Energy Toward Sustainability

DOOSAN Enerbility

About This Report

FEATURES OF THE REPORT

This is the Integrated Report of Doosan Enerbility, a report that introduces the various systems, activities and accomplishments of the company for the purpose of enhancing corporate sustainability. The report includes not only a detailed description of Doosan Enerbility's business strategies and the new businesses regarded as drivers of future growth, but also activities and performance results related to the company's sustainability efforts in the areas of the environment, society and governance. Doosan Enerbility has published the report annually as a way to continuously communicate with our stakeholders.

REPORT CRITERIA

This report has been prepared based on the Core Options of the GRI (Global Reporting Initiative) Standards, the global standard for report preparation. Through third-party verification, it has been confirmed that the report meets all relevant requirements. The details of the GRI Standards Index are provided in the appendix. The report adequately reflects industry standards as required by the Sustainability Accounting Standards Board (SASB) and adheres to the principles of the UNGC Communication on Progress (CoP) and the climate-related Financial Disclosures (TCFD).

DURATION AND SCOPE OF REPORT

The report was prepared using financial and non-financial performance results from January 1, 2022, to December 31, 2022. Significant matters with an impact on stakeholder decision-making have been covered for the period up to the first half of 2023. Some quantitative performance data from the past three years are presented so that trends can be observed. The financial performance data has been prepared using consolidated financial statements based on the K-IFRS (Korean International Financial Reporting Standards). If the information presented in the previous report has been either corrected or rewritten, the changes are explained with footnotes. The scope of the report includes all projects of Doosan Enerbility, both domestic and overseas. Where necessary, the report also presents the activities and performance of overseas subsidiaries and affiliates..

REPORT VERIFICATION

To ensure the reliability and quality of the contents of this report, the non-financial information has been verified by an external agency. The financial information has been reviewed by an independent audit firm, with the audit results being reflected accordingly. The non-financial information was verified by the Korea Foundation for Quality. Each verification opinion can be found on pages 89~90.

ADDITIONAL INFORMATION

The report will be published and distributed in Korean and English. It will be available for downloading in the PDF format on the Doosan Enerbility website. Any opinions or comments can be conveyed to the contact number provided below.

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Telephone | 031-5179-2696
Department in Charge | Credo/ESG Team

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Interactive User Guide

This report has been published as an interactive PDF that includes features such as jumping to related pages within the report and linking to related webpages.

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CEO's Message

Dear Esteemed Stakeholders,

I would like to express my deepest gratitude to all our stakeholders for your continued support of Doosan Enerbility, and present our company's commitment to sustainability management and our achievements as a leading green energy company through this Integrated Report.

Nowadays, movements such as the mandatory disclosure of ESG information and the establishment of ESG investment schemes by investment companies are materializing as global trends. This means that we are getting closer and closer to a time when a company's ESG activities will have a direct impact on its business performance. As ESG is becoming a key measure of corporate sustainability, we seek to continuously enhance our competitiveness through the implementation of an ESG management system and by applying the ESG management philosophy to all our decision-making processes.

In light of these internal and external changes, the company is focusing on three key initiatives.

First, we will further expand eco-friendly energy-related business opportunities and secure the technology for new businesses to emerge as the market leader.

The energy market is expected to undergo continuous adjustments in its fuel mix to respond to the twin challenges of climate change and energy security. This is reflected in not only the government's 10th Basic Plan for Long Term Electricity Supply and Demand, but also in policies of major countries, which recognize not only renewable energy but also nuclear and natural gas-fired power generation as eco-friendly economic activities. We seek to expand our business opportunities by leveraging our well-developed internal capabilities and securing the technology required by clients to lead the market for new future businesses, such as additive manufacturing(3D printing), resource recycling, and digitalization.

Second, we will continue to improve profitability by implementing fundamental changes in our business structure.

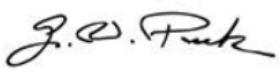
The transformation of our business portfolio to one centered around green energy is paying off in many areas, and the order intake, a leading indicator of revenue, is on the rise. To ensure the sustainability of our business, we will continue to improve profitability by making fundamental changes in our business structure. To this end, we will focus our resources on profitable businesses and expand our portfolio of high-margin businesses. We will also focus our R&D investments on high-value-added new businesses to build a virtuous cycle in which the results of technology development lead to improved profitability across the company.

Third, we will create an agile and sustainable organization through a horizontal organizational culture.

We are pursuing horizontal and open communication to build an organizational culture that responds agilely to rapidly changing environments. The key to establishing a horizontal organizational culture is implementing a two-way communication system where opinions are freely expressed and a streamlined decision-making process. To this end, we have simplified the position hierarchy for our white-collar employees from a five-tier to two-tier structure, and we are also promoting various organizational culture improvement initiatives to enable quick decision-making through the free exchange of opinions among employees.

Doosan Enerbility will continue to make changes and innovations for sustainable management, and we look forward to your continued interest and encouragement. Thank you.

Geewon Park, Chairman & CEO



About Doosan Enerbility

Company Overview

Group Profile

When asked "What kind of company is Doosan," our answer is steadfast. We are a company renowned for our unique devotion to cultivating people.

- Excerpt from Doosan Credo -

Group Vision

People-centered management that views talented people as a source of global competitiveness

Proud Global Doosan

Operating a process that meets global standards

Overview of the Doosan Group Companies

Doosan Corporation	Doosan Electro-Materials,	Doosan Fuel Cell Power	Doosan Digital Innovation	Doosan Corp. Retail
Major Subsidiaries	Doosan Enerbility	Doosan Bobcat	Doosan Industrial Vehicle	Doosan Fuel Cell
	Doosan Tesna	Doosan Robotics	Doosan Mobility Innovation	Doosan Logistics Solutions
	Oricom	Hancomm	Doosan Magazines	
	Doosan Bears	Doosan Cuvex		
Auxiliary Institutions	Doosan Yonkang Foundation	Doosan Art Center	Doosan Leadership Institute (DLI)	

Doosan Credo

Doosan Credo

Our Beliefs and Philosophy	A charter to guide all management activities and decisions	Consists of aspirations and values

Doosan Credo System

Aspiration

Proud Global Doosan

Core Values

Doosan people practice the nine core values of the Doosan Credo every day. To create a "Proud Global Doosan," Doosan People practice the nine core values of the Doosan Credo wherever they do business around the world. The core values include how we do business, how our employees treat each other, and how we work with our partners.

People	Cultivating People	Integrity & Transparency
Inhwa	Customers	Technology & Innovation
Profit	Social Responsibility	Safety & Environment

Doosan People

Doosan's human resources, i.e., "Doosan People," refers to all our employees who are capable of and willing to contribute to the organization and practice the Doosan Credo, while continuously striving to improve their capabilities. Doosan people's behavior reflects the importance placed on the Doosan core values and the traits required of Doosan people. The inherent traits of Doosan people are as follows:

- Limitless Aspiration
- Cultivating People
- Inhwa
- Open communication
- Tenacity & Drive
- Prioritization & Focus

Company Profile

General Status

Doosan Enerbility has grown to become an energy company that provides light and water to more than 40 countries around the world, thereby adding value to the planet. Come view Doosan Enerbility's past 60-year journey and its transformation into a green energy company.

Headquarters	22, Doosan Volvo-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, South Korea
Bundang Office	155, Jeongjail-ro, Bundang-gu, Seongnam-si, Gyeonggi-do
Homepage	https://www.doosanenerbility.com
Youtube	Doosan EnerbilityTV (formerly Doosan Heavy Industries & Construction)

Company Name

Doosan Enerbility

Company Established on

September 20, 1962

Business Type

Manufacturer of Machineries and Equipment

Representative Directors

Geewon Park, Yeonin Jung, Sanghyun Park

Number of Employees

5,816 persons

* As of end of 2022

Financial Performance

KRW **23** trillion
Total Assets

KRW **15.4** trillion
Revenue

KRW **1.1** trillion
Operating Income

* Based on consolidated financial statements as of end of 2022

History

1962~1980 — The Beginning & Challenges

- **1962** · Founded in **1962**

1981~2000 — Growth & Development

- **1982** · Completed construction of Changwon General Machinery Plant

2001~2011 — Growth into a Global Enterprise

- **2001** · Became privatized and name changed to Doosan Heavy Industries & Construction
- **2006** · Acquired Mitsui Babcock and secured boiler technology
- **2009** · Acquired Skoda Power and secured original steam turbine technology
  · Completed construction of Doosan Vina Manufacturing Plant in Vietnam
- **2011** · Acquired AE&E Lentjes and secured original CFB technology
  · Acquired the water treatment solution provider Enpure Limited
  · Declaration of the Doosan Credo

2012~2019 — Strengthening our Eco-Friendly Portfolio

- **2016** · Acquired the U.S.-based ESS (Energy Storage System) specialist 1Energy Systems (Currently Doosan GridTech)
- **2017** · Obtained 5.5MW wind turbine technology
  · Acquired the U.S.-based gas turbine service provider ACT(Currently DTS)

2020~ — Transforming into an Eco-friendly Energy Company

- **2020** · Transitioning to become a green energy company
  - Completed development of large gas turbines
  - Contract won to build the first hydrogen liquefaction plant in Korea (Scheduled to be completed in 2023)
- **2022** · Name changed to Doosan Enerbility

Global Network

Overseas Subsidiaries
10

Asia	Doosan Power Systems India (India), Doosan Vina (Vietnam), Doosan Power Systems Arabia (Saudi)
Europe	Doosan Power Systems (UK), Doosan Lentjes (Germany), Doosan Skoda Power (Czech Republic)
America	Doosan Power Systems America (US), Doosan HF Controls (US), Doosan GridTech (US), Doosan Turbomachinery Services (US)

Overseas Entities, Branches / Offices (Sales Office / Other)
23

Asia	Riyadh, Dubai, Abu Dhabi, Kuwait, Hanoi, Jakarta, Taipei, Manila, Bangkok, Tokyo, Beijing, Shanghai, New Delhi, Mumbai, Middle East Operation Center(UAE)
Europe / Africa	Cairo, Frankfurt
America	New Jersey, Newington, Pittsburgh, Santiago, America Holdings, D20 Capital

R&D Centers
2

ATSE (Switzerland)
ATSA (US)

Business Overview

Business Portfolio

Global Energy Market Trends

In recent years, the global energy market has recognized nuclear and natural gas-fired power generation as eco-friendly economic activities, along with renewable energy, and announced support policies to strengthen energy security in response to the insecure energy supply and achieve carbon neutrality.

In Europe, the European Parliament approved the EU Taxonomy in July 2022, recognizing natural gas and nuclear power generation as eco-friendly power sources, alongside renewable energy. In the U.S., the Inflation Reduction Act (IRA) took effect in August 2022, strengthening carbon neutrality with support policies for wind, solar and nuclear energy.

In Korea, the Tenth Basic Plan for Long-Term Electricity Supply and Demand expanded the proportion of renewable energy and nuclear power generation, and in January 2023, the K-Taxonomy (Korean Green Taxonomy) was announced, which includes natural gas and nuclear power generation as eco-friendly economic activities. In the case of hydrogen, the domestic hydrogen business is also taking shape through the preparation of a clean hydrogen certification system and a hydrogen power bidding market. As such, investment in nuclear and natural gas, as well as renewable energy and hydrogen, is expected to increase in the future.

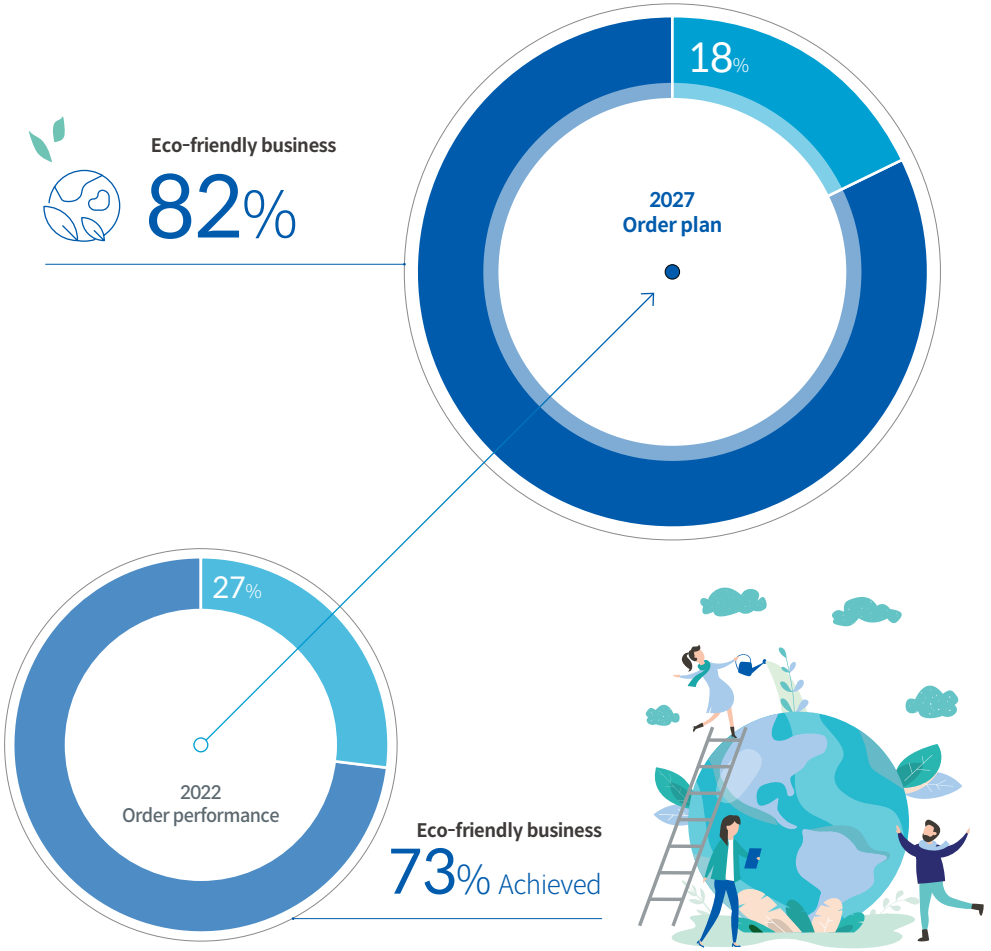
Doosan Enerbility's Mid- to-Long Term Strategic Direction

For sustainable management, Doosan Enerbility is building a portfolio consisting of four key growth drivers through a multifaceted analysis of the domestic and global energy market and internal capabilities, and the company is also expanding its business through focused investments.

4 Key Growth Drivers	Strategy
Gas Turbine	• Developing high-efficiency large-scale gas turbine technology and expanding the domestic & overseas gas turbine equipment/service business • Preempting the market by accelerating hydrogen gas turbine technology development
Next Generation Nuclear Power Plant (SMR)	• Developing innovative technologies and expanding facility investments to gain competitive edge over potential competitors and become the leading global SMR foundry • Stable business expansion by strengthening partnerships with SMR developers
Renewable Energy	• Developing a large-scale offshore wind turbine model and expanding business through various collaborative partnerships • Leveraging technical expertise to operate renewable energy business and expanding business model to include O&M service
Hydrogen	• Strengthening competitiveness by carrying out activities that cover the entire hydrogen value chain, including hydrogen production, supply and utilization • Business entry and expansion through technology development and collaboration with companies engaged in hydrogen business

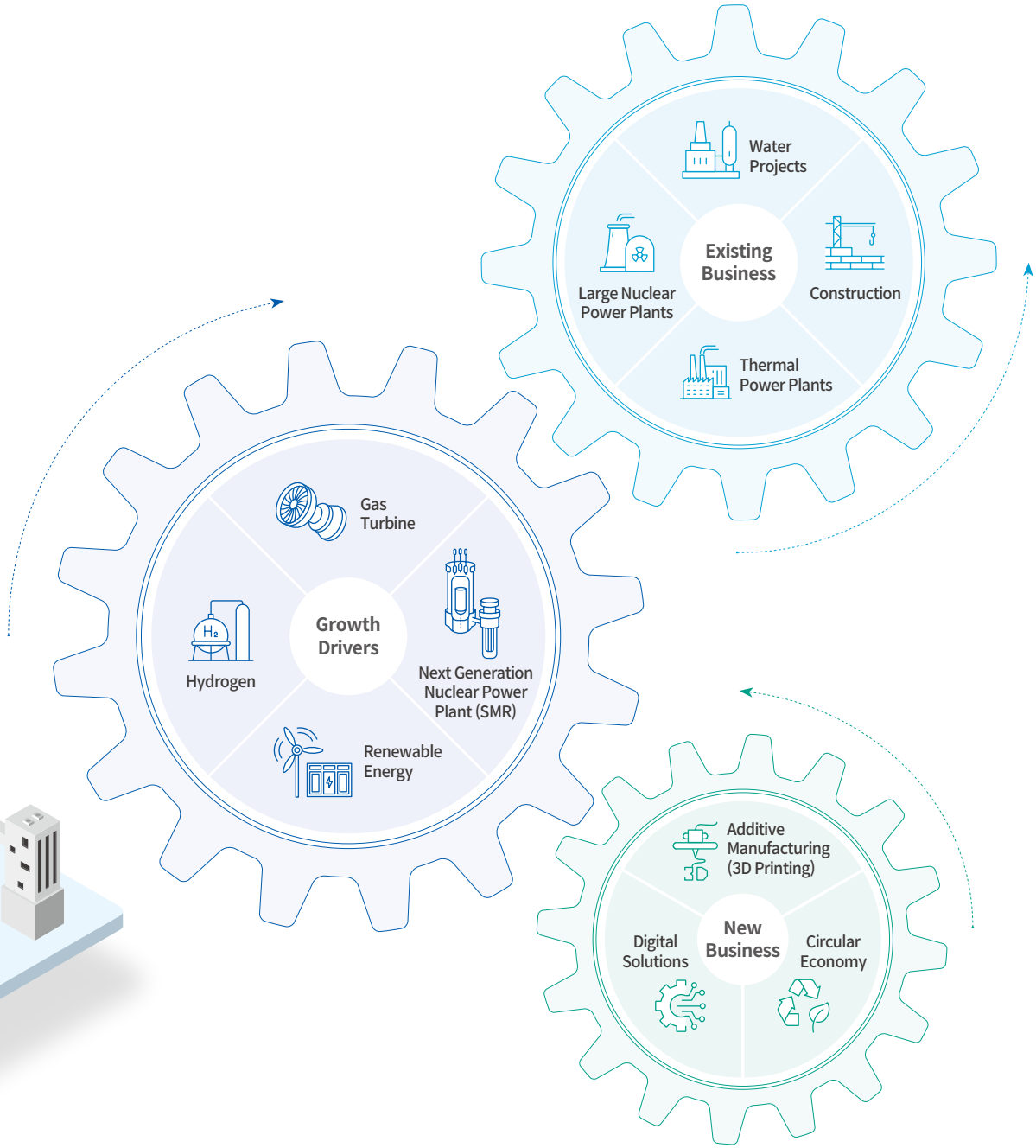
Green Business Goals

Doosan Enerbility is expanding its eco-friendly business to achieve global carbon neutrality and sustainable business operations, and in 2022, eco-friendly business orders accounted for 73% of the total orders, and we plan to increase the proportion of eco-friendly business to over 82% by 2027.



R&D Investment

Doosan Enerbility is actively investing in strengthening the capabilities of its four growth drivers and new eco-friendly businesses. Investment in growth drivers such as SMRs, gas turbines, and hydrogen is increasing, and R&D investment in new businesses is also steadily increasing. As for our new business plans, we will be expanding our metal additive manufacturing (3D printing) business, which is currently the largest in Korea, in the short term, and be working on the technology development and commercialization of our own materials in the long term.



2022 Business Calendar

'Built Korea's first locally-manufactured gas turbine'

Doosan Enerbility has succeeded in independently developing the world's fifth large-scale 270MW gas turbine for power generation. The gas turbine, the first to be locally manufactured in Korea, will be supplied to the Gimpo Combined Heat & Power(CHP) Plant for a demonstration project extending over two years until 2025.

SMR Manufacturing Agreement with US NuScale Power

Doosan Enerbility signed an agreement with NuScale Power at Doosan Tower in Dongdaemun, Seoul, to begin full-scale production of small modular reactors (SMRs), which will be supplied to NuScale Power's Utah Associated Municipal Power systems (UAMPS) project.

Signed a business agreement with Siemens Gamesa (SGRE)

Doosan Enerbility has signed a memorandum of understanding (MOU) with Siemens Gamesa Renewable Energy (SGRE), a global offshore wind power leader, for strategic cooperation in the domestic offshore wind market. SGRE is a subsidiary of Germany's Siemens Energy and holds the top spot in the global offshore wind market with 19.4 GW of installed capacity.

Signed digital and hydrogen business agreements

Doosan Enerbility has signed a memorandum of understanding (MOU) for mutual cooperation on digital and hydrogen business with Approtium, an industrial gas manufacturing company. The company is the largest hydrogen supplier and producer in Korea, accounting for about 40% of the industrial hydrogen distributed in the country and about 12% of the domestic carbonation market.

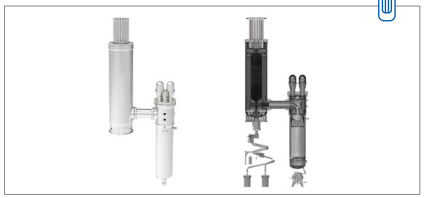
Signed MOU to collaborate on clean hydrogen and ammonia business

Doosan Enerbility has signed a memorandum of understanding (MOU) with E1 to collaborate in the clean hydrogen and ammonia business, and will engage in strategic cooperation across the value chain, including production, storage, transportation, and utilization of clean hydrogen and ammonia. A council will also be formed to secure and promote related business opportunities.

Won a KRW 1.6 trillion contract to build the secondary circuit of the El Dabaa Nuclear Power Plant in Egypt

Doosan Enerbility has signed a contract with Korea Hydro & Nuclear Power (KHNP) for the construction of the second circuit (Turbine Island) of the El Dabaa Nuclear Power Plant in Egypt, valued at approximately KRW 1.6 trillion.

Signed equity investment and core equipment supply agreement with U.S. X-Energy



Doosan Enerbility has signed an agreement with X-energy, a U.S.-based developer of the fourth-generation High Temperature Gas-cooled Reactor SMR, to invest equity and supply core equipment. The fourth-generation high-temperature gas reactor is capable of high-temperature operation and can produce hydrogen more economically.

Obtained international certification for 8MW offshore wind power system

Doosan Enerbility obtained the international Type Certification from 'DEWI-OCC' in Germany in December 2022 for the first large-scale offshore wind power system 8MW offshore wind turbine (model name DS205-8MW) in Korea, after the installation and demonstration of the prototype in Yeonggwang, Jeollanam-do in January 2022.

Growth Drivers

Gas Turbine

The gas turbine business is expected to grow as a backup for renewable energy sources, which have high load variability, in response to the rising need for conversion of aging coal-fired power plants. Doosan Enerbility plans to increase sales and profitability by targeting overseas markets, alongside the domestic market, for the gas turbine equipment business and high-margin services business, through the successful commercial operation of Doosan's gas turbine, which was produced with the company's own technology.

About Business

Objective
- Developing High Efficiency Turbines
- Accelerating transition to hydrogen turbines

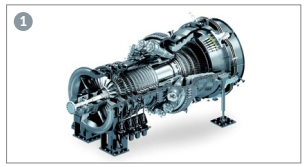
Achievements
- Successful load verification test for large gas turbines
- Development of hydrogen turbine combustion technology (30% co-firing)

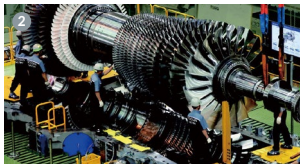
Ongoing Projects
- Domestic commercial operation and demonstration of large gas turbines
- Supply of new large gas turbine equipment
- Replacement of aged power generation facilities (R&M)
- Services in domestic/overseas markets (O&M)

Future Strategies
- Expanding domestic market share and targeting overseas markets with highly efficient gas turbine models
- Going carbon neutral with hydrogen turbines

Core Business Areas and Main Products (Equipment)

1 **Standard gas combined cycle turbine models**	• Completed the development of 380 MW and production underway with completion targeted for 2025
2 **Building a test bed**	• Demonstration project for differentiated high-efficiency standard combined cycle power plants in the Korean market
3 **Hydrogen turbines**	• Successful testing of 30% hydrogen co-firing gas turbine combustor and simultaneous development of 50% hydrogen co-firing and 100% hydrogen-fueled gas turbines as a national project





Next Generation Nuclear Power Plant (SMR)

Doosan Enerbility is pursuing the business model of becoming a global SMR foundry that is capable of manufacturing various types of SMRs by leveraging its extensive experience as a leading nuclear components manufacturer. To this end, we have established strategic partnerships with global leaders, such as NuScale Power and X-energy. In addition, we plan to expand our production capacity to be able to simultaneously manufacture 4 to 10 or more modules, and we are working to establish a production system that will significantly shorten the production period and mass-produce high-quality SMRs by preemptively introducing innovative manufacturing technologies.

About Business

Objective
- Building a competitive SMR foundry

Achievements
- Completed the verification of NuScale's manufacturability and secured orders for main components
- Signed agreement with X-energy for equity investment and supply of key equipment

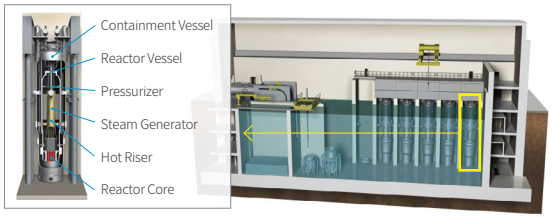
Ongoing Projects
- Manufacturing of equipment materials for first order of NuScale's UAMPS project and pursuing follow-up project
- Reviewing X-energy's manufacturability and manufacturing critical equipment

Future Strategies
- Becoming a global SMR foundry
  - Secure leading position for global manufacturing technology
  - Diversify reactor types

Core Business Areas and Main Products (Equipment)

NuScale's NPM

Manufacture cast & forged parts and core components of the first SMR order for the UAMPS Project



X-energy's Xe-100

Review manufacturability and manufacture main components of Xe-100

Growth Drivers

Renewable Energy

As the domestic and overseas wind power market growth is expected to accelerate, Doosan Enerbility plans to expand its wind power business with a diverse model line-up developed through collaboration with overseas companies, along with its own models. In addition, by expanding its business model to renewable power generation, Doosan Enerbility will secure stable and continuous profits and strengthen synergies with the company's equipment business.

About Business

Objective
- Securing next-generation models and expanding offshore wind power business
- Promoting recurring business

Achievements
- Development of 8MW wind turbine and obtainment of international certification
- Expansion of large-scale ESS business in Australia

Ongoing Projects
- Expanding large-scale offshore wind power business in Korea
- Promoting ESS business in Australia and the U.S.

Future Strategies
- Securing offshore wind mega-model development
- Strengthening business competitiveness through partnerships with overseas wind power companies
- Promoting recurring business through value chain expansion to renewable energy business development, EPC, and O&M

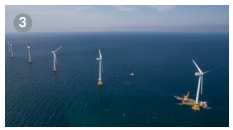
Core Business Areas and Main Products (Equipment)

1 8MW Large Capacity Offshore Wind Turbine Model
- Obtained international type certification for Korea's first large 8MW offshore wind power system

2 ESS
- Strengthening operations in Australia and the Americas
- Expansion into additional ESS growth regions such as Southeast Asia and Europe

3 Renewable Power Generation Projects
- Acquired development rights for Chilsan Offshore Wind Power (151MW) and Yawol Offshore Wind Power (108MW) in 2022
- Developing hydrogen fuel cells such as Changwon Fuel Cell (40MW) and Gwangju Fuel Cell (26MW)
- Promoting the Changwon plant rooftop solar project (11.7MW)
- Making efforts to expand renewable energy by participating in development projects
- Pursuing the establishment of subsidiaries to handle renewable energy development





Hydrogen

To contribute to the introduction and promotion of the hydrogen economy, Doosan Enerbility, as the leading OEM of power plant equipment in Korea, is developing core technologies that can enable decarbonization of the power generation sector through fuel conversion to clean hydrogen. The company is also establishing a cooperation system for developing clean hydrogen production technologies and introducing overseas hydrogen/ammonia.

About Business

Objective
- Acquire hydrogen-fueled power generation technology and supply equipment
- Promote end-to-end business by entering the hydrogen cooperative project

Achievements
- Construction of Korea's first hydrogen liquefaction plant
- Completed Korea's first MW-scale green hydrogen production demonstration project

Ongoing Projects
- Hydrogen liquefaction plant project
- Technology development and demonstration of clean hydrogen production
- Leveraging expertise held as leading OEM of gas turbines/ boilers to develop and demonstrate key technologies for hydrogen power generation

Future Strategies
- Expanding hydrogen power generation business
  - Hydrogen gas turbines, ammonia co-firing, etc.
- Clean hydrogen production and supply business aligned with power generation and industrial demand

Core Business Areas and Main Products (Equipment)

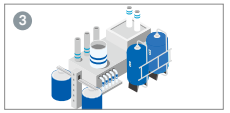
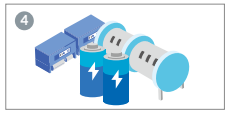
1 Hydrogen Production: Clean Hydrogen
- Water electrolysis plant engineering and operation technology using renewable energy
- Production of clean hydrogen using nuclear energy for energy security purposes

2 Hydrogen Imports & Supply
- Establishing a cooperative framework to import and supply clean hydrogen from overseas and build domestic infrastructure

3 Hydrogen-Fueled Power: hydrogen gas turbines, ammonia co-fired boilers
- Development and demonstration of 100% hydrogen-fueled/co-fired models for entire gas turbine line-up
- Development and demonstration of ammonia co-firing technology for USC/CFB

4 Hydrogen - Fueled Power: Fuel Cells
- Utilizing fuel cells supplied by Doosan Fuel Cell to participate in power plant and EPC projects



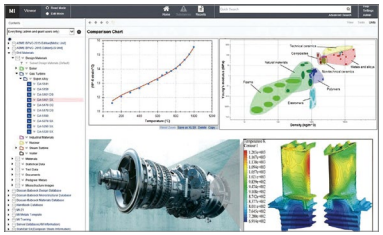
New Business

Additive Manufacturing (3D Printing)

Through continuous technology development, Doosan Enerbility has secured AM(Additive Manufacturing, 3D Printing) technology for the entire cycle of design, manufacturing, and quality inspection, and boasts the highest level of technology capabilities in Korea, especially in the field of metal AM manufacturing using PBF (Powder Bed Fusion). In order to improve the performance of gas turbines being developed independently, we have manufactured combustor parts using AM technology, and started to mass produce after successful demonstration tests. We have participated in joint development projects with clients in various industries such as aviation and defense, achieving outcomes such as prototype production and successful demonstration tests. We have also adopted international quality management systems (AS9100, ISO9001) to meet quality requirements.

Independently Developed Materials

By leveraging our development experience and database which was built up over the years, Doosan Enerbility has secured material engineering capabilities, including development, manufacturing, and property evaluation of a wide range of materials, ranging from steel materials to super heat-resistant alloys and composites, which are utilized in all the various energy-related sectors, including mechanical parts, shipbuilding, offshore plants and power plants. Doosan Enerbility has completed the construction of D-MAPs, a proprietary material properties database platform, and is steadily providing material information required by the entire value chain through continuous updating and maintenance of the latest material properties. In the future, we plan to strengthen our own material competitiveness and expand our business through the convergence of material AI technologies and the development of new materials and new types of steel.



Digital Transformation

The digital solutions that Doosan Enerbility is commercializing are developed by combining various IT technologies (AI, Cloud, Big Data) with the company's unique capabilities, and can be broadly categorized into prediction/diagnosis, optimization, digital twin, and data analysis solutions. We provide our clients with benefits such as reducing operating costs when operating power plants/industrial facilities, minimizing facility downtime due to breakdowns, and optimizing emission management. In the future, we plan to accelerate digital transformation and expand the scope of our solutions to all industries, including four growth businesses such as gas turbines, renewable energy, hydrogen, and next-generation nuclear power plants, and new business areas such as additive manufacturing (3D Printing).

About Business

Objective
- Big Data and AI, and optimization solutions to keep plants running reliably and reduce operating costs.

Achievements
- Providing predictive diagnostics solutions: power generators and utilities
- Soot blowing optimization solution: demonstration for Gheco One Power Plant in Thailand, USC Power Plant

Ongoing Projects
- Expanding supply of predictive diagnostics solutions
- Providing combustion optimization solutions: 1000MW USC Power Plant
- Supplied gas turbines solution: Gimpo Cogeneration Plant

Future Strategies
- Enhancing digital competitiveness in new growth businesses: Renewable O&M solutions, SMR non-destructive testing, and gas turbines solutions
- Expanding solution applications: Expanding application to energy and manufacturing industries

Core Business Areas and Main Products (Equipment)

1	**Prediction/ Diagnostics**	• PreVision is a differentiated AI solution that provides a stable operating environment by detecting device abnormalities in advance through accurate predictions based on ensemble algorithms and providing the underlying cause of failure. • DOOVES is a specialized vibration diagnosis solution that analyzes axial rotating machine vibration and operation data to diagnose the cause of vibration and provide action guides by cause.
2	**Optimization**	• Optimization is a differentiated AI solution that maximizes the operating efficiency of facilities and stabilizes the operating environment by calculating optimized operating parameters through real-time operation data analysis based on NN and PSO
3	**Digital Twin**	• Physical and data-driven digital solutions at the intersection of design domain knowledge, artificial intelligence, and big data analytics • Solutions that enable product lifetime assessment and proactive maintenance
4	**Data analytics**	• D-Vision is an AI solution that can block fundamental 'human error' and prevent equipment failure and safety accidents caused by defects through AI-based non-destructive testing image reading.

Existing Business

Power EPC

As a global leader of power generation, Doosan Enerbility has the EPC capabilities to execute activities across the entire value chain, from plant design to equipment supply, construction, and commissioning. Based on these capabilities, we are carrying out numerous projects at home and abroad, and are in the process of transforming our business portfolio to increase the share of low-carbon energy plants to become an eco-friendly power generation company.

Core Business Areas and Main Products (Equipment)

Combined Cycle Power Plant

- Won contracts for the Ukudu Power Plant (198 MW) in Guam and Jafurah Cogeneration Plant (320 MW) in Saudi Arabia in 2022
- Preparing to enter new markets for combined cycle power plant, such as Vietnam, Thailand, and Kazakhstan
- Aiming to enter the gas turbine power generation market in the Philippines

Water EPC

Doosan Enerbility has capabilities that cover the entire value chain of the water EPC business, including design, equipment supply, and construction. Starting with the Farasan project in 1978, leading up to the Shuaibah 3 project in Saudi Arabia in 2022, Doosan has been providing countries with a water supply capacity of about 8 million tons/day over the past 35 years. Backed by our project delivery experience with constructing global seawater desalination plants and EPC capabilities, we plan to diversify our business areas to include solving drought problems in remote and mountainous areas in Korea and building smart farm infrastructure overseas.

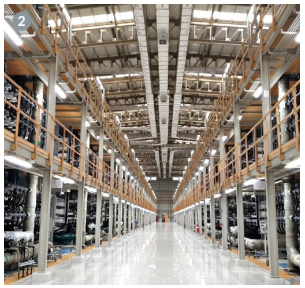
Core Business Areas and Main Products (Equipment)

1 MSF/MED Desalination Plants

- MSF and MED technologies are used to convert seawater to freshwater and they are essential water EPC technologies that can be applied to produce high-purity freshwater even under various water quality conditions, even for seawater with high salt concentration.
- Hold the capability to design and manufacture evaporators, a core component of MSF and MED plants.

2 RO(Reverse Osmosis) Desalination Plants

- Reverse osmosis (RO) is a technology for seawater desalination that can be applied independently without steam, with relatively low energy consumption, and can be widely applied to various capacities and processes.
- Won contracts for large RO plants, such as Yanbu 4 IWP (450,000m^3/day) and Shuaibah 3 (600,000m^3/day).



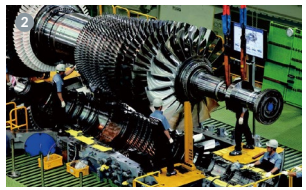
Existing Business

Castings & Forgings

To secure competitiveness in the face of the advancement of industries, we are making the best of efforts to create value for our clients by continuously investing in remelting facilities related to the production of ultra-clean steel and building optimal infrastructure to produce highly functional metal materials. Backed by our core competencies, we expect to have more opportunities to win new orders in the power plant, shipbuilding, and maritime businesses in the coming years.

Core Business Areas and Main Products (Equipment)

1 **Nuclear Power Plant Materials**	• Hold capabilities for fabricating main components of nuclear power plants, such as reactors and steam generators • Deliver forged parts to clients to be installed in large nuclear power plants and SMRs
2 **Turbine Materials**	• Manufacture and supply high quality castings and forgings for power plants using the company's one-stop manufacturing system and proprietary technologies • Supply rotor materials for high, medium, and low-pressure turbine rotors and generators to clients worldwide
3 **C/S(Crank Shaft) and Shipbuilding Materials**	• Certified by all major classification societies (ABS, DNV, etc.) • Supply cast and forged materials for shipbuilding, such as crankshaft and stern frame castings, shafts for ship engines to major shipyards at home and abroad
4 **Rack & Chord and Maritime Products**	• In 2022, started the mass production of special steel used in racks & chords, a key component of the jack-up legs used by offshore wind turbine installation vessels • Simultaneous and timely supply of various grades of high-strength, low-temperature castings and forgings for offshore plants, such as offshore drilling rigs, carriers, and special vessels

Large Nuclear Power Plant

The UAE Barakah Nuclear Power Plant, the first Korean nuclear power plant to be exported, entered commercial operation with Unit 3 in 2023, thereby demonstrating the company's technological prowess. In Korea, Shin Hanul 1, for which 100% local procurement was achieved for the RCP and MMIS, components that were formerly procured from overseas, began commercial operation in December 2022, and in March 2023, the company signed a contract to supply main components for Shin Hanul 3 and 4, signaling the restoration of the nuclear power plant ecosystem. As a member of Team Korea, Doosan Enerbility contributes to the stable supply of electricity in Korea and the achievement of greenhouse gas reduction goals. In addition, we are actively promoting the export of Korean nuclear power plants to countries, such as the Czech Republic and Poland, based on customized strategies for each country.

Core Business Areas and Main Products (Equipment)

1 **Reactors and Internal Structures**	• A nuclear reactor is a pressure vessel that stores nuclear fuel and provides a place for a chain of nuclear reactions to occur. • As the only company in Korea with the capability to manufacture large-scale nuclear reactors, we plan to manufacture and supply APR1000 reactors customized for Europe in the future based on our experience in delivering the Korean nuclear reactor APR1400 numerous times.
2 **Steam Generator**	• A major device in the reactor system that generates steam through heat exchange between the primary coolant of the reactor system and the secondary feedwater of the turbine/generator system. • We have designed, manufactured and supplied steam generators for Korean nuclear power plants (OPR1000, APR1400) and Westinghouse AP1000 in the U.S., as well as steam generator replacements for domestic and overseas nuclear power plants.
3 **Back-end Nuclear Fuel Cycle - Cask, Decommi-ssioning**	• Securing dry storage cask technology for spent nuclear fuel and promoting domestic and overseas businesses - Obtained design certification for Korean metal storage overpack (MSO-37) from the U.S. Nuclear Regulatory Commission(NRC) in January 2023 - Completed delivery of spent nuclear storage casks for Unit 1 at Three Mile Island (TMI) in the U.S. and scheduled to deliver Unit 2 in April 2024 - Pursuing new orders for design and manufacturing of domestic spent nuclear fuel dry storage containers • Pursuing domestic and overseas projects using nuclear power plant decommissioning technology - Based on our power plant services expertise, we are participating in national projects and pursuing the development of related technology such as for nuclear decommissioning.
4 **Nuclear Power Plant Construction**	• Construction of 10 domestic nuclear power plants (Hanul Units 1-6 and Saeul Units 1-4) • Won order for constructing the Phase 2 of the El Daba Nuclear Power Plant in Egypt in 2022 and currently in the process of construction • Participated as a member of Team Korea's construction team in cooperation with Korea Hydro & Nuclear Power (KHNP) to win orders for overseas nuclear power plants in the Czech Republic and other countries




Commitment to Sustainability

ESG Management

ESG Strategy and Roadmap

ESG Management Strategy

In 2011, Doosan Enerbility established its vision of making unremitting efforts to achieve sustainable growth and operating an eco-friendly business and has been steadily implementing the plans since then. To this end, we have selected acceleration of the transition to low-carbon energy, 2050 Carbon Re:set to establish an eco-friendly workplace and strengthening of the ESG management system, which involves enhancing the company's capabilities through implementation of ESG practices.

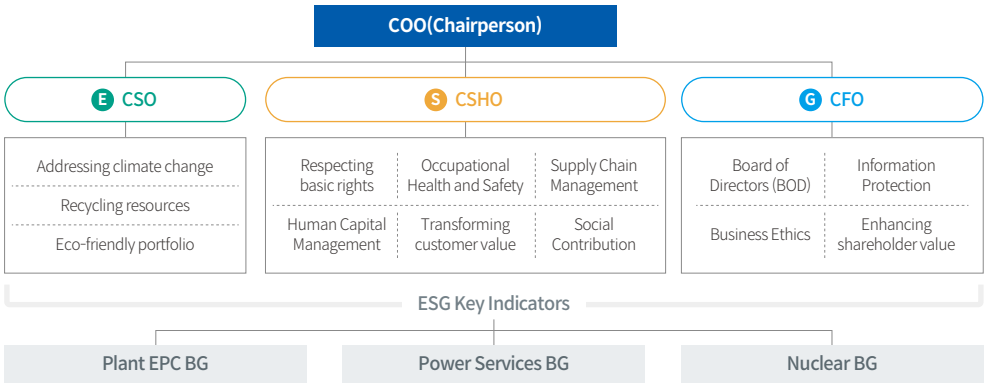
Each area has a Moonshot Goal that serves as the end goal and sub-goals that support it, all of which are driven by the Doosan Credo, Doosan's business philosophy.

Vision	Endeavoring toward a Sustainable & Green Future 2050
Focus Areas	Accelerating the transition to low-carbon energy / 2050 Carbon Re:SET / Strengthening the ESG management system
Moonshot Goal	Increase the share of eco-friendly, new growth driver businesses / Achieve carbon neutrality by 2050 / Manage executive ESG KPIs
Detailed Goals	Early realization of expansion plan for new growth driver businesses Improve sustainability of products/technologies Increase renewable energy procurement Optimize operations and apply new production technologies ESG accountability aligned with performance Strengthen communication with stakeholders
Guiding Philosophy	Doosan Credo

ESG Governance

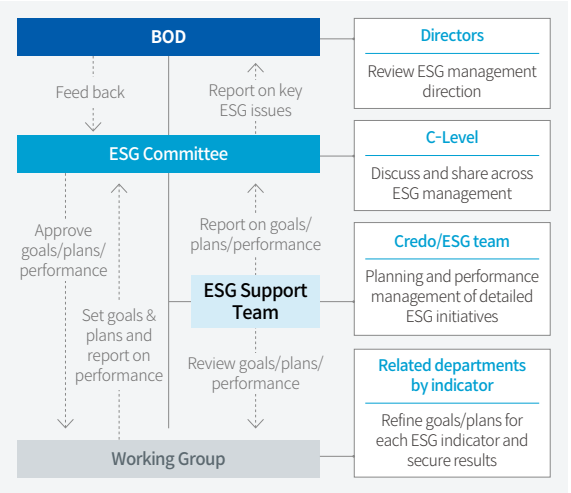
Direction of ESG Committee

The ESG Committee, chaired by the COO of Doosan Enerbility, practices ESG management by preemptively responding to ESG trends and strengthening the ESG management system to ensure the company's sustainable growth. To this end, goals and strategies are established under the leadership of the company's top management, taking into account the expertise of the E (Environment), S (Society), and G (Governance) pillars, and are implemented by the relevant business group.



ESG Implementing Organizations

Doosan Enerbility promotes sustainable business practices based on company-wide participation that includes the Board of Directors and management. The ESG Committee, which is composed of C-level executives, reviews the plans and performance of the overall ESG management, and the targets and implementation plans for each indicator which were reviewed by the Committee are communicated to the business groups for implementation. In addition, the major agenda items that were reviewed by the Committee are reported to the Board of Directors.



Materiality Assessment

Materiality Assessment Overview

To transparently communicate with stakeholders and systematically identify and manage ESG issues, Doosan Enerbility conducted a Materiality Assessment. It identified complementary relationships with stakeholders across the company's business activities and value chain, and identified the impacts that the company could have in light of its sustainable performance. We also conducted an environmental and social impact survey among internal and external stakeholders to identify ESG issues that Doosan Enerbility should respond to more proactively. Based on the results of the Materiality Assessment, we selected 13 Topic Shortlists, and finally selected five ESG Key Topics that have a material impact on the company.

Materiality Assessment Process

Step 1

Analyze and diagnose internal and external environments

- Analyze ESG evaluation standards and disclosure requirements (6 organizations including GRI Standards, KCGS and MSCI)
- Analyze international and peer industry trends
- Analyze BOD and ESG committee agendas and CEO messages
- Analyze press and media issues

Analyze domestic and international trends

- **Analyzing evaluation/disclosure criteria:** Analyze international initiatives and guidelines related to ESG to identify key domestic and international sustainability trends.
- **Benchmarking**: Identify key issues for best-in-class sustainability companies in peer and similar industries

Analyze press and media issues

- Analyze sustainability (ESG) articles in the media and intranet
  - **Research period:** 2022.01.01~2022.12.31
  - **No. of articles:** 6,739 valid articles found among 15,239 articles

Step 2

Create issue pools

- Identify 13 key issues (Topic Shortlist) for Doosan Enerbility that comprehensively reflect the internal and external environment analysis and current status diagnosis

2022 Key Issues(Topic Shortlist)

E Manage greenhouse gas emissions	S Safety and health management
E Energy usage and management	S Product quality and safety
E Air pollutant management	S Supply chain management
E Waste management	S Human rights management
E Hazardous materials management	S Diversity and inclusion
E Water, wastewater, and water pollution control	G Manage business transition risks
	G Ethical management

Step 3

Conduct an impact measurement survey

- Analyze the social and environmental impact of the company's activities through interviews
- Assess impact of each issue via survey conducted on internal members and external experts

Stakeholder Survey

- Survey conducted on the company's internal and external stakeholders regarding ESG management and issues
- Conducted a 5-point survey on the impact of each issue in four categories: size, scope, correctability and likelihood of occurrence, and selected key topics via standardization process
  - **Survey Period:** 2022.04.05~2022.04.11
  - **Method:** Online Survey

Step 4

Prioritize issues

- Prioritize all issues based on the results of the materiality assessment
- Select 5 Key Topics in line with ESG strategy and report to Doosan Enerbility management and BOD

2022 Key Topics

1	G **Manage business transition risks**
2	S **Safety and health management**
3	E **Hazardous materials management**
4	S **Product quality and safety**
5	E **Manage greenhouse gas emissions**

Materiality Assessment Results

Based on the materiality assessment, Doosan Enerbility has identified topics with high social and environmental impacts, and the top five key topics are reported to effectively demonstrate the impacts on the environment and society and the level of materiality of those impacts. By analyzing the social and environmental impacts of each issue, Doosan Enerbility will proactively prevent managerial risks and identify new opportunities to use as a basis for making the leap forward to a better future.

Key Topics Selection Results

Rank	Area	Issue	Social and Environmental Impact	Impact Attribute		Impact Materiality Level	Stakeholder	Report Page
				Positive/Negative	Actual/Potential			
1	Governance	Manage business transition risks	By providing clean and efficient energy solutions, the company helps reduce greenhouse gas emissions and improve air quality	⊕	Actual	●●●	Local community	9~10, 27~28
			Acceleration of climate change due to new orders and construction of large emitters of greenhouse gases/air pollutants such as thermal power plants	⊖	Potential	●○○	partner companies, Local community	
2	Social	Safety and health management	Improves safety and health management capabilities and raises safety awareness across the company's value chain, including the headquarters, business sites and partner companies	⊕	Potential	●◐○	Employees, partner companies	33~36
			Reduces legal and administrative risks by complying with safety-related laws and regulations, such as the Act on Punishment of Serious Accidents	⊕	Potential	●●○	Employees, partner companies, Government	
3	Environment	Hazardous materials management	Prevents hazardous chemical spills in workplace	⊕	Actual	●◐○	Employees, Local community	26
			Reduces legal and administrative risks by complying with laws and regulations related to hazardous chemicals	⊕	Actual	●●○	Government	
4	Social	Product quality and safety	Increases product safety by producing/buying high-quality products	⊕	Actual	●●◐	Clients, Competitors	43~45
			Increases customer trust and satisfaction for company's products and the company	⊕	Potential	●○○	Clients	
5	Environment	Manage greenhouse gas emissions	Greenwashing risks due to lack of visible and ongoing commitment to reducing GHG emissions	⊖	Potential	●◐○	Shareholders, Clients	29~30
			Contributes to the achievement of the Nationally Determined Contributions (NDC) and the 2050 carbon neutrality goal of the "Framework Act On Carbon Neutrality and Green Growth for Coping With Climate Crisis" ("Carbon Neutrality Framework Act")	⊕	Actual	●◐○	Government	

Management Approach

Doosan Enerbility conducts a materiality assessment every year and aims to pursue sustainable development by broadly reflecting the issues identified in the materiality assessment across its management and improving its system accordingly. We will transparently disclose our company-wide response to the issues identified as Key Topics in the Integrated Report, utilizing it as a communication channel with stakeholders, and will seek to strengthen our ESG management capabilities. Details of the GRI Index for the Key Topics can be found on page 83~84.

Rank	Issue	Definition	Strategy and Plan	Activity and Performance	GRI Mapping	UN SDGs
1	**Manage business transition risks**	Managing the risks and opportunities of transition through actions such as incorporating the impact of social, environmental, and political transitions, including responses to the transition to a low-carbon and climate-constrained economy, in the long-term business planning.	• Increase orders for renewable and eco-friendly projects such as hydrogen fuel cells and hydrogen gas turbines • Enter new business areas such as additive manufacturing (3D Printing), innovative materials business, digital transformation, etc.	• 73% of the order intake for 2022 were eco-friendly projects • Obtained international certification for 8MW offshore wind power system • Signed a number of MOUs for new growth driver businesses, such as clean hydrogen and digital technology	-	9, 12, 13
2	**Safety and health management**	Creating a safe working environment and promoting the mental and physical health of employees	• Establish a BOD reporting and approval system for health and safety decisions and key deliberations • Strengthen site safety management system • Expand support for supplier safety management	• Reported to the BOD on health and safety related discussions • Created a roadmap for fatal industrial accidents reduction and conducted a workplace risk assessment • Issued a total of 62 safety alerts in 2022 and published training materials for on-site supervisors and workers • Number of partner companies supported to obtain and maintain risk assessment accreditation: 35 companies • Number of partner companies supported to maintain KOSHA MS Certification: 5 companies	403-1~10	3, 8
3	**Hazardous materials management**	Complying with relevant laws and regulations and preventing leakages during the transportation, storage, use, and disposal of hazardous substances	• Achieve zero environmental accidents involving hazardous chemicals • Achieve incremental reductions in the use of hazardous chemicals	• Provided training to 4,458 employees and partner companies' workers dealing with hazardous materials • Contributed to reducing the use of hazardous chemicals by using only 110.7 tons of hazardous chemicals, 27.5% of our annually permitted quota of 403 tons • Introduced the Doosan Chemical Information System (DCIS), an integrated chemical management system, to manage incoming, outgoing, and usage of chemicals in real time	306-1~5	6, 12, 14, 15
4	**Product quality and safety**	Managing product-related risks by producing products while considering quality degradations and accidents that may occur when using the product, and by introducing follow-up measures	• Maintain and expand a total of 55 external certifications by business division to operate an organized and systematic quality assurance system in accordance with global standards to strengthen and ensure quality • Digitize quality information from planning to results of quality inspections to secure progress visibility and enhance execution of quality management	• Korea's first ISO 19443 certified company • Won more high-quality small modular reactor (SMR) projects and expanded strategic partnerships • Pursued nuclear quality management training programs • Reviewed project risks through the implementation of Quality Gates • Operated the Doosan Quality Management System (DQMS) to produce products in line with global standards • Conducted Customer Satisfaction Survey: Achieved 88.1 points (▲7.1 higher than the previous year)	416-1~2	12
5	**Manage greenhouse gas emissions**	Minimize negative climate impacts through activities such as reducing greenhouse gas emissions by proactively identifying climate change risks	• Set goal of reducing GHG emissions by 208,000 tons (19.4%) in 2030, compared to 258,000 tons in 2017, with the ultimate goal being to achieve Net Zero by 2050	• Established a Climate Change Response Council • Conducted short, mid-to-long term climate change (physical and transitional) risk/opportunity analysis • Conducted monthly GHG emissions monitoring through GEMS (Green Energy Management System) • Expanded GHG emission disclosure coverage to overseas subsidiaries in 2022	305-1~7	3, 7, 13

Stakeholder Engagement

Stakeholder Communication

Doosan Enerbility defines shareholders, customers, employees, partner companies, local communities, governments, and competitors as the main stakeholder groups, and operates communication channels for each group to collect opinions smoothly. In addition, we actively refer to and respond to our stakeholders' valuable opinions in our corporate management to effectively build trust with stakeholders.

	Shareholders	Clients	Employees	Partner Companies	Local Communities	Government	Competitors
Key Stakeholders	• Doosan Corporation • Foreign investors • Institutional investors • Minority shareholders	• Domestic public power generation companies • Domestic private power generation companies • International customers	• Employees at headquarters • Employees at overseas branches/ offices • Employees at overseas subsidiaries	• Primary and secondary partner companies	• Local residents • Academia • Research centers • NGOs	• Government • Local governments • Related organizations	• Manufacturers of power plant equipment • Companies that build desalination & water treatment plants
Key Interests	• Stable mid-to-long term growth • Increasing shareholder value	• Increasing customer satisfaction • Improving product quality and safety	• Establishing a horizontal work culture • Work-Life Balance	• Building a mutual growth-supporting ecosystem • Supporting supplier sustainability	• Conducting strategic social contribution activities • Pursuing shared growth with local communities	• Fulfilling social and legal responsibilities • Paying taxes	• Enabling fair trade and fair competition
Communication Channels (Frequency)	• IR (regularly) • Conference (ad hoc basis) • Overseas NDR (ad hoc basis)	• Roadshows (ad hoc basis) • Technical Presentations (ad hoc basis) • VOC (Voice of Customer) (constantly) • Attend safety training programs for private power generation companies (ad hoc basis) • Technology exchange meetings and seminars (semi-annually) • Customer satisfaction surveys (annually)	• Occupational Safety and Health Committee (quarterly, ad hoc basis) • Labor-Management Council (quarterly) • Overseas Site Workers Training Programs (ad hoc basis) • Health and Safety Statutory Training Programs (regularly) • Management briefings (throughout the year) • Security Council Meeting (once every other year)	• General Assembly of Doosan Enerbility Partners (annually) • Doosan Enerbility Partner Companies Steering Committee (semi-annually) • Primary Suppliers Meeting for Shared Growth (quarterly) • Safety & Health Council for Supplier Representatives (monthly)	• Social welfare center and local childcare center-linked programs (ad hoc basis) • Doosan Enerbility Social Service Volunteers Council (ad hoc basis) • Organizations related to social contribution activities (Local governments of Changwon City, Gyeongsangnam-do Province, beneficiary organizations) (ad hoc basis) • Local Community Service Council (ad hoc basis)	• Korea Environmental Industry & Technology Institute (ad hoc basis) • Safety and Health Innovation Leaders Forum (quarterly) • PSM Council (quarterly) • Voluntary agreement for fine dust reduction initiated by Gyeongnam Provincial Office (semi-annually) • Council for Fire Development (monthly) • Changwon City, Gyeongsangnam-do (ad hoc basis) • Outsourced quasi-governmental organizations (Korea Energy Technology Evaluation and Planning, Korea Evaluation Institute of Industrial Technology, etc.) (ad hoc basis) • Gyeongsangnam-do Climate and Environment Network Committee (semi-annually) • Gyeongsangnam-do Sustainable Development Council (semi-annually) • Changwon City private-public sector agreement for saving Masan bay, Changwon Coast Guard (annually) • Local council for marine pollution prevention (ad hoc basis) • Gyeongnam Environmental Engineers Association (semi-annually)	• Technology exchange meetings (ad hoc basis)

Environmental

Environmental Management

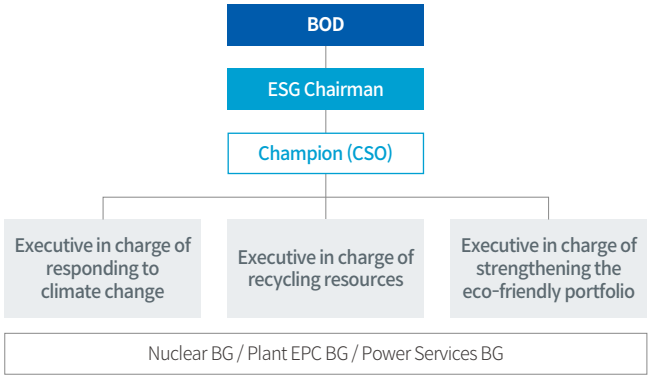
Governance

Doosan Enerbility establishes and implements an environmental policy by putting the value of environmental safety at the forefront of all its business activities, and transparently discloses it to stakeholders. We comply with environmental laws and regulations related to our business activities and develop eco-friendly technologies and products to reduce greenhouse gases and pollutant emissions. In addition, we have been ISO14001 certified since 2010 and have established an Environmental Management System (EMS) to systematically manage environmental performance in all processes at all sites. We pursue sustainable development by continuously sharing improvement results with stakeholders including the Board of Directors (BOD).

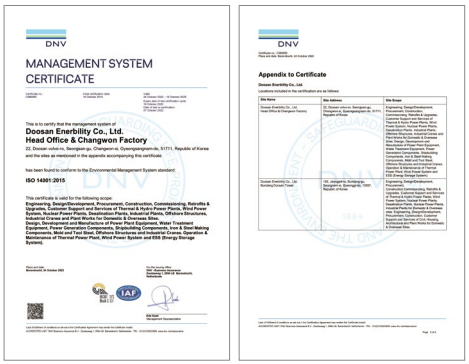
Organization in Charge

Through the ESG Committee, Doosan Enerbility establishes goals and manages performance for each environmental indicator, and reports on key issues to the BOD for the sake of effective management. The corporate-wide direction and goals for environmental management are established and approved by the CSO, who is the environmental champion of the ESG Committee, while the executives in charge of climate change response, strengthening of eco-friendly portfolio and resource recycling, establish goals for their respective area in alignment with the corporate and Business Group(BG)-level goals, conduct performance reviews and carry out the feedback process.

Environmental Management Organization



Environmental Management System (ISO 14001) Certification



Management Strategies and Targets

Doosan Enerbility's mission is to drive sustainable business growth through energy and environmental performance by establishing an advanced and scientific environmental management system centered around people and nature. To achieve this, we are implementing five strategic initiatives, including the development of eco-friendly products and technologies. We also set detailed management indicators, as well as short and mid-to-long term targets for strategic initiatives, establish action plans for each indicator and manage the performance and results annually.

Strategic Initiatives

Develop eco-friendly products and technology	Contribute to building resource-circulating society	Build a green production system	Build preemptive response system for domestic/ overseas regulations	Develop advanced, scientific environmental management systems and processes

Targets & Results

Management Indicators	Mid-to-Long-Term Targets	2022 Targets	2022 Results
Greenhouse gas emissions (Unit : 10,000 tons)	· 2030 : **20.8** · 2050 : **Net Zero**	· Scope1 : **10** · Scope2 : **13** · Total : **23**	· Scope1 : **9** · Scope2 : **12.5** · Total : **21.5** (reduced 1.5)
Energy usage	· 2030 : Fossil fuels **1,475**TJ · 2030 : Electricity **2,520**TJ	· Fossil fuels : **1,614**TJ · Electricity : **2,760**TJ	· Fossil fuels : **1,506**TJ · Electricity : **2,575**TJ
Waste recycling rate	· 2030 : **95**% or more	· **91.5**%	· **91.6**%
Manage NOx and SOx quotas and emissions	· 2030 : less than government quota	· **218** tons	· **116** tons
Wastewater discharge concentration	· 2030 : less than government quota	· **40**%	· **18.6**%
Manage hazardous chemicals	· 2030 : less than government quota	· **201.5** tons	· **110.7** tons
Purchase green products	· To purchase according to company's procurement plan	-	· KRW **21.6** billion
Environmental Investments	· To invest according to company's investment plan	· KRW **800** million	· KRW **810** million

Risk Management

Provision of Environmental Training

Doosan Enerbility has established a training program plan and offers various training programs aimed at raising the environmental awareness of employees and partner companies.

In 2022, we provided training for employees, partner companies' workers and related personnel on how to handle, store, and manage hazardous chemicals and respond to accidents. We also held monthly in-house waste management training programs for partner companies' representatives to establish a culture that promotes waste collection.

Environmental Management Training Program

Course	Trainees	Content
Training for workers dealing with hazardous chemicals	Employees and partner companies	• Year-round training for workers dealing with hazardous materials (2,056 employees, 929 partner companies' workers at Changwon plant)
Training for workers managing/handling hazardous chemicals	Workers managing/ handling hazardous chemicals (5 people)	• Hazardous chemical storage and handling facility management standards, first actions to be taken in the event of leakage, etc.
Training on waste sorting	In-house partner companies' (50 companies) representatives	• Conducted once a month • In-house waste sorting standards, key insufficiencies in waste sorting, types of designated waste and sorting standards, etc.

Management of Air Pollutants

Doosan Enerbility is conducting process control and active facility improvements and investments to reduce the generation of major air pollutants, such as nitrogen oxides(NOx), sulfur oxides(SOx) and dust. In 2022, we invested KRW 500 million to improve facilities such as forging and heat treatment furnaces to reduce nitrogen oxides(NOx), and as a result, emitted only 116 tons, an amount equivalent to 53% of the total regulatory quota of 218 tons (nitrogen oxide and sulfur oxide). We have also established and implemented annual reduction targets to be achieved by 2024 based on a voluntary agreement entered into with the Gyeongnam Provincial Office for reducing fine dust. We successfully achieved the target by emitting only 40 tons, which equates to 70% of the target level (60 tons), through the installation and operation of air pollutant prevention facilities (rooftop hoods) for major emitting facilities such as electric arc furnaces. In recognition of these efforts, the company was selected as an excellent workplace from among the companies who signed the Voluntary Agreement on Fine Dust Reduction in 2022. The company monitors and manages the pollution level of air pollutants in the production process by periodically conducting self-assessments, and also communicates with the local community by periodically measuring the air pollution level at the boundaries of its business sites. In addition, we plan to invest a total of KRW 5.4 billion by 2024 to improve facilities for the continuous reduction of air pollutants.

Water Pollutant Management

The company stably manages major water pollutants at a level of less than the legally permissible discharge standard at its in-house wastewater treatment plant. In addition, the company transfers all treated wastewater to the Deokdong Water Recycling Center, a public sewage treatment facility, to eliminate the risk of reuse as industrial water or discharge wastewater. In addition, we have strengthened our own standards for measuring pollutants in the treated wastewater once a week. To monitor the pollution level around the workplace, we conduct pollution analysis on rainwater from drainage ditches around the workplace, as well as seawater near the pier and Yongho village every half year to prepare for possible unexpected environmental damage.

Waste Management

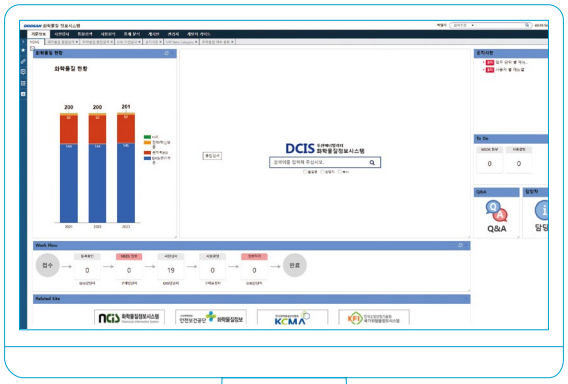
Doosan Enerbility is actively responding to the Resource Circulation Act, which has been in effect since 2019, and is conducting activities to curb waste generation and promote recycling in order to expand the circulation of eco-friendly resources and minimize environmental pollution. We avoid simple incineration and landfilling and make activities to expand recycling or fundamentally reduce waste emissions the basis of our management strategy. In 2022, we achieved a waste recycling rate of 91.6%, and reused 37% of the recovered iron and processed chips generated in the steelmaking process, contributing to resource circulation. We also strive to minimize incineration/landfill waste by identifying new recyclers to improve the recycling rate. We closely monitor the legal disposal of waste through on-site inspections of waste disposal companies every year, and in 2022, we conducted on-site inspections of high-risk waste management companies to prevent legal risks such as legal disposal of waste before contracting with waste disposal companies.

Main Activities to Improve Waste Recycling Rate

Hazardous Materials Management

Operation of Doosan Chemical Information System (DCIS)

Doosan Enerbility has established the Doosan Chemical Information System (DCIS) to digitize and efficiently manage the entire cycle of chemicals from purchase to use. We require prior approval for all chemicals entering the workplace and strictly prohibit the importation of unapproved hazardous chemicals. In addition, to comply with relevant laws and regulations (Chemical Substances Control Act, Occupational Safety and Health Act, Act on the Safety Control of Hazardous Substances) and to provide the latest information on hazardous substances to those in charge in a timely manner, we provide chemical safety data sheets in the Doosan Chemical Information System (DCIS).



Doosan Chemical Information System (DCIS) Screenshot

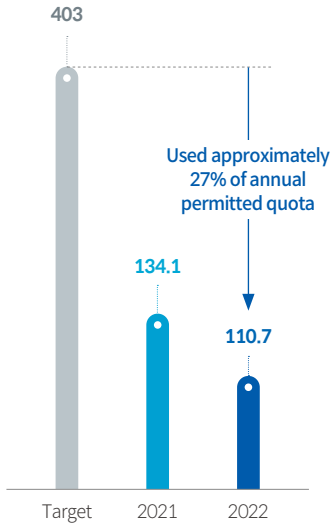
Reducing the Use of Hazardous Chemicals

Doosan Enerbility is committed to promoting workers' safety and minimizing environmental impact on local communities throughout our chemical use processes. As part of this endeavor, we have set target usage amounts for hazardous chemicals and are continuously managing and reducing usage.

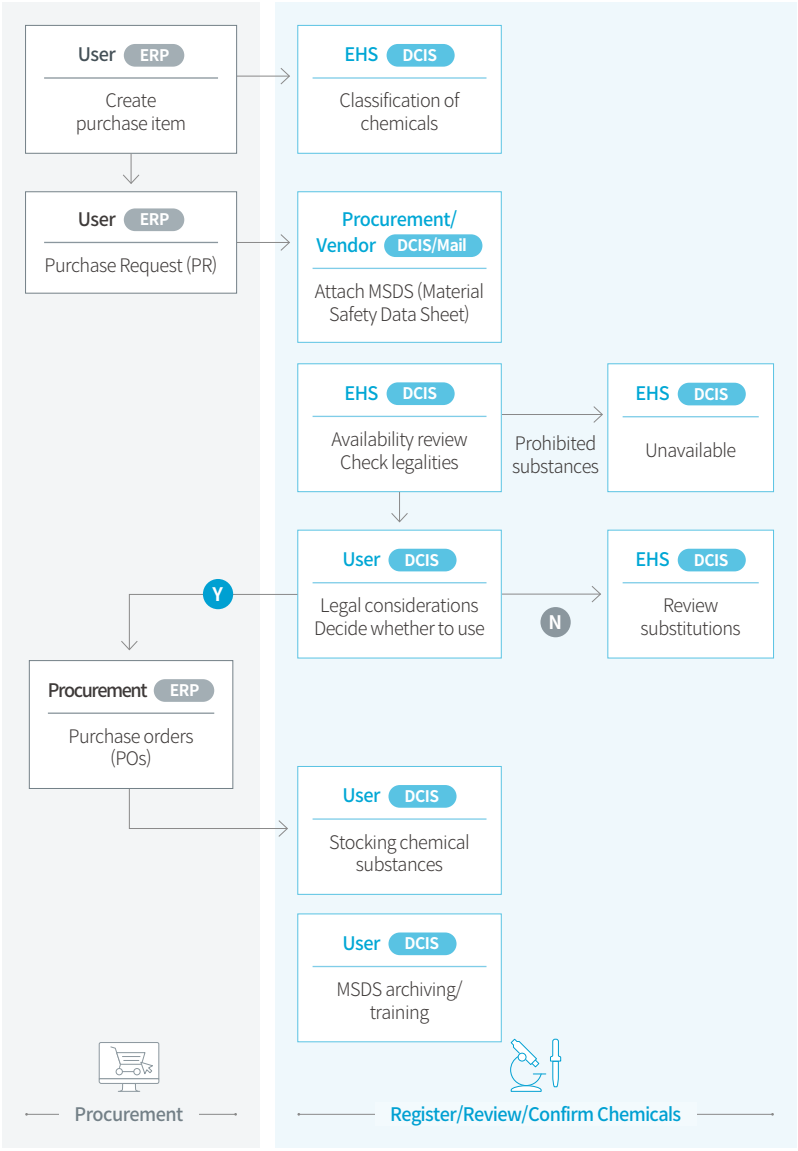
In 2022, we contributed to the reduction of hazardous chemical usage by using only 110.7 tons of three major hazardous chemicals (sulfuric acid, caustic soda, and 2-furanmethanol) at the Changwon plant, an amount equivalent to about 27% of the annual permitted quota (403 tons).

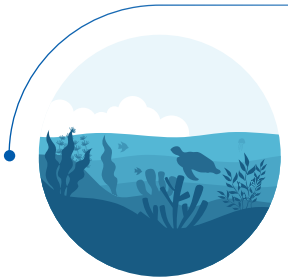
Hazardous Chemical Usage Targets and Result

(Unit: ton)



Hazardous Chemical Management Process





Biodiversity

Risk Management

Preserving Biodiversity

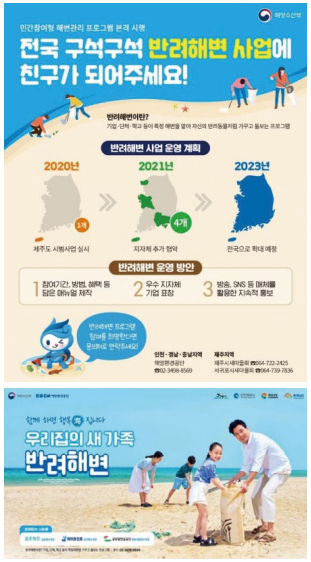
Designation of Companion Beach

In September 2022, Doosan Enerbility participated in the nationwide designation of companion beaches (28 nationwide) organized by the Ministry of Oceans and Fisheries, and received approval and designation of Gwisan Beach as a companion beach. We were also awarded the Minister of Oceans and Fisheries Award for our contribution to coastal cleanup activities, such as reducing marine waste.The Companion Beach Program is a marine ecosystem conservation program in which private sector organizations, such as companies, civic groups, and schools voluntarily apply to designate specific beaches for marine management and conservation.

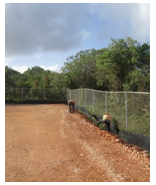
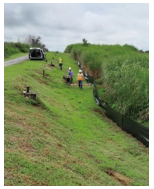
All participants are required to conduct cleanup activities at their designated beaches at least three times a year, and must plan and operate related marine environmental protection programs or devise separate environmental programs. We will strive to improve and preserve the local marine environment by planning activities and programs that meet the purpose and conditions of the Companion Beach Program and actively encouraging employees to participate.

Project Biodiversity Conservation

Doosan Enerbility is strengthening project-specific biodiversity management to minimize negative impacts on local biodiversity. We identify relevant risks prior to project implementation and actively respond to them.



Poster to encourage participation in the Companion Beach Program

Project	Risk Analysis	Responding to risk	Cases	BEFORE	AFTER
Ukudu CCPP	**Protected species conservation** • Tree snails are native to Guam's forest ecosystem and are not found on any other island. • Rapidly disappearing due to habitat destruction and introduction of invasive species	• Conduct a pre-survey on protected species by a certified biologist • If there are protected species as a result of the pre-survey, mark the area with a ribbon and install barriers to protect them • Conduct monitoring by a biologist during the construction of the fuel pipeline, and provide training to workers and drivers on the protection of protected species	Stormwater treatment furnaces		 
	Preventing the introduction of invasive species • Species that are not native to Guam's ecosystem and could impact existing ecosystems if introduced.	• Washing mud and dirt from construction equipment tracks (or tires) to prevent the spread and introduction of invasive species in construction areas			
	Managing stormwater to prevent pollution • Rainwater and stormwater runoff can mix with materials on site and pollute the surrounding environment, including nearby storm sewer systems, rivers, lakes, or coasts • Requires stormwater treatment measures to be implemented in accordance with a CWAP(Clean Water Act Permit) and SWPP(Storm Water Pollution Prevention Plan)	• Installation of silt fence in the boundary fence area of the project site to prevent external run-off of storm water from the Ukudu site and the fuel pipeline construction section			
Gimpo Combined Heat and Power(CHP) Plant	• Risk of disruption of native plant ecosystems due to the occurrence of invasive plants on site	• Greenbelt weeding to remove invasive plants, inhibit seed production, and promote the recovery of native plant communities	Improving native plant ecosystems		
	• Dust generated due to soil flowing to nearby roads and local residents' complaints issued	• Regularly run water trucks and loaders to remove and clean up runoff from surrounding roads to reduce dust and complaints			
Dangjin LNG Tank Construction	• Need to reduce on-site fugitive dust from high winds and vehicle traffic	• Placing blast furnace slag (aggregate) on site			
	• Need to prevent soil contamination from work byproducts	• Preventing soil contamination through concrete pavement construction in rebar factories	Preventing soil contamination through paving		
	• Construction waste left unattended on site	• Running waste transfer station • Installing covers for waste scattering	Construction waste management		
	• Need to prevent environmental complaints near construction site	• Organize periodic environmental cleanups with participation of all employees			

Biodiversity Management

Protecting biodiversity in the project area

Doosan Enerbility reviews the creatures that need to be preserved in the areas where we operate and effectively conducts protection activities for them. In particular, we prepare an environmental impact assessment report before the project to disclose the details of bio-protected species that need to be protected and fulfill our obligation to take measures to protect the local ecosystem. Prior to the start of a project, we conduct surveys for biodiversity management with the local community to identify plant and animal species that need to be preserved and carry out protection activities for them. In addition, to preserve the ecosystem and minimize environmental changes from the construction stage, we periodically conduct monitoring of air, water, sun, noise, and vibration, and share the results with the client for systematic and continuous management.

Region	Project Name	Key Management Area	Number of Managed Species	Details of Managed Species
Oman	Sharqiyah	Water	9	• Turtles, whales, dolphins, foxes, lizards (35 species), gazelles, camels, goats, and birds (94 species, including eagles and seagulls)
Korea	Pyeongchon General Industrial Complex	Fertile soil, native trees	6	• Fertilized soil (5,900m^3): Park planting soil (3,498m^3) + green space landscaping soil (2,402m^3) • 762 trees in total including 47 oak trees, 4 konara oak trees, 3 hornbeam trees, 665 pine trees, 27 pine trees, 16 konara oak trees
	Suncheon Trimaze	Native trees, parks, and greenery	2	• 395 trees in total including 269 oak trees and 126 konara oak trees • Park: 25,157m^2, greenery: 45,834m^2
	Honam Railroad District 3	Fertile soil	-	• Fertilized soil 1,976m^3
	Ulsan Down 2 Public Housing District Construction work (District 1)	Damaged trees, animals, and fertile soil	3	• 280 trees transplanted, 1 old and large trees (black pine) • Scarlet dwarf dragonfly • Fertilized soil 28,100m^3
	Galcheongasu Road Expansion Project	Animals	7	• Lynxs, mandarin ducks, bean goose, white-tailed eagles, hen harriers, kestrels, white-naped cranes
	345kV Force Power Transmission Line Construction	Animals and plants, air, water quality, topography & geology resource circulation, noise & vibration	18	• Plant: Siberian ginseng • Mammals: marten, otter, lynx, goat, flying squirrel • Birds: mandarin ducks, kestrels, falcons, eagles, Chinese sparrowhawks, sparrowhawks, goshawk, long-billed ploves, scops owls, eagle-owls • Fish: eurasian minnow, truman river sculpin
	Gimpo Combined Heat & Power Plant Construction Office	Plants, animals	6	• 153 evergreens, 612 deciduous trees • Lynxs, snow geese, sparrowhawks, kestrels, Korean frogs, sheldrakes
	Changnyeong-Milyang Expressway	Plants, animals, and fertile soil	1 animal 1 plant	• 493 oak trees, lynxs • Fertilized soil 2,526m^3
	Changwon Dong-eup~Gimhae Hallim National Highway Construction	Animals	27	• 2 mammals (lynxs, otter) • 1 amphibian (narrow-mouthed toad) • 2 reptiles (freshwater tortoise, pythons) • 22 birds (Korean buzzard, kestrel, sparrow hawk, mandarin duck, Chinese sparrowhawk, pied harrier, falcon, spoonbill, whooper swan, swan goose, bean goose, lesser white-fronted goose, spectacled teal, white-naped crane, eagle owl, white-tailed eagle, goshawk, hawk, painted snipe, eagle, imperial eagle, white heron)
	Sejong-Anseong Expressway	Plants	6	• 324 trees in total including oak, oriental oak, Mongolian oak, konara oak, white oak and pine trees
	Hamyang-Changnyeong Expressway District 7	Plants, fertile soil	1	• 99 oak trees • Fertilized soil: 558m^3, 883m^3

Responding to Climate Change

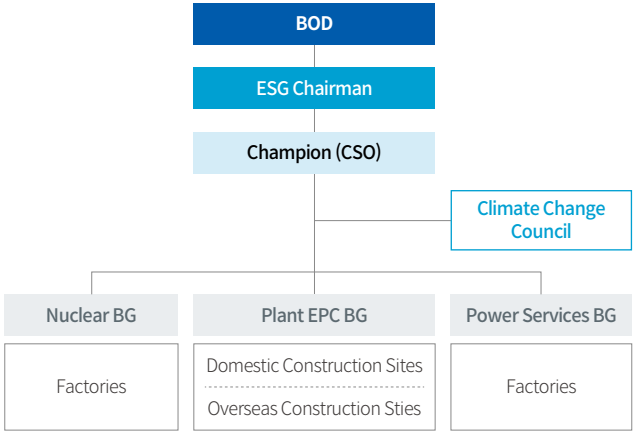
Governance

Doosan Enerbility operates the ESG Committee, which includes top decision makers and key decision makers, as a body that analyzes risks and opportunities for responding to climate change, checks on the performance of responding to climate change, including greenhouse gas emissions, and makes decisions on future initiatives. In addition, key issues are reported to the BOD, and in 2022, we reported on the results of establishing ESG management strategies, including the ESG Carbon Neutrality Roadmap, and collected opinions.

Climate Change Council

Doosan Enerbility established the Climate Change Council in 2022 to strengthen the implementation of actions to combat climate change. Through the Council, we review detailed implementation plans for achieving carbon neutrality with the related organizations, such as investing in a rooftop solar power system for the Changwon plant.

Organizations for Responding to Climate Change



Climate Change Council	(Established in 2022) Council of relevant departments to promote individual tasks for responding to climate change (consultative body of executive directors in charge of management)

Key Activities of Climate Change Council

Key Areas

Responding to domestic and international policies and regulations regarding climate change

- Responding to domestic and international policies and regulations regarding climate change
- Reflect and monitor climate change priority KPIs

Identify and implement carbon neutrality/reduction projects

- Securing carbon credits and driving reduction activities
- Reviewing investments and establishing action plan for carbon reduction projects

Operation Plan

Frequency

- Regularly: before and after the ESG Committee is convened every year
- Ad Hoc Basis: as tasks progress and climate change issues arise

Method

- Basic policy is to have non-face-to-face meetings. On-site meetings to be convened if needed.

Strategy

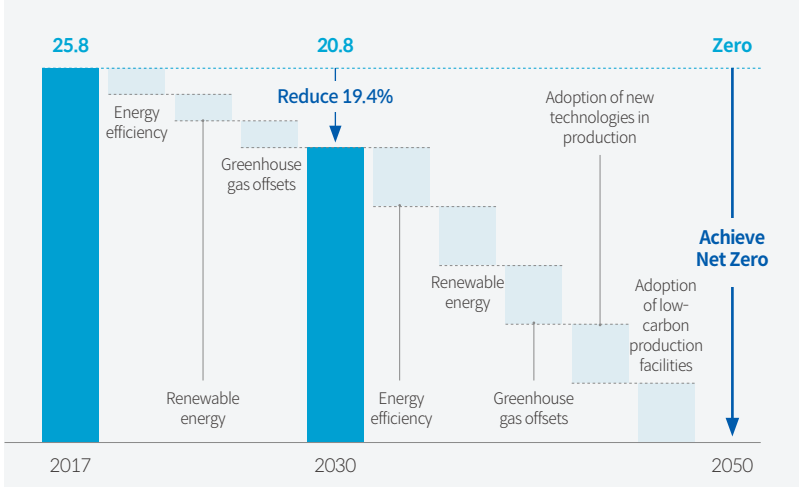
Advancing a Mid- to Long-Term Net Zero Strategy

Under the '2050 Carbon RE:Set' strategy, which is a focus area of our ESG Vision, Doosan Enerbility has established a detailed roadmap to achieve the 2050 Net Zero goal, the 2030 interim goal, and a 19.4% reduction from 2017 carbon emissions. To achieve the 2030 goal, we are expanding the use of renewable energy, conducting external reduction activities, and improving the efficiency of energy use at the Changwon plant, and plan to achieve the 2050 goal by focusing on introducing new production technologies and low-carbon production facilities at the Changwon plant. We are implementing business strategies and investments to effectively reduce not only scope 1 & 2 carbon emissions generated within company-owned, operated, and managed business sites, but also scope 3 indirect carbon emissions generated within the value chain by accelerating the transition to a portfolio of green energy-centered growth driver businesses.

In 2022, we promoted the conversion of aging cooling & heating facilities to ones with heat pumps, which improve efficiency by 25%, and established a Climate Change Council to enable prompt response to government policies. In addition, we were the first Korean conglomerate to participate in the government's carbon win-win cooperation project. We were able to identify a total of nine participant companies and reduced carbon emissions by about 2,000 tons per year, thereby actively contributing to the government's carbon neutrality policy. We also saved power and reduced carbon emissions by developing a production output forecasting system utilizing AI at our manufacturing plants.

2050 Carbon Neutrality Roadmap

(Unit: 10,000 tons)



Risk Management

Based on the governance system for responding to climate change, Doosan Enerbility identifies and effectively responds to climate change risks and opportunities through the climate change risk management process and materiality assessment. We analyze scenarios such as RCP, IEA, and NDC, and prepare and implement countermeasures by categorizing legal and regulatory, technological, market, reputation, timeframe, and scope of application in terms of business strategy and finance. Major climate change risks and opportunities include shifting to an eco-friendly business portfolio, responding to the cap-and-trade system (ETS), and managing business site facilities in the event of heavy rains/earthquakes.

Managing Climate Change Risks and Opportunities

Based on the company-wide climate change risk management process, Doosan Enerbility identifies, monitors, and manages risks and opportunities for climate change issues. In addition, material climate change issues that have a strategic and financial impact on the company are reported to the top management and BOD for decision-making.

Physical Risk Management

Doosan Enerbility is conducting physical risk assessments and formulating countermeasures based on RCP scenario analysis as the frequency and intensity of extreme weather events such as heavy rain and heat waves increase due to rising global temperatures. For Changwon, Gyeongsangnam-do, where our main business site is located, we analyzed climate change projections for the Korean Peninsula, strong winds, and earthquake history from the National Academy of Meteorology, and developed a plan to secure safety against flooding at the Changwon plant, as well as a plan to identify and reinforce the seismic status of buildings.

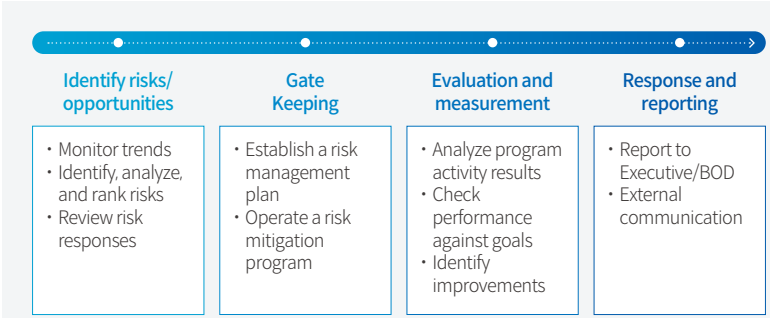
RCP8.5 Scenario Analysis (Greenhouse gas emissions on current trends)
The amount of damage to tangible assets due to the heat wave/rain was estimated to be up to approximately KRW 96.6 billion/6.2 billion. All ESG sub-committees are continuously promoting investments in responding to climate change through company-wide situational assessments, and are also conducting preparatory activities for natural disasters.

RCP6.0 Scenario Analysis (Achieving some level of GHG reduction)
It was analyzed that the maximum temperature and annual precipitation in the area where the business site is located will increase, and the intensity of precipitation in the Changwon business site will be the highest in Korea.

RCP4.5 Scenario Analysis (Significant realization of greenhouse gas reduction policies)
In addition, we conducted a CRAS (Climate Change Risk Assessment System) scenario analysis based on the year 2100 to analyze the financial risks of climate change and prepare countermeasures. According to the RCP4.5 scenario, the maximum amount of damage to tangible assets due to heat waves/rain is approximately KRW 45.8 billion/4 billion.

RCP2.6 Scenario Analysis (Take an immediate action on greenhouse gas reductions)
It was predicted that the risk of climate change in the workplace would decrease due to the reduction of greenhouse gas concentrations. In 2022, we invested approximately KRW 330 million to mitigate physical risks by improving the reinforcement of rock cuts, slopes, and drainage channels.

Climate Change Risk and Opportunity Management Process



Physical Risk and Opportunity Analysis

Type	Issue	Risk	Opportunity	Response	Period	Scope	Financial impact
Acute	Large-scale catastrophic disasters (typhoon, flood, heat wave, fire)	Losses due to production delays and disruptions	Reliable product delivery with better management	Assess workplace risks and develop a response plan	Short-term	Company, Downstream	High
Chronic	Rising temperatures and increased precipitation	Increased production facility operating costs	Growing demand for carbon-free power	Going carbon neutral	Long-term	Company, Downstream	High

Transition Risk Management

Doosan Enerbility recognizes the transition to a low-carbon economy as being an important part in securing the sustainability of the company which operates in the energy sector. Doosan is analyzing and responding to business risks and opportunities from a mid- to-long term perspective for the categories of law/regulations, technology, market and reputation based on IEA scenarios (B2DS, NZE 2050, APS) and national NDCs. Based on the IEA B2DS and NZE 2050 scenarios, we are establishing and implementing key strategies to accelerate the transition to an eco-friendly portfolio centered around the four areas: renewable energy, gas turbines, hydrogen, and next-generation nuclear power plants. We have also established a 2050 carbon neutrality goal based on the IEA APS and NDC scenarios, and set an interim goal of reducing emissions by 19.4% from the 2017 level by 2030. We are striving to effectively reduce carbon emissions through legal and regulatory responses such as the Carbon Border Tax and Taxonomy, as well as improving energy efficiency at our plants to produce low-carbon products. In 2022, we established a BAU (Business as Usual) emissions calculation system for company-wide GHG emissions by utilizing the manufacturing plants' production KPIs, and calculated not only scope 1 & 2 but also scope 3 emissions, and we plan to gradually expand the scope of calculation, as well as prepare ways to measure carbon emissions by product. In addition to establishing an eco-friendly business strategy to respond to reputational risks, we have been disclosing environment-related information, and we also changed our company name to Enerbility, which was coined by combining the words energy and sustainability, to better meet the changing business environment and strengthen communication with stakeholders by presenting our future direction.

Transition Risk and Opportunity Analysis

Type		Issue	Risk	Opportunity	Response	Period	Scope	Financial Impact
Legal/ Regulatory	Present	K-ETS (Korea Emissions Trading Scheme)	Rising emissions prices	Gain on sale of emission allowances	Improve workplace energy efficiency	Mid-term	Company, Downstream	Mid
	Present	Taxonomy (Green Taxonomy)	Decreased revenue due to failed business conversions	Efficiently attract outside investment	Ensure taxonomy coverage by business unit	Mid-term	Company, Upstream	Mid
	Future	EU CBAM (Carbon Border Adjustment Mechanism)	Increased costs due to taxation	Reduce regulatory costs through carbon reduction	Manage and improve carbon footprint by product	Mid-term	Company, Downstream	Mid
Technical		Developing low-carbon, green products	Increased competition in green technology development	Increase competitiveness of green products	Invest in new green businesses such as additive manufacturing (3D Printing)	Short-term	Company, Downstream, Upstream	Low
Market		Increased demand for green energy	Shrinkage of existing business market	Increase revenue by capturing new markets	Accelerate offshore wind power and next-generation nuclear power projects	Short-term	Company, Downstream, Upstream	High
Reputation		Stakeholders' demand for response to climate change	Tighter sanctions on investments in existing businesses	Increased intangible assets such as brand value	Expanding green business portfolio	Mid-term	Company, Downstream, Upstream	Low

Metrics & Targets

As climate change response is recognized as a major opportunity and risk for the company's sustainability management and its impact is increasing, we set KPIs such as accelerating the transition to a clean energy-centered portfolio and quantitatively reducing carbon emissions as targets for key employees, including the C-level management, and evaluate their performance annually in conjunction with Management by Objectives (MBO), and grant incentives such as performance-related pay and promotion.

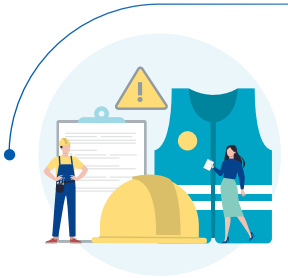
Managing Greenhouse Gas Reductions

Through the Green Energy Management System (GEMS), Doosan Enerbility sets GHG reduction targets for each business site, Changwon plant, construction site, and department in conjunction with national GHG emission quotas and internal carbon neutrality targets, and monitors GHG emissions from energy use in real time on a monthly basis for company-wide management to achieve the targets. In 2022, in order to respond to climate change risks and expand opportunities, we plan to discover additional indicators for scope 3 carbon emissions, carbon emissions by product, and eco-friendly sales, and to establish a system for calculating additional indicators by linking the existing production system and GEMS. In 2022, we implemented AI and energy efficiency enhancement activities centered on the casting and forging shops to reduce GHG emissions at the workplace, and converted the offset credits given for the Myanmar Cookstove CDM project to domestic use. In addition, to effectively respond to climate change risks and expand opportunities, we have defined additional indicators, such as the Scope 3 carbon emissions, carbon emissions by product, and eco-friendly sales. We also have plans to build a system to calculate carbon emissions by product, which involves linking the existing production system and GEMS.

Managing Energy Usage

We set company-wide energy reduction targets under EHS KPIs and manage energy usage (electricity, natural gas etc.) monthly by BG/factory unit, and identify and manage energy-saving items annually, and the energy management department monitors results of the energy saving. In 2022, we replaced the aging cooling and heating system with a heat pump, improving thermal efficiency by 25%, and set a goal of reducing energy costs by KRW 1 billion. For efficient and economical energy management, we are establishing a systematic system for energy management by factory and building by upgrading the Green Energy Management System (GEMS). In addition, in 2022, we have been implementing efforts to continuously improve energy efficiency by identifying possible reduction items through the statutory energy diagnosis conducted every five years.

Social



Safety and Health Management

Governance

Doosan Enerbility recognizes the importance of promoting the health of its employees through on-site safety management, and strives to create working conditions based on trust for all employees and partner companies, and to strengthen its safety and health management system. Accordingly, the company has appointed the head of the EHS/Management Division as the Chief Safety and Health Officer (CSHO) and operates the Occupational Safety and Health Committee to deliberate and resolve major issues related to occupational safety and health. The ESG Committee, which is convened annually, reviews the performance reports of major safety and health issues and handles the final decision and approval process.

Organization in Charge

Occupational Safety and Health Committee

The Occupational Safety and Health Committee, which is composed of an equal number of members from the labor and management sides, plays a role in planning and inspecting the various activities related to employees' safety and health. The BOD receives and approves agendas for overall safety and health management, including safety and health management policies, safety and health organization structure, safety and health budget and facility status, and safety and health activity results and plans.


DNV

MANAGEMENT SYSTEM CERTIFICATE

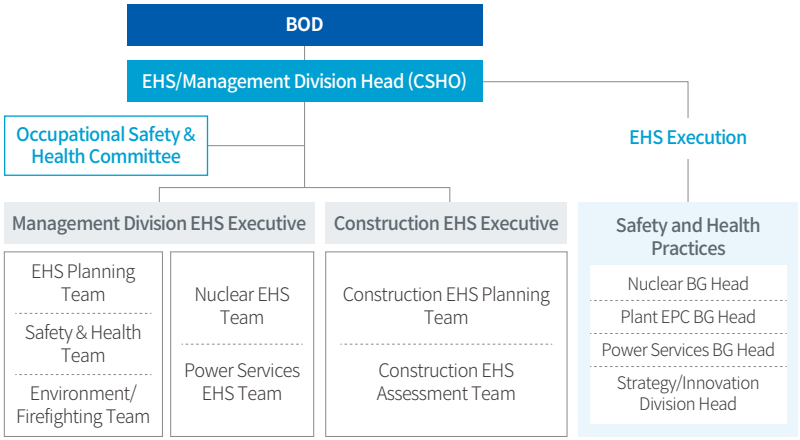
This is to certify that the management system of
Doosan Enerbility Co., Ltd.
Head Office & Changwon Factory
22, Doosan volvo-ro, Seongsan-gu, Changwon-si, Gyeongsangnam-do, 51711, Republic of Korea
and the sites as mentioned in the appendix accompanying this certificate

has been found to conform to the Occupational Health and Safety Management System standard:
ISO 45001:2018

This certificate is valid for the following scope:
Engineering, Design/Development, Procurement, Construction, Commissioning, Retrofits & Upgrades, Customer Support and Services of Thermal & Hydro Power Plants, Wind Power System, Nuclear Power Plants, Desalination Plants, Industrial Plants, Offshore Structures, Industrial Cranes and Plant Works for Domestic & Overseas Sites, Design, Development and Manufacture of Power Plant Equipment, Water Treatment Equipment, Power Generation Components, Shipbuilding Components, Iron & Steel Making Components, Mold and Tool Steel, Offshore Structures and Industrial Cranes. Operation & Maintenance of Thermal Power Plant, Wind Power System and ESS (Energy Storage System).

ISO 45001 Certificate

Safety and Health Management Organization



Management Strategies and Targets

Aiming for an eco-friendly and accident-free workplace, Doosan Enerbility continuously endeavors to identify hazardous risk factors in the field and focuses on preventing major accidents, while striving to improve the level of safety and health management capabilities and safety awareness throughout the company's value chain, including headquarters, business sites and partner companies. In addition, we not only ensure the safety of our employees by preventing major accidents, improving working conditions, and actively engaging workers, but also improve the safety and health levels of our partner companies by promoting systematic management and activities to improve their operations.

EHS Management Strategy and Performance

Activities	Management Strategy	2022 Results
1 Goal setting/ planning	• Establish quantitative health and safety KPIs (manage leading and lagging indicators) • Create a health and safety plan, report to and receive BOD's approval	• Created and implemented health and safety plans for 170 departments through EHS workshops
2 Risk assessment	• Identify all hazards using the 4M* methodology • Identify PSM** target facilities with high explosion/fire risk • Identify risk factors in workers' behaviors with video risk assessment * 4M(Man, Machine, Media, Management) ** PSM(Process Safety Management)	• Minimized gray zones by rebuilding risk assessment system • Improved risk factors through worker engagement
3 Countermeasure plan development	• Prioritize and integrate quantitative targets and action plans for all hazards • Establish detailed safety measures and emergency action plans based on the 4Ms • Establish standard safety work procedures	• Conducted 65 joint crisis response drills • Established EHS governance and strengthened management systems at 29 domestic and overseas service sites
4 Training	• Conduct EHS leadership and mindset training for executive/plant managers • Conduct worker TBM* • Conduct EHS training for new process workers • Internalize compliance with Golden Safety Rules * TBM(Tool Box Meeting)	• Operated special training courses by position/job function • Expanded TBM for major processes (tasks) through the system (mTBM App) • Published a total of 62 Safety Alerts
5 EHS risk monitoring	• Register as a high risk process manager • Conduct MSLT* for Executives • Safety and health internal audit(investigation/ evaluation) • Pre-screening for EHS investments • Operate a workers' behavior observation program • Statutory inspection of hazardous machinery • Conduct patrols during risk prone hours * MSLT: Management Safety Leadership Tour	• Conducted 780 MSLTs for executives • Conducted 9 workshops organized by CSHOs • Conducted 77 behavioral observation programs
6 Issue improvement & review	• Conduct the EHS Review Session • Convene the Occupational Safety and Health Committee • Convene the EHS Committee by Business Unit	• Conducted 3 EHS Sessions • Conducted 4 regular meetings of the Occupational Safety and Health Committee

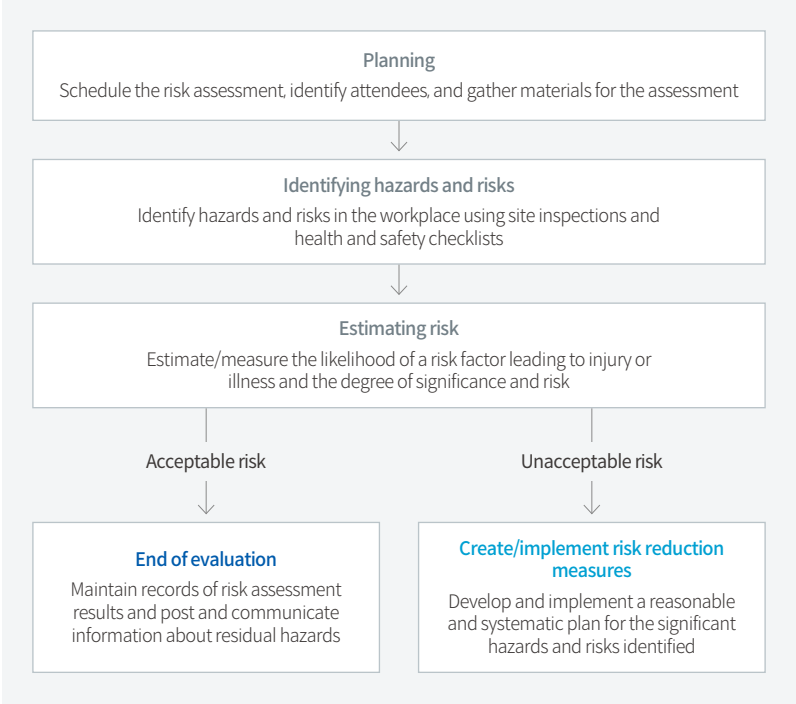
Risk Management

Site Safety Improvement Activities

Conducting Risk Assessments

Doosan Enerbility regularly conducts risk assessments to proactively identify and prevent harmful and dangerous factors in the workplace. In 2022, all departments such as procurement, HR, marketing, as well as production, actively participated in risk assessment and improvement activities. In particular, major risk factors derived from risk assessments are shared with all the site workers during safety morning meetings (TBM) to raise awareness, and in the case of high-risk factors, improvement measures are established by closely identifying risk factors and assessing the environment through self-monitoring of work conditions.

EHS Management Strategy System



Introducing Safety Alert

Doosan Enerbility is working to strengthen its workplace safety management system and raise awareness and compliance with safety laws and regulations among site workers. As part of these efforts, we have produced and distributed a guideline booklet on the Serious Accidents Punishment Act to all managers at our Changwon plant and domestic construction sites for training. We also operate the Safety Alert system to quickly share cases of various types of fatal accidents at various industrial sites with all employees and workers of partner companies, as well as conduct preventive inspections and special training. In 2022, we issued a total of 62 Safety Alerts and created a collection of cases to be utilized as training materials for site management supervisors and workers.

Conducting Emergency Response Drills

Doosan Enerbility conducts emergency response drills more than 60 times a year, using emergency scenarios that fit the risk factors of each department. In 2022, we held two company-wide drills in the first and second half of the year, all employees at the Changwon Headquarters, Changwon plant and Bundang Doosan Tower, to enhance our ability to respond to emergency situations. At the Changwon plant, firefighters and paramedics are always on stand-by with firetrucks and ambulances at the ready 24×7 throughout the year to swiftly respond to emergencies reported through the company's emergency hotline.

Direction of EHS Training in 2022

EHS Mind-Set
Training program that provides employees with a better awareness of their respective EHS roles and helps build up their competencies.

Risk Assessment Expertise Building Program
Training of site supervisors to enhance their capabilities in identifying and remediating risks

Conducting TBMs
TBMs (Tool Box Meetings) held prior to starting on a job to provide the workers with a good understanding of safe work practices needed to deal with risks accompanying the job

Forklift Operator Expertise Building Program
Forklift operators provided with hands-on training, in addition to the statutory training

Training Program for Partner Companies' Safety Officers
Training for safety officers of partner companies to help build up their skills

Training Programs for New Hires of Partner Companies
Safety and health training programs offered to the new hires, in addition to the statutory training

Conducting Employees Safety Training

To improve the effectiveness of the safety training and raise safety awareness, Doosan Enerbility offers customized safety training programs by establishing safety training program plans suitable for each position and function (executives, supervisors, workers, EHS, and working-level employees).

In 2022, we conducted special safety and health training programs for junior employees in technical positions, and offered various training programs to strengthen employees' EHS capabilities, such as programs on improvement and development of specialized risk assessment capabilities and prevention of fires and explosions.

Site Safety Improvement Activities

Building a Digital EHS

At the Doosan Enerbility Changwon plant, 150 tablet computers were provided to on-site supervisors to improve access to the latest safety and health data. In addition, body cameras are utilized to monitor and manage risk factors in real time during high-risk operations, such as working at heights and handling heavy materials. In 2022, we improved the working environment by installing alarm systems in high-risk access control areas such as the lower part of electric furnaces and 576 fire and explosion gas leakage monitoring systems. In addition, we operate an EHS feedback system utilizing QR codes throughout the workplace, so that employees and partner companies can report safety risks when they find them, thereby ensuring worker safety.

Empowering Partner Companies to Manage Safety

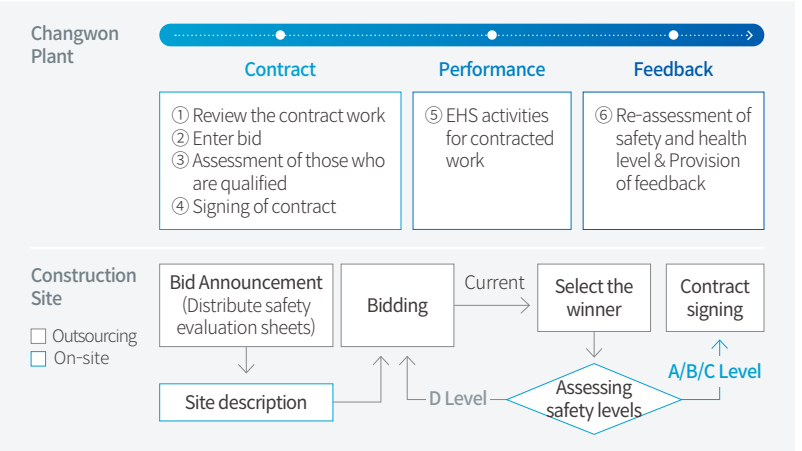
When selecting partner companies, Doosan Enerbility considers factors such as compliance with occupational safety and health laws and regulations, appointment of a safety management officer, and evaluation and feedback on safety and health management practices, such as training and medical examinations, before signing a new contract with the partner, as we consider the safety management capabilities of partner companies to be crucial.

In 2022, we supported a total of 35 partner companies on acquiring and maintaining risk assessment certifications to strengthen their safety management capabilities. We also supported five partner companies on maintaining the KOSHA MS certification through the establishment of a safety and health management system, and we plan to support seven more partner companies on acquiring certification in the future. In addition, we are helping partner companies to establish and upgrade their safety management systems by operating a behavioral observation program to identify and improve upon unsafe behavioral factors for high-risk tasks.

Direction of EHS Training by Position and job function in 2022

Executives	**EHS Leadership Programs conducted to build a culture of safety** • Leadership programs with content linked to humanities for executives and plant managers • Training programs on trends and policy directions of the Ministry of Employment and Labor (Guide on prevention of industrial accidents)
Site Supervisors	**Site supervisor skills enhancement program offered to improve safety awareness and job performance** • Safety program covering content linked with humanities and standard safety guidelines for work • Training on risk assessment techniques ※ Reflecting the site supervisors' needs regarding assessment of the safety culture. • Strengthening capability to prevent occupational diseases and industrial accidents using MSDS
Workers	**Training programs conducted to improve workers' basic competencies and prevent conventional disasters** • Training for rope hanger specialists: specialized training on rope hanger occupation for direct hires and those at partner companies • Practical training for forklift operators: training to improve forklift driving competency for those who have completed the KOSHA's online training for forklift operation
EHS and Working-Level	**Customized training programs conducted to prevent chemical accidents** • Safety training on fire/explosion prevention: training to improve fire/explosion prevention capabilities • Training on PSM basic competency improvement: practical application of the 12 elements for PSM operation

Partner Company EHS Evaluation Process



Promoting Employee Health

Employees' Health Checkups

We offer comprehensive medical examinations once a year for employees and their spouses who have worked for more than five years at the company or are over the age of 35, and PET-CT or brain/cardiovascular MRA examinations for employees who have worked for more than 20 years or are over the age of 45. To manage occupational diseases, we regularly conduct special medical examinations and general medical examinations at least once a year, and provide follow-up management, such as prescription of medication, exercise therapy and education through consultation with a specialist at an affiliated hospital for those who have abnormal findings. In addition, to manage cerebro-cardiovascular diseases, we conduct a risk assessment for cerebro-cardiovascular once a year, and provide consultation with a specialist at an affiliated hospital for high-risk groups and follow-up management.

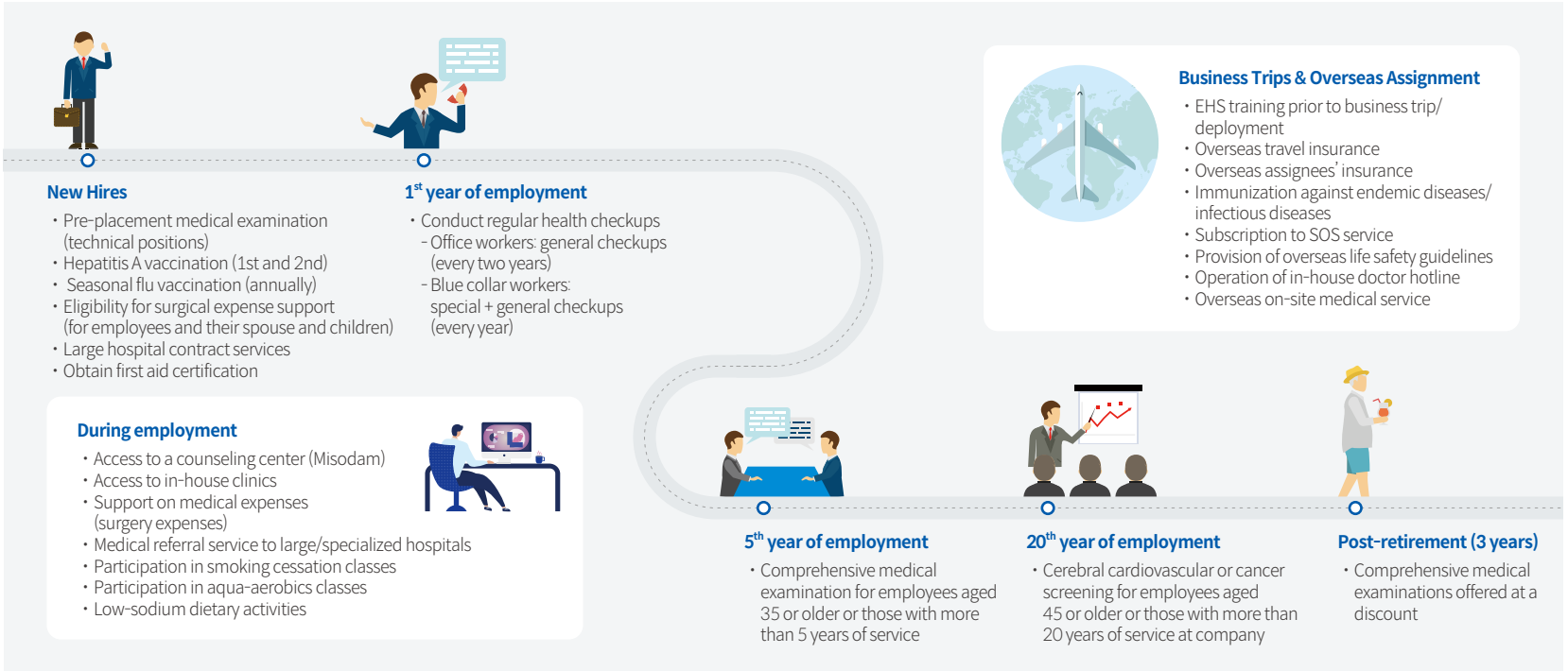
Vaccination

We offer annual influenza vaccinations for employees and their families. In 2022, we immunized about 6,460 people, and we also support vaccinations against endemic diseases (malaria, typhoid, yellow fever, etc.) that are prevalent in certain regions/countries to prevent diseases that can be contracted overseas.

Psychological Counseling Programs

We operate internal and external psychological counseling centers (Miso-dam) to help employees and their families deal with stress and grievances through consultations with professional psychologists. In 2022, a total of 774 counseling sessions (234 internal and 540 external) were held, with a total of 304 visitors receiving professional psychological counseling.

Health Care Program From Point of Hire to Retirement



Human Rights Management

Governance

As a member of the UN Global Compact (UNGC), Doosan Enerbility has established and operate a human rights management due diligence system that is based on international human rights principles, such as the UN Guiding Principles on Business and Human Rights. We have also established a dedicated organization for human rights management and regularly conduct human rights impact assessments to identify and prevent factors that hinder or violate the human rights of employees and stakeholders.

Organization in Charge

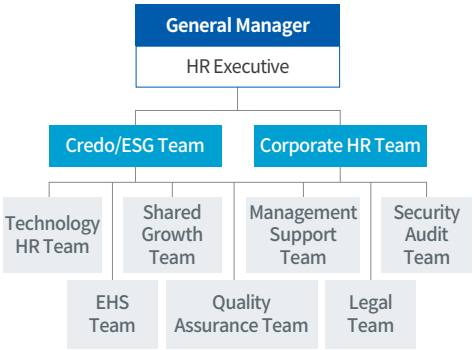
Human Rights Steering Committee

The Steering Committee oversees the entire human rights impact assessment process, from assessing the company's human rights management status to establishing, implementing and monitoring human rights risk management plans. An HR executive, designated as the general director of human rights management, periodically evaluates the company's human rights management status and makes improvements by addressing the deficiencies.

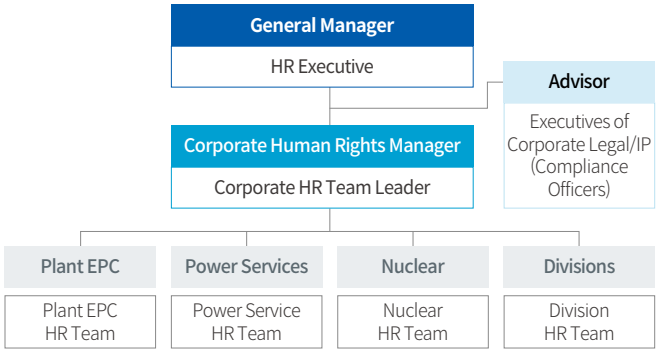
Internal Human Rights Committee

The Human Rights Committee is composed of people from Corporate and BG/Division HR and compliance officers who act as advisors. The Committee plans and operates company-wide human rights management activities. In the event of a human rights issue, the Human Rights Committee responds promptly in accordance with the internal grievance handling process, while abiding by the principle of confidentiality and ensuring the protection of the complainant.

Human Rights Steering Committee



Human Rights Committee

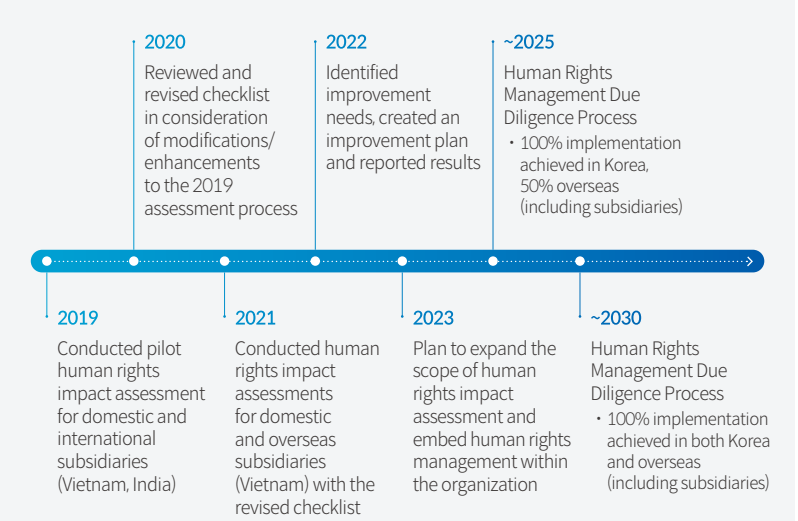


Strategy

Establishing and Enhancing Human Rights Management System

Doosan Enerbility has a corporate ESG Committee, led by the COO, convened annually to prevent and improve human rights risks. Human rights risk management is one of the core issues of the Social pillar, and as such, the status of risk management and the results of human rights impact assessments are reviewed and reported every year. In 2023, the ESG Committee shared a report on the company-wide goals and achievements, including the Human Rights Impact Assessment results, to raise awareness of human rights and check on the implementation results, as well as plans for expanded application to domestic and overseas sites and subsidiaries.

Advancing Human Rights Impact Assessment



Promoting Diversity and Inclusion

Doosan Enerbility is committed to granting equal opportunities to all employees and respecting the diversity of all. To ensure diversity and inclusion of the employees, the company receives reports on grievances through the Whistleblowing Center and the Workplace Bullying and Sexual Harassment Prevention Center and makes improvements in areas that are confirmed to be of issue. In addition, the results of improvements made in human rights risks, such as workplace bullying and sexual harassment, are regularly reported on through the corporate ESG Committee.

Human Rights Impact Assessment Process

Conduct a Human Rights Impact Assessment
Identify areas of weakness and prioritize improvements

Review evaluation results
Review assessment results and consider appropriateness of prioritized improvement areas

Create an improvement plan
Create an improvement plan

Implement improvement plans and report results
Report to executives, BG Heads and COO on improvement results

Risk Management

Human Rights Impact Assessment

Doosan Enerbility conducts the assessment once a year for domestic business sites based on the human rights management checklist. In the case of overseas subsidiaries, Vietnam (Doosan Vina) has established and is implementing an improvement plan based on the 2021 assessment results, and the Czech Republic (Skoda Power), having conducted a pilot test in 2022, is currently reviewing the assessment results and taking supplementary measures.

Human Rights Impact Assessment Evaluation Area by Stakeholder

Employees
- Implementing a human rights management system
- Ensuring freedom of association and collective bargaining
- Ensuring occupational safety
- Respect and communication
- Non-discrimination in employment
- Protecting personal privacy
- Prohibition of forced labor
- Prohibition of child labor

Partner Companies
- Responsible supply chain management

Clients
- Protecting consumer rights

Local Communities
- Protecting the human rights of local residents
- Ensuring environmental rights

Grievance Handling Process

Operation

The company accepts reports of human rights issues and violations of ethical management through various channels, including online reporting channels ('Whistleblowing Center' on the company website), in accordance with the Internal Reporting System Operating Regulations, and guarantees confidentiality of the identity of the reporter and the contents of the report, and prohibits disadvantageous measures from being taken against good faith reporters. Reports received through the report center are verified and investigated by the relevant departments, and disciplinary action is taken through the HR Committee. Once all the procedures are completed, the management department reports the matter to the COO and notifies the complainant about the outcome.

Operation of Workplace Bullying and Sexual Harassment Prevention Center

Doosan Enerbility complies with the Labor Standards Act and laws and regulations on gender equality and respects the diversity of its employees, so that none of the employees are discriminated against based on external factors, such as gender, disability and religion. An external professional organization receives reports and conducts an initial interview to objectively verify the relevant facts, and then conducts a follow-up process within the company. In cases of workplace bullying or sexual harassment, in addition to taking action against the perpetrator, we make efforts to support the victim by offering psychological treatment to the victim at our in-house psychological counseling center, "Miso-dam".

Metrics & Targets

2022 Human Rights Impact Assessment Results and Improvement Plan

Doosan Enerbility conducts annual human rights impact assessments to diagnose human rights risks in detail and manage them efficiently across its business activities. As a result of the human rights impact assessment conducted in 2021, 21 items for improvement were identified, and we prioritized them, established and implemented improvement plans, and reported on the improvement results. In 2022, we conducted a human rights impact assessment for domestic business sites through a checklist consisting of 50 items in 12 assessment areas, and found that 6 items had been improved upon compared to the previous year. In addition, in Vietnam (Vina), one of our overseas business entities, we are making improvements, such as establishing a human rights management inspection system, improving the recruitment process, and improving and activating the grievance handling system, which were identified as improvement needs in the 2021 assessment.

Major Improvement Items in 2022 – Domestic Sites
- Establish human rights compliance obligations and monitoring systems for partner companies
- Establish training and monitoring systems to prevent human rights violations by security companies and employees
- Establish and operate environmental requirements management directives that must be considered throughout the product lifecycle to ensure stakeholder environmental rights
- Establish a liaison system with local stakeholders to prevent, mitigate, and control environmental disasters to ensure local environmental rights, and conduct joint drills once a year

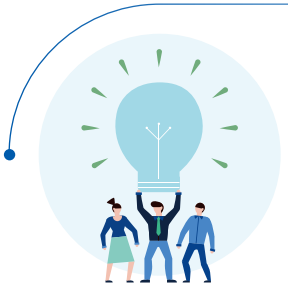
Major Improvement Plans in 2023 – Domestic Sites
- Regularly review and improve our human rights policy
- Assess human rights violations at subsidiaries/partner companies
- Incorporate the results of the human rights violation assessment of partner companies into the company selection process

Major Improvement Plans in 2023 – Subsidiary (VINA)
- Establish a human rights task force (TFT) and a human rights status check/education system
- Establish standards for the personal information collection management system and selection of dedicated personnel
- Revise job application forms to protect personal information
- Establish a grievance handling process and select/train grievance handling officers

2022 Human Rights Impact Assessment Results and Improvements

(Unit: cases)

Assessment Results (Items)	2021	2022	Remarks
Positive Evaluation	25	31	+6
Needs Improvement	21	14	-7
Others	4	5	+1



Talent Management

Governance

Doosan Enerbility operates various training programs aimed at cultivating the next generation of leaders and strengthening the capabilities of each employee. The company creates employee training program plans that are devised to help employees develop and obtain the traits required of "Doosan people." We also introduce and operate various systems that help to establish an equitable corporate culture and enable employees to achieve a good work-life balance.

Organization in Charge

Doosan Enerbility offers differentiated training programs, led by the Corporate HR team, based on each employee's strengths and competency level to foster talented people who possess a good balance of leadership skills and job expertise. In addition, we offer a wide variety of programs that help to foster experts who can capably lead the green energy and new growth driver businesses, including voluntary and proactive self-development programs and customized training programs.

Doosan Enerbilitiy's Talent Development System

Doosan LEADERSHIP COLLEGE

Courses consist of unique leadership courses that reflect the Doosan Credo and traits of Doosan people and business courses designed to build up troubleshooting ability and business acumen.

Foster **leaders** who practice the Doosan Credo

- **Orientation Program** (Cultivate employees who internalize the values of the Doosan Credo)
- **Introduction to New Roles** (Secure key competencies required to perform assigned roles effectively)
- **Build up Program** (Strengthen Doosan's way of doing business and skills for putting the Credo into practice)
- **Business Fundamental** (Enhance all employees' business acumen)

Doosan PROFESSIONAL COLLEGE

Systematic courses are provided to build knowledge and know-how needed to perform duties and foster experts in each business function.

Foster **experts** with underlying competitiveness

- **Foundation Program** (Basic business knowledge to foster job experts)
- **Expert Program** (Job training by business function and growth stage)
- **Global Program** (Global communication skill development)
- **Faculty Program** (In-house instructor and facilitator development)
- **Essential Program** (Essential rules and mindset training)

Strategy

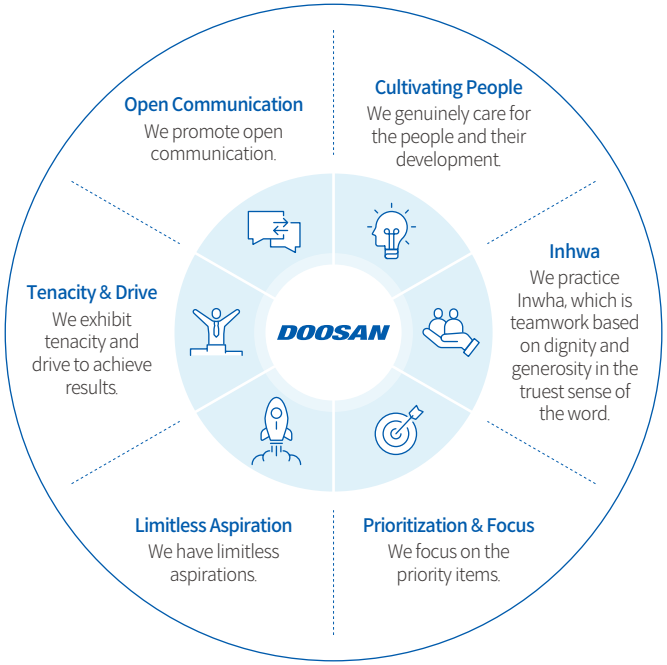
Talent Development Strategy

Doosan Enerbility implements a fair recruitment process to recruit people who fit Doosan's concept of talent, and offers training programs optimized for each new employee.
In recent years, we have strengthened our leadership and communication programs for each position to refresh the organizational atmosphere and improve awareness in response to the changes in the internal and external business environment, and we have focused on training employees to develop functional experts as we expand into new businesses.

Concept of Talent at Doosan Enerbility

Doosan People, who embody the Doosan Group's concept of talent, refers to all employees who have the ability and willingness to contribute to the organization and strive to constantly improve their capabilities. To create an organizational culture that enables all employees to develop the traits required of 'Doosan People,' Doosan Enerbility is working to set up a clear system and strategy that helps establish learning & development programs and a corporate culture that fosters the development of 'Doosan people' and is constantly pursuing business practices that promote a happy corporate culture.

Concept of Talent at Doosan Enerbility



Evaluation and Reward Systems

Employees' Competency Evaluation (DCM) and Performance Management (MBO) systems

Doosan Enerbility operates the Doosan Competency Model (DCM), which systematizes and evaluates employees' competencies and behaviors based on the traits required of 'Doosan people', and the MBO system, which involves setting individual performance goals in alignment with the company's mid-to-long term strategies and annual operating plan, and managing/evaluating the annual performance. The MBO system first requires the establishment of team goals at the beginning of each year to support the achievement of the company's annual goals, after which the team goals are cascaded down to the individual employees through goal review meetings between the team leaders and team members. If deemed necessary by mutual consultation, some individual goals may be additionally set for priority tasks in addition to the team goals. Through the process of goal-setting, coaching, mid-year review, year-end evaluations, and feedback on evaluation results, fair and clear competency evaluations and performance management are carried out, and through this, we are motivating our employees to improve their competencies. In addition, from 2023, we will conduct a 360 survey to be taken by subordinates regarding those in positions of authority (executives/team leaders) to build a culture of two-way communication and feedback to leaders, and we will utilize the survey results to support the development of leaders.

Reward System

Doosan Enerbility motivates employees to develop their capabilities and improve their performance by operating a compensation system linked to individual competencies and organizational/individual performance. Based on the results of the DCM, we operate a variety of variable pay schemes, including a fixed pay that reflects the results discussed in the annual salary review sessions, MBO bonus (STI) that reflects organizational and individual performance, and incentives to ensure timely rewards for performance. In addition, we comply with compensation-related laws, including minimum wage, and do not discriminate based on gender for employee compensation. For executives, we operate a separate long-term incentive (LTI) scheme linked to the company's shares, and we promote mid-to-long-term performance improvement of the organization through three-year performance evaluations.

Competency Evaluation/Performance Management System

LTI		Compensation that reflects the organization's mid- to long-term performance (company growth) (executive)
STI	Organizational Performance	Differential rewards based on organizational performance
	Individual Performance	Differential rewards based on individual performance
Special Incentive		Occasional rewards for special achievements during the year (inventions, system innovation achievements, etc.)
Annual salary		Compensation that considers the individual's capabilities/development, etc.

Risk Management

Preemptive Risk Prevention Through Talent Development

Diverse Leadership and Functional Training Programs

The company continues to develop and offer diverse leadership programs and functional training programs to support the growth of employees. In 2022, in order to effectively respond to the rapidly changing business environment, we offered training programs on eco-friendly businesses, such as renewable energy and other new growth drivers. We strived to strengthen the capabilities of the entire workforce by also providing functional training programs for contract workers engaged in the new businesses, such as gas turbines, wind power, and SMRs.

In addition, we have introduced a company orientation program for new and experienced hires to facilitate their early mobilization, and we are building a horizontal corporate culture by providing training and promoting dialogue to strengthen communication between new employees and their team leaders and senior employees.

We provide contents for self-development, such as Willa audiobooks and e-library, to all those who are interested, including part-time and contract workers. The overall satisfaction rate regarding our learning & development programs is 4.3 (out of 5.0). We plan to improve the overall satisfaction rate by continuously reorganizing the training content and encouraging active participation.

Major New Businesses & Leadership Training Programs in 2022

Course	Course Name	Period	Trainee
Functional Training Program for New Businesses	SMR Basic Training for Carbon Reduction	Sep. 29-30	20 people
	Training on key job skills for wind power	Jul. 5-6	56 people
	Training on key job skills for GT	Jul. 11-13	49 people
Leadership Program for Team Leaders	Generation XYZ Empathetic Leadership	Aug. 19	Team leaders and senior employees (101 people)

Creating a Culture of Self-Initiated Learning

Doosan Enerbility has built up programs aimed at fostering a culture of self-initiated learning in order to proactively improve the competencies of its employees. To this end, in 2022, Doosan Enerbility invited renowned guest speakers to share their insights and provide a good understanding of the Arabic culture. It also offered language programs and subsidized the language test fees for 183 employees scheduled for overseas assignments. In addition, Doosan Enerbility enabled non-face-to-face training by supporting live video transmissions and streaming of employee-led training programs to ensure timeliness and efficiency of training.

Re-employment Program

Doosan Enerbility operates a re-employment training program for full-time employees of the age 50 or above who are scheduled to soon retire. The program is conducted as an online training program covering post-retirement change management, life design and self-development, and functional & business skills development. The employees' successful life design and career transition is supported through the creation of individualized career plans after the training. In 2022, we provided diagnosis and counseling on aptitudes and careers from a life design perspective to 65 candidates. Going forward, we will continue to make efforts to help employees design their life and career paths.

Promotion of Supportive Organizational Culture

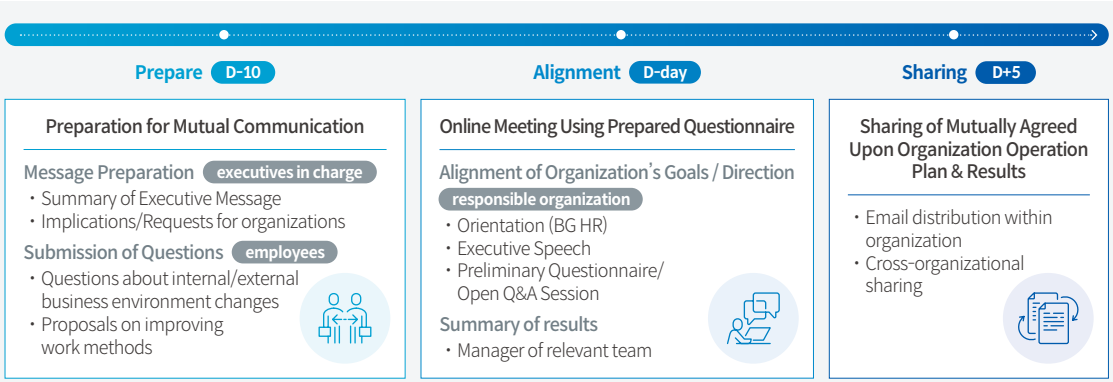
Running an Open Communication Program

We operate the Dynamics Enhancement Program (DEP) and New Leadership Assimilation Program (NLAP) to foster two-way communication between the executives and team members regarding challenges faced by the organization and create an environment where team members can freely make suggestions on ways of working to their leaders.

DEP We operate the Dynamics Enhancement Program (DEP) in the form of online meetings to communicate the company's vision and strategy to the employees. We share the direction of the organization, which is set in line with the changes in the internal and external business environment, and key messages from the leadership.

NLAP The New Leadership Assimilation Program (NLAP) was implemented to help new leaders share the organization's vision and goals with their team members, so that they may effectively run the organization.

Operation of Executive-level Interaction Program (DEP)



Running a Team Culture Activation Program

We operate the Team-up Program to promote flexible communication and mutual understanding within the organization. Through the Birkman Method, we seek to understand the strengths and traits of our employees to help them collaborate at a higher level.

Establishing a Sound Labor-Management Culture

Doosan Enerbility has been a labor dispute-free workplace for 17 consecutive years (2006-2022) owing to continuous efforts made to establish a mutually-beneficial culture where improvement of working conditions is pursued. In 2022, we held a collective bargaining agreement signing ceremony in December after 37 rounds of collective bargaining was pursued based on the foundation of trust between labor and management. We continue to discuss improvements to the working environment and welfare benefits through various consultation bodies such as the Labor-Management Council and the System Improvement Committee. We also operate individual communication channels and grievance handling committees within the BG to reflect employees' concerns and opinions on system improvement in the company policies to promote a harmonious labor-management relations.

Work-Life Balance

Doosan Enerbility operates various facilities and systems to promote a virtuous cycle between work and family life for its employees. In particular, to prevent female employees from having their careers interrupted due to pregnancy and childbirth, the company has introduced and operates maternity leave and family care systems, as well as in-house childcare facilities to provide a supportive practical environment. In recognition of our efforts, we received the Family-Friendly Company Certification from the Ministry of Gender Equality and Family in December 2021, and we are striving to establish a better organizational culture. In addition, Doosan Energy is continuously improving its systems to ensure a happy organizational culture, and conducts employee satisfaction surveys every two years to improve its systems. In the survey conducted in 2021, we scored 12 points (out of 15) and are in the process of collecting and improving areas of weakness. We also continue to participate in and (renew) our agreement on the work-life balance campaign organized by the Ministry of Employment and Labor.

Collective Bargaining Agreement Signing Ceremony in 2022

Family-Friendly Company Certificate


Work-Life Balance Campaign Certificate

Metrics & Targets

Conducting Surveys for Organizational Culture Improvement

To build a horizontal corporate culture, Doosan Enerbility conducts employee surveys and focus group interviews (FGIs) every two years to understand the current status of the company's organizational culture and the needs of its employees. In 2022, the surveys and FGIs were conducted on 1,666 and 53 employees respectively to closely understand the current status of the company's organizational culture and identify improvement needs, such as improving the mindset of leaders and strengthening the professionalism of employees. Based on the survey results, we plan to introduce and implement five systems to establish a horizontal culture in 2023.

Implementation in 2023

1. Restructuring of Position Hierarchy: Separate the titles and grades for existing positions and streamline the titles to a two-tier structure (effective as of March 21)
2. Operate voluntary 'Remote Work' system to improve the working environment: Establish and apply customized guidelines for each executive-led/team-level organization unit
3. Conduct a "360 Survey" to validate the leadership of existing leaders (2-year cycle)
4. Strengthen readiness checks for new team leaders
   - Introduce a self-nomination system for verification of team leader readiness and conduct 360 Surveys and leadership interviews when screening team leader candidates.
5. Conduct horizontal culture training for leaders to change their mindset

Key Employee Benefits

Pregnancy and childbirth gift

- Provision of gifts worth KRW 100,000 to all pregnant female workers
- Provision of congratulatory leave (10 days) and congratulatory money (KRW 100,000) to employees who give birth to a baby

Maternity protection system, such as maternity leave and reduction of working hours during pregnancy

- Various maternity protection schemes pursuant to relevant laws
  - Leave of absence before and after childbirth (90 days, 120 days for multiple births)
  - Parental leave (1 year)
  - Reduction in working hours during child rearing (1 year)
  - Reduced work hours during pregnancy (2 hours/day reduction for women who are up to 12 weeks pregnant and those who are 36 weeks pregnant and beyond)
  - Change in working hours for pregnant employees (change of clock-in/out time)
  - Paid leave for fetal examination

Pregnancy	Up to 28 weeks	From 29~36 weeks	After 37 weeks
Allowed frequency of leave request	Once per 4 weeks	Once per 2 weeks	Once per week

- Leave for miscarriage / stillbirth

Pregnancy	Within 11 weeks	12 weeks~ 15 weeks	16 weeks~ 21 weeks	22 weeks~ 27 weeks	After 28 weeks
Leave	Up to 5 days from date of miscarriage / stillbirth	Up to 10 days from date of miscarriage / stillbirth	Up to 30 days from date of miscarriage / stillbirth	Up to 60 days from date of miscarriage / stillbirth	Up to 90 days from date of miscarriage / stillbirth

* Same as the pre- and post-natal leave benefit system (first 60 days paid, 30 days unpaid)/Article 75 of the Employment Act

- Spouse maternity leave(10 days of paid leave within 90 working days after childbirth)
- 3 days of leave for subfertility / infertility treatment (Paid leave for the first day and unpaid for the remaining 2 days)
- Provision of pregnant women's lounge and lactation room (Paid time-off for lactation of 30 minutes or longer provided twice a day)

Provision of in-house childcare facilities

- To support employees good work / family balance, an in-house childcare center is provided at Changwon and Bundang
  - Specialized childcare programs / special activities by age group offered through education experts, including experts of child development

Financial support on treatment for subfertility / infertility

- In the case of subfertility / infertility treatment, one-time financial support within the range of KRW 1 million is provided, in addition to the government subsidy

Flexible working hours

- Remote Office: operate a remote office in Dongdaemun Doosan Tower for employees in the Seoul metropolitan area (Bundang/Dongtan) to improve employees' work concentration, strengthen their ability to perform self-directed work, and prevent loss of work time due to commuting time.
- Staggered commute system: change the default commute time set by each individual/organization for a certain period of time (7 to 8, 8 to 5, 9 to 6, etc.) for efficient work performance and work-life balance
- Part-time contract worker currently employed (1 person as of June 20, 2022)

Work-from-Home

- Allow employees to work from home when necessary, such as for disease prevention purposes in accordance with EHS guidelines, to ensure work efficiency before or after overseas business trips, and in case of other emergencies

Support of medical expenses such as surgery for spouse / children

- Financial support on surgeries for employees, their spouses and children
  - In case of surgery / procedure due to illness or injury outside of work, and diagnosis of cancer, brain disease, cardiovascular disease, intractable disease, financial support of up to KRW 20 million, with no limit on minimum billing amount, is provided for the medical expenses (Applicable individually per employee, spouse and child)
- Subsidy of 200,000 won per month is provided for offspring under the age of 20 who were diagnosed as a Grade 3 or higher disability level

Tuition support for children

- Tuition support is provided to offspring of employees for pre-school, elementary school, high school and college education
  - Fixed rate tuition support for elementary school students aged 3 years or older
  - Full support on admission fee, tuition and membership fees for middle and high school students
  - Support on admission fee and tuition for college students (up to 3 students)

Provision of dormitories for children of employees who entered universities located in metropolitan area

- Provision of apartment dormitories in Seoul area to provide housing convenience for children who have entered a four-year university in the metropolitan area among employees working in non-metropolitan areas (Doosan Dormitory, support for up to 2 years)

Family Care (does not include paid parental leave)

- Pursuant to the relevant laws, days-off for family care is permitted up to a max. of 10 days per year and leave of absence for family care is permitted up to a max. of 90 days per year (However, if days-off for family care is used, these days will be included in the calculation of total leave of absence for family care)

Qualifications Allowance

- Payment of incentives offered by the company as encouragement to those who acquired advanced technical qualifications specified by the company (fixed amount, one-time payment)
- If the company uses or appoints it for various sales purposes, a monthly flat amount allowance is paid as set per qualification level

Employee Psychological Counseling Program

- Operates in-house comprehensive counseling center 'Miso-dam' to help employees resolve stress and grievances by consulting with professional counselors
- Family members of employees can visit an off-site counseling center for consultation
- Operational welfare for all employees, including dispatched/contract employees

Quality Management

Governance

Organization in Charge

The Quality Assurance Team promotes quality management activities to possess and strengthen core capabilities in plant design, fabrication, installation and commissioning at the global level. Furthermore, we maintain an organized and systematic quality assurance system in accordance with global standards to produce defect-free quality products that satisfies clients. In addition, all organizations and employees of the company strictly comply with the requirements of the quality policy.

Composition of Doosan Quality Management System (DQMS)

Quality Assurance/ Certification & Education	Quality Inspection	Quality Status/ Documentation	Quality Prevention/ Improvement
Quality Assurance Data	**Inspection Execution**	**Quality Problems & Status**	**Preventive Quality**
Quality Policy/ Program	Client QIP	QFR/NCR Management	Preventive Quality Activity Pool
Quality Certificates	Company standard QP/MPP	CAR/RAC Management	Prevention of Recurrences/ Management
Quality Assurance Plan/Manual	Item/PR QC approval	Cost of Quality Failures Management	Quality Improvement Task Management
Approved Vendor List	Receipt of inspection and assignment of inspectors	ADR Analysis	Prototype Management
Certification & Education	Execution of inspection and entry of results	**Equipment and Materials**	Quality Tracking
Quality Personnel Qualifications Management	Inspection request/ management	Non-Destructive Examination Data by Project	Quality Prevention Monitoring
Non-Destructive Examiner Certification Management	Outcome of mold tool steel	Non-Destructive Equipment/Materials Management	
Designer Certification Management	**Reports**	**QVD Management**	
Planning & Execution of Quality Assurance Education	NDE Inspection Report	Registration/ Gathering of QVD Records	
	Material Certificate	CMTR/COC Management	
	Authenticity Confirmation		

ISO 19443 Certificate

Strategy

Doosan Quality Management System (DQMS)

Doosan Enerbility has adopted the Doosan Quality Management System (DQMS) for preventive quality management by digitally managing the quality-related information and documents. We have digitized quality-related information at all stages from inspection planning to the results stage to secure visibility into the progress of quality management and strengthen execution.

Quality Management Certification

Doosan Enerbility has obtained international certifications to acquire a stronger quality management system and operates a quality assurance system and an environmental & safety management system corresponding to the international certification standards. We have obtained and hold 52 external certifications from internationally accredited organizations in the nuclear, thermal power, wind power and desalination sectors to demonstrate our quality competitiveness and secure the trust of our clients. We also became the first Korean company to obtain the ISO 19443 certification, enabling us to export nuclear power plants to Europe.

International Quality Standards Certifications Acquired

Area	Type of Certification	Number of certifications
ASME (Nuclear/ Non-Nuclear)	N/NPT, U, S, etc.	14
KEPIC (Nuclear)	MN, SN, EN, etc.	8
ISO	9001, 14001, etc	7
Other	PED H, Shipping Register, etc.	23

National Quality Master

As of the end of 2022, Doosan Enerbility has three Korean Master Hands and seven National Quality Masters. These masters contribute to technology transfers and quality improvements through various in-house activities and serve as in-house instructors for new employee training programs. For external activities, they participate as lecturers and judges in events organized by the Human Resources Development Service of Korea and Korea Standards Association.

National Quality Master Status

Korean Master Hands
3

National Quality Masters
7

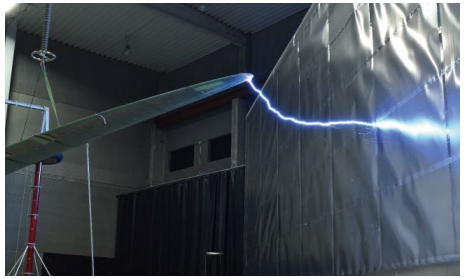
Risk Management

Product Quality and Safety

Ensuring Wind Power Quality & Safety

Doosan Enerbility received the IEC61400 certification, an international standard issued by the International Electrotechnical Commission, for its wind turbines, thereby getting assurance on the quality and safety of its wind power systems. The certification process includes tests on the turbine's response and safety to startup, shutdown, normal operation, and fault situations to ensure performance and safety in the design/manufacturing as well as in the use phase, and also evaluates the soundness of the actual blades against extreme loads and fatigue loads that may occur during their lifetime.

Blade Static Load Test



High Voltage Test

Ensuring Nuclear Power Quality & Safety

To ensure the quality and safety of its nuclear products, Doosan Enerbility has received international certifications from global authorities such as ASME, KEPIC and ISO in the fields of material manufacturing, nuclear main equipment/auxiliary equipment design and production. In the process of designing and manufacturing products, Doosan evaluates the soundness of the product through various performance tests, such as hydrostatic tests, load tests, and non-destructive examinations (NDE) according to codes, international standards, and clients' special requirements to ensure the performance and safety of the use stage.

ITER Project Load Test

ITER Project Hydrostatic Test

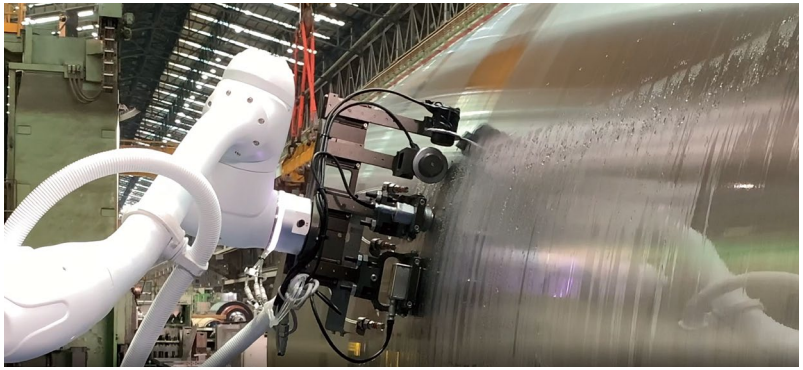
Quality Control Activities

Nuclear Quality Training Programs

To secure customers' trust in the quality of its nuclear products, Doosan Enerbility continuously provides all its managers in the nuclear business with quality mindset training, which emphasizes the importance of listening to customers' voices and shares examples of nuclear quality issues and measures to prevent recurrences of such issues.

Automation of Non-Destructive Examinations

Doosan Enerbility is developing inspection techniques and designing and manufacturing systems to apply automated and digital data-based non-destructive examination to welded parts of major equipment in power plants. Some systems are undergoing performance verification after development, and Doosan Enerbility expects to further improve the reliability of its non-destructive examinations by applying the automated non-destructive examination technology that was developed to the production of new nuclear facilities, such as SMRs(Small Modular Reactors).



Automation of Non-Destructive Examination with Collaborative Robots

Development and Operation of Mobile Welding Applications

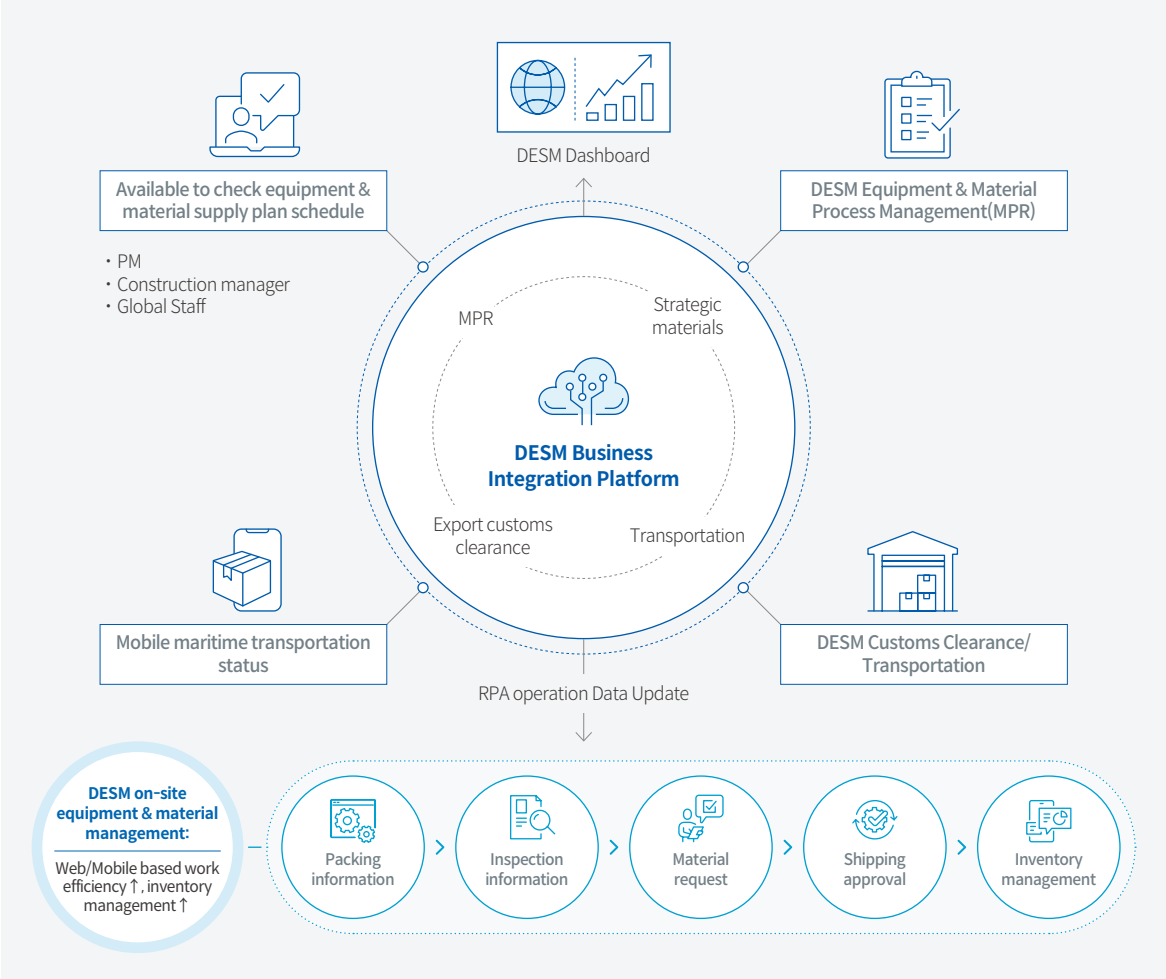
Doosan Enerbility developed and operates a mobile welding application to easily check on relevant information needed to secure welding quality (welder qualifications, welder certification data, status report of welded materials release and monitoring of welding parameters).

Development of Welding Parameters Monitoring System

Doosan Enerbility has developed a welding parameters monitoring system that can remotely monitor voltage, current and preheating temperature, which are the main variables of on-site welding work, in real time to ensure welding quality.

Development of Doosan Equipment & Material Supply Management System (DESM)

We have centralized the equipment supply schedule into an integrated management system (DESM, Doosan Equipment & Material Supply Management System) to improve work efficiency and facilitate inventory management. The integrated management system is shared with the relevant personnel in real time, and we digitized the system for receiving, storing, and releasing construction site materials to efficiently manage materials.



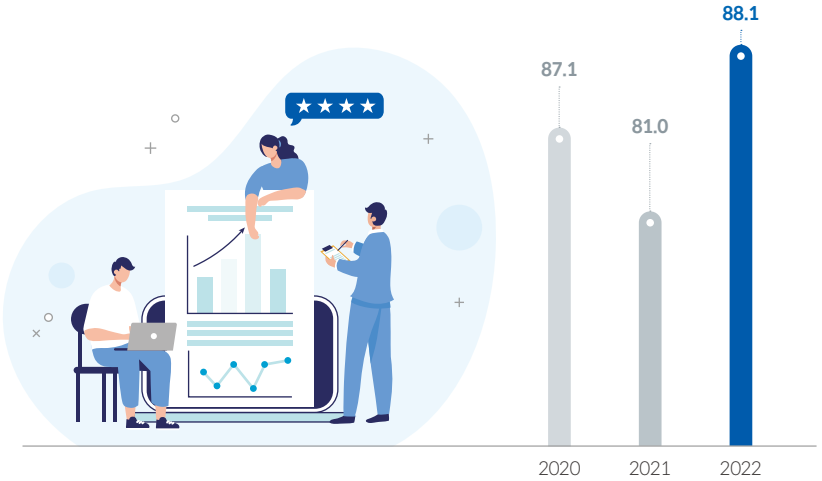
Metrics & Targets

Customer Satisfaction Survey

Doosan Enerbility conducts annual customer satisfaction surveys to assess and improve the current status of its product quality and safety as part of its efforts to enhance its overall quality management and raise customer satisfaction. The survey, which is conducted in the form of an online survey or interview, measures satisfaction in three areas: process management, quality & competence, and customer management. In 2022, the Customer Satisfaction Survey score was 88.1, an increase of 7.1 points from the score of 81.0 achieved in 2021. Doosan Enerbility will continue to strive for quality competitiveness and high customer satisfaction in order to achieve a score of 90 in all areas.

Customer Satisfaction Survey Results

(Unit: Score)



Information Security

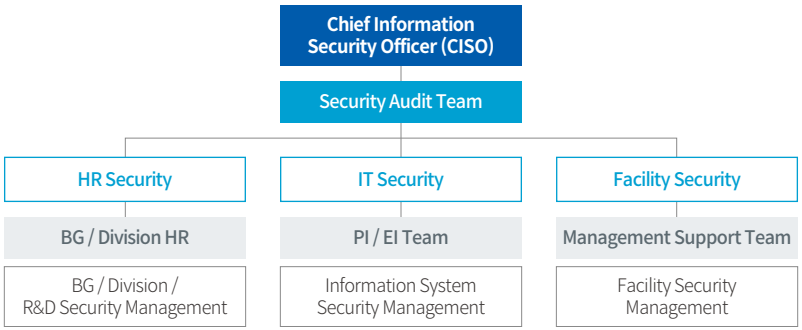
Governance

Doosan Enerbility has established internal guidelines in accordance with information security-related laws and regulations to protect the personal information and intellectual property rights of its employees and various stakeholders, its trade secrets, and technical information related to research and development, and is advancing its information security system through continuous monitoring and security control activities.

Organization in Charge

Doosan Enerbility appoints a Chief Information Security Officer (CISO) who meets the qualifications of the Act on Promotion of Information and Communications Network Utilization and Information Protection and related laws and regulations, and grants him independent authority and responsibility for information protection work. The CISO is responsible for establishing information protection strategies and policies necessary for the stable operation of the company's information assets, complying with relevant legal systems, conducting protection management activities, and identifying and implementing information protection measures based on risk management.

Information Security Organization Chart



Roles of Chief Information Security Officer (CISO)

1. Establish, manage, and operate an information security management system
2. Analyze, assess, and remediate information security vulnerabilities
3. Breach prevention and response
4. Design and implement proactive information protection and security measures
5. Review security of information protection
6. Encrypt sensitive information and review the suitability of secure servers
7. Take any additional necessary measures under the Act on Promotion of Information and Communications Network Utilization and Information Protection or related laws and regulations

Strategy

Acquisition of ISO 27001 Certification

Doosan Enerbility has an information protection policy and regulations covering all areas of security management, such as HR, facilities, trade secrets management and information assets, that all employees must comply with in order to reinforce the importance of information protection and protect customer value. For overseas subsidiaries, the same standard policy is applied, but security policies that are in line with local laws and internal environments are separately established and managed to meet the company's business and security-related laws. In addition, we have acquired ISO 27001, an international standard information security certification, and have advanced information security management systems and processes to protect company assets based on standardized information security management systems, and conduct internal information system audits to ensure data integrity and efficient use of information.

ISO 27001 Certificate

Site Security Improvement

To improve the security environment at overseas sites, Doosan Enerbility established standards specific to the site environment and piloted them at four sites in 2022. As a result of the pilot, the virus infection rate was reduced to the level of the headquarters, and there were substantial improvements, such as zero personal information leakage of accounts and a real-time information leakage monitoring environment being set up, so we plan to apply the security standards to all sites in stages.

Strengthening of Security at Plants

We conducted security enhancement activities to block attacks such as ransomware, which is a trend targeting Operational Technology (OT). We configured a dedicated network for plants and implemented access control, built a system to identify and manage all equipment in the plant, and conducted activities such as terminal security for IoT devices. We plan to strengthen security so that IT and OT devices in the plant can be protected efficiently by aligning with Doosan Group's OT security strategy.

Risk Management

Information Security Enhancement Activities and Programs

Security Incident Response / Management

Doosan Enerbility operates a separate crisis response organization to respond to security incidents. In the event of a security incident, such as a malware or ransomware infection, we establish a process for rapid resolution, so that we can take immediate action on information security issues, and we conduct system mock hacking to prevent hacking attacks and respond to them at an early stage. We also analyze vulnerabilities discovered through system monitoring to prevent security incidents in advance and respond effectively.

Adoption of Global Security Control (Global SOC)

Doosan Enerbility secured a system to monitor and respond to security threats in real-time with a global always-on operating system and standardized the security incident response process through AI and automation platforms, introducing an advanced security control system that enables rapid detection of IT security threats, risk analysis, and action.

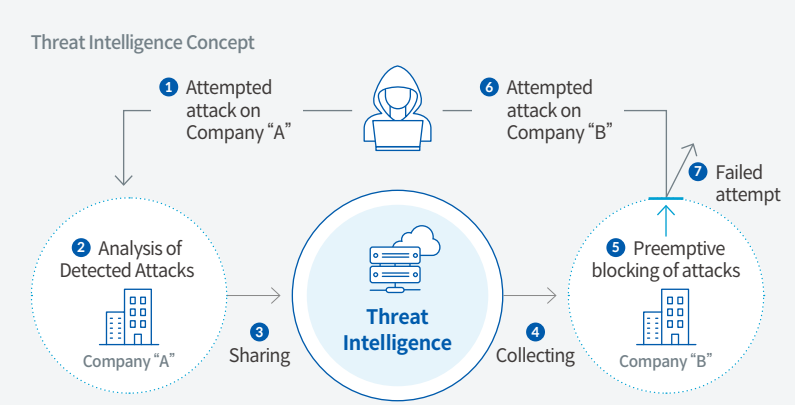
Key Tasks of Security Control

Category	Key Tasks
Hacking Detection and Monitoring	• 24×365 security event monitoring • Notification of signs of an incident (E-Mail)
Incident Response Support	• Analyze cause and effect in the event of a hacking • Support for recovery from incident and recurrence prevention • Support for coordinated response with external organizations (KISA, National Cybersecurity Center, etc.)
Reports	• Report on security control operations and daily checks of security systems • Emergency reporting, including incident reporting
Help Desk	• 24×365 respond to security inquiries • Respond to inquiries related to various security issues, etc.

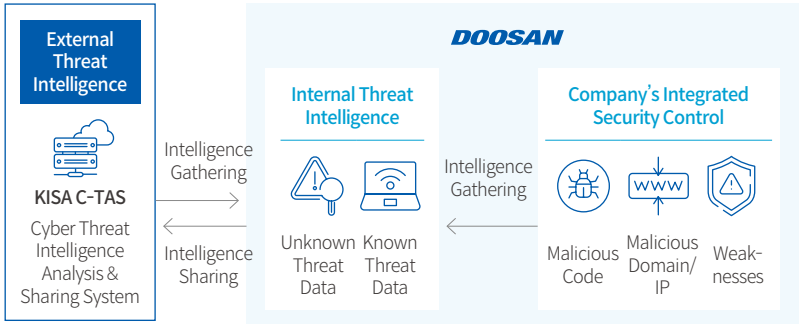
Security Controls with External Organizations

Doosan Enerbility conducts security control activities through threat intelligence (TI) technology based on big data, and has established a Korean-type threat intelligence system (C-TAS: Cyber Threat Analysis and Sharing) in collaboration with the Korea Internet & Security Agency (KISA). This system systematically collects 'cyber threat information' and automates the analysis of collection results and information sharing among related organizations to strengthen prevention and response to external threats.

Threat Intelligence Concept Map



Threat Intelligence Architecture



Information Security Awareness Activities

Security Training

Every year, Doosan Enerbility conducts "Information Security Online Training" for the entire company, covering topics such as email security, trade secret management, PC management, and personal information management, and provides information security training for each employee, including new hires, new department heads and departmental security officers, to perform their duties. In addition, Doosan Enerbility raises information security awareness by announcing changes to company security policies and occurrences of security issues through an internal portal and email.

Cybersecurity Drills

Reflecting the trends of the latest hacking incidents, Doosan Enerbility conducts malicious email mock drills three times a year to strengthen employees' security awareness, assuming situations that may actually occur, such as ransomware distribution, money transfer fraud, and information theft.

Metrics & Targets

Information Security Investment

Information Security Investments

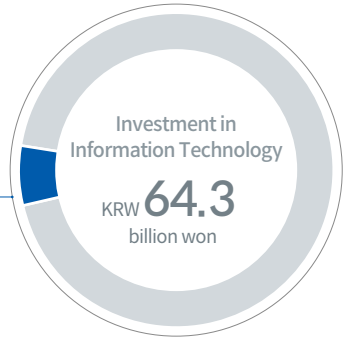
We invested about 6.3% of our total investment in information technology in the information protection sector, and our major investment results include applying global security control (GSOC), applying standard security products (NAC, firewall) at global overseas sites, applying 2FA to our suppliers and global employees, adopting the online electronic signature system to prevent SCAM incidents, diagnosing/improving IT infrastructure and system vulnerabilities, conducting online information security training for employees across the company, and obtaining personal information liability insurance.

Information Security Investment Status

Investment in Information Security

KRW **4** billion won

(6.3%)



Shared Growth

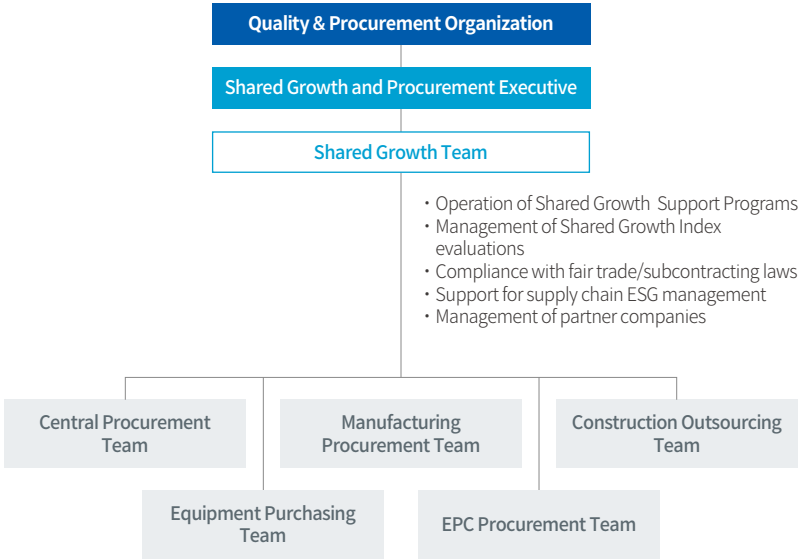
Governance

Doosan Enerbility strives to build virtuous partnerships and improve competitiveness across the supply chain by transferring technical capabilities and business systems to partner companies.

Organization in Charge

Shared growth is overseen by the Shared Growth and Procurement Executive, who is under the Quality & Procurement organization. The Shared Growth Team is an organization that promotes the company's overall work on shared growth and fair trade, and is responsible for operating the Shared Growth Support Programs, managing the evaluation of the Shared Growth Index, complying with fair trade and subcontracting laws, and supporting supply chain ESG management. Each of the procurement teams work with the Shared Growth Team to communicate with partner companies and develop various shared growth initiatives.

Shared Growth Organization Chart

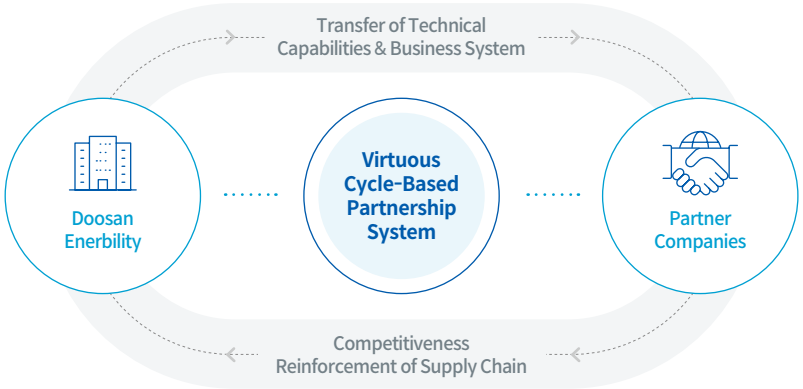


Strategy

Creating Virtuous cycle-based Partnerships

Doosan Enerbility aims to contribute to the revitalization of the local economy and the national economy through shared growth by enhancing and sharing the competitiveness through a virtuous cycle-based partnership where all of our partner companies are included in our unique technology and quality management system for strengthening technical capabilities and upgrading business systems.

Shared Growth Partnership System



Risk Management

Internalization Activities

Monitoring of Subcontract Transactions

Doosan Enerbility has established an internal subcontracting monitoring system to block unfair trade practices and prevent related risks in the process of conducting subcontracting transactions with partner companies, and has the monitoring system operated on a quarterly basis. We also receive consultations and reports filed on unfair subcontracting, unfair trade practices, and violations of fair trade compliance through the Shared Growth Call Center, and handle all the cases in a fair and prompt manner while strictly adhering to the principle of confidentiality.

Subcontracting Law Training Program

Every year, the company holds sessions on subcontracting laws and partner companies' technology protection to help employees maintain fair business relationships with partner companies and pursue mutual growth. In 2022, we offered training programs on the subcontracting law at 20 construction sites for 500 employees working in Project Management and Production Management.

Metrics & Targets

Accomplishments in Supporting Partners

Supporting New Business for Partners

Doosan Enerbility is actively supporting its partner companies on participating in various new businesses to promote mutually beneficial growth. In particular, in 2022, Doosan Enerbility conducted new business technology exchanges and made preorders to minimize the damage that may be caused to existing partner companies from the restructuring of the company's business portfolio around eco-friendly businesses.

Target Size of Shared Growth Fund

(Unit: KRW 100 million)

New Business Support in 2022

(Unit: KRW 100 million)

Project Classification	Project Name	No. of partners	Preorder amount
Gas Turbine	Standard Combined Cycle Power Plant Demonstration #1, 2	61	199.3
	Standard Combined Cycle Power Plant Demonstration #2-6	1	5.7
Wind Power	Equipment Supply for Jeju Hallim Offshore Wind Farm	45	148.4
	Development of 8MW Offshore Wind Turbine	24	7.7
Nuclear Power	Key Components Manufacturing for Shin Hanul Nuclear Power Plant #3, 4	48	324
TOTAL		131	361.1

Creation of Shared Growth Fund

From 2023, we plan to support KEPIC acquisition and renewal costs for 22 companies, and we will continue to increase the size of the shared growth fund to promote mutual growth with SMEs. We will continue to support our partner companies to strengthen their competitiveness through various win-win activities.

Managing the Shared Growth Index Evaluation

Doosan Enerbility has been managing related performance in accordance with the Fair Trade Agreement Evaluation of the Korea Fair Trade Commission and the Shared Growth Performance Evaluation Indicators of the Shared Growth Committee, and has obtained a rating of Excellent or better for five consecutive years.

Evaluation Results of Shared Growth Index

2020	Excellent
2021	Excellent
2022	In progress

Shared Growth Support Activities

Doosan Enerbility operates programs in four areas for shared growth with partner companies: enhancing partners' competitiveness, supporting partners' entry into global market, financial support and strengthening of communication. In particular, through regular and irregular communication activities with partner companies, we strive to receive and actively address the reports on partners' hardships and suggestions.

Shared Growth Support Program

Reinforcing Partners' Competitiveness

- Operation of a support program to improve competitiveness
- Project on improving EHS Safety & Health through mutual cooperation
- Consortium of National Human Resources Project
- Partners Training on Quality Guidance & Improvement
- Benefit-sharing system and technology repository system

Offering Financial Support

- Direct Support Fund without interest for partner companies
- Operation of Shared Growth Fund (Combined Support)
- Network Loans for Partner Companies (Based on Purchase Order/Performance Results)
- Offer safety management expenses
- Win-win payment system

Strengthening Communication

- Establishment & Regular Convening of Doosan Enerbility Cooperation Council
- Increase in visits by CEO and executives to Partner Companies
- Operation of Shared Growth Call Center
- Support gifts to partner companies on the Lunar New Year/ Chuseok and foundation day
- Support for improving the working environment of partner companies

Supporting Overseas Expansion

- Jointly Expansion to Overseas Construction Sites
- Support process of obtaining PQ (Prequalification) approval from overseas clients
- Support participation in overseas exhibitions

Enhancing Partners' Competitiveness

Doosan Enerbility conducts various support programs, such as the technology escrow system and performance sharing system, to achieve shared growth with partners by helping to strengthen the capabilities of partner companies.

Achievements in Improving the Fundamental Competitiveness of Partner Companies

(Accomplishments in 2022)

Technology escrow system	Support for **18** technology escrows	Consortium for human resources development ability magnified program	**503** people from 97 companies
Performance sharing system	Identified **27** new projects Approved **9** projects	Quality guidance and improvement training for partner companies	**482** people from 155 companies

Financial Support for Partner Companies

Doosan Enerbility has established the shared growth fund to support the stable finances and operations of its partner companies. In addition, we have promoted mutual growth with small and medium-sized partner companies through the win-win partner loan and direct support.

Status of Financial Support for Partner Companies

(Accomplishments in 2022)

Shared Growth Fund	Loan of KRW **12** billion provided	Nomubi.com	KRW **95.2** billion for partner companies of tier 1 or below
Win-Win Partner Loan	(win-win settlement system) KRW **215.1** billion	Direct Support	KRW **386** million for 2 companies

Strengthening Communication With Partners

We regularly organize dialogues with our partner companies to facilitate communication and resolve grievances, strengthening the bond between our company and partner companies.

Outcomes of Enhanced Communication With Partners

(Accomplishments in 2022)

Steering Committee	Convened **Once**	Providing New Year/Chuseok gifts to employees of partner companies	Provided to **970** employees
Visits to partner companies (listen to hardships & issues)	**157** companies	Support for improvement of work environment for in-house partners	• Parking lot maintenance • Office roof improvement • Locker room and shower room improvement

Supporting Partners' Entry into Global Market

Doosan Enerbility actively encourages and supports small and medium-sized partner companies in expanding their business overseas. To this end, we provide consulting services on administration, business practices, management, and human resources, and we support the strengthening of the capabilities of our partner companies' employees by entering overseas construction projects together.

Status of Support for Partners' Entry into Global Market

(Accomplishments in 2022)

Support on getting approval from overseas clients	**75** cases	Joint participation in overseas construction projects	**11** cases

Supply Chain Management

Governance

Doosan Enerbility is continuously improving its supply chain ESG management capabilities and evaluation system to create a healthy supply chain ecosystem and promote sustainable management of partner companies. We promote ESG management by establishing Supplier ESG Guidelines and advising all partner companies to comply with them. The guidelines and the company's procurement policy are periodically checked for conflicts and updated to reflect the global supply chain environment and revisions to procurement regulations.

Organization in Charge

For systematic supply chain management, Doosan Enerbility reports related major issues to the top management, and in particular, for supply chain ESG assessment, we receive decisions on follow-up actions after reporting the results. The results and goals of supply chain management activities are shared through the ESG Committee, and the ESG Committee's major agenda is reported to the BOD for preliminary review.

Supply Chain ESG Management System

2022	2023~2026	2027 and after
Implementation	**Growth**	**Stabilization**
Evaluation / Embedding / Systemization	**Expansion & Adoption of ESG Activities**	**Establishment of Supply Chain with Outstanding ESG Capabilities**
Online Assessment / Due Diligence, Review current ESG status of Supply Chain	Set targets for strong/ weak groups	Adopt self-initiated supply chain ESG system
Training of Internal / External Stakeholders	Expand / Adopt target group for evaluations	Advance ESG assessment and operation
Refine the system, incl. policies, procedures, external assessments, etc.	Support activities for establishment of supply chain ESG	

Strategy

Establishing a Supply Chain ESG Management System

Doosan Enerbility is promoting the establishment and institutionalization of an evaluation system for supply chain ESG management. In addition to the supply chain evaluation system, we are making efforts to modify related systems and change the perception among employees and partner companies. We strive to internalize ESG management throughout the supply chain through a virtuous evaluation cycle of measurement, evaluation, and improvement of the supply chain evaluation system.

Classification of Partner Companies

Doosan Enerbility selects and manages the significant Tier 1 partner companies by considering the strategic importance and ESG risk exposure of the companies. Strategic importance is evaluated based on the company's business influence (core business items), transaction size, and transaction continuity, and ESG risk exposure is evaluated based on the company's geographical location (country risk) and supply structure (procurement risk). Significant partner companies are selected based on the integrated assessment of strategic importance and ESG risk exposure, and the list is updated annually based on the supply chain assessment results and the companies' transaction performance.

Core Partner Companies Selection Standards

- ESG evaluation results
- Transaction item (strategic core item)
- Transaction period (continuity)
- Quality
- Transaction size (price)
- On-time delivery

Partner Companies Classification

Significant Tier 1 Partner Companies

First-tier partner companies with whom we continue to do business on strategic core items and who have a strong track record of quality, price, delivery, ESG, etc.

119 companies

Tier 1 Partner Companies

Companies with annual transaction of KRW 100 million or more for strategic and collaborative items

775 companies

Qualified Companies

Companies that have been established for at least one year and have passed internal qualification criteria (quality, financial, technical, competency, etc.)

3,334 companies

Risk Management

Supply Chain Evaluation

Doosan Enerbility has introduced a new 'Supply Chain ESG Evaluation' in addition to the existing Overall Competency Evaluation. With the new evaluation system, we are minimizing supply chain risks by proactively identifying the potential ESG risks of our partner companies and making improvements.

Supply Chain ESG Evaluation

In 2022, Doosan Enerbility introduced the Supply Chain ESG Evaluation to determine the sustainability of its supply chain. The Supply Chain ESG Evaluation is conducted by a third-party ESG evaluation organization that closely diagnoses the overall ESG level of partner companies through three stages: self-assessment questionnaire (SAQ), general assessment (evidence-based verification), and due diligence. The evaluation results are communicated to all partner companies, and those with low ratings are required to establish improvement plans and take corrective actions. We also provide training for those in charge to improve and internalize awareness of supply chain ESG. A series of issues related to the ESG evaluation are reported to the company's top management and shared through the ESG Committee.

Doosan Enerbility Partner Companies Evaluation

Evaluation Type	Evaluation items	Frequency	Evaluation target	No. of companies
Overall Competency Evaluation	Quality, price, and delivery	Biennial	Tier 1 partner companies	695 companies
ESG Evaluation	Conduct evaluation across ESG areas • E: Environmental management system certifications, environmental incidents, greenhouse gas emissions, hazardous materials reduction programs, etc. • S: Quality certifications, wage levels, industrial accidents, human rights management, etc. • G: Arrears, fair trade compliance, ESG disclosure levels, etc.	Annual	Tier 1 partner companies*	72 companies

* Including Significant Tier 1 partner companies

Supply Chain ESG Evaluation* Process

Self-Assessment	General Assessment	Precision Evaluation
• Conducted primary diagnosis by completing checklists from partner companies	• Review and evaluate external disclosures and documents submitted by partner company	• Conduct face-to-face evaluation by selecting industry representatives from partner companies for whom the general Assessment is conducted • Provide simple consulting on evaluation indicators
Evaluation indicators: 47 (E: 15, S: 18, G: 14)	Evaluation indicators: 65 (E: 28, S: 26, G: 11)	Evaluation indicators: 65 (E: 28, S: 26, G: 11)

* General assessment and due diligence are conducted by referring to evaluation methodologies from global supply chain initiatives, such as RBA, EcoVadis, etc.

Metrics & Targets

2022 Supply Chain ESG Evaluation Results

In 2022, we conducted ESG evaluations for a total of 72 partner companies, including our Significant Tier 1 partner companies, and 38 (52%) were identified as requiring management and improvement. We conducted additional on-site due diligence for 11 companies, supporting improvement plans and training on immediate action items for partner companies with urgent need for the upgrading of ESG ratings. In addition, we conducted 100% of pre- and post-assessment training for all partner companies, achieving a high satisfaction rate of over 4.59/5.0 on the training satisfaction survey.

Support for Improving ESG Immediate Action Items for Partner Companies

Category	Improvement Challenges	2023 Support Activities for Improvement
E	• Environmental education	• Training for companies receiving ESG evaluations (bi-annual) • Share environmental education materials and information
S	• Establishing a technology protection policy • Operation of safety, health, and critical incident processes • Establishment of human rights management policy	• Training for companies receiving ESG evaluations (bi-annual) • Shared company policies and internal processes • Support for review by company experts
G	• Conducting and supervising fair trade education • Establishment of an ethics policy • Maintenance of a compliance manual	• Training for companies receiving ESG evaluations (bi-annual) • Shared company policies and internal processes • Sharing relevant training materials and information

Target

Doosan Enerbility plans to steadily expand the number of companies subject to ESG evaluation, and we will continue to pay attention to our partner companies and actively support not only their immediate improvement tasks, but also their mid and long-term tasks.

2023 Goals for ESG Evaluation of Partner Companies

Expanding the number of ESG evaluation companies	Number of training sessions for ESG evaluation companies	Partner companies with grade 6 in 2022	Partner companies with grade 7 in 2022
72 ⌄ 100	5	50% rating improvement	100% rating improvement

Social Contribution

Governance

Organization in Charge

Doosan Enerbility operates the Social Contribution Committee, the highest decision-making body for social contribution, to improve the adequacy of its local community social contribution programs and the transparency of its donations/sponsorships. The Social Contribution Committee, centering around the chairperson of the ESG Committee, assesses the overall transparency of the selected beneficiary organizations and donations/sponsorships and checks to see whether the support is in line with the company's social contribution strategy.

Social Contribution Committee Organization Chart

Strategy

Social Contribution Principle

Doosan Enerbility strives to contribute to the local community and enhance corporate value by promoting social contribution activities linked to the company's business. Based on the three principles of social contribution activities - Business Oriented, Community Focused, and Employee Engagement - we conduct activities that enable the company and society to grow sustainably by resolving social problems and fostering future human resources through cooperation and engagement with the local communities.
In particular, in 2022, we set the themes of our social contribution activities as "energy" and "light" to reflect the nature of our business, and began work on preparing and introducing new programs. Going forward, Doosan Enerbility will continue to grow together with local communities by identifying and focusing on social contribution activities that reflect the needs of local communities and the identity of Doosan Enerbility.

Objective

Contributing to the local community and increasing corporate value

Principles

Business Oriented | Community Focused | Employee Engagement

Activity Area

Talent Development	Supporting the underprivileged	Community engagement
• Reflecting the nature of the engineering business and securing technical talents • Contributing to fostering future talent in the community	• Supporting the building of social safety nets to prevent and solve social problems	• Expanding local community collaboration network • Facilitating stakeholder engagement

Risk Management

Community Impact Assessment

Community Engagement Process

Doosan Enerbility regularly communicates with various institutions/organizations in the local community to listen to their needs, and based on this, we identify negative impacts that exist within the community and devise policies for engagement.

Community Engagement Process

1 Identify community needs	Identify possible risks associated with local communities (negative impacts in the area) through consultations with stakeholders
2 Review engagement plan	Review target, timing and method of participation
3 Confirm engagement	Determine engagement activity by comprehensively reviewing the conformance to social contribution activity principles, effectiveness in reducing negative impacts, and congruence with business purpose
4 Community engagement	Conduct activities according to engagement plan
5 Collect community feedback	Collect and analyze community feedback after conducting activity
6 Final analysis of engagement effectiveness	• Effects of reducing negative impacts • Identify additional needs that may arise during the course of executing the activity

Applying the community engagement process CASE

Example of donating light fixtures to unsafe areas

- The pedestrian walkway being an area with a high risk of nighttime crime is an area with a high need for environmental improvement
- Selected areas that are urgently in need of improvement through prior consultation with the Bundang Police Department
- Conducted a briefing session for local residents and school officials and began installation work with prior consent
- Plan to continuously monitor the effectiveness of the installation in the future, and additional activities will be decided as a result of impact assessment.

Installation of lighting facilities in unsafe areas

Metrics & Targets

Talent Development

Activity	Description	2022 Performance
Youth Dream Up Project	Support talent development of underprivileged athletically-gifted students (archery, shooting, baseball, etc.)	**Provide scholarships to underprivileged athletically-gifted students in Changwon** • Beneficiaries: 2 ppl (archery 1, baseball 1) • Scholarship Fund: KRW 7 million
Support for developing technical workforce	Donate R&D equipment to schools and research organizations	**Donate superconducting research equipment to Jeju University** • Donated superconducting related equipment (39 units including 5MW high- temperature superconducting motor drivers)
"Sharing Love" Campaign for Donating Study Guides	Donate study guides to company-affiliated youth welfare facilities	**Donate study guides to 2,047 elementary and middle school students in Changwon and Bundang regions' youth welfare facilities** • 5,498 books in first half of the year • 5,700 books in second half of the year

Doosan Enerbility donates wind power research equipment to Jeju University

Support to the underprivileged facing energy poverty

Support for the Underprivileged

Activity	Description	2022 Performance
Supporting the Under-privileged Facing Energy Poverty in Changwon City	Assistance with energy purchase costs to reduce financial burden for the underprivileged during winter due to inflation and rising utility bills, such as gas and electricity	**Provided energy vouchers to the underprivileged** • Co-sponsored by the company (KRW 50 million) and Changwon Chamber of Commerce & Industry (KRW 30 million), 4+ member households in Changwon received.
Supporting Child Welfare Facilities	Regular donations for company-affiliated child welfare facilities and children • Establishment of an employee social contribution fund	**Supported local children's centers** • 75 local centers in Changwon and Bundang, KRW 250,000/month, KRW 3 million/yr (Total KRW 225 million/yr) **Supported child foster care facilities** • 6 facilities in Changwon, KRW 500,000/month, KRW 6 million/yr (Total KRW 36 million/yr)
Talent Sharing	Operation of employee volunteer group • Technology volunteers, Safety volunteers, Career education volunteers, Harmful environment monitoring group for youths	**Youth harmful environment monitoring group** • Conducted a total of 20 activities, incl. youth protection, home repairs, rural areas labor assistance, winter goods deliveries for the socially vulnerable. • 86 employees participated as volunteers
Contactless Walkathon Fundraiser Campaign	Walkathon Fundraising Campaign pursued in collaboration with Bundang Police Station	**Walkathon Fundraising Campaign, Season 3** • 135 million steps walked (135% of Target 100 million steps) • Participants: 606 employees from Changwon, Bundang and sites **Walkathon Fundraising Campaign, Season 4** • 76 million steps walked (127% of Target 60 million steps) • Participants : 444 employees from Changwon, Bundang and sites, 500 people from Bundang Police Station, partner organizations, local community. **Walkathon Fundraising Campaign Ceremony** • Attended by the company, Bundang Police Station and the Children's Foundation • Sponsored surgery & rehabilitation for 4 children with walking disabilities in Bundang (KRW 20 million)

Local Community Development

Activity	Description	2022 Performance
Donate lighting fixtures in unsafe neighborhoods	Contribute to local community crime prevention through a donation program that reflects the company's business characteristics (energy, light) by installing nighttime security lights in unsafe areas	Installed 75 solar security lights in the 300-meter section of the pedestrian path outside Hansol Village apartment complex 7 in Jeongja 2-dong and the Hansol High School's commuter road
Coastal Clean-ups	Conducted marine waste collection and environmental cleanup activities along the coastline of Gwisan-dong, near the company's Changwon site • Participated in the Changwon City 'Saving Masan Bay' agreement, and the company regularly commemorates Ocean Day (May 31) every year	① **Environmental cleanup to commemorate Ocean Day** • Participated by 33 employees • Collected 1 ton of marine debris ② **Special environmental cleanup to commemorate the designation of Guisan Beach as a companion beach** • Designated in 2022 (by the Ministry of Oceans and Fisheries) • 40 employees and 7 competent district officials participated • collected about 2 tons of buoys, waste wood, and household garbage from a 3 km section of the beach
Support for Rural Farmers	In cooperation with Gyeongsangnam-do and local agricultural cooperatives, we selected farmers in areas where it is difficult to obtain labor during the harvest season and provided labor support.	**Supported persimmon harvesting for farmers in Daehan Village, Bukmyeon, Changwon** • 52 employees participated

Employee Cleanup Activity for Ocean Day


Engaging New Hires for Farm Work

Governance

Governance

BOD Composition

BOD Independence

Doosan Enerbility's Board of Directors (BOD) is composed of three inside directors (standing), including the CEO, and four outside directors (non-standing) with diverse industry experience, totaling seven members*. To enhance the efficiency of management judgment and business execution and realize responsible management, the CEO serves as the chairman of the BOD, and to ensure the independence of the BOD's composition and operation, the ratio of outside directors in the BOD is more than the majority (50%). In addition, the company has specified the composition requirements for the appointment of outside directors in accordance with relevant laws and regulations, the Articles of Incorporation, and BOD regulations.

* As of March 29, 2023

BOD Composition

Position	Name	Gender	Term	Title	Career Highlights
Inside Directors	Park, Geewon	Male	2008.03.21 ~ 2026.03	Chairman & CEO, BOD Chairman	Currently) Chairman & CEO of Doosan Enerbility Formerly) Vice-Chairman of Doosan Group
	Jung, Yeonin	Male	2019.03.28 ~ 2025.03	President & COO	Currently) President & COO of Doosan Enerbility Formerly) Head of Doosan Vina
	Park, Sanghyun	Male	2021.03.30 ~ 2024.03	President & CFO	Currently) President & CFO of Doosan Enerbility Formerly) CEO of Doosan Bobcat
Outside Directors	Bae, Jinhan	Male	2021.03.30 ~ 2024.03	Chairman of Audit Committee	Currently) Professor, Business Economics, Korea Univ (majored in accounting) Currently) Vice Chairman of Korean Association of Fair Economy/KICPA
	Lee, Junho	Male	2019.03.28 ~ 2025.03	Member of Audit Committee	Currently) Lawyer, Kim & Chang Law Firm Formerly) Judge, Seoul Central District Court
	Lee, Eunhyung	Female	2023.03.29 ~ 2026.03	Member of Audit Committee	Currently) Professor, Business Economics, Kookmin Univ Formerly) Member of the Committee of Industrial Development, Ministry of Knowledge and Economy
	Choi, Taehyun	Male	2023.03.29 ~ 2026.03	Member of Audit Committee	Currently) Advisor, Kim & Chang Law Firm Formerly) Senior Secretary to the President for Civil Affairs

* As of March 29, 2023

Outside Director Candidates Nomination Committee

The Outside Director Candidates Nomination Committee selects outside director candidates from among those recommended by a separate Outside Director Nomination Advisory Group by selecting those who are deemed suitable for establishing transparent corporate governance and enhancing the expertise of the BOD. Outside director candidates recommended by the Committee are elected at the General Meeting of Shareholders. As of the end of 2022, all members of the Committee are outside directors, and the appointment and dismissal of members is determined by resolution of the BOD.

BOD Transparency

Doosan Enerbility protects the rights and interests of stakeholders by disclosing BOD-related information, such as the operating status of the BOD, rules for appointing directors, minutes of BOD meetings, and changes related to the BOD, through the company's website, business reports, and corporate governance reports.

BOD Expertise and Diversity

Doosan Enerbility strives to apply a broad perspective when forming the BOD, to ensure its independence and expertise, without committing any discrimination in terms of gender, religion, field of study, race, disability, political affiliation, etc. To enhance the expertise of our outside directors, we have designated the Finance Team as a dedicated team and assigned staff members to provide support, such as helping to improve the directors' understanding of the business and offering training programs to provide a status overview following the restructuring of the business portfolio. In addition, we appointed a female outside director as a new member at the general shareholders' meeting in the first quarter of 2023, thereby improving the diversity of the BOD.

BOD Attendance

(Unit: %)

Category	2020	2021	2022
Outside Directors' Attendance	92.2	94.4	89.6
BOD Attendance	95.4	93.4	90.0

Operating Principle of BOD

Doosan Enerbility's Board of Directors operates based on the four operating principles: responsible leadership, operational efficiency, fair remuneration, and stakeholder-centeredness. To ensure fairness in the operation of the Board of Directors, directors with special interest in BOD resolutions are restricted from voting, and BOD resolutions are passed through an affirmative majority vote where the majority of directors are present. In addition, a meeting of the BOD may be held when more than one third of registered directors jointly call for a meeting, while specifying the purpose of the meeting and the date they wish to hold the meeting.

BOD Operation

Doosan Enerbility's BOD shares important issues concerning the company management, including economic, environmental and social aspects, and seeks solutions to such issues. In order to make decisions quickly and efficiently, we have established three BOD subcommittees as stipulated by the Articles of Incorporation. In 2022, we held a total of 14 BOD meetings, with 32 agenda items being raised for resolution (regarding general shareholders' meeting, BOD, investment and planning management, accounting and financial management, and other major management issues) and 8 agenda items being presented as reports. The Compliance Team acts as a support organization for the Audit Committee, which handles internal audits and the operation/evaluation of the internal accounting control system.

BOD Subcommittees

Committee Type	Role	Purpose
Outside Director Candidates Nomination Committee	Recommend candidates to be appointed as outside director at general shareholders meeting	To strengthen the BOD's independency
Audit Committee	Conduct audits on the company's accounting and overall business	To strengthen COD's check and balance function based on expertise in accounting and financial matters
Internal Transaction Committee	Conduct review/approval of internal transactions with related parties	To strengthen transparency

2022 Average Board Compensation

(Unit: Persons, million)

Category	Inside Director	Outside Director
No. of Directors	3	4
Total Remuneration	5,260	226
Average Remuneration Per Director	1,753	56.5

※ Based on the disclosed 2022 Business Report

BOD Performance

(Unit : Times, Case)

Category	2020	2021	2022
No. of meetings convened	16	18	14
No. of agenda items for resolution	37	39	32
No. of agenda items for modification	0	0	0
No. of agenda items for report	7	7	8

BOD Evaluation and Remuneration

BOD Remuneration Criteria

Doosan Enerbility pays remuneration to its inside and outside directors in accordance with the ceiling amount set at the General Meeting of Shareholders and the stipulated BOD regulations.

Inside Director Performance Evaluation

In addition to quantitative profit targets, Doosan Enerbility reflects non-financial business targets that are aligned with the company's business strategies in the KPIs of its inside directors. As of 2023, we have established detailed strategic initiatives centered around the following tasks - 'Shifting business portfolio to eco-friendly, high-profit margin businesses,' 'Fostering new businesses and diversifying business models,' and 'Building a sustainable business by establishing an ESG strategy.' We will also evaluate the contribution level and performance of the inside directors.

Remuneration Criteria for Inside Directors

The company calculates and pays remuneration based on the company's solvency, market competitiveness, long-term service, contribution to the company, and position/title in accordance with the company regulations for internal executives. For bonuses, the company pays short and long-term incentives based on the performance results of quantitative and qualitative indicators. In addition, the company pays welfare benefits and long-term service rewards in accordance with company regulations.

Remuneration Criteria for Outside Directors

The company pays remuneration set in accordance with the company regulations for executives, and pays fixed remuneration to ensure the independence and transparency of outside directors.

Remuneration Criteria for CEO

As of 2022, the CEO's total remuneration is KRW 3,107 million, consisting of KRW 1,411 million in base salary and KRW 1,694 million in bonus. The CEO's performance evaluation compensation generally reflects the results of financial indicators, such as order intake, EBIT, FCF, debt ratio and non-financial indicators such as growth, market conditions and portfolio improvement, and is implemented transparently and fairly through the BOD reporting and resolution process as needed.

2022 BOD Remuneration

(Unit: KRW million)

Category	Inside Director	Outside Director	Employees	Directors to Employees Ratio
Average remuneration per director	1,753	57	89	19.7 times

Shareholder Return

Shareholders and Capital Structure

Stock and Capital Structure

Doosan Enerbility's largest shareholder is Doosan Corporation, and foreign/institutional/general shareholders make up the majority of its shareholders. According to Doosan Enerbility's Articles of Incorporation, the total number of shares authorized for issuance is 2,000,000,000 (par value of 1 share: KRW 5,000), and all shares issued are common shares with equal voting rights based on the number of shares. As of the end of December 2022, Doosan Enerbility had 638,308,033 issued shares, 95,978 treasury shares, and 25,740 shares of public benefit corporations, resulting in 638,186,315 shares with voting rights, or 99.98% of the issued shares.

Communicate with shareholders and investors

Key Investor Relations Activities

Based on a systematic and proactive IR policy, Doosan Enerbility strives to increase shareholder value and gain market trust by communicating with shareholders and investors through various channels.

We operate separate IR pages on our website in Korean and English so that shareholders can easily obtain relevant information, In 2022, we held more than 250 IR meetings per year, including one-on-one meetings, non-deal roadshows (NDR), and participation in securities company conferences.

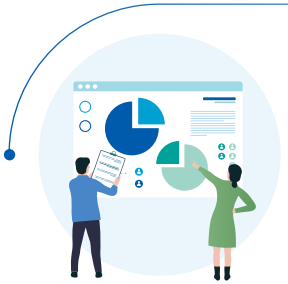
Company's Return to Shareholders, including Dividends, and Future Plans

The Company may pay out dividends in cash and stock in accordance with the Articles of Incorporation. In addition, the Company may pay quarterly dividends in cash as provided in the Articles of Incorporation, which must be approved by the BOD within 45 days after the reference date (quarter end date).

The Company has not been able to pay out any dividends for the last three business years owing to poor business performance and financial structure improvement efforts. However, as the financial structure improvement work was completed in the first half of 2022, the Company will endeavor to return dividends to shareholders in consideration of business performance and other factors.

Communication with Shareholders about Shareholder Return Policy

When dividends are finalized by resolution of the BOD, the Company provides information on dividends (in the case of financial year-end dividends) through the 'Decision on Cash and In-Kind Dividends' disclosure about six weeks before the Annual General Meeting. In addition, when changes to the existing dividend policy occur, the Company immediately informs shareholders through comprehensive disclosures. Although we did not specifically disclose our mid to long-term dividend policy, we will supplement the relevant parts in the future to provide shareholders with sufficient dividend-related information.



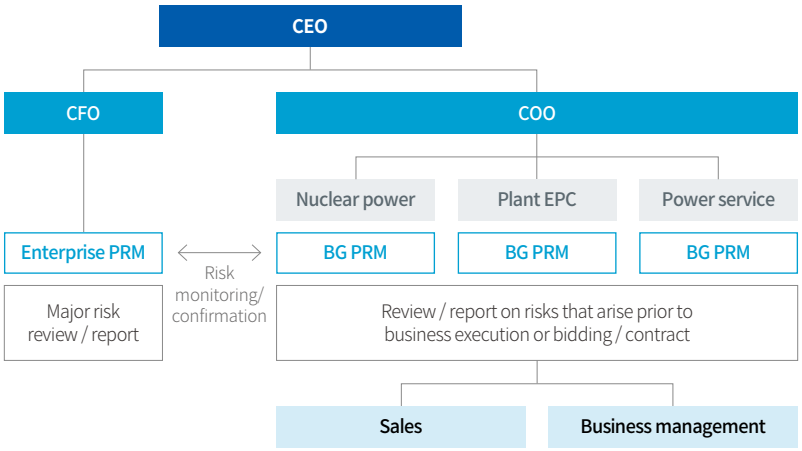
Integrated Risk Management

Governance

Organization in Charge

Doosan Enerbility has a company-wide Project Risk Management (PRM) function to objectively identify risks to the business.
The relevant business units inspect and manage the project risks identified at sites, and then, review and report the risks through the Corporate/Business Group (BG) PRM teams. We have a system in place to ensure that the risks identified through the corporate PRM Team are reported to the top management and managed accordingly.
Risks are categorized into Operation and Financial risks, and can be reported to the BOD depending on the severity of the issue.

Risk Managing Organization



* Business management: Management of risks in all processes including design, purchasing, construction and commissioning.

Strategy

Introduction of Quality Gate System

Doosan Enerbility has a systematic risk management system, the Quality Gate system, set up and operated to enable early identification and prevention of potential risks that may impact the company's economic, environmental and social value.
Once the company decides on a target project, the Bid Development phase would be the first Quality Gate to go through to facilitate early risk identification and analysis. During the second phase of the Quality Gate, all the checklist categories (5 large categories, 10 mid-level categories, and 97 small categories) are reviewed to identify the project requirements and assess the local conditions, after which the risks are analyzed and an optimal response plan is devised.
A questionnaire on the identified risks is submitted to and answered by the client, and the bid price is then finalized. We then proceed to participate in the bid with the fixed bid price.

Quality Gate Process

1. Select project	• Review key checkpoints before selecting project to bid on
2. Develop bid	• Confirm that the risks have been comprehensively evaluated and reflected to decide on bidding price
3. Sign contract	• Check to see risks are adequately resolved through negotiations, then proceed to final approval of contract signing
4. Prepare for project	• Finalize project delivery plan, then check to see that there are no new risks discovered
5. Execution	• Decide on details of the actual project execution • Continue monitoring to ensure that risks are being continuously assessed and managed as planned
6. Project Closing	• Evaluate project performance and share experience and know-how • Organize experience and know-how acquired during the project and provide feedback to following projects

Risk Management

Potential Risk Management

Doosan Enerbility analyzes scenarios for potential risks that could affect the company according to the categories presented in the World Economic Forum (WEF) Global Risk Report - economic, environmental, geopolitical, social, and technological - and strives to proactively respond to them.

Green Portfolio Transformation Needs (Economic)

According to the country's 10th Basic Plan for Electricity Supply and Demand (2022-2036), the share of nuclear power is expected to increase to 34.6% and the share of renewable energy to 30.6% by 2036. The EU has announced that it will increase the share of renewable energy generation from 32.0% to 42.5% by 2030. This projected increase in carbon-free power generation is a potential risk for Doosan Enerblity, which is engaged in the power generation equipment business, and the transition to a greener portfolio is an important issue directly related to sales and order intake. In response, we are implementing various strategies to mitigate potential risks and respond to changes in the market. We have announced a plan to expand the share of four growth driver businesses (renewable energy, next-generation nuclear power plants, hydrogen, and gas turbines) from 32.0% to 42.5%. We plan to expand orders for eco-friendly businesses to 82% by 2027, and have started production of the SMR, the next-generation nuclear power plant, and obtained international certification for the 8MW offshore wind power system.

We are also focusing on investing in technology development (R&D) for eco-friendly businesses, including the development of eco-friendly innovative materials.

Reducing greenhouse gas emissions due to domestic and international carbon regulations (Environment)

According to the revised Nationally Determined Contribution (NDC), a 40% reduction from 2018 is required by 2030, and the paid carbon permit rate of the GHG emission trading system is expected to continue to increase. In addition, in the EU, product competitiveness is likely to be impacted by carbon emissions after 2026 due to the implementation of the Carbon Border Adjustment Mechanism (CBAM). Doosan Enerbility recognizes the rising costs under the domestic and international carbon regulations and increasing demands from stakeholders as environmental potential risks, and has established the 2050 Carbon RE:Set strategy and is implementing a carbon roadmap that aims to achieve carbon neutrality by 2050 and a 19.4% reduction from 2017 levels by 2030. To this end, we are mitigating the risk of GHG reduction through energy efficiency improvement activities at the Changwon Plant, such as improving power efficiency of electric furnaces using AI, and efforts to secure emission credits through overseas carbon neutrality support projects and support for partners of the Korea Energy Agency.

Internalization of Integrated Risk Management

In order to strengthen the overall risk management function and related competencies, Doosan Enerbility offers employee training programs on risk management, such as on the related policies and risk status. In particular, we conduct training programs, such as the PM Academy for Project Managers and employees of related departments, to promote their understanding of risk management and the procedures. By doing so, we are not only spreading the risk management culture, but also enhancing the management capabilities of various controls to be followed and major risk factors to identify potential risks.

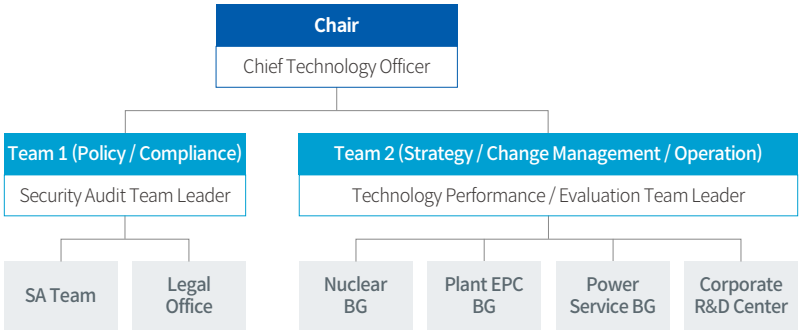
Ethics and Compliance Management

Governance

Organization in Charge

With technological competitiveness becoming increasingly important, Doosan Enerbility is strengthening the area of research security by establishing a Research Security and Ethics Review Committee to manage research security and technology leakages. The Committee deliberates over and reaches resolutions on the revision of major regulations/policies and other related matters, and manages the research ethics situation. In addition, we appointed a compliance officer in 2012 to monitor ethics and anti-corruption issues and strengthen ethical management. We conduct compliance inspection activities led by the compliance officer and regularly disclose the results of these activities.

Research Security & Ethics Review Committee Organization Chart



Strategy

Doosan Enerbility is continuously strengthening its ethics and compliance management system through actions, such as establishing internal guidelines based on relevant laws and regulations, building support systems and infrastructure, and regularly training employees in order to comply with the trading order and conduct transparent and fair business activities. In 2022, we revised the Code of Conduct to reorganize the company's basic responsibilities and ethical foundation for major stakeholders. We also provide ethics training to raise awareness and internalize ethics and compliance management among employees, and disclose the results of the training in the annual Integrated Report. In addition, we operate an internal reporting center to fulfill our social responsibilities with stakeholders, such as the employees, customers and partner companies, and strive to grow as a trusted company.

Risk Management

Activities to Strengthen Ethics and Compliance Management

Compliance Officer Letter to Improve Employee Awareness

Doosan Enerbility sends out compliance officer letters to employees that contain information on major laws, systems, and guidelines to help establish a culture of ethics and compliance management throughout all its corporate activities and encourage employees to put it into practice in their daily work.

Operating the Cyber Reporting Center

We operate the Cyber Reporting Center to which reports on unfair acts can be filed and violations of laws, regulations, the Doosan Credo and Code of Conduct can be managed Anyone can report to the Cyber Reporting Center, which is operated by a third party, using real names or anonymously, and the identity of the reporter and the contents of the report are strictly confidential, prohibiting the posing of any disadvantages to good faith reporters. The center offers services in 36 languages to facilitate the reporting of ethical violations and is open to all internal and external stakeholders.

Doosan Cyber Reporting Center (doosan.com)

Strengthening Ethical Management of Partner Companies

Doosan Enerbility introduces the Code of Conduct to its partner companies and provides a guide on how to report violations, so that they can check for potential issues and report on non-compliances. In addition, we send out letters every holiday reminding partners to comply with the Code of Conduct, adding a clause to all contracts with partner companies to ensure compliance with it. We also created a new corruption risk checklist for new partner companies to monitor their compliance with the Code of Conduct, thereby strengthening ethical management.

Extending the Reach to Domestic and Overseas Operations

Doosan Enerbility strives to raise the level of ethical management in not only Korea, but also overseas business sites, including our overseas subsidiaries. All employees are required to sign a “Pledge of Compliance with the Code of Conduct,” and we distribute ethics checklists and conduct briefings to strengthen compliance with the Anti-Graft Act. We institutionalize activities to strictly comply with ethical management, such as specifying compliance regulations when signing contracts with overseas business agents and prohibiting illegal acts and manipulations of the law.

Conducting Ethics Training

Doosan Enerbility conducts ethical management training programs every year to raise employees' ethical awareness. Ethics training programs are conducted annually for employees at the headquarters and some overseas subsidiaries. The ethics education content provides criteria for correct value judgment on ethical dilemmas that may arise in the performance of work, thereby enhancing employees' awareness and understanding of ethical management. In 2022, we conducted ethics training for 2,696 domestic white-collar employees, and we are conducting ethics training for Doosan Vina employees among our overseas subsidiaries.

2022 Ethics Training Programs

Category	Unit	2020	2021	2022
No. of target people	People	2,978	3,002	2,746
No. of participants	People	2,910	2,941	2,696
Participation rate	%	98	98	98

Internal Control

Doosan Enerbility has established policies for compliance, internal accounting, and publicly disclosed information and operational status management. The company has established compliance control standards to strengthen the Company's compliance management and social responsibility in accordance with relevant regulations, such as Article 542(13) of the Commercial Act and appointed a compliance officer through a BOD resolution. In addition, the company has established and complied with internal regulations in accordance with relevant laws and regulations to protect shareholders and investors from the risk of financial loss and damage to the company's corporate image due to business activities. The company conducts compliance support activities in accordance with the compliance control standards, operates the internal accounting management system in accordance with the Internal Accounting Control Regulations and the Internal Accounting Management Practice Guidelines, and operates internal procedures to ensure that accurate information is disclosed in a timely manner in accordance with the Disclosure Information Management Regulations.

Metrics & Targets

Doosan Enerbility periodically checks the status of its ethics and compliance management and strengthens it in order to continuously improve and implement the ethics management system.

Major Ethics and Compliance Management Activities in 2022

Activities	Description	Frequency
Check on compliance with personal information protection	• Check for compliance with the personal information protection act and internal regulations	Ad Hoc Basis
Compliance checks across the company's overall business operations	• Compliance checks for new and existing businesses • Compliance activities in the areas of trade secrets, anti-competition, fair trade, and anti-graft • Appointment of a Chief Information Security Officer (CISO) and information security disclosure in accordance with the amendments to the Information and Communications Network Act and Enforcement Decree	Ad Hoc Basis
Compliance training for employees	• Training on prohibition of unauthorized solicitation and bribery • Training for employees on new and revised laws • Training for practitioners on customs laws, foreign exchange transaction laws, and FTA implementation • Training on compliance with laws on prevention of unfair competition and protection of trade secrets	Annually or Ad Hoc Basis
ESG Committee activities	• Review and advise on domestic and international laws related to environment, human rights, governance, etc • Anti-corruption and ethics subcommittee in the ESG Committee • Participation in the UN Global Compact (UNGC) Human Rights and Anti-Corruption Working Group	Ad Hoc Basis
Research Security and Ethics Review Committee activities	• Training for the heads of R&D projects to strengthen research security and ethics awareness, and deliberations on security ethics • Regular committee meeting held in 2022	Ad Hoc Basis, Regular Meetings Convened
Rewards for employee inventions	• Succession and fair compensation for employee inventions	Ad Hoc Basis

Appendix

ESG Data

Economic Performance Data

Consolidated Statement of Financial Position

(Unit: KRW)

Subject		End of 58th Report	End of 59th Report	End of 60th Report
Assets				
Total Assets		**25,567,174,291,104**	**23,720,545,628,641**	**23,049,781,799,921**
Current Assets	Total Current Assets	9,946,795,870,391	8,417,624,107,978	8,098,893,728,490
	Cash & Cashable Asset	2,336,795,020,568	1,908,603,989,132	1,395,837,596,356
	Short-term Financial Instruments	316,762,603,159	519,150,027,683	105,780,374,651
	Short-term Investment Securities	268,262,018,463	197,197,204,569	23,775,906,989
	Accounts Receivable	2,036,954,321,016	921,080,464,985	1,619,606,553,120
	Unclaimed Construction	1,764,133,275,013	1,632,887,643,517	1,156,934,174,443
	Outstanding Balance	236,838,070,204	207,625,154,622	208,081,476,274
	Prepayment	452,091,457,840	499,609,555,547	609,869,214,936
	Prepaid Expenses	94,593,137,930	129,779,489,360	118,613,409,154
	Short-Term Loans	149,986,369,488	62,126,808,865	73,900,528,476
	Derivative Assets	58,352,499,895	30,275,102,551	72,485,060,186
	Binding Contract Asset	5,900,766,998	45,877,394,613	54,927,582,112
	Inventory Assets	1,958,721,611,748	1,788,420,159,139	2,459,025,995,764
	Non-Current Assets Held for Sale	11,495,049,364	319,607,727,615	4,684,773,518
	Other Current Assets	255,909,668,705	155,383,385,780	195,371,082,511
Non-Current Assets	Total Non-Current Assets	15,620,378,420,713	15,302,921,520,663	14,950,888,071,431
	Long-term Financial Instruments	23,367,497,135	29,271,959,777	31,513,699,275
	Long-Term Investment Securities	926,508,778,964	301,709,821,939	321,093,597,491
	Investments in Affiliates and Joint Ventures	162,973,738,141	582,045,106,081	355,954,924,015
	Unclaimed Construction	102,739,503,644	102,739,503,644	102,739,503,644
	Long-Term Loans	230,048,605,914	44,703,080,573	41,235,869,325
	Tangible Assets	6,157,806,963,024	5,436,969,444,692	5,022,147,617,428
	Intangible Assets	6,900,287,804,408	8,015,980,133,418	7,772,723,576,214
	Real Estate Investments	81,937,006,635	72,920,331,892	274,446,280,278
Non-Current Assets	Derivative Assets	37,748,633,632	8,683,481,005	18,057,362,857
	Binding Contract Assets	9,818,569,590	20,892,251,073	40,539,228,724
	Security Deposits	488,311,023,811	363,655,647,884	334,333,042,824
	Deferred Tax Assets	442,532,656,942	232,791,073,638	416,706,171,660
	Net Defined Benefit Assets	-	-	14,400,518,959
	Other Non-Current Assets	56,297,638,873	90,559,685,047	204,996,678,737
Liabilities				
Total Liabilities		**18,460,677,610,119**	**14,912,949,983,920**	**12,969,491,516,052**
Current Liabilities	Total Current Liabilities	13,070,548,146,216	10,125,765,540,983	8,059,455,534,052
	Trade Accounts and Notes Payable	2,194,328,819,387	1,880,747,776,315	2,518,709,955,521
	Short-Term Loans	5,368,579,020,551	3,908,482,953,731	1,433,571,969,401
	Securitized Liabilities	59,550,657,597	-	-
	Accounts Payable	492,438,703,598	399,635,790,173	263,751,374,574
	Advances Received	96,754,115,588	64,196,097,441	49,454,651,620
	Overcharged Construction	1,666,079,090,537	1,455,693,415,375	1,734,717,867,012
	Deposits	32,641,867,115	30,295,770,427	29,728,488,184
	Accrued Expenses	645,041,631,439	411,290,713,603	585,783,617,640
	Net Corporate Tax Liabilities	38,710,823,579	36,231,843,804	62,254,573,267
	Current Maturities of Long-Term Liabilities	1,590,801,459,636	938,862,829,868	771,005,503,541
	Derivative Liabilities	61,603,742,869	211,671,916,451	74,833,353,086
	Confirmed Contract Liabilities	17,401,805,083	10,120,811,188	16,710,336,818
	Estimated Liabilities	508,536,449,621	320,457,896,603	319,218,544,700
	Current Lease Liabilities	66,465,579,213	64,880,159,213	76,193,144,764
	Lease Liability in a Sale	-	-	27,499,428,692
	Liabilities held for Sale	-	273,469,051,609	-
	Other Current Liabilities	231,614,380,403	119,728,515,182	96,022,725,232

(Unit: KRW)

Subject		End of 58th Report	End of 59th Report	End of 60th Report
Non-Current Liabilities	**Total Non-Current Liabilities**	**5,390,129,463,903**	**4,787,184,442,937**	**4,910,035,982,000**
	Private Loans	1,800,160,199,498	848,257,259,234	356,347,784,913
	Long-Term Loans Payable	1,183,035,254,754	1,516,918,542,299	2,350,867,610,263
	Long-Term Securitized Liabilities	49,102,652,561	-	-
	Long-Term Accounts Payable	14,928,812,333	14,522,398,927	11,278,271,449
	Net Defined Benefit Liabilities	721,424,677,702	540,496,543,264	452,352,771,950
	Deposit Securities	309,091,438,251	330,443,720,443	317,890,642,911
	Derivative Liabilities	70,772,172,508	37,802,056,172	41,217,731,602
	Confirmed Contract Liabilities	24,633,647,381	5,651,863,540	6,307,158,879
	Deferred Corporate Tax Liabilities	334,221,214,442	462,047,648,049	502,157,754,739
	Estimated Liabilities	370,469,192,358	312,515,735,320	380,357,585,584
	Other Non-Current Liabilities	171,864,529,234	316,307,158,369	317,700,599,789
	Other Non-Current Liabilities in a Sale	-	-	49,848,395,281
	Other Non-Current Liabilities	340,425,672,881	402,221,517,320	123,709,674,640
Capital				
Total Capital		**7,106,496,680,985**	**8,807,595,644,721**	**10,080,290,283,869**
Controlling Company Proprietor's Equity	**Total Controlling Company Proprietor's Equity**	**3,188,385,999,809**	**6,091,427,146,585**	**7,113,272,670,506**
	Capital	1,937,707,325,000	2,675,624,980,000	3,256,061,215,000
	Capital Surplus	2,662,214,482,750	1,865,083,188,183	2,870,068,226,942
	Other Capital	47,907,323,727	46,159,352,713	45,676,122,284
	Accumulated Other Comprehensive Income	587,157,416,427	731,324,738,126	882,653,386,161
	Retained Earnings (Deficit)	(2,046,600,548,095)	773,234,887,563	58,813,720,119
Non-Controlling Interest	Non-Controlling Interest	3,918,110,681,176	2,716,168,498,136	2,967,017,613,363
Total Liabilities & Capital		**25,567,174,291,104**	**23,720,545,628,641**	**23,049,781,799,921**

Policy Spending[1)]

Subject	Unit	2020[2)]	2021[2)]	2022
Total Spending	KRW 1 million	1,222	1,339	1,603
Lobby	KRW 1 million	-	-	-
Political Donation	KRW 1 million	-	-	-
Membership Fee	KRW 1 million	1,222	1,339	1,603
Membership Fee Details				
Overseas Construction Associations	KRW 1 million	381	363	393
Changwon Chamber of Commerce and Industry	KRW 1 million	206	198	183
EPRI (Electric Power Research Institute)	KRW 1 million	49	55	164

1) No contributions to political organizations, lobbyists, etc.
2) Figures for 2020 and 2021 have changed due to a change in the basis for calculating the total amount of association fees paid.

R&D Investments[1)]

Classification	Unit	2020	2021	2022
Total R&D Investments	KRW 1 million	474,213	428,443	371,199
R&D Investment-to-Sales Ratio	%	3.2	3.8	2.4

1) Based on consolidated statement

Environmental Performance Data

* Environmental performance data is based on domestic operations.

Energy Consumption[1)]

Classification		Unit	2020	2021	2022
Total Energy Consumption		**TJ**	**4,372**	**3,837**	**4,078**
Energy Consumption by Energy Source (Direct)	Energy Consumption (Direct) Subtotal	TJ	1,822	1,424	1,507
Energy Purchases (Indirect)	Energy Consumption (Indirect) Subtotal	TJ	2,553	2,415	2,575
	Electricity	TJ	2,545	2,411	2,570
	Steam - Heat (hot water)	TJ	8	4	4
Energy Costs		KRW 1 million	50,010	50,206	77,762
Energy Intensity[2)]		TJ/100 million	0.13	0.11	0.08
Cost Reduction		KRW 1 million	2,750	830	1,026

1) Figures of 2020 and 2021 has changed due to change in energy usage aggregation criteria
2) Energy intensity = total energy usage / revenue (separate basis)

Reduction of Energy Consumption

Classification	Unit	2020	2021	2022
Total energy savings	**TJ**	**21**	**16**	**64**
Introduction of high-efficiency facilities	TJ	21	16	64

Emission of Greenhouse Gas

Classification	Unit	2020	2021	2022
Total GHG emissions	**1,000 tCO_2-eq**	**229.3**	**200.3**	**214.6**
Direct GHG emissions (Scope 1) subtotal	1,000 tCO_2-eq	105.4	84.8	91.4
Scope 1 intensity[1)] (unit load emissions)	1,000 tCO_2-eq/ KRW 10 billion	0.31	0.24	0.17
Indirect GHG emissions (Scope 2) subtotal	1,000 tCO_2-eq	123.9	115.5	123.2
Scope 2 intensity[1)] (unit load emissions)	1,000 tCO_2-eq/ KRW 10 billion	0.36	0.32	0.23

Classification	Unit	2020	2021	2022
Total Other indirect GHG emissions (Scope 3)	**1000 tCO_2-eq**	**-**	**-**	**22.4**
Classification 2 (Purchasing capital goods)	tCO_2-eq	-	-	435.7
Classification 3 (Fuel and energy not included in Scope 1, 2)	tCO_2-eq	-	-	17,361.4
Classification 5 (Job-generated waste)	tCO_2-eq	-	-	2,403.6
Classification 6 (Business travel)	tCO_2-eq	-	-	568.2
Classification 7 (Employees Commuting)	tCO_2-eq	-	-	1,606.2
Scope 3 intensity[1)] (unit load emissions)	1000 tCO_2-eq/ KRW 10 billion	-	-	0.04

1) GHG intensity = total GHG emissions/revenue (separate basis)

Substances Discharged Into Air

Classification	Unit	2020	2021	2022
NOx Emission Amount	Ton	110.0	104.0	111.0
SOx Emission Amount	Ton	4.0	3.0	5.1
VOC (Volatile Organic Compound) Discharge Amount	Ton	29.0	28.0	23.8
HAP (Hazardous Atmosphere Pollutants) Discharge Amount	Ton	-	-	-
PM (Particulate Matter) Discharge Amount	Ton	8.0	8.0	8.1

Water Harvesting, Use, and Recycling[1)]

Classification		Unit	2020	2021	2022
Total water harvesting		**Ton**	**945,561**	**1,012,456**	**1,167,566**
Quantity to Take For Each Supply Source	Surface layer water	Ton	-	-	-
	Underground water	Ton	3,299	27,174	60,284
	Rainwater	Ton	-	-	-
	Wastewater from other business sites	Ton	-	-	-
	Water supply or other water support system	Ton	942,262	985,282	1,107,282
	Others	Ton	-	-	-
Total water usage[2)]		**Ton**	**299,208**	**323,293**	**227,079**
Quantity of Recycled Water		Ton	-	-	-
Quantity of Alternative Water		Ton	-	-	-

1) Water data including domestic construction sites from 2022
2) New additional indicators for 2022 (water consumption = total amount of water intake - total amount of wastewater and sewage discharge)

Wastewater and Sewage Discharge

Classification		Unit	2020	2021	2022[1)]
Total Discharged Amount of Wastewater and Sewage		**Ton**	**646,353**	**689,163**	**940,487**
Discharged Amount of Wastewater[2)]		Ton	94,469	84,565	247,495
Discharged Amount of Sewage[3)]		Ton	551,884	604,598	692,992
Water Quality of Discharged Wastewater	TOC	mg/l	9.9	9.1	4.5
	SS	mg/l	3.8	3.8	2.6
	N-H	mg/l	0.7	0.2	0.0
	Fe	mg/l	0.2	0.1	0.1
	T-N	mg/l	1.8	3.8	3.4
	T-P	mg/l	0.2	0.1	0.0

1) Aggregated data including domestic construction sites since 2022
2) Final wastewater discharge site: Deok-dong Recycling Center, wastewater treatment method: physical and chemical treatment, etc.
3) Sewage discharge from business sites as a new disclosure indicator in 2022

Use and Recycling of Raw Materials

Classification		Unit	2020	2021	2022
Raw material usage total		**Ton**	**143,372**	**140,245**	**167,173**
Non-renewable raw materials	Scrap iron	Ton	78,915	77,368	90,318
	Ferroalloys	Ton	4,316	4,409	4,377
	Quicklime	Ton	5,294	5,259	6,031
	Fluorspar	Ton	725	649	655
	Lump coal	Ton	3,068	2,905	3,736
Renewable materials	Recovered iron	Ton	41,432	41,486	53,919
	Chip	Ton	9,622	8,169	8,137
Percentage of recycled materials used		%	35.6	35.4	37.1

Waste Generation, Disposal, and Recycling

Classification			Unit	2020	2021	2022[2]
Total waste generated			**Ton**	**41,223**	**36,820**	**64,590**
Hazardous waste	Hazardous waste subtotal		Ton	2,977	2,907	3,360
	Fertilization		Ton	-	-	-
	Incineration	without energy recovery	Ton	305	301	532
		with energy recovery[1]	Ton	-	-	-
	Landfill		Ton	2,035	1,894	2,172
	Others		Ton	-	-	5
	Recycling		Ton	637	712	651
	Recycling rate		%	21.4	24.5	19.4
General waste	General waste subtotal		Ton	38,246	33,913	61,231
	Fertilization		Ton	-	-	-
	Incineration	without energy recovery	Ton	780	774	695
		with energy recovery[1]	Ton	-	-	299
	Landfill		Ton	601	392	486
	Field storage		Ton	-	-	-
	Others		Ton	-	-	13,077
	Recycling		Ton	36,865	32,747	46,674
	Recycling rate		%	96.4	96.6	76.2

1) Energy recoverable solid fuels from 2022 onwards
2) Standard changed from 2022 by aggregating waste from domestic construction sites and domestic business sites

Hazardous Chemical Emissions[1]

Classification	Unit	2020	2021	2022
Number of Substances	EA	3	3	3
Amount of Hazardous Chemicals Used	Ton	131	137	111

1) No off-site releases of hazardous chemicals from 2020 to 2022

Total Expenses For Environment

Classification	Unit	2020	2021	2022
Total environmental costs	**KRW 1 million**	**2,956**	**6,950**	**4,173**
Amount of environmental investment	KRW 1 million	623	3,040	810
Expense of cosigned waste treatment	KRW 1 million	1,378	1,865	1,863
Clean air	KRW 1 million	739	1,399	909
Water quality	KRW 1 million	216	646	591
Sale revenue of waste	KRW 1 million	544	766	1,368

Environmental Management System (ISO 14001) Certification Status[1]

Classification	Unit	2020	2021	2022
Number of operations certified	Unit	2	2	2
Number of operations subject to certification	Unit	2	2	2
Percentage of environmental management system certification	%	100	100	100

1) Separate standard: Headquarter, Changwon Plant, and Bundang Doosan Tower

Purchasing Eco-friendly Products

Classification	Unit	2020	2021	2022
Purchased amount	KRW 1 million	21,037	37,340	21,570

Violations of Environmental Laws[1]

Classification	Unit	2020	2021	2022
Number of environmental incidents	Cases	-	-	-
Fine imposed due to incidents	KRW 1 million	-	-	-

1) We only reported the number of domestic environmental violations that resulted in fines of KRW 10 million or more, and there were no such incidents in 2020 and 2022.

Environmental Performance Data (Consolidated basis)

* Environmental performance data (on a consolidated basis) is based on 2022 results.

Energy Consumption

Classification		Unit	Overseas Construction Sites	Doosan VINA	Doosan Bobcat
Total Energy Consumption		**TJ**	**385.9**	**102.2**	**2,281**
Energy Consumption (Direct) Subtotal		TJ	362.1	27.7	N/A
Energy Consumption (Indirect) Subtotal		TJ	23.7	74.5	N/A

Emission of Greenhouse Gas

Classification		Unit	Overseas Construction Sites	Doosan VINA	Doosan Bobcat
Total GHG emissions		**1,000 tCO_2eq**	**29.3**	**12.6**	**138.0**
Direct GHG emissions (Scope 1)	Direct GHG emissions (Scope 1) subtotal	1,000 tCO_2eq	25.1	1.8	46.3
Indirect GHG emissions (Scope 2)	Indirect GHG emissions (Scope 2) Subtotal	1,000 tCO_2eq	4.2	10.8	91.7

Water Harvesting, Use, and Recycling

Classification		Unit	Overseas Construction Sites	Doosan VINA	Doosan Bobcat
Total water harvesting		**Ton**	**241,592**	**205,660**	**448,670**
Quantity Harvested Per Supply Source	Surface layer water	Ton	-	-	-
	Underground water	Ton	133,064	-	-
	Rainwater	Ton	-	-	-
	Wastewater from other business sites	Ton	-	-	-
	Water supply or other water delivery system	Ton	108,528	205,660	448,670
	Other water harvesting	Ton	-	-	-
Total wastewater discharges		**Ton**	**N/A**	**80,143**	**N/A**
Total water usage		**Ton**	**N/A**	**125,517**	**316,817**

Waste Generation, Disposal, and Recycling

Classification		Unit	Overseas Construction Sites	Doosan VINA	Doosan Bobcat
Total waste generated		**Ton**	**19,486**	**1,800**	**47,818**
Hazardous waste	Hazardous waste subtotal	Ton	2,268	819	319
	Fertilization	Ton	-	-	-
	Incineration	Ton	-	-	234
	Landfill	Ton	1	-	-
	Others	Ton	2,267	819	-
	Recycling	Ton	-	-	85
	Recycled rate	%	-	-	26.6
General waste	General waste subtotal	Ton	17,218	981	47,499
	Fertilization	Ton	-	-	-
	Incineration	Ton	587	-	381
	Landfill	Ton	9,379	-	5,058
	On-site storage	Ton	26	-	-
	Others	Ton	5,395	981	-
	Recycling	Ton	1,829	-	42,056
	Recycled rate	%	10.6	-	88.5

Social Performance Data

* Social performance data is created on a separate basis.

Status of Employees

Classification			Unit	2020	2021	2022
Total number of employees			**Persons**	**5,587**	**5,622**	**5,816**
By employment contract	Permanent employee	Male	Persons	4,509	4,373	4,331
		Female	Persons	167	160	179
	Contract worker	Male	Persons	788	971	1,185
		Female	Persons	123	118	121
By age	Younger than 30 years old	Male	Persons	252	275	353
		Female	Persons	68	51	68
	30 to 50 years old	Male	Persons	3,848	3,690	3,544
		Female	Persons	218	220	223
	Over 50 years old	Male	Persons	1,197	1,379	1,619
		Female	Persons	4	7	9
By position/role	Executive[1)]	Male	Persons	51	63	69
		Female	Persons	-	-	1
	Senior Manager	Male	Persons	2,356	2,545	2,572
		Female	Persons	93	115	124
	Associate	Male	Persons	1,332	1,212	1,388
		Female	Persons	197	163	175
	Blue Collar Worker	Male	Persons	1,558	1,524	1,487
		Female	Persons	-	-	-

1) Including professional executives

Employees by Nationality

Classification	Unit	2020	2021	2022
Domestic	Persons	5,152	5,215	5,395
Overseas	Persons	435	407	421

Employee Breakdown by Nationality[1)]

Classification		Unit	2020	2021	2022
Korea	Number of employees	Persons	5,567	5,603	5,796
	Percentage of employees	%	99.64	99.66	99.66
	Number of managerial positions	Persons	3,322	3,441	3,541
	Percentage of managerial positions	%	99.70	99.74	99.75
Ukraine	Number of employees	Persons	7	7	7
	Percentage of employees	%	0.13	0.12	0.12
	Number of managerial positions	Persons	6	6	6
	Percentage of managerial positions	%	0.18	0.17	0.17
India	Number of employees	Persons	2	2	4
	Percentage of employees	%	0.04	0.04	0.07
	Number of managerial positions	Persons	-	-	-
	Percentage of managerial positions	%	-	-	-
Others	Number of employees	Persons	11	10	9
	Percentage of employees	%	0.02	0.18	0.15
	Number of managerial positions	Persons	4	3	3
	Percentage of managerial positions	%	0.12	0.09	0.08

1) Figures for 2020 and 2021 have changed due to changes in nationality classifications.

Status of Managerial Position

Classification			Unit	2020	2021	2022
Management Level	Top/Senior management	Male	Persons	50	64	69
		Female	Persons	-	-	1
	Middle management	Male	Persons	2,547	2,860	2,962
		Female	Persons	97	119	131
	Junior management	Male	Persons	575	364	352
		Female	Persons	63	43	35
Non-Management Level		Male	Persons	2,125	2,056	2,133
		Female	Persons	130	116	133

Status of Female Employees[1)]

Classification		Unit	2020	2021	2022
All employees[2)]	Number of female employees	Persons	290	278	300
	Percentage of female employees	%	5.2	4.9	5.2
Management Level	Percentage of female employees	%	4.8	4.7	4.7
Higher-managerial position	Percentage of female employees	%	-	-	1.4
Middle management	Number of female employees	Persons	3.7	4.0	4.2
Junior management	Percentage of female employees	%	9.9	10.6	9.0
Non-managerial positions	Percentage of female employees	%	5.8	5.3	5.9
Managerial positions of revenue-generating functions	Number of female employees	Persons	96	98	98
	Number of male employees	Persons	2,728	2,826	2,883
	Percentage of female employees	%	3.4	3.4	3.3
STEM-related jobs[2)]	Number of female employees	Persons	142	145	167
	Number of male employees	Persons	4,470	4,499	4,633
	Percentage of female employees	%	3.1	3.1	3.5

1) Figures for 2020 and 2021 have changed due to changes in criteria on managerial positions and percentage calculations
2) Including contract workers

Employee Diversity and Inclusion

Classification		Unit	2020	2021	2022
Employment diversity	Disabled	Persons	79	71	66
	Percentage of the disabled	%	1.4	1.3	1.1
	National Merit	Persons	113	109	109
	Percentage of National Merit	%	2.0	1.9	1.9

New Hires and Turnover[1)]

Classification			Unit	2020	2021	2022
Number of New Hires	Total		Persons	4	80	159
	By gender	Male	Persons	3	77	125
		Female	Persons	1	3	34
	By age	Younger than 30 years old	Persons	-	62	87
		30 to 50 years old	Persons	2	13	67
		Over 50 years old	Persons	2	5	5
	Open positions filled by internal candidates (internal hiring)		%	99.7	94.0	85.2
	Cost per hire		KRW	7,224,875	1,487,555	2,529,732
Employee Turnover	Total		Persons	1,146	214	181
	By gender	Male	Persons	1,113	203	167
		Female	Persons	33	11	14
	By age	Younger than 30 years old	Persons	11	6	11
		30 to 50 years old	Persons	406	110	79
		Over 50 years old	Persons	729	98	91
	Turnover rate		%	21.7	4.6	4.0
	Number of voluntary turnovers		Persons	124	103	85
	Voluntary turnover rate[2)]		%	2.3	2.2	1.9
Average years of employment	Male employees		Years	16.5	17.5	17.4
	Female employees		Years	10.5	12.2	10.6

1) Figures for 2020 and 2021 have changed due to a change in calculation method to aggregate permanent employees (white collars, blue collars) excluding contractors.
2) Voluntary turnover rate = number of employees who left voluntarily (retirees other than those who retired at retirement age or were dismissed due to disciplinary action)/average of current employees

Employees Training[1)]

Classification			Unit	2020	2021	2022
Total training hours			**Hours**	**20,327**	**43,982**	**46,504**
Average training hours per person	By gender	Male	Hours	3.5	7.9	7.6
		Female	Hours	5.3	7.1	14.9
	By age[2)]	Younger than 30 years old	Hours	-	-	18.7
		30 to 50 years old	Hours	-	-	8.1
		Over 50 years old	Hours	-	-	5.0
	By training	Leadership training	Hours	6.4	12.4	10.5
		Functional training	Hours	-	0.5	1.9
	By position	Managerial positions	Hours	4.9	6.8	8.6
		Non-managerial positions	Hours	1.7	9.4	7.0
	Average training hours for all employees		Hours	3.6	7.8	8.0
Average training cost per person	Training & Development Total Amount		KRW 1 million	1,011	1,415	7,926
	Average training cost for all employees		KRW / Person	180,935	251,641	1,362,759
Percentage of employees participating in training			%	69.1	26.1	39.4

1) Includes contract workers
2) This metric was introduced in 2022, and only includes performance for that year.

Return on Investment (HC ROI)[1)]

Classification	Unit	2020	2021	2022
Total revenue (A)	KRW 1 million	15,132,407	11,283,611	15,421,058
Total operating expenses (B)	KRW 1 million	13,077,134	9,418,698	12,865,181
Total Employees-related costs (C)	KRW 1 million	2,225,047	1,608,008	1,949,175
HC ROI[3)]	-	1.92	2.16	2.31

1) Consolidated accounting basis
2) Total employee-related expenses: salary, severance pay, welfare expenses, and training expenses combined
3) HC ROI = (A-(B-C))/C

Ratio of Workers Covered by Collective Agreement

Classification		Unit	2020	2021	2022
Number of Workers for Membership		Persons	2,143	1,809	1,741
Labor Union, Labor-Management Committee	Number of Membership	Persons	1,549	1,460	1,449
	Ratio of Membership	%	72.3	80.7	83.2

Equal Pay Table[1)]

Classification			Unit	2020	2021	2022
Executive level	Base Salary	Ratio	%	-	-	99
	Base Salary+Cash Incentive, such as Performance Bonus	Ratio	%	-	-	98
Managerial level	Base Salary	Female	KRW 1 million	70	70	74
		Male	KRW 1 million	72	71	76
		Ratio	%	97.2	98.6	97.4
	Base Salary+Cash Incentive, such as Performance Bonus	Female	KRW 1 million	70	70	82
		Male	KRW 1 million	72	71	84
		Ratio	%	97.2	98.6	97.6
Non-Managerial level	Base Salary	Female	KRW 1 million	56	57	61
		Male	KRW 1 million	56	57	61
		Ratio	%	100	100	100

1) Not discriminating against men and women in promotions and compensation for the same position and job function.

Parental Leave Status

Classification		Unit	2020	2021	2022
Number of employees who have the right to receive parental leave[1]	Male	Persons	1,778	1,772	1,618
	Female	Persons	82	90	89
Number of employees who have used parental leave	Male	Persons	42	59	53
	Female	Persons	24	17	19
Number of employees who have returned to work after parental leave	Male	Persons	39	50	48
	Female	Persons	23	18	19
Parental leave return rates	Male	%	90.7	87.7	94.1
	Female	%	76.7	85.7	100
Number of employees who worked for 12 months continuously after returning from parental leave	Male	Persons	30	26	43
	Female	Persons	6	18	18
Ratio of employees who worked for 12 months continuously after returning from parental leave[2]	Male	%	78.9	66.7	86.0
	Female	%	66.7	78.3	100

1) Change in eligibility criteria for parental leave: Employees with children aged 9 or younger at the end of the year.
2) Retention rate for 12 months or more after returning from parental leave: (Employees who stayed 12 months after returning to work in the base year/employees who returned to work in the previous reporting period) × 100.

Identification of Partner Companies[1]

Classification	Unit	2020	2021	2022
Number of Tier 1 Partner Companies	EA	-	-	775
Number of Core Tier 1 Partner Companies	EA	-	-	119
Share of Purchases from Core Tier 1 Partner Companies (%)	%	-	-	13.1
Number of Tier n Partner Companies	EA	-	-	65
Number of Core Partner Companies	EA	-	-	184

1) New metric introduced in 2022, showing performance for that year only

Supply Chain Procurement Status[1]

Classification		Unit	2020	2021	2022
Korea	Number of partner companies	Companies	2,713	2,819	2,914
	Purchase amount	KRW 100 million	17,138	23,831	24,433
	Percentage of purchase	%	77.3	76.7	70.7
Asia[2]	Number of partner companies	Companies	167	153	165
	Purchase amount	KRW 100 million	2,507	2,934	6,358
	Percentage of purchase	%	11.3	9.4	18.4
Europe	Number of partner companies	Companies	199	189	214
	Purchase amount	KRW 100 million	2,234	3,033	2,925
	Percentage of purchase	%	10.1	9.8	8.5
America	Number of partner companies	Companies	38	36	39
	Purchase amount	KRW 100 million	302	1,271	828
	Percentage of purchase	%	1.4	4.1	2.4
Others	Number of partner companies	Companies	6	2	2
	Purchase amount	KRW 100 million	0.4	-	0.3
	Percentage of purchase	%	0.0	-	0.0

1) Data for 2020 and 2021 has changed due to a change in the criteria for counting partners
2) Asian countries except Korea

Major Negative Environmental & Social Impacts in Supply Chain and Actions Taken[1]

Classification	Unit	2020	2021	2022
Number of partner companies assessed for supply chain ESG	EA	-	-	72
Percentage of core partner companies with ESG assessments	%	-	-	39.1
Number of partner companies identified as supply chain risk (or identified as having actual/potential negative impact)	EA	-	-	5
Number of partner companies subject to disciplinary actions	EA	-	-	-

1) Newly introduced in 2022, only the performance for that year is listed.

Safety and Health of Employees[1]

Classification			Unit	2020[2]	2021[2]	2022
Employees	LTIFR[3]	Total	LTIFR	0.65	0.51	0.66
		Domestic	LTIFR	1.35	1.85	1.84
		Overseas	LTIFR	-	-	-
	ODR[4]	Total	ODR	0.6	0.25	0.35
		Domestic	ODR	2.6	2.3	1.02
		Overseas	ODR	-	-	-
	LWSR[5]	Domestic	LWSR	403.15	775.9	423.3
	Number of Disasters	Total	Case	14	18	18
		Domestic	Case	14	17	18
		Overseas	Case	-	1	-
Partner Companies	LTIFR[3]	Total	LTIFR	0.5	0.75	0.9
		Domestic	LTIFR	1.7	2.8	3.1
		Overseas	LTIFR	-	-	-
	LWSR[5]	Domestic	LWSR	155.65	333.95	324.65
	Number of Disasters	Total	Case	29	32	40
		Domestic	Case	28	31	39
		Overseas	Case	1	1	1

1) LTIFR, ODR, and number of disasters are calculated for all domestic and overseas worksites, and LWSR is calculated for all domestic worksites.
2) Figures for 2021 and 2022 have changed due to upgrading and redefining the calculation criteria.
3) LTIFR (Lost Time Injuries Frequency Rate) = (Total number of lost time accidents/total hours worked) × 1,000,000
4) ODR (Occupational Disease Rate) = ((Number of occupational diseases + number of work-related diseases)/Total hours worked)) × 1,000,000
5) LWSR (Lost Workday Severity Rate) = (Total Lost Workdays/Total Hours Worked) × 1,000,000

Product Safety[1]

Classification	Unit	2020	2021	2022
Number of safety-related recall incidents	Case	-	-	-
Total number of products returned due to the issue of safety related recall	EA	-	-	-
Amount of financial sanctions in relation to product safety (penalty, fine, etc.)	KRW	-	-	-

1) No product safety issues from 2020 to 2022

Customer Satisfaction

Classification	Unit	2020	2021	2022
Customer satisfaction survey	Point	87.1	81.0	88.1

Human Rights Assessment

Classification		Unit	2020[1]	2021	2022
Internal business activities (Employees)	Total assessment rate for past 3 years (A)	%	-	30.0	20.0
	Rate of severe risks identified among the assessed sites (B)	%	-	21.4	11.0
	Rate of cases where mitigable/remedial measures were taken among the sites where risks were identified (B)	%	-	100	100

1) 2020: No evaluation due to development of human rights management evaluation indicators and establishment of inspection system

Participation in Volunteer Work

Classification		Unit	2020	2021	2022
Number of Activities		Cases	19	15	27
Participation by Employees	Number of Participants	Persons	101	710	1,169
	Participation rate	%	2.0	13.0	20.0
Hours Invested in Volunteer Work	Total Hours of Volunteer Work	Hours	780	5,662	9,465
	Hours of Volunteer Work Per Person	Hours	0.2	1.1	1.6

Social Contribution Spending

Classification		Unit	2020	2021	2022
Amount of Expenses	Total	KRW 100 million	4.1	4.7	5.4
	Cash	KRW 100 million	3.8	4.5	4.6
	Goods	KRW 100 million	0.2	0.1	0.7
	Operation Costs	KRW 100 million	0.1	0.1	0.1
Details of Expenses	Charitable donations	KRW 100 million	-	0.2	0.5
	Investment in local community	KRW 100 million	4.1	4.5	4.9
	Commercial initiatives	KRW 100 million	-	-	-
Purpose of Activity	Fostering talents	KRW 100 million	3.6	4	3.3
	Supporting the underprivileged	KRW 100 million	0.1	0.1	0.6
	Closely supporting the local community	KRW 100 million	0.4	0.6	1.5

Social Performance Data (Consolidated basis)

Status of Employees

* Social performance (consolidated) data is based on 2022 performance.

Classification		Unit	Doosan VINA	Doosan Bobcat
Total number of employees		**Persons**	**1,561**	**9,546**
By employment contract	Permanent worker	Persons	1,561	9,128
	Contract worker	Persons	-	418

관리직 현황

Classification			Unit	Doosan VINA	Doosan Bobcat
Management Level	Top/Senior management)	Male	Persons	1	52
		Female	Persons	-	3
	Middle management	Male	Persons	106	1,229
		Female	Persons	30	236
	Junior management	Male	Persons	169	1,185
		Female	Persons	96	413
Non-Management Level)		Male	Persons	1,097	5,131
		Female	Persons	1,159	1,297

Status of Female Employees

Classification	Unit	Doosan VINA	Doosan Bobcat
Number of female employees	Persons	188	1,949
Percentage of female employees	%	12.0	20.4
Number of female employees in managerial positions	Persons	12	652
Percentage of female employees in managerial positions	%	0.77	20.9
Number of female employees in mid-level managerial positions	Persons	18	236
Percentage of female employees in mid-level managerial positions	%	1.15	16.1
Number of female employees in managerial positions at revenue-generating functions	Persons	5	N/A
Percentage of female employees in managerial positions at revenue-generating functions	%	-	N/A
Percentage of female employees at STEM-related jobs	%	1.41	N/A

New Hires and Turnover

Classification	Unit	Doosan VINA	Doosan Bobcat
New hires total	Persons	29	2,126
Turnover total	Persons	137	N/A

Employees Training

Classification	Unit	Doosan VINA	Doosan Bobcat
Total training hours	Hours	8,432	65,378
Average training hours for all employees	Hours	5	7

Governance Performance

Status of BOD[1)]

Classification	Unit	2020	2021	2022
BOD headcount total	**Persons**	**6**	**7**	**7**
Inside Directors	Persons	2	3	3
Outside Directors	Persons	4	4	4
Other Non-Executive Directors	Persons	-	-	-
Male	Persons	6	7	7
Persons	Persons	-	-	-
Average tenure	Year	4	4	5
Number of BOD meetings	Times	16	18	14
BOD attendance rate	%	95	93	90
Average outside director attendance rate	%	92	94	90
Agenda items for resolution	Case	37	39	32
Agenda items for amendment	Case	-	-	-
Reporting agenda	Case	7	7	8

1) As of March 29, 2023

BOD and Executive Compensation Breakdown

Classification	Unit	2020	2021	2022
BOD compensation total	**KRW 1 million**	**1,207**	**691**	**5,293**
Inside Directors	KRW 1 million	942	420	5,260
Outside Directors	KRW 1 million	66	66	33
Auditors	KRW 1 million	199	204	193
Audit Committee Members	KRW 1 million	-	-	-
Average total compensation per person	KRW 1 million	172	86	784

Ethics Training Status

Classification	Unit	2020	2021	2022
Number of people who have received anti-corruption (ethics) training	Persons	2,978	3,002	2,746

Ethics Management Reporting and Handling Status

Classification			Unit	2020	2021	2022
Cyber reporting center report total			**Case**	**23**	**33**	**15**
Reported by	Identified whistleblower	Employees	Case	1	2	2
		Partner companies	Case	7	7	4
		Clients	Case	1	10	6
		Other	Case	-	4	-
	Anonymous whistleblower	Employees	Case	2	3	-
		Partner companies	Case	8	2	-
		Clients	Case	-	-	-
		Other	Case	4	5	3
Total report through other routes (HR and Shared Growth, etc.)			Case	1	3	3
Total number of cases handled				24	36	18
Rate of cases handled			%	100	100	100
Human rights violations (Reporting and handling discrimination and grievances)	Number of reports		Case	3	7	5
	Number of cases handled	Offender disciplinary action	Case	1	2	1
		Compensating victims	Case	-	-	-
		No charges/closed	Case	1	2	2
		Other measures (transfer to other team)	Case	1	3	2
		Under review	Case	-	-	-
	Total number of cases handled		Case	3	7	5
	Rate of cases handled		%	100	100	100

Classification			Unit	2020	2021	2022
Corruption and unfairness (Corruption, bribery, unfairness, monopoly, collusion)	Number of reports		Case	15	13	7
	Number of cases handled	Number of discipline cases	Case	1	-	2
		Number of cases where contracts with business partners were terminated or not renewed	Case	-	-	-
		Number of legal actions	Case	-	-	-
		No charges/closed	Case	14	13	5
		Under review	Case	-	-	-
	Total number of cases handled		Case	15	13	7
	Rate of cases handled		%	100	100	100
Information protection	Number of reports		Case	-	-	-
	Number of cases handled	Number of discipline cases	Case	-	-	-
		No charges/closed	Case	-	-	-
		Under review	Case	-	-	-
	Total number of cases handled		Case	-	-	-
	Rate of cases handled		%	-	-	-
Others (such as complaints about apartment construction sites)	Number of reports		Case	6	16	6
	Number of cases handled	Closed	Case	6	16	5
		Under review	Case	-	-	1
	Total number of cases handled		Case	6	16	6
	Rate of cases handled		%	100	100	100

Creation of Social Value

Doosan Enerbility plans to continuously increase not only the financial value generated by its business, but also the positive social and environmental impacts of its business activities. To this end, the company is advancing its system for converting social and environmental impacts into financial value. The resulting value calculated through social value measurement is defined as the social value created by Doosan Enerbility. We will continue to expand management activities that generate positive impacts, and for those that generate negative impacts, we will promote improvement activities to reduce their impact.

How we measure social value

In order to effectively measure social value, we collected the main results of business activities as input and output data. We also established an impact measurement system based on domestic and international statistics and research data to identify trends in impact measurement and introduce clear standards and measurement methods.

Collection of Doosan Enerbility's key ESG performance linked to material issues, such as greenhouse gas, waste, and safety

Defining the impact measurement approach by researching the appropriate scaling factors for each metric to calculate social costs and benefits

Monetizing the sustainable creation of social value effects of business activities for a given year

Social Value Measurement Results

(Unit: KRW 100 million)

Classification		Considerations for defining and measuring impact	Results of Social Value Measurement
Environment	Greenhouse gas impact	Calculate the social cost of CO_2 to reflect domestic and international greenhouse gas emissions	-148
	Water impact	Reflect the management costs associated with water use and wastewater generation from production activities in environmental impact costs	
	Waste impact	Translate the costs of final waste disposal, such as incineration, into social costs	
	Atmospheric environmental impacts	Quantify environmental impacts on local communities based on emissions of key air pollutants from domestic operations	
Society	Employees impact	Calculate the positive impact made on the community through the creation of jobs and payment of employee compensation	+3,394
	Safety incident impact	Calculate the social benefits of preventing employee safety accidents, such as industrial accidents	
	Partner companies impact	Calculate the monetary value of additional social value, such as increased sales of partner companies indirectly generated by supporting small partner companies via win-win funds	
	Community investment	Measure non-monetary values, such as employee time spent on community conservation activities, as social value	
Economy	Investor interest	Added value based on the company's business performance	+4,267
	Government tax	Translate the performance of the company's contribution to national development and improve the standard of living of the people by paying taxes on its economic performance	
Total Social Value			**7,513**

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Membership in Key Associations and Organizations

Criteria	List of Associations
Common	Korea New & Renewable Energy, World Energy Council Korean Member Committee, The Korean Society of Mechanical Engineers, Korea Association of Machinery Industry, Korea Engineering and Consulting Association, Korea Industrial Technology Association, Korean Chamber of Commerce and Industry, Korea Enterprises Federation, Korea International Trade Association, UNGC(UN Global Compact) Network Korea, CDP(Carbon Disclosure Project), Korea Listed Companies Council, Korea Association for Intellectual Property Services, The Korean Institute of Power Electronics, Korea Customs Logistics Association, Korea AEO Association, Energy Alliance, Korea Plant Industries Association
Supply Chain	Korea Fair Competition Federation
New Business	H_2KOREA(Hydrogen Convergence Alliance), Green Ammonia Council, Korea H_2 Business Summit
Plant EPC	Construction Association of Korea, Korea Mechanical Construction Contractors Association, Korea Housing Association, Korea Electrical Contractors Association, Korea Information & Communication Contractors Association, Korea Fire Facility Association, Korea Construction Transport New-Technology Association, Korea Federation of Construction Contractors, IDA(International Desalination Association), KDPA(Korea Desalination Plant Association), International Contractors Association of Korea
Power Service	The Korean Institute of Electrical Engineers, the Korean Society of Mechanical Engineers, Korea Society for Fluid Machinery, Korea Wind Energy Industry Association, Korea Wind Energy Association, Jeonnam Wind Industry Association, Energy Transition Forum, the Korean Society of Propulsion Engineers, Korea Project Management Association, Korean Society for Fluid Machinery, Korean Society of Combustion, ACGT
Nuclear	Korea Atomic Industrial Forum, Korean Nuclear Industry, Korean Nuclear Society, Korea Radioactive Waste Society, Korea Hydro Power Industry Association, Korean Society of Pressure Vessels and Piping, Korea Defense Industry Association, Korean Society for Fluid Machinery
Quality	The Korean Society for Non-Destructive Testing, the National Quality Master Association, Korean Master Hand Association, NIAC

GHG Assurance Statement

Verification Statement on 2022 Greenhouse Gas Emission Report

Verification Target
Korean Foundation for Quality (hereinafter "KFQ") has conducted a verification of "Greenhouse Gas Emissions (hereinafter "Inventory Report") of Doosan Enerbility (hereinafter the "Company") for 2022.

Verification Scope
KFQ's verification scope covered on 10 facilities (nine overseas construction sites and on overseas branch) and emission sources under the operational control and organizational boundary of Doosan Enerbility during 2022.

Verification Criteria
The verification process was based on 'Guidelines for reporting and certification of emissions in the greenhouse gas emission trading system', 'ISO14064-1' and 'ISO14064-3'. Each country's electricity emission factor is calculated based on the emission factor of the source determined by the company itself.

Level of Assurance
The Verification has been planned and conducted as 'ISO14064-3', and the level of assurance for verification shall be satisfied as limited level of assurance.

Verification Limitation
The verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.

Verification Opinions
Regarding to the data of the Greenhouse Gas Emission Consumption through the verification, KFQ provides our verification opinions as below;

1) The Inventory Report has been stated in accordance with 'ISO 14064-1' and Guidelines for reporting and certification of emissions in the greenhouse gas emission trading system'
2) The data and information used in calculating the Greenhouse Gas emission were appropriate, reasonable, and no significant errors or omissions could affect verification statement were not found;
3) Therefore, KFQ provides an unmodified opinion on the Greenhouse Gas Emissions of Company in 2022 as follows.

(Unit: GHG Emission tCO_2eq, Energy Usage: TJ)

Classification		Scope 1	Scope 2	Total
GHG Emissions	An overseas Branch (VINA)	1,837.814	10,778.197	12,616
	9 Overseas Construction Sites	25,078.639	4,239.865	29,319
Energy Usage	An overseas Branch (VINA)	27.708	74.475	102
	9 Overseas Construction Sites	362.123	23.728	386

kfq Korean Foundation for Quality

June 27th 2023
CEO **Ji-Young Song**
Korean Foundation for Quality

Verification Statement on 2022 Greenhouse Gas Emission Report

Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted a verification of Greenhouse Gas Emissions of Doosan Enerbility (hereinafter the 'Company') for 2022.

Verification Scope

KFQ's verification was focused on all the facilities which emitted the greenhouse gas during the year of 2022 under the company. GHG emissions from direct and indirect emission sources (Scope 1 and 2) were calculated for all GHG emission facilities under the operational control of the company. The verification of other indirect emissions (Scope 3) was carried out in the self selected category according to the following criteria.

* Verification Category : Capital goods, Fuel and Energy Related Activities Not Included in Scope1 or Scope2, Waste Generated in Operations, Business Travel, Employee Commuting

Verification Criteria

The validation criteria are as follows

* Scope 1~2 : 'Rule for emission reporting and certification of greenhouse gas emission trading Scheme (Notification No. 2021-112 of Ministry of Environment)', 'Rules for verification of operating the greenhouse gas emission trading scheme (Notification No. 2022-279 of Ministry of Environment)', ISO 14064-1, 3

** Scope 3 : Technical Guidance for Calculating Scope 3 Emissions, Carbon Emission Factor (Korea Environmental Industry Institute), National LCI database information network, GHG Emissions from Transport or Mobile Sources (GHG Protocol Calculation Tools and Guidance)

Level of Assurance

The verification was performed in accordance with the procedures specified in ISO 14064-3 and the assurance level of the The assurance level of the validation was performed to meet reasonable assurance for Scopes 1 and 2 and limited assurance for Scope 3.

Verification Limitation

For Scope 1, 2 emissions, the verification shall contain the potential inherent limitation in the process of application of the verification criteria and methodology.
For Scope 3 emissions, this verification is not intended to verify the validity of the calculation criteria set by the company itself. Assurance results contain inherent limits of uncertainty inherent in the company's own calculation standards. Depending on our own calculation standards, significant differences may occur in the emission calculation results, which may affect comparability.

Verification Opinions

Through the verification process according to the 'ISO 14064-3:2006' KFQ could obtain reasonable basis to express following conclusion on the Greenhouse Gas Emission Report.

1) For Scope 1, 2 emissions, Inventory Report has been stated in accordance with 'Rule for emission reporting and certification of greenhouse gas emission trading Scheme'
2) The result of material discrepancy satisfied the criteria for an organization that emits less than 500,000 tCO_2-eq shall not exceed 5% from total emission as per 'Rules for verification of operating the greenhouse gas emission trading scheme'.
3) For Scope 3 emissions, no significant errors or omissions were found, except for emissions information that was not considered within the scope of the selected category. The standards set, estimated/assumed, and the relevant process when calculating emissions were transparently reflected in the internal calculation process.

Summary of GHG Emission Results

*Emission calculation period:
The emission calculation period is from January 1st to December 31st 2022

Company Scope1, 2 Emissions verification Results (Unit: tCO_2eq)

Scope 1	Scope 2	Total
91,383.593	123,170.457	214,551

Company Scope3 Emissions verification Results (Unit: tCO_2eq)

Category	Capital goods	Fuel-and Energy-Related Activities Not Included in Scope 1 or Scope 2	Waste Generated in Operations	Business Travel	Employee Commuting	Total
Scope3 Emissions	436	17,361	2,404	568	1,606	**22,375**

kfq Korean Foundation for Quality

June 30th 2023
CEO **Ji-Young Song**
Korean Foundation for Quality

Third Party Assurance Statement

Dear Stakeholders of Doosan Enerbility

Korean Foundation for Quality (further 'KFQ') has been requested by Doosan Enerbility to conduct an independent verification on the 「2023 Doosan Enerbility Sustainability Report」 (further 'the Report'). KFQ has responsibility to provide an independent verification opinion against the criteria and scope of assurance as specified below. Doosan Enerbility has sole responsibility for the preparation of the Report.

Verification Criteria and Scope

- Verification Criteria : AA1000AS (v3) and AA1000AP (2018)
- Verification Type : Type 2 [Verification of compliance of 4 reporting principles and Reliability of Data Collection Method]
- Verification Level : Moderate [Verification based on limited evidence collected]
- Verification boundary : Headquarters, Bundang office and overseas subsidiaries
- Verification Scope : Compliance with the 4 reporting principles (Inclusivity, Materiality, Responsiveness, Impact) according to AA1000AP and the GRI Standards 2021 reporting requirements
  - GRI Standards (2021) Reporting Principles
  - Universal Standards

Reporting in accordance with GRI Standards (2021), compliance with the following requirements

Requirements	Compliance	Requirements	Compliance
1. Reporting principles	○	5. Report disclosures from the GRI Topic Standards for each material topic	○
2. General Disclosures	○	6. Provide reasons for omission	○
3. Determine material topics	○	7. Publish a GRI content index	○
4. Report the disclosures in GRI 3: Material Topics 2021	○	8. Provide a statement of use	○
		9. Notify GRI	○

- Topic Standards

Requirements	GRI Standards/Topic Disclosure	
Reporting material issues according to the GRI Topic Standards	• GRI 305: Emissions • GRI 306: Waste	• GRI 403: Occupational Health and Safety • GRI 416: Customer Health and Safety

Methodology

In order to assess the reliability of the sustainability performance in the Report against above mentioned criteria, the assessment team reviewed sustainability-related processes, systems, internal control procedures, and available performance data. The documentation the assessment team reviewed during the verification includes:

- **Non-financial information e.g.,** data provided by Doosan Enerbility, disclosed business reports, and information obtained from media and/or the internet; and
- **Financial information i.e.,** data disclosed in the electronic disclosure system (dart.fss.or.kr) of the Financial Supervisory Service and data posted on the homepage were used, but these contents are not included in the scope of verification.

The assessment was performed by document verification and interview the person in charge. The validity of the materiality assessment process, selected major issues, data collecting and management, and Report preparation and contents in the Report were assessed through interview with the person in charge, but external stakeholder interviews were not conducted. Afterwards, it was confirmed that some errors, inappropriate information, and unclear expressions found in the above steps were appropriately supplemented before publishing the Report.

Competency and independence

The assessment team was consisted in accordance with KFQ's internal regulations. KFQ has no conflict of interest to the Doosan Enerbility business which could threaten the independence and impartiality of verification, other than providing third-party verification services.

Limitations

The completeness and responsiveness of sustainability performance represented in the Report have inherent limitations due to its nature and the methodology used to determine, calculate and estimate its performance. In accordance with the terms of the contract, we assessed the information and evidence provided by the Doosan Enerbility. We did not perform any further assessment on raw data.

Findings and Conclusions

As a result of the verification, the Report was prepared in accordance with the requirements for 'in accordance with GRI standard 2021' and the assessment team found reasonable objectives to guarantee the AA1000AS(V3) Type 2 assurance level. We also found no significant errors or inadequacies in the Report regarding compliance with reporting principles.

Inclusivity
Doosan Enerbility defines the 7 stakeholder groups (shareholders, customers, employees, partners, local communities, government, competitors) and hear their opinions through the communication channels considering the characteristics of each group for effective communication. The assessment team could not find any major stakeholders that were omitted during this process, and it was confirmed that Doosan Enerbility is making efforts to reflect the collected opinions of stakeholders in its management strategy.

Materiality
Doosan Enerbility has established a vision for ESG management and has set three key areas, sectoral goals, and detailed goals. In addition, it was confirmed that Doosan Enerbility is operating the ESG Committee to monitor the plans and performance of ESG management in general and to preemptively respond to identified issues, and is striving for effective ESG management.
Doosan Enerbility organized an issue pool based on internal and external environmental analysis then identified complementary relationships with stakeholders and analyzed their impacts, in order to derive ESG issues that should be more actively responded. As a result, 13 material issues were identified, of which 5 issues were finalized as ESG Material Topics. The assessment team confirmed that the identified material issues were dealt with more heavily in the Report, and that the material issues identified in the materiality assessment process were reported in the Report without omission.

Responsiveness
Doosan Enerbility consistently communicate with stakeholders to hear to their feedback and main interests. Nothing came to our attention to suggest that its responses and performances are inappropriately described in the Report.

Impact
Doosan Enerbility selects and monitors material issues in consideration of their mutual relationship with the external environment of the company, and reports the contents as much as possible. Nothing came to our attention to suggest that it does not properly assess and report impacts relating to material issues.

Recommendation for improvement

- We hope that a series of processes from the creation and collection of ESG-related data to performance reporting will be managed and reported more completely and systematically so that Doosan Enerbility's ESG management performance can be efficiently communicated to stakeholders.
- The principle of reproducibility and comparability of data is applied more strongly to performance reporting, so that meaningful information can be communicated to stakeholders. In addition, we hope that ESG management performance will be more meaningfully shared with stakeholders through efforts to interpret and analyze the collected data from a wider perspective.

June, 2023
Seoul, Korea

CEO **Ji Young Song**
Korean Foundation for Quality (KFQ)

kfq Korean Foundation for Quality

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