of key issues for improvement ▶ Verification of compliance and implementation of the safety and health system ▶ **Checking and improving operational status**

Results of the consulting for establishing a safety and health management system

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Certificate of Registration
OCCUPATIONAL HEALTH AND SAFETY MANAGEMENT SYSTEM
DS DANSUK CO., LTD.
KS Q ISO 45001:2018/ISO 45001:2018

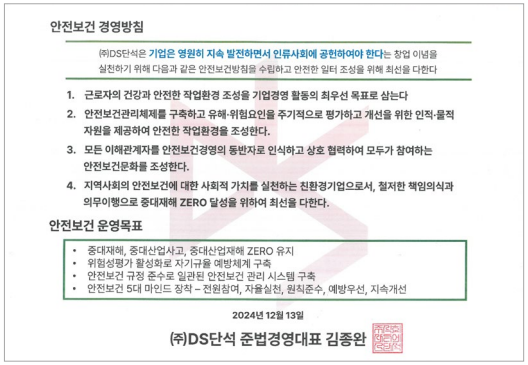
Certificate of the Occupational Safety and Health Management System

Occupational Safety and Health Strategy

Occupational Safety and Health Management Policy

DS DANSUK has established the "Safety and Health Management Policy and Annual Operational Goals," reflecting the management commitment of the representative director in charge of compliance management, to enhance the overall safety and health standards of the company. This policy is posted on all business sites, allowing not only employees but also workers from partner companies to view it at any time. Additionally, the safety and health organization has set the vision of becoming the "Smart Factory Leading Department in 2025" and has established key goals such as internalizing the safety and health management system, advancing process safety management, strengthening safety and health management for partner companies, and establishing a safety and health culture to enhance the safety and health management system. DS DANSUK continuously monitors major legal and institutional changes, such as the comprehensive revision of the Industrial Safety and Health Act and the enactment of the Serious Accident Punishment Act, as well as social issues and government policy trends. Based on this, they establish response plans and systematically implement them to proactively manage legal risks.

Additionally, to flexibly respond to the changing internal and external environments, we review and continuously improve our safety and health-related policies and management systems on a semi-annual basis. In particular, during the process of establishing the 2025 operational goals, a worker contest was held for all employees, and the best works were incorporated into the management policy, thereby encouraging voluntary participation and interest from the members. In this way, DS DANSUK adheres to the belief that "the safety and health of all employees is the company's top priority," internalizing safety and health into the overall corporate culture and making it a core element of sustainable management.


안전보건 경영방침

(주)DS단석은 **기업은 영원히 지속 발전하면서 인류사회에 공헌하여야 한다**는 창업 이념을 실천하기 위해 다음과 같은 안전보건방침을 수립하고 안전한 일터 조성을 위해 최선을 다한다

1. 근로자의 건강과 안전한 작업환경 조성을 기업경영 활동의 최우선 목표로 삼는다
2. 안전보건관리체제를 구축하고 유해·위험요인을 주기적으로 평가하고 개선을 위한 인적·물적 자원을 제공하여 안전한 작업환경을 조성한다.
3. 모든 이해관계자를 안전보건경영의 동반자로 인식하고 상호 협력하여 모두가 참여하는 안전보건문화를 조성한다.
4. 지역사회의 안전보건에 대한 사회적 가치를 실천하는 친환경기업으로서, 철저한 책임의식과 의무이행으로 중대재해 ZERO 달성을 위하여 최선을 다한다.

안전보건 운영목표

- 중대재해, 중대산업사고, 중대산업재해 ZERO 유지
- 위험성평가 활성화로 자기규율 예방체계 구축
- 안전보건 규정 준수로 일관된 안전보건 관리 시스템 구축
- 안전보건 5대 마인드 장착 – 전원참여, 자율실천, 원칙준수, 예방우선, 지속개선

2024년 12월 13일

(주)DS단석 준법경영대표 김종완

Occupational Safety and Health Management Policy and Operation Goals

Safety and Healthy Workplace

Strategic Vision and Goals

VISION: Smart Factory Leading Department In 2025

Core Goals	Year	Strategic Tasks	Major Action Plans
Internalization of the Occupational Safety and Health Management System	2024	The establishment of a company-wide safety and health culture	• Expansion of safety and health leadership training • Operation of the safety and health suggestion system • Participation in external support projects such as consulting for the establishment of safety and health management systems • Operation of "Safety Day" with participation from all members • Introduction of the partner company safety and health evaluation system • Implementation of a system for providing and approving safety and health information for outsourced work • Implementation of safety and health campaigns and communication programs
Advancement of Process Safety Management	2025	Strengthening the safety and health partnership with our partners	• Strengthening the evaluation system for partner company safety and health • Providing information on safety and health • Computerization of subcontracting work permits, strengthening of access procedures • Regularization of safety training programs for the supply chain • Promotion of regular PSM meetings • Promotion of health programs involving partner companies • Improvement of MSDS training and sharing for office staff • Introduction of a heat illness prevention system
Strengthening the safety and health management of partners	2026	Zeroing out serious industrial accidents and Industrial accidents	• Internalization of PSM in high-risk processes • Strengthening self-regulation prevention system through the activation of risk assessment and linkage with KPIs • Strengthening corporate response processes such as accident cause analysis and improvement • Expansion of leadership training for supervisors • Establishment of a post-healthcare management system • Prevention of occupational diseases through integrated management of MSDS • Improvement of compliance with the obligation to provide MSDS and sharing of warning labels • Strengthening the heat illness prevention management system
	2028	Introduction and dissemination of smart safety technologies	• Establishing a quantitative analysis system for safety and health, etc., to enhance data-driven management • Expanding accessibility to safety and health participation through mobile devices • Introduction of predictive risk analysis system • Pilot operation of AI-based chatbot safety and health support service • Introduction of the Smart MSDS Information Provision System • Introduction of a system for creating management guidelines based on MSDS • Introduction of a system that provides break time information based on perceived temperature according to indoor temperature and humidity at the site
Establishing a safety and health culture	2030	Realization of integrated safety and health management based on ESG	• Integrated management of safety and health indicators within the ESG Sustainability Committee • Introduction and expansion of the no-accident certification system • Regular disclosure of safety and health indicators in ESG performance reports • Actively participate in external activities such as the presentation competition for excellent safety and health cases • Obtained the Health-Friendly Workplace certification • Operation of 'Safety and Health Day'

Safety and Healthy Workplace

Safety and Health Risk Management

Risk Assessment

DS DANSUK is establishing a self-regulatory preventive system to systematically manage safety and health risks. This is being implemented by moving away from the traditional method of relying on external supervision or regulation and instead establishing internal processes that allow the workplace to independently identify and systematically control hazardous and risky factors.

Each workplace conducts activities to regularly identify and improve harmful and hazardous factors in accordance with risk assessment regulations, and these activities are establishing an effective management system that goes beyond mere legal compliance to lead to actual industrial accident prevention. In particular, we conduct customized risk assessments that reflect the characteristics of each workplace and the working environment. We also operate various participation-based programs such as suggestion systems, TBM (Toolbox Meeting), and weekly risk assessment meetings to encourage all employees to actively participate in safety and health activities.

Additionally, through various ongoing management activities such as daily safety patrols, weekly safety and health meetings, EHS & 5S activities, monitoring of external contractors, operation of the occupational safety and health committee, and joint safety and health inspections, we continuously check site-centered risks and proactively identify and swiftly address hazardous and dangerous elements.

In 2024, we have set the performance of safety and health activities as a key performance indicator (KPI) and has set a target of achieving an average of 2,500 points per month. We are maintaining highly active operations with an actual average of 2,782 points. In the future, DS DANSUK plans to further enhance the risk assessment system to focus on practical risk reduction and the internalization of safety culture on-site.

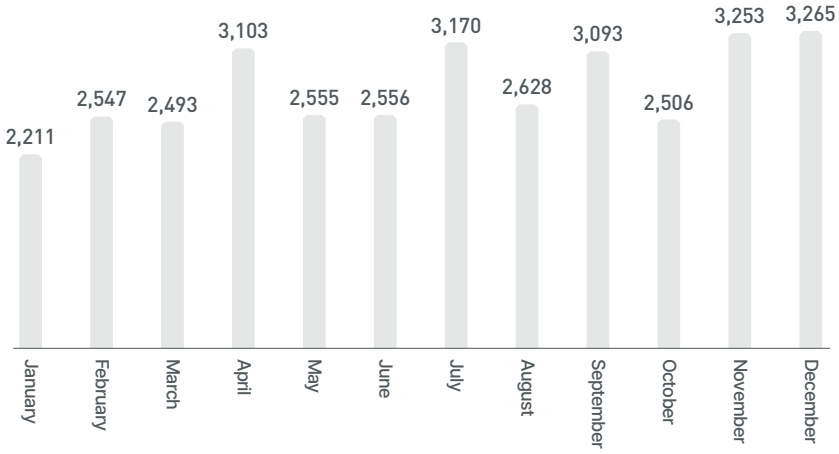
Risk Assessment Meeting

Risk Assessment Process

1. Establish a risk assessment implementation plan	Scope of the target, selection of evaluation techniques, etc.
2. Conduct risk assessment	Determination of risk levels and establishment of damage countermeasures
3. Follow-up on the implementation results of risk reduction measures	Verification of performance after implementing improvement measures
4. Report on the results of the risk assessment	Writing the final report
5. Monitoring	Sharing evaluation results with employees and continuous improvement

2024 Monthly Safety and Health Activity Rates

(Unit: (Number of safety and health activities / Total monthly working hours) x 1 million hours)



Safety and Healthy Workplace

Communication in Occupational Safety and Health

DS DANSUK operates various communication channels to create a safe working environment and promote safety and health activities. Through these channels, we are building trust between labor and management regarding safety and health, and by encouraging the interest and voluntary participation of all members, we are creating a work environment where everyone can work with peace of mind.

Activity Name	Goal	Main Contents	Operation Method and Characteristics
Group training	Enhancement of workers' health protection and safety awareness	Sharing information on hazardous and risky factors, working environment measurement results, health check-ups, and recent safety and health issues through regular safety and health training	Incorporation of the latest issues such as in-depth health examinations and job stress assessments
Messenger of the Supervisory Group	Rapid response and information sharing for emergencies such as natural disasters	Sharing disaster response information such as newly established and ongoing risk assessment results, fine dust, heatwave, and cold wave alerts from the Sihwa Plant	Expansion of the functionality as a real-time communication channel (including notifications of major accidents)
Weekly Risk Assessment Meeting	Improvement of on-site hazardous and risk factors and enhancement of supervisor capabilities	Discussion on improving harmful and hazardous factors based on employee suggestions, and reflecting recent safety and health issues	At the request of the recent risk assessment team, the latest issues have been included in the meeting materials
Occupational Safety and Health Committee	Incorporation of employee opinions and fulfillment of legal requirements related to occupational safety and health	Regular meetings are held with the statutory committee, where workers' safety and health matters are reviewed and decided upon, and the minutes are publicly posted	Posting meeting minutes in common areas such as the entrance of the cafeteria and verifying compliance during self-inspections
Group messenger of the Safety and Health Council	Strengthening safety and health collaboration between contractors and subcontractors and real-time sharing of issues	Regular meetings and joint inspections between the contractor and subcontractor, provision of educational materials before meetings, and on-site inspections as needed	Operating centered around the Sihwa Plant, expanding subcontractor participation through training and document inspections
Safety and Health Officer Chat Room	Discussion on the establishment and revision of safety and health regulations and sharing of representative instructions	Operation of a group chat for safety and health officers at all worksites	Collecting data and gathering practical opinions for responding to the Serious Accident Punishment Act
TBM (Tool Box Meeting)	Regular safety and health education and risk awareness enhancement before work	Sharing safety procedures before work on the day and disseminating the weekly risk assessment results under the supervision of the manager	Including the function to maintain the continuity of risk improvement during shift work

Safety Accident Improvement Activities

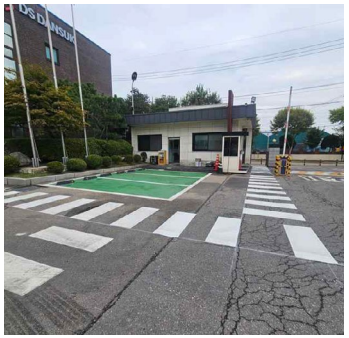
DS DANSUK operates various programs aimed at reducing hazards in the workplace, based on autonomous practices and field-centered activities. Aiming to achieve a zero-accident workplace, we are enhancing members' interest and naturally strengthening on-site vigilance through activities that encourage company-wide participation, such as safety practice pledge ceremonies, safety and health slogan contests, and group speech campaigns.

Additionally, we operate a suggestion system that gathers the voices from the field through direct participation of workers, and we actively receive practical solutions to hazardous situations discovered during actual work. We are actively receiving effective solution ideas for hazardous situations discovered during work. We provide incentives such as monetary rewards to outstanding contributors to encourage voluntary participation, and the collected suggestions are systematized as risk assessment data to be reflected in practical workplace improvements.

DS DANSUK is driving substantial changes beyond mere formal responses through these activities, continuously striving to create a trustworthy and safe working environment for employees and to establish a sustainable health and safety management system.

Safety accident improvement activities (before)

Safety accident improvement activities (after)



Example of safety accident improvement proposals

Safety and Healthy Workplace

Strengthening safety and health management

Establishing a Safety and Health Culture

DS DANSUK is internalizing a safety and health culture throughout the organization based on autonomy and communication. To ensure that all members can participate as subjects of safety, we have identified improvement tasks on-site through safety and health evaluation index surveys and incorporated excellent proposals derived from the employee opinion contest into the 2025 management policy. This participation-based communication is leading to substantial policy improvements beyond mere formal procedures.

To quickly incorporate on-site feedback, we appropriately assign supervisors to each shift and operate communication channels between them and safety managers to share and resolve safety issues in real-time. In regular safety training, on-site information such as the discussions of the Occupational Safety and Health Committee and accident cases are shared, and the needs raised through worker representatives are reflected in the policies through the committee.

Activities for fire prevention are also being strengthened. Every month, we inspect over 120 fire safety equipment units in collaboration with specialized fire safety companies and conduct annual fire drills by group, thereby enhancing our practical response capabilities. In addition, to enhance health management, we operate health promotion programs linked with community health resources, and after regular health check-ups, we continuously upgrade our management system with post-care and guidance to achieve zero industrial accidents due to illness.

The person in charge of safety and health management at the Sihwa Plant, who also serves as the CEO, conducts daily site inspections to proactively identify hazardous and risk factors and directs immediate corrective actions, thereby demonstrating practical safety leadership. In addition, the introduction of the "Emergency Control Room," proposed in the 2024 internal competition, is currently underway, and there are plans to expand protective equipment training for all employees, including office staff, to enhance emergency response capabilities.

Safety Practice Pledge Ceremony

Safety and Health Slogan Contest

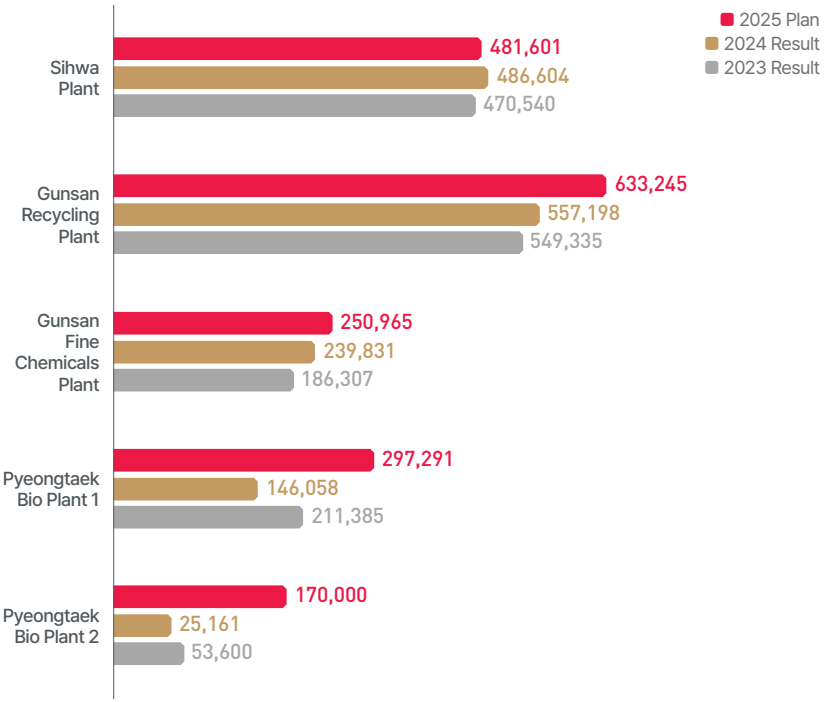
Group Safety Speech Campaign

Investment in the field of safety and health

DS DANSUK establishes and operates annual budgets, and execution plans to ensure the provision of personnel, facilities, and equipment related to safety and health, and to improve hazardous and risky factors. We manage monthly and site-specific execution performance and spare no effort in supporting investments in the safety and health sector to create a safe and pleasant working environment. In particular, the Gunsan Recycling Plant has invested in detection equipment to prevent the spread of fires in the LIB storage warehouse and in isolation equipment to prevent individual fires during battery storage. Through the installation of fire-fighting equipment to respond to LIB fire explosions, we are creating an environment that ensures the safety of workers and can manage emergency situations.

Safety and Health Budget by Site

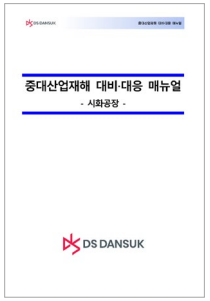
(Unit: KRW 1,000)



Safety and Healthy Workplace

Disaster Response and Recurrence Prevention

DS DANSUK operates an integrated safety management system for all its business sites, encompassing disaster prevention, response, analysis, and recurrence prevention. In the event of an accident, immediate response measures are implemented according to the emergency response manual, and external rescue agencies are coordinated with if necessary to minimize damage. After an accident, the Accident Investigation Committee identifies the cause and inspects processes, equipment, and work environments to establish measures to prevent recurrence. We are continuously enhancing our on-site response capabilities through case-based education and hands-on training. (e.g., initial response measures in case of a severing accident, how to bandage a suspected fracture, the Heimlich maneuver, CPR, etc.) DS DANSUK considers even minor accidents as potential risks and is establishing a safety and health culture centered on prevention. According to the Ministry of Employment and Labor statistics, we are also strengthening safety and health regulations that reflect the types of serious accidents. (e.g., mandatory helmet wearing for all entrants at the Sihwa Plant, mandatory escorting when entering the plant, etc.). Additionally, the accident response manual is updated biannually, and the CEO in charge of compliance management approves it, ensuring that top management is directly involved in safety management. All business sites are equipped with emergency relief supplies, and their sufficiency is also checked during budget preparation. Starting in 2025, we plan to distribute individual duty cards at the Sihwa Plant to enhance the emergency response system. Additionally, cases of serious accidents reported to the Ministry of Employment and Labor are shared in real-time and used as TBM training materials to raise awareness among all workers. In terms of preventing heat-related illnesses, heatwave information is also shared in real-time, and flexible responses such as adjusting work hours are being implemented. DS DANSUK plans to go beyond mere compliance with regulations and continue to realize a safety and health culture that learns and evolves.



Serious Industrial Accident Preparedness and Response Manual

Types of Serious Industrial Accidents

Poisoning
In the event of gas poisoning while working in confined spaces, take emergency measures, report the situation, and notify the fire department, etc.

Fire/Explosion
According to the self-defense firefighting team formation schedule, take self-extinguishing measures. If difficult, report to the fire station and evacuate quickly.

Electric shock
After cutting off the power to which the victim was connected, rescue them, check the victim's consciousness, perform first aid such as artificial respiration, and report to the fire station, etc.

Fall
Check consciousness by tapping on the shoulder, provide first aid such as immobilizing with a splint for arm or leg injuries, and report to the fire station, etc.

Step-by-step measures in case of serious industrial accidents, etc.

Spread the situation
- Inform all staff about the situation → Use voice or communication equipment to relay the emergency situation to nearby employees and other staff.
- Information that must be provided when reporting: name of the reporter, details and circumstances of the incident, patient's condition, specific location

Stop the work
Stop the work, isolate the site, etc.

Initial response
Prompt treatment and emergency transport to the hospital for the victim.

Emergency evacuation
If initial response is not possible due to the spread of fire or explosion, etc.

Report
Supervisors, department heads, persons in charge of safety and health management, etc.
(In case of urgency, report first and then notify)

Notify
Relevant fire stations and labor offices, etc.

Preserve the site
Until the accident investigation is completed

Investigate the cause of accident
The labor office investigates the cause of the accident.

Improve the hazards
Improve the hazards, establish recurrence prevention measures, etc.

Safety and Healthy Workplace

Employee Health Management

DS DANSUK operates customized health management programs at each workplace to prevent diseases and promote the health of its employees. Currently, we are piloting a health promotion program centered around the Sihwa Plant, where an industrial nurse is stationed, and we are gradually expanding its application to all workplaces based on the guidance and consultation of the industrial nurse. Each workplace is carrying out health management activities tailored to the characteristics of the site in cooperation with industrial nurses affiliated with health management specialized institutions. In particular, the Sihwa Plant, which also serves as the headquarters with management strategy functions, has a relatively high proportion of middle-aged and older office workers. To enhance health awareness and improve lifestyle habits among its members, it plans and operates customized health management programs that take into account age and job characteristics. Pyeongtaek Bio Plant 1 supports health check-ups during recruitment as exposure to harmful factors is relatively low, while Gunsan Recycling Plant is expanding its AED (Automated External Defibrillator) capacity by two units and improving related systems to enhance emergency response capabilities. Additionally, the Gunsan Fine Chemicals Plant is reinforcing its personal protective equipment facilities, taking into account the characteristics of the hazardous materials handled, and focusing on preventive measures to protect the safety and health of its workers. Additionally, all business sites are continuously discovering customized programs linked to local community human and material resources through quarterly self-inspections, and they plan to continuously improve customized health promotion programs that reflect the characteristics of the workplace and the needs of the workers in the future.

Health Promotion Program by Site

Guidance and advice from the company's occupational health nurses and health officers (occupational health physicians, occupational health nurses, industrial hygienists) affiliated with specialized health management institutions

Sihwa Plant (HQ)	Pyeongtaek Bio Plant 1 and 2	Gunsan Recycling Plant	Gunsan Fine Chemicals Plant
• Identification of individuals interested in the Occupational Safety and Health Agency's in-depth health examination support project and application on behalf of an industrial nurse (Holding a screening institution that conducts the project nearby) • Participation in the free support program at the health center (inviting health education instructors, health bus, etc.) • Operation of free tests at health screening centers (bone density, carotid artery ultrasound, body fat, etc.) • Operation of follow-up care through on-site visits or in-clinic visits • Sending notification messages to individuals eligible for confirmatory tests in general health check-ups • Operation of cholesterol testing support for employees to increase the accuracy of assessing the risk of cerebrovascular diseases • Operation of clinical psychologist visits at the Employee Health Center • Health management room available (industrial nurse on-site) • Operation of 1 AED (Automated External Defibrillator)	• Review of free health check-up services at health examination institutions planned ('26) • Sending post-care notification messages • Sending notification messages to those eligible for the general health check-up confirmatory tests • Operation of cholesterol testing support for employees to increase the accuracy of evaluating the risk of developing cerebrovascular diseases • Review of free psychological counseling planned ('25) • Automatic blood pressure monitor available in the break room • Operation of 1 AED (Automated External Defibrillator) • Possession of medical agreement institutions (hospitals and clinics) • Conduct special health examinations before assigning all employees	• Review of free health check-up services at health examination institutions planned ('26) • Operation of follow-up care through on-site visits or in-clinic visits • Sending notification messages to individuals eligible for confirmatory tests in general health check-ups • Introduction of cholesterol testing support for employees to increase the accuracy of evaluating the risk of developing cerebrovascular diseases (scheduled for '26) • Review of psychological counseling at the mental health welfare center planned ('25) • Blood pressure monitor placed in the men's changing room (in front of the shower room) • Operation of 2 AEDs (Automated External Defibrillators) • Possession of medical agreement institutions (hospitals and clinics) • Operation of sauna facilities • Special health examinations before assigning all employees	• Review of free health check-up services at health examination institutions planned ('26) • Operation of follow-up care through in-clinic visits • Sending notification messages to individuals eligible for confirmatory tests in general health check-ups • Introduction of cholesterol testing support for employees to increase the accuracy of evaluating the risk of cerebrovascular diseases (scheduled for '26). • Review of psychological counseling at the mental health welfare center planned ('25) • Review of blood pressure monitor placement planned ('25) • Operation of 1 AED (Automated External Defibrillator) • Holds medical agreement institutions (hospitals and clinics) • Prevention of heat-related illnesses with cooling vests during the summer • Operation of personal protective equipment room • Special health examinations before assigning all employees
Safety and Health Team	Primary: Business Support Team Secondary: Environment and Safety Team	Primary: Business Support Team Secondary: Environment and Safety Team	Primary: Business Support Team Secondary: Environment and Safety Team

Safety and Healthy Workplace

Management of Partner Safety and Health

DS DANSUK is supporting partners in establishing safety and health management procedures through safety and health councils, logistics companies, and construction firms for mutual growth. We operate regular monthly safety and health council meetings to support our partners in autonomously establishing safety and health management systems, and we collaborate through quarterly joint safety and health inspections to identify hazardous and risky factors and prevent safety accidents. Furthermore, we actively participate in the safety and health suggestion system implemented by DS DANSUK, attend weekly risk assessment meetings, and take part in emergency evacuation drills conducted at the workplace, all of which contribute to the prevention of industrial accidents. In this way, we are inducing the improvement of the safety capabilities and standards of the consortium, and we are continuously managing to prevent any disadvantages from arising due to insufficient evaluation scores of the suppliers. Additionally, for logistics companies, we conduct training on compliance with safety regulations and visitor education, and for construction companies, we produce and distribute safety and health information materials before construction to prevent industrial accidents.

Division	Purpose	Main Contents	Operation Method and Characteristics
Operation of the Safety and Health Council	Strengthening practical safety communication between contractors and subcontractors	Operation of a safety and health council consisting of contractors and subcontractors (security, cafeteria, loading and unloading, etc.). Monthly meetings, quarterly joint inspections, provision of pretraining materials, participation of subcontractors in fire drills, etc.	In the case of the Sihwa Plant, real-time issue sharing and on-site guidance are conducted using a group messenger.
Construction company management	Establishing a system for ensuring the safety of contractors and providing information during construction	Providing safety and health information documents before hazardous and dangerous work (such as chemical substances, work inside equipment, etc.). Training for subcontractor workers through TBM	Plan for compliance with document provision obligations under the Occupational Safety and Health Act and linking with practical training
Support for working environment measurement	Support for ensuring the safety of the supplier's work environment and meeting legal requirements	Support for measuring the work environment of the supplier in case of exposure to harmful substances. Cost support according to the recommendations of the measuring institution	Encouragement of proactive measurement in case of potential exposure to hazards, and provision of priority support upon request from the Safety and Health Council.
Visitor Health Management	Strengthening the protection of the health of entering workers and the management of vulnerable groups	After collecting the health examination results of dispatched workers, connect them to health counseling. Allow entry for visitors when visiting health institutions. Flu vaccine support	Coordination with industrial health specialist institutions, along with guidance and encouragement for managers to participate.
Logistics driver safety management	Improvement of job stability and welfare for logistics drivers	Theoretical training and job guidance for new drivers. Biannual safety and health training. Installation and operation of a driver-exclusive break room and massage chairs	Establishment of driver facilities within the Sihwa Plant to reduce fatigue and promote safety culture

Strengthening the outsourcing work permit process

DS DANSUK is continuously enhancing its safety management system for outsourced projects to ensure that all workers, including those from subcontractors, receive an equal level of protection. When outsourcing contracted work, we consistently apply legal procedures and practical protective measures such as risk assessments, Safe Work Permits (SWP), personal protective equipment (PPE) usage, and access control in accordance with relevant laws and regulations, including the Occupational Safety and Health Act. In particular, high-risk tasks such as work involving fire, confined spaces, and elevated work are mandated to undergo pre-inspections and safety measure confirmations for each process, ensuring that risk management is centered on prevention. Currently, DS DANSUK is promoting the introduction of an electronic approval-based safety work permit system across the company, and after its implementation, all procedures from work plan establishment to risk assessment, permit application, and approval will be unified digitally. Accordingly, we expect not only to enhance the transparency and response speed of the work approval process but also to significantly strengthen the control over the entry procedures of subcontractors and the level of real-time history management. This will enable structural improvements in safety management blind spots such as unauthorized work, false registrations, and misuse of entrants on-site. At the work site, permits and procedures are posted in advance, and stakeholders such as workers, attendees, and supervisors perform safety management according to their respective roles, continuously verifying the consistency between the actual work and the permit details. If the working hours exceed 8 hours, we apply an extension approval procedure after on-site verification, thereby preventing worker overexertion and ensuring safety simultaneously. Additionally, for urgent tasks where it is difficult to follow the normal approval procedures, we operate a simplified separate procedure to ensure that key measures such as TBM, on-site postings, supervisor assignments, and gas concentration measurements are not omitted. In cases of changes in work content or exceptions, we ensure both accountability and safety through additional review and approval processes. In the future, DS DANSUK will continue to maintain a preventive safety management system that reflects the characteristics and risk levels of outsourced work and will expand systematic support to internalize practical safety capabilities together with partner companies.

Outsourcing company safety work permit procedure

Preparation and submission of the safety work permit ▶ Issuance of the safety work permit ▶ Approval of the safety work permit by the authorized approver ▶ Present on safety work ▶ **End of work**

Outsourcing company construction progress process

1-hour safety training before the start of construction ▶ Preparation of work application form before starting construction → Early identification of harmful and hazardous factors ▶ Periodic measurement of oxygen and harmful gases in enclosed spaces during work. ▶ **Periodic patrol**

Safety and Healthy Workplace

Occupational Safety and Health Training

DS DANSUK is utilizing qualified internal personnel and external experts as instructors to enhance the professionalism of safety and health training. Internal trainers are composed of individuals who have completed the required legal training and have over three years of experience, while external trainers are invited based on the Ministry of Employment and Labor's standards, including emergency responders, physical therapists, and mental health experts. In 2024, training was conducted on various topics such as the prevention of musculoskeletal disorders, CPR practice, and job stress reduction. The training is conducted above the legal standards, and we create our own teaching materials considering the characteristics of each workplace, following the annual training plan that reflects the Occupational Safety and Health Act. Additionally, the training personnel regularly complete mandatory training such as safety and health job training, supervisor training, and oxygen/hazardous gas measurement qualification training, while also engaging in specialized training such as PSM, MSDS, protective equipment usage, and healthcare refresher courses to continuously enhance their practical skills. Accordingly, DS DANSUK maintains an effective, field-based training system.

Strengthening the capabilities of internal trainers

Training Name	Target	Period	Main content
Occupational Safety and Health Personnel Job Training	Persons in Charge of Safety and Health Management, Safety/ Health Officer, Safety and Health Management Personnel	Biennial	Job training under the Occupational Safety and Health Act
Supervisor Training	Supervisors	Annual	Completion of mandatory training
Oxygen and hazardous gas measurement qualification training	Safety and health personnel at workplace, etc.	Once at first	Qualification granted upon completion of the training
PSM specialization training	Safety Officer at Sihwa/ Pyeongtaek Plant	Occasional	Specialized training in process safety management
MSDS specialization training	Safety and health personnel at each site, quality assurance department, etc.	Occasional	Strengthening the capacity to prepare and interpret Safety Data Sheets
Mandatory continuing education for healthcare professionals	Health Managers of the Sihwa Plant	Annual	Completion of mandatory continuing education for healthcare personnel
3M protective equipment training	Safety and health personnel at each site, etc.	As needed	Training on the use and wearing of protective gear
Seminar on Industrial Safety and Health Month	Safety and health officers at each workplace, etc.	Every July	Attending issue-based case-centered seminars

Training Topics for Sihwa Plant External Instructor in 2024

Month	Instructors	Content of Education
March	Physical therapist, industrial health instructor	Methods for preventing musculoskeletal disorders, stretching, and investigating harmful factors
June	Health degree + more than 3 years of teaching experience	CPR and AED practice
November	Holder of a degree related to mental health	Work-related stress prevention practice (meditation, laughter therapy, self-massage, etc.)

Metrics and Targets

Safety and Health Management Targets and Serious Accident Management Metrics for 2024

Division	Targets	Results	Achievement Rate (%)
Advancement of the Occupational Safety and Health Management System	ISO 45001 certification Cooperation in issuing the sustainability report	ISO 45001 certification renewal Collaboration on the issuance of the sustainability report	100
Raising the process safety management rating	Achieving S-grade Zero serious industrial accidents	Achieving S-grade Zero serious industrial accidents	100
Smart Safety and Health Management	Safety and health activity rate above 1,500	Safety and health activity rate of 2,782, indicating highly active ongoing activities (average from January to December)	100
Building a culture of safety and health	Occupational injury rate (LTIR/TRIR) is less than 2.00 / 5.00	Achieving the injury rate target (LTIR 2.00 / TRIR 5.00) - LTIR 1.29 - TRIR 3.43 (baseline date: December 3, 2024)	100
Strengthening health management, including MSDS	Zero occupational disease and industrial accidents	Zero occupational disease and occupation-related disorder	100

An Organization for Everyone, a Workplace Where Everyone is Respected

Management Approach

Material Issue

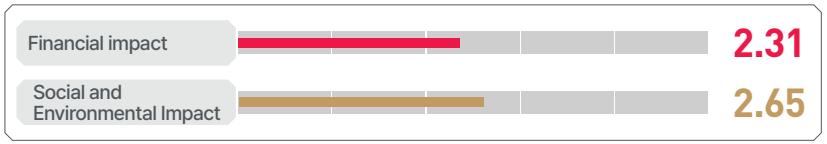
DS DANSUK acknowledges that respect for human rights is fundamental to all business operations and a core principle underpinning long-term corporate sustainability. Respecting human rights is a fundamental responsibility essential to earning stakeholder trust. We are committed to proactively identifying potential human rights risks and implementing systematic management across all areas of our business operations. DS DANSUK promotes the adoption of human rights management practices across its partners and supply chain, embedding internationally recognized principles such as fair labor conditions, non-discrimination, workplace safety, and the prohibition of child and forced labor. We will continue to foster a corporate culture grounded in respect for human rights, supported by ongoing education, transparent communication, and systematic monitoring.

UN SDGs

10.2 Promote inclusion of all

16.1 Significantly reduce all forms of violence and related death rates

Human Rights Impact on DS DANSUK



Governance

To strengthen the implementation of human rights management, DS DANSUK regularly reports key human rights issues, policy developments, and the progress of improvement initiatives to the ESG Sustainability Committee. The committee reviews these reports to determine appropriate responses to human rights risks and to formulate effective action plans for continuous improvement. Key issues addressed by the committee are communicated across all business divisions and functional units, led by the CEO, to ensure human rights management is fully embedded throughout the organization rather than remaining a mere declaration. This approach enables DS DANSUK to consistently integrate the principle of respecting human rights into its corporate culture and overall management practices.

Strategy

DS DANSUK is advancing people-focused human rights management through an integrated system that balances talent development with employee well-being, grounded in a commitment to human rights. Since 2024, we have been implementing a three-phase roadmap (system establishment, internalization, and enhancement) to strengthen human rights management. This includes establishing a human rights policy declaration, conducting impact assessments, and operating a reporting and remediation system. We also provide guidelines and training to enhance execution capabilities across departments and have introduced a data-driven management system to identify and mitigate human rights risks proactively.

IRO	Detailed Description	Response Period			Response Strategy
		Short-term	Mid-term	Long-term	
Positive	Upholding human rights through enhanced labor practices and advanced corporate culture	●	●	●	Progressive implementation of human rights management and a culture of mutual respect

Risk Management

DS DANSUK has developed and currently operates a comprehensive human rights risk management system aligned with both domestic and international human rights standards. We regularly assess the potential for both direct and indirect human rights violations across our entire business operation. Based on these evaluations, we develop targeted response measures, such as protecting vulnerable worker groups, ensuring labor rights, operating grievance mechanisms, and conducting human rights due diligence, to advance responsible human rights management.

Metrics and Targets

TARGET Achieve 100% coverage of human rights risk evaluations across all workplaces and maintain a 100% resolution rate through a rapid response system for human rights complaints by 2030

METRICS

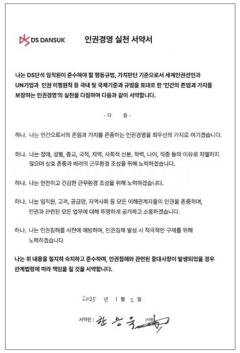
Category	2024	2025
Human Rights Risk Evaluation Rate	40.3%	45.5%

An Organization for Everyone, a Workplace Where Everyone is Respected

Human Rights Management System

Overview of Human Rights Management Initiatives

To proactively implement human rights management and address potential risks, DS DANSUK has established a Human Rights Charter aimed at preventing rights violations in its business operations and promoting a culture of respect for human rights. To implement effective human rights management, DS DANSUK is committed to aligning with international human rights and labor standards, including the Universal Declaration of Human Rights, the UN Guiding Principles on Business and Human Rights, the ILO Core Conventions, and the OECD Due Diligence Guidance for Responsible Business Conduct. In parallel, the company is working to establish a robust human rights management system to ensure tangible progress in upholding human rights.


DS DANSUK 인권경영 실천 서약서

Human Rights Management Practice Pledge

Declaration and Strengthening of Human Rights Governance

In January 2025, DS DANSUK formally declared its commitment to human rights management during the New Year's ceremony, reinforcing human rights as a core corporate value. Both CEOs and all employees signed the 'Human Rights Management Practice Pledge,' demonstrating their commitment to its effective implementation.

The human rights management declaration focused on the following core initiatives:

- Announced five key human rights principles based on international standards (UNGPs, ILO, etc.)
- Conducted company-wide employee pledge and collective reading of the human rights declaration
- Introduced grievance channels and shared plans for operational enhancement

We aim to move beyond a formal declaration by fostering active participation from all employees and stakeholders, building a sustainable human rights management culture. This will be supported by a concrete implementation roadmap that includes expanding human rights education, conducting regular risk assessments, and formalizing board-level reporting.

Commitments and Policies on Human Rights

DS DANSUK recognizes human rights protection as a core corporate responsibility and operates a system of commitments and policies based on international standards to guide its human rights management in line with the following key principles.

Key Principles of Human Rights Management

Non-Discrimination	Prohibition of Sexual Harassment and Workplace Bullying	Adherence to Labor Standards
Ensuring Workplace Safety and Health	Humane and Respectful Treatment	Safeguarding the Rights of Local Communities
Upholding Freedom of Association and Collective Bargaining Rights	Respecting the Rights of Customers and Business Partners	Prohibition of Forced and Child Labor, and Human Trafficking

Governance Body for Human Rights Management

Through the ESG Sustainability Committee, DS DANSUK sets key ESG policies and priorities, including labor and human rights, to advance people-focused human rights management. The Management Support Division oversees people-focused risk identification and management, facilitating improvement initiatives and implementation reviews through cross-departmental meetings.

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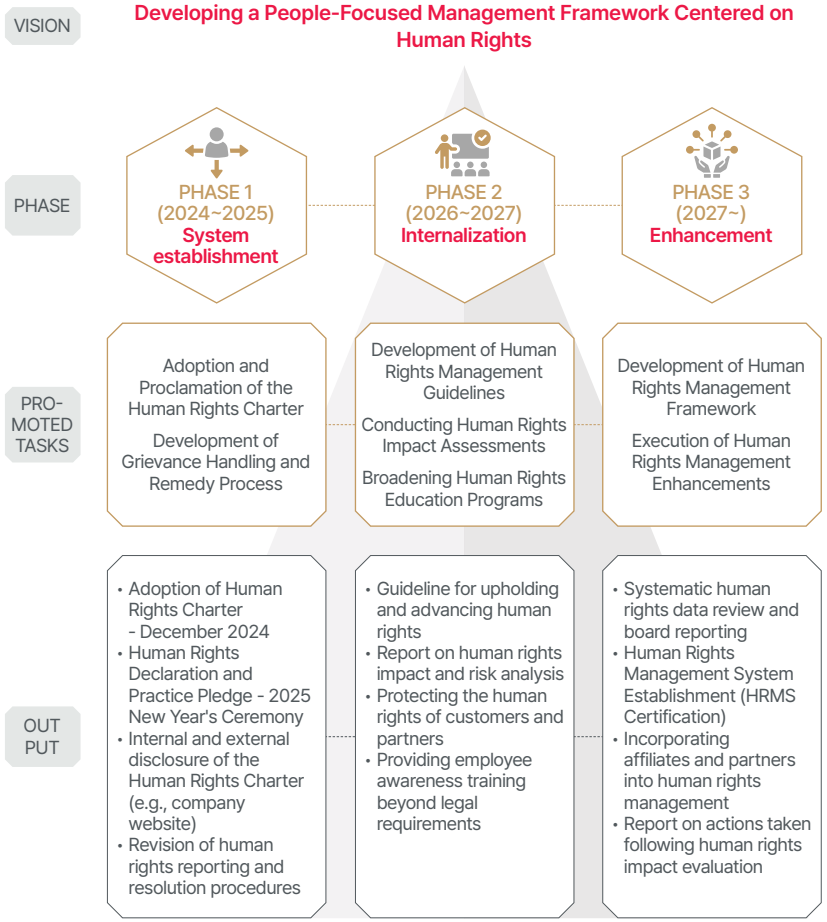
Human Rights Management Strategy

Human Rights Management Roadmap

DS DANSUK commits to respecting and protecting the human rights of all stakeholders, including employees, partners, customers, and communities, throughout its management activities, guided by a three-phase implementation plan.



Risk Governance for Human Rights Management

Overview of Human Rights Survey

Recognizing human rights as a key corporate responsibility, DS DANSUK conducts regular surveys among office employees to assess the state of human rights protection and identify potential risks. Based on international standards and national guidelines, the findings inform organizational-level response measures and system improvements. The company aims to foster a human rights-friendly culture and will gradually expand and deepen the scope of these efforts to include production workers and affiliates in the future.

Human Rights Survey Workflow

Defining Evaluation Scope ▸ Designing Survey Questions ▸ Conducting the Survey ▸ Analyzing Risks & Identifying Improvements ▸ **Improvement and Monitoring**

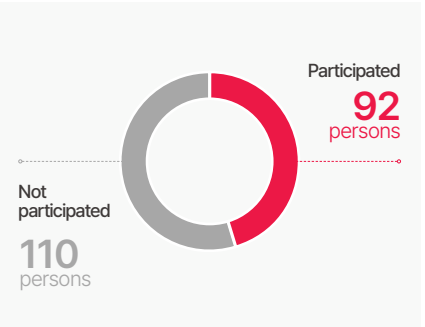
Issues identified in Human Rights Survey

- Human Rights Awareness
- Discrimination and Rights Violation Experiences
- System Improvement Needs
- Grievance System Satisfaction
- Concerning human rights education

Focus of Human Rights Survey

Category	Contents
Survey subjects	202 company-wide office staff
Survey period	Q1 2025
Survey purpose	Human rights risk detection and organizational culture reinforcement
Survey method	5-point rating survey combined with open-ended responses

Survey Participant Count



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Result of Human Rights Survey

(1 pt: Very low, 3 pt: Average, 5 pt: Very high)

Item		Avg. score
Degree of Human Rights Violation Prevention	Human rights violation awareness and response skills	3.42
	Non-discrimination	3.90
	Adherence to Labor Standards	3.60
	Humane and respectful treatment	3.89
	Prohibition of forced labor	3.73
	Freedom of association and collective bargaining rights	3.70
	Ensuring workplace safety and health	4.08
Degree of Human Rights Management System Implementation	Recognition of the commitment to human rights practices	3.51
	Evaluation of changes in company human rights standards	3.50
	Victim relief and support system	2.33
	Recognition of the value of human rights education	3.99

Analysis Results of Human Rights Violation Incidents

While no formal cases of human rights violations or discrimination have been recorded, reported issues primarily relate to organizational culture and working conditions, with 94% of the harm identified as 'mental or emotional damage'. Despite awareness of problem-solving measures, many affected individuals refrained from taking action due to mistrust in their effectiveness. Although 73% were aware of the human rights relief system, its utilization rate was only 2%, highlighting the need to enhance departmental efforts and improve system accessibility. Therefore, fostering a human rights-sensitive organizational culture requires moving beyond basic awareness to offering concrete support for implementation.

Critical Actions and Improvement Focus

Category	Contents
Grievance handling system	Enhancing anonymous reporting channel via Closed Loop system
Effective protection	Secondary harm prevention manual, faster response and stronger management capability
Organizational culture	Dining culture awareness campaign focused on respect and privacy
Reinforced regulatory authority	Enhanced understanding of reporting mechanisms

Activities of Human Rights Management

Respect for diversity

DS DANSUK is committed to fostering a diverse and inclusive corporate culture, prioritizing an environment where all employees can reach their full potential. Accordingly, the company actively recruits diverse talent, including foreign and disabled workers. Since 2019, efforts have focused on increasing the recruitment of severely disabled individuals and creating a supportive workplace that enables them to thrive. Beyond legal compliance, we promote a culture of mutual respect and understanding through targeted education on foreign workers and individuals with disabilities. Employees actively embrace and respect diversity daily. Recognizing that respect for diversity enhances both employee satisfaction and corporate social responsibility, the company pursues sustainable growth through these inclusive practices.

Employee Training Program

In addition to mandatory training, such as sexual harassment prevention and disability awareness, DS DANSUK will enhance educational effectiveness in 2025 by using an internal bulletin board accessible to all employees. This platform will share real cases of human rights violations, along with prevention and response measures, to deepen understanding and strengthen awareness and response capabilities.

Human Rights Grievance System

DS DANSUK upholds human rights protection as a core management principle to foster a respectful and healthy work environment for all employees and stakeholders. The company has established a grievance handling process designed to proactively prevent violations and ensure prompt, fair responses. Grievances can be submitted anonymously by employees and all stakeholders, including partner company members, via both online and offline channels. The Closed Loop system guarantees whistleblower confidentiality and maintains complete anonymity throughout the process. Informants can confidently report complaints and anonymously track their progress through the same channel. Complaints receive an initial response within five business days through coordination between the human rights and relevant departments, with fact-finding and action results communicated within ten business days. Victim protection and prevention of secondary harm are prioritized throughout the process.

Human Rights Grievance Handling Process

Growth that Begins with People

Management Approach

Material Issue

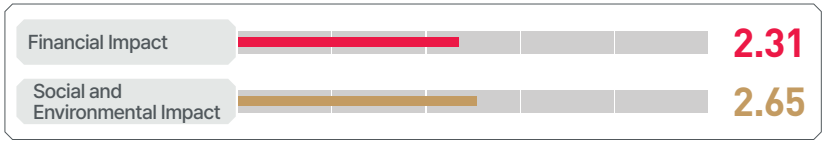
DS DANSUK views talent as the foundation of corporate competitiveness and a key driver of sustainable management, and is cultivating a people-focused corporate culture. We prioritize fair recruitment and evaluation, competency-based development, work-life balance, and a safe workplace. Employee potential is nurtured through role-specific training, leadership development, and career planning. Regular communication and feedback systems support a culture of openness and mutual respect, while ongoing efforts aim to ensure a discrimination-free environment. The company remains committed to strategic talent management that aligns employee growth with corporate development.

UN SDGs

4.4 Drive productivity and foster high-quality employment

8.3 Broaden access to technical training and talent development

Influence of Talent Management on DS DANSUK



Governance

DS DANSUK is building governance to systematically promote talent management and foster a people-focused corporate culture. Talent development initiatives include job-based training, career development plan (CDP), and leadership programs, overseen by the Management Support Division. We actively reflect employee feedback through internal communication to foster an inclusive, discrimination-free culture. The company is committed to enhancing its talent management system and aligning workforce development with organizational competitiveness.

Strategy

To advance people-focused management, DS DANSUK is strategically pursuing talent management by progressively establishing a competency-based development system, job-focused training programs, and enhanced career development and evaluation frameworks. The company also aims to strengthen execution across departments through guidelines and leadership training, while implementing a data-driven HR analytics system to attract top talent, improve organizational commitment, and support sustainable talent growth.

IRO	Detailed Description	Response Period			Response Strategy
		Short-term	Mid-term	Long-term	
Risk	Cost increases driven by stricter labor law compliance	●	●	●	Improved workplace agility and efficiency through digital innovation
Positive	Promoting fair employment practices to recruit talent and contribute locally	●	●	●	Attracting talent and creating quality jobs through enhanced evaluation and compensation

Risk Management

DS DANSUK manages talent-related risks through a company-wide system based on HR and internal standards, proactively addressing challenges such as talent retention, rising turnover, generational gaps, and cultural stagnation in a dynamic business environment. Building on these insights, we are implementing targeted strategies, such as role-specific talent development and engagement enhancement, to strengthen a sustainable HR management system.

Metrics and Targets

TARGET Building a long-term learning environment with a goal of 15 hours of training per person by 2030

METRICS

Category	Unit	2022	2023	2024	2030(Target)
Training time per person	Hours	10.2	13.5	**8.6**	**15.0**

Growth that Begins with People

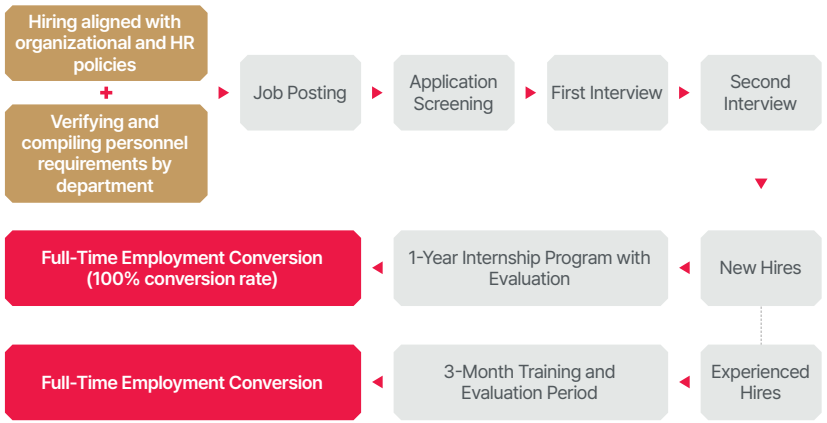
People-Focused Management Framework

Talent Acquisition and Development Framework

DS DANSUK is developing a training system aligned with its core values to attract top talent and support mutual growth with employees. In 2024, the company participated in two job fairs to strengthen talent acquisition and enhance recruitment fairness and professionalism by revising its interview evaluation process. Since launching a recruitment-based internship program in late 2022, the intern-to-employee conversion rate has reached 100% as of 2025. Additionally, DS DANSUK is extending employment opportunities by rehiring key manufacturing personnel past retirement age as contract workers, supporting continued skilled production and senior employment.

Job Fair

Talent Acquisition Process



People-Focused Business Strategy

Employee Training Program

DS DANSUK has designated 'professional talent development' as a core strategy for securing future growth, and operates structured training programs to enhance employee and executive capabilities. Biannual workshops are held for new employees, and program content is continuously improved based on satisfaction surveys and participant feedback. We provide mandatory legal training for all employees, along with ESG- and compliance-related education in areas such as information security, ethical management, and internal accounting. The training system is structured by role into three levels—Junior, Senior, and Manager—with tailored curricula and development goals. Competency-based training is conducted at least annually, with training needs assessed through pre-surveys and effectiveness verified through evaluation metrics.

DS DANSUK will further refine role- and career-specific training and enhance its learning infrastructure to directly link employee development with long-term corporate sustainability.

Employee Competency Enhancement Program

Junior

- Enhancing task accuracy and execution skills
- Facilitating organizational integration and process comprehension
- Offering training in followership, motivation, and related soft skills

Senior

- Strengthen coordination and integration skills across teams
- Develop expertise for independent professional performance
- Provide training in bridge leadership, goal setting, and performance management

Manager

- Drive departmental performance and support team development
- Set and implement mid- to long-term departmental goals and strategies
- Provide training in leadership, organizational development, and performance management

Growth that Begins with People

Performance Evaluation of Employees

DS DANSUK values its employees as key assets and promotes both individual growth and organizational success through a fair, systematic performance evaluation system. This system serves as a foundation for enhancing capabilities, fostering an active culture, and linking compensation to performance, thereby motivating employees and matching individual and organizational goals.

Performance evaluations are conducted for all employees, with methods varying by job and organizational roles. The results are linked to incentives, promotions, and training to support both individual growth and organizational performance.

Performance Evaluation Principles

Category	Contents
Fairness	Sets evaluation criteria by role and responsibility, ensuring a balanced mix of qualitative and quantitative assessments
Transparency	Defines evaluation items and objectives in advance, and ensures results are clearly communicated through feedback
Developmental	Provides guidance on performance and skill development through semiannual evaluations and in-person feedback sessions

Evaluation Items

Category	Contents
General Competencies	Outlines the general competencies expected of all executives and employees, assessing fundamental skills, work attitudes, and goal attainment related to job performance
Functional Skills	Assesses job-related skills and competencies, including expertise in specific functional areas
Leadership Capabilities	Evaluates the capacity to lead, motivate others, and drive organizational performance

Risk Governance in People-Focused Management

Digital Innovation for a Better Work Environment

DS DANSUK utilizes Robotic Process Automation (RPA) to cut annual work hours and improve efficiency by automating routine, repetitive tasks, resulting in increased productivity company-wide.

Since May 2021, DS DANSUK has deployed six RPA bots automating 12 office tasks such as sales/purchase processing and expense reconciliation. This automation saves approximately 4,860 work hours annually, equivalent to the output of about 2.6 full-time employees based on the OECD standard of 1,874 hours per FTE.

RPA-Applied Tasks

Logistics Inbound and Outbound	L/C Entry	Purchase Order Entry	Sales Order Entry
Customs Declaration Input	Goods Receipt Recording	Expense Settlement	Tax Invoice Management

DS DANSUK plans to advance its RPA initiatives by developing additional programs and expanding automation across the organization. These efforts aim to minimize human error, reduce time and labor costs associated with repetitive tasks, and extend automation to more complex processes to further enhance operational efficiency.

We also aim to enhance the user interface to improve field-level accessibility to RPA and will continue identifying new automation opportunities to expand RPA adoption. As part of its digital transformation strategy, the company also plans to develop an intelligent work support system that integrates chatbot technology with RPA. By extending RPA across all business sites and enabling real-time, chatbot-based task support, DS DANSUK seeks to further boost productivity and operational responsiveness.

Growth that Begins with People

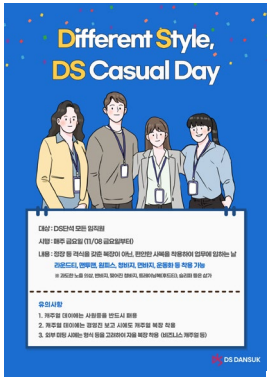
Reinforcing People-Focused Management Practices

Corporate Culture Activities

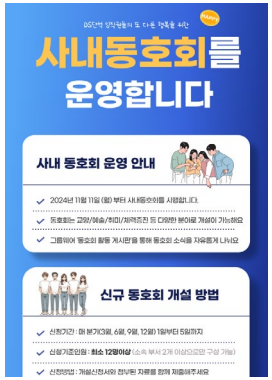
DS DANSUK promotes a culture of communication by regularly sharing management updates, business trends, and divisional priorities each quarter to unify all executives and employees toward a common direction.

In 2024, DS DANSUK held its first employee participation initiative, the "1st DS Contest: Building DS DANSUK Together," under the theme 'Good Workplace, Better Life.' Employees submitted ideas to improve work efficiency, the work environment, corporate culture, and internal communication. Selected proposals, reviewed by executives, are being considered for implementation as short-, mid-, or long-term projects, with awards granted to contributors. As part of this initiative, the idea titled 'The Safer, the Better DS' is being implemented by 2024, including casual dress days, support for in-house clubs, and the installation of pedestrian crosswalks. In 2025, DS DANSUK plans to hold town hall meetings to strengthen direct communication. By facilitating open, two-way dialogue between the CEO and employees on topics such as corporate culture, business strategies, and improvement opportunities, the company aims to enhance employee satisfaction and organizational performance.

1st DS Contest Poster



Casual Day Poster



In-House Club

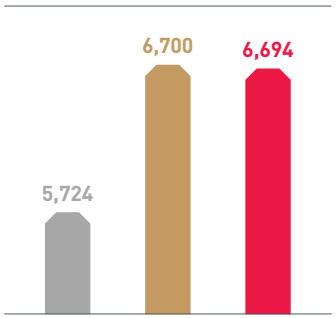
Advancements in Workplace Benefits

DS DANSUK operates a range of benefit programs to support work-life balance and enhance employee convenience and performance. To promote well-being and job satisfaction, the company offers initiatives such as health checkups, hobby support, and condolence assistance. In 2024, facility upgrades included replacing office air conditioners on the second floor and renovating four dormitory rooms. For 2025, plans include launching an in-house digital library, providing shared dormitory equipment, and expanding comprehensive health screenings.

Benefit System

- Assistance with Gifts for Employee Condolences and Celebratory Occasions
- Financial Support for Infertility Treatment and Childbirth Congratulations
- Subsidies for Employee Vacation and Resort Use
- Educational Scholarships for Employees' School-Aged and College-Enrolled Children
- Provision of On-Site Fitness Facilities and Health Management Programs
- Operation of Company Shuttle Buses and In-House Cafeterias

Benefit Expenses (unit: 1 million KRW)



Assistance for Childbirth and Infertility Treatments

Growth that Begins with People

Labor-Management Communication

DS DANSUK facilitates effective labor-management communication through an autonomously operated council established under the "Act Concerning the Promotion of Worker Participation and Cooperation." Although no collective bargaining union exists, the company respects and supports workers' rights to collective bargaining and ensures their autonomous exercise. The council serves as the primary forum for labor-management dialogue, holding quarterly meetings with equal representation from both sides to address key issues, resolve challenges, and encourage worker participation. Prompt and open communication of council issues improves the efficiency of discussions.

In 2024, the head office benefit building underwent significant upgrades, including the full replacement of lockers and changing room floors, as well as enhancements to shower and fitness facilities. Additionally, the labor-management council led revisions to in-house benefit regulations to introduce support for infertility treatment costs and increase childbirth congratulatory payments, thereby expanding the company's practical benefit offerings. We are committed to fostering a sustainable organizational culture by maintaining a cooperative relationship founded on mutual respect and trust between labor and management.

2024 Labor-Management Council Discussion Agenda

Category	Date	Agenda
Q1	24.03.25	• Major personnel appointments for 2024 • Discussion on safety incidents involving in-house construction machinery • Review of expanding eligibility for Production Worker Excellence Awards
Q2	24.06.27	• Overview of 59th anniversary key events • Briefing on revised internal benefit policies • 2024 summer vacation guidelines
Q3	24.09.30	• October substitute holiday operation guidelines • Public facility usage guidelines • On-site workplace safety precautions
Q4	24.12.31	• Reappointment of user committee members • Regular staffing and organizational restructuring for 2025 • Wage adjustment for 2025 • Performance bonus distribution for 2024


2024 Labor-Management Council

Strategic Goals and Key Performance Indicators (KPIs)

DS DANSUK is implementing a phased roadmap for people-focused management, progressing from system establishment to internalization and advancement. To enhance effectiveness, the company will continue refining performance evaluation, strengthening fair compensation practices, and expanding competency development programs.

2024 Highlights and Performance Outcomes

Category	Goal	Outcome	Attainment (%)
Enhanced Employee Evaluation Process	Development of a Performance-Driven Organizational Culture	• Executed Mid-Year Performance Assessments • Year-End Performance Input and Review • Introduced New Competency Assessment Criteria • Integrated Job Classification Framework	100
Formulation of Employee Training Process	Employee Empowerment	• Hosted Two On-boarding Workshops for New Employees • Conducted ESG-Focused Training Programs • Designed Role-Based Training Curricula and Competency Development Goals	80
Recruitment System Revision	Attracting Top Talent	• Participated in Two Job Fairs • Ongoing Revision of Interview Evaluation Criteria	80

ESG Performance

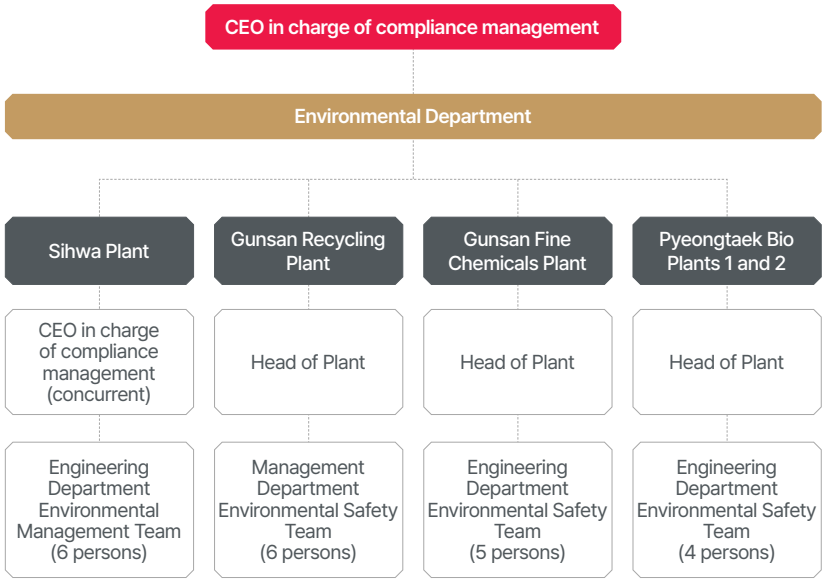
ESG Performance

Internalization of Environmental Management

Environmental Management System

Environmental Management Organization

DS DANDUK is reinforcing its field-focused environmental management structure by establishing an environmental department under the CEO for compliance oversight and creating specialized teams at its Sihwa, Gunsan, and Pyeongtaek sites to swiftly address local environmental issues. Each site is led by a sustainability or management department head who functions as the environmental manager, supported by dedicated environmental and safety teams. Comprising 21 experts, the organization strategically manages key environmental tasks including greenhouse gas and energy monitoring, air pollution prevention, and resource circulation. The ESG Sustainability Committee regularly reviews implementation plans and performance, reporting to the board as needed, thereby ensuring strategic execution. Through this governance framework, DS DANDUK integrates C-level decision-making with operational capabilities, strengthening climate risk response and ESG internalization across the company.



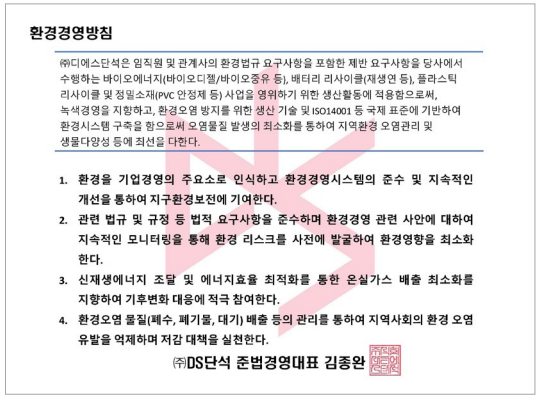
Environmental Management Advancement Framework

Environment Policy

DS DANSUK commits to eco-friendly management through resource circulation, treating environmental stewardship as vital to sustainability. Each site targets reductions in pollutants and greenhouse gases by investing in prevention technologies, improving energy efficiency, and expanding waste monitoring. The company also reduces its environmental footprint by adopting renewable energy and proactively managing risks, while fostering strong ties with local communities and upholding global environmental responsibilities.

Environmental Management Policy

DS DANSUK is a manufacturing company focused on resource circulation and progressively addressing climate change and environmental pollution. We prioritize establishing a sustainable environmental management system, implementing this policy across all business sites. DS DANSUK strengthens organizational commitment to environmental goals by regularly improving training programs and educating executives, employees, and partners on compliance with environmental regulations.



환경경영방침

㈜디에스단석은 임직원 및 관계사의 환경법규 요구사항을 포함한 제반 요구사항을 당사에서 수행하는 바이오에너지(바이오디젤/바이오중유 등), 배터리 리사이클(재생연 등), 플라스틱 리사이클 및 정밀소재(PVC 안정제 등) 사업을 영위하기 위한 생산활동에 적용함으로써, 녹색경영을 지향하고, 환경오염 방지를 위한 생산 기술 및 ISO14001 등 국제 표준에 기반하여 환경시스템 구축을 함으로써 오염물질 발생의 최소화를 통하여 지역환경 오염관리 및 생물다양성 등에 최선을 다한다.

1. 환경을 기업경영의 주요소로 인식하고 환경경영시스템의 준수 및 지속적인 개선을 통하여 지구환경보전에 기여한다.
2. 관련 법규 및 규정 등 법적 요구사항을 준수하며 환경경영 관련 사안에 대하여 지속적인 모니터링을 통해 환경 리스크를 사전에 발굴하여 환경영향을 최소화 한다.
3. 신재생에너지 조달 및 에너지효율 최적화를 통한 온실가스 배출 최소화를 지향하여 기후변화 대응에 적극 참여한다.
4. 환경오염 물질(폐수, 폐기물, 대기) 배출 등의 관리를 통하여 지역사회의 환경 오염 유발을 억제하며 저감 대책을 실천한다.

㈜DS단석 준법경영대표 김종완

Environmental Management Policy

Internalization of Environmental Management

Environmental Management System

DS DANSUK is advancing its data-focused environmental management to drive meaningful improvements in environmental outcomes. Beyond legal compliance, we are developing customized management systems specific to the workplace's environmental risks to improve operational efficiency and responsiveness. Environmental data are regularly digitized by emission sources to ensure accuracy, and key sites employ real-time monitoring systems. This enables early detection of anomalies and prompt responses to risks such as hazardous emissions or equipment malfunctions. In addition, we operate a collaborative system among environmental management staff, sharing best practices and conducting internal consulting and peer reviews for continuous improvement. This integrated approach enhances the effectiveness of ISO 14001 certification, reduces operational discrepancies across sites, and mitigates company-wide environmental risks.

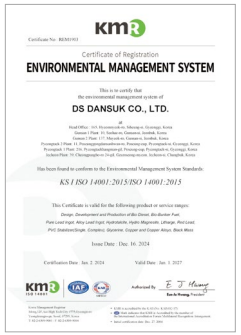
ISO14001 Environmental Management System

Certified Business Sites

Sihwa Plant, Gunsan Recycling Plant, Gunsan Fine Chemicals Plant, Pyeongtaek Bio Plant 1, Pyeongtaek Bio Plant 2

Certification Scope

Design, development, and production of bio diesel, bio heavy oil, pure lead, lead alloy, hydrotalcite, hydromagnesite, litharge, red lead, basic PVC stabilizer, one pack stabilizer, glycerin, copper and copper alloys, and black mass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Certificate of Registration

ENVIRONMENTAL MANAGEMENT SYSTEM

DS DANSUK CO., LTD.

KS I ISO 14001:2015/ISO 14001:2015

Environmental Management System Certificate

Environmental Facility Investment

Green Investment Overview

DS DANSUK minimizes environmental risks, including pollutant emissions, through investments in new operations and environmentally responsible facilities. We establish annual environmental investment plans and allocate resources to upgrade, expand, and build facilities that prevent pollution and mitigate environmental risks.

Category	Contents
Sihwa Plant	• Installed regenerative thermal oxidizers(RTO) in biofuel manufacturing → Cut composite odor by 95% and power consumption by 50% → Minimized heat loss with internal heat storage and used low NOx burners to lower NOx emissions
Gunsan Recycling Plant*	• Replaced 2 TRF filter dust collectors → Shortened dust removal and compressed air cycles → Reduced power consumption, lowering greenhouse gas emissions (approx. 261 tons/yr) • Implemented waste heat recovery system for kettle burners → Captures waste gas at approximately 600°C from the burners → Cuts greenhouse gas emissions by reducing LNG consumption (approx. 64 tons/yr) • Installed PE waste reduction facility → Achieved a 25% decrease in PE wastewater content, reducing waste by approximately 667 tons annually
Gunsan Fine Chemicals Plant	•Newly installed odor scrubbers, exhaust systems, and water tank leak detectors
Pyeongtaek Bio Plants	•Installation of 'regenerative thermal oxidizers(RTO)' at Pyeongtaek Bio Plant 1 → Reduction in air pollution and odor emissions

* Smart Eco-Factory Construction Project

'Regenerative Thermal Oxidizers(RTO) at Sihwa Plant'

Internalization of Environmental Management

Environmental Education

Environmental Education for Employees

DS DANSUK conducts quarterly environmental education to enhance the environmental expertise and capabilities of key personnel. The program combines theoretical instruction with field-based learning and covers topics such as air quality, water management, waste, and hazardous chemicals. Education is tailored to various roles, including production staff, hazardous chemical managers, environmental engineers, and general employees. Additionally, the Sihwa Plant promotes environmental awareness through internal campaigns.

Environmental Education Curriculum

Category	Target	Education Hours Per Person	Number of Participants				Education Type
			Sihwa	Gunsan Recycling	Gunsan Fine Chemicals	Pyeong-taek	
Hazardous Chemicals Manager	Managers of hazardous chemicals	16 hr/ 2 yr	4	6	3	3	External
Hazardous Chemicals Handler	Employees handling hazardous chemicals	16 hr/ 2 yr	7	131	4	5	External
Hazardous Chemicals Workers	DS employees	2 hr/yr	190	29	85	2	External
Integrated Environment Engineer	Environment engineers	32 hr/ 2 yr	4	-	2	2	External
Waste Recycling and Disposal Worker	Environment engineers	6 hr/ 3 yr	1	-	1	2	External
Waste Disposal Worker	Production workers	1 yr/yr	30	-	-	2	Internal
Evacuation Training for Hazardous Chemical Incidents	DS employees	1 hr/yr	190	123	-	55	Internal
Management of Facilities Discharging Environmental Pollutants	Production workers	1 hr/yr	30	-	-	25	Internal

Environmental Compliance

Environmental Incident Handling and Regulatory Action

DS DANSUK operates an integrated legal response system and partner environmental management process to prevent environmental incidents and minimize regulatory violations. Weekly updates on laws and regulations from external experts are promptly shared with site-level environmental managers, ensuring compliance with the latest requirements. Each site reviews industry-related incident cases and applicable laws to proactively identify environmental hazards and potential risks. Compliance in key areas such as waste, air, and water quality is closely monitored, with immediate corrective actions taken when necessary. We conduct annual on-site inspections of partner companies, particularly waste disposal contractors, to assess compliance with the Wastes Control Act, processing capacity, and environmental impact. The results inform contract renewal decisions and serve as a basis for encouraging continuous environmental performance improvement.

Site visit to the waste disposal service provider

Environmental Load Control

Hazardous Chemicals

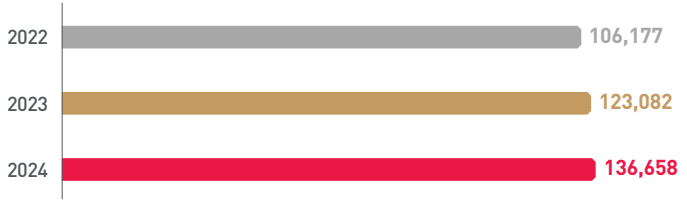
Hazardous Chemical Control

DS DANSUK is implementing a comprehensive chemical management system to minimize risks from hazardous chemicals across all sites. The company has developed an integrated chemical database to centrally manage all chemicals handled, including those regulated domestically and internationally. This system enables proactive compliance by identifying new and regulated substances early and swiftly adapting to regulatory changes in key regions such as the EU (REACH)[1], China (MEE)[2], the U.S. (TSCA)[3], and Taiwan (TCSCA)[4], ensuring alignment with legal requirements and customer expectations. We take proactive measures such as reviewing and registering alternative substances when necessary. Since 2024, we have been digitizing and automating hazardous chemical management and entry/exit records to enhance material flow control. To mitigate risks during the high-risk entry/exit stage, personal information of transporters and access history are tracked separately. The company also continues to strengthen its chemical hazard information management system by annually assessing the risks of manufactured and imported substances. For those lacking data, hazard information is prioritized based on usage volume and reported to the National Institute of Environmental Research, fulfilling regulatory requirements while minimizing risk. At the field level, updated Material Safety Data Sheets (MSDS) are made readily available in offices and along process lines, with regular updates reflecting newly introduced raw materials or products to enhance information accessibility and safety awareness. Facilities handling hazardous chemicals are sealed to prevent external exposure, and their stability is ensured through routine patrols and leak inspections. We also reinforce training to improve chemical accident prevention and response, requiring initial safety training for all new employees and conducting scenario-based drills and preventive inspections to strengthen on-site readiness. DS DANSUK will continue enhancing the full-cycle management system for hazardous chemicals, covering pre-identification, information management, on-site response, and regulatory compliance. Accordingly, the company aims to uphold its responsibility to protect worker safety and health while promoting environmental protection as part of its commitment to sustainable management.

1) EU REACH Regulation: European framework for the registration, evaluation, authorization, and restriction of chemicals
2) MEE (China): Service for the registration and notification of new chemical substances
3) TSCA (U.S.): Toxic Substances Control Act
4) TCSCA (Taiwan): Toxic Chemical Substances Control Act

Volume of Hazardous Chemicals Used

(Unit: tons)



MSDS Documentation and Management System

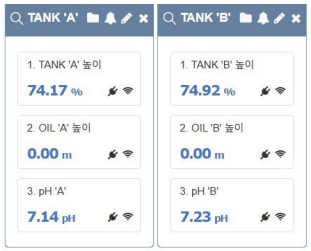
Raw Materials	
Purchase	• Obtain MSDS and related documents from new suppliers • Maintain the latest MSDS versions for all raw materials • Register directly imported raw materials with the Korea Occupational Safety and Health Agency (KOSHA)
Safety, Health, Environment, Quality	• Confirm and update the latest MSDS versions • Verify hazards according to relevant regulations (Industrial Safety and Health Act, Hazardous Substances Control Act, etc.) • Update contents in the on-site MSDS storage • Educate handling workers
Production	• Maintain and manage on-site MSDS storage • Ensure workers are familiar with the MSDS

Finished Product	
R&D Quality	• Obtain MSDS and related documents upon new registration • Maintain the latest MSDS versions for all products • Register DS DANSUK production with the KOSHA
Safety, Health, Environment, Quality	• Update to the latest versions • Verify hazards according to relevant regulations • Update contents in the on-site MSDS storage • Educate handling workers • Provide chemical (hazard) information as partners' requests
Customers	• Provide the latest MSDS versions • Provide chemical (hazard) information as users' requests

Environmental Load Control

Accident Prevention

DS DANSUK collaborates with local organizations to prevent and manage chemical accidents by regularly reviewing evacuation site maps, key information on hazardous substances, and emergency response guidelines. The company updates its chemical accident prevention and response plans based on weekly chemical information and conducts annual training, on-site inspections, and calibration of detection equipment to minimize risks associated with hazardous chemical leaks. Specifically, the Sihwa Plant is implementing preventive measures to reduce external contamination by installing shut-off valves on rainwater pipes that may carry chemical discharge. Furthermore, an IoT-enabled monitoring system has been deployed at the terminal points of rainwater discharge to continuously detect pollutants around the clock and automatically notify environmental managers via wireless alerts in the event of an abnormality. To further prevent hazardous chemical leaks, we conduct ongoing inspections and maintenance of all related facilities. Leak detectors are equipped with UPS systems to ensure uninterrupted monitoring, even during power failures resulting from emergencies.



Monitoring interface for contaminant detection system


Preventive Training for Chemical Hazards


UPS Device Installation

Incident Response Protocol

As a manufacturer of hazardous chemicals, DS DANSUK has implemented a systematic emergency response framework to enable rapid and coordinated action during chemical incidents. Each business site maintains a pre-organized emergency response team, and company-wide response capabilities are reinforced through annual simulation-based evacuation drills. If an incident occurs, the situation is immediately communicated to the safety officer and emergency response team, and everyone on-site is required to evacuate according to the established emergency response procedures. Depending on the severity, actions are taken in accordance with a step-by-step response guide, such as notifying relevant authorities, arranging medical transport, and alerting nearby facilities to potential risks. Each chemical handling area is equipped with customized emergency kits tailored to the specific substances involved, enabling prompt first responses. In 2025, DS DANSUK plans to upgrade its emergency broadcasting infrastructure to enhance the clarity and speed of communication during incidents, reinforcing a more advanced response system that prioritizes the safety of personnel and the surrounding community.

Environmental Load Control

Water Resources

Water Resource Conservation Efforts

DS DANSUK sets targets for water use and actively manages consumption to secure limited water resources. Efforts include maximizing water reuse and reducing usage through process improvements to promote water conservation and ensure a stable supply.

Category	Contents
Sihwa Plant	• Round-the-clock monitoring through the installation of pollutant detection systems and blocking valves at rainwater discharge outlets • Regular pollutant measurement at discharge outlets and cleaning of wastewater collection tanks • Enhances water use efficiency by utilizing an external steam supply instead of in-house steam production
Gunsan Recycling Plant	• Daily tracking of total industrial water consumption in operations • Wastewater undergoes physical and chemical treatment before discharge to a public sewage facility • Non-point source pollutants are treated using aqua filtration systems
Gunsan Fine Chemicals Plant	• Separates treatment lines based on discharge water quality levels, applying physical and chemical processes accordingly • Enhances internal conditions by dredging the inflow and discharge tanks of the wastewater treatment facility • Installed pH sensor-based automatic gates at non-point pollution sources
Pyeongtaek Bio Plants 1 and 2	• Reuse of process wastewater as condensate in the reaction process and similar applications • For HVO PTU, wastewater is treated through an evaporation and concentration process (WWT) and reused as cooling water

Water Consumption Control at Operational Sites

DS DANSUK has implemented a comprehensive water monitoring system across all business sites to effectively manage water-related risks. The company tracks 100% of process-specific water usage in real time, enabling close oversight of consumption patterns and swift response to any irregularities or excessive use. The company also reviews the quality of raw materials in advance, such as checking moisture content, to reduce excess water consumption during processing. Daily water usage is tracked and analyzed, with regular evaluations of usage patterns used to identify inefficiencies and promote company-wide water conservation efforts. DS DANSUK continues to reduce the use of new water sources and lower wastewater discharge by recycling water through ongoing process optimization. Wastewater treatment efficiency is managed as a core performance metric to improve discharge quality and meet regulatory standards. The company also conducts routine analyses of wastewater fluctuations to identify root causes and implements structural enhancements aimed at consistently reducing wastewater output.

Management of Water Pollutants

DS DANSUK has strengthened its wastewater monitoring efforts by increasing the frequency of in-house testing from the legal annual requirement to at least quarterly. This allows for more detailed identification of contamination levels by raw material and a clearer understanding of wastewater characteristics by waste type. Wastewater with relatively low pollutant loads is repurposed as initial rinse water in production processes, enhancing overall water reuse. Furthermore, the company manages potential non-point source pollution at rainwater outlets leading to the sea, effectively containing pollutants from equipment before they are released externally.

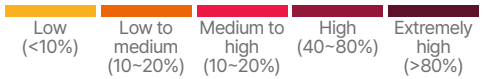
Site Name	Site Scale	Content
Sihwa Plant	Class 4	• All wastewater co-treated • Collection tank capacity: 1,400 tons
Gunsan Recycling Plant	Class 3 (Special)	• Wastewater treatment method: Physicochemical treatment • Treatment capacity: 800 tons/day
Gunsan Fine Chemicals Plant	Class 1 (Special)	• Wastewater treatment method: Physicochemical treatment • Treatment capacity: 3,100 tons/day
Pyeongtaek Bio Plant 1	Class 5	• All wastewater outsourced for treatment (Collection tank capacity: 320 tons)
Pyeongtaek Bio Plant 1 and 2	Class 5	• All wastewater outsourced for treatment (Collection tank capacity: 280 tons)

Environmental Load Control

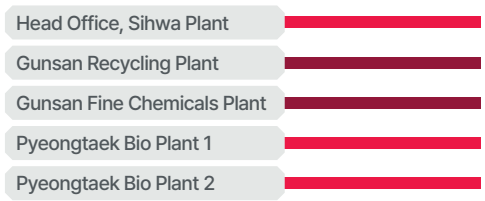
Water Stress

DS DANSUK re-evaluated the water stress levels across all domestic sites as of 2024 to address the risks of water shortages due to climate change and strengthened its risk response system for high-risk areas. This assessment utilized the World Resources Institute (WRI)'s Aqueduct Water Risk Atlas to analyze the Baseline Water Stress index for each site. The Baseline Water Stress index compares the total water demand with the availability of renewable surface and groundwater resources. It comprehensively reflects factors such as demand across residential, industrial, and agricultural uses, upstream water use, and the operation of large dams. A higher index value indicates more intense competition for water use in the area, which increases the likelihood of direct impacts on business operations. The analysis found that the Gunsan site is in a high-risk area, with Baseline Water Stress levels exceeding 40%. This is due to a combination of factors including the density of surrounding industrial complexes, agricultural water demand, and the region's geographical characteristics. In response, DS DANSUK has developed a water stress risk management strategy focused on high-risk sites and is implementing the following measures. First, the company is reducing water intake within production processes and expanding the use of recycled water to lower dependence on external water sources. It has also introduced wastewater reuse systems to help reduce overall water consumption. In addition, DS DANSUK is improving treatment efficiency prior to wastewater discharge to minimize water quality risks and regularly monitoring site-specific water risk indicators to ensure ongoing improvements. DS DANSUK plans to further enhance its monitoring systems in water-stressed regions and strengthen customized water circulation strategies for each site, thereby reducing its corporate water footprint and establishing a sustainable water resource management system.

Water Stress



Water Stress Index by Plant



Source

Air Pollution

Air Pollution Management Activities

In response to increasingly stringent environmental policies and regulations, DS DANSUK implements an air pollutant emissions management system to control and minimize the generation of air pollutants. The company conducts emission impact analyses to assess how air pollutants released from its processes affect the surrounding environment, and establishes strict, step-by-step emission standards accordingly. Through this approach, DS DANSUK ensures compliance with environmental laws and stakeholder requirements. In addition, the company has installed and upgraded various pollution control facilities to effectively manage emissions of environmental pollutants. By continuously monitoring the environmental pollutants emitted from its operations, DS DANSUK aims to assess their impact on nearby areas and remains committed to environmental improvement efforts that contribute to better air quality in the local community.

Air Pollutant Emissions Management by Site

Site	Activities
Sihwa Plant	• Treated THC and other volatile organic compounds generated from the bio process with approximately 98% efficiency • Installed high-efficiency equipment with an over 95% heat recovery rate, reducing unavoidable air pollutant emissions during operation • Introduced combustion systems into existing treatment facilities, eliminating the need for separate waste disposal and simultaneously reducing air, water, and soil pollution as well as waste generation • Plans for Regenerative Thermal Oxidizers(RTO) facility expansion: Investment of approximately KRW 1.1 billion
Gunsan Recycling Plant	• Replaced two outdated high-efficiency bag filter dust collectors to ensure continuous compliance with permitted emission levels • Introduced vacuum suction cleaning vehicles to reduce fugitive dust pollutants, cleaning the entire indoor and outdoor site twice weekly • Operates the plant building as a closed structure to minimize the spread of fugitive dust
Gunsan Fine Chemicals Plant	• Operates odor scrubbers to improve the internal and external environment of the plant, reducing odors through internal cleaning, pall ring packing cleaning, and stack extension • Conducts voluntary air quality measurements of air pollution prevention facilities at least once per year (up to once per month); if emissions exceed 50% of the permissible level, facilities are re-evaluated • Replaced aging FRP scrubbers with STS304 material to enhance heat resistance and safety
Pyeongtaek Bio Plants 1 and 2	• Sets replacement cycles for washing water and filler materials such as activated carbon • Conducts regular in-house air pollutant measurements and documentation in accordance with legal cycles, managing data for each prevention facility • Plant 1: Installed pre-treatment equipment upstream of air pollution prevention facilities • Plant 2: Replaced aging wet-type air pollution prevention facilities

Environmental Load Control

Air Pollutant Reduction Activities

DS DANSUK recognizes the environmental risks associated with carbon (CO_2) and air pollutant emissions (such as SOx, NOx, and particulate matter) generated from its manufacturing processes and operates an integrated monitoring system for real-time control and reduction. In particular, the company has strengthened equipment-centered responses by increasing the frequency of self-monitoring for key pollutants emitted during combustion and resource processing and by replacing outdated treatment facilities with high-efficiency equipment. In 2024, DS DANSUK installed Regenerative Thermal Oxidizers (RTOs) at the Sihwa and Pyeongtaek Bio Plant 1 sites to efficiently process VOCs and hazardous gases, while the Gunsan Recycling Plant improved fine dust collection performance by upgrading its dust collectors. Additionally, DS DANSUK centrally manages real-time environmental data from each site through its Environmental Management System (EMS), optimizing regular maintenance cycles based on equipment performance standards to detect early signs of abnormal pollutant emissions. The company also supplies used cooking oil-based biofuels through its bio diesel production facilities, contributing to reductions in SOx and PM emissions as well as Scope 1 carbon reduction. DS DANSUK will continue to advance its full-cycle integrated management system and proactively reduce air quality risks through equipment strategies customized to each process.

Site	Site Scale	Status of Air Pollution Prevention Facilities
Sihwa Plant	Class 2	Total 25 units (8 scrubbers, 6 filters, 5 A/C towers, 5 low NOx burners, 1 regenerative thermal oxidizer (RTO))
Gunsan Recycling Plant	Class 1 (Special)	Total 45 units (5 setting chambers, 8 cyclones, 10 A/C towers, 15 filters, 3 catalytic oxidizers, 1 low NOx burner)
Gunsan Fine Chemicals Plant	Class 1 (Special)	Total 56 units (2 scrubbers, 54 filters)
Pyeongtaek Bio Plant 1	Class 3	Total 12 units (6 low NOx burner, 4 scrubbers, 1 regenerative thermal oxidizer (RTO)
Pyeongtaek Bio Plant 2	Class 3	Total 4 units (2 low NOx burners, 2 scrubbers)

Management of Air Pollutant Emissions

Air Pollutant	Unit	2022	2023	2024
Particulate Matter emissions	tons	3.60	4.75	**6.65**
NOx emissions	tons	28.17	22.38	**30.37**
SOx emissions	tons	1.10	3.64	**4.25**

Waste

Waste Management Activities

DS DANSUK is committed to minimizing the environmental impact of waste generated from its operations by improving waste management practices and increasing recycling rates. The company has also established a process to reuse by-products generated during bio diesel production as feedstock for bio heavy oil processes, thereby enhancing its waste circulation rate. To ensure proper handling of various types of waste, DS DANSUK separates general and designated waste strictly in accordance with the Waste Control Act and manages waste generation and disposal volumes through the official Allbaro System. The company also conducts on-site inspections of waste disposal vendors to verify legal compliance and prioritizes the selection of recycling vendors, aiming to improve recycling rates of materials such as waste synthetic resins and wastewater sludge through ongoing vendor management. Going forward, DS DANSUK will continue to reduce waste generation and promote efficient disposal and recycling, thereby ensuring the sustainability of its manufacturing activities.

Waste Reduction Activities

DS DANSUK is actively working to reduce waste generated during business operations. At the Sihwa Plant, continuous process improvements are underway to reduce waste, and initiatives such as a disposable product reduction campaign have been launched to raise awareness among employees. For instance, the in-house café encourages the use of reusable cups instead of disposable ones. The Gunsan Recycling Plant is also pursuing various activities to reduce waste. Sulfuric acid, which is part of the electrolyte produced during the regeneration and repurposing of waste batteries, is reused and recycled to neutralize wastewater pH. Furthermore, by expanding and optimizing the operation of collection tanks, the volume of waste processed continues to decline. In addition, the plant is reducing the generation of wastewater sludge by optimizing the use of water treatment chemicals and has introduced a twin-screw press to reduce both the moisture content and volume of PE waste. These efforts together contribute to effective waste reduction across operations.

In-house café poster

Environmental Load Control

Waste Management Activities by Plant

Site	Activities
Sihwa Plant	• Installed CCTV and integrated with the on-site information system to monitor incoming and outgoing waste • Strengthened waste separation by type to isolate recyclable materials such as metals • Reduced waste synthetic resin output by 40% compared to the previous year
Gunsan Recycling Plant	• Installed signage and posted hazard information at waste storage facilities • Ensured legal compliance in the full process from storage to consigned treatment of by-product waste
Gunsan Fine Chemicals Plant	• Conducted on-site inspections of disposal and waste-generating companies to verify proper waste treatment • Updated waste signage and hazard information to maintain compliance
Pyeongtaek Bio Plants 1 and 2	• Installed CCTV at waste storage areas, access roads, and weighbridges: Transmits data to the "Waste Treatment Site Information Management System"

Waste Treatment Site Information Management System

In accordance with the official notification on the transmission of on-site waste treatment information, DS DANSUK operates the Waste Treatment Site Information Management System to prevent illegal activities by establishing a monitoring framework that tracks proper waste handling throughout the generation, transportation, and treatment stages within its facilities. In 2024, the system was proactively implemented at the Sihwa Plant, Pyeongtaek Bio Plant 1, and Gunsan Recycling Plant ahead of the legal compliance deadline. The company also upgrades CCTV systems regularly to ensure the transmission of accurate and reliable data. Additionally, in response to the revised Guidelines for On-site Information on Imported and Exported Waste coming into effect in October 2024, DS DANSUK is developing a management system for the import/export waste inflow and outflow process. As part of this, the company registers seal device photos and surrounding images of containers at both the port of departure and upon arrival at its facilities for imported waste (e.g., used lead-acid batteries), enabling container location tracking and helping to prevent the illegal import or export of waste.

Real-time location information collected via GPS on waste collection and transport vehicles

Transmitting weight values measured at on-site weighing facilities

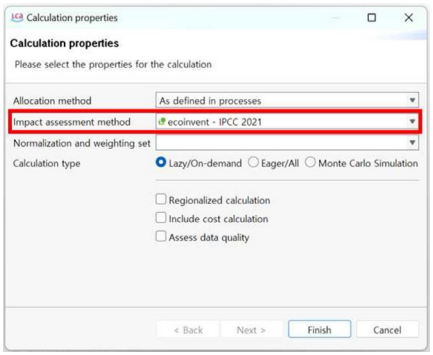
Video information from CCTVs installed at entry routes, weighing facilities, and storage locations

Life Cycle Assessment (LCA)

LCA Methodology

DS DANSUK conducts Life Cycle Assessments (LCA) in accordance with the international standards ISO 14040 and ISO 14044 to quantitatively evaluate the environmental impacts of its products. The assessment targets include used cooking oil-based bio diesel and recycled polypropylene (PP) pellets. For both products, a Gate-to-Gate system boundary was applied, and functional units were set based on the production of 1 ton or 1 kilogram. The primary environmental impact category evaluated was climate change, expressed in terms of CO_2 equivalents (CO_2eq). Process-specific data were collected for each product, including actual measurements for raw material input, energy and utility usage, and water and air emissions during the production stage. DS DANSUK constructed a comprehensive Life Cycle Inventory (LCI) using the OpenLCA software and Ecoinvent database. To ensure alignment with international regulations, the company applied the IPCC 2021 (GWP100a) emission factors when calculating the greenhouse gas impact category.

OpenLCA software



Application of IPCC 2021 (GWP100a) emission factors

LCA Target Products and Plants

Target Product	Target Plant
Bio Diesel	Sihwa Plant, Pyeongtaek Bio Plants 1 and 2
Recycled Plastic (PP)	Gunsan Recycling Plant (Point of Origin), DS PCR Yeongcheon Plant

Environmental Load Control

LCA Scope

To quantitatively analyze the environmental impacts throughout a product's life cycle, DS DANSUK conducts LCA using a Gate-to-Gate system boundary approach. Up to 2024, the analysis focused on intermediate stages centered on manufacturing processes. Starting in 2026, the company plans to gradually expand the scope to a full Cradle-to-Grave assessment, covering the entire life cycle from raw material extraction to final disposal.

LCA Scope Definitions

Well-to-Tank	Gate-to-Gate	Tank-to-Wheel
Activities prior to manufacturing, such as raw material collection, pre-treatment, and transportation (To be included in future assessments)	On-site manufacturing processes including refining, reaction, distillation, mixing, and extrusion	Product use (e.g., combustion or functional performance) and disposal (Gradually expansion starting in 2026)

Raw Material Collection / Refining ▶ Reaction Process ▶ Distillation Process ▶ Product Shipment

LCA Items

DS DANSUK conducts LCA based on ISO 14040 and ISO 14044 standards, focusing on the following key categories. The primary impact areas are classified into ecosystem impacts, resource use, and human health. Among these, greenhouse gas emissions (GWP) serve as a representative metric, and a multi-impact category analysis can be performed using this framework.

Category	Item	Description
Ecosystem Impact	Acidification (AP)	Impact on ecosystems caused by acidic substances in the atmosphere (e.g., sulfur oxides)
	Particulate Matter (PM)	Health and environmental damage caused by dust and fine particulate matter
	Eutrophication (EP)	Water quality degradation due to excess nutrients such as nitrogen and phosphorus
	Global Warming Potential (GWP)	Cumulative impact of greenhouse gas emissions (e.g., CO_2)
	Ozone Depletion Potential (ODP)	Damage to the ozone layer caused by chemical substances such as refrigerants
	Photochemical Oxidant Formation (POCP)	Formation of smog and other photochemical oxidants
Resource Use	Resource Depletion (Minerals)	Depletion potential of rare metals and natural resources
	Land Use	Land area occupied for production and transportation
	Water Scarcity	Impact on water resources due to water usage
Human Health	Ionizing Radiation	Health effects from radiation exposure (applied as needed)

LCA Results

DS DANSUK conducted Life Cycle Assessments (LCA) for its bio diesel and recycled polypropylene (PP) pellet products, quantitatively identifying the environmental impacts per unit of product. For bio diesel, the environmental burden from the raw material acquisition stage was found to be very low due to the nature of its feedstock—used cooking oil. The major contributors to total greenhouse gas emissions were identified as the reaction process, which involves significant methanol usage, and the distillation process, which requires high thermal energy. For recycled PP pellets, the use of recovered materials from waste battery housings significantly reduced carbon emissions compared to petroleum-based feedstocks. The extrusion and mixing processes were identified as the stages with the greatest impact due to high electricity consumption. The total life cycle carbon emissions per product unit were calculated based on functional units (1 ton for biodiesel, 1 kg for recycled PP) and presented in metric tons of CO_2 equivalents (tCO_2eq). All results were derived in accordance with ISO 14040 and 14044 standards and have been third-party verified through a critical review by the Korea Testing & Research Institute (KTR), ensuring credibility and objectivity.

Utilization of LCA Results

Based on LCA outcomes, DS DANSUK conducts in-depth analyses of environmental impacts throughout the product life cycle and continues to pursue eco-friendly process improvements and low-carbon technology adoption. For bio diesel, the company is exploring environmentally friendly alternatives and energy efficiency strategies to reduce carbon-intensive stages such as methanol usage and energy consumption in the distillation process. In the case of recycled PP products, efforts are being made to further reduce carbon emissions per product unit by optimizing the mixing process and improving the purity of recycled materials. To respond to increasingly stringent global environmental regulations and growing demands for carbon-related information within the supply chain, DS DANSUK is enhancing its ESG disclosure and international certification systems (e.g., ISCC, RSB). It is also preparing to implement an integrated management system that links environmental data—such as energy consumption, waste generation, and waterborne emissions—with LCA data from each plant. DS DANSUK plans to expand the linkage between LCA results and both domestic and international environmental certifications such as Environmental Product Declarations (EPD) and Carbon Footprint of Products (CFP). This will serve to objectively validate the environmental performance of its products and strengthen market competitiveness.

LCA Report Verification

Third-party verification of the Life Cycle Assessment (LCA) report for bio diesel produced from used cooking oil

Third-party verification of the Life Cycle Assessment (LCA) report for recycled polypropylene (PP) pellet production

TNFD Report: Biodiversity

Biodiversity Framework

DS DANSUK recognizes the impact its business activities can have on ecosystems and natural capital, and clearly acknowledges that the integrity of natural capital is a key factor in the sustainability of a resource-circulating manufacturing industry. As such, the company has designated biodiversity conservation as a core task within its sustainable management strategy and is working to build a structured management system. Through regular analyses of the ecological environment surrounding its business sites, DS DANSUK identifies potential environmental impacts in advance, including land use, water quality effects, and disruption of biological habitats. The company also continues to strengthen risk assessments and mitigation strategies regarding potential ecological impacts arising from the production of waste-based biofuels and recycled products. Looking ahead, DS DANSUK plans to enhance its biodiversity risk analysis system and gradually expand conservation initiatives and community-based collaboration programs aimed at minimizing biodiversity loss. Through these efforts, the company aims to establish a sustainable production system rooted in a circular ecosystem model that not only supports its continued business growth but also contributes to the restoration of natural capital.

Biodiversity Assessment and Management

Recognizing that conserving natural capital is directly tied to corporate sustainability, DS DANSUK is strengthening systems to quantitatively and qualitatively assess and manage its impact on ecosystems. To this end, the company is gradually applying the LEAP (Locate, Evaluate, Assess, Prepare) methodology under the framework of the Taskforce on Nature-related Financial Disclosures (TNFD), a global initiative for nature-related sustainability. Through this approach, the company identifies interactions between its business sites and natural capital. Moving forward, DS DANSUK will further develop its biodiversity management process based on a "risk identification – impact analysis – management response" framework. The company also plans to minimize environmental degradation through resource circulation and expand practical activities that contribute to ecosystem restoration.

Mid- to Long-Term Natural Capital Management Plan

Locate

Define criteria for scale
Expand management scope
Broaden application by categorizing value chain into upstream, downstream, and own operations

Establish ecological sensitivity criteria
Conduct detailed analysis of nearby ecosystems and vegetation distribution
Use high-resolution analysis techniques to assess ecosystems and vegetation near business sites

Evaluate

Evaluate interaction with nature specific to industry
Advance understanding of ecosystem dependency and impact level
Identify dependency and impact at the project level, considering phases of the value chain (step-by-step)

Assess

Evaluate risk levels by project
Identify and assess risk/opportunity factors
Identify and evaluate physical and transitional risks or opportunities at the project level

Prepare

Set indicators, targets, and action plans
Establish a continuous monitoring system
Define management indicators for natural factors
Develop conservation activities for key natural factors
Establish measures to mitigate ecosystem impact

TNFD Report: Biodiversity

Biodiversity Risk Analysis

Locate

Based on the LEAP (Locate–Evaluate–Assess–Prepare) framework presented by the Taskforce on Nature-related Financial Disclosures (TNFD)—a global standard for nature-related disclosures—DS DANSUK has established criteria for selecting sites to evaluate in terms of their dependency on nature, impact, and associated risks. Taking into account factors such as revenue scale, site location characteristics, and sensitivity of surrounding ecosystems, DS DANSUK selected five representative domestic sites as priority targets for evaluation. During this process, the company examined whether each site is adjacent to Key Biodiversity Areas (KBAs) or Protected Areas (PAs), which are regions of high biodiversity conservation value. It also assessed the distribution of endangered species near the sites by referring to the National Institute of Ecology's ecological sensitivity criteria and using TNFD-recommended analysis tools such as ENCORE.

Major Natural Ecosystems Near DS DANSUK's Key Domestic Business Sites

Site	Endangered Species (IUCN Red List)[1]	Endangered Species (Korean Municipal Level)[2]	Protected Areas (PAs)[3]			Key Biodiversity Areas (KBAs)[4]
	Total	Class 1 & Class 2	World Heritage[5]	Ramsar[6]	MAB[7]	Important Bird and Biodiversity Area[8]
Sihwa Plant	100	17	0	3	0	10
Gunsan Plant 1	109	45	1	2	1	5
Gunsan Plant 2	109	45	1	2	1	5
Pyeongtaek Plant 1	98	23	0	1	0	6
Pyeongtaek Plant 2	96	23	0	1	0	6

1) Number of endangered species classified as Vulnerable (VU), Endangered (EN), or Critically Endangered (CR) by the International Union for Conservation of Nature (IUCN) within a 50 km radius.
2) Number of endangered wildlife species (Grade I or II) distributed within the relevant city or municipality, as designated under the Wildlife Protection and Management Act of Korea.
3) Number of protected areas within a 50 km radius designated and managed under legal or institutional frameworks for preserving ecosystem services and cultural values.
4) Number of Key Biodiversity Areas (KBAs) within a 50 km radius, identified based on scientific criteria as habitats for rare species or ecologically important regions.
5) Natural or cultural heritage sites designated by UNESCO as possessing Outstanding Universal Value, recognized for their high ecological importance.
6) Wetlands of international importance designated under the Ramsar Convention, acknowledged for their biodiversity value, particularly as bird habitats.
7) Biosphere Reserves designated by UNESCO's Man and the Biosphere (MAB) program, aiming to harmonize conservation and sustainable use of natural resources.
8) Areas designated by BirdLife International, a global NGO for bird conservation, as significant for breeding, habitation, or migratory routes of rare bird species.

Class I Endangered Species (Korean Municipal Level)

Site	Mammals	Birds	Amphibians/ reptiles	Insects	Invertebrates	Terrestrial plans
Siheung-si, Gyeonggi-do	-	3 species	1 species	-	-	-
	-	Chinese egret, black-faced spoonbill, stork	Suwon tree frog	-	-	-
Gunsan-si, Jeonbuk State	1 species	6 species	1 species	-	1 species	-
	Otter	Chinese egret, stork, black swan, and 3 other species	Suwon tree frog	-	Cockscomb pearl mussel	-
Pyeongtaek-si, Gyeonggi-do	1 species	3 species	1 species	-	-	-
	Otter	Black-faced spoonbill, Nordmann's greenshank, white-tailed eagle	Suwon tree frog	-	-	-

Class II Endangered Species (Korean Municipal Level)

Site	Mammals	Birds	Amphibians/ reptiles	Insects	Invertebrates	Terrestrial plans
Siheung-si, Gyeonggi-do	-	8 species	2 species	1 species	1 species	1 species
	-	Long-billed plover, vulture, and 6 other species	Seoul frog, boreal chorus frog	Bekko tombo	Milky fiddler crab	Prickly waterlily
Gunsan-si, Jeonbuk State	1 species	29 species	2 species	-	1 species	3 species
	Leopard cat	Fairy pitta, Eurasian goshawk, hooded crane, owl, and 25 other species	Seoul frog, boreal chorus frog	-	Milky fiddler crab	Prickly waterlily, northern water hemlock, water sprite
Pyeongtaek-si, Gyeonggi-do	2 species	15 species	1 species	-	-	-
	Marten, leopard cat	Oystercatcher, Chinese sparrow hawk, Eurasian eagle-owl, far eastern curlew, and 11 other species	Seoul frog	-	-	-

TNFD Report: Biodiversity

Evaluate

To conduct a precise analysis of DS DANSUK's dependency on natural capital and ecosystem services, as well as its environmental impact throughout its business operations, the company utilized ENCORE (Exploring Natural Capital Opportunities, Risks and Exposure), a global tool for natural capital assessment. This evaluation focused on key business activities such as waste-based biofuel production and plastic and battery recycling, assessing how these operations interact with nature. The results showed that the company's dependency on core ecosystem services—such as climate regulation, water supply, and soil stabilization—was generally at the "Very Low" to "Low" level. This indicates that DS DANSUK's operations are not structurally over-reliant on existing ecosystem functions. However, from an environmental impact perspective, certain risks were identified at relatively higher levels. In particular, factors such as air and water pollution—including fugitive dust and wastewater discharge—and potential biodiversity degradation in areas adjacent to urban zones were identified as potential risks. These could lead to tighter regulations, public complaints, and reputational damage in the future. In response, DS DANSUK has designated pollutant reduction as a core strategic priority and is actively pursuing eco-friendly process transformation through its Smart Eco-Factory Construction Project.

DS DANSUK's Dependencies on Natural Capital

Regulation and Maintenance Services	
Global climate regulation	VL
Rainfall regulation	VL
Local climate regulation	VL
Air filtration	VL
Soil stabilization and erosion control	VL
Solid waste treatment	VL
Water purification	VL
Water cycle maintenance	VL
Flood damage prevention	VL
Storm damage prevention	VL
Noise pollution mitigation	VL
Pest and disease control	VL
Pollutant reduction by air and ecosystems	VL
Pollution mitigation (excluding noise)	VL

DS DANSUK's Impacts on Natural Capital

Impact Factors	
Ecosystem disturbance (e.g., noise, light)	L
Greenhouse gas emissions	VL
Non-greenhouse gas emissions	L
Generation and discharge of solid waste	VL
Land use area	VL
Discharge of toxic substances into water and soil	L
Discharge of nutrient pollutants into water and soil	VL
Water consumption	VL
Introduction of invasive species	M

Very Low Low Medium High Very High

Assess

Using WWF's Biodiversity Risk Filter Tool (BRF Tool), DS DANSUK quantitatively assessed biodiversity-related risks at its major domestic sites. Most of DS DANSUK's business sites are located within industrial complexes, showing low proximity to protected areas or habitats of endangered species. These sites are also situated in areas where industrialization has already progressed, which results in relatively low physical pressure on biodiversity and limited impact on ecosystem services. Nevertheless, apart from these locational characteristics, potential biodiversity-related impacts stemming from the company's business activities were identified. These include degradation of water and air quality due to the discharge of wastewater and volatile organic compounds (VOCs), habitat disturbance, and reduced climate stability resulting from emissions of greenhouse gases and fine particulate matter. On the other hand, potential risks from ecosystem degradation include increased exposure to natural disasters such as floods and heatwaves due to weakened ecosystem buffering functions, as well as threats to production infrastructure from soil erosion and ground instability. In response, DS DANSUK plans to mitigate physical risks in the short term by enhancing its environmental facilities and purification capacity, and by establishing a regular environmental monitoring system to identify and manage high-risk elements in advance. Furthermore, the company intends to gradually expand ecosystem restoration and conservation efforts through cooperation with local communities and stakeholders, while ensuring transparency by disclosing related information. Through this integrated response strategy, DS DANSUK aims to realize sustainable corporate operations that harmonize with biodiversity.

Biodiversity Risk Assessment Results

Site	Physical Risk	Ecosystem Resource Dependency	Ecosystem Maintenance & Support Functions	Biological Risk Mitigation Function	Ecological & Cultural Value Impact	Biodiversity Impact Pressure	Reputational Risk	Environmental Condition Factors	Socioeconomic Conflict Factors	Reputation-Related Risk Factors
	SPH	SRC1	SRC2	SRC3	SRC4	SRC5	SRP	SRC6	SRC7	SRC8
Sihwa Plant				NA					NA	
Gunsan Plant 1				NA					NA	
Gunsan Plant 2										
Pyeongtaek Plant 1										
Pyeongtaek Plant 2										

NA
NA

No dependency or impact | Very Low (1.0≤x≤1.8) | Low (1.8<x≤2. 6) | Medium (2.6<x≤3.4) | High (3.4<x≤4.2) | Very High (4.2<x≤5.0)

TNFD Report: Biodiversity

Prepare

As a resource-circulating manufacturer, DS DANSUK recognizes the conservation of biodiversity and natural capital as core values of sustainable management. The company is steadily strengthening its responsible management practices and transparent disclosure related to these areas. Moving forward, DS DANSUK plans to establish quantitative indicators and mid- to long-term targets for biodiversity based on the Science Based Targets Network (SBTN) methodology, applying them across both its operational sites and supply chain. Additionally, based on the Taskforce on Nature-related Financial Disclosures (TNFD) framework, DS DANSUK will annually disclose its performance regarding natural capital risks and biodiversity issues arising from business activities, and will continue to systematically refine and improve these disclosures. Through these efforts, DS DANSUK aims to position itself as a company that contributes to Nature Positive outcomes by preventing nature loss and supporting ecosystem restoration, realizing sustainable business operations and supply chain development.

Biodiversity Activities

DS DANSUK carries out practical initiatives to conserve biodiversity and contribute to local communities, striving for sustainable business operations that coexist with nature. In 2024, to mark the newly designated "Sihwa Lake Day" (October 10) by Gyeonggi Province, the company organized the "The 1st Healthy Carbon Diet Campaign", led by the Sihwa Plant. This campaign, driven by the voluntary participation of employees, took the form of a plogging (pick up litter + jogging) environmental cleanup activity in the areas surrounding Sihwa Lake and Oido. It served not only as a one-time event but also as an experiential program reinforcing the importance of biodiversity conservation. DS DANSUK is considering institutionalizing this campaign and expanding it to all of its sites. The Sihwa Plant, as a member of the Purmee Action Group, a public-private ecological conservation network in Siheung City, continuously engages in environmental cleanup activities in areas such as Gomsolnuri Forest and Okgu Stream. Similarly, the Gunsan Recycling Plant participates in cleanup campaigns led by the Integrated Environmental Management Council under the Jeonbuk Regional Environmental Office, collecting litter around Bieung Port near the Gunsan Industrial Complex as part of its ecosystem conservation efforts. These activities are carried out with an ecological approach that considers the habitats of endangered species, aiming to make tangible contributions toward restoring and preserving local ecosystems. DS DANSUK will continue to strengthen cooperation with local communities and government agencies to expand biodiversity conservation efforts across the company and to fulfill its environmental and social responsibilities with substance.

The 1st Healthy Carbon Diet Campaign

Environmental Cleanup Event by Purmee Action Group

Joint Environmental Cleanup at Bieung Port by the Gunsan Recycling Plant

ESG Performance

Social

Sustainable Supply Chain

Supply Chain Management System

DS DANSUK is actively responding to the implementation of the European Corporate Sustainability Due Diligence Directive(CSDDD) based on UN and OECD guidelines, and is strengthening ESG risk management for its global supply chain, including ISCC EU-certified raw materials. To this end, the company is striving to establish a systematic and effective ESG governance framework. It has implemented a "Supply Chain ESG Management Policy" and a "Code of Conduct for Partners", and has designated a dedicated department to oversee their implementation and manage ESG-related supply chain issues. Relevant departments collaborate to establish and execute ESG risk response strategies. DS DANSUK also evaluates key suppliers for ESG compliance, monitors their performance, and provides feedback to prevent supply chain risks and enhance the overall management system.

Supply Chain Management Organization

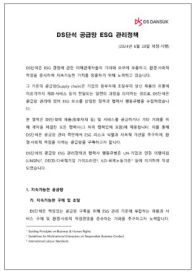
Supply Chain Policy

To embed ESG principles throughout the supply chain, DS DANSUK has adopted the "Supply Chain ESG Management Policy", aiming to internalize risk management across all operations. The company operates a supplier evaluation and due diligence process to proactively prevent potential ESG risks and implement corrective actions for identified issues to minimize negative impacts. In 2025, DS DANSUK aligned its supply chain ESG management more closely with the OECD Due Diligence Guidance for Responsible Business Conduct. The company conducted self-assessments of its top 10 domestic suppliers[1] to evaluate and improve their ESG management capabilities. Additionally, two of these suppliers underwent on-site audits to verify their ESG compliance and effectiveness. Risks identified through the audits were followed up with improvement requests and support for implementation. All findings are incorporated into DS DANSUK's supply chain risk monitoring system, enhancing both transparency and stability.

1) Selected the top 10 domestic suppliers based on the purchase amount of raw materials and components.

Code of Conduct for Partners

To promote sustainable business practices and social responsibility within its supply chain, DS DANSUK has established a "Code of Conduct for Partners" and works collaboratively with suppliers for its implementation. In 2025, major partners were asked to review and return signed agreements acknowledging compliance with the code. This process reinforces the company's ESG oversight by clearly communicating standards and expectations across environmental, social, and governance domains. Through this approach, DS DANSUK aims to progressively elevate supplier performance and build a sustainable business ecosystem.



Supply Chain ESG Management Policy

Partner Code of Conduct Compliance Agreement

Sustainable Supply Chain

Goals and Performance Indicators

DS DANSUK operates a promotion system based on its "Supply Chain ESG Management Policy" with the aim of enhancing the ESG management level across its supply chain. This system is managed using quantitative goals and performance indicators.

Category	Goal (2025)	Performance (2025)
Partner ESG Compliance Agreement Rate	Key partners (top 10 suppliers) 100%	Achieved 100% (10 partners)
Partner ESG Self-Assessment Participation Rate	Key partners (top 10 suppliers) 100%	Achieved 100% (10 partners)
Supply Chain ESG Risk Management System Establishment and Operation	Operate a risk identification, evaluation, and monitoring system	Risk management system established and quarterly monitoring completed
On-site ESG Risk Management Audit	Conduct at least one audit per year for key partners (top 10 suppliers)	On-site audits conducted and completed for 2 partners

DS DANSUK also aims to increase supplier compliance with sustainability certifications such as ISCC EU and QAP, and to ensure the stable supply of certified raw materials. Strengthening the certification management system within the supply chain and improving supplier certification acquisition and maintenance rates are designated as top priorities.

	Performance (2024)	Goal (2025)	Performance (2025)
Suppliers certified under ISCC EU	5	7	Achieved 100%
Certification application rate	29.4%	41.2%	Achieved 100%

Supply Chain Management Strategy

Supply Chain Management Roadmap

~2025
Implementation of Supply Chain ESG Policy
Top 10 suppliers
Provision of products and services
Applied to suppliers

▶

~2030
Expansion of ESG policy implementation across the supply chain
Top 20% suppliers
Provision of products and services
Applied to suppliers

▶

~2050
ESG 100
Full ESG integration across the entire supply chain
Implementation will proceed in phases, tailored to the scale and ESG maturity of each supplier

Supplier Selection and Evaluation

DS DANSUK is enhancing its ESG risk management framework for suppliers by formally incorporating compliance with the "Supply Chain ESG Management Policy" and the "Supplier Code of Conduct" into its criteria for supplier selection and evaluation—beyond the traditional assessments based on company status, financial indicators, and ISO certification systems. In 2025, the company conducted evaluations of key suppliers (top 10 based on transaction volume), requiring them to submit a Code of Conduct Compliance Agreement and complete an ESG self-assessment checklist. ESG management criteria are also reflected in the terms of business contracts. Through this supply chain evaluation process, DS DANSUK aims to both regularly assess suppliers' ESG performance and prioritize the selection of high-performing partners, thereby advancing ESG management and proactively responding to domestic and international ESG regulations. In particular, a more detailed evaluation process is in place for raw material suppliers in the bioenergy business, as outlined below.

Bioenergy – Supply Chain Evaluation Process

1. On-site Audits and Plant Verification
- Preliminary review of basic information such as company overview, credit reports, and financial statements
- Site visits to verify operational status

2. Evaluation Based on Certification Standards
- Review of compliance with certification requirements (e.g., ISCC EU)
- Verification of raw material collection methods and processing workflows
- Assessment of quality control and analytical systems

3. Verification of Supporting Documents
- Review of weighbridge records and transaction documentation
- Inspection of production records and documentation processes
- Evaluation of raw material mass balance data

4. Evaluation Outcome and Risk Review
- Results shared with the procurement team
- Determination of purchase approval, need for improvements, or disqualification
- If risks are identified, improvement actions are requested and subject to re-evaluation

Sustainable Supply Chain

Supply Chain Management Process

DS DANSUK operates a proactive ESG management process to address the rising global supply chain risks, such as the EU Corporate Sustainability Due Diligence Directive (CSDDD). This structured approach enables early identification and mitigation of ESG risks, aiming to build a sustainable supply chain.

PLAN
- Review the company's supply chain sustainability strategy, procurement goals, performance, and implementation plans
- The dedicated supply chain department at HQ (procurement team) analyzes purchasing performance and ESG data to formulate improvement strategies

DO
- Use an ESG self-assessment checklist to identify and analyze ESG risks among key suppliers
- Conduct a first round of communication to assess suppliers' ESG management levels and their self-initiated improvement plans

CHECK
- Conduct on-site ESG audits for suppliers with insufficient self-assessment results (two audits completed in 2025)
- Based on self-assessment and audit reports, identify areas for improvement or support
  ⇒ Initiate a second round of communication with the supplier

ACT
- Internally report supply chain ESG risks to management and the ESG Sustainability Committee
- Monitor the implementation of suppliers' ESG improvement plans regularly to continuously strengthen the management system

Sustainable Supply Chain Certification Management Process

Category	Details
Raw Material Supplier Certification Review	• Review ISCC EU certification and QAP verification documents of suppliers • Assess sustainability and traceability of raw materials • Check key requirements based on ISCC standards
Internal Audits of Suppliers	• Conduct internal audits of suppliers once a year (DS DANSUK certification team acts as auditors) • Evaluate traceability of raw materials, mass balance systems, and GHG data management • Identify compliance status and areas for improvement through audits
Review of Certification-Related Risks and Improvement Support	• Identify potential issues in supplier document reviews and provide solutions • Offer consulting to maintain and improve certification in line with ISCC standards • Support preventive actions for ESG and sustainability risks within the supply chain

Establishing Fair Trading Practices

All DS DANSUK suppliers are evaluated fairly based on the same standards. Evaluations are conducted objectively to assess whether they meet requirements related to quality, price, delivery, ESG factors, and other certifications. In addition, DS DANSUK continuously discusses cooperative initiatives and support measures with partners to enhance fair trade practices and improve the ESG management level of suppliers. The company plans to implement strategies to build and maintain fair trading relationships.

Fair Trading Relationship Strategy

Adherence to Fair Trade Principles
- Establish and share fair trade policies and guidelines
- Utilize standard contracts and fair trade agreements

Reinforcement of Fair Trade Processes
- Operate transparent procurement processes
- Run internal review committees for supplier management

Establishment of a Fair Trade Culture
- Conduct fair trade training
- Hold regular meetings and maintain communication channels with suppliers

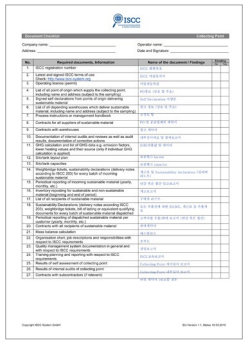
Sustainable Supply Chain

Supply Chain Risk Management

Development of Supply Chain Checklists

To systematically manage ESG risks within its global supply chain, DS DANSUK has developed and implemented a proprietary ESG checklist based on the Ten Principles of the UN Global Compact across its four core areas: Human Rights, Labor, Environment, and Anti-Corruption. This checklist covers a broad spectrum of ESG topics, including environment, health and safety, labor and human rights, and social and ethical practices. Key items in the checklist include prohibitions against forced and child labor, non-discrimination, occupational safety and health, greenhouse gas reduction, hazardous materials management, anti-corruption, and information security. Suppliers conduct self-assessments based on these categories, with the checklist structured to enable practical improvements. In the bioenergy sector, DS DANSUK utilizes a specialized checklist designed to meet ISCC EU certification requirements. This tool comprehensively evaluates raw material traceability, mass balance, production processes, and documentation systems—ensuring transparency and reliability in confirming the use of actual waste materials and promoting resource circulation. By applying ESG criteria as core benchmarks from the supplier selection and evaluation stage, DS DANSUK aims to enhance sustainability throughout its supply chain. In 2025, self-assessment checklist evaluations were conducted, and the results have been reflected in decisions regarding supplier selection and continued partnerships. Looking ahead, DS DANSUK will continue to strengthen collaborative ESG capabilities with its suppliers and proactively manage comprehensive supply chain risks, striving to achieve world-class sustainable business practices.

Supply Chain ESG Management Self-Assessment Checklist



Bioenergy Supply Chain Checklist

Supply Chain Evaluation and Utilization of Results

To proactively manage ESG risks in its supply chain, DS DANSUK operates a structured supplier ESG evaluation process. Based on the results, the company continuously monitors the ESG management level and potential risks of its suppliers. Suppliers receiving a total score below 70 points across all evaluation categories are excluded from the approved vendor list. In addition, DS DANSUK shares identified risk factors with suppliers and engages in discussions to develop improvement plans. This approach ensures that ESG compliance continues even after contract initiation, forming a foundation for long-term improvements in the sustainability of the supply chain.

DS DANSUK Supply Chain Evaluation Results

Category	Evaluation Item	Average Result	Potential Risks
Environment	Existence of environmental management policy	100%	-
	Dedicated department/personnel for environmental management	80%	Lack of quick response to environmental accidents, risk of regulatory violations
	Environmental impact management system	70%	Legal risks due to hazardous material leaks or poor waste/emissions handling
	Record of regulatory violations within the past year	0%	-
Safety & Health	Dedicated department/personnel for safety and health	70%	Possibility of accidents due to insufficient capacity to respond to and prevent industrial accidents
	System for managing and preventing occupational accidents and diseases	80%	High risk of serious accidents; Regulatory non-compliance may lead to penalties or suspension of operations
	Record of regulatory violations within the past year	0%	-
Labor & Human Rights	Worker hours management system	90%	Human rights infringement and labor disputes due to excessive work hours
	Record of regulatory violations within the past year	0%	-
Social & Ethics	Social contribution policy and strategy	90%	-
	Anti-corruption procedures and systems	90%	-
	Whistleblower process for unethical conduct	70%	Lack of whistleblowing mechanisms may lower trust and hinder issue resolution in cases of corruption or unethical practices
	Record of regulatory violations within the past year	0%	-

Sustainable Supply Chain

Selection of Outstanding Partners

DS DANSUK selects outstanding partners by incorporating ESG factors into supplier evaluations, in addition to standard assessment criteria. ESG evaluation results are shared directly with partners, and those demonstrating strong ESG performance are offered incentives such as extended contracts and expanded business opportunities. This approach encourages voluntary ESG compliance among partners and helps to reduce environmental, social, and ethical risks across the supply chain. DS DANSUK plans to continue cultivating outstanding partners through ongoing ESG assessments, monitoring, and support policies.

Supplier Communication Channels and Activities

To ensure smooth communication and effectively manage ESG-related concerns, DS DANSUK is establishing dedicated communication channels for suppliers. Close communication supports consistent quality improvement and process enhancement across the supply chain. Supplier managers are engaged through online networks and regular site visits to monitor raw material conditions, alongside continuous on-site audits and improvement initiatives. Additionally, DS DANSUK plans to broaden its ESG communication efforts by hosting supplier meetings and sharing ESG performance, allowing for open dialogue, addressing concerns, and promoting ESG culture throughout its supply network.

Tanker Transportation Supplier Communication Platform

The Logistics Team at DS DANSUK has developed a mobile application to serve as a communication channel with tanker transport partners, integrated within the company's logistics management system. Tanker drivers can submit concerns or suggestions for improvement through the app, which are reviewed and responded to by the relevant departments. This platform is actively promoted to encourage open dialogue and enhance communication with logistics partners.

Main page of website


Post creation page


Application

Mutual Growth

Support for Win-Win Partnerships

DS DANSUK operates a cooperative support system to help its partners obtain ISCC EU certification and QAP verification. Through a certification support program for raw material suppliers, partners are not only able to supply certified feedstocks directly to the broader market but also strengthen their position as suppliers to DS DANSUK. This, in turn, enables DS DANSUK to increase its certified feedstock volume and expand biofuel production for export. The company also offers customized consulting to help partners address challenges during the certification acquisition and maintenance process.

Certification Support for a Win-Win Collaboration Model

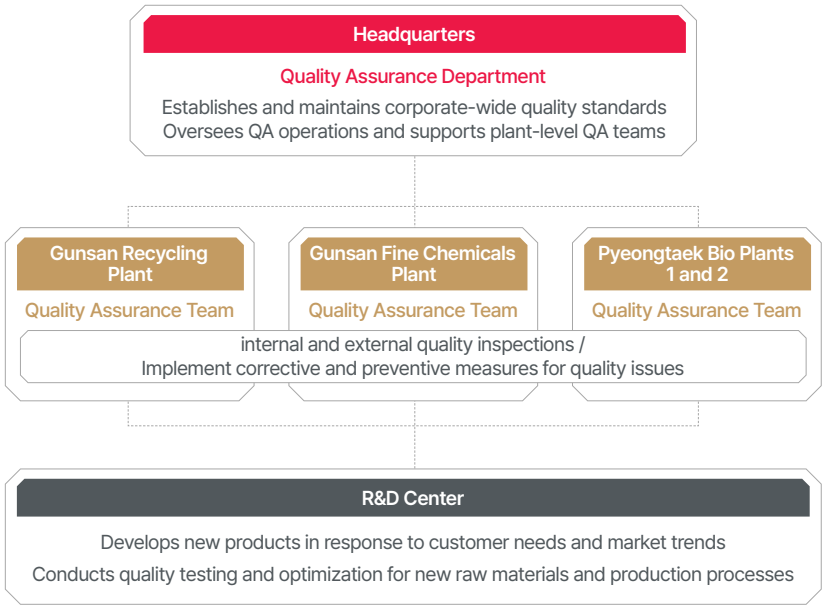
Category	Details
ISCC EU Certification and QAP Verification Support	• Consulting and guidance for new suppliers seeking ISCC EU certification and QAP verification • Pre-audits using certification checklists and assessment of certification feasibility
Support for Certification Maintenance and Improvement	• Annual internal audits for existing certified suppliers and advice on maintaining certification • Consulting on improving core criteria such as mass balance, raw material traceability, and documentation systems
Market Competitiveness through Certification Acquisition and Maintenance	• Certification enables suppliers to enter the certified feedstock market directly • Increased access to certified raw materials allows DS DANSUK to expand production of export-oriented biofuels

Customer Satisfaction and Quality Management

Quality Management Governance

Quality Management Organization

To ensure the highest quality and maximize customer satisfaction, DS DANSUK operates dedicated Quality Assurance (QA) Teams at each plant under the supervision of the Head Office QA Department. This centralized approach ensures consistent product and service quality across all sites while enhancing customer satisfaction and strengthening business competitiveness through localized QA activities. In addition to first-level quality improvement actions by the QA Department, the R&D Center plays a key role in quality optimization by conducting research and development based on customer needs and technological trends.



Quality Management System

Customer Satisfaction and Quality Management

Quality Management Policy

- Realizing customer satisfaction through customer-first operations
- Supplying products and services of superior quality
- Complying with and continuously improving the quality management system

Under the vision of becoming a "Global Leader Based on Differentiated Quality," DS DANSUK has established a robust quality management system aimed at delivering excellence. The company is committed to achieving flawless products and continuously strives for improvement to provide products and services that genuinely move and satisfy customers. This commitment supports the foundation for mutual growth based on trust. DS DANSUK currently operates five domestic and one overseas site certified with the international quality management standard ISO 9001, ensuring a reliable system to meet customer expectations with consistently high-quality products. Through systematic operation and continuous improvement of this quality management system, DS DANSUK aims not only to enhance quality competitiveness but also to build long-term partnerships with customers and contribute to sustainable growth.


Certificate of Registration
QUALITY MANAGEMENT SYSTEM
DS DANSUK CO., LTD.
KS Q ISO 9001:2015/ISO 9001:2015

Quality Management System Certificate

Quality Management Goals & Performance Indicators

DS DANSUK has established quality management goals aimed at securing sustainable growth momentum through the early stabilization of quality in new processes, providing future-oriented energy solutions based on product quality and customer trust, and contributing to the achievement of management goals that exceed profitability targets through continuous improvement efforts. In line with these goals, the company has identified strategic tasks and corresponding key initiatives to ensure ongoing management and enhancement, thereby realizing customer satisfaction through superior quality. The performance indicators for quality management focus on defect rate control, delay in delivery management, and compliance with quality standards. To manage defect rates, the company continuously monitors defects during production and shipping processes and sets reduction targets based on these metrics. To minimize delivery delays caused by quality issues, it tracks the number of delayed deliveries and analyzes the proportion of customer complaints related to such delays in order to develop improvement measures. Additionally, to manage compliance with quality specifications, the company works to increase the rate at which it meets customer-required quality standards, using product inspection pass rates and internal quality audit compliance rates as key performance indicators. Through these efforts, DS DANSUK aims to continuously improve product quality, build customer trust, and strengthen its competitiveness in the market.

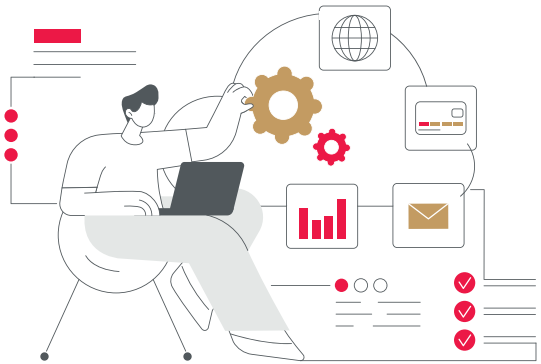
Customer Satisfaction and Quality Management Strategy

DS DANSUK strives to ensure customer satisfaction and effective quality management by minimizing variability in production processes, adhering to standardized work procedures, actively utilizing process monitoring and Statistical Process Control (SPC), and reinforcing preventive maintenance of equipment to proactively prevent quality issues during production.

Securing Process Stability
- Minimizing process variability
- Adherence to standardized work procedures
- Raw material and process inspection

Preventing Quality Defects in Advance
- Statistical Process Control (SPC)
- Process monitoring
- Preventive maintenance of equipment

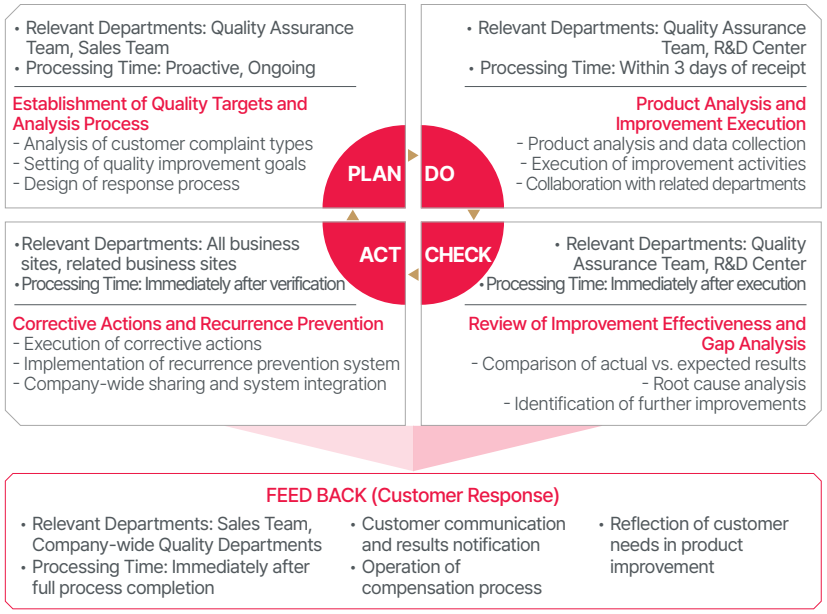
Meeting Customer Quality Requirements
- Product screening through inspections
- Full inspection prior to shipment
- Prompt corrective and preventive actions (CAPA)



Customer Satisfaction and Quality Management

Customer and Product/Service Response System

DS DANSUK places the highest value on achieving customer satisfaction and is committed to delivering top-quality products through company-wide efforts. To accurately assess customer needs and reflect them in products and services, the company operates an integrated quality response system based on real-time monitoring throughout the entire process—from R&D to post-service feedback. When customer complaints are received, the on-site sales team collects the feedback directly. The details are shared with relevant departments within 24 hours to facilitate prompt root cause analysis. Within three days, improvement directions and action plans are established, which then lead to tangible technical improvement efforts. In addition to the quality response system, DS DANSUK prioritizes the prompt provision of substitute products as a proactive measure to minimize customer inconvenience. A unified quality management system linked to related business sites enables quick and consistent responses in the event of an issue. Moving forward, DS DANSUK will continue to strengthen regular interdepartmental communication to improve the complaint-handling process and enhance customer satisfaction by advancing the quality of its products and services through technological innovation.



Supplier Quality Risk Management

Product/Service Quality Management for Suppliers

DS DANSUK is committed to enhancing suppliers' quality mindset and strengthening their internal quality systems. Through interdepartmental collaboration—ranging from raw material quality testing by the Quality Assurance Team to delivery management and contract extensions by the Purchasing and Logistics Team—the company supports quality assessments and improvements for its suppliers. The results of these assessments are analyzed to identify weak areas, enabling the prevention of similar quality issues and the sharing of best practices, thereby contributing to improved supplier quality competitiveness.

Supplier Quality and Process Improvement

To ensure the quality reliability and production stability of its recycled ingot products, DS DANSUK continuously engages in improvement activities through regular quality audits with key battery clients and other suppliers. These audits cover various aspects such as product appearance, physical and chemical properties, and foreign matter control. The goal is not only to identify issues but also to systematically conduct root cause analysis, develop improvement plans, and implement follow-up measures. Most battery clients conduct audits based on their own quality guidelines. When new issues arise, DS DANSUK works jointly with them to review technical aspects and, if necessary, introduces new quality management criteria, establishing mutual standards between both parties. This approach enhances customer-specific responsiveness and lays the groundwork for proactively meeting quality expectations. Recently, DS DANSUK has further strengthened audit quality by introducing precise specimen analysis for micro-defects, conducting correlation analysis of defect rates by process, and implementing company-wide response protocols for quality abnormalities. In addition, joint workshops with suppliers have been held to share best practices and expand technical collaboration. DS DANSUK plans to continuously advance its cooperative framework with clients through regular quality reviews and feedback, reinforcing its quality competitiveness in the battery recycling materials market.

Customer Satisfaction and Quality Management

Customer Communication Activities

DS DANSUK promotes an execution-oriented operational approach that enhances work efficiency through swift communication with operational departments and enables agile responses to customer needs. The company actively gathers customer feedback through various communication channels and strengthens its collaborative foundation with clients by proposing new value aligned with industry changes. DS DANSUK also consistently participates in major domestic and international industrial exhibitions and trade shows to showcase its products and technological capabilities. These engagements help the company better understand and accommodate the evolving expectations and demands of customers amid shifting market environments and technological developments. In 2024, DS DANSUK participated in the Asia Biofuels & Feedstocks Conference in April and the Vietnam Environment & Energy Tech 2024 in June, seizing the opportunity to highlight its competitiveness and establish new customer networks. Through these efforts, DS DANSUK continues to expand customer touchpoints each year, enhance quality in line with market trends, and ultimately achieve greater customer satisfaction and ongoing market expansion.

Monitoring of external market and technology trends, identifying customer needs

▼

R&D activities, design and implementation review of development processes

▼

Mass production validation, assessment of compliance with customer specifications

▼

Final approval/rejection and identification of improvement points through customer satisfaction management

Asia biofuels & feedstocks Conference

Vietnam Environment & Energy Tech 2024

Customer Satisfaction Survey

DS DANSUK maximizes customer satisfaction by incorporating feedback from customer satisfaction surveys into its quality improvement plans. These surveys are conducted annually with top customers by sales volume in each business division and evaluate satisfaction in four key areas: delivery, quality level, emergency production response, and complaint handling. The feedback received is analyzed to identify areas for improvement, ensuring that customer needs are met proactively. DS DANSUK aims to build trust by delivering competitive-quality products on time and by enhancing customer satisfaction through active service engagement. Looking ahead, DS DANSUK plans to expand the scope of feedback collection by introducing an online community system in addition to one-on-one interviews, enabling more diverse and extensive customer voices to be heard.

Category	Unit	Customer Satisfaction Survey		
		2022	2023	2024
Bioenergy	Points	97.0	96.0	**97.9**
Battery Recycling*	Points	-	-	**95.0**
Plastic Recycling	Points	95.8	96.2	**97.7**

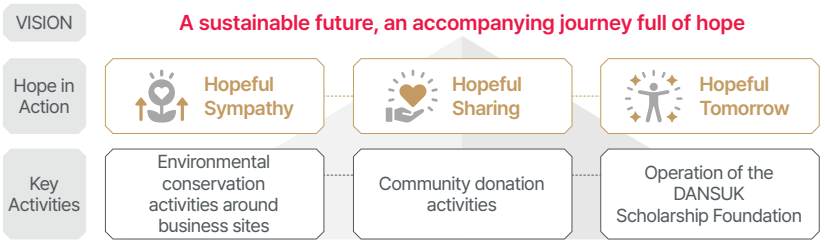
* Customer satisfaction survey conducted since 2024

Social Contribution

Social Contribution Implementation Framework

Social Contribution Vision and Strategy

Based on its founding philosophy that "A company should keep developing and contribute to society," DS DANSUK is committed to realizing a sustainable future in collaboration with local communities and various stakeholders. Guided by this philosophy, the company has established a social contribution vision and actively implements practical initiatives. These include preserving the environment of local communities where its business sites are located, making regular donations, supporting vulnerable groups, and operating scholarship programs to expand educational opportunities. These efforts are not one-off events but are part of DS DANSUK's continuous commitment to fulfilling its corporate social responsibility (CSR). Going forward, the company will continue to expand its social contribution activities and contribute to solving social issues as a member of the broader community.



Link Between Business and Social Contribution

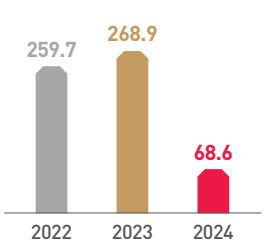
As a company engaged in resource circulation and eco-friendly energy businesses, DS DANSUK continuously undertakes initiatives to protect the environment surrounding its business sites. These efforts contribute to preserving local ecosystems and reflect the company's commitment to its responsibilities as an environmentally conscious enterprise. Recognizing that the advancement of green industries must occur in collaboration with local communities, DS DANSUK strives to build a sustainable society alongside residents. The company supports local communities through economic and social contributions, creating an environment where businesses and communities can grow together. Furthermore, as a corporate citizen dedicated to contributing to society, DS DANSUK promotes educational support to help future generations thrive in better environments. Through the DANSUK Scholarship Foundation, it provides tuition assistance to university students facing financial hardship, fulfilling its responsibility as a member of the community.

Social Contribution Activities

Based on its core focus in eco-friendly industries, DS DANSUK actively engages in a wide range of social contribution initiatives to create a sustainable foundation where future generations and local communities can coexist. In addition to supporting marginalized groups and contributing to community welfare, the company also promotes academic research through donations and partnerships - activities closely aligned with its core business. DS DANSUK contributes to inclusive social development through donations to local welfare foundations and community chests, as well as through direct support for vulnerable groups such as multicultural families. Since 2000, the company has operated the DANSUK Scholarship Foundation to nurture future talent and support academic environments. Notably, DS DANSUK has sponsored the Korea Environmental Energy Awards for four consecutive years through 2024, helping to foster continued growth in the environmental technology and energy research sectors. These ongoing initiatives demonstrate the company's commitment to corporate social responsibility, shared prosperity with local communities, and creating social value centered on sustainability.

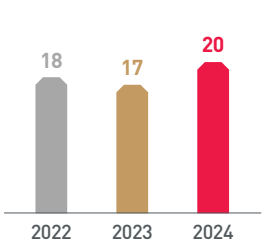
Total Social Contribution Donations

(Unit: KRW 1 million)

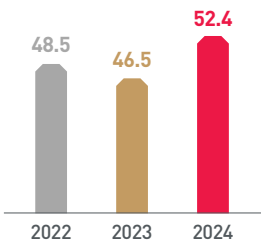


Scholarship Support Overview

(Unit: 1 person)



(Unit: KRW 1 million)



Donation to Han Ki-beom Hope Sharing

Commendation for Contribution to Job Creation in Jeonbuk state

Information Security

Information Security Governance

Information Security Management Organization

To ensure the stability, professionalism, and independence of IT operations, DS DANSUK separates roles and assigns responsibilities to designated personnel.

IT Operations / Information Management Officer
- Oversees all aspects of IT operations (strategy and planning, systems and infrastructure, security, and personal data protection)

IT Operations / Information Management Manager
- Develops IT operation strategies and plans
- Builds infrastructure
- Manages system security
- Oversees personal data protection

IT Operations / Information Management Staff
- Implements IT strategies and plans
- Manages networks and business systems

Information Security Policies and Management System

Information Security Policies and Guidelines

DS DANSUK defines matters related to information security in its "IT Management Regulations." Information security encompasses all IT security aspects used within the company, including PC security, server security, website security, user account management, password management, network security, email security, malware infection control, access log management, database security, system maintenance, and security program operation. In addition to the "IT Management Regulations," the company enforces internal regulations related to information security such as the "Privacy Policy." The "Privacy Policy" is published on the company website to ensure compliance with the Personal Information Protection Act throughout the entire process of collecting, using, and disposing of third-party personal information, while also establishing preventive and responsive measures against incidents.

IT Management Regulations

Information Security Propulsion system

In response to a rapidly changing business environment, DS DANSUK has established a comprehensive information security framework to protect stakeholders' personal information and the company's information assets. To effectively operate this framework, the company implements policies and regulations, manages an information security organization, and conducts company-wide training to strengthen security capabilities. DS DANSUK also conducts pre-checks for legally mandated information security disclosures and inspects for illegal software to prevent violations. Additionally, a centralized document management system has been adopted to standardize document control and prevent data leaks. Ongoing information security training is conducted to raise awareness and promote a culture of cybersecurity across the organization.

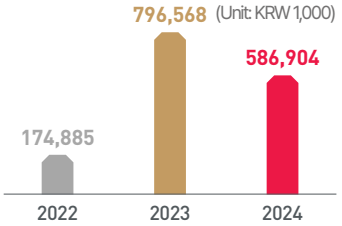
Information Security

Strengthening Information Security Response

Information Security Activities

DS DANSUK has established and operates a management system to prevent the risk of internal confidential information and personal data leaks. Under the supervision of the IT team, the company carries out various internal information security activities that are applicable to day-to-day operations. An annual software inspection is conducted to prevent virus infections caused by unauthorized programs. In addition, security systems such as spam mail filtering and document security have been implemented to block the infiltration and spread of malicious code and to enhance overall security. In 2025, DS DANSUK plans to introduce a NAC solution to prevent unauthorized users from accessing the network indiscriminately. This will further strengthen network security and help prevent IT security risks such as viruses, thereby continuously addressing and improving security vulnerabilities.

Investment in Information Security and Protection Enhancement



2024 IT and Security Investment

Classification	Unit	Amount
IT Sector Investment	KRW	575,653,922
Information Security Investment	KRW	11,249,728
Ratio of Security to IT Investment	%	2.0

NAC*: Network Access Control

Implementation Background

- With the increased use of personal devices for work and growing network access by external visitors, it is essential to assign appropriate access rights to users and devices and ensure compliance with security policies.
- The risk of malware infection and data leakage rises with inadequately managed devices.
- Security-related regulations and laws such as ISO 27001 and the Personal Information Protection Act are being increasingly strengthened.

Objectives

- Strengthen user and device identification and authentication for all devices accessing the network to prevent unauthorized or illegal device connections.
- Enhance the stability of internal assets by applying automated monitoring and policy enforcement in accordance with corporate security policies and regulations.
- Play a key role in implementing Zero Trust architecture through the introduction of NAC, which enables pre- and post-access checks and granular access control.

*NAC : Network Access Control

Advantages and Expected Benefits

IT Resource Data Collection
Automatically collects information on all systems connected to the internal network.

IP Address Management
Prevents IP address conflicts, unauthorized changes; allows IP/MAC address blocking, scheduling, and IPv6 detection/blocking.

System Authentication
Blocks or allows unauthorized systems regardless of device type or operating system.

User Authentication
Ensures that only authorized users can access the network.

Integrity Verification
Verifies installation of required software, guides installations, and blocks network bypass routes.

Report Search / Viewing
Enables tracking of policy violations and incident management; provides searchable reports and logs.

Information Security Training

DS DANSUK conducts annual training sessions for all executives and employees to enhance awareness of information protection and security and to manage associated risks. These sessions include both personal information protection and information security training to strengthen the organization's capabilities to respond to cyber threats and reinforce individual responsibility regarding security and data protection.

Personal Information Protection

Concept and basic principles of personal data protection
Understanding safety measures and risk response
Violation case studies and prevention guidelines

Information Security

Understanding information security systems
Hacking and security breach cases
Detection and response to cyber threats

2024 Information Security Training Status

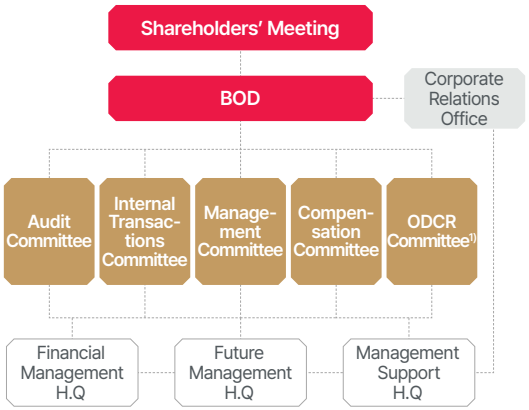
Classification	Unit	Personal Information Protection	Information Security
Number of Participants	Persons	446	446
Number Completed	Persons	446	446
Completion Rate	%	100	100

ESG Performance

Board of Directors

Board Composition

DS DANSUK ensures reliable and transparent strategic decision-making by operating an independent and professional Board of Directors. The Board is composed of seven directors and complies with Article 542-8 of "the Commercal Act", which mandates that outside directors make up at least one-quarter of the total number of directors. To facilitate efficient operations and decision-making, the CEO also serves as the Chair of the Board. To strengthen internal controls, DS DANSUK has established and operates committees mainly consisting of outside directors. Each director is set to serve a three-year term as specified in the company's Articles of Incorporation, and reappointment is determined through a comprehensive evaluation of each director's performance and contributions. Each outside director actively contributes their expertise in diverse areas such as business management, law, and finance, offering valuable insights on management issues and the company's mid-to long-term strategic development. Furthermore, DS DANSUK plans to provide training for outside directors on their roles and corporate governance to support their effective performance.



1) Outside Director Candidate Recommendation Committee

Board Composition Overview

(As of December 31, 2024)

Category		Inside Directors				Outside Directors		
		Seung-uk Han	Jong-woan Kim	Jae-dong Yoo	Sang-hyuk Koh	Chung-jin Shim	Hwan-seop Yeo	Yeong-ho Choi
Experience	Leadership	CEO	CEO	Executive	Executive	Professor	Head of Institution	Executive
	Related Industry	●	●	●	●			●
	Global	●						●
Specialized Area	Business Strategy	●						●
	Corporate Governance			●	●		●	
	Compliance Management		●		●	●	●	
	Financial Accounting			●		●		
	Environmental Health and Safety		●					
General Information	Nationality	South Korea	South Korea	South Korea	South Korea	South Korea	South Korea	South Korea
	Age (Gender)	Born in 1958 (Male)	Born in 1972 (Male)	Born in 1971 (Male)	Born in 1972 (Male)	Born in 1964 (Male)	Born in 1968 (Male)	Born in 1966 (Male)
	Experience	-	-	Head of Financial Planning Team at Sinopax	Head of Future Business Team at Ecobit	RSM Korea Certified public accountant	The 47th Director of the Judicial Research and Training Institute	Head of GS Energy's Chinese Subsidiary (Qingdao Lixin Tank Terminal)
	Education	Master of Industrial Chemistry	Ph.D. in Policy Studies Master of Chemical Engineering	Master of Accounting	Bachelor of Law	Ph.D. in Business	Bachelor of Law	Master of Chemical Engineering
	Date of Appointment	2024-03-28	2024-03-28	2024-03-28	2023-03-31	2023-03-31	2023-03-31	2024-03-28
	Term of Office	41 years 11 months	24 years 11 months	6 years 6 months	3 years 1 months	1 year 8 months	1 year 8 months	9 months

Director Appointment

To ensure fairness and transparency in the appointment of directors, DS DANSUK strictly adheres to the qualifications mandated by applicable laws and follows a structured appointment process. This process comprehensively considers each candidate's expertise, experience, and the overall diversity of the Board's composition. For inside directors, the board evaluates candidates based on their management capabilities, field of expertise, and the potential for synergy and diversity within the existing structure of the Board. After this assessment, the nomination is submitted to the general shareholders' meeting for approval. For outside directors, the Outside Director Candidate Recommendation (ODCR)—comprising more than two-thirds outside directors—objectively reviews the candidates' qualifications, evaluating their expertise, independence, and suitability. Following this verification, the committee then submits its recommendations to the Board and the general shareholders' meeting for final approval. In particular, DS DANSUK enhances the independence and transparency of the Outside Director Candidate Recommendation Committee by implementing a robust review process that emphasizes both the fairness of selection method and the involvement of external expertise. This approach serves as the foundation for strengthening the objectivity and transparency of the Board's composition.

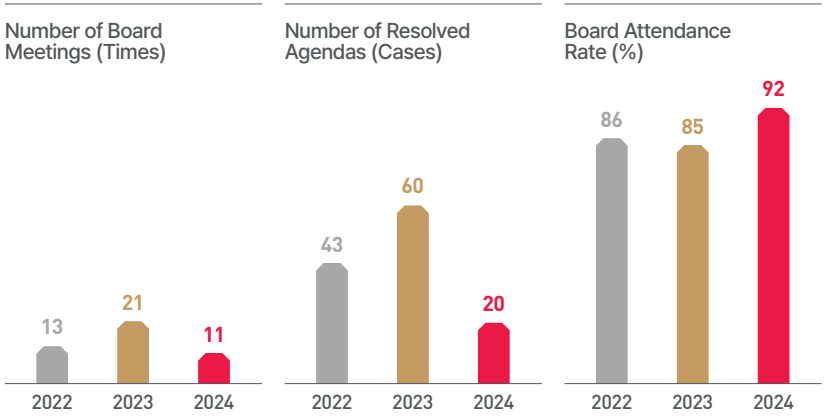
Board of Directors

Board Operations and Activities

Board Operations

To enhance the structure and efficiency of board operations, DS DANSUK holds regular board meetings on a quarterly basis in accordance with its Articles of Incorporation and Board Operation Regulations, and convenes temporary board meetings as needed. In order to facilitate transparent and prompt discussions of key management issues, board members are notified of when the meeting would take place at least three days in advance as stipulated by relevant regulations, and supporting materials for agenda items are provided beforehand. Furthermore, to ensure that directors can thoroughly review agenda items and make responsible decisions, essential Q&A sessions and explanatory materials are provided before and after the meetings. In addition, to improve attendance and encourage active participation, contactless meeting methods such as video conferencing systems are actively utilized. Through these measures, DS DANSUK supports its board in fulfilling its legal and internal roles and responsibilities in a stable and effective manner.

Board Operations Overview



Individual Attendance Rates of Outside Directors

Category	Unit	Chung-jin Shim	Hwan-seop Yeo	Yeong-ho Choi
Attendance Rate	%	90.9	72.7	100

Board Activities

In 2024, DS DANSUK held a total of 11 board meetings and deliberated on 20 agenda items.

Session	Date	Agenda Item
1st	2024.02.14	Agenda 1: Approval of the preliminary financial statements and business report for FY2023 (40th fiscal year) Agenda 2: Approval of transactions between directors and the company for FY2024
2nd	2024.03.12	Agenda 1: Approval of the financial statements and business report for FY2023 (40th fiscal year) Agenda 2: Convening of the 40th Annual General Shareholders' Meeting Agenda 3: Approval of paid-in capital increase of a subsidiary Agenda 4: Ratification of executive appointments Agenda 5: Approval of credit facility from Korea Development Bank (Industrial Operating Capital Loan)
3rd	2024.03.28	Agenda 1: Appointment of CEO Agenda 2: Appointment of committee members within the board
4th	2024.04.17	Agenda 1: Approval of factory land acquisition Agenda 2: Approval of amendments to internal company regulations (Regulations on transactions with related parties, Internal Transaction Committee Regulations, Management Committee Regulations)
5th	2024.05.14	Agenda 1: Approval of establishment and operation plan for an overseas subsidiary
6th	2024.06.03	Agenda 1: Approval of concurrent executive positions at subsidiaries
7th	2024.07.16	Agenda 1: Approval of revamping process for bio marine fuel production at Pyeongtaek Bio Plant 2 Agenda 2: Approval of new credit lines with financial institutions
8th	2024.07.23	Agenda 1: Approval of equity acquisition in subsidiary DS E&E Agenda 2: Approval of concurrent executive positions at subsidiaries
9th	2024.10.14	Agenda 1: Approval of refined feedstock supply agreement for HVO production
10th	2024.10.25	Agenda 1: Approval of raw material purchase agreement
11th	2024.11.11	Agenda 1: Capital increase through capitalization of capital reserve (free capital increase)

* Key ESG reporting agenda: 'Report on solar power generation facility installation plan' at the 4th Board of Directors meeting in 2024, 'Report on publication of sustainability report' at the 7th Board of Directors meeting

Board of Directors

Board Committees

To strengthen the expertise of board-level decision-making and improve the efficiency of oversight, DS DANSUK has established and operates a set of specialized board committees, contributing to the realization of sound corporate governance. The company currently operates a total of five committees under the Board of Directors: the Audit Committee, Management Committee, Internal Transaction Committee, Compensation Committee, and the Outside Director Candidate Recommendation Committee. Each committee engages in in-depth discussions on relevant management issues and provides independent perspectives to support the board. Among these, the Audit Committee—classified as a special type defined under Article 542-11 of "the Commercial Act"—along with the Internal Transaction Committee, the Compensation Committee, and the Outside Director Candidate Recommendation Committee are typically mandatory or strongly recommended for listed companies with total assets of KRW 2 trillion or more. DS DANSUK, however, has proactively established all of these committees in advance regardless of asset size, thereby constructing a transparent and accountable governance structure.

Status of Board Committees

(◆ Approved ◆ Reported ◆ Other)

Category	Composition	Members	Main Roles	Meetings Held	Agenda Items
Audit Committee	3 Outside Directors	Chung-jin Shim (Chair), Young-ho Choi, Hwan-seop Yeo	• Supervision of the work and decisions of directors and management • Evaluation of internal control systems (including internal accounting management) • Selection, dismissal, and post evaluation of external auditors	4	◆ 1 ◆ 5 ◆ 4
Management Committee	2 Inside Directors	Seung-uk Han (Chair) Jae-dong Yoo	• Decision-making on routine management matters below the board's criteria • Resolution of major management issues delegated by the board	13	◆ 19
Internal Transactions Committee	2 Outside Directors 1 Inside Director	Hwan-seop Yeo (Chair) Chung-jin Shim, Jae-dong Yoo	• Review and resolution of major internal transaction matters to ensure fair transactions with stakeholders (including subsidiaries)	6	◆ 10
Compensation Committee	2 Outside Directors 1 Inside Director	Chung-jin Shim (Chair), Young-ho Choi, Jae-dong Yoo	• Ensuring of transparency in the executive remuneration system • Evaluation of the appropriateness of director remuneration limits and review of compensation systems	1	◆ 1
Outside Director Candidate Recommendation Committee	2 Outside Directors 1 Inside Director	Young-ho Choi (Chair), Hwan-seop Yeo, Sang-hyuk Koh	• Evaluation and recommendation of the suitability of candidates for new outside directors	2	◆ 2

Operation of the Audit Committee

DS DANSUK has established and operates an Audit Committee in accordance with the special provisions for listed companies under Article 542-11 of "the Commercial Act". On April 5, 2023, the Board of Directors officially approved the establishment of the Audit Committee and its operational regulations, marking the commencement of full-scale operations. The Audit Committee is composed exclusively of outside directors, ensuring that all audit functions are conducted with independence and professional expertise. To further enhance the committee members' capabilities, specialized training—such as the internal accounting control system—is regularly conducted. The committee fulfills its audit responsibilities by thoroughly reviewing the company's key risk factors through regular communication with external auditors, without the participation of management.

Audit Committee Member Selection Criteria

(◆ Fulfilled ◆ Unfulfilled)

Key Criteria	Fulfillment Status
Composed of three or more directors	◆ 3 members
Outside directors constitute two-thirds or more	◆ All outside directors
At least one member is an accounting or finance expert	◆ Outside director Chung-jin Shim
Chair of the Audit Committee is an outside director	◆ Outside director Chung-jin Shim
Disqualifying factors (e.g., related parties of major shareholders)	◆ Not applicable

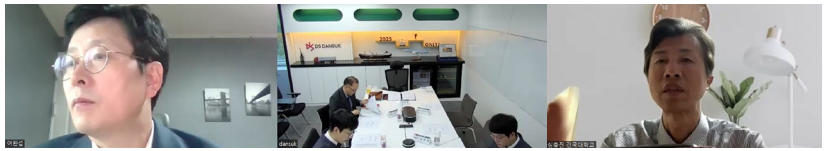
Audit Committee Training Status

Training Date	Organizer	Attending Members	Key Training Topics
2024.10.25	Samil PwC	All Present	• Direction of policy changes in internal control oversight • Legal framework for evaluation and reporting standards of the internal accounting control system • Reporting and explanation on fraud risk assessment and strengthened fund control

Board of Directors

Operation of the Internal Transactions Committee

Since 2023, DS DANSUK has strengthened controls over transactions with major shareholders and other stakeholders by establishing and implementing the "Regulations on Transactions with Interested Parties" and the "Internal Transaction Committee Operating Regulations," and by operating an Internal Transaction Committee within the Board of Directors. The Internal Transaction Committee proactively applies internal transaction procedures required under Article 26 of "the Fair Trade Act" for publicly disclosed business groups and independently performs review and approval functions. Additionally, in accordance with Article 542-9 of "the Commercial Act", DS DANSUK applies prior review and approval procedures for transactions of a certain size or more with interested parties, as required for listed companies with total assets exceeding 2 trillion KRW. This ensures a fair and transparent internal transaction structure.



Video conference of the Internal Transactions Committee

Operation of the Compensation Committee

DS DANSUK's Compensation Committee is responsible for reviewing and approving matters related to individual director compensation, including the remuneration limits and performance bonuses for registered directors submitted to the shareholders' meeting. The committee also independently reviews the appropriateness of compensation when executives who are related parties of the largest shareholder are appointed. Since 2023, the committee has played a key role in ensuring transparent and responsible management of the remuneration system by conducting prior reviews and approvals of agenda items related to directors' remuneration limits and individual director compensation submitted to the shareholders' meeting.

Operation of the Outside Director Candidate Recommendation Committee

Although DS DANSUK is a company with total assets under 2 trillion KRW and therefore not required to establish an Outside Director Candidate Recommendation Committee, it voluntarily established the committee on April 5, 2023, to enhance the independence and transparency of the board's composition. In accordance with Article 542-8, Paragraph 4 of "the Commercial Act", the committee is composed so that outside directors constitute a majority of the total members. The committee reviews the qualifications, expertise, and independence of outside director candidates, then recommends them to the Board of Directors and the shareholders' meeting, thereby promoting fairness and objectivity in the director appointment process.

Board Evaluation and Remuneration

Board Performance Evaluation

To strengthen the capabilities of DS DANSUK's Board of Directors and establish a board-centered management system, evaluations are conducted on the performance of individual directors as well as executives. For directors, candidates are comprehensively assessed based on factors such as expertise, management understanding, and practical experience to ensure the appointment of individuals with appropriate competencies. After appointment, evaluations are conducted on whether the director faithfully fulfills the roles and responsibilities required by laws and internal regulations, as well as on management performance, achievements, and competencies—factors stipulated as evaluation criteria in the regulations—to inform decisions regarding reappointment. Outside directors are selected through the Outside Director Candidate Recommendation Committee, which verifies fairness and objectivity. Post-appointment, their contribution to board activities, sense of responsibility, and proactiveness are comprehensively evaluated to determine whether to recommend their reappointment.

Board and Executive Remuneration Policy

DS DANSUK determines director compensation based on the "Executive Compensation and Retirement Benefits Regulations" approved at the shareholders' meeting and within the approved remuneration limits, in accordance with the company's key policies. Individual director compensation undergoes prior review by the Compensation Committee and is approved and executed following prescribed procedures. The outcomes of compensation execution are transparently reported back to the Compensation Committee, the Board of Directors, and the shareholders' meeting. When reviewing the appropriateness of individual director compensation and overall remuneration limits, the Compensation Committee considers both the social compensation standards of comparable industries and DS DANSUK's actual compensation levels. Furthermore, the compensation system for all executives, including directors, (covering performance bonuses) operates based on standards approved by the Compensation Committee and the Board, ensuring fairness and legitimacy. Meanwhile, outside directors' compensation consists of fixed salaries and allowances related to duties performed. DS DANSUK does not operate a performance-linked compensation system for outside directors, as it is considered that such a system could undermine their independence and ability to express impartial opinions. Through these policies and compensation frameworks, DS DANSUK strives to manage the remuneration of the Board and executives transparently and fairly.

Director Compensation Status

(Unit: KRW 1,000)

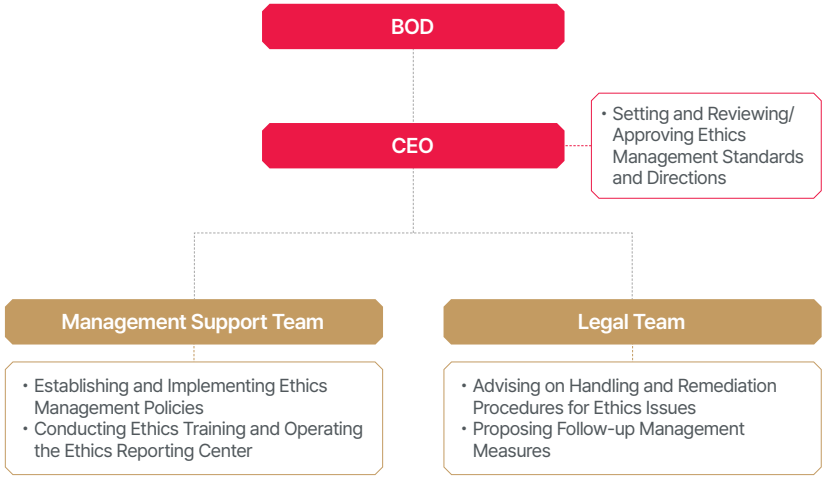
Category	Number of People	Total Compensation	Average Compensation per Person
Registered directors (excluding outside directors and Audit Committee members)	4	1,335,904	333,976
Outside directors (excluding Audit Committee members)	-	-	-
Audit committee Members	3	117,000	39,000
Total	7	1,452,904	207,558

Ethical Management

Ethical Management Governance

Ethical Management Organization

DS DANSUK goes beyond merely complying with legal responsibilities and earnestly fulfills its social responsibilities as a corporate citizen by practicing company-wide ethical management. Centered around a dedicated ethics management team, regular ethics training is conducted for all employees, and an Ethics Reporting Center operates to maintain a continuous monitoring system. When ethical issues arise, prompt investigations are carried out to assess the severity of the matter, and appropriate resolutions and preventive measures are proposed to foster a transparent and accountable corporate culture.



Ethical Management System

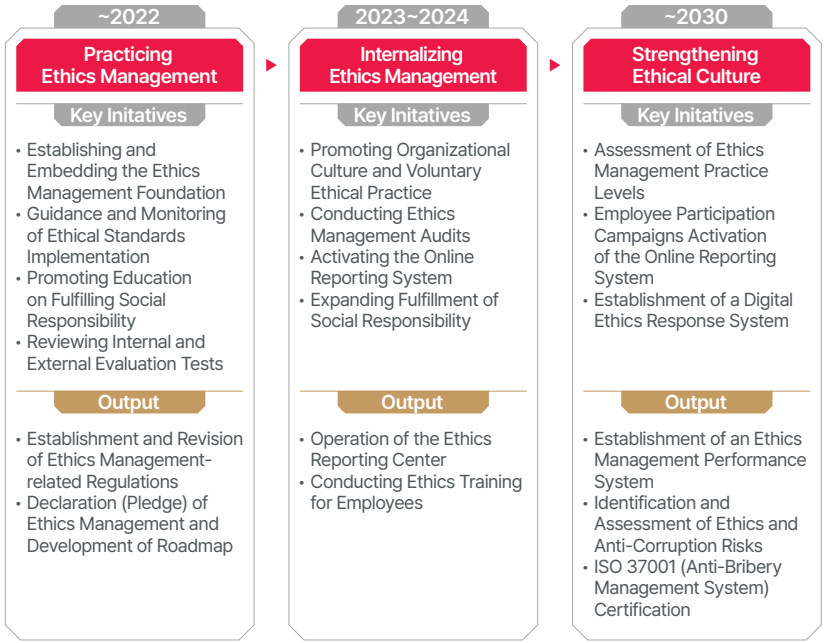
Since 2021, DS DANSUK has been systematically establishing its ethics management by formulating comprehensive policies and implementation guidelines. Based on these, all employees are required to sign an ethics pledge to commit to upholding the company's Code of Ethics. To foster a transparent ethical culture across the organization, DS DANSUK promotes ethical principles not only for individual responsibilities of employees, but also in its relationships with key stakeholders: ensuring service excellence for customers, transparency and accountability for shareholders and investors, and fair practices and mutual cooperation with business partners. The company has also established ethical standards for partner companies and continuously improves its management system to internalize ethical culture throughout the organization.

Vision and Mid- to Long-Term Strategy

Ethical Management

Ethical Management Roadmap

DS DANSUK is making company-wide efforts to fulfill its social responsibilities through ethics management. The company is committed to embedding ethical decision-making and organizational culture into daily operations based on its Code of Ethics. Guided by an ethics management roadmap, DS DANSUK continuously conducts ethics training for all employees. Additionally, by operating an Ethics Reporting Center, the company has activated an online reporting system to improve accessibility and transparency. Since 2023, DS DANSUK has focused on internalizing ethics management throughout the organization. In particular, it is currently reviewing the establishment of a new audit team to strengthen oversight functions and foster an environment that encourages voluntary ethical practices. Through these initiatives, DS DANSUK reflects ethical values in all business activities and promotes a culture of ethics management grounded in trust with stakeholders.



Building an Ethical Culture

DS DANSUK has diligently advanced the foundational and practical aspects of ethics management by promoting “living ethics” and “internalization” phases. The company has continuously worked to establish ethical standards and spread an ethical culture throughout the organization, ensuring ethical values permeate all levels. Regular ethics training for all employees has laid the groundwork for ethical decision-making to naturally apply across all business activities. The transparent operation and procedural establishment of the online Ethics Reporting Center further systematize ethics management.

Starting in 2025, building on these achievements, DS DANSUK aims to establish a more advanced ethical culture by strengthening ethics management. The company plans to introduce a voluntary ethics self-assessment system that enables each employee to evaluate and receive feedback on their ethical practices. Through participatory ethics campaigns, DS DANSUK seeks to improve actual ethical awareness. This will reinforce internal ethical recognition and create an environment where ethics management becomes a voluntary practice. Considering the close connection between digital technology and corporate ethical responsibilities, DS DANSUK also plans to develop a response system for digital ethics. This will address new core areas such as protecting internal information, preventing technology misuse, and proactively avoiding cyber-ethical violations. The company intends to establish ethical standards and codes of conduct suited to the digital work environment to strengthen its response capabilities. By advancing an ethical organizational culture and leading ethics management aligned with the digital transformation era, DS DANSUK aims to fulfill its role as a responsible corporation committed to sustainable growth.

Ethical Management

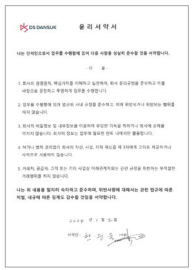
Ethics Policy

DS DANSUK defines "ethics" as a core value of sustainable management and internalizes ethical decision-making criteria throughout its organizational operations. The company regards ethics management not merely as compliance with laws and regulations but as a systematic management area aimed at preventing corporate risks and building trust with stakeholders. To this end, DS DANSUK has established policies on ethics management, codes of conduct, internal whistleblower protection systems, and ethical standards for partners. The implementation level of these systems is regularly monitored through both quantitative and qualitative indicators. In particular, to enhance the effectiveness of the ethics policy, a multi-layered management system is operated, which includes strengthening executive accountability, expanding internal education, and advancing monitoring systems.

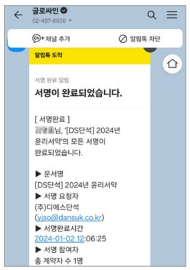
Ethics Regulations and Code of Conduct

DS DANSUK regards management based on ethical principles as a core value for realizing corporate sustainability and social responsibility. To this end, the company has established ethical norms and practical guidelines that all employees must comply with, fostering a fair and transparent corporate culture within the organization. In 2023, following the ethics management roadmap, DS DANSUK strengthened its ethics implementation system by operating a dedicated ethics management organization and establishing an ethics reporting center. All employees continuously fulfill ethics pledges, maintaining awareness of and commitment to ethical responsibility. The ethics norms and practical guidelines provide employees with clear standards for ethical judgment and behavior, while clearly defining their rights and responsibilities. Additionally, to manage ethical risks effectively, DS DANSUK has a system that includes both preventive measures against unethical conduct and education and sanction procedures.

DS DANSUK Ethics Pledge Employee Signatures



CEO Signature



Employee Electronic Signature

Code of Ethics

Implementation Guidelines

Code of Ethics Key Contents

Employee Job Ethics
- Basic Ethics for Employees
- Duty to Comply with Laws and Regulations
- Obligation to Report Facts Honestly
- Creating a Healthy Work Environment
- Establishing a Sound Cyber Culture

Customer Ethics
- Customer Satisfaction
- Customer Protection
- Customer Respect
- Customer Value Creation

Ethics Toward Shareholders and Investors
- Maximizing Corporate Value
- Transparent Management

Ethics Toward Partner Companies
- Establishment of Fair Transaction Procedures
- Pursuit of Mutual Growth with Partner Companies
- Establishment of an Ethical Management System

Ethics Toward Competitors
- Compliance with Fair Trade
- Fair and Free Competition

Ethics Toward the Environment and Society
- Environmentally Friendly management
- Social Contribution Activities
- Fulfillment of Corporate Citizenship Responsibilities

Operation of the Ethics Reporting System
- Operation of an Ethical Reporting System

Implementation Guidelines
- Compliance with guidelines and obligation to report
- Protection of whistleblowers

Key Contents of the Implementation Guidelines

Workplace Ethics
- Mutual respect among employees
- Communication between superiors, subordinates, and departmentsProhibition of false reporting
- Confidentiality of information
- Prohibition of personal use of internal information
- Protection of company assets
- Prohibition of dual employment
- Avoidance of conflicts of interest in duties
- Prohibition of gambling activites
- Prohibition of sexual harassment

Prohibition of Receiving Money or Gifts
- Monetary Transactions
- Exchange of Money or Gifts
- Acceptance of Favors or Hospitality
- Congratulatory and Condolence Money
- Sponsorship of Events
- Honoraria for External Activities

Ethical Management

Ethical Risk Management

Ethical Reporting System

DS DANSUK operates an ethics reporting system to cultivate a transparent and fair corporate culture while strengthening corporate sustainability and social responsibility. Through the Ethics Reporting Center, employees and stakeholders can anonymously report unethical conduct or legal violations related to business activities. By protecting whistleblowers and ensuring fair investigations, the company actively practices ethical management. In 2024, three reports[1] submitted via the company website were promptly reported to the CEO in charge of compliance management and investigated according to established procedures. This demonstrates DS DANSUK's commitment to proactively addressing reported issues and enhancing ethics management. Through these efforts, the company strengthens its internal control system and prevents and eradicates unethical and illegal activities, thereby improving corporate transparency and trust.

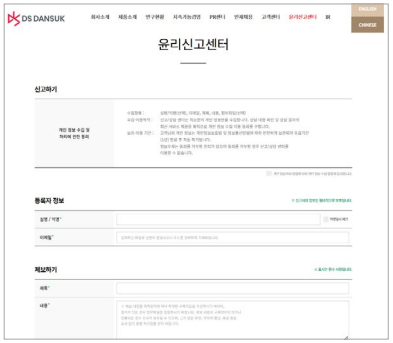
1) 총 3건의 신고 중 비윤리 관련은 1건 해당 (법인차량 운행 관련으로 규정 위반에는 미해당되나 주의 조치 처리)

Ethical Reporting Process

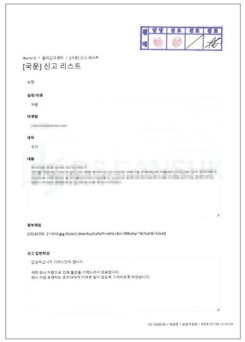
Report Submission (Ethics Reporting Center) ▸ Investigation of Report Content (Management Support H.Q) ▸ Report to CEO (Compliance management) and Internal Meeting ▸ **Notification of Results and Actions to the Parties Involved**

Ethical Management Performance Indicators

Category	2022	2023	2024
Number of Unethical Conduct Reports	0	1	1
Status of Report Handling	0	3	3
Number of Internal Audit Findings	0	0	0



Ethics Reporting Center



Reported Case Under the Ethics Reporting Program

Ethical Management Activities

Strengthening Ethical Culture

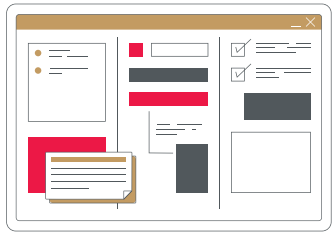
Since 2023, DS DANSUK has been conducting regular ethics management training for all employees to foster an ethical corporate culture and grow as a sustainable company that fulfills its ethical responsibilities. The training focuses on the necessity of ethical management and real-life examples of ethical dilemmas that may arise in daily work, enhancing its practical effectiveness. Through this education, employees clearly understand ethical decision-making criteria and build the capacity to make ethical choices independently in everyday work situations. Moreover, DS DANSUK is committed to advancing beyond economic and legal responsibilities to fulfill ethical responsibilities as a company. By raising employees' ethical awareness, the company will continue striving to firmly establish ethics management as part of its corporate culture.

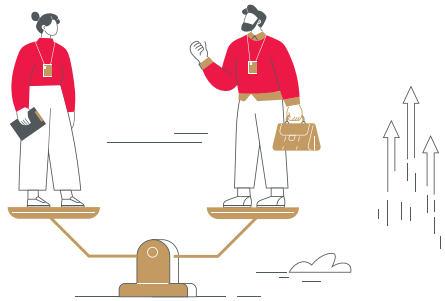
Ethical Management Training

2024 Ethical Management Training

446 Participants,

100% Attendance Rate





Compliance Management

Compliance Management Governance

Compliance Governance

BOD
- Resolves important matters related to compliance control standards
- Supervises whether the CEO and the company effectively operate the compliance control system

CEO
- Establishes, maintains, operates, and monitors the compliance control system as per the compliance control standards and board resolutions

Compliance Officer
- Oversees practical compliance control, including checks on adherence to compliance control standards

Legal Team
- Supports compliance throughout all company management activities

Roles and Permissions of the Compliance Officer

- Operation of Compliance Education and Training Program
- Regular and Ad Hoc Inspections on Compliance with Compliance Control Standards
- Request for Legal Compliance and Improvements by Employees
- Request for Disciplinary Action Against Employees Who Violate Compliance Control Standards
- Attendance at and Statement of Opinions in Board Meetings Related to Compliance Matters
- Ongoing Compliance Support (e.g., Advisory Services) and Support for Voluntary Compliance Checks by Employees

Compliance Management System

Compliance Management Framework

DS DANSUK strengthened its compliance management by passing the establishment of the "Compliance Control Standards" and appointing a Compliance Officer at the Board of Directors meeting held in April 2023. The Compliance Officer, supported by the Legal Team, is responsible for overall compliance checks and advice on company management activities, as well as reviewing legal matters and contracts. The officer also attends board meetings to monitor compliance adherence during the company's decision-making processes. Since appointing the Compliance Officer, DS DANSUK has been focusing on effectively overseeing compliance operations and establishing a solid compliance foundation to raise employees' compliance awareness and prevent potential legal risks to the company.

Operation of the Compliance Support System in the Event of a Compliance Issue

Issue Reporting
- Detailed reporting of the occurrence, causes, and whether (expected) damage has occurred

▼

Issue Response
- Advising on the appropriateness of response actiosn by the relevant department for each issue, aiming for early resolution and minimizing damage

▼

Resolution and Recurrence Preveition
- Identifying the root cause within the specific department where the issue occurred and requesting measures to prevent risk recurrence

Mid-to Long-term Strategy and Performance Indicators

Target	Achieving Zero Anti-Corruption Risk through Compliance Management		
Mid- to Long-term Strategy	Fair Trade Education and Compliance Performance Enhancement	Self-Inspection and Promotion of Compliance Culture	Employee Compliance with Contract-Related Laws and Regulations
Perfor-mance Indicator	Compliance Training Completion Rate	Ethics Pledge Signing Compliance Rate	Standard Contract Usage Rate

Compliance Management

Compliance Control Standards

DS DANSUK complies with social norms and corporate ethics in its business activities and strives to conduct operations transparently and fairly. The company's Compliance Control Standards define the criteria and procedures that employees must follow during their work to ensure compliance with applicable laws and regulations and to maintain trusted management activities with stakeholders. DS DANSUK's Compliance Officer carries out various compliance support activities based on these Compliance Control Standards and the processes outlined below.

Compliance Control Process

STEP 1 — Pre-Check
- Conduct prior legal reviews for key matters such as major contracts, business plans, investments, imports and exports, and R&D.
- Apply internal approval procedures under the supervision of the Legal and Compliance departments.
- Provide advance risk analysis and response guidelines based on changes in laws and regulations.

STEP 2 — Monitoring
- Operate department-specific autonomous compliance programs (Compliance Program).
- Conduct inspections of high-risk areas such as fair trade, environmental safety, and import/export controls.
- Monitor the completion rate of compliance training and the implementation status of policies.
- Apply linked monitoring through internal control systems (e.g., approval systems).

STEP 3 — Review & Improvement
- Analyze the causes of legal violation cases and issues raised through internal reports, and improve related systems.
- Conduct compliance and risk assessments at least once a year.
- Report audit results and risk response status to management.
- Monitor implementation of improvement tasks and update policies accordingly.

임직원 대상 준법교육

Compliance Management Activities

DS DANSUK is promoting systematic, company-wide compliance management activities to enhance its compliance level. In accordance with "the Commercial Act", it operates a compliance officer system and maintains a practical compliance management framework. In 2024, DS DANSUK distributed a 'Fair Trade Guidelines' internally, clearly informing employees about key provisions of the Fair Trade Act and examples of violations that they should be aware of during their work. Additionally, through a 'Fair Trade Self-Inspection Checklist,' employees are encouraged to recognize compliance control standards themselves, helping to prevent unfair trade and unfair competition practices. This checklist serves as an important tool that assists employees in practicing fair trade principles in various transactions and contracts.

Furthermore, before contract execution, internal legal processes require mandatory review by the Legal Team and the Compliance Officer. For major contracts such as purchasing, supply, subcontracting, and sales, DS DANSUK provides 'Standard Contract Templates (in Korean and English)' tailored to business characteristics and relevant laws. These templates help prevent potential risks and minimize the chance of legal violations during contract execution. DS DANSUK also operates online legal advice and contract consultation services to offer employees timely and accurate legal guidance for issues that may arise during their work. This real-time legal support system enhances company-wide compliance capabilities and strengthens the legal response abilities of operational units. Moving forward, DS DANSUK will continuously monitor trends in the enactment and revision of relevant major laws and proactively respond to changing regulatory environments. The company plans to continuously strengthen and expand the capabilities of its compliance organization, compliance education, compliance audits, and fair trade compliance programs.

Fair Trade Guidelines

Fair Trade Self-Inspection Checklist

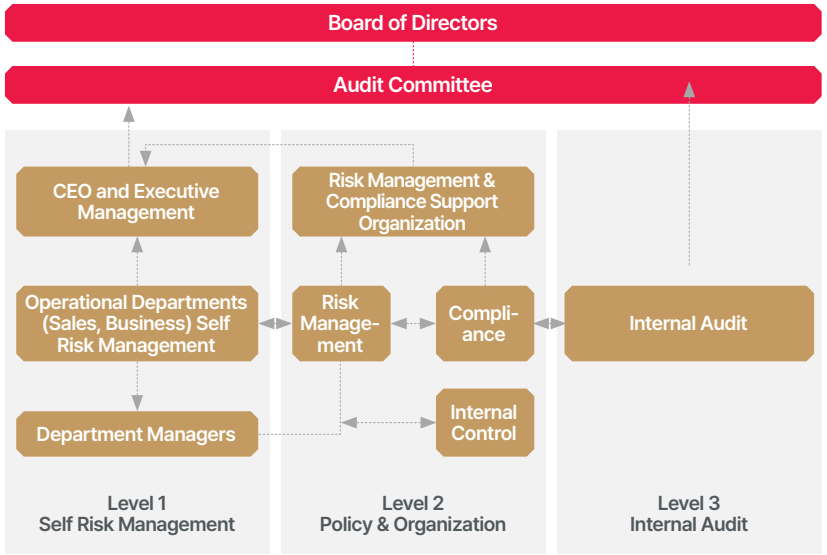
Integrated Risk management

Risk Management System

DS DANSUK operates a risk management system to proactively review and respond to various risk factors that may affect its business activities, and to prepare in advance for potential risks in order to grow together with all stakeholders. The company has established a risk management framework that spans from the autonomous operation of risk control by members of frontline departments, through the operation of risk management and compliance support organizations, to risk oversight and policy approval by the Board of Directors.

Integrated Risk Management System

DS DANSUK proactively reviews and responds to various risk factors that may impact its business operations and operates a company-wide risk management system through preemptive measures against potential risks. In this system, each responsible person within frontline and business departments carries out their duties based on the Risk Management Regulations or other relevant rules and guidelines specific to the matter. Response to risk occurrences or direct risk management activities are handled by dedicated teams for each area. When deficiencies are identified, the company manages risks by revising or updating regulations, distributing guidelines, and conducting monitoring and inspection activities.



Risk Management

Financial and Non-Financial Risk Response

DS DANSUK recognizes financial stability and non-financial sustainability as key priorities for sustainable growth. Accordingly, it identifies various risks inherent in changes to the business environment and strengthens organizational resilience by establishing a structured response system. In particular, financial risks are factors that directly impact financial soundness, such as profitability and cash flow, while non-financial risks are managed as critical issues that determine the company's long-term trust and sustainability.

Financial Risk

Category	Reasons for Selection and Response Strategy
Raw material Price Volatility Risk	There is a high dependence on key raw materials such as used cooking oil, waste batteries, and waste plastics, making the company sensitive to price fluctuations caused by international market trends and geopolitical risks. When raw material costs rise sharply, some product lines may face delayed price pass-through, resulting in reduced profitability. Therefore, DS DANSUK strengthens cost stabilization strategies through supplier diversification, long-term contracts, and product-specific cost sensitivity analysis
Exchange Rate Risk	Due to a high proportion of exports and raw material imports settled in foreign currencies, DS DANSUK is exposed to exchange rate fluctuations, which can cause profitability volatility. Changes in global monetary policy and geopolitical factors exacerbate exchange rate instability. To manage this risk, the company maintains a balance of foreign currency assets and liabilities, employs hedging strategies, and monitors translation gains and losses regularly.

Integrated Risk management

Non-Financial Risk

Category	Reasons for Selection and Response Strategy
Technology Change and Innovation Risk	The green energy and materials industry experiences rapid technological changes, and the commercialization of high value-added technologies determines market competitiveness. Delays in technology responses in fields such as HVO (Hydrotreated Vegetable Oil), LIB (Lithium Ion Battery) recycling, and PCR (Post-Consumer Recycled) plastics may lead to risks of market share and profitability decline. To address this, DS DANSUK is strengthening technological competitiveness through market monitoring, increased investment and business alliances, patent acquisition, and shortening commercialization periods
Environmental Regulation and Policy Change Risk	Global environmental regulations such as CBAM[1)] and REACH[2)] are being strengthened, directly impacting product design, processes, and exports. Delays in certification, market entry restrictions, and increased costs may occur, potentially reducing business competitiveness. DS DANSUK is proactively strengthening its risk response system through increased investments in environmental regulation compliance, global certification management, and shortening response lead times.
Supply Chain Geopolitical Instability Risk	With escalating geopolitical conflicts like the US-China trade dispute and the Russia-Ukraine war, uncertainty in the global supply chain persists. Some raw materials for DS DANSUK's bioenergy, battery, and plastic recycling businesses are concentrated in specific countries, exposing the company to risks such as raw material supply disruption and price spikes in case of conflict escalation. Accordingly, active discussions are underway between departments to stabilize the supply chain, focusing on diversifying import countries, securing alternative raw materials, and establishing strategic stockpiling systems.

1) Carbon Border Adjustment Mechanism (CBAM): The Carbon Border Adjustment Mechanism (CBAM) is a regulatory instrument implemented by the European Union (EU) to address the risk of carbon leakage and to promote global climate action. Under this mechanism, a carbon levy is imposed on imported goods based on their embedded greenhouse gas emissions, thereby aligning the carbon cost of imports with that of goods produced within the EU. The CBAM is designed to ensure a level playing field for EU industries subject to stringent environmental regulations.
2) EU REACH (Registration, Evaluation, Authorization and Restriction of Chemicals): The REACH Regulation, which came into effect on June 1, 2007, is the European Union's comprehensive chemical management framework. It mandates that all chemical substances—whether in pure form, in mixtures, or contained within articles—manufactured or imported into the EU in quantities of one tonne or more per year must be registered with the European Chemicals Agency (ECHA). The regulation requires manufacturers and importers to provide data on the substances' properties, uses, and potential risks to ensure safe use and protection of human health and the environment.

Emerging Risk

The transitional characteristics of the energy and materials industries, along with rapidly changing global regulatory and technological environments, require companies to proactively prepare for long-term uncertainties beyond existing risk response systems. DS DANSUK identifies emerging risks that could significantly impact corporate value due to unforeseen external factors or structural changes and secures mid-to-long-term risk resilience through strategic response discussions.

Risk	Reasons for Selection and Response Strategy
Talent Acquisition and Industry Expert Shortage Risk	The eco-friendly energy and materials industry is technology-intensive, requiring highly specialized personnel in key business areas such as bio diesel, waste battery recycling, and recycled plastic materials. However, difficulties in securing talent are intensifying due to talent concentration, recruitment limitations in regional sites, and increased demand for retraining caused by changing industry trends. In response, DS DANSUK is continuing internal discussions focused on strengthening core talent retention, expanding industry-academia cooperation, and implementing regional talent development strategies. The company aims to systematically address this risk by establishing a mid- to long-term personnel management system.
Community Acceptance and Factory Location Conflict Risk	As the eco-friendly industry expands and production facilities increase, the potential for conflicts with local communities is also rising. DS DANSUK's major plants handle chemicals and waste materials and generate noise and odors, which may lead to complaints. Within the ESG management trend, "social acceptance" has emerged as a mid- to long-term business risk. Accordingly, DS DANSUK is discussing ways to build trust with local communities by expanding community briefings, establishing complaint response channels, and planning coexistence programs. The company is also working to establish a system that proactively considers local acceptance before future investments.
Carbon Emissions Accounting and Reduction Responsibility Risk	As the implementation of carbon neutrality expands as a global obligation, companies are under pressure to quantitatively and transparently manage carbon emissions throughout the entire product life cycle (LCA). DS DANSUK produces eco-friendly products but recognizes that insufficient supply chain emissions data and an imprecise carbon accounting system may lead to regulatory violations or export restrictions. Accordingly, discussions are underway to establish a carbon accounting system aligned with Scope 1-3 standards, develop an LCA-based calculation framework, and collaborate with external certification bodies.

Appendix

DATA

Financial Performance

B DATA

Summary of Consolidated Statement of Financial Position

Category	Unit	2022	2023	2024
Total Assets	KRW million	565,587	718,904	**735,819**
Current Assets	KRW million	303,352	351,805	**307,863**
Non-Current Assets	KRW million	262,235	367,100	**427,956**
Total Liabilities	KRW million	425,844	437,729	**452,781**
Current Liabilities	KRW million	317,923	340,137	**300,059**
Non-Current Liabilities	KRW million	107,921	97,591	**152,722**
Total Equity	KRW million	139,743	281,175	**283,038**
Equity Attributable to Owners of the Parent Company	KRW million	139,467	277,355	**279,799**
Non-Controlling Interests	KRW million	276	3,820	**2,737**

Summary of Consolidated Statement of Comprehensive Income

Category	Unit	2022	2023	2024
Revenue	KRW million	1,133,719	1,070,440	**961,722**
Cost of Sales	KRW million	1,017,311	945,082	**901,626**
Gross Profit on Sales	KRW million	116,408	125,357	**60,096**
Selling and Administrative Expenses	KRW million	42,423	49,116	**47,908**
Operating Profit	KRW million	73,985	76,240	**12,187**
Finance Income	KRW million	9,316	10,869	**9,658**
Finance Costs	KRW million	33,148	32,218	**27,035**
Other Non-operating Income	KRW million	1,120	3,785	**4,122**
Other Non-operating Expenses	KRW million	13,515	7,254	**11,273**
Net Income before Income Tax Expense	KRW million	37,758	51,422	**(12,340)**
Income Tax Expense	KRW million	10,576	12,260	**(2,018)**
Net Profit	KRW million	27,181	39,161	**(10,321)**
Total Comprehensive Income	KRW million	27,172	50,126	**1,966**

Corporate Innovation

Category	Unit	2022	2023	2024
Total R&D Operating Expenses	KRW million	593	594	**777**
R&D Intensity per unit of revenue	KRW million	0.0005	0.0006	**0.0008**
Total Number of R&D Personnel	Persons	16	12	**12**
Metal / Inorganic Materials Technology	Persons	4	8	**8**
Biotechnology	Persons	3	4	**4**
Composite Materials	Persons	9	Business Division Integration	**Business Division Integration**
Total Intellectual Property	Cases	17	17	**22**
Patents	Cases	12	12	**15**
Utility Models	Cases	0	0	**0**
Designs	Cases	0	0	**0**
Trademarks and Other Copyrights	Cases	5	5	**7**

DATA

Environment

E DATA

All Business Sites

GHG Management[1)]

Category	Unit	2022	2023	2024
Total GHG emissions	tCO_2eq	80,522.26	80,823.47	**86,000.35**
Direct emissions (Scope1)	tCO_2eq	51,907.65	54,556.54	**57,003.20**
Indirect emissions (Scope2)	tCO_2eq	28,614.60	26,266.94	**28,997.15**
Base unit emissions[2)]	tCO_2eq/Ton	0.08	0.07	**0.10**
GHG reduction performance	tCO_2eq	(3,692.79)	(301.22)	**(5,176.88)**

1) Figures exclude the Seoul Office and Jecheon Bio Plant (currently inactive).
2) Unit emissions are calculated based on production volume

Water Management

Category	Unit	2022	2023	2024
Total Water Intake	Ton	1,366,758	851,682	**1,258,972**
Municipal Water Supply	Ton	245,907	220,797	**160,806**
Industrial Water Supply	Ton	1,120,851	630,885	**1,098,166**
Total Water Discharge	Ton	822,801	496,787	**947,399**
Total Water Consumption	Ton	543,957	354,895	**311,573**
Total Wastewater Generation	Ton	822,801	496,787	**947,399**
Total Water Pollutant Discharge	Ton	25.66	18.97	**45.66**
BOD	Ton	1.19	2.95	**5.70**
COD	Ton	3.0	1.6	**1.95**
T-N	Ton	4.14	3.78	**6.35**
T-P	Ton	0.03	0.04	**0.17**
TOC	Ton	7.20	5.66	**7.57**
SS	Ton	10.10	4.94	**23.92**

Energy Management

Category	Unit	2022	2023	2024
Total energy use	TJ	1,637.14	1,569.62	**1,571.83**
Base unit (energy intensity)	TJ/Ton	0.0016	0.0014	**0.0018**
Total Direct energy use	TJ	782.56	761.31	**759.25**
Base unit	TJ/Ton	0.0008	0.0007	**0.0009**
LNG (fuel)	TJ	570.23	629.04	**757.80**
LPG (fuel)	TJ	212.33	132.28	**1.45**
Total Indirect energy use	TJ	872.11	808.3	**813.17**
Base unit (energy intensity)	TJ/Ton	0.0008	0.0007	**0.0009**
Electricity consumption	TJ	550.09	521.67	**578.70**
Heat/steam consumption	TJ	304.49	286.64	**234.47**
Energy reduction Performance[1)]	TJ	(50.83)	67.52	**(2.21)**
Total Carbon Intensity	tCO_2eq/TJ	49.18	51.49	**54.71**
Direct energy	tCO_2eq/TJ	66.33	71.66	**75.08**
Indirect energy	tCO_2eq/TJ	32.81	32.50	**35.66**

1) Year-over-Year Change

DATA

Air Pollution Management

Category	Unit	2022	2023	2024
Total Air Pollutant Emissions	Ton	32.87	30.77	**41.27**
Particulate Matter (PM)	Ton	3.60	4.75	**6.65**
NOx	Ton	28.17	22.38	**30.37**
SOx	Ton	1.10	3.64	**4.25**

Waste Management*

Category	Unit	2022	2023	2024
Total waste generation	Ton	23,620.03	30,241.08	**31,802.18**
Base unit (percentage compared to production)	Ton/Ton	0.0230	0.0280	**0.0364**
Incineration (On-site)	Ton	0.00	0.00	**0.00**
Incineration (Commissioned)	Ton	1,550.65	4,323.29	**4,979.92**
Landfilling (On-site)	Ton	0.00	0.00	**0.00**
Landfilling (Commissioned)	Ton	9,806.93	13,876.88	**15,674.39**
Neutralization	Ton	0.00	0.00	**0.00**
Total Waste Recycled	Ton	12,262.45	12,029.06	**11,147.87**
On-site Recycling Amount	Ton	0.00	0.00	**0.00**
Off-site Recycling Amount	Ton	12,262.45	12,029.06	**11,147.87**
Total Waste Recycling Rate	%	51.92	39.78	**35.05**

* Allbaro System Data

Hazardous Chemical Management

Category	Unit	2022	2023	2024
Total Consumption	Ton	106,177.11	123,082.54	**136,658.15**
Number of Spill Incidents	Cases	0	0	**0**

Environmental Compliance*

Category	Unit	2022	2023	2024
Violation of environmental regulations	Cases	0	0	**0**

*Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

Eco-friendly Investment

Category	Unit	2022	2023	2024
Total Investment Cost	KRW million	7,089	8,333	**11,082**
Facility Management Cost	KRW million	6,247	7,971	**6,411**
Facility Investment Cost	KRW million	842	361	**4,671**

DATA

Sihwa Plant

GHG Management

Category	Unit	2022	2023	2024
Total GHG emissions	tCO_2eq	17,607.76	15,516.18	**15,083.80**
Direct emissions (Scope1)	tCO_2eq	8,076.23	7,638.65	**7,703.08**
Indirect emissions (Scope2)	tCO_2eq	9,531.53	7,877.53	**7,380.73**
Base unit emissions[1)]	tCO_2eq/Ton	0.04	0.04	**0.05**
GHG reduction performance	tCO_2eq	631.75	2,091.58	**432.38**

1) Unit emissions are calculated based on production volume.

Water Management

Category	Unit	2022	2023	2024
Total Water Intake	Ton	213,194	156,179	**149,460**
Municipal Water Supply	Ton	18,392	17,878	**16,726**
Industrial Water Supply	Ton	194,802	138,301	**132,734**
Total Water Discharge	Ton	61,295	46,860	**53,893**
Total Water Consumption	Ton	151,899	109,319	**95,567**
Total Wastewater Generation	Ton	61,295	46,860	**53,893**
Total Water Pollutant Discharge	Ton	5.80	3.23	**2.16**
BOD	Ton	0.40	0.15	**0.32**
COD	Ton	2.60	1.60	**0.00**
T-N	Ton	0.30	0.18	**0.29**
T-P	Ton	0.00	0.00	**0.02**
TOC	Ton	1.70	0.96	**1.27**
SS	Ton	0.80	0.34	**0.26**

Energy Management

Category	Unit	2022	2023	2024
Total energy use	TJ	388.26	343.54	**330.99**
Base unit (energy intensity)	TJ/Ton	0.0010	0.0009	**0.0010**
Total Direct energy use	TJ	157.50	148.95	**142.99**
Base unit	TJ/Ton	0.0004	0.0004	**0.0010**
LNG (fuel)	TJ	157.50	148.95	**142.99**
LPG (fuel)	TJ	0.00	0.00	**0.00**
Total Indirect energy use	TJ	230.76	194.59	**188.00**
Base unit (energy intensity)	TJ/Ton	0.0006	0.0005	**0.0006**
Electricity consumption	TJ	151.32	137.40	**127.00**
Heat/steam consumption	TJ	79.44	57.19	**61.00**
Energy reduction Performance[1)]	TJ	14.44	44.72	**12.55**
Total Carbon Intensity	tCO_2eq/TJ	45.35	45.17	**45.57**
Direct energy	tCO_2eq/TJ	51.28	51.28	**53.87**
Indirect energy	tCO_2eq/TJ	41.31	40.48	**39.26**

1) Year-over-Year Change

DATA

Air Pollution Management

Category	Unit	2022	2023	2024
Total Air Pollutant Emissions	Ton	4.33	3.64	**9.78**
Particulate Matter (PM)	Ton	0.50	0.20	**0.56**
NOx	Ton	3.66	3.38	**9.22**
SOx	Ton	0.17	0.06	**0.004**

Waste Management

Category	Unit	2022	2023	2024
Total waste generation	Ton	5,528.98	4,790.96	**3,074.55**
Base unit (percentage compared to production)	Ton/Ton	0.0138	0.0127	**0.0096**
Incineration (On-site)	Ton	0.00	0.00	**0.00**
Incineration (Commissioned)	Ton	577.69	996.6	**1,130.26**
Landfilling (On-site)	Ton	0.00	0.00	**0.00**
Landfilling (Commissioned)	Ton	56.72	17.04	**0.00**
Neutralization	Ton	0.00	0.00	**0.00**
Total Waste Recycled	Ton	4,894.57	3,777.32	**1,944.29**
On-site Recycling Amount	Ton	0.00	0.00	**0.00**
Off-site Recycling Amount	Ton	4,894.57	3,777.32	**1,944.29**
Total Waste Recycling Rate	%	88.53	78.84	**63.24**

Hazardous Chemical Management

Category	Unit	2022	2023	2024
Total Consumption	Ton	12,369.63	13,162.32	**11,763.27**
Number of Spill Incidents	Cases	0	0	**0**

Environmental Compliance*

Category	Unit	2022	2023	2024
Violation of environmental regulations	Cases	0	0	**0**

*Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

Eco-friendly Investment

Category	Unit	2022	2023	2024
Total Investment Cost	KRW million	2,632	3,062	**3,741**
Facility Management Cost	KRW million	2,474	2,987	**2,346**
Facility Investment Cost	KRW million	158	75	**1,395**

DATA

Pyeongtaek Bio Plant 1

GHG Management

Category	Unit	2022	2023	2024
Total GHG emissions	tCO_2eq	11,760.68	11,716.83	**12,268.01**
Direct emissions (Scope1)	tCO_2eq	6,026.63	5,919.34	**6,734.98**
Indirect emissions (Scope2)	tCO_2eq	5,734.05	5,797.48	**5,533.03**
Base unit emissions[1]	tCO_2eq/Ton	0.04	0.04	**0.05**
GHG reduction performance	tCO_2eq	(2,395.18)	43.85	**(551.19)**

1) Unit emissions are calculated based on production volume.

Water Management

Category	Unit	2022	2023	2024
Total Water Intake	Ton	132,169	125,965	**101,766**
Municipal Water Supply	Ton	132,169	125,965	**101,766**
Industrial Water Supply	Ton	0.00	0.00	**0.00**
Total Water Discharge	Ton	11,258	3,292	**10,289**
Total Water Consumption	Ton	120,911	122,673	**91,477**
Total Wastewater Generation	Ton	11,258	3,292	**10,289**
Total Water Pollutant Discharge	Ton	All Wastewater Commissioned Treatment	All Wastewater Commissioned Treatment	**All Wastewater Commissioned Treatment**
BOD	Ton			
COD	Ton			
T-N	Ton			
T-P	Ton			
TOC	Ton			
SS	Ton			

Energy Management

Category	Unit	2022	2023	2024
Total energy use	TJ	463.66	467.28	**421.00**
Base unit (energy intensity)	TJ/Ton	0.0015	0.0014	**0.0016**
Total Direct energy use	TJ	118.79	116.69	**132.28**
Base unit	TJ/Ton	0.0004	0.0004	**0.0005**
LNG (fuel)	TJ	118.79	116.69	**132.28**
LPG (fuel)	TJ	0.00	0.00	**0.00**
Total Indirect energy use	TJ	344.87	350.59	**289.09**
Base unit (energy intensity)	TJ/Ton	0.0011	0.0011	**0.0011**
Electricity consumption	TJ	119.82	121.15	**115.62**
Heat/steam consumption	TJ	225.05	229.44	**173.47**
Energy reduction Performance[1]	TJ	(61.72)	(3.62)	**46.28**
Total Carbon Intensity	tCO_2eq/TJ	25.36	25.07	**29.14**
Direct energy	tCO_2eq/TJ	50.73	50.73	**50.92**
Indirect energy	tCO_2eq/TJ	16.63	16.54	**19.14**

1) Year-over-Year Change

DATA

Air Pollution Management

Category	Unit	2022	2023	2024
Total Air Pollutant Emissions	Ton	2.92	2.85	**2.71**
Particulate Matter (PM)	Ton	0.06	0.19	**0.08**
NOx	Ton	2.71	2.38	**2.61**
SOx	Ton	0.15	0.28	**0.02**

Waste Management

Category	Unit	2022	2023	2024
Total waste generation	Ton	1,958.45	3,589.94	**4,978.45**
Base unit (percentage compared to production)	Ton/Ton	0.0060	0.0110	**0.0193**
Incineration (On-site)	Ton	0.00	0.00	**0.00**
Incineration (Commissioned)	Ton	240.56	221.85	**158.81**
Landfilling (On-site)	Ton	0.00	0.00	**0.00**
Landfilling (Commissioned)	Ton	14.11	62.57	**249.59**
Neutralization	Ton	0.00	0.00	**0.00**
Total Waste Recycled	Ton	1,723.58	3,368.09	**4,570.05**
On-site Recycling Amount	Ton	0.00	0.00	**0.00**
Off-site Recycling Amount	Ton	1,723.58	3,368.09	**4,570.05**
Total Waste Recycling Rate	%	88.01	93.82	**91.80**

Hazardous Chemical Management

Category	Unit	2022	2023	2024
Total Consumption	Ton	14,696.58	14,102.29	**12,145.90**
Number of Spill Incidents	Cases	0	0	**0**

Environmental Compliance*

Category	Unit	2022	2023	2024
Violation of environmental regulations	Cases	0	0	**0**

*Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

Eco-friendly Investment

Category	Unit	2022	2023	2024
Total Investment Cost	KRW million	1,424	1,106	**950**
Facility Management Cost	KRW million	712	1,077	**5**
Facility Investment Cost	KRW million	712	29	**945**

DATA

Pyeongtaek Bio Plant 2

GHG Management

Category	Unit	2022	2023	2024
Total GHG emissions	tCO_2eq	10,885.80	12,247.82	**5,428.03**
Direct emissions (Scope1)	tCO_2eq	8,854.22	10,160.74	**4,459.24**
Indirect emissions (Scope2)	tCO_2eq	2,031.58	2,087.08	**968.78**
Base unit emissions[1)]	tCO_2eq/Ton	0.07	0.07	**0.07**
GHG reduction performance	tCO_2eq	14.21	(1,362.02)	**6,819.79**

1) Unit emissions are calculated based on production volume.

Water Management

Category	Unit	2022	2023	2024
Total Water Intake	Ton	84,868	66,825	**30,242**
Municipal Water Supply	Ton	84,868	66,825	**30,242**
Industrial Water Supply	Ton	0.00	0.00	**0.00**
Total Water Discharge	Ton	1,243	1,147	**361**
Total Water Consumption	Ton	83,625	65,678	**29,881**
Total Wastewater Generation	Ton	1,243	1,147	**361**
Total Water Pollutant Discharge	Ton	All Wastewater Commissioned Treatment	All Wastewater Commissioned Treatment	**All Wastewater Commissioned Treatment**
BOD	Ton			
COD	Ton			
T-N	Ton			
T-P	Ton			
TOC	Ton			
SS	Ton			

Energy Management

Category	Unit	2022	2023	2024
Total energy use	TJ	217.15	244.09	**108.00**
Base unit (energy intensity)	TJ/Ton	0.0013	0.0013	**0.0015**
Total Direct energy use	TJ	174.69	200.47	**87.98**
Base unit	TJ/Ton	0.0011	0.0011	**0.0012**
LNG (fuel)	TJ	174.69	200.47	**87.98**
LPG (fuel)	TJ	0.00	0.00	**0.00**
Total Indirect energy use	TJ	42.45	43.61	**20.24**
Base unit (energy intensity)	TJ/Ton	0.0003	0.0002	**0.0003**
Electricity consumption	TJ	42.45	43.61	**20.24**
Heat/steam consumption	TJ	0.00	0.00	**0.00**
Energy reduction Performance[1)]	TJ	0.27	(26.94)	**136.09**
Total Carbon Intensity	tCO_2eq/TJ	50.13	50.18	**50.26**
Direct energy	tCO_2eq/TJ	50.69	50.68	**50.68**
Indirect energy	tCO_2eq/TJ	47.86	47.86	**47.86**

1) Year-over-Year Change

DATA

Air Pollution Management

Category	Unit	2022	2023	2024
Total Air Pollutant Emissions	Ton	5.05	5.19	**2.29**
Particulate Matter (PM)	Ton	0.06	0.45	**0.04**
NOx	Ton	4.99	4.74	**2.23**
SOx	Ton	0.00	0.00	**0.02**

Waste Management

Category	Unit	2022	2023	2024
Total waste generation	Ton	41.27	641.95	**361.46**
Base unit (percentage compared to production)	Ton/Ton	0.0003	0.0035	**0.0049**
Incineration (On-site)	Ton	0.00	0.00	**0.00**
Incineration (Commissioned)	Ton	0.00	0.00	**0.00**
Landfilling (On-site)	Ton	0.00	0.00	**0.00**
Landfilling (Commissioned)	Ton	0.00	0.00	**0.00**
Neutralization	Ton	0.00	0.00	**0.00**
Total Waste Recycled	Ton	0.00	641.95	**361.46**
On-site Recycling Amount	Ton	0.00	0.00	**0.00**
Off-site Recycling Amount	Ton	0.00	641.95	**361.46**
Total Waste Recycling Rate	%	0.00	100	**100**

Hazardous Chemical Management

Category	Unit	2022	2023	2024
Total Consumption	Ton	9,131.89	8,666.57	**3,785.95**
Number of Spill Incidents	Cases	0	0	**0**

Environmental Compliance*

Category	Unit	2022	2023	2024
Violation of environmental regulations	Cases	0	0	**0**

*Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

Eco-friendly Investment

Category	Unit	2022	2023	2024
Total Investment Cost	KRW million	43	254	**109**
Facility Management Cost	KRW million	43	194	**1**
Facility Investment Cost	KRW million	0	60	**108**

DATA

Gunsan Recycling Plant

GHG Management

Category	Unit	2022	2023	2024
Total GHG emissions	tCO_2eq	21,298.91	29,116.83	**33,658.98**
Direct emissions (Scope1)	tCO_2eq	16,617.24	23,154.31	**25,658.71**
Indirect emissions (Scope2)	tCO_2eq	4,681.67	5,962.53	**8,000.27**
Base unit emissions[1]	tCO_2eq/Ton	0.17	0.17	**0.17**
GHG reduction performance	tCO_2eq	(2,563.98)	(7,817.92)	**(4,542.15)**

1) Unit emissions are calculated based on production volume.

Water Management

Category	Unit	2022	2023	2024
Total Water Intake	Ton	126,137	154,066	**182,352**
Municipal Water Supply	Ton	5,457	4,154	**6,130**
Industrial Water Supply	Ton	120,680	149,912	**176,222**
Total Water Discharge	Ton	96,564	137,623	**141,341**
Total Water Consumption	Ton	29,573	16,443	**41,011**
Total Wastewater Generation	Ton	96,564	137,623	**141,341**
Total Water Pollutant Discharge	Ton	1.79	2.71	**9.13**
BOD	Ton	0.09	0.50	**0.88**
COD	Ton	0.40	0.00	**1.95**
T-N	Ton	0.50	0.80	**1.84**
T-P	Ton	0.00	0.01	**0.10**
TOC	Ton	0.30	0.80	**1.10**
SS	Ton	0.50	0.60	**3.26**

Energy Management

Category	Unit	2022	2023	2024
Total energy use	TJ	217.08	287.60	**343.83**
Base unit (energy intensity)	TJ/Ton	0.0017	0.0017	**0.0017**
Total Direct energy use	TJ	119.25	163.00	**176.65**
Base unit	TJ/Ton	0.0009	0.0010	**0.0009**
LNG (fuel)	TJ	119.25	162.93	**175.20**
LPG (fuel)	TJ	0.00	0.07	**1.45**
Total Indirect energy use	TJ	97.83	124.60	**167.18**
Base unit (energy intensity)	TJ/Ton	0.0008	0.0007	**0.0008**
Electricity consumption	TJ	97.83	124.60	**167.18**
Heat/steam consumption	TJ	0.00	0.00	**0.00**
Energy reduction Performance[1]	TJ	(14.55)	(70.51)	**(56.23)**
Total Carbon Intensity	tCO_2eq/TJ	98.12	101.24	**97.89**
Direct energy	tCO_2eq/TJ	139.35	142.05	**145.25**
Indirect energy	tCO_2eq/TJ	47.86	47.85	**47.86**

1) Year-over-Year Change

DATA

Air Pollution Management

Category	Unit	2022	2023	2024
Total Air Pollutant Emissions	Ton	16.50	13.60	**21.18**
Particulate Matter (PM)	Ton	2.70	3.50	**4.94**
NOx	Ton	13.10	6.80	**12.03**
SOx	Ton	0.7	3.3	**4.21**

Waste Management

Category	Unit	2022	2023	2024
Total waste generation	Ton	14,737.40	20,282.10	**21,893.54**
Base unit (percentage compared to production)	Ton/Ton	0.1167	0.1184	**0.1096**
Incineration (On-site)	Ton	0.00	0.00	**0.00**
Incineration (Commissioned)	Ton	457.50	2,907.59	**3,494.75**
Landfilling (On-site)	Ton	0.00	0.00	**0.00**
Landfilling (Commissioned)	Ton	9,736.10	13,748.30	**15,203.10**
Neutralization	Ton	0.00	0.00	**0.00**
Total Waste Recycled	Ton	4,543.80	3,626.26	**3,195.69**
On-site Recycling Amount	Ton	0.00	0.00	**0.00**
Off-site Recycling Amount	Ton	4,543.80	3,626.26	**3,195.69**
Total Waste Recycling Rate	%	30.83	17.88	**14.60**

Hazardous Chemical Management

Category	Unit	2022	2023	2024
Total Consumption	Ton	53,915.01	74,494.89	**88,631.03**
Number of Spill Incidents	Cases	0	0	**0**

Environmental Compliance*

Category	Unit	2022	2023	2024
Violation of environmental regulations	Cases	0	0	**0**

*Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

Eco-friendly Investment

Category	Unit	2022	2023	2024
Total Investment Cost	KRW million	3,046	3,712	**5,880**
Facility Management Cost	KRW million	2,776	3,569	**3,930**
Facility Investment Cost	KRW million	270	143	**1,951**

DATA

Gunsan Fine Chemicals Plant

GHG Management

Category	Unit	2022	2023	2024
Total GHG emissions	tCO_2eq	18,969.11	12,225.82	**19,561.54**
Direct emissions (Scope1)	tCO_2eq	12,333.32	7,683.49	**12,447.20**
Indirect emissions (Scope2)	tCO_2eq	6,635.78	4,542.32	**7,114.34**
Base unit emissions[1]	tCO_2eq/Ton	0.86	0.69	**0.86**
GHG reduction performance	tCO_2eq	620.41	6,743.29	**(7,335.71)**

1) Unit emissions are calculated based on production volume.

Water Management

Category	Unit	2022	2023	2024
Total Water Intake	Ton	810,390	348,647	**795,152**
Municipal Water Supply	Ton	5,021	5,975	**5,942**
Industrial Water Supply	Ton	805,369	342,672	**789,210**
Total Water Discharge	Ton	652,441	307,865	**741,515**
Total Water Consumption	Ton	157,949	40,782	**53,637**
Total Wastewater Generation	Ton	652,441	307,865	**741,515**
Total Water Pollutant Discharge	Ton	18.07	13.03	**34.37**
BOD	Ton	0.70	2.30	**4.50**
COD	Ton	0.00	0.00	**0.00**
T-N	Ton	3.34	2.80	**4.22**
T-P	Ton	0.03	0.03	**0.05**
TOC	Ton	5.20	3.90	**5.20**
SS	Ton	8.80	4.00	**20.40**

Energy Management

Category	Unit	2022	2023	2024
Total energy use	TJ	350.99	227.12	**368.01**
Base unit (energy intensity)	TJ/Ton	0.016	0.0129	**0.02**
Total Direct energy use	TJ	212.33	132.21	**219.35**
Base unit	TJ/Ton	0.0097	0.0075	**0.0097**
LNG (fuel)	TJ	212.33	132.21	**219.35**
LPG (fuel)	TJ	0.00	0.00	**0.00**
Total Indirect energy use	TJ	138.66	94.92	**148.66**
Base unit (energy intensity)	TJ/Ton	0.0063	0.0054	**0.0066**
Electricity consumption	TJ	138.66	94.92	**148.66**
Heat/steam consumption	TJ	0.00	0.00	**0.00**
Energy reduction Performance[1]	TJ	10.73	123.87	**(140.89)**
Total Carbon Intensity	tCO_2eq/TJ	54.04	53.83	**53.15**
Direct energy	tCO_2eq/TJ	58.09	58.12	**56.75**
Indirect energy	tCO_2eq/TJ	47.86	47.85	**47.86**

1) Year-over-Year Change

DATA

Air Pollution Management

Category	Unit	2022	2023	2024
Total Air Pollutant Emissions	Ton	4.07	5.493	**5.31**
Particulate Matter (PM)	Ton	0.28	0.41	**1.03**
NOx	Ton	3.71	5.08	**4.28**
SOx	Ton	0.08	0.003	**0.00**

Waste Management

Category	Unit	2022	2023	2024
Total waste generation	Ton	1,375.43	861.04	**1,494.18**
Base unit (percentage compared to production)	Ton/Ton	0.0627	0.0488	**0.0660**
Incineration (On-site)	Ton	0.00	0.00	**0.00**
Incineration (Commissioned)	Ton	274.90	197.25	**196.10**
Landfilling (On-site)	Ton	0.00	0.00	**0.00**
Landfilling (Commissioned)	Ton	0.00	48.97	**221.70**
Neutralization	Ton	0.00	0.00	**0.00**
Total Waste Recycled	Ton	1,100.50	615.44	**1,076.38**
On-site Recycling Amount	Ton	0.00	0.00	**0.00**
Off-site Recycling Amount	Ton	1,100.50	615.44	**1,076.38**
Total Waste Recycling Rate	%	80.01	71.48	**72.04**

Hazardous Chemical Management

Category	Unit	2022	2023	2024
Total Consumption	Ton	16,064.00	12,471.49	**20,332.00**
Number of Spill Incidents	Cases	0	0	**0**

Environmental Compliance*

Category	Unit	2022	2023	2024
Violation of environmental regulations	Cases	0	0	**0**

*Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

Eco-friendly Investment

Category	Unit	2022	2023	2024
Total Investment Cost	KRW million	655	199	**401**
Facility Management Cost	KRW million	242	144	**129**
Facility Investment Cost	KRW million	413	55	**272**

DATA

Social

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Employee Status by Gender

Category	Unit	2022	2023	2024
Total employees	Persons	373	416	**446**
Male	Persons	332	368	**400**
	%[1]	89.0	88.5	**89.7**
Female	Persons	41	48	**46**
	%[2]	11.0	11.5	**10.3**

1) (Number of male employees / Total number of employees) × 100
2) (Number of female employees / Total number of employees) × 100

Employee Status by Contract Type

Category	Unit	2022	2023	2024
Executive Management	Persons	16	19	**17**
Permanent Employees	Persons	347	377	**436**
Male	Persons	312	337	**392**
	%	89.8	89.4	**89.9**
Female	Persons	35	40	**44**
	%	10.1	10.6	**10.1**
Fixed-term Employees	Persons	10	20	**10**
Male	Persons	5	14	**8**
	%	50	70	**80**
Female	Persons	5	6	**2**
	%	50	30	**20**
Non-affiliated Workers	Persons	0	0	**2**
Male	Persons	0	0	**0**
	%	0	0	**0**
Female	Persons	0	0	**2**
	%	0	0	**100**

Employee Status by Job Position

Category	Unit	2022	2023	2024
Executive	Persons	16	19	**17**
	%	4.3	4.6	**3.8**
Male	Persons	15	17	**16**
	%	93.8	89.5	**94.1**
Female	Persons	1	2	**1**
	%	6.3	10.5	**5.9**
General Manager	Persons	6	15	**14**
	%	1.6	3.6	**3.1**
Male	Persons	5	14	**13**
	%	83.3	93.3	**92.9**
Female	Persons	1	1	**1**
	%	16.7	6.7	**7.1**
Deputy General Manager	Persons	23	15	**17**
	%	6.2	3.6	**3.8**
Male	Persons	23	15	**17**
	%	100.0	100.0	**100.0**
Female	Persons	0	0	**0**
	%	0.0	0.0	**0.0**
Manager	Persons	19	29	**40**
	%	5.1	7.0	**9.0**
Male	Persons	17	26	**34**
	%	89.5	89.7	**85.0**
Female	Persons	2	3	**6**
	%	10.5	10.3	**15.0**
Assistant Manager	Persons	40	35	**37**
	%	10.7	8.4	**8.3**
Male	Persons	31	28	**30**
	%	77.5	80.0	**81.1**
Female	Persons	9	7	**7**
	%	22.5	20.0	**18.9**
Staff	Persons	269	303	**321**
	%	72.1	72.8	**72.0**
Male	Persons	255	277	**290**
	%	94.8	91.4	**90.3**
Female	Persons	14	26	**31**
	%	5.2	8.6	**9.7**

DATA

Employee Status by Age

Category	Unit	2022	2023	2024
Under 30	Persons	66	100	**119**
	%	17.7	24.0	**26.7**
30-49	Persons	252	260	**265**
	%	67.6	62.5	**59.4**
50 or older	Persons	55	56	**62**
	%	14.7	13.5	**13.9**

Remuneration Status

Category	Unit	2022	2023	2024
Total Annual Salary Amount	KRW Million	23,331	26,098	**25,273**
Total Annual Salary Amount for Males	KRW Million	21,481	23,738	**23,121**
Total Annual Salary Amount for Females	KRW Million	1,850	2,360	**2,152**
Average Annual Salary per Employee (Overall)	KRW Million	45	49	**44**
Average Annual Salary per Male Employee	KRW Million	46	49	**45**
Average Annual Salary per Male Employee	KRW Million	36	45	**35**
Basic Salary and Compensation Ratio of Females Compared to Males	KRW Million	77.3	90.6	**78.9**
Average Compensation per Employee	KRW Million	45	49	**44**

Hiring and Turnover Status

Category	Unit	2022	2023	2024
Total Number of New Hires	Persons	139	170	**160**
Number of Male New Hires	Persons	127	157	**145**
Number of Female New Hires	Persons	12	13	**15**
Under 30	Persons	47	68	**78**
30-49	Persons	89	90	**73**
50 or older	Persons	3	12	**9**
Number of Voluntary Resignations	Persons	155	115	**145**
Average Length of Service	Years	4.5	4.1	**4.4**

Training Status

Category	Unit	2022	2023	2024
Total Number of New Hires	Persons	547	540	**663**
Number of Male New Hires	Hours	5,592	7,274	**5,701**
Number of Female New Hires	Hours	10.2	13.5	**8.6**
Total Amount of Training Cost	KRW Million	24	50	**86**
Training Cost per Persons	KRW Million	0.04	0.09	**0.13**

Employee Benefits Utilization Status

Category	Unit	2022	2023	2024
Employees on Maternity Leave	Persons	0	0	**3**
Employees on Parental Leave	Persons	0	0	**4**
Female	Persons	0	0	**2**
Male	Persons	0	0	**2**
Employees Returned from Parental Leave	Persons	0	0	**2**[1)]
Female	Persons	0	0	**0**
Male	Persons	0	0	**2**

1) As of September 2024

DATA

Diversity and Inclusion

Category	Unit	2022	2023	2024
Female Managerial Staff[1)]	%	6.3	7.7	**9.1**
Total Number of Minority Group Employees	Persons	44	44	**49**
Foreign Nationals	Persons	33	33	**37**
Persons with Disabilities	Persons	11	11	**12**

1) Manager level and above

Organizational Culture

Category	Unit	2022	2023	2024
Cyber Ombudsman Registration	Cases	0	0	4
Total Number of Labor-management Council members	Persons	24	24	24
Number of Labor-Management Council Meetings Held	Cases	16	16	16

Partners and Supply Chain

Category	Unit	2022	2023	2024
Total Number of Partner Companies	Number of Companies	288	279	**279**
Number of Key Partner Companies[1)]	Number of Companies	30	26	**15**
Total Purchase Cost	KRW Million	908,979	848,854	**707,045**
Purchase Cost from Key Partners	KRW Million	589,215	547,115	**376,768**

1) Transaction amount over KRW 10 Billion

Community and Social Contribution

Category	Unit	2022	2023	2024
Donations	KRW Million	259.71	268.87	**68.60**
Number of Scholarship Recipients at DANSUK Foundation	Persons	18	17	**20**
Scholarship Amount	KRW Million	48.5	46.5	**52.0**

Information Security

Category	Unit	2022	2023	2024
Number of Personal Date Breaches and Incidents	Cases	0	0	**0**

DATA

Safety and Health

Sihwa Plant

Occupational Safety and Health Incidents

Category	Unit	2022	2023	2024
Employees Covered by the Occupational Safety and Health Management System	Persons	163	176	**171**
	%	100	100	**100**
Number of Fatalities	Persons	0	0	**0**
	%	0.00	0.00	**0.00**
Industrial Accident Rate[1)]	%	0.00	0.00	**0.00**

1) Industrial Accident Rate = ((Number of Accident Cases + Number of Occupational Disease Cases)/ Number of Employees Covered by Industrial Accident Insurance)*100

Safety and Health Investment

Category	Unit	2022	2023	2024
Safety and Health Investment Costs	KRW Million	362	471	**487**

Safety and Health Compliance*

Category	Unit	2022	2023	2024
Number of Safety and Health Regulation Violations	Cases	0	0	**0**

* Includes cases where the fine per violation is USD 10,000 or more

Training Status*

Category	Unit	2022	2023	2024
Training Hours	Hours	4,624	4,332	**4,012**
Training Hours per Person	Hours	29	25	**23**
Number of Employees Who Completed Training	Persons	161	172	**174**

* Data changes due to changes in calculation method

Safety Inspection and Audit

Category	Unit	2022	2023	2024
Safety and Health System Operation Inspection	Times	34	34	**43**
Number of Occupational Safety and Health Committee Meetings Held	Times	4	4	**4**
Joint Safety and Health Inspections with Partner Companies	Times	12	12	**12**
Workplace Risk Assessment[1)]	Times	3	12	**42**

1) Data changes due to changes in calculation method

Safety and Health Activities

Category	Unit	2022	2023	2024
Total Health Checkup Support	Times	6	4	**10**
On-site Health Examinations (General & Special)	Times	4	2	**3**
Support for Cholesterol Test Fees (Additional)	Persons	75	84	**235**
Provision of Cholesterol Testing Opportunities (Additional)	Times	2	2	**7**
Total Health Support	Times	245	272	**346**
Participation in Regular Internal Health Consultations	Times	132	118	**199**
Number of Vaccination Participants	Persons	78	74	**80**
Vaccination Rate	%	47.9	42	**46.8**
Participation in Regular Outsourced Worker Health Consultations	Times	113	154	**147**

DATA

Pyeongtaek Bio Plant 1

Occupational Safety and Health Incidents

Category	Unit	2022	2023	2024
Employees Covered by the Occupational Safety and Health Management System	Persons	35	45	**49**
	%	100	100	**100**
Number of Fatalities	Persons	0	0	**0**
	%	0.00	0.00	**0.00**
Industrial Accident Rate[1)]	%	0.00	0.00	**0.00**

1) Industrial Accident Rate = ((Number of Accident Cases + Number of Occupational Disease Cases)/ Number of Employees Covered by Industrial Accident Insurance)*100

Safety and Health Investment

Category	Unit	2022	2023	2024
Safety and Health Investment Costs	KRW Million	106	211	**146**

Safety and Health Compliance*

Category	Unit	2022	2023	2024
Number of Safety and Health Regulation Violations	Cases	0	0	**0**

* Includes cases where the fine per violation is USD 10,000 or more

Training Status*

Category	Unit	2022	2023	2024
Training Hours	Hours	1,953	2,452	**1,891**
Training Hours per Person	Hours	47	53	**37**
Number of Employees Who Completed Training	Persons	42	46	**51**

* Data changes due to changes in calculation method

Safety Inspection and Audit

Category	Unit	2022	2023	2024
Safety and Health System Operation Inspection	Times	30	30	**34**
Number of Occupational Safety and Health Committee Meetings Held	Times	4	4	**4**
Joint Safety and Health Inspections with Partner Companies	Times	4	4	**4**
Workplace Risk Assessment[1)]	Times	2	2	**2**

1) Data changes due to changes in calculation method

Safety and Health Activities

Category	Unit	2022	2023	2024
Total Health Checkup Support	Times	2	2	**2**
On-site Health Examinations (General & Special)	Times	2	2	**2**
Total Health Support	Times	60	71	**67**
Participation in Regular Internal Health Consultations	Times	0	0	**0**
Number of Vaccination Participants	Persons	21	28	**19**
Vaccination Rate	%	60	62.2	**38.8**
Participation in Regular Outsourced Worker Health Consultations	Times	39	43	**48**

DATA

Pyeongtaek Bio Plant 2

Occupational Safety and Health Incidents

Category	Unit	2022	2023	2024
Employees Covered by the Occupational Safety and Health Management System	Persons	15	16	1
	%	100	100	100
Number of Fatalities	Persons	0	0	0
	%	0.00	0.00	0.00
Industrial Accident Rate[1)]	%	0.00	0.00	0.00

1) Industrial Accident Rate = ((Number of Accident Cases + Number of Occupational Disease Cases)/ Number of Employees Covered by Industrial Accident Insurance)*100

Safety and Health Investment

Category	Unit	2022	2023	2024
Safety and Health Investment Costs	KRW Million	22	54	25

Safety and Health Compliance*

Category	Unit	2022	2023	2024
Number of Safety and Health Regulation Violations	Cases	0	0	0

* Includes cases where the fine per violation is USD 10,000 or more

Training Status*

Category	Unit	2022	2023	2024
Training Hours	Hours	1,070	1,110	416
Training Hours per Person	Hours	18	16	16
Number of Employees Who Completed Training	Persons	59	69	26

* Data changes due to changes in calculation method

Safety Inspection and Audit

Category	Unit	2022	2023	2024
Safety and Health System Operation Inspection	Times	30	30	17
Number of Occupational Safety and Health Committee Meetings Held	Times	4	4	4
Workplace Risk Assessment[1)]	Times	2	2	2

1) Data changes due to changes in calculation method

Safety and Health Activities

Category	Unit	2022	2023	2024
Total Health Checkup Support	Times	2	2	1
On-site Health Examinations (General & Special)	Times	2	2	1
Total Health Support	Times	16	22	1
Participation in Regular Internal Health Consultations	Times	0	0	0
Number of Vaccination Participants	Persons	3	5	0
Vaccination Rate	%	20	31.3	0
Participation in Regular Outsourced Worker Health Consultations	Times	13	17	1

DATA

Gunsan Recycling Plant

Occupational Safety and Health Incidents

Category	Unit	2022	2023	2024
Employees Covered by the Occupational Safety and Health Management System	Persons	85	94	125
	%	100	100	100
Number of Fatalities	Persons	0	0	0
	%	0.00	0.00	0.00
Industrial Accident Rate[1)]	%	0.00	2.63	2.88

1) Industrial Accident Rate = ((Number of Accident Cases + Number of Occupational Disease Cases)/ Number of Employees Covered by Industrial Accident Insurance)*100

Safety and Health Investment

Category	Unit	2022	2023	2024
Safety and Health Investment Costs	KRW Million	223	549	557

Safety and Health Compliance*

Category	Unit	2022	2023	2024
Number of Safety and Health Regulation Violations	Cases	0	0	0

* Includes cases where the fine per violation is USD 10,000 or more

Training Status*

Category	Unit	2022	2023	2024
Training Hours	Hours	2,778	4,129	3,907
Training Hours per Person	Hours	37	41	32
Number of Employees Who Completed Training	Persons	76	108	122

* Data changes due to changes in calculation method

Safety Inspection and Audit

Category	Unit	2022	2023	2024
Safety and Health System Operation Inspection	Times	42	42	42
Number of Occupational Safety and Health Committee Meetings Held	Times	4	4	4
Joint Safety and Health Inspections with Partner Companies	Times	4	4	4
Workplace Risk Assessment[1)]	Times	2	2	2

1) Data changes due to changes in calculation method

Safety and Health Activities

Category	Unit	2022	2023	2024
Total Health Checkup Support	Times	2	1	1
On-site Health Examinations (General & Special)	Times	2	1	1
Total Health Support	Times	145	161	205
Participation in Regular Internal Health Consultations	Times	0	0	0
Number of Vaccination Participants	Persons	59	58	65
Vaccination Rate	%	69.4	61.7	52
Participation in Regular Outsourced Worker Health Consultations	Times	86	103	140

DATA

Gunsan Fine Chemicals Plant

Occupational Safety and Health Incidents

Category	Unit	2022	2023	2024
Employees Covered by the Occupational Safety and Health Management System	Persons	74	81	**97**
	%	100	100	**100**
Number of Fatalities	Persons	0	0	**0**
	%	0.00	0.00	**0.00**
Industrial Accident Rate[1)]	%	0.00	0.00	**0.00**

1) Industrial Accident Rate = ((Number of Accident Cases + Number of Occupational Disease Cases)/ Number of Employees Covered by Industrial Accident Insurance)*100

Safety and Health Investment

Category	Unit	2022	2023	2024
Safety and Health Investment Costs	KRW Million	122	186	**240**

Safety and Health Compliance*

Category	Unit	2022	2023	2024
Number of Safety and Health Regulation Violations	Cases	0	0	**0**

* Includes cases where the fine per violation is USD 10,000 or more

Training Status*

Category	Unit	2022	2023	2024
Training Hours	Hours	2,912	2,729	**3,786**
Training Hours per Person	Hours	32	37	**44**
Number of Employees Who Completed Training	Persons	90	74	**86**

* Data changes due to changes in calculation method

Safety Inspection and Audit

Category	Unit	2022	2023	2024
Safety and Health System Operation Inspection	Times	42	42	**42**
Number of Occupational Safety and Health Committee Meetings Held	Times	4	4	**4**
Joint Safety and Health Inspections with Partner Companies	Times	4	4	**4**
Workplace Risk Assessment[1)]	Times	2	2	**2**

1) Data changes due to changes in calculation method

Safety and Health Activities

Category	Unit	2022	2023	2024
Total Health Checkup Support	Times	2	1	**1**
On-site Health Examinations (General & Special)	Times	2	1	**1**
Total Health Support	Times	125	130	**137**
Participation in Regular Internal Health Consultations	Times	0	0	**0**
Number of Vaccination Participants	Persons	61	57	**63**
Vaccination Rate	%	82.4	70.4	**64.9**
Participation in Regular Outsourced Worker Health Consultations	Times	64	73	**74**

DATA

Governance

G DATA

Board of Directors

Category	Unit	2022	2023	2024
Number of Board Meetings Held	Times	13	21	**11**
Number of Agenda Items Voted On	Cases	43	60	**20**
Attendance Rate of Inside Directors	%	86	86	**96**
Seung-uk Han	%	100	95.2	**90.9**
Jong-woan Kim	%	92.3	85.7	**100**
Jae-dong Yoo	%	100	100	**100**
Sang-hyuk Koh	%	-	93.3	**100**
Attendance Rate of Outside Directors	%	-	80	**85**
Chung-jin Shim	%	-	78.6	**90.9**
Hwan-seop Yeo	%	-	69.2	**72.7**
Young-ho Choi	%	-	-	**100**
Number of ESG & Sustainability Committee Meetings Held	Times	4	2	**2**

Shareholders with 5% or More Ownership

Category	Unit	2022	2023	2024
Seung-uk Han	Share	1,068,021	2,136,042	**6,408,126**
	%	43.11	36.44	**36.44**
Stonebridge Eco No.1 Private Equity Partnership	Share	850,000	1,090,000	**-**
	%	34.31	18.6	**-**

Ethical Management

Category	Unit	2022	2023	2024
Employees Informed of the Ethics Policy	Persons	373	416	**446**
	%	100	100	**100**
Code of Conduct/Ethics Policy Violations	Cases	0	0	**0**
Number of Employees Dismissed or Disciplined Due to Violations of the Code or Policy	Times	0	0	**0**

Compliance Management and Anti-Corruption

Category	Unit	2022	2023	2024
Number of Corruption Cases	Cases	0	0	**0**
Number of Employees Dismissed or Disciplined Due to Corruption Cases	Cases	0	0	**0**

Compliance*

Category	Unit	2022	2023	2024
Number of Legal/Regulatory Violations	Cases	0	0	**0**
Occurrence of Administrative Fines	Cases	0	0	**0**
Occurrence of Non-Financial Sanctions	Cases	0	0	**0**
Fines Imposed Due to Legal/Regulatory Violations	KRW Million	0	0	**0**

* Data is aggregated only for cases where fines or penalties per violation are USD 10,000 or more

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Reporting Index

GRI Index

GRI 1. Foundation 2021

Category	Report Contents
Statement of use	DS DANSUK is reporting its sustainability management activities in accordance with the GRI Standards, covering the period from January 1, 2024, to December 31, 2024.
GRI 1 used	GRI 1: Foundation 2021
Applicable GRI Sector Standard	As of the publication date, the relevant industry standard for DS DANSUK's major sectors has not been released, and therefore, is not applied.

GRI 2. General Disclosure 2021

Index	No	Disclosure	Pages	Remarks
Organizational profile and reporting principles	2-1	Organizational details	10-11	
	2-2	Entities included in the organization's sustainability reporting	2	
	2-3	Reporting period, frequency and contact point	2	
	2-4	Restatements of information		Footnotes for the updated data are provided at the bottom of each table.
	2-5	External assurance	138-139	
Activities and Workers	2-6	Activities, value chain, and other business relationships	13	
	2-7	Employees	118-119	
	2-8	Workers who are not employees	118	Refer to the business report: Status of Executives and Employees, page 276
Governance	2-9	Governance structure and composition	15, 92	
	2-10	Nomination and selection of the highest governance body	92	
	2-11	Chair of the highest governance body	92	
	2-12	Role of the highest governance body in overseeing the management of impacts	15	
	2-13	Delegation of responsibility for managing impacts	15, 92	
	2-14	Role of the highest governance body in sustainability reporting	15, 92	
	2-15	Conflicts of interest	92	
	2-16	Communication of material topics	15, 93-95	
	2-17	Collective knowledge of the highest governance body	92	
Governance	2-18	Evaluation of the performance of the highest governance body	95	
	2-19	Remuneration policies	95	
	2-20	Process to determine remuneration	95	
	2-21	Annual total compensation ratio		Refer to the business report: Remuneration of Executives page 278
Strategy, policies and practices	2-22	Statement on sustainable development strategy	5-6	
	2-23	Policy commitments	44, 54, 64, 79	
	2-24	Embedding policy commitments	44, 54-55, 64, 79-81	
	2-25	Processes to remediate negative impacts	46, 56, 83, 99	
	2-26	Mechanisms for seeking advice and raising concerns	56, 99	
	2-27	Compliance with laws and regulations	107, 109, 111, 113, 115, 117, 121-126	Refer to the business report: Matters related to sanctions and penalties page 286
	2-28	Membership associations	22, TBD	
Stakeholder Engagement	2-29	Approach to stakeholder engagement	12, 18	
	2-30	Collective bargaining agreements	61	Absence of a collective bargaining agreement

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Reporting Standards by Material Topics and Specific Issues

Index	No	Disclosure	Pages	Remarks
Material Topic	3-1	Process to determine material topics	17-18	
	3-2	List of material topics	19-20	
	3-3	Management of material topics	19-20	

GRI 3. Material Topic 2021_Response to Climate Change

Index	No	Disclosure	Pages	Remarks
Material Topic	3-3	Management of material topics	24	
GRI 305: Emissions 2016	305-1	Direct GHG emission (Scope 1)	31, 106, 108, 110, 112, 114, 116	
	305-2	Energy indirect GHG emission (Scope 2)	31, 106, 108, 110, 112, 114, 116	
	305-4	GHG emissions intensity	31, 106, 108, 110, 112, 114, 116	
	305-5	Reduction of GHG emissions	31, 106, 108, 110, 112, 114, 116	
	305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	31, 106, 108, 110, 112, 114, 116	

GRI 3. Material Topic 2021_Circular economy and industrial innovation

Index	No	Disclosure	Pages	Remarks
Material Topic	3-3	Management of material topics	32	
GRI 301: Materials 2016	301-1	Materials used by weight or volume	35, 37	
	301-2	Recycled input materials used	35, 37	
	301-3	Reclaimed products and their packaging materials	35, 37-38	

GRI 3. Material Topic 2021_ A safe and healthy workplace

Index	No	Disclosure	Pages	Remarks
Material Topic	3-3	Management of material topics	53	
GRI 403: Occupational Safety and Health 2018	403-1	Occupational health and safety management system	44	
	403-2	Hazard identification, risk assessment, and incident investigation	46	
	403-3	Occupational health services	42, 46-48	
	403-4	Worker participation, consultation, and communication on occupational health and safety	43	
	403-5	Worker training on occupational health and safety	52	
	403-6	Promotion of worker health	50, 121-125	
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	46-49, 51	
	403-8	Workers covered by an occupational health and safety management system	121-125	
	403-9	Work-related injuries	121-125	

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GRI 3. Material Topic 2021_An organization for all, a workplace where everyone is respected

Index	No	Disclosure	Pages	Remarks
Material Topic	3-3	Management of material topics	53	
GRI 405: Diversity and equal opportunity 2016	405-1	Diversity of governance bodies and employees	92, 118-120	
	405-2	Ratio of basic salary and remuneration of women to men	119	
GRI 406: Non-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	56, 126	

GRI 3. Material Topic 2021_Growth that Begins with People

Index	No	Disclosure	Pages	Remarks
Material Topic	3-3	Management of material topics	57	
GRI 401: Employment 2016	401-1	New employee hires and employee turnover	119	
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	60	
	401-3	Parental leave	119	
GRI 402: Labor/ Management Relations 2016	402-1	Minimum notice periods regarding operational changes	61	
GRI 404: Training and education 2016	404-1	Average hours of training per year per employee	119	
	404-2	Programs for upgrading employee skills and transition assistance programs	58	
	404-3	Percentage of employees receiving regular performance and career development reviews	59	

GRI 201-207. Economics Topics

Index	No	Disclosure	Pages	Remarks
GRI 201: Economic Performance 2016	201-1	Direct economic value generated and distributed	13, 105	
	201-2	Financial implications and other risks and opportunities due to climate change	27	
	201-3	Defined benefit plan obligations and other retirement plans		Refer to the business report: Employee salaries page 62
GRI 203 Indirect Economic Impacts 2016	203-1	Infrastructure investments and services supported	88	
	203-2	Significant indirect economic impacts	88	
GRI 205: Anti-Corruption 2016	205-2	Communication and training about anti-corruption policies and procedures	99	
	205-3	Confirmed incidents of corruption and actions taken	126	

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GRI 301-308. Environment

Index	No	Disclosure	Pages	Remarks
GRI 302 Energy 2016	302-1	Energy consumption within the organization	106, 108, 110, 112, 114, 116	
	302-3	Energy intensity	106, 108, 110, 112, 114, 116	
	302-4	Reduction of energy consumption	106, 108, 110, 112, 114, 116	
GRI 303 Water and effluents 2018	303-1	Interactions with water as a shared resource	69-70	
	303-2	Water resources significantly affected by withdrawal of water	69-70	
	303-3	Water withdrawal	106, 108, 110, 112, 114, 116	
	303-4	Water discharge	106, 108, 110, 112, 114, 116	
	303-5	Water consumption	106, 108, 110, 112, 114, 116	
GRI 304 Biodiversity 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	75	
	304-2	Significant impacts of activities, products and services on biodiversity	75-76	
	304-3	Habitats protected or restored	77	
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations	75	
GRI 306 Waste 2020	306-1	Waste generation and significant waste-related impacts	71-72	
	306-2	Management of significant waste-related impacts	71-72	
	306-3	Waste generated	107, 109, 111, 113, 115, 117	
	306-4	Waste diverted from disposal	107, 109, 111, 113, 115, 117	
	306-5	Waste directed to disposal	107, 109, 111, 113, 115, 117	
GRI 308 Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	82	
	308-2	Negative environmental impacts in the supply chain and actions taken	82	

GRI 401-418. Society

Index	No	Disclosure	Pages	Remarks
GRI 408 Child Labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor	82	
GRI 409 Forced or Compulsory Labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	82	
GRI 413 Local communities 2016	413-1	Operations with local community engagement, impact assessments, and development programs	77, 88	
	413-2	Operations with significant actual and potential negative impacts on local communities	69-71, 75-76	
GRI 414 Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	82	
	414-2	Negative social impacts in the supply chain and actions taken	82	
GRI 418 Customer Privacy 2016	418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	120	

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ESRS Index

ESRS2. General Disclosures

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ESRS 2 BP-2	Disclosures in relation to specific circumstances	Footnotes provided at the bottom of each data item
ESRS 2 GOV-1	The role of the administrative, management and supervisory bodies	15, 92
ESRS 2 GOV-2	Information provided to and sustainability matters addressed by the undertaking's administrative, management and supervisory bodies	19-20
ESRS 2 GOV-3	Integration of sustainability-related performance in incentive schemes	-
ESRS 2 GOV-4	Statement on sustainability due diligence	15, 17-18
ESRS 2 GOV-5	Risk management and internal controls over sustainability reporting	19-20
ESRS 2 SBM-1	Market position, strategy, business model(s) and value chain	10-11, 13
ESRS 2 SBM-2	Interests and views of stakeholders	12
ESRS 2 SBM-3	Material impacts, risks and opportunities and their interaction with strategy and business model(s)	19-20
ESRS 2 IRO-1	Description of the processes to identify and assess material impacts, risks and opportunities	17-18
ESRS 2 IRO-2	Disclosure Requirements in ESRS covered by the undertaking's sustainability statements	TBD

ESRS E1. Climate Change

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ESRS E1-2	Policies related to climate change mitigation and adaptation	64
ESRS E1-3	Actions and resources in relation to climate change policies	26, 28
ESRS E1-4	Targets related to climate change mitigation and adaptation	28
ESRS E1-5	Energy consumption and mix	106, 108, 110, 112, 114, 116
ESRS E1-6	Gross scopes 1, 2, 3 and total GHG emissions GHG intensity based on net revenue	106, 108, 110, 112, 114, 116
ESRS E1-7	GHG removals and GHG mitigation projects financed through carbon credits	106, 108, 110, 112, 114, 116
ESRS E1-8	Internal carbon pricing	-
ESRS E1-9	Potential financial effects from material physical and transition risks and potential climate-related opportunities	27

ESRS E2. Pollution

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ESRS E2-1	Policies related to pollution	64
ESRS E2-2	Actions and resources related to pollution	65
ESRS E2-3	Targets related to pollution	-
ESRS E2-4	Pollution of air, water and soil	106-117
ESRS E2-5	Substances of concern and substances of very high concern	67
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ESRS E3. Water and Marine Resources

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ESRS E3-2	Actions and resources related to water and marine resources policies 74 ESRS	-
ESRS E3-3	Targets related to water and marine resources	-
ESRS E3-4	Water consumption	106, 108, 110, 112, 114, 116
ESRS E3-5	Potential financial effects from water and marine resources-related impacts, risks and opportunities	-

ESRS E4. Biodiversity and Ecosystems

Indicator No.	Title	Pages
ESRS E4-1	Transition plan on biodiversity and ecosystems	-
ESRS E4-2	Policies related to biodiversity and ecosystems	-
ESRS E4-3	Actions and resources related to biodiversity and ecosystems	-
ESRS E4-4	Targets related to biodiversity and ecosystems	-
ESRS E4-5	Impact metrics related to biodiversity and ecosystems change	75-77
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ESRS E5. Resource Use and Circular Economy

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ESRS E5-2	Actions and resources related to resource use and circular economy	-
ESRS E5-3	Targets related to resource use and circular economy	33-34, 37, 40
ESRS E5-4	Resource inflows	35, 37
ESRS E5-5	Resource outflows	13, 107, 109, 111, 113, 115, 117
ESRS E5-6	Potential financial effects from resource use and circular economy-related impacts, risks and opportunities	-

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ESRS S1-2	Processes for engaging with own workers and workers' representatives about impacts	-
ESRS S1-3	Channels for own workers and workers' representatives to raise concerns	56
ESRS S1-4	Taking action on material impacts on own workforce, and approaches to mitigating material risks and pursuing material opportunities related to own workforce, and effectiveness of those actions	55-56
ESRS S1-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	55-56
ESRS S1-6	Characteristics of the Undertaking's Employees	118-119
ESRS S1-7	Characteristics of non-employee workers in the undertaking's own workforce	118-119
ESRS S1-8	Percentage of employees covered by collective bargaining agreements, reasons and actions for those not covered by collective agreements	61
ESRS S1-9	Employee Diversity Indicators	120
ESRS S1-10	Methodology for calculating fair wages, percentage of employees receiving wages below the fair wage	-
ESRS S1-11	Social security and public assistance programs	88
ESRS S1-12	Disability employment rate, number of disabled employees by gender	120
ESRS S1-13	Percentage of employees receiving performance evaluations and career development reviews	-
ESRS S1-14	Occupational Safety and Health (OSH) Indicators	121-125
ESRS S1-15	Work-life balance indicators	119
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ESRS S1-17	Number of labor and human rights-related reports received, investigated, addressed, and prevention plans established	99, 126

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ESRS S2. Workers in the Value Chain

Indicator No.	Title	Pages
ESRS S2-1	Organizational policies on labor and human rights for employees	79
ESRS S2-2	Procedures for consulting with employees or employee representatives on labor and human rights impact	-
ESRS S2-3	Channels for employees or employee representatives to report significant labor and human rights risks	83
ESRS S2-4	Methods for addressing and mitigating significant risks and impacts, including the effectiveness of these actions and mitigations	82
ESRS S2-5	Organizational goals for managing significant risks and impacts	80

ESRS S3. Affected Communities

Indicator No.	Title	Pages
ESRS S3-1	Policies related to affected communities	-
ESRS S3-2	Processes for engaging with affected communities about impacts	12, 99
ESRS S3-3	Processes to remediate negative impacts and channels for affected communities to raise concerns	99
ESRS S3-4	Taking action on material impacts on affected communities, and approaches to mitigating material risks and pursuing material opportunities related to affected communities, and effectiveness of those actions	69-71, 75-76
ESRS S3-5	Targets related to managing material negative impacts, advancing positive impacts, and managing material risks and opportunities	-

ESRS S4. Consumers and End Users

Indicator No.	Title	Pages
ESRS S4-1	Policies related to consumers and end-users	85
ESRS S4-2	Processes for engaging with consumers and end-users about impacts	87
ESRS S4-3	Processes to remediate negative impacts and channels for consumers and end-users to raise concerns	86
ESRS S4-4	Taking action on material impacts on consumers and end-users and approaches to mitigating material risks and pursuing material opportunities related to consumers and end-users, and effectiveness of those actions	86
ESRS S4-5	Targets related to managing material impacts on consumers and end-users	84

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Indicator No.	Title	Pages
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ESRS G1-3	Activities for eradicating and preventing unethical behavior, unfair trade, investigation, and internal reporting systems	81, 96-101
ESRS G1-4	Number of confirmed unethical, unfair trade cases, number of cases investigated by judicial authorities, number of employees subject to disciplinary action	126
ESRS G1-5	Amount of political contributions by party, campaign, or other political organizations, purposes of contributions, and related activities	-
ESRS G1-6	Average payment period for supplier transactions, organizational policy on the average payment period	-

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SASB Index

Topic	Code	Description of the metric	Pages
Air Quality	RR_BI_120a.1	Air emissions of the following pollutants: (1) NOx (excluding N_2O) (2) SOx (3) Volatile organic compounds (VOCs) (4) Particulate matter (PM10) and (5) Hazardous air pollutants (HAPs)	107, 109, 111, 113, 115, 117
	RR_BI_120a.2	Number of incidents of non-compliance associated with air quality permits, standards, and regulations	107, 109, 111, 113, 115, 117
Water Management in Manufacturing	RR_BI_140a.1	(1) Total water withdrawn (2) Total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress	70, 106, 108, 110, 112, 114, 116
	RR_BI_140a.2	Description of water management risks and discussion of strategies and practices to mitigate those risks	69-70
	RR_BI_140a.3	Number of incidents of non-compliance associated with water quality permits, standards and regulations	107, 109, 111, 113, 115, 117
Lifecycle Emissions Balance	RR_BI_410a.1	Lifecycle greenhouse gas (GHG) emissions, by biofuel type	35, 72-73
Sourcing & Environmental Impacts of Feedstock Production	RR_BI_430a.1	Discussion of strategy to manage risks associated with environmental impacts of feedstock production	33-36, 65, 69-76
Management of the Legal & Regulatory Environment	RR_BI_530a.2	Discussion of corporate positions related to government regulations and/or policy proposals that address environmental and social factors affecting the industry	103

Index	Code	Pages
Biofuel production capacity	RR-BI-000.A	13
Amount of feedstock consumed in production	RR-BI-000.C	35

IFRS Index(TCFD)

Category	TCFD Recommendation	Pages
Governance	a) Describe the board's oversight of climate-related risks and opportunities	25
	b) Describe management's role in assessing and managing climate-related risks and opportunities	25
Strategy	a) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	27
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning	27-29
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	-
Risk management	a) Describe the organization's processes for identifying and assessing climate-related risks	31
	b) Describe the organization's processes for managing climate-related risks	31
	c) Describe the procedure for identifying, assessing, and managing climate change-related risks and how it integrates into the organization's overall risk management	-
Metrics and targets	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	31
	b) Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	29-31, 106, 108, 110, 112, 114, 116
	c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	24

UN SDGs & UNGC

UN SDGs

Goal	Principle	Pages
Goal 3	Ensure healthy lives and promote well-being for all at all ages	70-71, 106-117
Goal 4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	58, 119
Goal 5	Achieve gender equality and empower all women and girls	54, 118
Goal 6	Ensure availability and sustainable management of water and sanitation for all	69-70, 106, 108, 110, 112, 114, 116
Goal 7	Ensure access to affordable, reliable, sustainable and modern energy for all	24-31, 106, 108, 110, 112, 114, 116
Goal 8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	42-52, 121-125
Goal 11	Make cities and human settlements inclusive, safe, resilient and sustainable	70-71, 107, 109, 111, 113, 115, 117
Goal 12	Ensure sustainable consumption and production patterns	32-41, 105
Goal 13	Take urgent action to combat climate change and its impacts	24-41, 105-106, 108, 110, 112, 114, 116
Goal 14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development	69-70, 77, 106, 108, 110, 112, 114, 116
Goal 15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	74-77
Goal 16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	96-101, 126

UN Global Compact Commitment

Goal	Principle	Pages
Human Rights	1. Businesses should support and respect the protection of internationally proclaimed human rights; and	54
	2. Make sure that they are not complicit in human rights abuses	55-56
Labour	3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;	61
	4. The elimination of all forms of forced and compulsory labour;	54
	5. The effective abolition of child labour; and	54
	6. The elimination of discrimination in respect of employment and occupation.	54
Environment	7. Businesses should support a precautionary approach to environmental challenges;	68
	8. Undertake initiatives to promote greater environmental responsibility; and	25, 29-30, 64, 66-71, 77
	9. Encourage the development and diffusion of environmentally friendly technologies.	32-41, 65
Anti-Corruption	10. Businesses should work against corruption in all its forms, including extortion and bribery.	100-101

Awards and Memberships

Memberships

	Associations
1	3D Printing Research Association
2	ISCC Association (ISCC e.V.)
3	Gyeonggi Process Safety Management Council (formerly the Gyeonggi Western Region Chemical Plant Safety Management Council)
4	Gyeonggi-do Environmental Conservation Association
5	Gunsan Industrial Complex Development Council
6	Gunsan Business Environment Council
7	Gunsan Industrial Complex Tenant Companies' Mutual Cooperation Council
8	Gunsan Chamber of Commerce and Industry
9	Gunsan Fire Protection Association
10	Korea Mech. Const. Contractors Association
11	Ministry of Justice Youth Crime Prevention Committee – Gunsan & Iksan Regional Council
12	Sihwa Fashion Collar Business Cooperative
13	Siheung Chamber of Commerce and Industry
14	Ansan Siheung Environmental Engineers Incorporated Association
15	United Nations Global Compact (UNGC)
16	Jeonbuk Freight Forwaders Association
17	Jeonbuk Trucking Association
18	Jeonbuk Environmental Engineers Association

	Associations
19	Jeonbuk Environmental Conservation Association
20	Poseung Management Council
21	Korea Exchange
22	Korea Copper Industrial Cooperative
23	Korea International Trade Association
24	Korea Bioenergy Association
25	Korea Nonferrous Metal Association
26	Korea Listed Companies Association
27	Korea Fire Safety Institute
28	Korea Energy Engineers Association
29	Korean Energy Society
30	Korean Institute of Resources Recycling
31	Korea Recycled Lead Association
32	Korea Electrical Engineers Association
33	Korea Specialty Chemical Industry Association
34	Korea Waste Recycling Association
35	Korea Packaging Recycling Cooperative
36	Korea Chemicals Management Association
37	Smart Chemical CEO*
38	Korea Battery Industry Association

* Council of Chemical-Handling Facility Representatives

Awards

Name of the awards	Awarding body	Date
Citation for contributing to national industrial development through productivity improvement	Ministry of Trade, Industry and Energy	2000.05
Citation for eradicating illegal petroleum products/ establishing order in the supply chain for the oil market	Ministry of Commerce, Industry and Energy	2007.10
Gold Award in the environmental safety sector at the Korea Green Energy Awards	Korea Green Energy Awards organizing committee	2009.10
38th Commerce and Industry Day: Commendation for Regional Community and Commercial/Industrial Promotion and Development	Gyeonggido	2011.03
Citation as a prestigious heritage company, and for improving the status of small and medium-sized companies	Korea Federation of SMEs	2011.05
Citation for contributing to the conservation of the natural environment	Ministry of Environment	2011.10
Awarded the 50 Million Dollar Export Tower	Ministry of Trade, Industry and Energy Korea International Trade Association	2011.12
46th Taxpayer's Day: Order of Industrial Service Merit (Silver Tower)	Ministry of Economy and Finance National Tax Service	2012.03
Chemical Management Award Recipient	Korean Chemical Society	2012.10
Awarded the 70 Million Dollar Export Tower	Ministry of Trade, Industry and Energy Korea International Trade Association	2012.12
Awarded the Trader of the Year Award	Korea International Trade Association	2013.10
Awarded the 100 Million Dollar Export Tower	Ministry of Trade, Industry and Energy Korea International Trade Association	2013.12
Awarded the Academic Technology Award at the Korea Environmental Energy Awards	Korean Society of Energy, etc.	2018.11
Awarded the 200 Million Dollar Export Tower	Ministry of Trade, Industry and Energy Korea International Trade Association	2020.12
Awarded the 300 Million Dollar Export Tower	Ministry of Trade, Industry and Energy Korea International Trade Association	2022.12
Awarded Green Management Award at the 22nd Global Standard Management Awards	Korea Management Registrar (KMR)	2023.11
Commendation for Contribution to Job Creation	Jeonbuk State	2024.10
2024 Korea Energy Awards: Order of Industrial Service Merit (Iron Tower)	Ministry of Trade, Industry and Energy, Korea Energy Agency	2024.11

Certifications

Certification	Object (Complete or Goods)	Business Site	Acquisition Year	Organization
US EPA registration	Waste/Fat/Grease, Soybean oil	Sihwa Plant	2012~	U.S. Environmental Protection Agency (EPA)
	Waste/Fat/Grease	Pyeongtaek Bio 1, 2	2018~	
	Soybean oil	Jecheon Bio Plant	2018~	
California LCFS registration	Domestic Animal fats, UCO	Sihwa Plant	2014~	California Air Resources Board (CARB)
	Domestic UCO	Pyeongtaek Bio 2	2019~	
Oregon CFP registration	Domestic Animal fats, UCO	Sihwa Plant	2018~	Oregon Department of Environmental Quality (DEQ)
	Domestic UCO	Pyeongtaek Bio 2	2020~	
EU ISCC certification (Bio diesel plant, Refinery)	Bio Diesel, Refined Oil, Residue of FAME end distillation	Sihwa Plant	2012~	European Commission EU ISCC Association
		Pyeongtaek Bio 1	2019~	
		Pyeongtaek Bio 2	2017~	
EU ISCC certification (Trader with storage)	All	Sihwa Plant	2017~	
		Pyeongtaek Bio 1	2019~	
		Pyeongtaek Bio 2	2017~	
EU ISCC certification (Collecting point)	UCO	Sihwa Plant	2020~	
EU ISCC certification (Point of origin)	Residue of FAME end distillation, Crude Glycerin Waste/Residues from processing of vegetable or animal oil	Sihwa Plant	2021~	
		Pyeongtaek Bio 1	2021~	
		Pyeongtaek Bio 2	2021~	
ISCC CORSIA certification (Treatment plant for waste/Residues, Refinery)	Refined Oil, Fatty Acids	Sihwa Plant	2023~	International Civil Aviation Organization EU ISCC Association
		Pyeongtaek Bio 1	2023~	
ISCC CORSIA certification (Collection Point)	UCO	Sihwa Plant	2023~	
ISCC CORSIA certification (Trader with storage)	All	Sihwa Plant	2023~	
		Pyeongtaek Bio 1	2023~	
EU ISCC PLUS Certification (Scope Point of Origin)	Mixed plastic waste	Gunsan Recycling Plant	2021~	European Commission EU ISCC Association
EU ISCC PLUS Certification (Plastic Waste Collector)		Gunsan Recycling Plant	2021~	
EU ISCC PLUS Certification (Trader with Storage)		Sihwa Plant	2021~	
		Gunsan Recycling Plant	2021~	
EU ISCC PLUS Certification (Plastic Waste)	Circular PP, Circular PE, Circular PVC	DS PCR Yeongcheon Plant	2021~	
EU ISCC PLUS Certification (Compounding Plant)		DS PCR Yeongcheon Plant	2021~	
EU ISCC PLUS Certification (Trader with Storage)		DS PCR Yeongcheon Plant	2021~	

GHG Verification Statement

Verification Scope

based on GHG report provided by DS DANSUK CO., LTD. which includes Scope1 and Scope2 emissions.

Verification Standards and Guidelines

To conduct verification activities, verification team applied verification standards and guidelines. The standards and guidelines are as follows.

- Guidance for reporting and verification of GHG emissions trading scheme (No. 2024-155 provided by Ministry of Environment, Republic of Korea)
- Verification Guidelines for the Operation of the Greenhouse Gas Emission Trading System (No. 2024-169 provided by Ministry of Environment, Republic of Korea)
- For matters not specified in other guidelines, refer to 2006 IPCC Guidelines, KSI ISO 14064-1: 2018 and KS I ISO 14064-3: 2019

Level of Assurance

DS DANSUK CO., LTD. GHG emissions satisfies the under Reasonable Assurance (less than ±5.0% of total emissions).

Verification Conclusion

As a result of verification activities, verification team has found no significant errors, omissions, and misstatements. Therefore, Korean Standards Association confirms that following emissions data are adequately quantified.

2024 GHG Emissions (Scope1, Scope2)

Year	Unit	Scope 1	Scope 2	Total
2024	tCO_2eq	57,003.202	29,022.984	**86,023**

※ This emission is based on the March 2025 abd the final emission value is subject to change.
※ Decimal place is not considered when calculating the emission of each workplace.

April 04, 2025

KOREAN STANDARDS ASSOCIATION

Independent Assurance Statement

To readers of DS DANSUK Sustainability Report

Introduction

NICE D&B Co., Ltd. (hereinafter referred to as the "Assurer") was commissioned by DS DANSUK to conduct an independent assurance of its Sustainability Report 2025 (hereinafter referred to as the "Report"). The responsibility for all information and statements included in the report lies with the management of DS DANSUK. The assurer's responsibility is to perform an assurance engagement as agreed upon in our agreement with DS DANSUK and issue an assurance statement.

Competence and Independence

The assurer is composed of members who have accumulated long-term experience in sustainability, with deep understanding of the assurance standard methodology. The assurer has no other contract with DS DANSUK and did not provide any services to DS DANSUK that could compromise the independence of our work.

Scope and Standards

The assurance was conducted in accordance with the international verification standard AA1000AS v3 and applied a Moderate level of assurance. The assurance criteria were based on the AA1000AP(2018) principles of Inclusivity, Materiality, Responsiveness, and impact. The assurance followed a Type 1 to assess whether these principles were applied in the preparation of the report. In addition, for the eight key material topics selected by DS DANSUK, a Type 2 was applied to verify the quality and reliability of the disclosed information.

Type 2 assurance was applied to the following GRI Topic-specific Standards:

- GRI 301-1~3, 305-1~2, 305-4~5, 305-7
- GRI 401-1~3, 402-1, 403-1~9, 404-1~3, 405-1~2, 406-1

The scope of the verification applied to the report is as follows:

- Report contents during the period from January 1st 2024 to December 31st 2024
- Appropriateness of the selection of key issues based on materiality assessments
- Major contents included in the report, such as the company's strategies, activities, and performance related to specific sustainability information
- Validity of the processes for measuring and collecting selected information based on sampling

Assessment on the Application Level of GRI Standards

The assurer confirmed that the report by DS DANSUK was prepared in accordance with the GRI Standards and that there were no inappropriate elements based on the materials presented by DS DANSUK in relation to the Universal Standards and Topic Specific Standards.

Universal Standards

Topic Specific Standards

- Economic: 201-1~3(Economic Performance), 203-1~2(Indirect Economic Impacts), 205-2~3(Anti-corruption)
- Environmental: 301-1~3(Materials), 302-1, 302-3~4(Energy), 303-1~5(Water and Effluents), 304-1~4(Biodiversity), 305-1~2, 305-4~5, 305-7(Emissions), 306-1~5(Waste), 308-1~2(Supplier Environmental Assessment)
- Social: 401-1~3(Employment), 402-1(Labor/Management Relations), 403-1~9(Occupational Health and Safety), 404-1~3(Training and Education), 405-1~2(Diversity and Equal Opportunity), 406-1(Non-discrimination), 408-1(Child Labor), 409-1(Forced or Compulsory Labor), 413-1~2(Local Communities), 414-1~2(Supplier Social Assessment), 418-1(Customer Privacy)

Independent Assurance Statement

Conclusion and Opinion

Based on the document reviews and on-site inspections, the assurer had several discussions with DS DANSUK on the revision of the Report regarding the reporting principles, and reviewed the final report after incorporating recommendations for revisions and improvements. The verification results confirm that the report has been prepared in accordance with the GRI Standards, and no inappropriate aspects were found in relation to the compliance with the principles outlined in AA1000AP (2018). The assurer's opinions on the principles are as follows:

[Inclusivity]
DS DANSUK has stakeholder engagement processes in place that involve key stakeholders such as customers, shareholders and investors, partners in the supply chain, affiliated companies, government agencies, local communities, employees who are directly or indirectly affected by its operations. It has established channels to identify and communicate with these stakeholders to reflect their core needs in decision-making.

[Materiality]
DS DANSUK conducted a double materiality assessment in accordance with the implementation guidance of the European Sustainability Reporting Standards (ESRS) to identify key important reporting issues that need to be managed in relation to sustainable management. The assessment included analysis of global ESG standards based on business characteristics, and surveys conducted with internal stakeholders and external ESG experts. Based on an evaluation of the potential impacts, risks, and opportunities to the DS DANSUK, five key issues were identified and appropriately disclosed in the report.

[Responsiveness]
DS DANSUK has established management directions and ESG strategic tasks for each of the five key issues identified, and reported on the detailed actions and performance related to these tasks.

[Impact]
DS DANSUK identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

June 2025 Seoul, Korea

CEO **Oh, Gyu Geun**

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DS DANSUK