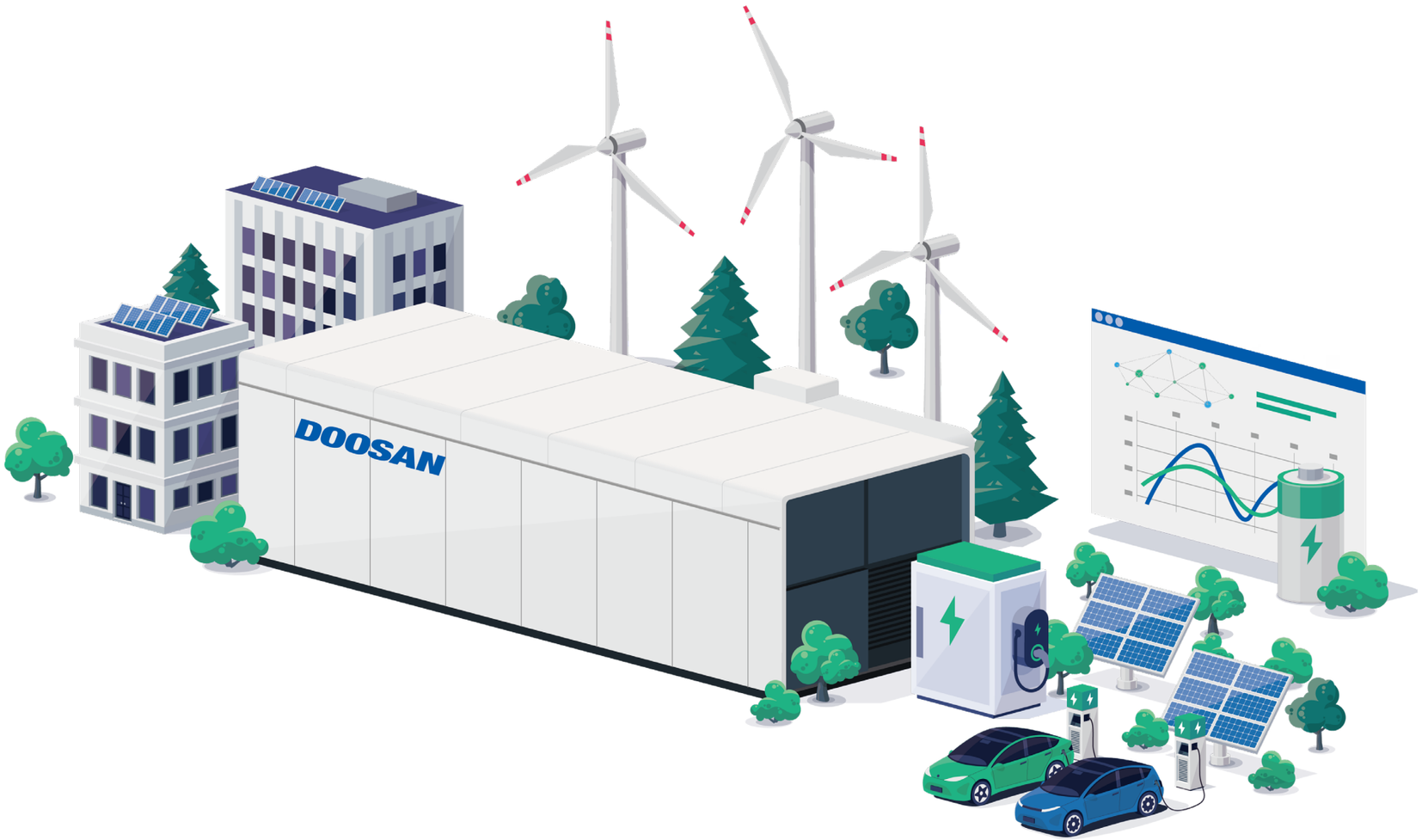
Hydrogen Energy Global No.1 Player



DOOSAN

About This Report

Overview

Since 2022, Doosan Fuel Cell has published the Doosan Fuel Cell Sustainability Report to transparently share its annual sustainable management activities and outcomes with internal and external stakeholders. This Report describes Doosan Fuel Cell's willingness and efforts to grow with the community as a sustainable company by aligning its strategies with ESG, and its reporting strategies and activities in accordance with DJSI and KCGS evaluation criteria.

Reporting Standards

This report is prepared in accordance with the GRI Standards 2021 reporting principles of the International Sustainable Management Standards Guidelines. Financial information follows Korea International Finance Reporting Standards(K-IFRS), and has been prepared based on the consolidated financial statements.

Reporting Period

This report describes and reports financial and non-financial activities and outcomes, in both qualitative and quantitative terms, for the period from January 1, 2023 to June 30, 2024.

Reporting Scope

The scope of this report includes the headquarters of Doosan Fuel Cell in Iksan, the Seoul office, and the R&D Center. In addition, the report also presents outcomes of primary suppliers, as well as efforts to minimize negative impacts on suppliers.

Reporting Cycle

Every year

Reporting Assurance

This report has been verified by KMR, an independent, third-party assurance agency, to secure the reliability of data and prevent ESG greenwashing. The verifier performed an independent assurance engagement in accordance with AA1000AS v3 and SRV1000. The Third-Party Verification Statement can be found on page 114.

Contact Information

This report can be downloaded from the Doosan Fuel Cell website (https://www.doosanfuelcell.com). For inquiries, please use the contact information below.

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E-mail : dfcc.esg@doosan.com

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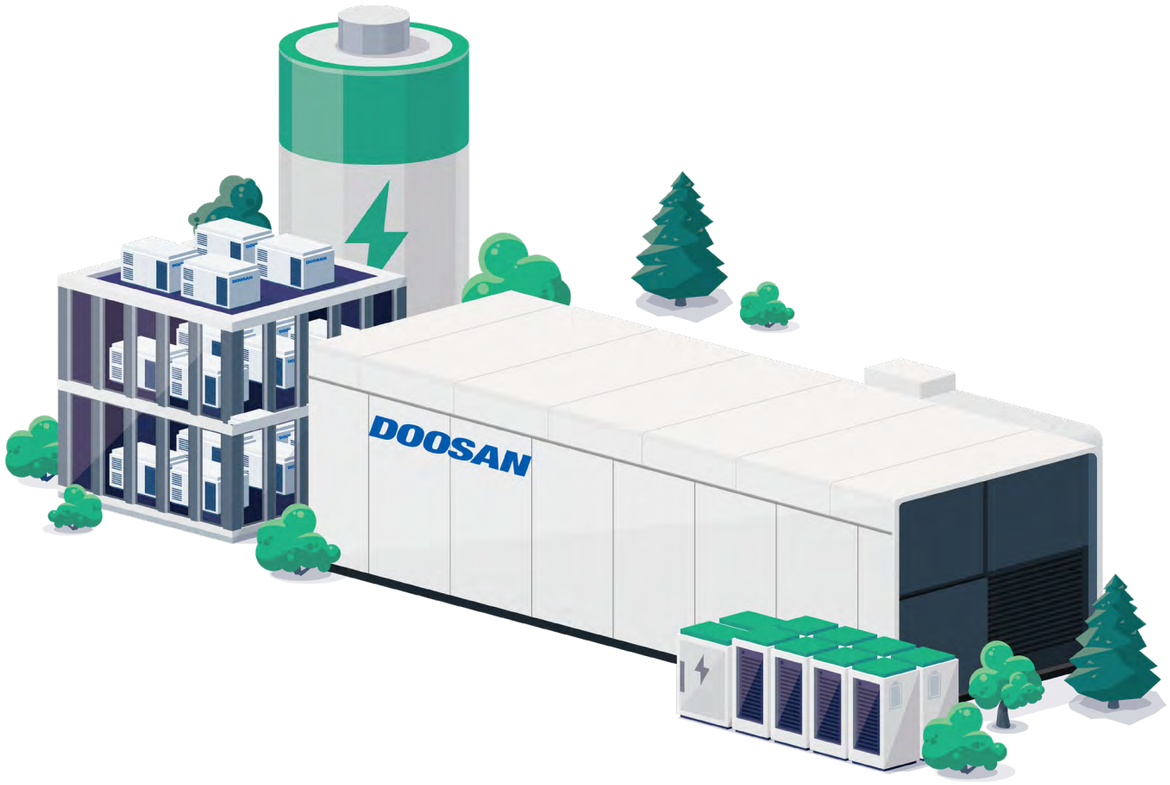


Message from the CEO

Dear respected stakeholders,

I would like to extend my deepest gratitude to all of you for your consistent support.
Despite uncertainties in both the internal and external business environments, Doosan Fuel Cell, Korea's leading hydrogen fuel cell company, has solidified its competitive position in the market by achieving a market share of 62% in the general hydrogen power generation bidding market, which was established in 2023. Additionally, Doosan Fuel Cell is committed to expanding its hydrogen fuel cell business by planning to enter the new clean hydrogen generation bidding market set to open in 2024. Beyond this, we are advancing our vision of becoming the 'Hydrogen Energy Global No.1 Player' by establishing a mass-production system for SOFCs (solid oxide fuel cells) for high-efficiency power generation, and are expanding into new business sectors such as marine fuel cells and commercial vehicle mobility power packs. The importance of hydrogen in achieving carbon neutrality will continue to grow, leading to an expansion of opportunities for businesses related to hydrogen fuel cells. Doosan Fuel Cell will enhance its social and economic value through business growth while fulfilling its role as a 'green energy company committed to a sustainable future.'

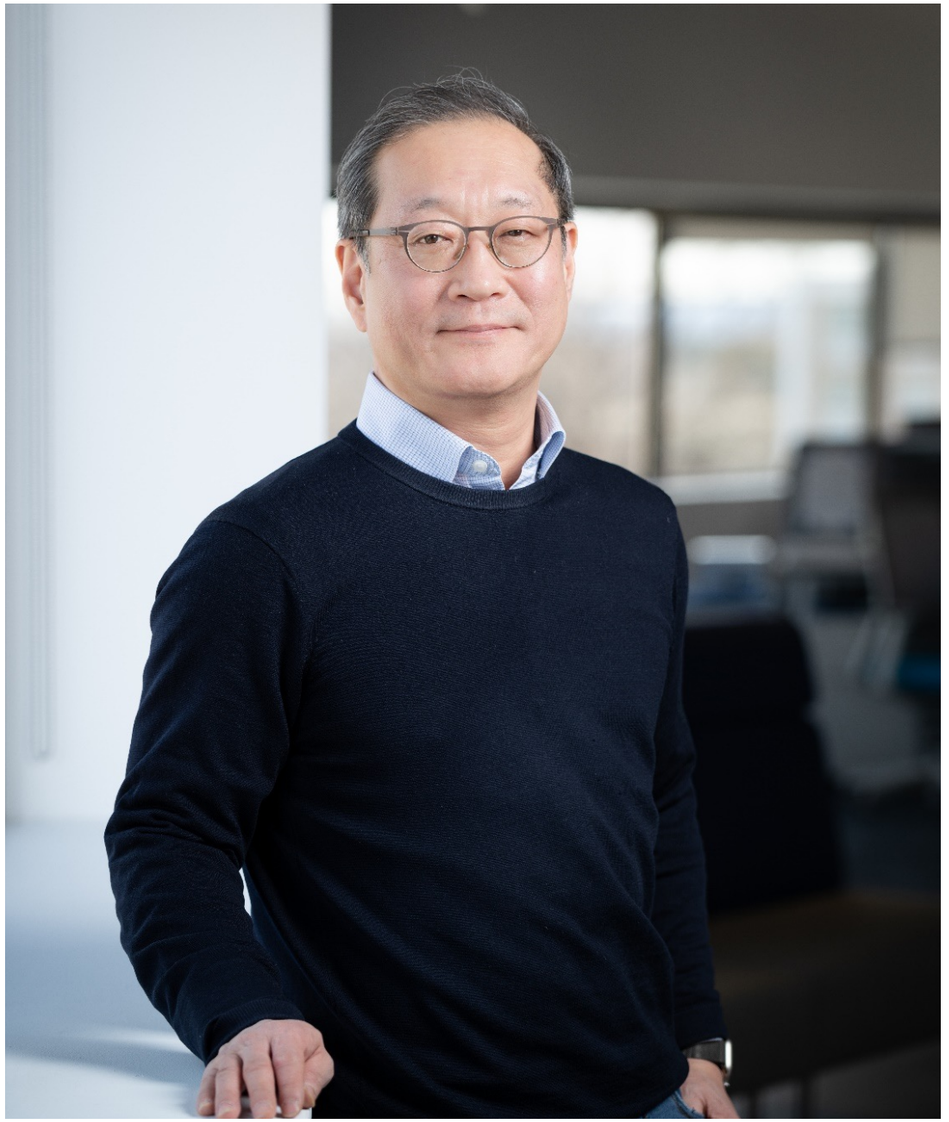
Doosan Fuel Cell considers ESG management to be a crucial pillar of our ongoing business competitiveness, and integrates it throughout our operations. Since establishing the ESG management system, we have actively promoted initiatives to reduce greenhouse gas emissions at our business sites, enhance environmental information disclosure, contribute to communities, and manage the ESG performance of our partners. As a result, we have achieved some remarkable milestones, including an overall rating of 'A' from the Korea Institute of Corporate Governance and Sustainability (KCGS), inclusion in the Dow Jones Sustainability Indices Korea for two consecutive years, and various government awards related to ESG.

Doosan Fuel Cell's ongoing commitment to integrating ESG management into our business will continue throughout this year. We will actively engage in initiatives to reduce our environmental impact across all business operations. This involves developing eco-friendly technologies, improving product efficiency and lifespan, minimizing greenhouse gas emissions from product operations, and strengthening our waste recycling efforts. In addition, we plan to continually enhance our ESG management capabilities by preparing for mandatory ESG disclosures, strengthening our social contribution activities, establishing a customer satisfaction system, and implementing change management activities.

In the face of a dynamic global business environment and diverse risks, Doosan Fuel Cell aims to achieve sustainable growth by reinforcing market competitiveness through bold challenges and innovation. We will do our best to significantly increase our business value by delivering substantial results that meet the expectations of our diverse stakeholders, including the community, customers, and shareholders.

Thank you again for your belief in Doosan Fuel Cell.

Doosan Fuel Cell., Ltd., CEO & President **Hyungrak Chung**



Group and Company Vision

Company Overview

Doosan Fuel Cell is a company that specializes in fuel cells, and is primarily focused on supplying fuel cell equipment for power generation and offering long-term maintenance services for fuel cell power plants. In addition, we have expanded into the eco-friendly commercial vehicle sector by incorporating HyAxiom Motors as a 100% subsidiary in January 2024. Fuel cells manufactured and supplied by Doosan Fuel Cell are eco-friendly power-generating sources that are capable of distributed power generation with high combined efficiency both in electrical and thermal aspects, as well as excellent stability. They hold the top position in cumulative market share within the domestic fuel cell market for power generation. We are also diversifying our business lines to address climate change, aiming to achieve Net-Zero emissions by 2050 while prioritizing customer satisfaction.

Company Name	Doosan Fuel Cell Co., Ltd.
Date of Establishment	October 1, 2019
Chief Executive Officer	Hyungrak Chung, Doosoon Lee (Representatives, Doosoon Lee appointed in March 2024)
Head Office Location	100, Seogam-ro 7-gil, Iksan-si, Jeollabuk-do, Republic of Korea
Major Businesses	Power-generating fuel cell business, mobility and marine fuel cell business
Largest Shareholder	Doosan Enerbility Co., Ltd.(30.33%**)
Number of Employees	470 persons (as of the end of 2023)
Branch/Corporation	Seoul Office, R&D Center, Gunsan (SOFC) Factory

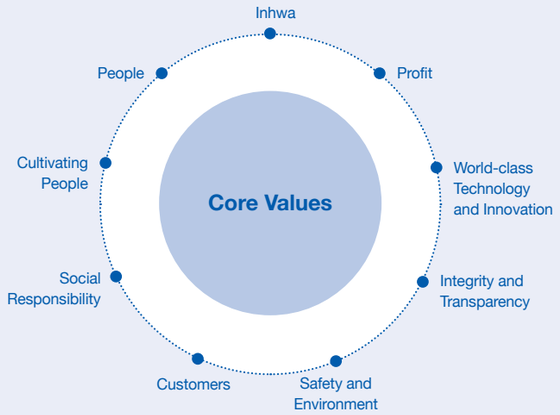
* The achievements listed above are based on the annual business report for 2023.
** Including preferred shares

Group Goals

The Doosan Credo embodies the management philosophy and business methods that have been inherited, developed, and stipulated over Doosan's 120-year history. The Doosan Credo includes the nine core values, which form the criteria for all decision-making and actions carried out at Doosan, through which Doosan ultimately achieves the company's goals. The Doosan Credo embraces Doosan's aspirations and core values.

Core Values

Doosan People practice the nine core values of the Doosan Credo everywhere we operate, every day, to build a "Proud Global Doosan". These values guide the way we do business, the way we treat each other and the way we work with our partners. The nine core values of the Doosan Credo are as follows.



History

1969
- UTC installed fuel cell on theApollo Space Shuttle

2014~2015
- Established Doosan Fuel Cell BG (Acquired CEP (United States))

2017~2018
- Completed the Iksan factory(63MW)
- Accumulated orders equivalent to100MW

2019
- Established Doosan Fuel Cell Co., Ltd.
- Accumulated orders equivalent to 300MW
- Listed on the KRX

2020
- Completed Daesan Green Energy(50.16MW), the world'sfirst and largest by-product hydrogen power plant
- Accumulated orders equivalent to 465MW

2021
- Became first Korean company to export power-generating fuel cells (Foshan, China)

2022
- Completed expansion of the PAFC factory
- Completed building of the SOFC factory

2023
- Joined the UN Global Compact

2024
- Passed the world's first marine SOFC cell stack environment test
- Incorporated subsidiary HyAxiom Motors

Management Strategy

The global economic and domestic policy environments surrounding Doosan Fuel Cell are highly uncertain. Geopolitical crises, such as the prolonged Russia-Ukraine war and the conflict between Israel and Hamas, continue to disrupt the energy market. In addition, the conditions for the fuel cell power generation business have deteriorated due to persistent high interest rates, tightness in the financial market due to real estate PF delinquency concerns, and rising raw materials prices. Despite these challenges, we are working actively to strengthen our competitiveness and lay the foundation for sustainable growth. On the domestic front, business uncertainty was alleviated by the opening of a general hydrogen power generation bidding market with the implementation of CHPS[1)] in 2023. Additionally, there will be business opportunities through temporary deferrals in the RPS[2)] market, which is undergoing a policy transition period. In 2024, it is anticipated that the clean hydrogen power generation bidding market will open for the first time, creating additional business opportunities. Internationally, business prospects are improving with the establishment and announcement of hydrogen industry development roadmaps in major countries. As the importance of energy security increases due to geopolitical instability, global electricity demands continue to rise with the expansion of data centers worldwide. Moreover, the fuel cell power generation market is growing in Asian regions such as China and Taiwan, which is expected to further enhance our business environment.

1) Clean Hydrogen Portfolio Standard
2) Renewable energy Portfolio Standard

Mid-term and Long-term Growth Project

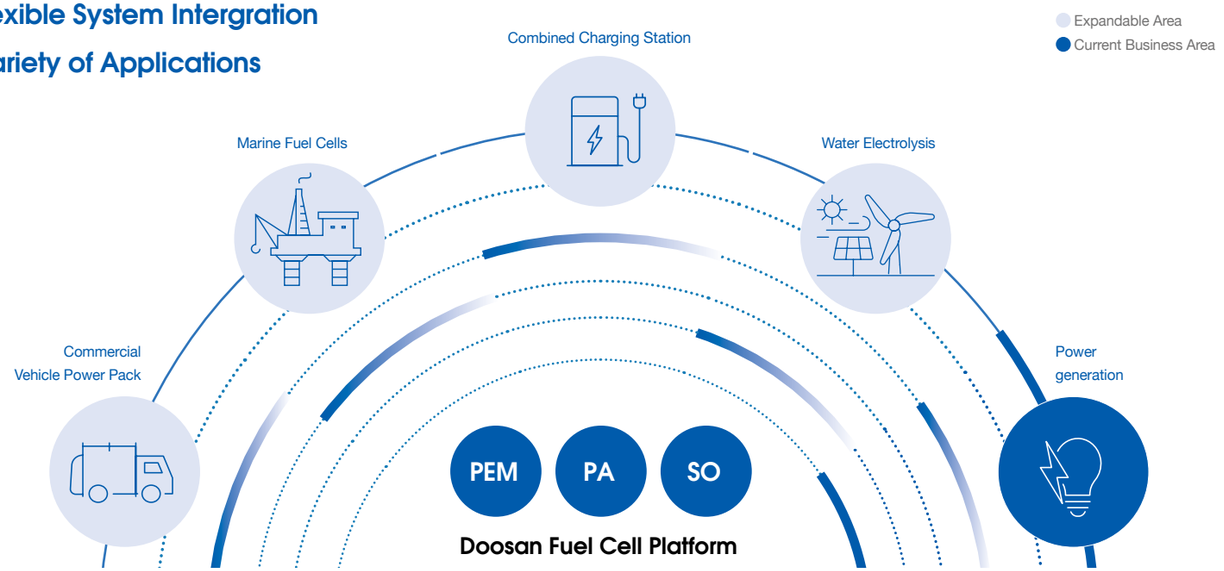
Mid-term and Long-term Direction	Major Task
Securing business competitiveness	- Increasing competitiveness in CHPS bidding market by creating customer value - Commercialization of high-power hydrogen model and mass production of SOFC(Solid Oxide Fuel Cell) - Reinforcing operation competitiveness through approaches such as the internalization of key components, establishment of global supply chains, etc. - Expanding business applications, such as hydrogen refueling station solutions, etc.
New Biz & Market	- Increasing exports through new global 3rd markets - New hydrogen projects, such as marine fuel cells, land mobility power pack, etc.
Carbon-neutral Response	- Developing CO2-free response technologies, such as fuel cells associated with CO2 capturing technology, etc.

VISION — Hydrogen Energy Global No.1 Player

Promotion Direction

Doosan Fuel Cell is realizing a business model based on eco-friendly technology and clean energy solutions to effectively respond to the rapidly changing management environment and expedite the realization of a hydrogen society that increases environmental sustainability for humanity. To secure a competitive advantage in the power generation fuel cell market, we are intensifying our efforts in R&D and application diversification. In the mid- to long-term, we plan to accelerate our business to ship/land mobility business (hydrogen utilization), hydrogen fusion charging station solutions (hydrogen distribution), and renewable energy water electrolysis solutions (hydrogen production).

Flexible System Intergration
Variety of Applications



Company Overview

2023 ESG Evaluation Results

KCGS

Korea Institute of Corporate Governance and Sustainability (KCGS) is Korea's leading ESG evaluation agency, and has been annually assessing the sustainable management practices of domestic listed companies since 2011. Doosan Fuel Cell began participating in the evaluation in 2021 and has rapidly internalized ESG management, achieving an overall grade of 'A' in 2023, the third year of its participation.

Evaluation Year	Overall Grade	Environmental	Social	Governance
2023	A	B+	A+	A
2022	B+	B+	A+	B

SUSTINVEST

Sustinvest is the leading provider of ESG benchmark information on the responsible investment of major pension funds, such as the National Pension Service. Each year, Sustinvest evaluates and discloses ESG information on approximately 1,000 domestic companies. Doosan Fuel Cell acquired Sustinvest's highest grade of AA in the second half of 2023.

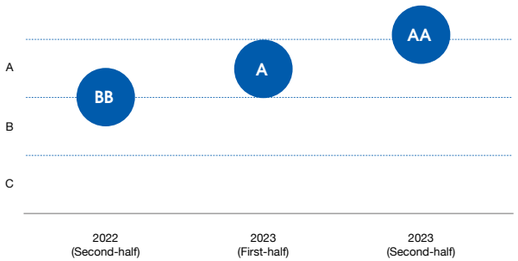
ESG Comprehensive Evaluation

AA 92.04

▶ Overall ranking: 144/1270
▶ Sector ranking: 18/153

AA | A | BB | B | C | D | E

Performance by Year



DJSI

DJSI is a sustainability management index developed in 1999 by S&P Global, an American financial information company, and RobecoSAM, a Swiss sustainability management evaluator. Based on the evaluation results, the top 10-30% of companies are selected for inclusion in the DJSI World Index, Asia-Pacific Index, and Korea Index. Doosan Fuel Cell has been included in the DJSI Korea Index for two consecutive years (2022 and 2023).

Member of
Dow Jones Sustainability Indices
Powered by the S&P Global CSA

ESG Awards in 2023

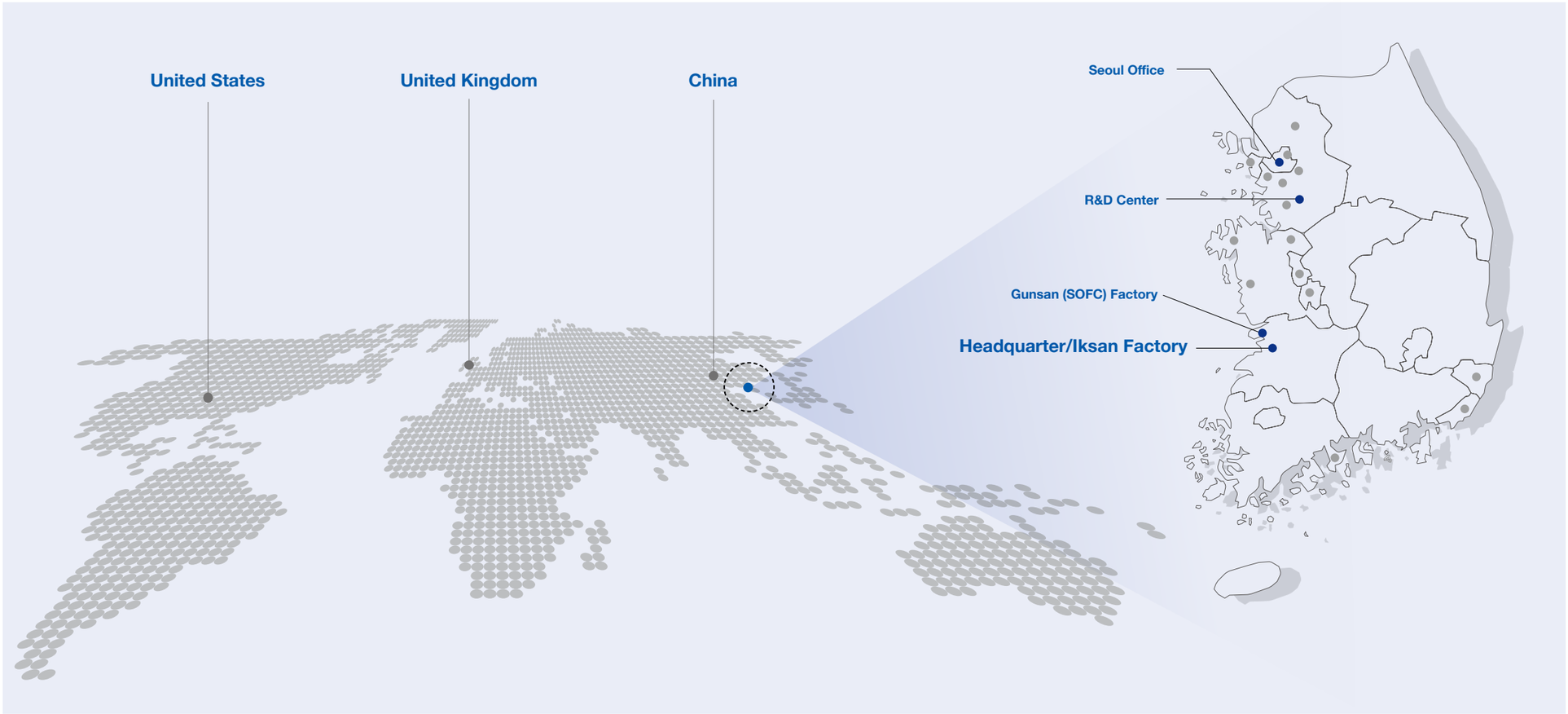
Award Name	The 30th Company Innovation Award	2023 Sustainable Management Merit	2023 Management Grand Awards
Host/ Organization	MOTIE/KCCI	MOTIE/KPC	Korea Management Association Consulting
Evaluation Criteria	Company innovation & ESG performance	K-ESG performance	Product innovation (green)
Result	Minister of Trade, Industry and Energy Prize	Minister of Trade, Industry and Energy Prize	Innovation Product of Year

Domestic Business Status

Doosan Fuel Cell has its head office in Iksan, Jeollabukdo, which produces fuel cell products, and the SOFC production factory in Gunsan. The office in Seoul carries out the majority of administrative affairs, while the R&D Center in Gwanggyo, Suwon focuses on developing new fuel cell products. A total of 1544 fuel cells have been installed and operated (679.05MW) at facilities nationwide.

Global Business

Doosan Fuel Cell is actively expanding its global business. We have installed four fuel cells in the Nanhai area of Foshan, China, and we are discovering major suppliers to expand our market presence in Asian regions, including China and Taiwan. We are also actively seeking new business opportunities in Europe and the Middle East. As of the end of 2023, the operation capacity of power fuel cells is at 53.2MW in the United States, 1.3MW in the United Kingdom, and 1.8MW in China. We expect further expansion of the power fuel cell market due to the increasing global demands for distributed power, such as the rise in data centers.

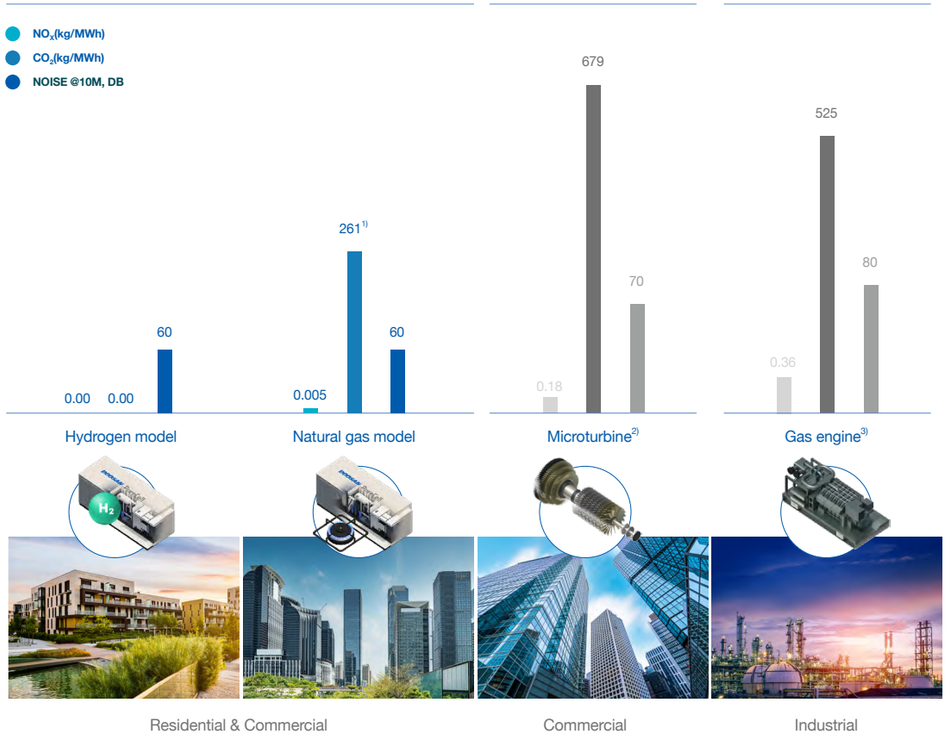


Business Introduction

Doosan Fuel Cell has been leading the fuel cell business for power generation and buildings in Korea. As a company specializing in fuel cells, Doosan Fuel Cell possesses core technologies that span the entire process, from the design and manufacturing of stacks and reformers to the production of the integrated system. Notably, Doosan Fuel Cell specializes in the utilization of hydrogen, within the Doosan Group's hydrogen economic value chain consisting of production, storage, transportation, and utilization of hydrogen.

Green Energy Business

This allows pollution-free power generation using hydrogen fuel cells, which has significantly lower gas emissions and noise compared to conventional power plants.



Safe Technology

The safety of Doosan Fuel Cell's technology has been demonstrated since its first application in a NASA project, and it is recognized as a safe technology that does not require high pressure or combustion in the power generation process. Doosan Fuel Cell maintains a high level of safety, making our fuel cell technology suitable for a wide range of building types. Our designs meet international standards, and have passed a range of inspections and safety certifications.

Non-combustible

The non-combustible start-and-stop method, which produces electricity through the electrochemical reaction of hydrogen and oxygen, prevents the risk of fire.

Safety device

More than 70 double failure and triple failure safety measures against fuel leakage are installed to enhance the capacity to respond to unpredictable accidents.

Low-pressure operation

Fuel is supplied and processed at atmospheric pressure in the entire process, and there is no risk of explosion because fuel is not stored.

International design standards

Designs that meet international standards are applied, and safety is verified through regular safety inspections and certifications.

[1] Based on simultaneous production of electricity and thermal energy (453g/kWh when producing electricity only) [2] 333kW(Source : DOE) [3] 633kW(Source : DOE)

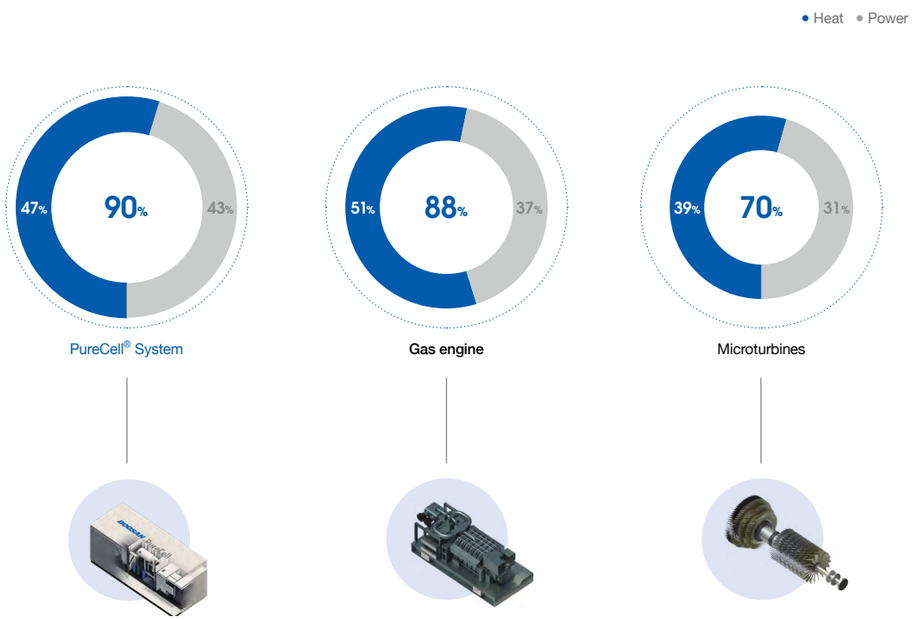
Product Introduction

Highly Efficient Power Generation

Initial investment costs can be minimized, as the installation requires only a small space and supports a flexible response to various installation conditions. Power and heat are delivered with low energy loss and high efficiency to maximize productivity.

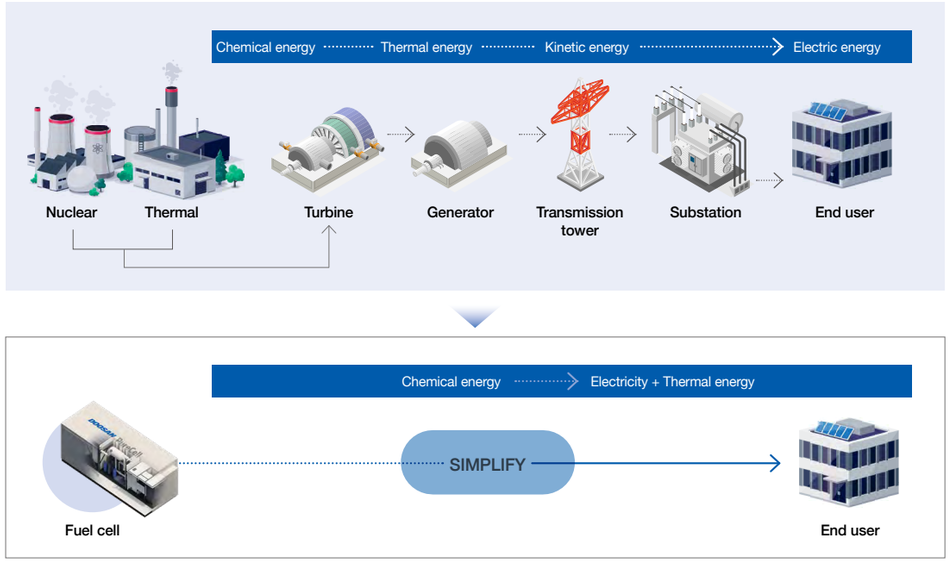
The technology is based on highly efficient cogeneration power unit that generates power and heat simultaneously

Unit: %



Low Energy Loss

Energy is supplied to end users with minimum energy loss.



Small Space for Installation

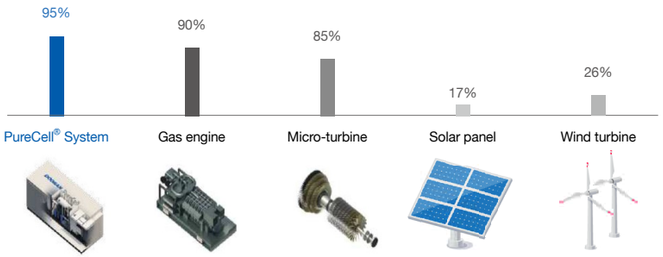
The compact fuel cells eliminate the need for large installation spaces and can be installed anywhere, such as outdoors, indoors, or in multi-story buildings.

Product Introduction

High Reliability

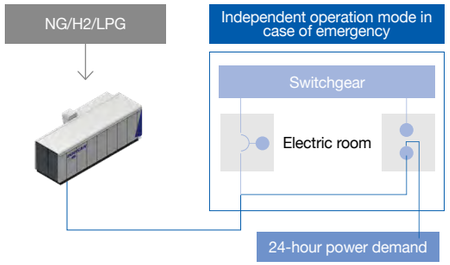
Doosan Fuel Cell delivers trustworthy services backed by many years of commercialization experience and technical data, and offers reliable energy through an outstanding capacity factor and fast response.

Outstanding capacity factor
Reliable power and heat supply based on high reliability.



Independent operation mode
In the event of blackouts caused by natural disasters or power system failures, Doosan Fuel Cell's power plants switch over to grid-independent operation immediately for the reliable supply of power and heat.

Smart remote control
24/7 IoT-based remote monitoring system supports remote control and responds to issues in real time.



Fuel Cell Supply Status

Ever since UTC supplied fuel cells for NASA's Apollo missions, Doosan Fuel Cell has been delivering 440kW stationary fuel cells, in Korea and abroad.

*Supply contract of 105MW

Category	Korea		United States		UK		China	
	Capacity (MW)	Unit	Capacity (MW)	Unit	Capacity (MW)	Unit	Capacity (MW)	Unit
In operation	546.5	1,243	53.2	120	1.3	3	1.8	4
Under installation	132.5	301	10.6	23				
Total	679.1	1,544	63.8	143	1.3	3	1.8	4

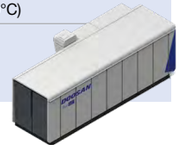
Product Lineup

Doosan Fuel Cell leads the fuel cell industry by producing the current Purecell® M400 NG, H2, LPG/NG Dual models and Tri-gen product.

Purecell® M400 NG

Purecell® M400 NG utilizes natural gas that is supplied through gas pipelines. Highly suitable for urban areas as electricity and heat are supplied using the current infrastructure.

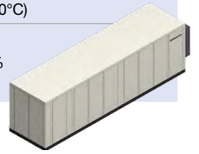
Category	Specification
Fuel	NG
Size	8.3x2.5x3.0m
Rated output	440kW
Heat supply	HG(120°C) / LG(60°C)
Efficiency	Compiling 90% Power 43% Heat 47%



Purecell® LPG/NG Dual

A natural gas/LPG-based model designed to operate in dual mode in regions where there is insufficient access to energy. LPG can be used as a backup fuel to supply electricity and heat. This model is best suited for use as an emergency power supply.

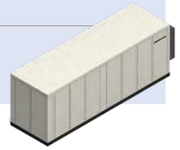
Category	Specification
Fuel	LPG/NG
Size	9.8x2.5x3.0m
Rated output	440kW
Heat supply	HG(120°C) / LG(60°C)
Efficiency	Compiling 90% Power 41%, 43% Heat 49%, 47%



Purecell® H2

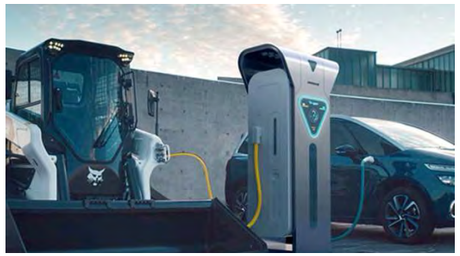
A highly efficient, eco-friendly hydrogen energy solution that can generate high power efficiency and clean water.

Category	Specification
Fuel	H2
Size	8.3x2.5x3.0m
Rated output	440kW
Heat supply	HG(120°C)
Efficiency	Compiling 85% Power 50% Heat 35%



Tri-gen

A triple energy production model that generates hydrogen through a reformer inside a fuel cell, in addition to electricity and heat generated through the stack. It can be installed on-site and direct installation to a hydrogen station can reduce the cost of transporting high pressure hydrogen.



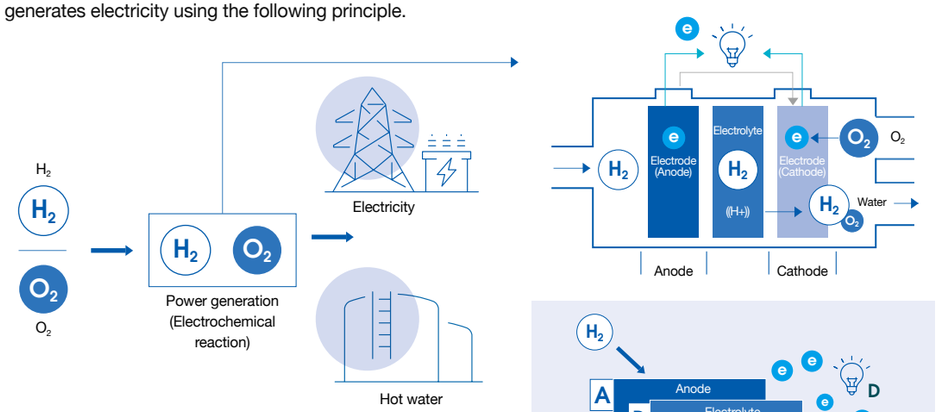
* A concept image of charging a fully electric loader and hydrogen car through Tri-gen, which generates hydrogen, electricity, and heat

Technology Introduction

Doosan Fuel Cell performs joint research related to solid electrolytes and cathodes, working with domestic and overseas universities to proactively secure the technologies required for fuel cells. We plan to design a product development roadmap and conduct research and development focusing on solid electrolytes and high-output cathode composite technology by 2025.

Fuel Cell Principle

A fuel cell is an efficient and green energy generation technology that harnesses the electrochemical reaction between hydrogen and oxygen. Currently, the PAFC-based M400 lineup, which is Doosan Fuel Cell's flagship model, generates electricity using the following principle.



A — Anode

The hydrogen fuel is channeled to the anode and split into positive hydrogen ions(protons) and negatively charged electrons by a catalyst.

B — Electrolyte

The electrolyte allows only the positively charged ions to pass through it to the cathode. The hydrogen ions go from the Anode through the electrolyte to the cathode.

C — Cathode

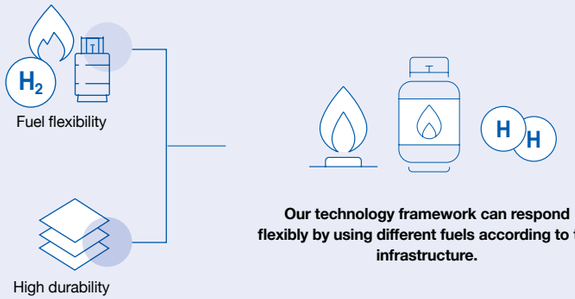
At the cathode, the positively charged hydrogen ions that passed through the electrolyte and the oxygen from cathode are combined to form water.

D — Electrolyte

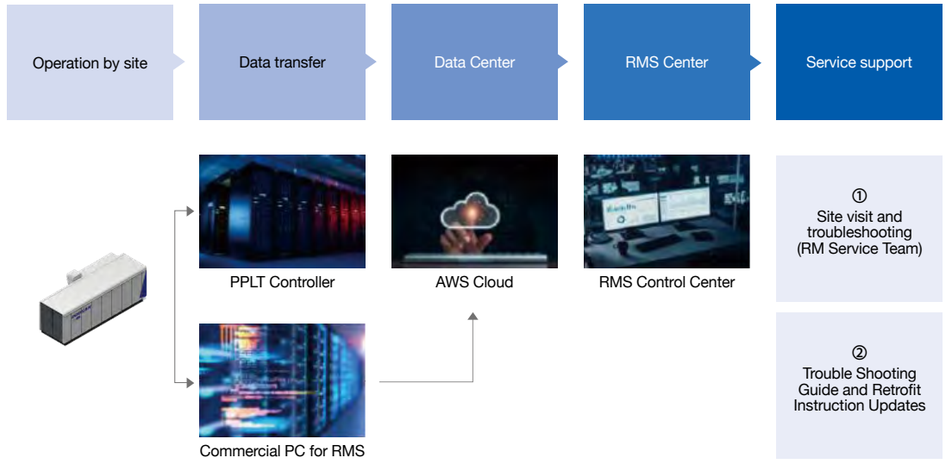
Electrons travel along an external circuit, creating an electrical current.

Fuel Cell Technology

Doosan Fuel Cell possesses PAFC (Phosphoric Acid Fuel Cell) technology that utilizes liquid phosphoric acid as an electrolyte. Our technology provides the benefits of durability, fuel flexibility and fast response to meet your energy needs on demand. With high durability, it can use various fuels such as natural gas, hydrogen, and LPG, and can utilize both electricity and heat, allowing you to select and install the model that best suits the environment. Additionally, it offers fast response to instantaneously meet your energy needs.



Fuel Cell System



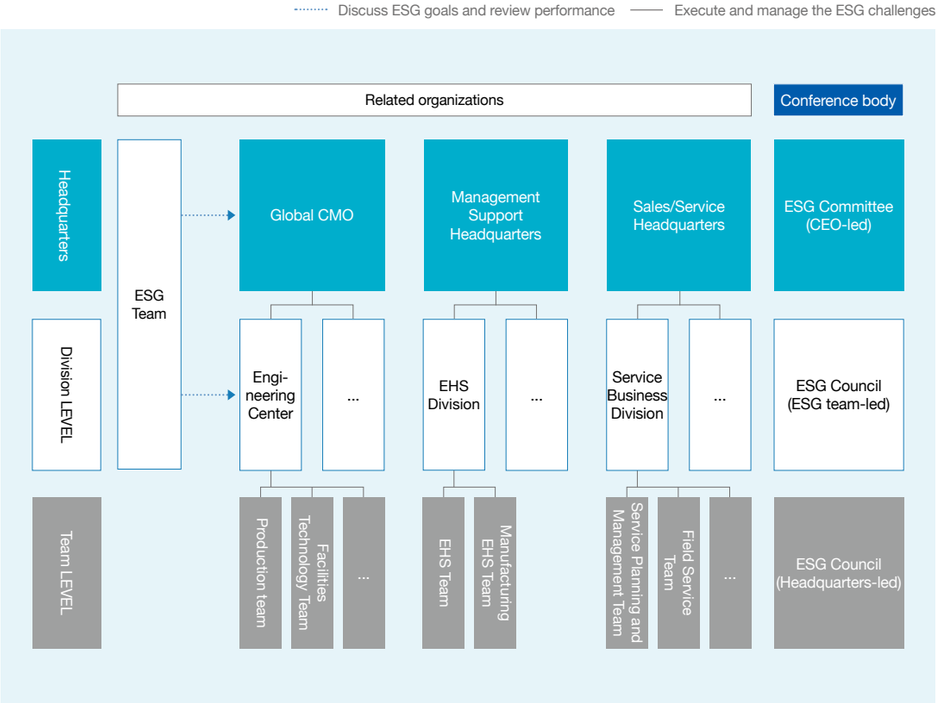
ESG Governance

ESG Committee

Doosan Fuel Cell operates the ESG Committee as the highest decision-making body involved in identifying opportunities and threats associated with the sustainability of the company, and preparing and approving countermeasures after analyzing the impacts. The ESG Committee, chaired by the CEO and attended by company executives and key team leaders, convenes once in the first half and once in the second half of the year.

ESG Council

To manage ESG performance and strengthen execution capabilities, we hold a quarterly ESG Council, involving working employees and managers from relevant departments. The ESG team hosts the consultative meetings in the first and third quarters, while the second and fourth quarter meetings are organized by each headquarters to ensure that ESG principles are internalized across all business departments.



* If the team is directly under the headquarters, the team consults with ESG

Major Activities of ESG Committee·Council

ESG Activities of BOD

Date	Activity	
2023. 12. 15	Reported ESG of the second-half of 2023	· Reported ESG strategic system · Reported mid- to long-term roadmap for reducing GHG emissions
	Independent director education	· Global ESG disclosure regulation trend and implications (EY Hanyoung)

ESG Committee Activities

Date	Activity	
2023. 3. 20	ESG Committee held for the first half of 2023	· Reported establishment of ESG strategies · Reported ESG challenge promotion plans - Mid- to long-term roadmap for GHG reduction emissions, climate change information disclosure, supply chain ESG system establishment, etc. · Reported Sustainability Report publication plan
2023. 12. 18	ESG Committee held for the second half of 2023	· ESG Committee held for the second half of 2023 · Reported ESG task performance of 2023 - Exceeded GHG reduction goals, disclosed climate change information, established a supply chain ESG system, and conduced self-assessment/on-site inspection · Reported ESG promotion direction for 2024
2024. 3. 22	ESG Committee held for the first-half of 2024	· Reported the framework for enhancing eco-friendliness of the entire product process · Reported IRO evaluation results on important issues in response to mandatory disclosure

ESG Council Activities

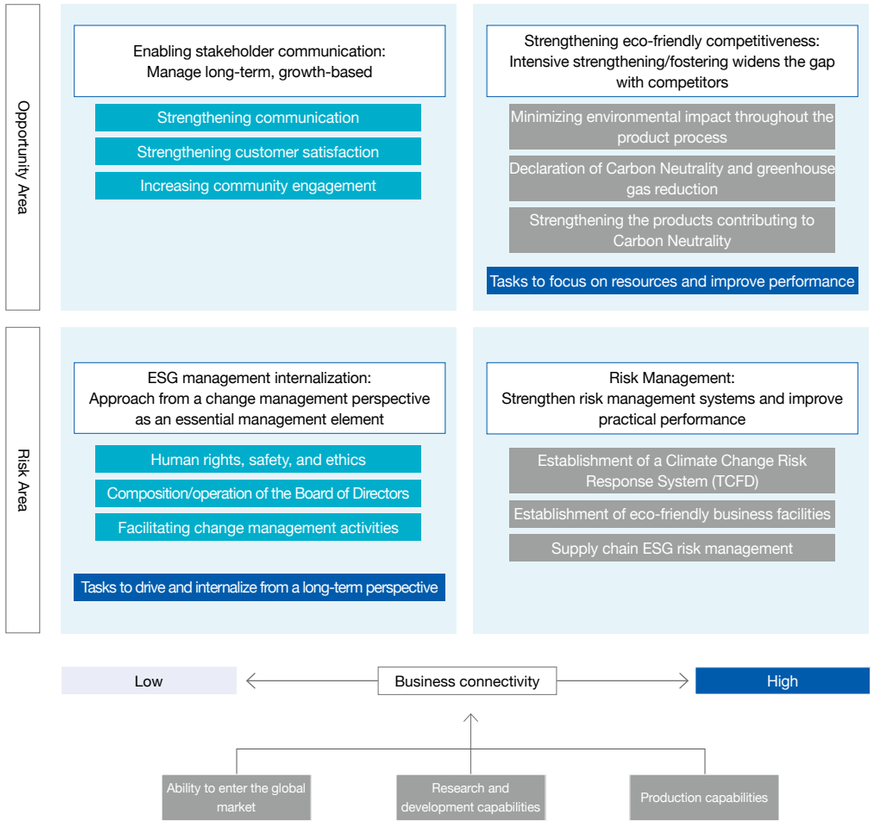
Date	Activity	
2023. 2. 9	ESG Council held for the Q1 of 2023	· Shared the established ESG strategies, provided mid- to long-term ESG plan establishment guide for related department, discussed task establishment
2023. May-Jun	ESG Council held for the Q2 of 2023	· Inspected task implementation status by headquarters
2023. Oct	ESG Council held for the Q3 of 2023	· Established understanding of ESG evaluation indicators for related departments, derived 2024 implementation task pool
2023. 12.13	ESG Council held for the Q4 of 2023	· Organized task promotion performance by headquarters, provided guide for establishing 2024 directions
2024. Feb-Mar	ESG Council held for the Q1 of 2024	· Discovered tasks, IRO assessment focus group interview (FGI) on top 3 issues of materiality assessment

ESG Strategy

Doosan Fuel Cell established an ESG management strategy based on its drive to achieve eco-friendly and sustainable growth as a company specializing in hydrogen energy. In early 2023, the ESG Committee, chaired by the CEO, was approved, and a report was subsequently presented to the board of directors in December 2023. Doosan Fuel Cell is pursuing proactive and systematic ESG activities based on the review and approval of its ESG strategy by the highest governance body.

Establishing ESG Strategic Direction

Doosan Fuel Cell has established strategic directions and activity policies for each task based on business connectivity and crisis/opportunity factors.



Establishing ESG Strategic Framework

The ESG strategic framework of Doosan Fuel Cell consist of ESG vision, strategy goals, strategic directions, and strategic tasks. In the environmental and social dimensions, we manage performance by selecting three strategic goals and directions along with nine strategic tasks. For governance, we identify strategic goals and directions along with three strategic tasks.

ESG Strategy

ESG Mid- to Long-Term Roadmap

Doosan Fuel Cell has established a mid- to long-term roadmap to achieve its ESG Vision of an “Eco-friendly Energy Company that Realizes a Sustainable Future” by 2030. In 2023, we prepared performance management measures based on ESG management strategies, and set and achieved goals and activities for major tasks such as reducing GHG and managing the ESG risks of our suppliers. As a result, we exceeded some of our targets, such as achieving an A grade in the KCGS ESG rating. As of 2024, our focus is on enhancing the execution of ESG tasks and advancing initiatives such as strengthening eco-friendliness throughout the entire product process. Beginning in 2026, we aim to establish and actively utilize our IT infrastructure to drive ESG implementation efforts, and develop ESG Best Practices to reach the global ESG Top Tier by 2030.

Phase 1

Establishing/Implementing ESG Strategies and System

Establishing and implementing ESG frameworks, roadmap, strategic tasks

2023

Establishing ESG management foundation

- Establishing/implementing an ESG strategic framework
- Developing/implementing ESG performance management plans
- Establishing/implementing mid- to long-term target to reduce GHG
- Establishing ESG evaluation system and conducting evaluation for suppliers

Phase 2

Maturing ESG Implementation

Empowering and complementing ESG tasks

2024~2025

ESG evaluation A or higher

- Empowering and complementing ESG tasks
- Managing C-Level ESG Performance
- Adopting renewable energy to reduce GHG
- Assessing suppliers' ESG and implementing risk mitigation activities, reflecting purchase plans
- Establishing/implementing a customer satisfaction system
- Establishing and implementing a framework for strengthening the eco-friendliness of the entire product process
- Implementing mandatory public disclosure response activities (IRO analysis).

Phase 3

Advancing ESG Implementation Activities

Developing ESG Best Practice

2026~2030

Global industry ESG TOP tier

- Accelerating ESG management and building a platform
- Managing ESG performance within the board
- Reviewing and adopting additional reduction measures for GHG
- Disclosing, implementing, and assessing global supply chain risk management
- Building and leveraging VOC DB
- Expanding ESG information disclosure and activating disclosure
- Implementing LCA for all products and disclosing information
- Establishing a mandatory public disclosure response system

ESG Goals and Outcomes

Our Goal & Performance

Goal	Detailed Task	Outcome	Plan
Enhancing eco-friendly competitiveness 	Reducing GHG emissions from the business sites	- Established the 2030 mid- to long-term GHG reduction roadmap for the Iksan (PAFC) factory and Gunsan (SOFC) factory - Iksan factory achieved 320% of the GHG reduction goal (390 tons)	- Preparing/implementing measures to reduce base load of the Iksan (PAFC) factory - ISO 50001 (Energy Management System) certification, Scope 3 emission management
	Expansion of products/ technology contributing to carbon neutrality	- Completed safety certification of the high efficiency hydrogen model (5CSA PAFC hydrogen model) - Completed performance evaluation of the high efficiency PAFC next-generation catalyst lab-scale sample and initial verification of metal separator coating technology - Completed designing a CCS (Carbon Capture and Storage)-linked model concept - Passed the DNV environment test of marine SOFC cell stack	- Completing development of a new high efficiency product (SOFC) - Diversifying (marine) and commercializing SOFC application - Improving SOFC product efficiency and developing a fuel diversification model - Developing a next-generation high efficiency PAFC product - Calculating and disclosing the environmental, social, and economic benefits of using fuel cells
	Minimizing impact across the entire production process	- Established the framework for enhancing the eco-friendliness of the entire product process - Established and implemented a circulation system for major parts during the use, maintenance, and disposal stages	- Promoting the establishment of an inventory for the entire product process - Life Cycle Assessment (LCA) of the entire product process - Environmental product declaration
Expanding management of non-financial risks 	Strengthening ESG risk management in the supply chain	- Enacted code of conduct for suppliers - Established and evaluated the supply chain ESG risk management system that applied international standards (51 online part suppliers, 3 on-site inspections)	- Applying ESG risk evaluation results to the purchase system - Preparing a follow-up management system for suppliers with outstanding or insufficient sustainability (Incentive/Penalty) - Improving supply chain ESG performance and supporting a shared growth program - Establishing online/offline communication channels
	Disclosure of climate change risk information	- Disclosed detailed requirements for topics (governance, strategy, risk management, indicators and goals) in the TCFD Guidance and quantitatively disclosed financial impacts - Analyzed scenarios and established response measures	- Implementing response measures according to the scenario analysis results
	Improving environmental performance in the business sites	- Enacted biodiversity policies - Zero environmental accidents - Achieved targets for the major environmental indicators (waste discharge, waste recycling, water use, water quality/air pollution emissions, etc.) of the company - Established a resource circulation system	- Establishing mid- to long-term improvement goals of major environment indicators - Reflecting environmental indicators in C-Level performance evaluation

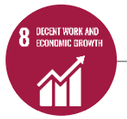
Goal	Detailed Task	Outcome	Plan
Activating stakeholder communication 	Establishing a customer satisfaction system	- Enacted customer satisfaction charter, established customer satisfaction system	- Conducting satisfaction survey for major clients, establishing VOC DB and utilizing it in product development and service improvement - Evaluation and improvement of satisfaction survey effectiveness
	Community contribution	- Carried out 'Green Walking Challenge,' an eco-friendly social contribution activities campaign, 2 times - Recruited disabled athletes to expand employment and diversity for vulnerable groups - Donated operating costs of Iksan 'Dairoum Free Meal Car,' a community welfare promotion program, and conducted regular volunteer activities - Supported replacement of old boilers and gas stoves at 45 child welfare facility 'Group Homes' - Donated idle office equipment - Held the 'H2Dream Hydrogen Energy Career Finding Class,' a community economy/infrastructure support project (for high school/university students)	- Identifying negative impacts around business sites and preparing a system for establishing improvement measures - Analyzing quantitative performance of CSR projects
	Strengthening communication	- Regularly published sustainability reports and disclosures of TCFD Guidance information - Updated the website with the latest ESG information - Released disclosure of exchange corporate governance reports - Gave notification of regular shareholders' meeting 3 weeks before convening (previously 2 weeks) - Recommended representative exercise of voting rights	- Separately publishing a story book and a fact book of sustainability reports, separately publishing TCFD reports, establishing an online ESG information disclosure platform - Systematizing information disclosure in response to mandatory disclosure
Creating ESG management culture 	Strengthening the composition and roles of the board of directors	- Submitted ESG agenda to the board of directors and stipulated professional support for independent directors through revision of board regulations - Granted the right to consent to the appointment of the head of the internal audit department by revising the audit committee regulations	- Appointing female independent directors (when assets exceed KRW 2 trillion)
	Human rights management	- Conducted human rights impact assessment and implemented mitigation measures, provided human rights education to relevant personnel, and regularly issued human rights management letters.	- Achieving family-friendly company certification
	Safety management	- Zero serious accidents, zero occupational diseases, zero safety accidents and EHS issues at the new Gunsan factory - Established and revised standard documents to establish ISO/DSRS integrated operating system, and completed ISO 45001 post-audit - Received the '2023 Doosan EHS Fair Innovation Award' according to the DSRS evaluation results - Applied EHS KPI to C-Level, linking rewards	- Strengthening EHS evaluation/ education/ inspection of suppliers - Achieving over 95% of annual goals for identifying and improving potential risks at business sites
	Ethical management	- Produced a manual for fair trade compliance	- Operating a fair trade compliance program
	Facilitating change management activities	- Reflected executives' KPIs in ESG strategic tasks and linked them to performance evaluation	- Conducting regular in-house ESG training, regular production/distribution of in-house ESG promotional materials - operation of ESG proposals and rewards for employees, and fostering in-house ESG instructors

ESG Goals and Outcomes

UN SDGs Activities

	Sustainable Development Goals	Details
 01	End poverty in all its forms everywhere	- Operating program for disabled athletes to expand employment for vulnerable groups - Donating operating costs of Iksan 'Dairoum Free Meal Car,' a community welfare promotion program, and conducting regular volunteer activities - Supporting replacement of old boilers and gas stoves at 45 child welfare facility 'Group Homes' - Donating idle office equipment to the Korea IT Center for The Disabled
 03	Ensure healthy lives and promote well-being for all at all ages	- Operating a psychological counseling support program for both employees and executives - Providing maternity protection by reducing working hours, offering prenatal check-up leave, maternity leave, and congratulatory benefits for childbirth - Ensuring safe management of hazardous chemicals, from acquisition to disposal - Obtaining ISO 45001 certification for construction to enhance workplace safety and health systems - Providing support for employee health checkups
 04	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	- Operating H2Dream Hydrogen Energy Career Finding Class for high school/university students to train hydrogen energy experts
 05	Achieve gender equality and empower all women and girls	- Providing maternity protection by reducing working hours, offering prenatal check-up leave, maternity leave, and congratulatory benefits for childbirth - Creating a Women's Lounge at Gwanggyo R&D Center
 06	Ensure availability and sustainable management of water and sanitation for all	- Establishing a water usage management system for each process to minimize water consumption and reduce wastewater generation
 07	Ensure access to affordable, reliable, sustainable and modern energy for all	- Completing the design of a PAFC system linked to CCS (carbon capture and storage) - Enhancing product power generation efficiency through the development of a high-efficiency hydrogen model (5CSA PAFC) and next-generation catalyst - Successfully developing and evaluating a water electrolysis system for hydrogen production - Expanding the utilization of biogas and enhancing the eco-friendly hydrogen fuel cell business model - Incorporating HyAxiom Motors, an eco-friendly commercial vehicle company, as a subsidiary to expand the hydrogen mobility market - Developing a marine SOFC fuel cell and passing environmental tests for key components (cell stack)

ESG Goals and Outcomes

	Sustainable Development Goals	Details
	08 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	- Supporting a disabled athletes team by employing 8 disabled athletes - Providing maternity protection by reducing working hours, offering prenatal check-up leave, maternity leave, and congratulatory benefits for childbirth - Implementing human rights impact assessment and human rights risk mitigation measures - Contributing to domestic industry by increasing the localization rate of parts
	10 Reduce inequality within and among countries	- Donating operating costs of Iksan 'Dairoum Free Meal Car,' a community welfare promotion program, and conducting regular volunteer activities - Changing the rank system to build a horizontal organizational culture (seniority system)
	11 Make cities and human settlements inclusive, safe, resilient and sustainable	- Carrying out waste reduction activities through reuse of major facilities and discovery of new waste treatment companies
	12 Ensure sustainable consumption and production patterns	- Establishing a system to strengthen eco-friendliness throughout the entire product process - Implementing resource circulation through reuse/remanufacturing during the use/maintenance and disposal stages of major parts - Developing a metal separator to replace carbon materials separator - Performing waste reduction activities through reuse of major facilities and discovery of new waste treatment companies - Research and development of Non-RCF materials to reduce the use of pollutants and chemicals - Recycling of coffee waste generated in office space
	13 Take urgent action to combat climate change and its impacts	- 2050 Net-zero declaration - Establishing a greenhouse gas reduction roadmap for Iksan factory and Gunsan factory - Achieving 320% of the greenhouse gas reduction goal at the Iksan factory by implementing reduction activities - Disclosure of TCFD detailed requirements information, analysis of climate change scenarios, and establishment of response plans
	15 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	- Carrying out Green Walking Challenge and planting shrubs in Jungnangcheon Stream in Seoul and Yucheon Ecological Park in Iksan, with the participation of employees and local residents
	16 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	- Producing a fair trade compliance manual - Requiring all employees to sign an ethical management pledge - Operating a human rights issue reporting channel and a help desk for reports related to ethical management - Operating an internal reporting system to establish a transparent and fair ethical management system - Operating a cyber reporting center - Establishing and operating a human rights-related grievance handling process

ESG Performance Management

Strategic Task Roadmap

For the smooth management and implementation of our strategic tasks, Doosan Fuel Cell systematically manages performance by designating key owners for each task and setting mid-term goals and milestone for the 2025 Target, and will continue to discover and promote new tasks. In addition, we are reflecting ESG performance in the MBO qualitative evaluation of employees so that performance is linked to compensation.

Strategic Direction	Strategic Task	2023				2024				2025			
		Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Enhancing eco-friendly competitiveness	Reducing GHG emissions in the business sites	Establishing mid- to long-term reduction goals and roadmap, performing activities to reduce greenhouse gas				Scope 3 management such as supplier greenhouse gas emissions, ISO 50001 (Energy Management System) certification, introduction of new renewable energy, CDP response							
	Expanding products/technology that contribute to carbon neutrality	Developing high-efficiency PAFC models, developing power generation/ship SOFC models				Applying CCS technology, expansion of hydrogen fuel cell business model using biogas							
	Minimizing impact in the entire production process	Reviewing Life Cycle Assessment (LCA) feasibility				Establishing and implementing a framework for strengthening eco-friendliness of the entire product process				Establishing Life Cycle Inventory (LCI)			
Strengthening non-financial risk management	Supply chain ESG risk management	Establishing a supply chain ESG management system				Supplier evaluation, communication channel establishment				Reflecting SCM strategies and improving the program			
	Disclosure of climate change risk information	TCFD information disclosure				Scenario analysis, calculation of quantitative financial impact				Preparation and implementation of countermeasures on climate change			
	Conservation of biodiversity	Enacting biodiversity policy				Developing biodiversity preservation activities				Reflecting environmental impact assessment and conducting preservation activities			
	Setting mid- to long-term environmental management goals and improving performance	Acquiring ISO 14001 certification				Setting mid- to long-term improvement goals and establishing a roadmap for major environmental indicators, reflecting environmental performance in C-Level performance evaluation				Implementing improvement activities for major environment indicators			
Activating stakeholder communication	Strengthening customer satisfaction	Defining customers		Developing satisfaction survey tool		Conducting customer satisfaction survey		VOC DB establishment		VOC analysis and improvement process establishment			
	Social contribution activities	Green Walking Challenge, Dairoum Free Meal Car regular service, hydrogen talent training project				Quantifying performance				Implementing a young carer support program, effectiveness evaluation of social contribution activities, and business advancement			
	Communication	Publication of sustainability reports (continuous), website updates (continuous), disclosure of corporate governance report (continuous)				Systematizing information disclosure in response to mandatory disclosure requirements, reinforcing the establishment of stakeholder communication channels				Establishing an online ESG platform			
Creating an ESG management culture	Strengthening the composition of boards of directors and ESG roles	ESG agenda report to the board of directors				Continuous report twice a year				Promoting appointment of female independent directors (asset of KRW 2 trillion↑)			
	Human rights, safety, and ethical management	Production of a fair trade compliance manual						Developing and operating a shared growth program					
		Joining UN Global Compact				Implementing the 10 principles compliance program and reporting activity results (yearly)							
		Activities for reducing employee and supplier occupational accidents											
		Implementing human rights impact evaluation and mitigation measures		Preparing excellent family-friendly company certification				Application and acquisition of excellent family-friendly company certification					
	Facilitating change management activities	Reflection of executive MBO qualitative evaluation		Providing ESG online education (half-yearly) and ESG letters (quarterly) for employees						Reflection of executive MBO quantitative evaluation			
						Providing professional lectures for independent directors, ESG Committee/Council, Implementing environmental/social performance improvement suggestion system, and rewarding outstanding employees							

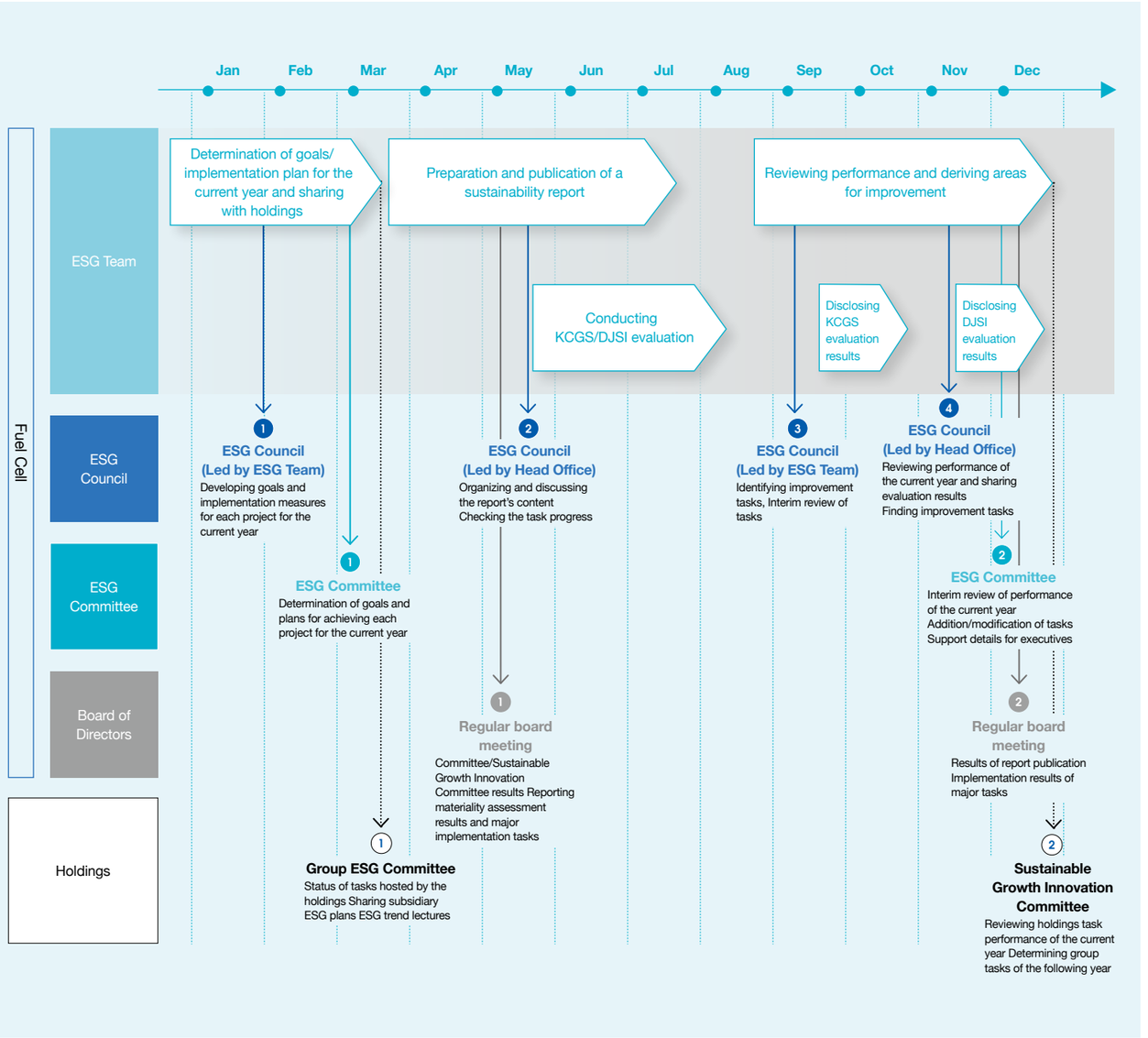
ESG Performance Management

Performance Management Process

Doosan Fuel Cell operates a quarterly working-level council to manage and implement ESG strategic tasks. The consultative meetings in the first and third quarters are organized by the ESG team, while the second and fourth quarter meetings are organized by each headquarters to review performance and enhance execution. In addition, we hold an ESG committee organized by the CEO to make decisions on ESG objectives, performance, and implementation plans for the year.

ESG Committee for the second half of 2023

ESG Committee for the first half of 2024



Stakeholder Communication

Classification of Stakeholders

Doosan Fuel Cell strives to reflect the opinions of the stakeholders that have a direct and indirect impact on our business activities. We classify our stakeholders into shareholders, investors, employees, customers, suppliers, communities, intelligence and affiliated organizations, and related organizations, and engage in a variety of activities to expand communication with all stakeholder groups.

Active Stakeholder Communication

Doosan Fuel Cell is diversifying its communication channels to address stakeholders' interests and recognize their legal rights. Since 2022, stakeholder communication activities and performance have been disclosed through the sustainability report. An annual materiality assessment is conducted to identify sustainability management issues important to stakeholders. Starting in 2024, we will be conducting an IRO (Impact, Risk, Opportunity) evaluation on the top three issues identified in the materiality assessment, and quantitatively disclosing the environmental, social, and financial impacts in the sustainability report to deliver diverse and appropriate information to stakeholders.

Stakeholder Communication

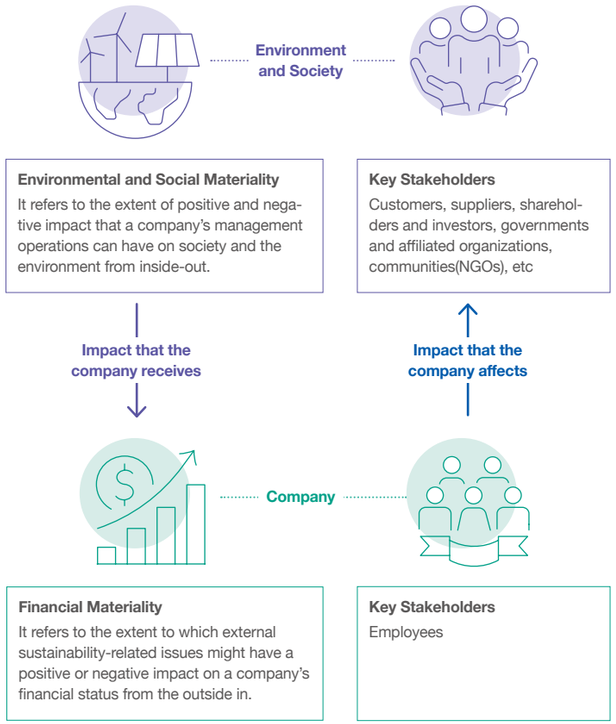
Stakeholders	Shareholders and Investors	Employees	Customers	Suppliers	Local communities	Government and affiliated organizations
Major interests	• **Financial performance** • **Transparent disclosure of information**	• **Employee development and increasing welfare** • **Strengthening communication within the organization** • **Establishing a cooperative labor-management relationship**	• **Creating customer satisfaction activities and building partnerships** • **Improving product quality and enhancing responsibility**	• **Providing support to strengthen suppliers' competitiveness and competency** • **Expanding information sharing** • **Empowering ESG competency**	• **Listening regularly to the opinions of the local communities** • **Supporting the growth of local communities in the vicinity of worksites**	• **Adapting the business portfolio in response to government policy changes** • **Trends by industry** • **Establishing an industry-academic-research cooperation system**
Communication channels	• General meeting of shareholders • Investor Relations(IR) • Public disclosure • Website • Analyst meeting • Governance report	• Educational programs • Employee satisfaction survey • Grievance handling channels • Internal online board • Internal newsletters • Labor-management Council • Management presentations • Management meetings • CA activities	• VOC • Product training • Periodic reports	• Cooperative Committee • Hotline • Technical exchange meetings • Safety and Health Consultative Group • ESG Evaluation Briefing	• CSR activities • Meetings with local governments and local social welfare institutions • Local universities • Employment Support Center • Incheon Metropolitan City Office Of Education/City Hall	• Policy meetings • Policy establishment public hearings • Assemblies and government departments

Materiality

Double Materiality Assessment

Concept of Double Materiality Assessment

International ESG disclosure guidelines, such as GRI Standards, apply the double materiality concept to advance the reporting level of sustainable management. Double materiality is a concept that takes into account external sustainability-related environmental and social factors that affect a company's financial status, as well as the external impact of its management activities, i.e., both internal and external perspectives.



Double Materiality Assessment Process

Doosan Fuel Cell conducted a double materiality assessment by comprehensively considering environmental and social impacts and financial impacts according to the 2021 GRI Standard methodology. Notably, we selected the top three issues among the material issues identified through an analysis of environmental and social impacts and financial impacts, and derived important impacts, risks, and opportunities (IRO). We conducted focus group interviews with departments related to material issues, and identified the sustainability issues that Doosan Fuel Cell should focus on through the IRO prioritization process. The issues identified in this way were used to promote the main ESG management strategies of Doosan Fuel Cell. We report the materiality assessment results through the ESG Committee, in which the CEO participates, and systematically manage material issues through the review and approval stages.

Materiality assessment

Environmental·social impact assessment
- Review of international standards (GRI, UN SDGs, ISO 26000, etc.)
- Media research
- Benchmarking analysis of the same industry

Financial impact assessment
- Analysis of corporate internal strategies
- Review of international standards (SASB, DJSI, MSCI, etc.)
- Analysis of domestic laws

Subdividing material issues

Selecting topics related to top 3 issues
- Based on GRI or ESRS Topic Standards

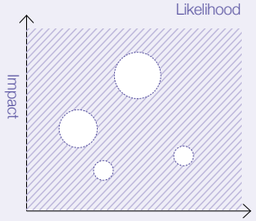
Selecting subtopics
- Example: Topic – Climate Change, Subtopic – Carbon Pricing

Finding IRO of the top 3 issues
- ESG evaluation indicator analysis
- Benchmarking the same industry
- Analysis of laws and research papers

Focus group interview

In-depth interview items
- Environmental·social impact: Scale, scope, irremediable character, likelihood
- Financial impact: Sales, costs, value chain, time of occurrence

Prioritizing issues



Prioritizing impacts
- Grouping by issue
- Defining the threshold
- Reporting results

Double Materiality Assessment

Double Materiality Assessment Results

2023 Material Issue Selection Results

Doosan Fuel Cell evaluated the environmental, social, and financial impacts, identifying a total of 10 material issues. Newly selected material issues in 2023 include the circular economy, strengthening anti-corruption and ethical management, community contribution, and water management. Consequently, the material issues from 2022, including strengthening eco-friendly business, product and customer-centered management, customer safety, and risk management, were excluded.

Rank	Material Issue
1	**Response to climate change**
2	**Circular economy** New
3	**Reducing product environmental impact**
4	Workplace safety and health
5	Strengthening anti-corruption and ethical management New
6	Employment and labor relations
7	Sustainable supply chain management
8	Improving energy efficiency
9	Community contribution New
10	Water management New

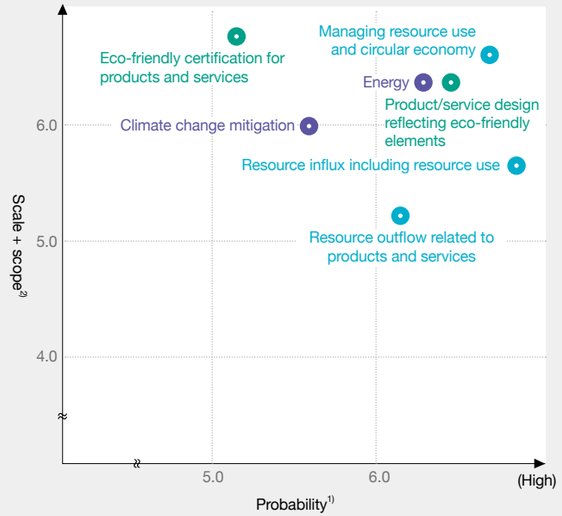
Material Issue IRO Analysis Results

From the top five material issues, Doosan Fuel Cell selected the following three issues requiring IRO analysis considering the company's current status: 'response to climate change,' 'circular economy,' and 'reducing product environmental impact,' and identified them as the material issues (top three issues). We then conducted an intensive analysis of opportunity and risk factors. According to the economic and social impact analysis, issues related to the 'circular economy' are expected to have the highest probability of occurrence and the greatest severity (scale + scope). According to the financial impact analysis, issues related to the 'response to climate change' are anticipated to occur within the shortest timeframe and to have the greatest impact on performance (sales + cost + value chain).

Major (Top 3) Issues

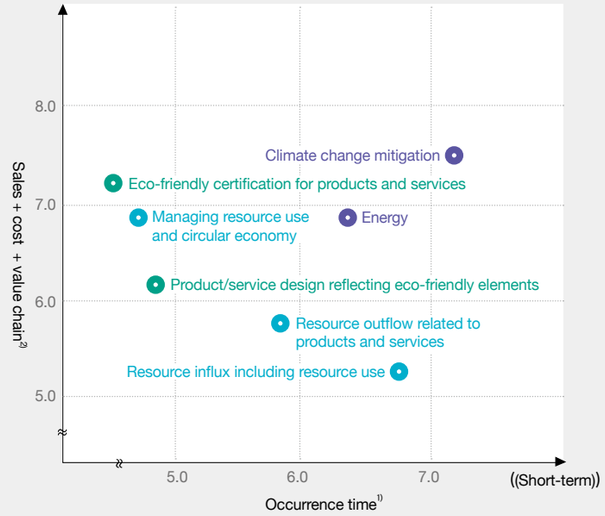
Response to climate change	Circular economy	Reducing product environment impact
• Climate change mitigation • Energy	• Resource outflow related to products and services • Resource influx including resource use • Managing resource use and circular economy	• Eco-friendly certification of products and services • Product/service design reflecting eco-friendly elements

Environmental·Social Materiality Assessment Results



1) X-axis: Probability (converted to a 10-point scale, rounded to two decimal places)
2) Y-axis: Scale + Scope (converted to a 10-point scale, rounded to two decimal places)

Financial Materiality Assessment Results



1) X-axis: Occurrence time (converted to a 10-point scale, rounded to two decimal places))
2) Y-axis: Sales + Cost + Value Chain (converted to a 10-point scale, rounded to two decimal places)

Double Materiality Assessment

As the assessment results indicate that Doosan Fuel Cell has a significant impact on the environment and society in the 'circular economy' sector, we confirmed the need to establish a resource circulation system. We also recognized that the 'response to climate change' issue could significantly affect our sales and costs in the short term, and as such, minimizing financial risks and creating new opportunities through the development of eco-friendly technologies as well as energy and GHG reduction activities are identified as crucial tasks. This report details the policies, goals, activities, and achievements of Doosan Fuel Cell in addressing these material issues.

Material Issue IRO Analysis Results and Promotion Activity

●○○ Low ●●○ Medium ●●● High

Material Issue	Details	Business Impact and Response Measures	Goal	2023 Performance	Executives Subject to Reward Alignment	Environmental·Social Materiality	Financial Materiality	Reporting Page
Response to climate change	Climate change mitigation	· Business impact - Opportunities for expanding business and order contracts due to revitalization of the clean hydrogen market · Response measure - Develop clean hydrogen conversion technology - Establish and manage a mid- to long-term roadmap for reducing GHG emissions	· 2025: Management of Scope 3 emissions, such as supplier GHG emissions, etc. · 2025: ISO 50001 (Energy Management System) certification · 2025: Introduction of new renewable energy · 2025: Introduction of new and renewable energy	· Established the 2030 GHG reduction roadmap for the Iksan (PAFC) factory and Gunsan (SOFC) factory · The Iksan factory achieved 320% of the GHG reduction goal (390 tons)	C-Level executives	●●○	●●●	28~29
	Energy					●●●	●●●	
Circular economy	Resource outflow related to products and services	· Business impact - Enhancing the reputation of stakeholders such as power generation companies - Enhancing ESG evaluation results · Response measure - Establish a circular economy system - Save resources, improve waste recycling rate	· 2024: Setting mid- to long-term environment and management improvement goals and establishing a roadmap · 2024: Reflecting environmental performance in C-level performance assessment · 2025: Implementation of major environmental indicators	· Established and implemented a circulation system for major parts during the use, maintenance, and disposal stages · Established a resource circulation system · Achieved company goals for the major environmental indicators (waste discharge, waste recycling, etc.) · Carried out waste reduction activities through the reuse of major facilities and discovery of new waste disposal companies		●○○	●●○	30~31
	Resource influx including resource use					●●○	●●●	
	Managing resource use and circular economy					●●●	●●○	
Reducing product environment impact	Eco-friendly certification for products and services	· Business impact - Strengthening eco-friendly business competitiveness · Response measure - Improve energy efficiency throughout the entire product design, manufacturing, and use processes, develop and apply technology to reduce carbon emissions	· 2025: Development of a high-efficiency PAFC model · 2025: Development of a power-generating/marine SOFC model · 2025: Application of CCS technology · 2025: Expansion of hydrogen fuel cell business model using biogas	· Established framework for enhancing eco-friendliness of the entire product process · Completed safety certification of the high-efficiency hydrogen model (5CSA PAFC hydrogen model) · Completed performance evaluation of the high-efficiency PAFC next-generation catalyst lab-scale sample, and initial verification of metal separator coating technology · Completed design of a CCS-linked model concept · Passed the DNV environment test of marine SOFC cell stack · Environmental product declaration		●●○	●●○	32~35
	Product/service design reflecting eco-friendly elements					●●●	●○○	

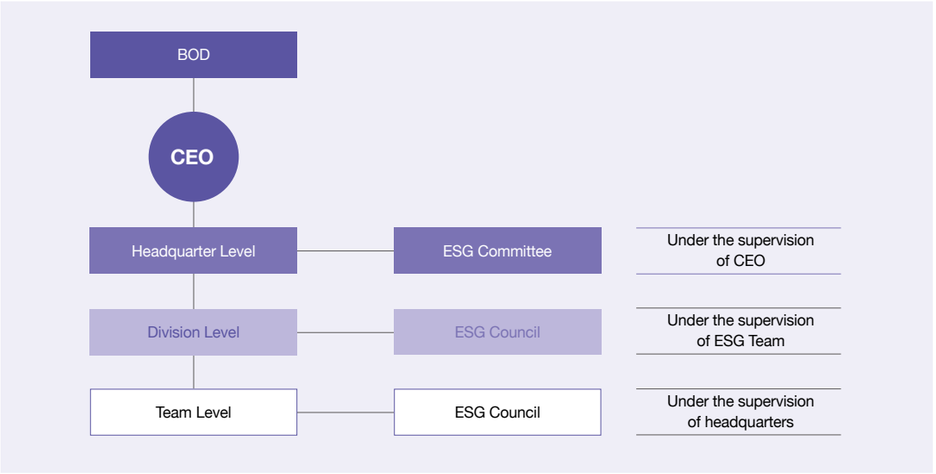
Material Topic #1. Response to Climate Change

Governance

Roles and Responsibilities of Top Management

In November 2021, Doosan Fuel Cells established a dedicated ESG organization, and the ESG Committee, chaired by the CEO, is promoting more active and practical ESG management in the areas of environment, society, economy, and governance. Through the ESG Committee, the CEO of Doosan Fuel Cell analyzes the significant potential financial impacts of risks and opportunities related to climate change and carbon neutrality and establishes response strategies to manage and oversee the environmental management agenda by integrating financial impacts and business strategies. To facilitate the management and implementation of ESG strategies, we also operate a quarterly ESG Council, involving the ESG team at the division level and each headquarters at the team level.

Response to Climate Change Governance



Strategy

Climate Change Scenario Analysis

Based on the IEA (International Energy Agency) NZE2050 and STEPS scenarios, Doosan Fuel Cell identified climate change risks and opportunities that will affect its business and analyzed the financial impact from short-term, mid-term, and long-term perspectives.

The analysis result recognized strengthened carbon emission regulations as a risk factor and increased demand in the renewable energy market, driven by the expansion of renewable energy adoption in national energy policies, as an opportunity factor. Doosan Fuel Cell is developing climate change response measures based on these scenario analysis results.

Climate Change Risk*

Category		Factor	Scenario	Financial Impact	Scale	Period**
Transition Risk	Energy Policy/ Law	Strengthened net zero policy and carbon tax/ carbon emissions regulations	1.5°C (NZE2050)	Weakening competitiveness in obtaining orders due to stricter global and government regulations related to clean hydrogen	●●●	Mid term
				Strengthened regulations on GHG emissions management, waste disposal, and greenwashing (increased carbon pricing and litigation-related costs)	●●○	Mid term
			2.6℃ (STEPS)	Strengthened energy GHG goal management system	●●●	Short term
	Market	Changes in energy demand	2.6℃ (STEPS) 1.5℃ (NZE2050)	Delay in market entry due to non-response to demands for new and renewable energy and hydrogen in the existing fossil fuel-centered energy market	●●●	Long term
	Technology	Securement of hydrogen-related technologies	1.5℃ (NZE2050)	Difficulty of securing business feasibility due to increasing number of new hydrogen business companies and intensifying competition	●●●	Mid term
	Reputation	Reputation decline due to lack of response to climate change	1.5℃ (NZE2050)	Exposure to reputational risk by failing to meet carbon neutrality target requirements	●●○	Long term

Climate Change Opportunity

Category	Factor	Scenario	Financial Impact	Scale	Period**
Energy Policy/ Law	Implementation of national policies for large-scale introduction of renewable energy sources	1.5℃ (NZE2050)	Expansion of order opportunities with the introduction of the Clean Hydrogen Energy Portfolio Standard (CHPS) and the opening of the clean hydrogen power generation market	●●●	Mid term
			Strengthened regulations related to GHG emissions management, waste disposal, and greenwashing (profits through selling carbon emissions credits)	●●●	Mid term
Market	Changes in energy demand	2.6℃ (STEPS) 1.5℃ (NZE2050)	Increasing customer demand for hydrogen fuel cell power generation facilities to achieve carbon neutrality and stabilize power supply and demand	●●○	Long term
Technology	Development of renewable energy and CCUS technologies	1.5℃ (NZE2050)	Securing profitability through early adoption of hydrogen-related technologies	●●●	Mid term
Reputation	A corporate image as a climate change pioneer	1.5℃ (NZE2050)	Establishing corporate image as a technical leader in the hydrogen economy by enhancing the competitiveness of the fuel cell business and promoting new hydrogen businesses	●●○	Long term

*We continue to monitor on an annual basis, and our 2024 scenario analysis identified physical risks as insignificant and therefore physical risks are excluded from the scope of this report

**Short-term: Within 1 year / Mid-term: 1-5 years / Long-term: 6-10 years

Material Topic #1. Response to Climate Change

Development of GHG Reduction Roadmap

Doosan Fuel Cell recognizes the importance of reducing and managing greenhouse gas emissions to effectively respond to climate change. To accurately measure and manage greenhouse gas emissions, Doosan Fuel Cell adheres to the IPCC guidelines and management standards of each country, and verifies and discloses our emissions through third-party assurance. In addition, Doosan Fuel Cell has established a '2030 GHG Reduction Roadmap' based on the company's production plans. We are continuously engaging in greenhouse gas reduction activities and monitoring our progress toward achieving our goals. By 2030, Doosan Fuel Cell aims to reduce its greenhouse gas emissions to 28,539 tCO_2eq, a reduction of approximately 15% compared to the BAU scenario of 33,664 tCO_2eq.

Mid- to long-term goal	Short term goal	2023 performance
• 2030: Achieving greenhouse gas emissions of 28,539 tCO_2eq (approximately a 15% reduction compared to BAU scenario of 33,664 tCO_2eq)	• 2025: ISO 50001 (Energy Management System) certification • 2025: Introduction of new and renewable energy • 2025: Scope 3 management such as supplier GHG emissions, etc.	• Established the 2030 GHG reduction roadmap for the Iksan (PAFC) factory and Gunsan (SOFC) factory • The Iksan factory achieved 320% (390 tons) of the GHG reduction goal

Energy/GHG and Energy Reduction Activities

Learn more about our GHG and energy reduction activities

Doosan Fuel Cell is actively pursuing multiple strategies to reduce its greenhouse gas emissions and energy consumption.

01 **Strengthening the energy data collection base**

02 **System improvement**

03 **Optimizing CSA testing process**

04 **Introduction of new and renewable energy**

05 **Process improvement**

06 **Introduction of green cars**

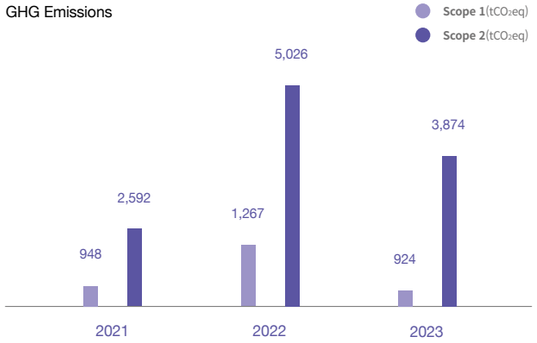
Risk Management

Doosan Fuel Cell has established the development of products and technologies that respond to the requirement of carbon neutrality as a major growth task, and is discussing business goals to achieve this. Therefore, we would like to establish a systematic process optimized for responding to climate risks by identifying and managing climate change risks based on Doosan Fuel Cell's risk management system. The resulting climate risk management plans and strategies will be reported to the ESG Committee.

Indicators and Targets

Doosan Fuel Cell manages key indicators such as greenhouse gas emissions together with its strategies for responding to climate change. We measure the performance of each task and establish detailed plans based on the results of monitoring our strategy achievement. Stakeholders can understand Doosan Fuel Cell's ability to respond to climate change based on the monitoring results.

GHG Emissions



GHG Emission Reduction Target*

Unit: tCO_2eq

Year	Emission projection	Emission reduction target
2024	6,054	4,858
2025	20,548	17,373
2026	27,006	23,892

*Based on Iksan factory and Gunsan factory BAU (Figures include Gunsan factory from 2025)

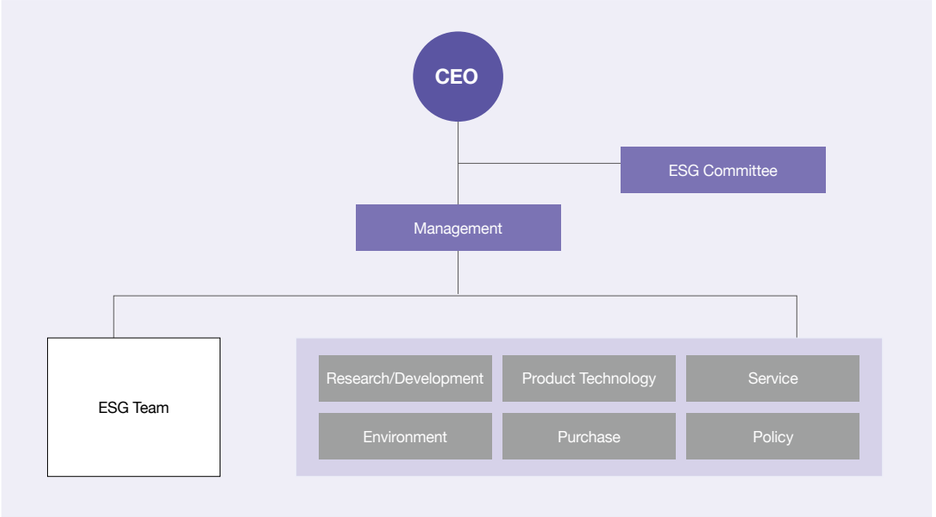
Material Topic #2. Circular Economy

Governance

To systematically and effectively realize and internalize the circular economy, Doosan Fuel Cell has established an implementation system and discloses related information through the sustainability report. We have established and are operating a circular economy implementation system composed of the 'ESG Committee - Management - Working Group' to identify and manage the impact of risks and opportunities related to circular economy issues on our business activities.

Circular Economy Delivery System

With the inclusion of the circular economy as a significant issue in the 2024 materiality assessment, Doosan Fuel Cell has established a circular economy implementation system involving relevant departments across the company, including research and development, product technology, facilities, environment, and services. We created and reported the mid- to long-term plan to the ESG Committee in the first half of the year.
The responsibility for setting and achieving circular economy goals lies with management, including the CEO, and these goals are reflected in management performance evaluations (KPIs). Management regularly monitors the progress at least once every six months and operates ESG council meetings, hosted by the ESG team, at least once every six months to implement the circular economy goals company-wide. Circular economy-related issues identified at the ESG Council are reported to management and the ESG Committee.



Strategy

Risk and Opportunity Factor Analysis

Doosan Fuel Cell establishes response strategies by finding risk and opportunity factors related to the circular economy and analyzing the financial impacts on business operations.

Category		Factor	Financial Impact	Period*
Risk	Policy related to resource use and circular economy	Increased risks and costs associated with product recall requests	●●○	Long term
		Strengthened regulations related to waste disposal and resource circulation (technology development/investment burden due to increased demand to reduce environmental impact throughout the product life cycle)	●○○	Long term
	Influx of renewable resources	Increased costs of enhancing resource recovery facilities and establishing infrastructures (reviewing reliability and quality performance of using recycled materials)	●○○	Long term
	Influx of non-renewable resources	Increased supply and demand costs due to resource price volatility and supply chain instability	●●●	Mid term
	Waste generation/ treatment	Increased costs related to waste risk assessment and management/ treatment	●●○	Mid term
	Waste recovery/ conversion	Additional costs related to waste/waste product recovery and recycling	●●○	Mid term
Opportunity	Policy related to resource use and circular economy	Technological innovation and cost reduction through MOUs with related industries (cost reduction through resource reuse, stability in supply and demand of rare metals)	●●○	Long term
		Increased leadership in the hydrogen-related market (contributes to increasing trust in power generation companies and enhancing ESG evaluation when a recovery and processing system is prepared)	●○○	Long term
	Influx of renewable resources	Reduced waste and reduced waste treatment costs through resource recycling	●○○	Long term
	Influx of non-renewable resources	Reduced costs through increased resource operation efficiency (minimizing resource use)	●○○	Mid term
	Waste generation/ treatment	Cost savings through innovation in waste reduction technology	●○○	Mid term
	Waste recovery/ conversion	Cost reduction and profit generation through reuse/recycling	●●○	Mid term
	Influx of renewable resources	Minimized resource outflow and profits generated by increased customer preference for recycled products	●○○	Long term

*Short-term: Within 1 year / Mid-term: 1-5 years / Long-term: 6-10 years

Material Topic #2. Circular Economy

Learn more about our product responsibility activities

Reuse and Remanufacturing of Selected Rework Materials

Doosan Fuel Cell systematically selects and lists materials that can be reworked to ensure maximum recycling and reuse of end-of-life product resources. When a core component, the Cell Stack Assembly (CSA), reaches its expiration date, the component is dismantled, and the reworkable materials are reintegrated into the manufacturing process or reused, positively impacting resource circulation.

CSA Rework Materials

- CMs (Coolant Manifold) in/outlet 2 types
- RMs (Reactant Manifold) Fuel in/out
- Air in/out 4 types
- PPs (Pressure Plate) Anode/Cathode 2 types
- Voltage Harness
- Manifold support
- Bypass line
- Electrical panel

Increasing Waste Recycling Rate

Doosan Fuel Cell is committed to optimizing resource utilization through a waste management system that reuses and recycles waste. Major facilities with performance degradation are refurbished and repurposed, while waste generated at our business sites is recycled as a priority to increase the waste recycling rate and minimize the volume of waste incinerated or discarded. In addition, we continuously seek out new partner companies and select them through objective evaluation to further increase the waste recycling rate.

Recovering major facilities, reusing after refurbishing

Prioritize recycling waste from business site

Discovering new waste treatment companies

2023 Waste Recycling Rate 42.8%

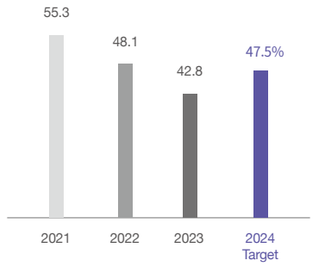
Risk Management

The realization of a circular economy is significantly influenced by policy and technology. On January 1, 2024, the「Circular Economy Society Transition Promotion Act」 took effect, replacing the previous「Framework Act on Resources Circulation」. The focus has transitioned from the circular use of waste to promoting the efficient use of resources throughout all production, distribution, and consumption processes. Accordingly, business operators now have specified responsibilities such as the use of recycled raw materials and waste recycling. Doosan Fuel Cell is responding to changes by monitoring related laws and policies that have been announced or are to be legislated. To develop necessary technologies or discover companies possessing such technologies, we are consulting with the purchasing team for various information and developing mid- to long-term strategies.

Indicators and Targets

Doosan Fuel Cell manages key measurement indicators such as waste recycling rate, recycling ratio of recovered end-of-life materials, etc. along with strategies for establishing a circular economy system. We measure our performance of each task and establish detailed plans based on the results of monitoring our strategy achievement. By referring to the monitoring results, stakeholders can gain an insight into the progress of Doosan Fuel Cell's circular economy establishment.

Waste Recycling Rate Unit: %

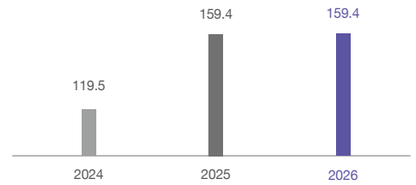


End-of-Life Product Management

Recycling or reuse ratio of products sold	Weight of recovered end-of-life materials	Recycling ratio of recovered end-of-life materials
37.8%	16 Ton	11.5%

For the circular economy, Doosan Fuel Cell has set a target to expand the reuse and remanufacturing of end-of-life products over three years starting from 2024. To achieve this, we plan to expand by 33% in 2025 (base year: 2024).

End-of-Life CSA Reuse and Remanufacturing Target Unit: ton

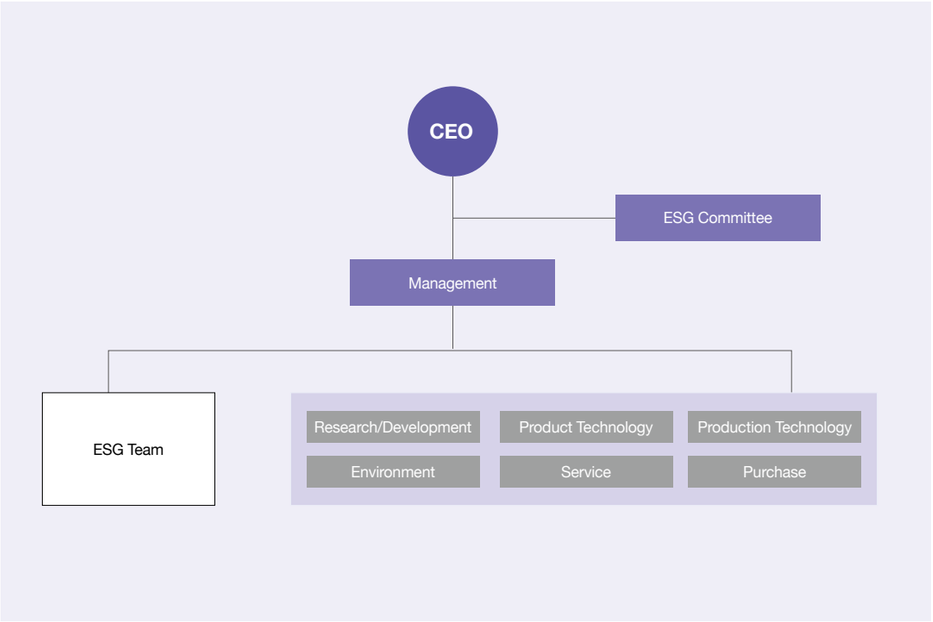


Material Topic #3. Reducing Environmental Impact of Products

Governance

Doosan Fuel Cell identifies the eco-friendly fuel cell market as its primary target, and strives to enhance the eco-friendliness of our activities, not only during product usage but across the entire lifecycle. We have built a framework for strengthening the eco-friendliness of the entire product process, and manage sales, etc. of related products as key indicators by reviewing the related laws, major ESG evaluations and guidance, and EU/K Taxonomy.

The six departments, including research and development, are in charge of technology development, application, implementation, and performance management related to the reduction of product environmental impacts, and each establishes mid- to long-term strategies to achieve their goals. The performance of the task is periodically reported to management, and performance is reviewed through the ESG Council, which is organized semiannually by the headquarters and semiannually by the ESG team. Major plans and performance are reported to the ESG Committee chaired by the CEO more than once per year.



Strategy

Risk and Opportunity Factor Analysis

Doosan Fuel Cell establishes response strategies by finding risk and opportunity factors related to reducing the environmental impacts of our products and analyzing financial impacts on business operations.

Category		Factor	Financial Impact	Period*
Risk	Collecting materials of products/services reflecting eco-friendly elements	Possible instability of supply of raw materials in cooperation with the community due to natural disaster, political unrest	●●●	Long term
		Investment costs to comply with regulations related to collection of raw materials	●○○	Long term
	Manufacturing materials of products/services reflecting eco-friendly elements	Technology investment costs of introducing eco-friendly manufacturing processes	●○○	Long term
	Product and service eco-friendliness certification	Costs of acquiring certifications	●○○	Long term
Opportunity	Collecting materials of products/services reflecting eco-friendly elements	Reduced logistics and transportation costs with materials supply in cooperation with the community	●○○	Long term
	Manufacturing materials of products/services reflecting eco-friendly elements	Reduced operating costs through improvement of energy efficiency	●●●	Mid term
	Using materials of products/services reflecting eco-friendly elements	Satisfying client needs and expanding business opportunities through carbon emission reduction in the product use process	●●○	Long term
	Product and service eco-friendliness certification	Profit making through increased client trust and preference and improved corporate image	●○○	Long term

*Short-term: Within 1 year / Mid-term: 1-5 years / Long-term: 6-10 years

Material Topic #3. Reducing Environmental Impact of Products

Frame for Enhancing Eco-friendliness of the Entire Product Process

Doosan Fuel Cell developed a framework that aims to enhance eco-friendliness throughout the entire product process. This framework considers both business objectives and ESG priorities, directly linking improvements in product competitiveness with ESG performance. We've identified a total of 33 tasks in all of the product research and development, production, use, and disposal stages, which span a range of environmental impact factors, including greenhouse gas reduction, energy conservation, resource circulation, and pollutant management. Based on this framework, Doosan Fuel Cell is actively engaged in activities to minimize its environmental footprint and enhance sustainability across the entire product lifecycle.

Eco-friendly Products and Technologies

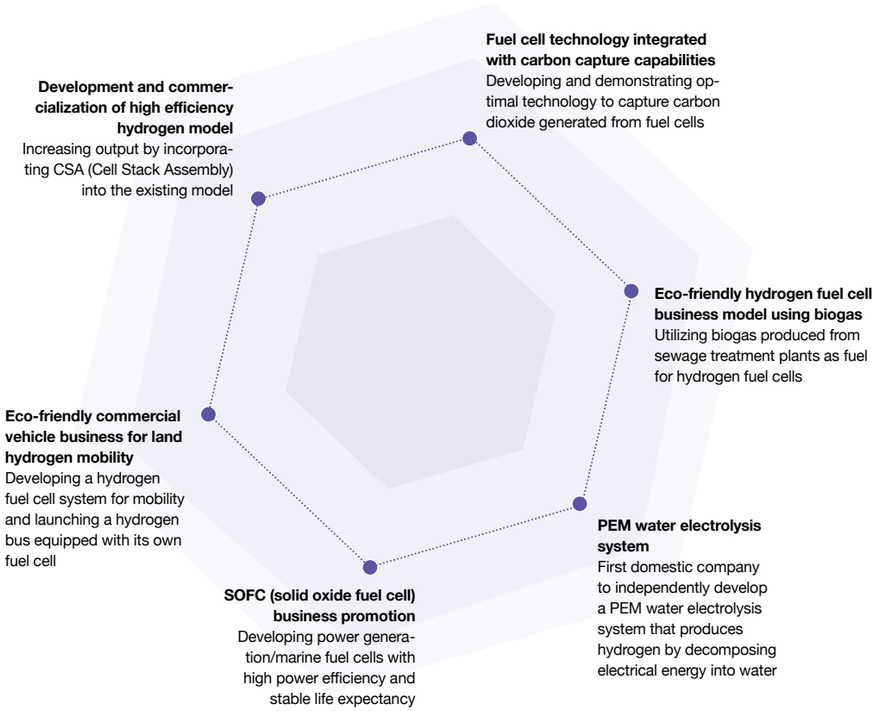
Learn more about our efforts to enhance the eco-friendliness of the entire product process

Doosan Fuel Cell puts environmental sustainability at the forefront of its product development, design, and use stages. We strive to maintain eco-friendliness throughout the entire life cycle of our products through a range of measures. Our efforts include ensuring the eco-friendliness of hydrogen fuel cell products that generate pollution-free energy, and designing advanced filters that capture carbon dioxide emissions produced from non-hydrogen fuels in the process of using hydrogen fuel cells and purifying the air to be supplied to fuel cells.

Product development	· Development of PAFC fuel cell utilizing hydrogen as fuel · Integration of technology to capture carbon dioxide emissions from hydrocarbon fuel usage · Designing blower filter to remove fine dust, ultrafine dust, and impurities · Development of 5CSA hydrogen-only model and high-efficiency PAFC model
Product design	· Development of metal PAFC separator to enhance resource circulation · Substitution with Non-RCF material for worker safety and health
Product use	· Signing a long-term maintenance service contract for delivered fuel cells · Resident professional service technicians to manage and optimize fuel cell operation · Monitoring and management of water/air pollutant emissions by the EHS department at headquarters to minimize emissions

Product and Technology Contributing to Carbon Neutrality

With the increasing necessity of energy conversion for carbon neutrality, the hydrogen industry's potential for sustained growth is being recognized. Doosan Fuel Cell is making a range of efforts to contribute to carbon neutrality objectives and make a positive environmental impact by leveraging the company's hydrogen technology and expertise. We have independently developed a water electrolysis system, a first in Korea, and are actively fostering collaborative partnerships through business agreements and joint development projects that span various sectors, including hydrogen mobility and production systems.

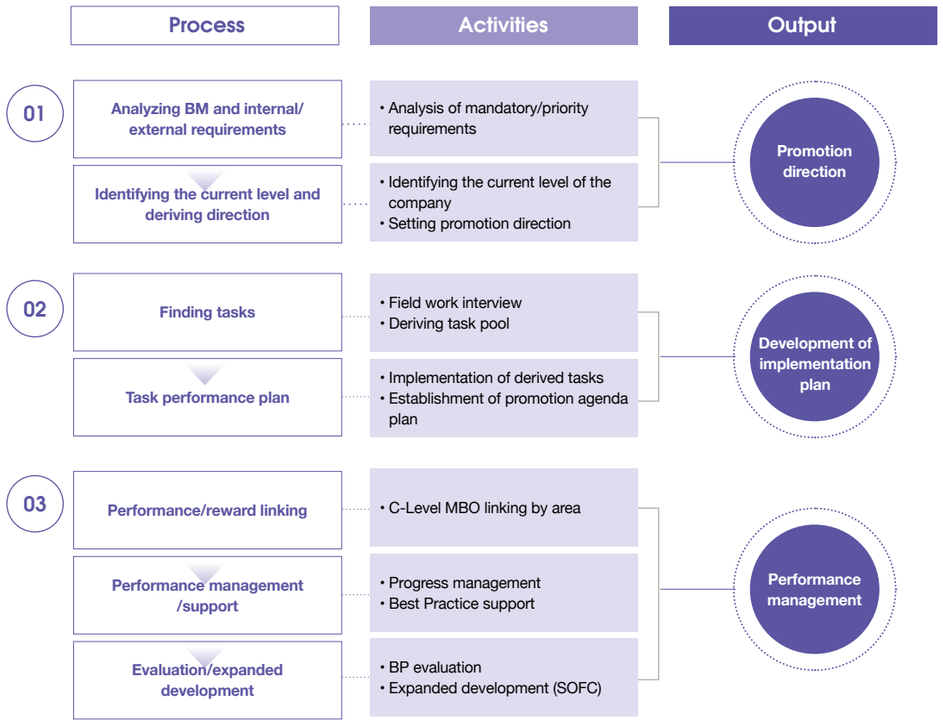


Material Topic #3. Reducing Environmental Impact of Products

Risk Management

With the growing emphasis on ensuring the eco-friendliness of the entire product life cycle, Doosan Fuel Cell manages risks related to reducing the environmental impacts of its products, and develops necessary response measures through monitoring institutional changes and the evaluation standards of major ESG rating agencies regarding domestic and overseas laws and the hydrogen generation bidding market.

Management Process



Main Activity and Output

01 Setting ESG trends and BM-based promotion direction of the company

- Analyzing internal and external requirements and identifying the current level
  - Comparing laws/regulations, stakeholders, advanced companies, and competitors
- Setting a promotion direction
  - Environmental impact reduction, information disclosure

02 Deriving tasks through field work interviews/ Establishing an implementation plan

- Deriving a task pool
  - Classifying into short-term/mid-term/long-term implementation tasks
- Selecting implementation tasks and establishing an implementation plan
  - Selecting main implementation tasks and establishing implementation tasks for next three years

03 Managing and expanding performance

- Performance-based evaluation and progress management
- Continuously discovering implementation tasks / expanding the scope
  - Expanding related departments

Material Topic #3. Reducing Environmental Impact of Products

Indicators and Goals

Doosan Fuel Cell pursues eco-friendly business practices by supplying fuel cells based on hydrogen generation technology and developing and advancing products and services that use them. Our sales performance is tracked and managed as eco-friendly sales, reflecting this business direction. Doosan Fuel Cell aims to enhance the competitiveness of its products by implementing strategies to minimize their environmental impact, and anticipates continuous growth in eco-friendly sales.

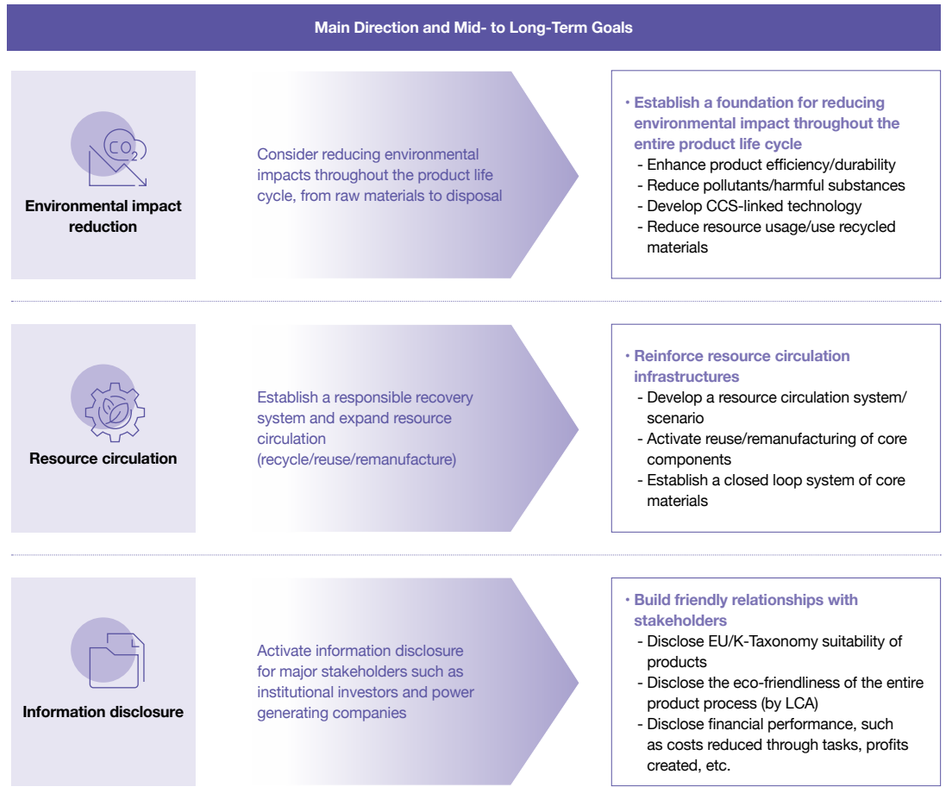
Eco-friendly Product and Service Improvement Performance

Year	Sales (KRW million)	Ratio of total sales (%)	Purchase (KRW million)	Ratio to total purchases (%)
2021	381,412	100	0	0
2022	312,149	100	30	0.3
2023	260,886	100	69	0.4

Product Environmental Impact Reaction Goals

Year	Product efficiency improvement	New product development	Activities to reduce product environmental impact
2024		5CSA model development	Non-RCF part design/development
2025	Increasing PAFC model efficiency and reducing GHG		CCUS-linked model development
2026~			Metal separator development

Main Direction and Mid- to Long-Term Goals



Environmental Management

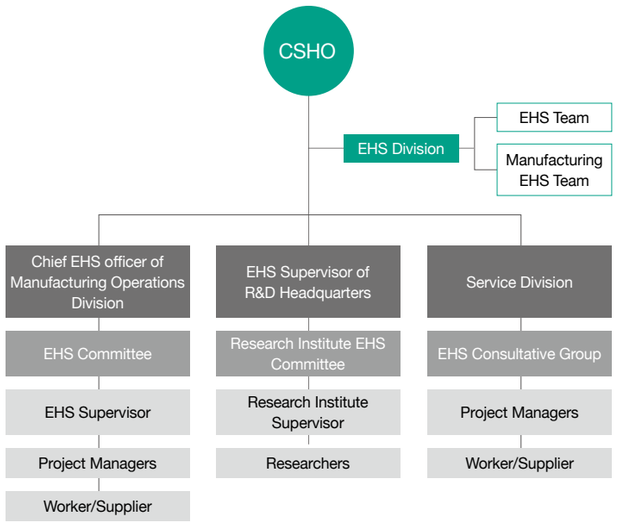
Environmental Management Policy

Environmental Management Organization

To create an eco-friendly, comfortable, and safe workplace, Doosan Fuel Cell has appointed a Chief Safety Health Officer (CSHO) of EHS (Environment, Health & Safety) within the organization to oversee all matters related to environment, safety, and health. The EHS CSHO operates a dedicated EHS management organization to oversee manufacturing, research institutes, and service sites. We are committed to raising the EHS awareness of our employees and strengthening their capabilities by appointing EHS management supervisors and personnel for each department and providing EHS-related training and inspections to ensure that each organization can carry out independent EHS activities.

Furthermore, we analyze the significant impacts of risks and opportunities related to climate change through the ESG Committee led by the CEO, and establish mid- to long-term response strategies to continuously improve EHS performance, integrating climate financial information and management strategies.

Environmental Management Organization



* CSHO (Cheif Safety and Health Officer)

Environmental Management Policy

Doosan Fuel Cell recognizes a safe and clean environment as a responsibility and core value for all of us, our families, and society. Accordingly, we have established an EHS management system and environmental management policy, getting approval from the CSHO to establish and implement detailed goals for improving our short-term and mid- to long-term environmental performance. We are committed to continually reducing our environmental impact, and to adhering to global standards.

Environmental Management Policy

01 Continuously conduct improvement activities to establish an environmental management system and improve environmental management performance.

02 Effectively prevent environmental accidents by proactively identifying and addressing environmental impacts that may occur throughout business operations, and strengthen emergency response capabilities to minimize damage in the event of an accident.

03 Minimize the emission of pollutants and waste generated from business operations and reduce environmental risks through regular monitoring.

04 Adhere to environmental laws and regulations, proactively addressing domestic environmental issues and international trends.

05 Use resources and energy efficiently to minimize greenhouse gas emissions, and actively strive to respond to climate change.

06 Actively participate in community environmental protection activities and communicate openly with stakeholders based on honesty and transparency.

07 Pursue continuous investment and research and development activities to provide eco-friendly products and services.

08 Make an effort to protect the global environment, including air, water, and soil, and promote various activities to protect biodiversity.

April 3, 2023 Doosan Fuel Cell., Ltd., CSHO **Joonyoung Park**

Environmental Management Goal

‘ZERO’ environmental accidents

Reduction in the use of energy and resources
Over 90% of annual targets

Compliance with environmental laws
‘Zero’ violation of environmental regulations

Prevention of/ response to emergencies
Implementing at least one case for each headquarters

Environmental Management Strategy

1	Proper monitoring(inspection, measurement) and maintenance of facilities discharging and preventing environmental pollutants.
2	Minimizing wastewater/waste through energy saving (electricity, gas, etc.) and the reduction of resources.
3	Conducting a regular evaluation of compliance with the law and monitoring of revised laws.
4	Performing environmental impact assessments and emergency drills to prevent and handle environmental accidents.
5	Establishment of environmental management system and implementation of continuous improvement.

Environmental Management

Environmental Management Program

Environmental Regulations Response and Monitoring

As the importance of environmental management grows both domestically and internationally and interest in environmental impacts continues to rise, Doosan Fuel Cell is striving to minimize the environmental impact of our corporate activities by establishing an environmental management system. We continuously monitor environmental regulations and trends, and proactively respond to potential risks associated with the installation of new facilities.

Waste Management System

Doosan Fuel Cell recovers, repairs, and reuses major equipment with degraded performance to minimize waste generation. We prioritize recycling waste discharged from our business sites to reduce incineration and landfill of waste. In addition, we comply with all relevant laws and reduce waste emissions by thoroughly managing, storing, and discharging waste from the generation stage. We set the waste emissions intensity target for 2023 at 2.8 tons/KRW 100 million, and the actual emissions intensity was reduced to 0.37 tons/KRW 100 million. To increase the recycling rate, we are continuously researching waste consignment companies, and select the optimum waste consignment companies through objective evaluations to ensure legal processing. We will continue to strive to reduce our waste emissions and improve recycling rates.

Minimizing Environmental Pollutant Emissions

Doosan Fuel Cell sets and monitors its own management standards, ensuring emissions remain at 30% of the legal limit or less to minimize emissions of environmental pollutants generated from business sites. Through regular inspections of our emission and prevention facilities, we ensure their efficient operation to reduce environmental impact, and work actively to preserve the surrounding environment.

Biodiversity Policy

As Doosan Fuel Cell understands that the preservation of biodiversity is an important issue in our response to climate change, we have established a biodiversity policy to minimize the impact of the workplace on the surrounding environment, and are preparing various activities to protect biodiversity.

01 Evaluate the impact on biodiversity in advance when carrying out new projects and make efforts to prevent threats and factors. In addition, we will comply with the legal requirements of the countries and regions covered by the International Convention (IUC Category I-IV protected areas).

02 Regarding business operations, actively consider supporting initiatives related to biodiversity protection, putting the protection of endangered rare and endemic species first.

03 Operate stricter in-house environmental pollutant emission standards than domestic and overseas legal acceptance standards, and strive to prevent loss in terms of biodiversity (NNL, No Net Loss) and have a more positive impact (NPI).

04 Recognize that forests are a very important resource for preserving the global ecosystem and voluntarily implement various forest protection activities.

05 Recognize the importance of protecting biodiversity through various media such as education and public relations activities for employees and stakeholders related to us.

June 21, 2023 Doosan Fuel Cell., Ltd., CSHO **Joonyoung Park**

Establishment of Eco-friendly Purchasing Standards

To define eco-friendly products, compile the performance of eco-friendly products, and increase purchases, Doosan Fuel Cell is establishing eco-friendly purchasing standards and presenting business standards as below.

1. Definition of Eco-Friendly Products

1.1 Products that have received eco-label certification in accordance with the「Environmental Technology Industry Act」and its enforcement decree

1.2 Low-carbon products under the Act on Promotion of Purchase of Green Products

1.3 Excellent recycled products (GR Mark certified products) in accordance with the「Act on the Promotion of Saving and Recycling of Resources」

1.3 Electric vehicles, solar vehicles, hybrid vehicles, hydrogen electric vehicles pursuant to the「Act on the Promotion of Development and Distribution of Environmentally Friendly Automobiles」, or vehicles announced through consultation between the Minister of Environment and the Minister of Trade, Industry, and Energy pursuant to thethe「Clean Air Conservation Act」

1.4 Other eco-friendly products recognized by domestic laws and public organizations

1.5 Eco-friendly products recognized by internationally recognized initiatives (e.g., FSC certification)

2. Scope of Application and Responsibilities

2.1 These standards apply to the purchase, rental, and lease of the company's office consumables and business vehicles, as well as to the compilation of performance data

2.2 The responsible department must actively promote the identification of necessary eco-friendly products, establish purchase plans, and place orders to expand the acquisition of eco-friendly products

Environmental Management

Environmental Management System Certification

In 2022, Doosan Fuel Cell obtained the environmental management system (ISO 14001) certification, an international standard, to minimize the environmental impact of overall business operations, and completed the follow-up review in 2023. To advance the environment management systems of our business sites, we are actively updating regulations based on the circumstances of each business site, establishing goals that are aligned with our environmental policy, and conducting performance evaluations and improvement activities. Our Gunsan SOFC plant, currently under construction for mass production, is slated to receive environmental management system certification. We remain committed to operating an effective environmental management system company-wide, and continuously enhancing its management level.

Environmental Management System Certification

Violation of Environmental Laws

Doosan Fuel Cell conducts pre-EHS evaluation whenever there are new purchases or changes in raw materials, equipment, and other relevant areas to comply with environmental laws and regulations. We also monitor the enactment and revision of all EHS-related laws every quarter. In addition, we perform compliance assessments at each business site to identify any potential violations. In 2023, we had no fines or penalties for violations of environmental laws.

Assessment of Environmental Impact

Doosan Fuel Cell conducts environmental impact assessments to identify and systematically manage the risks of direct and indirect environmental impacts from its business operations, and evaluates the implementation results every year.

Environmental Education

Doosan Fuel Cell conducts regular education and training each year to enhance the work competency of its employees related to the environment, and ensure they are equipped to respond to emergencies. We provide education to all our employees on environmental laws and key management issues. Significantly, we focus on response training based on environmental accident scenarios to minimize damage in the event of emergencies. In 2023, a total of 440 employees participated in four internal environmental education sessions (one conducted each quarter). Furthermore, we encourage our employees to take external training to enhance their proficiency in environmental management systems and foster proactive engagement across all departments.
In addition, we are conducting a recycling campaign and monitoring the implementation status to reduce in-house waste and promote recycling.

Environmental Education

Environmental Impact Assessment Process

Environmental Impact Assessment Stage	Implementation Details By Stage
Selecting the target of environmental impact assessment	• Conducting environmental impact assessments on processes, facilities, raw materials, buildings, etc. every two years • Conducting initial assessments for new establishments, or regular assessments when significant environmental changes occur
Identifying environmental aspects	• Identifying overall environmental impact factors by status, direct/indirect impact, and environmental impact level as environmental-related activities, services, and processes
Assessing environmental impacts	• Conducting an environmental impact assessment on the identified environmental impact factors • Conducting quantitative evaluation based on probability of occurrence and severity of results
Registering major environmental impacts	• Based on the result of the environmental impact assessment, if the score is above the standard, registering in the Major Environmental Impact Register for priority control • If the score is below the standard but deemed significant, registering and managing it in the Major Environmental Impact Register
Reflecting goals and follow-up management	• Reflecting the results of the environmental impact assessment in the goals and establishing an improvement plan to conduct follow-up management • Conducting monitoring and effectiveness evaluation for improvements

Improving Workplace Environmental Performance

Water Management

Doosan Fuel Cell reduced its water usage by performing an overall inspection of its water supply pipes and repairing the leak points. The water usage target for 2023 was 53,063 tons, and the actual total usage was 28,151 tons, with a plan to reduce it by 5% in 2024. In 2024, we plan to carry out activities to improve wastewater treatment quality and further increase the recycling rate by enhancing the wastewater treatment system. The wastewater generated is treated through a subcontracted wastewater treatment company and a wastewater treatment plant. We select a wastewater treatment company based on transparent and fair internal standards and review relevant criteria such as licenses and on-site treatment facilities to ensure the company can treat our wastewater in compliance with legal requirements.

Water Supply Pipe Inspection

The Facility Technology Team's facility department at Doosan Fuel Cell monitors daily usage of water to prevent leaks and waste. In 2023, during routine inspections, an unusual increase in water usage was detected on public holidays when the factory was operating minimally. We initially inspected the flow meter through a professional agency, but no abnormalities were found. Subsequently, we installed valves on pipes suspected of leaking. After monitoring, it was confirmed that water usage had significantly decreased, and repair work was performed. This resulted in a substantial reduction in water usage compared to the previous year.

Improvement of Wastewater Treatment System

We plan to enhance the wastewater treatment system within the DI Water Room to improve the quality of DI Water. Specifically, we aim to avoid disposal of DI Water after using Cell8B and recollect to the Cell8 Tank for recycling.

Waste Management

Doosan Fuel Cell is dedicated to minimizing the waste generated from its business sites. We reuse major facilities to minimize waste emissions and prioritize waste recycling to reduce the types of waste sent for incineration or landfill. To ensure transparency and fairness in contracts, we select only waste treatment companies that meet the required standards by performing objective evaluations, including on-site inspections of storage and treatment facilities and a review of documents such as waste permits and records of compliance with laws and regulations.

In addition, our waste generation is precisely managed through the Allbaro System. Doosan Fuel Cell's waste generation was lower in 2023 than in 2022 due to a decrease in production. However, the total amount of waste generated in 2023 was 707 tons, slightly exceeding the target of 701 tons by 1%. While waste related to production decreased slightly, the amount generated was slightly higher than the target due to the ongoing generation of non-production-related waste, such as general waste, leading to a slight increase in total waste emissions compared to the target. The total hazardous waste disposed of was 248 tons, a 3% reduction compared to the target of 256 tons. Despite this, the generation of hazardous waste was significantly increased due to the emergence of new waste. We will continue to conduct activities to reduce waste from each business site and process, striving to continuously minimize waste and increase recycling rates by improving materials and identifying new companies for waste management.

Chemical Substance Management

Doosan Fuel Cell ensures the safe handling of chemical substances from the purchase to disposal stages through lawful and transparent processes to prevent health hazards to employees and environmental accidents.

Before purchasing a new chemical, we review any regulations it may be subject to in accordance with the relevant domestic and overseas laws (Chemical Substances Control Act, Act on Registration and Evaluation, etc. of Chemicals, REACH, California Proposition 65, etc.) through our preliminary EHS impact assessment. We also comply with due process at the time of purchase.

Additionally, we ensure the legal and safe handling of chemicals by having specialized organizations conduct field assessments of hazardous chemical handling facilities.

To support our employees in their efforts to handle chemicals safely, we publish material safety data sheets (MSDS) and conduct safety training before handling, which includes supplying personal protective equipment and confirming safe work procedures.

We are committed to research and development to replace the hazardous chemicals used in product manufacturing and development with less hazardous substances. When it is unavoidably necessary to handle hazardous chemicals, we prioritize facility improvements and investments to protect worker health and ensure the availability of sufficient and appropriate protective equipment. Furthermore, we work to minimize EHS risks through regular inspections and change management of handling facilities.

GHG Management

GHG Emission Status

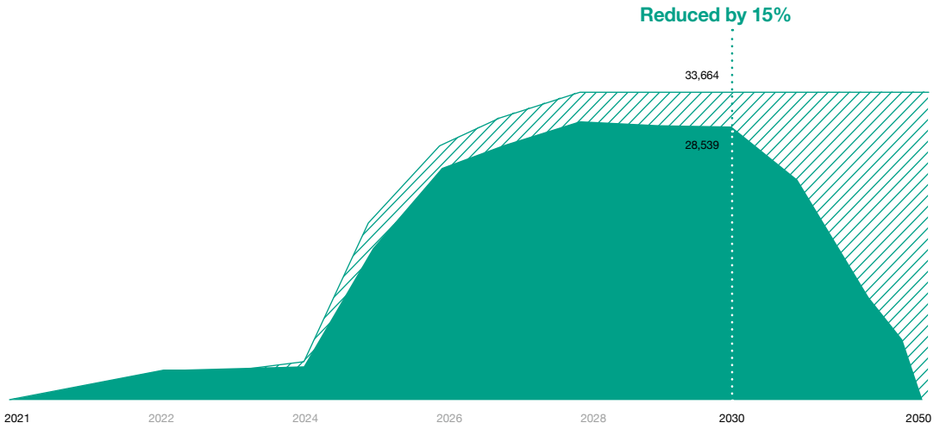
Doosan Fuel Cell recognizes the necessity of greenhouse gas management and reduction as the key factor in its climate change response and the goal of carbon neutrality. Although we are not subject to the Greenhouse Gas Target Management System and Emissions Trading System, we voluntarily verify our greenhouse gas emissions through third-party assurance according to IPCC guidelines and country-specific management guidelines, and disclose related information to ensure accurate emissions management and the establishment of reduction goals.

Setting Goals for GHG Emissions and Energy Consumption

Energy use has fluctuated significantly due to the expansion of factory lines in early 2022, the suspension of existing lines in late 2022, and shift changes in 2023, making it challenging to predict our energy use for 2024. Given the seasonal and hourly load changes, we needed stable performance data over one year, but have set greenhouse gas emissions targets by referencing and substituting the closest comparable working environment.
The energy consumption target for 2023 was 157.535 TJ but the actual consumption amounted to 98.79 TJ. We are actively pursuing various energy reduction activities to continually reduce our energy consumption. In 2023, the projected GHG emissions from the Iksan factory were 5,209 tCO2eq but we successfully emitted a total of 4,858 tCO2eq through ongoing GHG reduction efforts. This resulted in a savings of 351 tCO2eq, surpassing our target by 320%. For 2024, to reduce base load, we aim to further save energy consumption by setting goals related to energy used for air conditioning loads, air compressors, standby prevention facilities, lighting, and electric heating loads, irrespective of production levels.

GHG Reduction Roadmap

Unit: tCO_2eq



Establishment of GHG Reduction Roadmap

Doosan Fuel Cell reestablished the 2030 GHG reduction roadmap to align with production changes in the mid- to long-term plan. Production is expected to rise by 2025 with the Gunsan factory (SOFC) slated for operation in 2024. We forecast that GHG emissions will decline from 2026 onward. We will faithfully implement the NDC (Nationally Determined Contribution) through proactive activities aimed at reducing greenhouse gas emissions.

* BAU (Business As Usual):
The projected GHG emissions when facilities are operated without any specific reduction efforts; BAU may be subject to some change

GHG Management

GHG Emission and Energy Use Reduction Activities

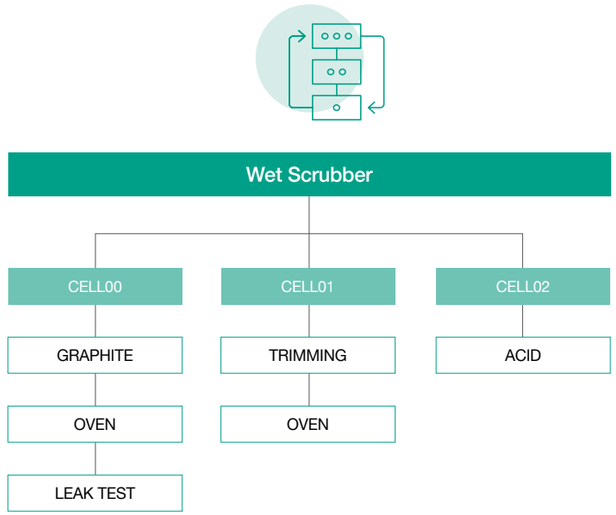
Strengthening Energy Data Collection Base

After implementing the Report Program, Doosan Fuel Cell conducted a detailed analysis of individual load trends for each manufacturing facility to observe temporal characteristics and fluctuations in load and compare before and after consumption. This gave us insight into overuse in specific loads, and enabled us to establish clear energy conservation goals. Furthermore, we carried out optimization through tests to appropriately allocate energy into steam usage in addition to electricity, and are continuously discovering areas with energy-saving opportunities across various aspects.

System Improvement

Wet Scrubber, an essential facility for operating the automated CSA (Cell Stack Assembly) line, previously needed to be manually started and stopped, resulting in unnecessary power consumption. To save energy, we established a system that constantly monitors the operation status of the CSA automated line and automatically starts and stops Wet Scrubber.

Wet Scrubber Automated System

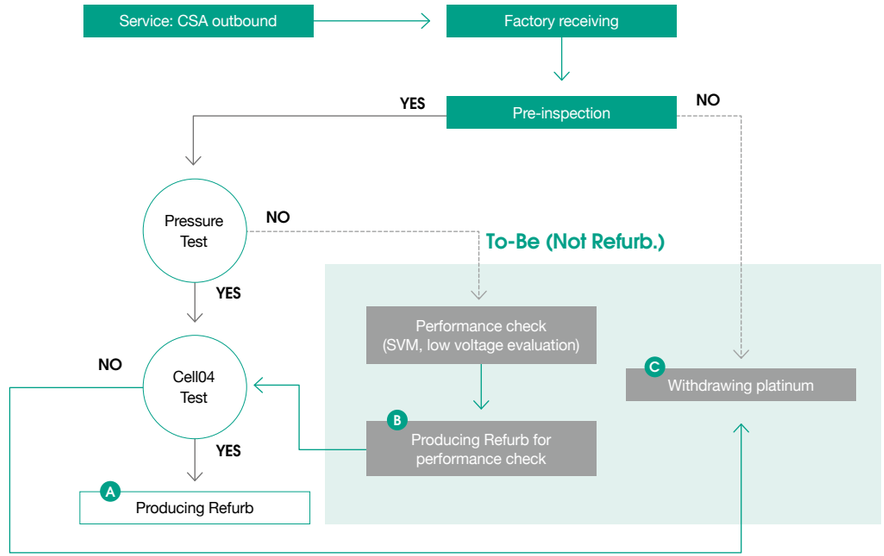


CSA Test Process Optimization

By reducing the number of E-Fills in the CSA Test process by 13.4%, and lowering our power and CO gas usage by decreasing the waiting time for judgment, we reduced our energy consumption and GHG emissions.

Process Improvement

The CSA Refurbishment Process is optimized to reduce power consumption. By lowering the steam pressure of the heating, ventilating, and air conditioning systems of the CSA Line by 60% and thus reducing its power use, a GHG reduction of approximately 9.1 tons annually can be expected. 96 unnecessary light fixtures were separated, and the essential space lighting was replaced with efficient bulbs, which are expected to lower GHG emissions by approximately 93.1 tons per year.

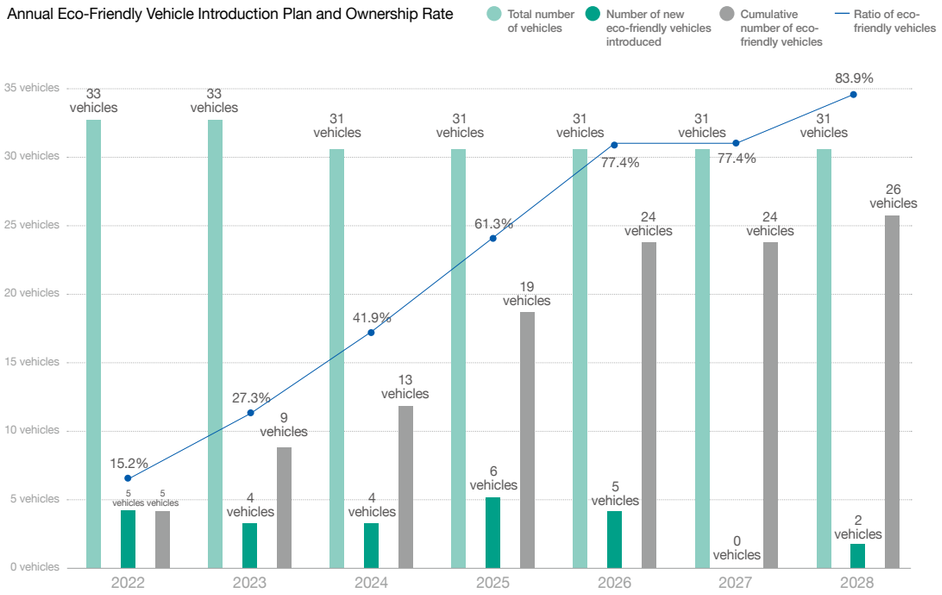


CSA Refur Process Optimization Schematic

GHG Management

Introduction of Eco-friendly Vehicles

Doosan Fuel Cell replaces air pollutants and GHG emitted from operating vehicles with eco-friendly vehicles every year. In 2023, our number of eco-friendly vehicles was increased from 5 to 9, or from 15.2% to 27.3%. In the future, vehicles scheduled for replacement will be replaced with eco-friendly vehicles such as electric vehicles.



Internal Carbon Prices

Application of Internal Carbon Prices[1)]

Doosan Fuel Cell is not subject to the Target Management System for GHG and the Emissions Trading Scheme, but we encourage employees to perform energy-saving activities by setting an internal carbon price and using it for economic evaluation and an internal reward system to check GHG emissions and promote energy-saving.

1) Based on the closing price of Korea Exchange KAU23 on January 2nd

Comparison of Economic Feasibility by Fuel Type

Doosan Fuel Cell created its own GHG calculator and fuel comparison chart to predict the amount of reduction when establishing a GHG reduction plan, and to compare the economic feasibility of each fuel in terms of GHG reductions when improving facilities and changing fuel.

Reflection of Individual Performance in the Area of GHG Reduction

We added evaluation of the GHG reduction performance to the cost reduction reward system to encourage employees to actively engage in energy reduction activities.

Calculation of Annual GHG Reduction Effects

We disclose the total reduction in costs incurred as a result of our annual GHG reduction activities in terms of the internal carbon price to increase awareness and encourage participation in various energy-saving activities. As a result, in 2023, 390 tCO2eq of GHG was reduced by changing the Boiler SCR removal, and about KRW 3.65 million was saved based on the internal carbon price.

Aligning with Performance Assessment and Rewards

In 2023, the MBO evaluation items for the Operation Headquarters and each department manager included 'establishing a mid- to long-term GHG emission reduction roadmap,' 'implementing short-term energy and GHG emissions reduction activities,' and 'reviewing the installation of rooftop solar power generation' with the goal of 'promoting energy reduction activities.' These goals are also reflected in the Global CMO's MBO evaluation items for 2024, aligning with performance assessment and rewards.

Expanding Green Products and Technologies

Development of Green Products and Establishment of Sales Standards

Eco-friendly energy

PAFC fuel cells made by Doosan Fuel Cell have significantly lower gas emissions and noise compared to conventional fuel cells, and enable non-polluting power generation when hydrogen is used.

CCS-linked PAFC system

A Fuel Cell is an eco-friendly power generation technology for producing electricity through the chemical reaction between hydrogen and oxygen. It is possible to eliminate CO2 emissions when hydrogen is used as fuel for PAFC, but if hydrogen is produced by modifying hydrocarbon fuels(natural gas, LPG, etc.), a small amount of CO_2 occurs during the combustion process to supply heat for the modification of hydrogen. For CO capture technologies to reduce CO, we apply wet/dry/separator CO capture technology at a 10MW level for coal thermal power generation and industrial processes. In Korea, there is no precedent for developing a technology that combines fuel cells with CCS.Doosan Fuel Cell is designing a CCS-linked PAFC system and developing optimal technology to capture the CO_2 discharged through exhaust gas.[1)] We are currently developing technologies to reduce PAFC CO_2 emissions by more than 70% through the configuration and control of the CO_2 concentration system, the optimized design of exhaust gas heat recovery, and the integrated management of multi-PAFC system gas. To advance this initiative, Nambu Power, Samsung C&T, Korea Energy Research Institute, and Doosan Fuel Cell signed a “Clean Hydrogen Fuel Cell Development and Conversion Business Agreement”('22.6) to accelerate the development of fuel cell-linked CCU.

1) Gas unnecessarily emitted by internal combustion engines (large amounts of water vapor, combustion products, unburned fuel, soot, dust, etc.)

Blower filter design

1MW of fuel cells requires a supply of air that can sustain about 10,000 adults. Our fuel cells are composed of multiple BOPs (Balance of Plant) that supply air.When designing a blower for dual air circulation, we apply a high-performance filter to filter out fine particles, ultrafine particles, and impurities in order to supply clean air into the cell. This can reduce the entry of fine particles as the fuel cell expands.

5CSA hydrogen-only model development

Doosan Fuel Cell is developing a new 5CSA model to improve the output and manufacturing efficiency of products. Similar to the hydrogen model in the existing M400 lineup, it does not generate greenhouse gases because it does not use hydrocarbon fuel. Utilizing the same space as the existing product, its output is increased by 25%, making it a more viable option for application as a power generation fuel cell.

High efficiency PAFC model development

Doosan Fuel Cell focuses on identifying the improvement points of key stack components to overcome their limitations and enhance efficiency. We are developing new catalysts that can maximize fuel cell reaction activity by altering the materials and structures used in fuel cell electrodes. For separator plates, we are working to improve the efficiency of our existing products by transitioning from graphite to metal, which broadens the design range. We anticipate that increasing fuel cell efficiency through these component improvements will lead to a reduction in the Levelized Cost of Energy (LCOE), thereby expanding the opportunities for fuel cells to contribute to a hydrogen society.

Sales standards of eco-friendly products

Doosan Fuel Cell has defined eco-friendly products based on K-Taxonomy announced by the Ministry of Environment, and calculated and disclosed related sales results. Among our fuel cells, the PureCell M400 Hydrogen model, a hydrogen-only model, is an eco-friendly product that meets the K-Taxonomy green sector’s “hydrogen and ammonia-based energy production” economic activities as it does not emit pollutants such as GHG, fine dust, nitric oxides, and sulfur oxides during power generation. The PureCell M400NG model is an eco-friendly product that meets the economic activities of ‘Liquid Natural Gas(LNG) and Mixed Gas- based Energy Production’ in the K-Taxonomy conversion sector when producing a combination of heat and electricity. In addition, sales of maintenance/repair/management services for the product are calculated as eco-friendly service sales and disclosed.

Expanding Green Products and Technologies

Product Design Standards

Doosan Fuel Cell is working to change the existing PAFC CSA separator made of graphite (carbon) to a metal separator to improve resource circulation. Currently, we are in the process of shape design and coating reliability verification, with the aim of completing development by 2026.

Metal separation plates use metal base materials to increase the possibility of recycling the separation plates, which previously were discarded, which enables product development for output increase or efficiency enhancement, as the design scope can be broadened through production flexibility.

In addition, it can reduce unnecessary material loss during the manufacturing process and secure price competitiveness, thus further improving eco-friendliness and product competitiveness.

Doosan Fuel Cell plans to strengthen eco-friendly products and technology from the product design stage and expand the high-efficiency, high-power fuel cell power generation market by developing metal separators.

RCF (Refractory Ceramic Fiber), on the other hand, is a hazardous substance commonly employed in high-temperature modified items such as fire protection equipment and aerospace, and is used as insulation for parts in Doosan Fuel Cell's fuel cell. Doosan Fuel Cell handles the material safely in accordance with domestic and foreign regulations and guidelines, but plans to design and manufacture products in which this is replaced with non-RCF materials on a pilot basis within the third quarter of 2024, and fully replace RCF by the end of the year.

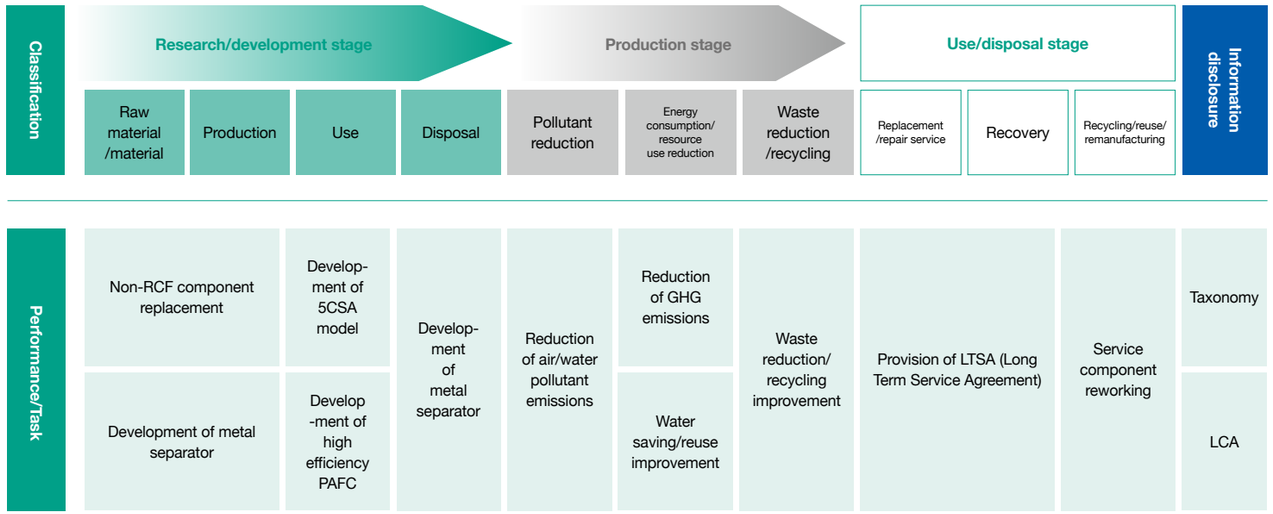
Enhancing Eco-friendliness of the Entire Product Process

Due to the nature of eco-friendly business, Doosan Fuel Cell's activities to strengthen product competitiveness are directly tied to ESG performance, contributing significantly to environmental goals. Accordingly, we have developed a framework to link ESG strategies with business tasks, such as improving product efficiency, which can link eco-friendliness with ESG performance. We identified 33 tasks and established an implementation roadmap divided into short-term, mid-term, and long-term.

From the research and development stage, we prioritize eco-friendliness in the selection of our raw materials, and reduce resource and energy consumption throughout each stage of production, use, and disposal. We also aim to minimize pollutant emissions and design products to facilitate recycling, reuse, and remanufacturing. In particular, the 5CSA model, set for mass production in the second half of 2024, is expected to enhance power production efficiency by 25% compared to existing models and significantly boost eco-friendliness in the use stage. At the production stage, we are making efforts such as optimizing facility efficiency, managing pollutant emissions below in-house standards, which are stricter than the legal requirements, and maximizing waste recycling. In the use and disposal stages, we offer 20-year long-term repair and maintenance contracts for delivered fuel cell equipment, and deploy professional service technicians to ensure optimal maintenance. We also carry out circular activities to repurpose end-of-life components as new resources.

We plan to disclose our task performance through the sustainability report and share details on our products' EU Taxonomy and K-Taxonomy eligibility, as well as LCA results with stakeholders, allowing them to contribute to the business.

Example of Frame for Enhancing Eco-friendliness of the Entire Product Process

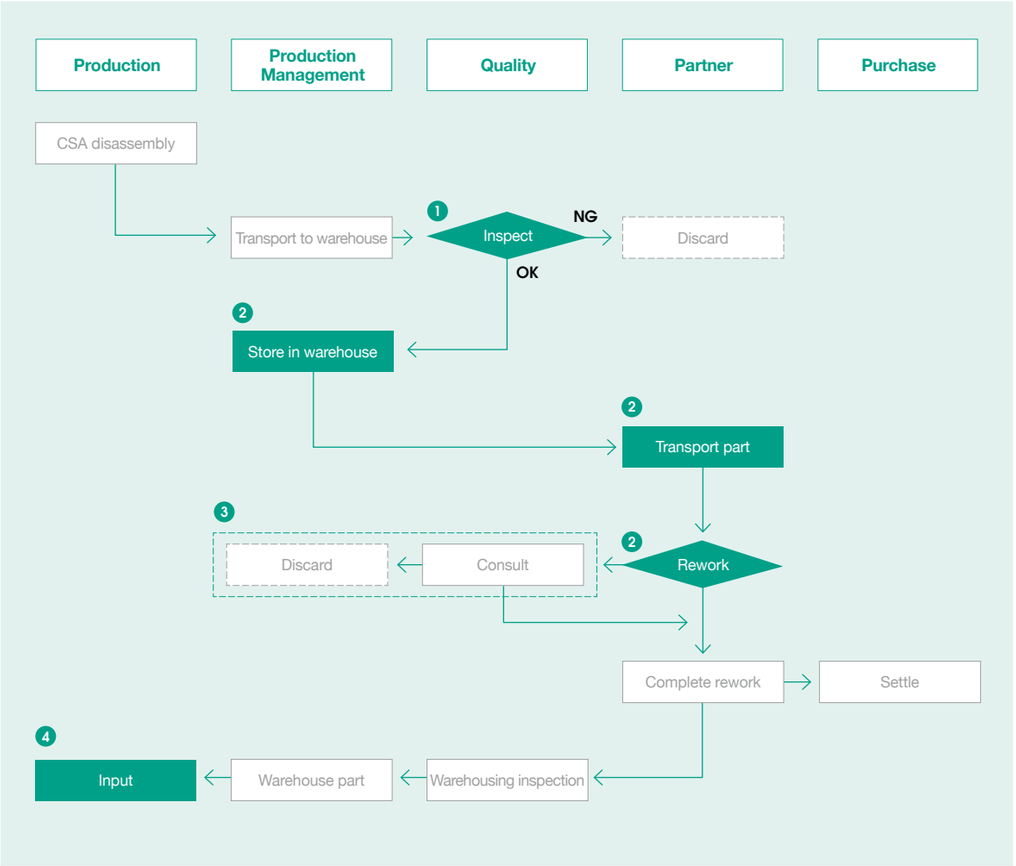


Expanding Green Products and Technologies

Responsibility for End-of-life Products

Doosan Fuel Cell has selected and listed reworkable products from among its end-of-life products. We are contributing to resource circulation by selecting two types of CMs (Coolant Manifold) in/outlet, RMs (Reactant Manifold) Fuel in/out, four types of Air in/out, two types of Anode/Cathode, Voltage Harness, Manifold support, Bypass line, and Electrical panel from the CSA (Cell Stack Assembly) as reworkable materials.

Rework Process



Field and Issue	Promotion Details
1 Inspection • Difference in the level of inspection between our company/agency→Unnecessary costs incurred from disposal by partner (transportation cost/ inspection cost, etc.) • Insufficient inspection history management and partner sharing	**Inspection standards and rework scope management : Quality** • Clarifying the inspection standards for reworkable parts of each component • Sharing inspection history/scope changes in person and via email
2 Inventory management and rework scope designation • Inadequate inventory management of reworkable item • Rework scope : Arbitrary work management of partners	**Inventory management : Production management** • Setting appropriate inventory quantity considering the production plan and storage location • Upgrading the component storage method
3 Rework management • Partners can aprogressrbitrarily discard due to lack of progress consultation	**Material input and product management : Production management** • Complementing computer system for material input history and service CSA classification management
4 Rework item input • No related computer system configuration for a new process when a new service is introduced	

Expanding Green Products and Technologies

Social Values of Fuel Cells

To measure the social value of fuel cells, we apply three measurement methods: avoidance value (Eliminate), improvement value (Improve), and new value (Create) to create new value, considering the product characteristics.

Avoidance value (Eliminate)

Avoidance values are social values created by the avoidance of negative impacts associated with use of existing power facilities. Key avoidance values are as follows.

- Avoidance of water use
- Avoidance of blackout loss

Improvement value (Improve)

Improvement values are the enhanced social values provided compared to existing products. We calculated social values created by eliminating the negative impacts of LNG combined cycle power generation. Key improvement values are as follows.

- Air pollution reduction
- GHG reduction
- Medical and social welfare cost saving through air pollution improvement

New value (Create)

New values are values that cannot be created through existing products. We calculated the social values newly created through fuel cells. Key new values are as follows.

- Removal of fine dust
- Heat production
- Creation of a fuel cell ecosystem

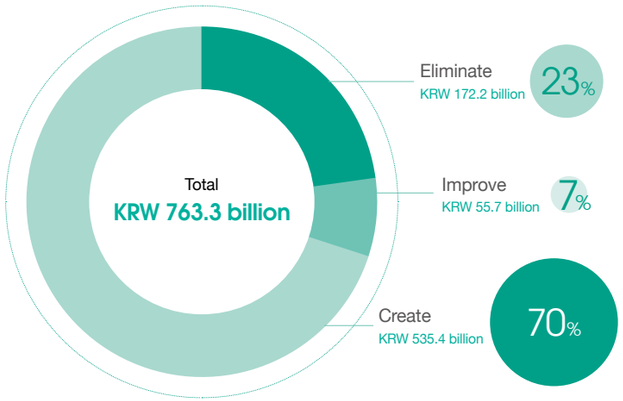
Social Values of Fuel Cells

The social value created by Doosan Fuel Cell's fuel cells was calculated to be approximately KRW 160,000 per 1 MWh. Based on the output of products currently delivered to and operated by clients, the total social value created is approximately KRW 763.3 billion (KRW 108.8 billion based on newly operated product output in 2023). This measurement was conducted by an external professional agency, utilizing indicators and formulas based on domestic and international research results. The measured results may vary depending on the reference data values. Doosan Fuel Cell plans to continuously supplement and refine these measurements, and develop them into tools to enhance the social values of products.

Social values created based on 1 MWh fuel cell — Unit: KRW/MWh

Eliminate	Improve	Create	Total
• Power transmission · distribution investment, lossdance[1] • Water use avoidance[2] • Blackout loss avoidance[3]	• Air pollutant reduction[4] • GHG reduction[5]	• Removal of fine dust[4] • Heat production[6] • Creation of fuel cell ecosystem[7]	
KRW 35,969	KRW 11,628	KRW 111,845	KRW 159,442

Social values created based on products in operation — Unit: %/KRW billion



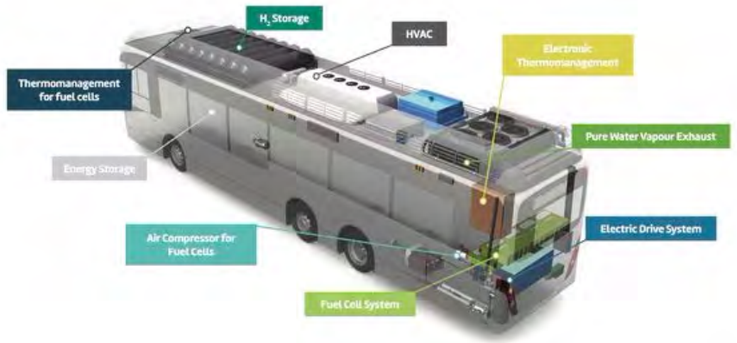
※ LNG generation is used as a comparison target of measurement for improvement and avoidance value calculation
※ Higher social value is anticipated when accounting for medical insurance and social welfare costs due to air pollutants like fine dust (PM2.5) and NOx (Approximately KRW 87,000 in improvement values can be added when the British medical insurance standard8) is applied)
※ The above social value calculation standards were established by a professional agency in 2018, and thus there may be discrepancies as of 2024.
※ The value is calculated on the assumption that the installed fuel cells generate electricity 24 hours a day without any interruptions.

1) KERI Report, Benefits and Unit Costs of Distributed Power Sources
2) Eco-cost) http://www.ecocostsvalue.com/EVR/model/theory/subject/5-data.html
3) Korea Electric Power Corporation, Loss Costs per Minute with Power Outage, 2015 EPSIS, Average Annual Power Outage Time, 2013
4) Ministry of Environment, A Study on Social Cost Reevaluation of Air Pollutants, 2015
5) Korea Energy Economics Institute, Social Costs per Ton of Greenhouse Gases, 2015
6) Korea Energy Economics Institute, A Study on New and Renewable District Energy Supply Plans, 2017
7) Korea Exchange, Operating Profit Ratio of Domestic Listed Companies, 2018
8) Public Health England, Estimation of costs to the NHS and social care due to the health impacts of air pollution, 2018

Expansion of Products and Technologies Contributing to Carbon Neutrality

Launching of Land Hydrogen Mobility Eco-friendly Vehicle Business Corporation

In 2024, Doosan Fuel Cell incorporated HyAxiom Motors as a subsidiary for the eco-friendly commercial vehicle business. Previously in 2022, we entered into a business agreement with Canada's Ballard Power Systems (hereinafter 'Ballard'), a leader in the PEMFC (Polymer Electrolyte Membrane Fuel Cell) industry, and Doosan's subsidiary HyAxiom in the United States. Since then, we've been working hard to develop fuel cells for hydrogen mobility with Ballard and secure stable demand based on a mutual cooperation structure with transportation companies.
With the incorporation of HyAxiom Motors, we plan to develop a hydrogen fuel cell system for mobility, establish a business model that secures early customers, and gradually expand our operations. Our goal is to launch a hydrogen bus equipped with our own fuel cells by 2026.
The eco-friendly vehicle market is expected to continue growing, thanks in part to government support. The policy to expand the domestic hydrogen mobility market by supplying 1,200 hydrogen charging stations, 40,000 hydrogen buses, and 30,000 hydrogen trucks by 2040 will be maintained.
According to Statistics Korea, approximately 6,000 old buses are expected to be replaced with eco-friendly buses annually. For low-floor buses, it is anticipated that 70% will be replaced by eco-friendly buses by 2022, and more than 90% of these buses are expected to be replaced by eco-friendly hydrogen buses after 2025, driven by strong government and local government initiatives.
The transition to eco-friendly buses in the traditional city and intercity bus market has been slower due to the limitations of electric vehicle products. For long-distance and high-speed driving, hydrogen buses using hydrogen fuel cells with high output and excellent durability will be a more suitable alternative.
Adding to SOFC for marine mobility under development, Doosan Fuel Cell plans to accelerate its market dominance by using PEMFC for hydrogen mobility through its new subsidiary, HyAxiom Motors.

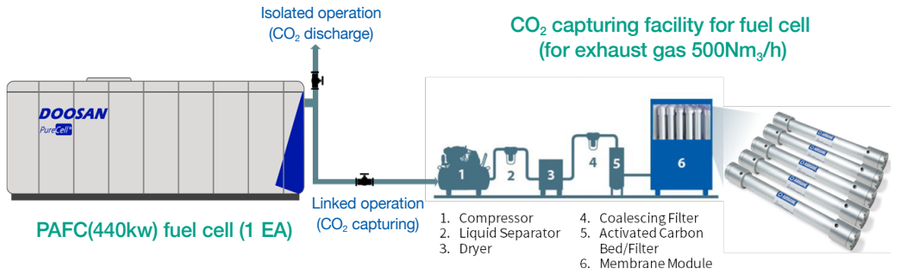


Concept map of Ballard Power Systems' hydrogen bus

Efforts to Convert to Clean Hydrogen Fuel Cells with CCUS Technology

Hydrogen is largely classified into grey hydrogen, blue hydrogen, and green hydrogen according to the method of production. Grey hydrogen represents about 96% of the hydrogen produced today, and is derived from natural gas. If CCUS[1)] technology is used to capture carbon dioxide, it is categorized as blue hydrogen.
Doosan Fuel Cell will complete the development and verification of optimal technology for capturing carbon dioxide from fuel cells and fulfill its role and social responsibility in the clean hydrogen market through blue hydrogen to achieve carbon neutrality.
To this end, we are focusing on securing advanced technological competitiveness for the transition to clean hydrogen fuel cells. As part of this effort, we jointly developed fuel cell-linked CO_2 capture technology with Korea Southern Power and the Korea Institute of Energy Research in 2022. In 2024, we signed a contract with Korea Hydro & Nuclear Power to develop direct CO_2 capture technology for PAFC fuel cells, and are pursuing a one-year demonstration project. Through this project, Doosan Fuel Cell plans to demonstrate a PAFC fuel cell system capable of recovering more than 90% of CO_2 in the process using a separator CO_2 capture facility, and to secure the economic feasibility of the overall business model.

1) CCUS (Carbon Capture Utilization and Storage) is a technology that captures, stores, and converts the carbon dioxide emitted from fuel combustion and industrial processes. It is largely divided into CCS and CCU depending on the carbon dioxide handling method. It is technology that captures and stores the carbon dioxide generated from greenhouse gas emission sources, or directly uses or converts it for utilization, and comprehensively includes recycling the captured carbon dioxide into resources depending on the degree of utilization. The goal of carbon neutrality is not only to minimize the greenhouse gases emitted from human activities but also to reduce actual greenhouse gas emissions to zero by removing those already emitted. In this context, methods like CCUS are essential for achieving carbon neutrality in terms of effectively removing emitted greenhouse gases.



Concept map of fuel cell CCS application

Expansion of Products and Technologies Contributing to Carbon Neutrality

PEM Water Electrolysis System, Launched in the Second-Half of 2023

Demand for hydrogen production system technology is rising in order to enable an expansion of hydrogen refueling stations and the overall hydrogen infrastructure. Doosan Fuel Cell participated in 'H2 MEET 2023,' Korea's largest hydrogen industry exhibition, which took place at KINTEX in Goyang-si, Gyeonggi-do, from September 13 to September 15, 2023. At this event, we introduced our proton exchange membrane (PEM) water electrolysis system. Supported by a national project, Doosan Fuel Cell developed, verified, evaluated, and test-operated a 1MW water electrolysis system based on PEMEC technology. This 1MW water electrolysis system produces hydrogen and oxygen by electrolyzing water using electrical energy. It can generate approximately 430 kg of hydrogen per day, which is enough to fuel about 20 hydrogen buses. Notably, Doosan developed the water electrolysis system independently, the first company in Korea to do so. Beginning in 2024, we plan to verify the system's performance and durability through demonstration operations both domestically and internationally, and promote its commercialization.

PEMEC Doosan Fuel Cell model

Expansion of Eco-friendly Hydrogen Fuel Cell Business Model Using Biogas

Doosan Fuel Cell signed a ‘Basic Agreement to Expand Mid- to Long-term Business and Cooperation Areas’ with Kolon Global in March 2023 to drive hydrogen fuel cell power generation projects using biogas.
Under this agreement, the two companies will cooperate step by step to develop an eco-friendly hydrogen fuel cell business model using biogas. Doosan Fuel Cell will be in charge of supplying hydrogen fuel cells and long-term maintenance (LTSA), while Kolon Global will supply fuel, EPC (design, procurement, construction), and secure piping facilities. In addition, the two companies have agreed to cooperate in the various licensing and technology exchanges necessary for the business.
The concept of this business model is to remove impurities from biogas generated in sewage treatment plants and mix them with natural gas(NG) to use as fuel for hydrogen fuel cells. The electricity generated here will be distributed, and the heat will be used for heating, cooling, and hot water. Doosan Fuel Cell’s Tri-gen products, which can produce hydrogen, electricity, and heat at the same time, will be installed together to ultimately charge hydrogen cars.
Notably, this business model is one that involves local governments, businesses, and the public by employing the biogas generated from sewage treatment plants, traditionally characterized as filthy facilities, as eco-friendly energy.
Through cooperation with local governments and environmental organizations, Doosan Fuel Cell is also promoting a business model that can supply electricity and heat through direct fuel cell generation by removing impurities from pure biogas, such as in food waste treatment plants, livestock manure, and organic waste.

Expansion of Products and Technologies Contributing to Carbon Neutrality

Development and Commercialization of High-Efficiency Hydrogen Models

Doosan Fuel Cell has demonstrated high performance and stability through its ongoing management of the world's first and largest hydrogen fuel cell power plant currently in commercial operation. Our fuel cells stand out as a flexible power source, capable of responding instantaneously to consumer load changes, and providing rapid system restoration during external power outages. The versatility in fuel usage, including hydrogen, natural gas, and LPG, allows for adaptability based on consumer needs and the business situation. Notably, fuel cells that directly use hydrogen are eco-friendly, emitting no carbon dioxide due to no fuel reforming reactions. They can work as distributed power generation near consumers, with high energy conversion efficiency and compact installation requirements.

Doosan Fuel Cell's hydrogen models are recognized for their world-class performance. In particular, our high-efficiency hydrogen model, developed in the second half of 2021, is set for commercialization in 2024. This model, which increases the output to 550kW by integrating the cell stack assembly (CSA) into the existing 440kW platform, improves the output of each fuel cell while minimizing changes in the existing model's platform. This advancement lowers the LCOE[1)] and increases installation efficiency, allowing for more power generation from the same site.

In September 2023, Doosan Fuel Cell participated in Korea's largest hydrogen industry exhibition at KINTEX in Goyang-si, Gyeonggi-do, where it showcased a variety of applications including next-generation hydrogen charging and utilization solutions. At 'H2 MEET 2023,' the world's premier hydrogen industry exhibition, eight companies were selected and announced by the H2 Innovation Awards, which honor the most groundbreaking technologies in the hydrogen industries. Doosan Fuel Cell's highly efficient hydrogen model 'Hydrogen Fuel Cell-5CSA' won the grand prize in the hydrogen utilization sector.

In line with the global shift towards eco-friendly energy, Doosan Fuel Cell plans to contribute to the realization of carbon neutrality by commercializing the high-efficiency, high-output, direct hydrogen utilization model, which will expand business opportunities in the clean hydrogen market.

1) Levelized Cost of Electricity

Photo of high-efficiency hydrogen model sample

Passing the World's First Environmental Test for Marine SOFC Core Component

Doosan Fuel Cell's SOFC (solid oxide fuel cell) business, a key element in the development of high-efficiency power generation and marine fuel cell technology, is advancing smoothly. Doosan Fuel Cell aims to secure market competitiveness by developing mid- to low-temperature SOFC products with high power efficiency and stable life expectancy.

A crucial component of fuel cells is the cell stack. The cell stack for marine SOFC developed by Doosan Fuel Cell and its subsidiary HyAxiom passed the stringent environmental test standards of the Norwegian Ship Registry (DNV), one of the world's three leading ship registries, in 2024. This accomplishment marks the first instance worldwide in which an SOFC has met the marine environmental test.

Typically, the electrical and electronic equipment on ships must endure extreme testing conditions, including extreme temperature, humidity, vibration, inclination, and electromagnetic waves, which are more severe than actual operational environments. Our product demonstrated outstanding competitiveness, with no reduction in output even under conditions harsher than actual operating conditions.

Doosan Fuel Cell plans to finalize the testing and certification of the remaining components and the overall SOFC within the year and begin full-scale verification after delivering the marine SOFC.

In October 2022, Doosan Fuel Cell signed a main contract for the 'Consortium for Demonstration of Marine Fuel Cells' with Shell, a global leader in the energy and petrochemical fields, HD Korea Shipbuilding & Marine Engineering, an intermediate holding company of HD Hyundai's shipbuilding division, and Hi-Axiom. Companies participating in the consortium will use the 600kW marine SOFC as an auxiliary power unit (APU) to verify the stability and efficiency of marine SOFC by deploying a demonstration vessel on an actual operating route for one year.

In July 2023, the International Maritime Organization (IMO) passed an amendment to achieve a 100% reduction in greenhouse gas emissions by 2050 compared to 2008 levels. Considering the economic feasibility of reducing carbon and fuel, it is expected that Doosan Fuel Cell's marine SOFC, currently in preparation for commercialization, will have competitive power in the market.

Doosan Fuel Cell has signed a technology agreement with Ceres Power (UK) to develop SOFC for power generation. We are building a 50 MW plant in the Saemangeum Industrial Complex, with the aim of reaching mass production. We plan to complete the development and verification of power generation SOFC by 2024 and enter the market in earnest from 2025.

Image cut of marine SOFC

Human Resource Management

Recruitment

Doosan Fuel Cell hires human resources with knowledge and talent based on the Doosan Credo, which stipulates Doosan's management philosophy and business methods. We invest a lot of time and effort into developing a system for fair employment, and follow Doosan's unique procedures to hire talents who are a good fit for Doosan

Document screening	- Initial judgment of the applicant's job understanding and job suitability, such as motivation for application and career details (including DBS* examination) * Doosan BioData Survey: Selection tool to measure whether applicants are Doosan's ideal talents
Personality test (DCAT)	- Doosan's unique diagnostic tool examines overall competency and basic job competency for successful job performance
Practical interview (SI, DISE, job suitability)	- Structured interviews that assess the applicant's overall competence and professional evaluation of the job * SI (Structured Interview): A structured interview to evaluate applicant's competency - Doosan Integrated Simulation Excellence (DISE): Conducts PT and Q&A by analyzing virtual business cases to assess applicant's analytical thinking and problem-solving skills - Job suitability: Identify the ability to actually perform the job after joining the company
Final interview	- Through interviews with the Group's management, talents that meets Doosan's values and culture are evaluated

Doosan People

Doosan Group's ideal talents, 'Doosan People,' are all employees with the ability and will to contribute to the organization and constantly strive to improve their abilities.

Doosan People

CULTIVATING PEOPLE
Cultivate people with a genuine interest

INHWA
Practice Inhwa

LIMITLESS ASPIRATION
Embrace limitless aspiration

OPEN COMMUNICATION
Open communication from top to bottom

TENACITY & DRIVE
Achieve anything with a smart backbone

PERSONALIZATION & FOCUS
Focus on solving important problems

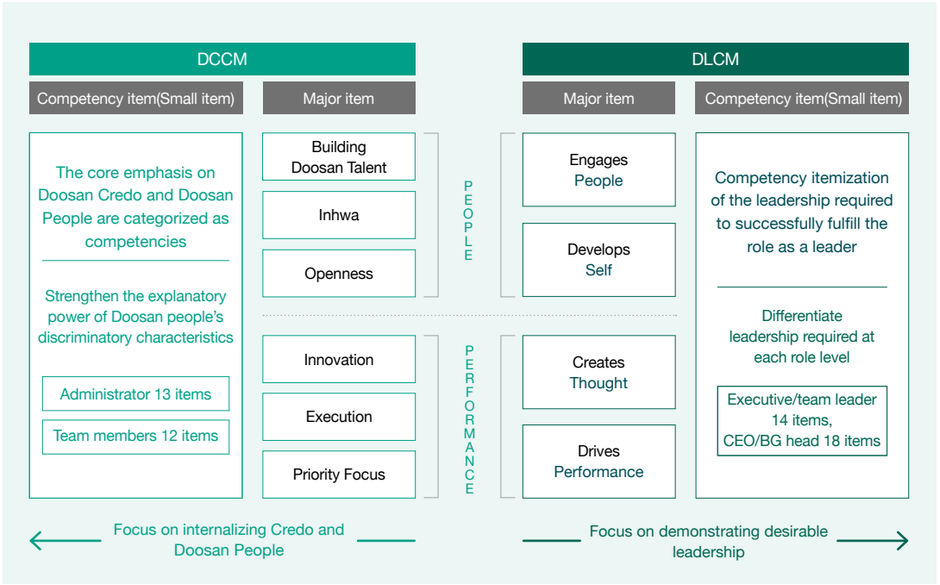
Employment of the Disabled

Doosan Fuel Cell has been hiring disabled athletes since 2022 in connection with the Korea Employment Agency for Persons with Disabilities. As of 2023, the company employs 8 disabled athletes, which are participating in the National Para Games.
Doosan Fuel Cell has provided education each year to all employees to improve their awareness of the disabled, in an effort to create a happy working environment for the able-bodied and the disabled alike.

Human Resource Management

Human Resources Training

Doosan Fuel Cell fosters human resources with leadership and job expertise. Each employee establishes a differentiated development plan according to his or her strengths and competency level, as identified through Doosan Group's competency evaluation model, DCM (Doosan Competency Model), and participates in training accordingly.



Strategic Human Resources Analysis

Doosan Fuel Cell uses a strategic human resources plan that involves calculating the operating scale of company human resources in connection with the management goals and business strategies of the company and each sector based on an analysis of human resources. We identify and review the status of company human resources through our recruitment and employment process, as well as by measuring our job change and resignation rate, and by identifying employees with a high likelihood of job change. Based on this data, we manage our human resources effectively by controlling recruitment for the vacancies arising from new businesses. We will address insufficient competencies for creating new business performance through measuring employee performance, developing a strategic human resources plan, identifying the competency gap of the current human resources, and monitoring our competition. We are planning to hire key human resources in growth areas such as SOFC fuel cells, mobility, and vessels.

Ability and Performance Assessment

Every year, Doosan Fuel Cell assesses the performance and abilities of office workers using specific criteria and factual data, which serves as a foundation for enhancing individual performance and capabilities.

Analysis of ability and performance

We evaluate individual performance and ability across 5 stages and arrange the evaluation results as a matrix to comprehensively analyze ability-performance levels. Once the evaluation is complete, the evaluator and the subject of evaluation have a 1:1 feedback meeting to discuss long-term evaluation results and implications. In addition, the detailed methods and direction are discussed to improve the level of performance. The results of individual evaluations are used to determine promotions, salary increases, and incentives.

Analysis of job capabilities

We developed a set of job-related capabilities, including the knowledge and skills required for each job, to secure competitiveness through training experts. Additionally, we evaluate individuals' job expertise across 5 stages through the job capability analysis. The evaluation results are provided to individuals to reflect in individual training plans.

Leadership analysis

To train proactive and systematic leaders, we assess the leadership level required for senior roles objectively and scientifically using the External Assessment Center for Executives and Team Managers. The purpose of this leadership assessment is to check senior managers' level of leadership performance through verified methods that are widely used by major global and Korean companies. It verifies the leader's capability, attributes, leadership potential, etc. through diagnostic tools such as simulation, interview, tendency test, and multiphasic diagnosis. The results of the leadership analysis are used to select leaders and candidates from the People Session and provide systematic training.

Human Resource Management

Work Engagement of Employees

Doosan Fuel Cell listens to employees' opinions through various channels such as meetings, surveys, CA (Change Agent), and interviews with retired employees to create a better working environment.
In 2023, COO-led meetings were held at each business site, in which the COO provided direct explanations of business and management status, followed by Q&A sessions. We created an opportunity for direct communication between the company and employees by listening to and addressing various opinions and suggestions from the employees.
Doosan Fuel Cell will continue to conduct a regular employee engagement survey to support employees and increase their motivation and engagement.

Creating a Pleasant Working Environment

Doosan Fuel Cell created a lounge combining a business center and a café sequentially at the Seoul Office in 2022 and Gwanggyo R&D Center in 2023, providing a comfortable space for relaxation and open communication among employees. Additionally, we gather employees' opinions on the cafeteria through HR meetings and reflect them in improvements to the menu and operations. Our goal is to create a pleasant working environment that enhances employees' productivity and efficiency.

Gwanggyo R&D Center Business Lounge

Employee Development Program

New Hire Onboarding and Mentoring Program

Doosan Fuel Cell conducts introductory courses from time to time to help new employees and interns understand the organization and acquire basic competencies. Not only do we provide company and product training, but also various programs to help them easily understand site safety, business etiquette, and company systems.
In addition, we operate a mentoring program that matches new employees with senior employees who have experience and work know-how to support them for a period of time to ensure a soft landing for new employees. We actively support mentors and mentees to work intensively for three months according to their own plans, and in 2023, the program played an important role in helping a total of 13 new hires stably adapt to the company.

New Educational Course in 2023

In 2023, we developed and implemented a 'Common Job Course' aimed at enhancing the job capabilities of employees. This course is designed to help employees understand the background and context of their roles, assess impact, and acquire the essential job knowledge necessary for their tasks. It includes 1) Understanding the Fuel Cell Business, 2) Understanding the Fuel Cell System, and 3) Understanding the PAFC Process.
To develop this course, we selected 9 internal workers and assigned them to a faculty training program to enhance their skills in designing, developing, and teaching courses as instructors. Notably, 'Understanding the Fuel Cell System' was created as an online course and uploaded to the exclusive Doosan Fuel Cell education channel, allowing students to access lectures as needed. Since the December kick-off, a total of 15 people have enrolled and completed the program. In 2024, we will further develop SOFC product and process, quality, and cost training to build the foundation for on-the-job training.

Operation of Learning Organization

We foster an autonomous learning culture through field-oriented and informal learning activities and enhance the individual skills of employees as well as overall organizational capabilities.
By participating in learning organization activities, employees address field-specific challenges, share essential knowledge and industry trends required for performing a job, and pursue professional certifications. In addition, we provide support for preparing learning materials or taking lectures by paying the activity fees necessary for learning activities.
For the second learning organization operated in 2023, seven learning organizations were formed and attracted the voluntary participation of 72 employees eager to refine their expertise and job competencies.

Family-friendly Certification

Doosan Fuel Cell is reviewing examples of companies certified as family-friendly, and investigating the minimum requirements it should meet to obtain certification as an excellent family-friendly company. In addition, we conduct self-assessment of family-friendly certification and establish improvement plans for insufficient items to obtain certification as an excellent family-friendly company, and strive for an environment in which employees and their families can be safe and happy.

Human Resource Management

Coexistence of Work and Family

Doosan Fuel Cell offers various forms of support to employees who are nurturing children. We foster an organizational culture in which employees can freely access pregnancy, childbirth, and childcare-related systems. Additionally, when employees return from parental leave, we ensure they are reassigned to their previous positions, supporting a stable transition back to work. Doosan Fuel Cell strictly prohibits any discrimination or imposition of disadvantages against employees for utilizing maternity protection systems.

Maternal Protection Program

Reduction of working hours	- Pregnancy period : Reduction available within 12 weeks or after 36 weeks of pregnancy (within 2 hours a day) - Parenting period : Reduction of working hours available for employees with children under the age of 8 or in the second grade of elementary school or lower (1-5 hours a day)
Provision of prenatal checkup leave	- Up to 28 weeks of pregnancy : Once every 4 weeks - Up to 29-36 weeks of pregnancy : Once every 2 weeks - After 37 weeks of pregnancy : Once a week
Maternity leave	90 days of leave before or after birth (120 days for multiple birth)
Congratulatory money for childbirth	Congratulatory card and gift card of KRW 400,000

Childcare Center

To alleviate the childcare responsibilities of our employees and enable them to concentrate on their work, we offer and support a daycare center (Future Tree Daycare Center) for employees' children aged 1 to 5 years.

Lactation Room

We provide maternal protection by offering a dedicated nursing room at our headquarters. In addition, we created the Women's Lounge within the Gwanggyo R&D center, operating it as a resting and lactating space for pregnant employees.

Flexible Work System

We are creating a flexible working environment and promoting efficient working methods through flex-time work, remote work, and work-from-home systems.

Family Care Leave

Employees can benefit from shortened work hours and up to 90 days of leave per year to spend quality time with their families.

School Expenses

To ease the financial burden of children's education, we provide tuition support for children attending middle school, high school, and college, aiming to lessen educational expenses for our employees.

Children's Day Event

In celebration of Children's Day, we offer various events at Doosan Leadership Institute (DLI) and baseball stadium to provide opportunities for employees to build bonds with their children.

Balancing Work and Life

Vacation and Leave System

We actively encourage employees to take summer and year-end vacations to recharge and maintain work-life balance. Employees are entitled to 5 days of paid summer vacation, and we encourage everyone to use the leave system during the last week of December. Additionally, we support a flexible working environment through the quarter-leave system (2-hour leave).

Housing Support

We offer a housing purchase funding support system to ensure the housing and living security of our employees. We provide partial financing for employees when they buy, sell or rent a home.

Supporting Health Checkup and Medical Expenses

We provide comprehensive health checkups for employees and their spouses, as well as support for medical expenses for executives and employees and their families. In addition, we provide support for employees by signing up for group insurance so that they can focus on their treatment in the event of an accident or illness.

Establishment of a Sound Labor-management Culture

Win-win Labor-Management Relationship

Doosan Fuel Cell has introduced and designed welfare and personnel systems through the Labor-Management Council since its establishment, predating the formation of the union. Following the establishment of the union in October 2019, Doosan Fuel Cell supported initiatives for stabilizing labor-management relations such as time-off, office space provision, and check-off before signing a collective agreement under the union law. The union began a win-win labor-management relationship by understanding the business environment of a company starting a business in a new field of the hydrogen industry.

Conclusion of Non-Negotiation Delegation of Collective Bargaining and Declaration of Labor-Management Coexistence

Following three years of negotiations since the union's establishment, agreements were successfully reached without disputes or strikes based on mutual trust between labor and management. The union delegated non-negotiation delegation to the company in 2022, continuing three consecutive years of non-negotiation delegation through 2024. In addition to consecutive bargaining delegation, we are creating a trusting and win-win labor-management relationship by proactively discussing and resolving pending issues between labor and management in daily labor-management relations through labor-management councils, various meetings, labor-management working-level consultations, and on-site proposals. Doosan Fuel Cell operated a total of four labor-management council meetings in 2023, and 14 submitted agenda items were discussed and handled, providing an opportunity to reflect the opinions of workers in company management.

2023 Declaration of Labor-Management Cooperation

Human Resource Management

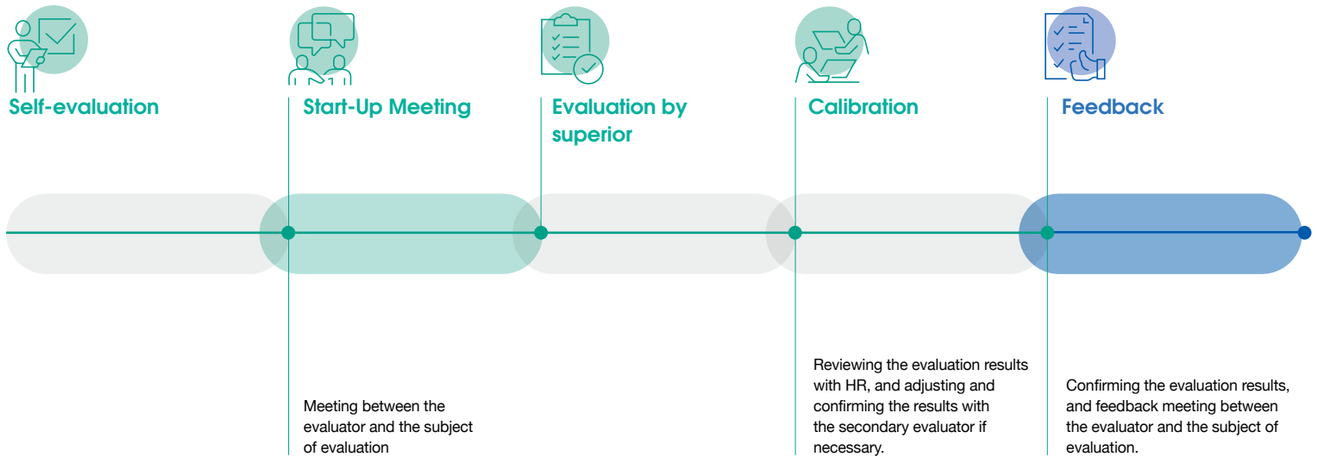
Fair Performance Evaluation and Rewards

Doosan Fuel Cell operates a capability and performance evaluation system to improve employees' performance and capabilities. Capability evaluations are classified into leadership capability evaluations for training global leaders, based on the philosophy of Doosan People, and job capability evaluations for training job experts. We use the evaluations to assess and cultivate employees' level of capability.

When evaluating the personal performance of employees, we assess achievement levels against goals based on the MBO (Management By Objective) method, and share and receive feedback on the progress between the evaluator and the subject of evaluation. To ensure an effective exchange of opinions between the evaluator and the subject of evaluation in the evaluation process, we hold start-up meetings and feedback meetings, and reinforce the fairness of evaluations through discussions between the primary evaluator and secondary evaluator. We encourage employees to improve their performance and capabilities by deciding on promotion, job appointment, salary raise, incentives, etc. based on the results of evaluation.

The long-term incentives provided to employees in positions lower than senior management are paid to the executive officers (1.7% of the total employees) as cash incentives over an average period of 3 years. Incentives of up to 20~40% of the annual salary can be given according to the regulations, and are paid based on the results of evaluating both metric indexes (MBO), including financial performance tasks, and non-metric indexes (qualitative evaluation), including growth, market situation, portfolio improvement, and appropriateness of the design level over the 3-year performance measurement period after 3 years from the given time.

Evaluation Process



Human Rights Management

Guidelines for Preventing Discrimination and Harassment

Prohibition of workplace sexual harassment, bullying, and discrimination	**Prohibition of sexual harassment in the workplace |** Business owners, managers, or members shall not subject other members to sexual harassment by taking advantage of their positions or in the process of performing their jobs. In addition, no unfair action in labor conditions and employment shall be taken as a result of a person not complying with prohibited sexual behavior or other related requests. **Prohibition of workplace bullying |** Doosan Fuel Cell prohibits all acts causing physical and mental distress to other members, or acts that aggravate the working environment, using position or relational superiority beyond the allowable scope of work. Acts of workplace bullying include physical bullying, positional bullying, work-related bullying, verbal bullying, and personal bullying, as well as aggravation of the working environment. **Prohibition of discrimination |** No discriminatory treatment shall be given on account of gender, race, ethnicity, nationality, county, religion, age, political stance, or country of origin.
Measures for handling	**Receipt of report (Doosan Fuel Cell Human Rights Center and Internal and External Report Centers of the Doosan Group) |** Should an employee experience or witness instances of sexual harassment, bullying or discrimination at the workplace, he or she can report such actions. Once the report is received, we will take proper measures, such as initiating an investigation. **Investigation and deliberation of factual grounds (Investigation division) |** We investigate acts of sexual harassment, bullying, or discrimination to find factual grounds while maintaining the confidentiality of the investigator. At this point, we listen to the victim's opinions about the handling method and take proper measures, such as a change of workplace and offering leave, if requested by the victim. **Measures (Human Resources Committee Division) |** If the facts of damage caused by such acts are confirmed, we take disciplinary action or equivalent measures. The employee who reported the act of workplace sexual harassment, bullying or discrimination, or the employee who claims damage, is protected. **Monitoring (Human Rights Center, HR) |** We monitor whether proper measures have been taken and if there are instances of additional harassment. We strive to prevent any disadvantageous treatment of the victim.
Confidentiality	Employees who participate in the investigative process regarding sexual harassment, bullying, or discrimination at the workplace shall not disclose any secrets discovered during the investigation.
Measures to prevent recurrence	The company may ask the offender to take counseling or education to prevent the recurrence of workplace sexual harassment, bullying, or discriminatory actions.
Prevention education	The company conducts education to prevent workplace sexual harassment, bullying, and discrimination more than once a year.In addition, we take preventive measures by conducting additional education for prevention or publishing and distributing relevant materials.
Roles and responsibilities	**Business owners |** Business owners shall strive to eradicate workplace sexual harassment, bullying, and discrimination by taking necessary measures to prevent such acts, protect the victim, and handle the case. **Managers |** The manager shall not handle the case in an arbitrary manner when he or she receives a report of the occurrence of workplace sexual harassment, bullying, or discrimination. The manager shall not take arbitrary measures against the victim's will, expose the victim to secondary damage, or blame the victim. The manager shall respect the victim's intent to take measures for handling the case. The manager shall cooperate with the handling process and measures taken by the responsible division, and work hard to protect the victim and prevent any recurrence. **Members |** Anyone who discovers an act of workplace sexual harassment or bullying shall advise the victim to report the matter. The reporter, offender, and other members shall not impose measures for handling the case against the victim's will, disclose the identity of the persons involved in the case or related facts, or spread false information. The member shall cooperate with the handling of the case and avoid blaming the victim.
Division in charge	Management Support Headquarters HR Team
Communication channel (Platform)	**Internal Report Center |** Banner and email report via Group Portal (compliance@doosan.com) **Human Rights Center |** Report to email of human rights personnel (humanright_dfc@doosan.com) **External Report Center |** stopit@humanlabor.com ※ For internal inquiries and consultations regarding workplace sexual harassment other than through the External Report Center, please contact via stopit@doosan.com.

Human Rights Management

Human Rights Policy

Doosan Fuel Cell respects the human rights of all stakeholders involved in its business operations in addition to our employees to encompass all stakeholders involved in our business operations. We advocate for the same standard of human rights management among our third-party partners and suppliers. We request our suppliers and major business partners uphold obligations regarding human rights protection and monitor their compliance status. Aligned with the CEO's endorsement of the 10 principles of the Global Compact covering human rights, labor, environment, and anti-corruption, Doosan Fuel Cell has implemented and operates human rights management practices and a due diligence system based on internationally recognized human rights principles, such as ‘Universal Declaration of Human Rights’ ‘UN Guiding Principles on Business and Human Rights; Ruggie Framework.’

Guaranteeing non-discrimination in employment and freedom of association and collective bargaining	We do not engage in any unfair discrimination in employment on the grounds of gender, religion, disability, age, social status, or region of origin, and we embrace diversity. In addition, we recognize workers' freedom of association and collective bargaining, ensuring no disadvantages are imposed based on labor union activities.
Prohibition of forced labor and child labor	We do not tolerate any form of forced labor in our business activities and adhere to the minimum employment age set by the countries in which we do business. We are committed to preventing exploitative labor practices harmful to human dignity, taking immediate action to rectify any employment of underage individuals.
Assuring industrial safety and responsible supply chain management	We maintain a safe working environment, complying with all relevant environmental, health, and safety laws and standards for workplace. We also implement safety and health measures for pregnant women, the disabled, and other vulnerable workers. In addition, we establish and continuously review supply chain ESG risk management policies and guidelines, supporting and cooperating with all business partners to practice human rights management. We will cease business with supply chains that fail to address serious human rights violations.
Protection of human and environmental rights of local residents	We respect the rights of local residents, including their right to life, freedom of residential mobility, personal safety, and property ownership. In addition, we will adhere to preventive principles regarding environmental issues and implement plans to prevent, mitigate, and control significant environmental damage and disasters.
Protection of customer human rights	We take all necessary precautions in accordance with legal standards when designing, manufacturing, and labeling products to prevent damage to the life, health, and safety of customers due to product defects. In the event of such damage, we will promptly notify customers of the risks and recall the affected products. We will also respect customer privacy and implement measures to secure personal information collected by the company.

Human Rights Education

Doosan Fuel Cell conducts human rights education for all employees more than once a year to establish a culture of respect for the human rights of its members and increase awareness regarding human rights management. Human rights education includes modules related to the prevention of sexual harassment, workplace bullying, and education to improve disability awareness. In 2023, 98% of employees completed the education related to human rights. We also plan to minimize human rights risks by providing education to team leaders and above on the leader's role and attitude to spread a culture of respect for human rights, as well as specific cases that may be. interpreted as human rights violations.

Human Rights Issue Report Channel

Doosan Fuel Cell operates the Whistle Blowing Center on its website to enable all stakeholders, including employees, to report any violation of human rights or other unethical actions. The reporting can be made in secret according to the principle of confidentiality. Details of reports are strictly protected, and reports are handled quickly and fairly in accordance with internal procedures. When there are human rights issues involving employees, the victim or witness can report the matter through the Internal Report Center, the Workplace Bullying and Sexual Harassment Prevention Center, or the Human Rights Center.

Internal Report Center
Workplace Bullying and Sexual Harassment Prevention Center
Human Rights Center
External Report Center | stopit@humanlabor.com Internal Report Center | Banner and email report via Group Portal (compliance@doosan.com) Human Rights Center | Report by emailing human rights personnel (humanright_dfc@doosan.com) *Internal inquiries and consultations regarding workplace sexual harassment other than through the External Report Center | stopit@doosan.coim

Process for Handling Human Rights Grievances

Doosan Fuel Cell operates a grievance handling system and relief system to help employees who have had a negative experience affecting their human rights. All processes comply with the three principles of grievance handling, including the protection of anonymity, prevention of disadvantages, and feedback.

Reception	When a human rights-related complaint is recognized, the case is promptly registered, and the reporter (victim) is notified of the preparations for initiating an investigation.
Consultation	The head of the Human Rights Center and the human rights manager of the HR/ER team conduct a consultation to decide on the direction of handling the case.
Investigation (Fact checking)	- If the victim wishes to conduct a company-level investigation, an investigation committee will be formed and will begin preparations in advance. - The investigation committee collects facts about the damage, victim's requests, and evidence, and then reports to the CEO. - The investigation report includes the committee's opinions on the facts, a determination of whether bullying/sexual harassment is applicable, and the recommended level of disciplinary action against the offender. - Inform both the reporter and respondent of the investigation results, and if necessary, inform them of the human resource committee schedule.
Deliberation and measures	Determine measures according to the direction of case processing requested by the victim.
Monitoring	Regularly interview and monitor the victims to prevent recurrence of the issue.

Number of reports on human rights-related grievances in 2023

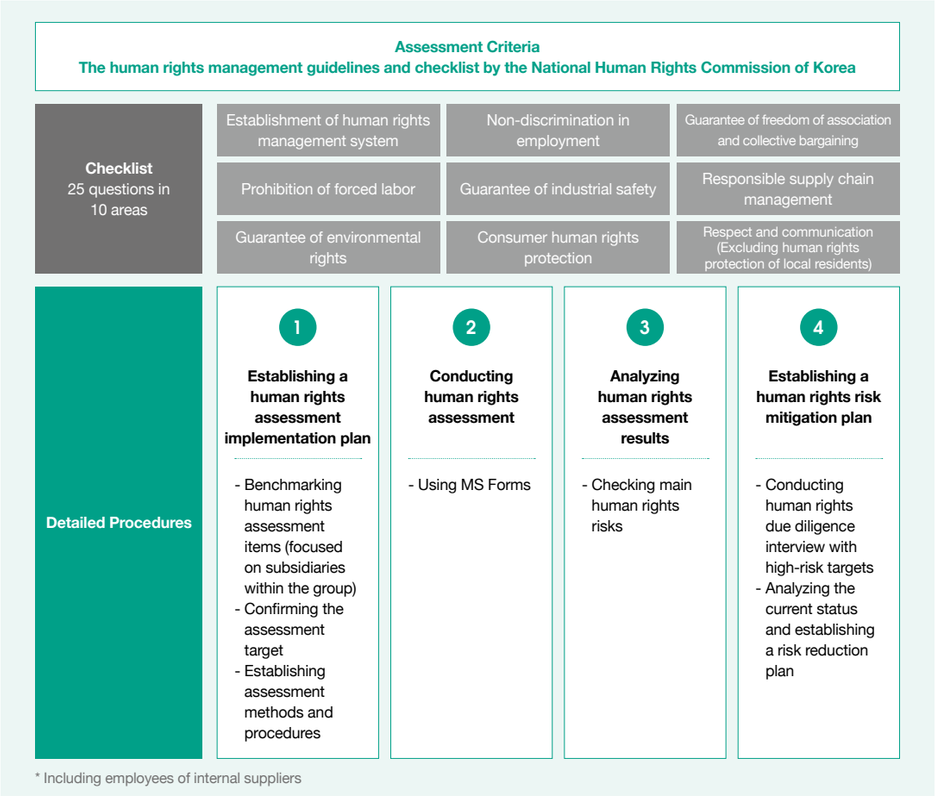
0 cases

Human Rights Management

Human Rights Impacts Assessment

Doosan Fuel Cell conducts human rights impact assessments and human rights due diligence to identify negative impacts and areas of vulnerability related to human rights issues. 75% of all employees participated in the human rights impact assessment conducted in 2022. Although no significant human rights issues emerged, it was found that the positive recognition rate regarding the establishment of a human rights management system, guaranteeing environmental rights, respect, and communication was relatively low. Accordingly, we selected this area for improvement. For areas with low positive recognition rates, we reviewed if there are potential risks of human rights violations and prepared mid- to long-term solutions through collaboration between responsible departments. We regularly conduct human rights impact assessments, and we conducted one in 2024 according to the human rights impact assessment process (see the figure below). Mitigation measures for identified risk factors will take place in the second half of the year.

Human Rights Impacts Assessment Process*



* Including employees of internal suppliers

Human Rights Risks Mitigation Plan

Respect for Human Rights

Doosan Fuel Cell respects the human rights of all stakeholders, including employees and suppliers, based on our human rights policy declared in 2021. We do not accept improper language or behavior, such as verbal abuse, violence, or sexual harassment, that violate the Inhwa philosophy internally or with suppliers. Any related issue can be reported through the Human Rights Center helpline or the Internal Report Center. When there is a human rights violation, we take prompt measures according to the handling process and manuals. We conduct ongoing education to prevent recurrence of violations and enhance human rights awareness among business owners, managers, and members.

Mitigation of Human Rights Risks

Doosan Fuel Cell has established and operates a Human Rights Center to raise employees' awareness of respect for human rights, and annually conducts training to prevent sexual harassment, improve awareness of the disabled, and prevent workplace bullying. In September 2021, we established a human rights policy declaration in compliance with the government guide, which was agreed upon by labor and management and declared internally and externally. In March 2022, we conducted a human rights assessment consisting of 25 questions in 10 areas based on the National Human Rights Commission's human rights management checklist. We consequently conducted focus group interviews with employees about human rights due diligence to review major human rights risks identified through human rights assessment and establish a mitigation plan. Based on human rights assessment and due diligence, we identified the level of awareness and potential risks of our members prior to issue occurrence and established a preemptive preventive action plan and human rights risk mitigation plan for all business sites. We have established a mitigation plan and remedial action plan for the sub-areas of human rights assessment results as below. We will select this as a company-wide ESG strategic task, monitor progress, and strengthen human rights management by discovering additional management items annually.

First, we will re-educate them on our human rights policies, regulations, and reporting channels to ensure that all employees are aware of the grievance handling process by identifying the publication of our internal human rights management process as a strategic priority.	Second, to improve leaders' awareness of human rights, we plan to provide separate offline human rights education for those in charge, in addition to legal education. In addition, we will regularly send human rights management letters containing bullying precedents in the workplace and revisions to related laws to recognize the importance of human rights awareness in daily life.

First-half of 2024	Conduct human rights impact assessment
Second-half of 2024	Conduct a customer satisfaction survey
2025	Implement human rights impact assessment mitigation measures
2026	Implement effectiveness assessment of human rights impact assessment mitigation measures

Safety and Health

Health and Safety Management Goals

Achieving a zero-accident workplace	EHS Leadership	Risk Management	Discovering and addressing potential threats at workplace
'Zero' occupational accidents	100% implementation compared to each headquarters' plan	Achieving over 95% of annual implementation target	Achieving over 95% of annual implementation target

Direction of Safety and Health Management

- Compliance with laws and regulations and prevention of serious accidents by strengthening the safety and health management system
- Expressing intention of achieving health and safety-oriented operations and enhancing safety awareness for employees through leadership actions such as safety and health inspections and meetings organized by management
- Preventing serious industrial accidents and establishing an autonomous safety and health system through the operation of PSM(Process Safety Management) at the workplace
- Establishing safety and health regulations, preventing accidents by complying with principles, and operating an effective risk assessment system by strengthening the risk assessment capabilities of related parties
- Operating risk management through actively discovering and addressing potential risk factors for safety and health
- Systematically establishing and operating safety and health management processes for suppliers to improve the management level of the workplace and realize shared growth in safety and health

Safety and Health Policy

Doosan Fuel Cell recognizes that a safe and clean environment is a responsibility and core value for all of us, our families, and society. To uphold this commitment, we have established a safety and health management system (ISO 45001) and are setting and executing detailed implementation goals for each department in line with the safety and health management policy. Additionally, we ensure that all employees work in a safe environment by complying with relevant laws such as the Serious Accident Punishment Act and the Occupational Safety and Health Act. We will continue to operate a safe workplace and adhere to global standards.

01 Based on the ideology of respect for human beings, the life and health of all people who work together are considered the top priority, and all employees actively practice safety and health activities in an exemplary manner.

02 Establish a safety and health management system, improve the management level of the system, and actively comply with relevant laws and regulations.

03 With the participation of all employees, fundamentally prevent safety accidents by effectively identifying and addressing possible risk factors.

04 Raise safety awareness and improve risk management skills through regular safety and health education and emergency response activities for employees of our company and suppliers.

05 Secure the safest working environment and facility operation capabilities through continuous investment and development in safety and health.

06 Practice open communication horizontally and vertically with stakeholders based on honesty and transparency, and fulfill our social responsibility to the community.

April 3, 2023 Doosan Fuel Cell., Ltd., CSHO **Joonyoung Park**

Safety and Health Management System

As a leading eco-friendly hydrogen fuel cell company, Doosan Fuel Cell acquired international certification for the safety management system (ISO 45001) to establish a robust safety and health system at our workplace, and completed a post-examination in 2023. Additionally, we operate our safety and health management system based on DSRS (Doosan EHS Rating System), a quantitative EHS performance tool developed by Doosan Group, continuously upgrading our management level through annual evaluations.

Health and Safety Education Performance

Doosan Fuel Cell conducts regular safety and health education on various topics to raise safety and health awareness among all workers and spread a culture of safety. In addition, to respond quickly in the event of an emergency and minimize human and material damage in the event of an accident, education and training based on emergency scenarios are conducted more than once a year.

Training title	Training target	Training period	Number of trainees
Regular Safety and Health Education	R&D, service, technical jobs	Quarterly	297
New Employee Training	New employees	On recruitment	19
Managing Supervisor Training	Managing supervisor	16 hours/year	65
Job Training	Safety and health management officer	6 hours/2 years	2
	Safety and health manager	24 hours/2 years	1
PSM Training	PSM process worker	2 hours/year	99
Special Safety Education	Service, technical jobs	On recruitment	8
CPR Training	Service	2 hours/2 years	125

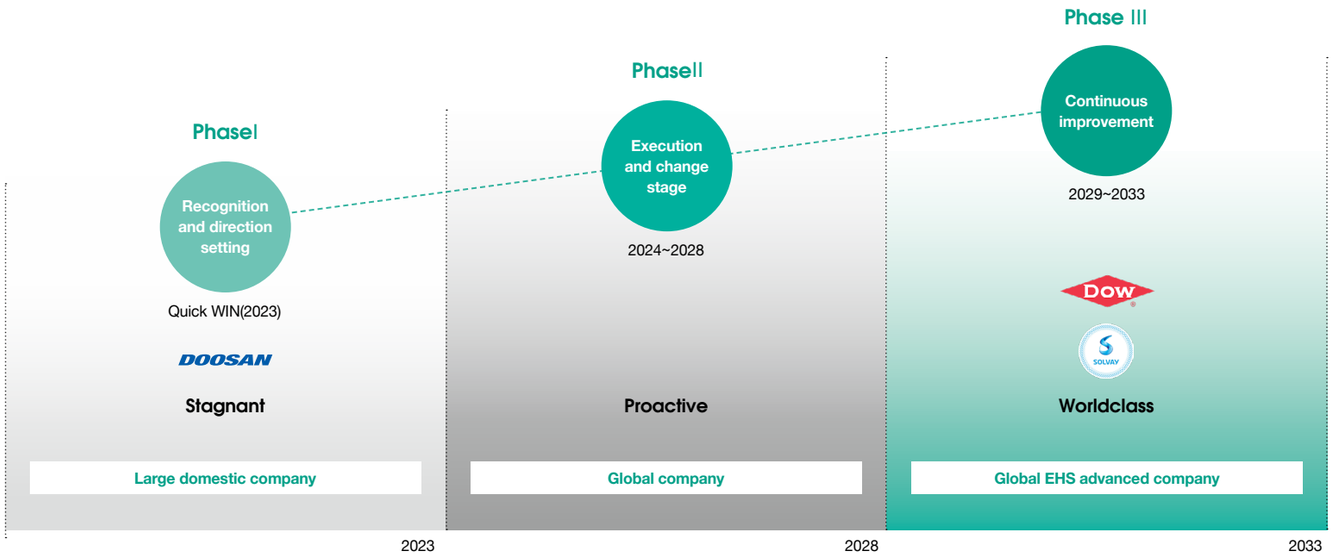
Establishment of Mid- to Long-Term Roadmap for Safety and Health Management

Doosan Fuel Cell puts safety and health first, and strives to ensure the safety both of our employees and of the communities in which we operate. Doosan Fuel Cell has set a Key Performance Index(K-PI) based on the mid- to long-term roadmap to safety and health, and has established detailed safety and health implementation plans for each year to effectively achieve its goals through monitoring and promote the continuous improvement of safety and health.

Starting in 2024, as Phase 2 of safety and health, we plan to strengthen the execution of leading EHS activities in each department, and carry out activities to strengthen the EHS capabilities and management of our internal and external partners.

Ultimately, to build a proactive safety and health implementation culture in which employees value safety and actively implement safe work practices, we will strive to practice advanced safety and health management by establishing step-by-step detailed goals and continuously improving from a mid- to long-term perspective.

Step-by-Step Roadmap to Safety and Health



KPI	**Employee safety accidents and occupational diseases “Zero” DSRS quantitative assessment level 65%⇧**	**Employee safety accidents and occupational diseases “Zero” DSRS quantitative assessment level 75%⇧**	**Employee safety accidents and occupational diseases “Zero” DSRS quantitative assessment level 85%⇧**
Implementation plan	**Quick WIN**	**Mid-term Initiatives**	**Long-term Initiatives**
	EHS mind improvement, prioritization task resolution	**Establishment of an EHS implementation culture focused on the site**	**Advancement/proactive EHS activities**
	• Strengthening the execution of EHS leadership activities • EHS Staff / on-site EHS capacity enhancement • EHS communication program activation • Early establishment of ISO 45001 safety and health management system • Strengthening safety management of SOFC large construction sites	• Reestablishing EHS R&R and strengthening the execution of site-led EHS activities • Expansion of EHS evaluation and compensation system(Including penalties) • Increasing and internalizing ISO 45001/ DSRS operational level • Strengthening EHS capabilities and management of internal and external suppliers • Enabling worker health care programs	• Introduction and activation of behavioral observation techniques • EHS IT System execution/securing efficiency (Advancement) • Introduction of Visual Safety • Strengthening SMART EHS(Applying advanced safety technologies such as AI) • Establishment of criteria for evaluating financial effects of EHS activities • Internalizing team-led EHS practice

Safety and Health

Safety and Health Management Activities

Doosan Fuel Cell holds the safety and health of its employees and the workers of its partners as its top priority, and manages all its activities based on a respect for humanity. We operate a range of procedures and systems such as assessment, inspection, and emergency response systems to eliminate and minimize risks related to EHS, and continue to strengthen independent implementation of safety activities among our executives and leaders. In terms of specific activities, we post EHS information on the internal bulletin board each month to provide safety-related information to our members, and the Chief Safety Health Officer (CSHO) of EHS sends letters to all employees to raise safety awareness.

Establishment of a Safety and Health Organization and Goals
Doosan Fuel Cell sets and fulfills the safety and health goals of the company and its workplaces based on its EHS policy. To prevent safety accidents and effectively achieve the safety and health goals of the organization, we have installed and continue to operate a safety and health division. We also appoint management supervisors and safety and health managers for each site to ensure effective operations.

Compliance with Safety and Health Principles and Prevention of Accidents
Based on our policy on safety, healthy, and the environment, Doosan Fuel Cell establishes and actively follows specific regulations and guidelines to prevent EHS accidents. Workers who perform the actual work directly participate in the risk assessment to more effectively identify a project's risk factors. All relevant employees, including suppliers, receive thorough training and inspection on the safe work procedures determined through the risk assessment to prevent accidents.

Management of Potential Safety and Health Risks
All employees of Doosan Fuel Cell actively strive to identify and address potential EHS risk factors in the field, and a regular reward system is applied to increase engagement and implementation capabilities among employees. Notably, we ensure site stability by systematically managing near-miss cases in which an accident occurred but no human or material damage was caused.

Safety and Health Leadership Activities
Doosan Fuel Cell's management has demonstrated a strong will to ensure safety and health, and performs safety and health activities based on initiative and an exemplary attitude. In addition, we take responsibility and authority for EHS promotion activities, such as through the direct participation of workers in the committee, an EHS consultative body, on the operation of the workplace's safety and health management system and compliance with laws and regulations. We encourage our employees to engage independently in safety activities and effectively raise the level of awareness to contribute to preventing workplace safety accidents and supporting sustainable growth.

Promotion of Employee Health
Doosan Fuel Cell carries out regular and systematic medical checkups to promote employees' health and prevent occupational diseases. For employees with diagnosed medical conditions, we provide continuous health counseling and follow-up management. We make active efforts to support employees' health through various health improvement activities. Additionally, we are making efforts to help employees manage their health by conducting a campaign to prevent the four major "lifestyle habit" addictions (alcohol, smartphones, drugs, and gambling), and also organized a physical fitness assessment event for all employees in 2023.

Response to Emergencies
Doosan Fuel Cell has prepared a rapid emergency response system to protect the lives and assets of employees, suppliers, and residents of the neighborhood. To minimize damage from accidents that may occur from process errors or natural disasters, we establish response and evacuation procedures for training and maintain a close response relationship with our stakeholders.

Safety and Health Management for Customer Service
Doosan Fuel Cell establishes and operates an autonomous safety and health management system for fuel cell operation service sites, and fulfills its promised safety and health obligations to customers by identifying and addressing potential risks during maintenance activities.

Safety Management of Outsourced Projects and Establishment of Cooperative Relationships
Doosan Fuel Cell enacts management regulations to prevent accidents occurring at workplaces related to outsourced projects, and has established a systematic safety management process for internal construction and maintenance service sites to prevent safety-related accidents. In addition, we operate a regular consultative group with suppliers to communicate and resolve necessary issues.

CSR

Social Contribution System and Direction

Doosan Fuel Cell carries out strategic CSR activities in line with the group's common goal of 'Proud Global Doosan.' We support the development of local communities to enhance our future competitiveness and corporate value, and encourage sustainable growth and social integration in various fields such as education, culture, sports, and the environment to contribute to social and economic activities.

Mission	**Enhancing future competitiveness and corporate values through strategic CSR activities**		
Key strategies	**Growth of people**	**Contribution to the community**	**Utilizing Possessing Capabilities**
Direction	**Supporting talent training and the creation of jobs** ❶ Train hydrogen energy human resources ❷ Develop education and provide opportunities for participation ❸ Facilitate the disabled to strengthen self-reliance and pursue growth	**Supporting underprivileged classes and contributing to the community** ❶ Find solutions to social issues by supporting underprivileged groups ❷ Participate in and contribute to the community	**Leveraging technologies and capabilities in the company's possession** ❶ Understand the hydrogen energy industry and products, provide training in engineering technologies ❷ Use employees' talents
SDGs	4 QUALITY EDUCATION, 10 REDUCED INEQUALITIES	1 NO POVERTY, 15 LIFE ON LAND, 11 SUSTAINABLE CITIES AND COMMUNITIES	4 QUALITY EDUCATION, 8 DECENT WORK AND ECONOMIC GROWTH, 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
Enabler	**CSR promotion system and employee commitment**		
Business KPI	Contribute to cultivating human resources of future generations by providing training and education on hydrogen energy, targeting students of middle and high schools	Support underprivileged groups and reinforce communication with the community through activities associated with the green business	Enhance the company's image and expertise by contributing to the establishment of an industryacademy-institute cooperation system for cultivating and supporting the hydrogen industry
Social KPI	Forming sports teams comprised of people with disabilities	Conduct activities to recover the ecosystem, working with the communities surrounding the main customers	Transfer knowhow on hydrogen fuel cell principles and technology by utilizing capabilities
Program	• Hiring and employing disabled athletes • H2Dream hydrogen energy career finding class (high school students) • H2Dream Doosan Fuel Cell visit program (university students)	• Iksan Dairoum Meal Car donation and regular volunteer activities • Green Walking challenge & urban forest creation • Energy efficiency support project for child welfare facilities • Idle OA donation project • Coffee waste recycling	• Industry-academic-research cooperation project • Attending fuel cell-related conferences and sharing cases

Mid and Long-term CSR Implementation Plan

Doosan Fuel Cell carries out CSR activities to achieve the company vision of 'Leading global CSR.'

Phase 1

Establish a CSR promotion system (2022~2023)
Create various conditions for CSR activities

Developing and running CSR programs
- Energy efficiency support project for child welfare facilities, and supporting the replacement of old boilers/gas stoves in 85 group homes
- Carried out idle OA donation and donated 103 equipment
- Recruited eight disabled athletes (2022)
- Developed eco-friendly CSR activity 'Green Walking Challenge & Urban Forest Creation' activities, with 1,187 employees participating
- Developed the hydrogen talent training class 'H2Dream,' with 85 people participating (2023)
- Coffee waste recycling (2023)
- Iksan Dairoum Free Meal Car, community volunteer (2023)

Expanding participation of employees
- Promoting programs and ensuring convenience of volunteers (2022)
- Rewarding outstanding participants (2023)

Establishing a CSR operation system
- Suggesting the direction of CSR strategies and activities (2022)
- Selecting specialized organizations/persons and establishing roles (2022)
- Establishing the system and operation processes (2022)

Phase 2

Reinforce CSR promotion capabilities (2023~2025)
Reinforce implementation and operational capabilities for CSR activities

Invigorating strategic CSR programs
- Expanding Green Walking Challenge & Urban Forest Creation to twice a year
- H2Dream, signing MOU with Incheon City - Incheon City Office of Education - Korea Western Power and expanding and regularizing the project

Communicating and cooperating with stakeholders
- Reinforcing cooperation with local universities near the Iksan Headquarters, regularizing the visit program

Expanding the CSR operational system
- Developing and operating a performance measurement model
- Reinforcing the operational system through core capabilities

Phase 3

Enhance the CSR promotion system (2026~2027)
Establish a strategic CSR system and create positive outcomes

Expanding strategic CSR programs
- Developing new programs and upgrading existing programs (linking to the SDGs, reflecting trends)
- Finding ways to solve social issues

Internalizing CSR activities
- Establishing a platform for the voluntary participation of employees
- Establishing infrastructures to stimulate engagement of the community and suppliers

Establishing a CSR operation system
- Measuring, analyzing, and disclosing data on the programs' performance
- Establishing a program monitoring system
- Associating creation and expansion of social values

CSR Activities

‘Human Growth’ CSR Activities

Employment of Disabled Athletes

After signing an agreement with the Jeonbuk branch of the Korea Employment Agency for Persons with Disabilities and the Jeonbuk Sports Council, Doosan Fuel Cell and hired five severely disabled athletes and three mildly disabled athletes, while supporting their training and competition activities. According to the business agreement, the Jeonbuk Sports Council recommended excellent disabled athletes in the province and supported their participation in various competitions, and the Jeonbuk branch of the Korea Employment Agency for Persons with Disabilities helped disabled athletes adapt to the company through pre-education. To help athletes focus only on their training in a stable environment, Doosan Fuel Cell directly employs disabled athletes and provides salaries and various welfare benefits. Doosan Fuel Cell, headquartered in Iksan, Jeollabuk-do, expects the employment of disabled athletes to create employment and support self-reliance for the vulnerable in the community while improving the performance of excellent athletes and preventing them from leaving for other regions. Doosan Fuel Cell will strive to consistently maintain a rate of 3.1% employees with disabilities within its workforce to ensure diversity among employees and support the societal advancement of vulnerable groups.

Chung-Ang University Donation

The Doosan Group has been donating funds for the development of Chung-Ang University since 2008. Donated funds are used to cover educational and facility expenses incurred by Chung-Ang University and as a financial resource to foster talented human resources demanded by society. We donated KRW 1 billion, KRW 1.5 billion, KRW 1.5 billion, KRW 1 billion in 2021, 2022, 2023, and 2024, respectively.

H2Dream Hydrogen Energy Human Resources Training

Doosan Fuel Cell, a specialized fuel cell company, launched a hydrogen energy human resources training program in 2023 to foster future talents. To help students become future hydrogen energy experts, we give high school and college students interested in hydrogen energy the chance to gain an in-depth understanding of the hydrogen industry and fuel cell products by touring the power plants and factories where our products are installed, exploring potential career paths, and gaining insights into jobs in the field. In April 2024, we signed an MOU with Incheon Metropolitan City, Incheon Metropolitan City Office Of Education, and Korea Western Power to foster hydrogen talent, and are expanding our work in this area.

H2Dream

H2Dream Visit

‘Contribution to the Community’ CSR Activities

‘Dairoum Free Meal Car’, a sponsorship and regular volunteer program in Iksan

Doosan Fuel Cell, which has its headquarters and factories in Iksan, Jeollabuk-do, is supporting the operation of the Dairoum Free Meal Car in Iksan to improve community welfare. The 'Dairoum Free Meal Car' is a vehicle that provides free meals to food-insecure people in low-income areas with low accessibility. In March 2023, Doosan Fuel Cell signed a sponsorship agreement with Iksan City to donate KRW 6 million in operating expenses, and employees participate as regular volunteers on the third Wednesday of every month to help distribute food. To encourage volunteer activities and motivate participating employees, Doosan Fuel Cell selects outstanding volunteers and volunteer teams and implements an award system to recognize their contributions.

Photos of Volunteer Activities

Green Walking Challenge & Urban Forest Creation

Doosan Fuel Cell, a provider of safe and sustainable energy solutions, is running campaigns to encourage employees to walk and plant urban forests in order to produce eco-friendly goods and technology, practice carbon neutrality in everyday life, and preserve a healthy ecosystem. Every spring and fall, the mobile walking application counts the number of steps taken by employees, suppliers, and family participants, and converts them into donations, giving up to KRW 10 million to environmental organizations. This donation will be used for urban forest creation activities involving employees to enable them experience the importance of forests and contribute to carbon neutrality. The Green Walking Challenge had 741 participants between October 2022 and April 2023, and the number of extra steps completed throughout the challenge has a carbon offset similar to the amount of carbon absorbed by 164 30-year-old pine trees in a year. The Green Walking Challenge held in October 2023 involved 353 participants and recorded a total of 35.69 million steps, contributing to a 475 kg reduction of carbon emissions, which is equivalent to the amount of carbon absorbed by 72 30-year-old pine trees in a year. Meanwhile, with donations raised by collecting the number of steps, 25 employees participated in the Anyeongcheon Stream tree planting activity in October 2022, and in April 2023, 30 employees took the lead in creating urban forests and preserving biodiversity by planting hydrophilic shrubs in Salgoji Park near Jungnangcheon Stream. In October 2023, about 3,000 shrubs, including zelkova trees, evergreen azalea, and evergreen spindle trees, were planted in Yucheon Ecological Wetland Park in Iksan-si. About 50 people, including Doosan Fuel Cell employees and local residents, participated in the tree-planting event held with the Green Iksan Conservation Movement Headquarters, which is expected to contribute to the natural purification of rivers and the protection of the ecosystem.

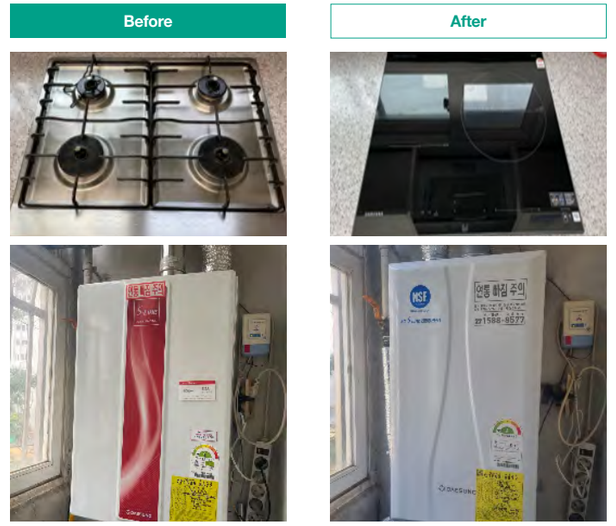
Creating Salgoji Park Urban Forest in Jungnangcheon Stream

Preservation activity for Yucheon Ecological Wetland Park in Iksan-si

Energy Efficiency Support Project for Children's Welfare Facilities

Doosan Fuel Cell delivered the donations gathered by employee volunteers to the Korea Council of Group Home for Children & Youth for Energy Efficiency Improvement through a project titled Fruit of Love. This project aims to replace deteriorated boilers, gas stoves, etc. at social welfare organizations with safe, eco-friendly products to improve the environment, reduce GHGs, prevent safety accidents, and enhance the living environment. We supported the improvement of facilities in 40 group homes in 2022, 50 in 2023, and 45 in 2024.

Before and After Improvement

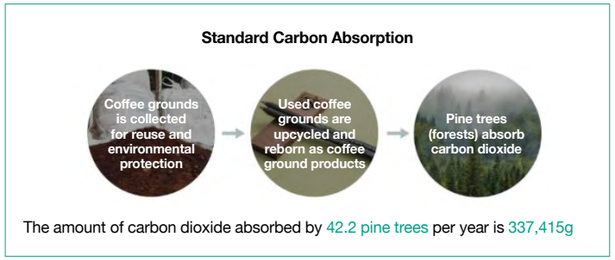


OA Donation

Doosan Fuel Cell donates unused OA assets to the 'Love PC Sharing Project' run by the Korean Information Office for the Disabled. We donated 91 devices including laptops and monitors in 2023 and 103 devices in 2024. Additionally, recyclable devices from the donated OA assets are used in information technology education for children and youth with disabilities. Unusable OA assets were disposed of and used for the business of the Korea Association for Child Welfare and expenses for child support.

Coffee Waste Recycling

Coffee waste (coffee grounds) is domestic waste that was previously disposed of by coffee machines used for staff wellness in the office. Doosan Fuel Cell began to take the lead in revitalizing resource circulation and reducing carbon generated during waste disposal by regularly delivering coffee grounds to 'Coffee Cube', a company specializing in recycling coffee grounds, in 2022. The recycled coffee grounds are transformed into useful items such as pencils, cups, and clay. In 2023 alone, Doosan Fuel Cell delivered 998 kg of recycled coffee grounds to Coffee Cube, which saved 337 kg of CO_2. This is equivalent to the amount of CO_2 absorbed by 42.2 pine trees in one year. Additionally, Doosan Fuel Cell regularly purchases the products made by Coffee Cube to help create a stable virtuous cycle of collection, production, and sales.



'Utilizing Possessing Capabilities' CSR Activities

Industry-Academic-Research Cooperation

Doosan Fuel Cell, a hydrogen corporation, actively promotes the hydrogen energy industry, which is being promoted as a means of achieving carbon neutrality and reducing climate change. To this end, Doosan Fuel Cell is developing and operating educational programs, or conducting joint research by participating in curricula related to green hydrogen production, hydrogen mobility, and fuel cells at major universities in Korea. In 2023, 'Jungang University's Human Resources Development Industry-Academic Research Project' is underway as a new industry-academic cooperation project. To build a convergence energy infrastructure linking hydrogen fuel cells and electric vehicle charging facilities and systematically train related R&D personnel, we are participating in the project to establish an EV smart charging platform innovation research center together with an industry-academic cooperation group and major external organizations and companies.

Doosan·ChungAng University Joint-AI Research

Participation of Employees in Funding

Employees of Doosan Fuel Cell voluntarily participate in monthly donation programs. The company matches the amount donated by employees to raise a fund to conduct CSR activities. Thanks to the enthusiastic participation of employees, we had a 49% participation rate as of the end of 2023, compared to 43% in 2022. Annual donations are spent on projects to improve energy efficiency and help socially vulnerable neighbors.

Impact on the Local Community

Negative Impact on the Local Community

Fuel cells can be installed and operated close to the city center as a representative distributed power source, which reduces the cost of building large-scale transmission networks and minimizes power loss during transmission. However, we recognize that all products have potential negative aspects that can affect society, and we strive to eliminate or reduce negative effects on local communities and increase our management levels of inevitable negative effects.

Identifying and Acting against the Negative Impacts on the Local Community

Doosan Fuel Cell's fuel cells are installed in U.S. schools and hospitals, which are known for their strict safety standards, and are also installed as power sources in skyscrapers in Korea. We strive to reduce the negative impact on the local community by strictly managing noise when installing and operating our products.

Agreement and Regulation of the Social Contribution Committee

Article 1 Purpose
The purpose of this regulation is to define the composition, operation, procedure, and standards of an organization that ensures the transparent and appropriate contribution and execution of donations made by Doosan Fuel Cell ("company").

Article 2 Definitions
The terms used in this regulation are defined as follows. "Donation" refers to money provided by the company to an individual, organization, or institution without seeking a benefit in return, whether it is called a sponsorship, donation, or otherwise. "Regular donation" refers to the sum or collection of all donations that are expected to occur during a business year, including donations made to regular recipients of donations made every year. "Non-regular donation" refers to a donation that is contributed upon receiving an individual request other than the regular donations. "Social Contribution Committee"("Committee") refers to a non-permanent meeting group composed of employees of the company and its affiliates, formed to decide donation-related policies, select recipient entities for each affiliate, and discuss the distribution of donation amounts according to separate agreements or stipulations.

Article 3 Establishment, Composition, and Targets of the Social Contribution Committee
The company established the Social Contribution Committee ("Committee") as a body to review and decide on donation-related matters, such as the status of donation, places of donation, and donation amount. The Committee consists of the chairperson of the CSR Committee, the CFO, and employees in charge of legal affairs. The chairperson of the CSR Committee shall be the chairperson of the Committee. Targets to be reviewed by the Committee include donations of KRW 10 million or more made to a single place of donation. The company shall appoint a secretary to assist the Committee with its duties and implement its decisions. The secretary shall be appointed from among employees of a department deemed appropriate based on the division of duties.

Article 4 Method of Arriving at Committee Resolutions
Resolutions of the Committee shall be passed if voted for by the majority of participating members, with the majority of members present. The Committee may conduct its meetings in a way by which all members participate using a communication means that can send and receive voice communication simultaneously, even if all members are not physically present at the meeting. In this case, the corresponding members are deemed to have participated in the meeting. If a member has difficulty attending the Committee for an inevitable reason, the member may designate an employee to attend on his or her behalf, and exercise his or her voting rights.

Article 5 Procedure for Handling Regular Donations
The Committee shall compile a budget for regular donations based on the amount of donations determined for each place of donation selected by the company to contribute during the corresponding business year, according to the results of the annual Committee meeting. When compiling the budget as per Paragraph 1, the Committee may separately review and set aside a reserve fund with an appropriate limit to cover non-regular donations. If there are cases that exceed an amount of KRW 500 million contributed by the company among the donations included in the budget under Paragraph 1, the Committee shall submit all such cases to the Board of Directors for approval. If the total amount of donation contributed jointly with affiliates exceeds KRW 500 million but the amount contributed by the company is less than KRW 500 million, the case may be submitted to the Board of Directors if approval is deemed necessary considering the purpose of donation and relevance to the business.

Article 6 Procedure for Handling Non-regular Donations
If the company receives a separate request for a donation not included in the regular donation budget, the Committee shall review and decide whether to approve the donation and the amount if approved, after considering the circumstances, such as the purpose or details of businesses operated by the requesting body, uses of the donation, relevance to the company's businesses, public interest, and financial conditions of the company. If the case falls under any of the following subparagraphs, the Committee may call a Council meeting to deliberate on approving the donation, amount, and share of each affiliate. If the amount requested exceeds KRW 100 million and it is deemed that affiliates need to share the amount jointly or the Committee needs to discuss the matter in view of the accompanying circumstances such as the purpose and details of businesses operated by the requesting body, uses of the donation, business relevance, and financial conditions of the company, the Committee shall review and decide the contribution or share of the company by referring to the balance of the reserve fund. If the amount of donations to be contributed by the company according to Paragraphs 1 to 3 exceeds KRW 500 million, the cases shall be submitted to the Board of Directors for approval. If the total amount of donation contributed jointly with affiliates exceeds KRW 500 million but the amount contributed by the company is less than KRW 500 million, the case may be submitted to the Board of Directors if approval is deemed necessary considering the purpose of donation and relevance to the business. Notwithstanding Paragraph 4, if there is an urgent circumstance and it is therefore difficult to carry out the processes of calling and resolution of the Board of Directors and still accomplish the purpose of the donation, the donation may be contributed at the discretion of the Committee without calling the Board of Directors for resolution. In this case, the purpose of the donation, place of donation, amount, and uses shall be reported at the first Board of Directors meeting called after the contribution.

Article 7 Minutes
Minutes shall be prepared to record the proceedings of the Committee. Minutes shall include the agenda, proceedings, and outcomes, and shall be sealed or signed by the participating members.

Article 8 Relation to Other Regulations
If this regulation does not accord with other in-house regulations, this regulation shall take precedence.

Supplementary Provisions 1.
This regulation shall come into effect on 1. 1. 2020.

Supply Chain ESG Management

Supplier ESG Management System

In preparation for the adoption of the EU supply chain due diligence law and taking into account the rising supply chain management trend, Doosan Fuel Cell has devised a roadmap for building a supply chain ESG risk management system and mid- to long-term implementation measures.

Supply Chain ESG Promotion Roadmap

	STEP 01 (~2023)	STEP 02 (~2024)
Goal	Establishing a risk management system	Promoting ESG risk communications
Detail	• Establishing an evaluation system (questionnaire design, system construction) • Linking a purchasing system	• Expanding a system-based ESG risk communication function (questionnaire design, system construction) • Forming an external ESG council (by industry)

	STEP 03 (~2025)	STEP 04 (~2026)
Goal	Establishing ESG risk KPIs	Strengthening due diligence and verification capabilities
Detail	• (Internal) Regular monitoring of high-risk groups (scale/time) • (External) Establishing ESG risk reduction goals for each company	• Dedicated due diligence team • Strengthening capabilities of persons in charge • Due diligence of global partners

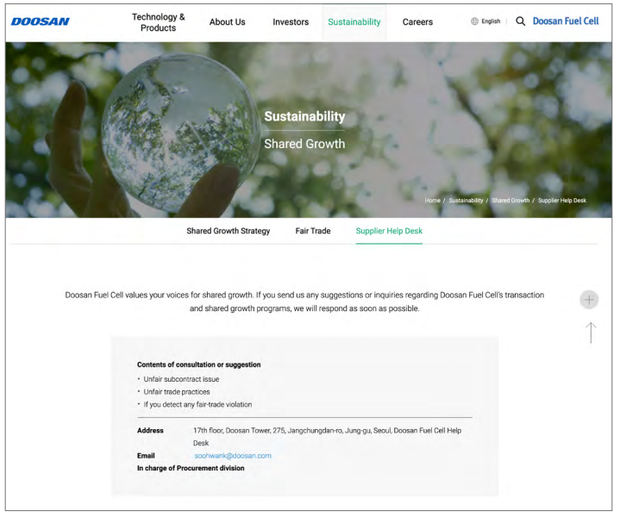
In 2024, we plan to collaborate with an agency specializing in ESG supply chain assessment to conduct self-assessment for our primary suppliers of components/products, carry out in-depth evaluations for critical suppliers, and conduct on-site inspections to verify the validity and reliability.

Definition of Supplier ESG Management Supply Chain

Doosan Fuel Cell has defined 43 domestic and overseas parts suppliers as ESG risk management suppliers by assessing business impacts and purchase risks, to prevent disruptions in parts procurement caused by suppliers' risks and expected delays in production schedules and delivery.
We select ESG risk management suppliers through the ESG risk assessment, and the selected suppliers are assessed for ESG risks. Those classified as high-risk suppliers are encouraged to implement remediation measures, and the end result is reflected in the purchase plan.

Supplier ESG Management Education and Communication

Doosan Fuel Cell regularly conducts training for its suppliers on topics that include labor and human rights, safety and health, environment, ethics and fair trade, and general management, as well as ESG risk assessment. To regularly listen to supplier feedback (VOC), we have reorganized the online VOC reception window on the website.



Supplier Help Desk

Number of complaints handled in 2023

0 received

0 handled

Supply Chain ESG Management

Doosan Fuel Cell requires new suppliers to pledge to practice ethical management and comply with ESG guidelines when signing a contract.

Guideline for Sustainable Supply Chains (GSSC)

1. Overview

1.1 Purpose: Doosan Fuel Cell has established the Guidelines for Sustainable Supply Chains (GSSC) to build an ethical and sustainable supply chain. These guidelines define requirements in the areas of labor rights, human rights, safety, health, environment, ethics, and fair trade that suppliers providing products and services to Doosan Fuel Cell must comply with. Doosan Fuel Cell expects all suppliers and their primary supply chains to adhere to these guidelines. These guidelines are based on the Responsible Business Alliance (RBA) Code of Conduct, and global standards and guidelines established by internationally recognized organizations, such as the ILO Declaration on Fundamental Principles and Rights at Work, and the UN Universal Declaration of Human Rights can be used as additional information. These guidelines do not specify all matters to be implemented by suppliers, and the guidelines may be regularly reviewed for supplementation and revision.

1.2 Target: All suppliers that provide goods and services to Doosan Fuel Cell or enter into a contract with Doosan Fuel Cell for other transactions must comply with this Code of Conduct. All suppliers subject to this Code of Conduct must recommend that the entire supply chain, including business partners (sub-suppliers), comply with the provisions of this Code of Conduct.

1.3 Responsibilities and Roles of Suppliers: All Doosan Fuel Cell suppliers must consider the matters presented in this Code of Conduct in management decision-making and business operation processes. Doosan Fuel Cell and third-party organizations entrusted by Doosan Fuel Cell may inspect and conduct due diligence to the extent permitted by law to determine whether the supplier is complying with the provisions of this Code of Conduct. Based on the results of the inspection and due diligence on compliance with this Code of Conduct, Doosan Fuel Cell can recommend improvements to address the identified risks, and the supplier will establish a risk mitigation plan and carry out implementation measures based on mutual consultation regarding improvements.
This Code of Conduct does not specify all of the supplier's obligations, and to build a sustainable supply chain, it may be regularly reviewed for supplementation and revision. This Code of Conduct can be viewed on the Doosan Fuel Cell website, and you may inquire about specific details of this Code of Conduct through the Doosan Fuel Cell department in charge.

2. Labor and Human rights

2.1 Prohibition of Discrimination: Doosan Fuel Cell's suppliers shall strive to create a workplace that is free from unlawful discrimination and harassment related to race, color, age, gender, sexual orientation, ethnicity, disability, health status, pregnancy, religion, political affiliation, etc. in employment practices such as hiring, promotion, compensation, and provision of education and training opportunities.

2.2 Humane Treatment: Doosan Fuel Cell's suppliers shall respect the human rights of all workers and must not subject workers to inhumane treatment such as sexual harassment, sexual abuse, corporal punishment, mental or physical coercion, verbal abuse, or unreasonable restrictions. To this end, suppliers shall have reasonable disciplinary regulations and procedures, and notify workers of such regulations and procedures.

2.3 Protection of Minors: Doosan Fuel Cell's suppliers shall comply with the International Labor Organization's Minimum Age Convention and must not hire employees below the minimum employment age prescribed by local laws. Workers under the age of 18 must not perform overtime or night work, or work that is hazardous to safety and health. If there are trainees, appropriate management and support must be provided in accordance with local laws and regulations.

2.4 Wage and Benefits: Doosan Fuel Cell's supplier shall pay wages on the specified date in compliance with laws such as those governing minimum wage and overtime pay, and provide pay slips written in language that workers can understand. Doosan Fuel Cell shall ensure that the working days and working hours of its workers do not exceed the maximum stipulated by local laws.

2.5. Voluntary Working/Prohibition of Forced Labor: Doosan Fuel Cell's suppliers shall not force workers to engage in forced labor (slavery, human trafficking, involuntary prison labor, etc.) against their will. When hiring, an employment contract written in language the worker can understand must be signed, and a copy must be provided to the worker. When hiring a foreign worker, the worker must keep their original documents such as their passport and work permit. Employers should only retain documents if such storage is legally required. In this case, under no circumstances should workers be denied access to documents. Workers must not be required to pay recruitment fees to the employer's employment agency or subcontractor or any other fees associated with their employment. Suppliers shall not unreasonably restrict workers' transfer, and workers must be able to leave the company freely if they wish.

2.6 Guarantee of Right to Association: Doosan Fuel Cell's suppliers shall guarantee workers' rights to freely organize and join labor unions, and the right to collective bargaining and peaceful assembly/demonstration in accordance with local laws and regulations. Workers or worker representatives shall be able to share their opinions and difficulties with management regarding working conditions and management policies without fear of discrimination, retaliation, or threats.

3. Safety and Health

3.1 Occupational Safety Management: Doosan Fuel Cell's suppliers shall eliminate physical hazards and implement preventive measures through appropriate design, engineering and administrative controls, preventive maintenance, and safe work procedures. Workers must be protected from potential safety hazards such as electricity, energy sources, fire, vehicles, and fall hazards. If these hazards cannot be adequately controlled, suppliers must provide workers with suitable personal protective equipment.

3.2 Mechanical Equipment Safety Maintenance: Safety hazards associated with Doosan Fuel Cell's production and mechanical equipment shall be evaluated. If there is a risk of workers being injured by the equipment, the supplier must install safety devices, protective barriers, emergency devices, etc. and provide workers with the necessary safety protective equipment.

3.3 Emergency Preparation: Doosan Fuel Cell's suppliers shall have an emergency response manual that includes protocols for reporting, responding to, and following up on emergencies such as natural disasters, pandemics, fires, and accidents. Suppliers shall conduct training at least once every half-year according to local emergency laws and self-established plans and manuals. Regular inspections must ensure that emergency evacuation routes, guidance lights, detectors, alarms, and firefighting equipment are operating normally.

3.4 Disaster and Disease Management: Doosan Fuel Cell's suppliers shall establish procedures and systems to prevent, manage, track, and report occupational accidents and diseases. These systems should identify injuries and illnesses, provide necessary data, and include corrective actions to prevent recurrence.

3.5. Compliance with Safety and Health Laws and Regulations: Doosan Fuel Cell's suppliers shall comply with all safety and health-related laws and regulations in each country where they operate, and must obtain and maintain all necessary safety and health-related licenses.

3.6 Establishment of a Safety and Health Management System: Doosan Fuel Cell's suppliers shall have a safety and health management system* in which the CEO considers the safety and health policies in management decisions and reviews the results of planning, execution, and inspection to prevent industrial accidents and create and maintain an optimal working environment. *This includes ISO 45001 established by the International Standardization Organization (ISO) and KOSHA-MS (formerly KOSHA 18001) developed by the Korea Occupational Safety and Health Agency.

3.7 Risk Assessment: Doosan Fuel Cell's suppliers shall regularly conduct risk assessments to identify potential worker exposure to risk factors and prevent risks. Based on the assessment results, suppliers shall implement safe process designs, technical and administrative controls, preventive maintenance, reflection of safety measures in the work procedures, and continuous education. Suppliers shall provide workers with necessary personal protective equipment and supervise them in the wearing of such equipment.

3.8 Health Checkup and Follow-up Management: Doosan Fuel Cell's suppliers shall periodically conduct general and special health checkups for employees in accordance with local health checkup laws. If necessary, based on the checkup results, suppliers must implement measures such as changing work locations, job rotations, or reducing working hours.

3.9 Physically Demanding Tasks: Doosan Fuel Cell's suppliers shall identify, evaluate, and control workers exposed to physically demanding tasks, such as lifting heavy materials, highly repetitive tasks, prolonged standing, and strenuous assembly tasks.

3.10 Sanitation, Food, and Housing: Doosan Fuel Cell's suppliers shall provide workers with clean toilet facilities, drinking water, sanitary food preparation and storage facilities, and a place to eat. Dormitories provided to workers must be clean and safe, offering reasonably sized personal spaces with adequate lighting, emergency escape facilities, heating, hot water, ventilation, storage facilities for personal belongings, and appropriate access mechanisms.

3.11 Safety and Health Communication: Doosan Fuel Cell's suppliers shall provide workers with safety and health information and training on all identified workplace hazards in their native language or a language they understand. Safety and health information must be clearly posted within the workplace. Regular health and safety training must be provided to all workers, and workers should be encouraged to freely raise health and safety concerns.

4. Environment

4.1 Compliance with Environmental Laws and Regulations: Doosan Fuel Cell's suppliers shall adhere to the environmental laws and regulations of each country in which they operate, and comply with environmental licensing and reporting requirements as well as our environmental/quality management standards.

4.2 Management of Hazardous Substances: Doosan Fuel Cell's suppliers shall identify hazardous substances used in the workplace and manage the safe handling, transportation, storage, use, and disposal history of these substances. Hazardous substances are compounds or other substances that pose a risk to the environment or worker safety when released to the outside or exposed to humans.

4.3 Management of Environmental Emissions: Doosan Fuel Cell's suppliers shall establish an information monitoring system for emissions when handling environmental emissions generated within the workplace, such as facilities, work processes, and sanitary facilities. They shall comply with the control and processing methods and tolerance limits prescribed by local laws and regulations. Environmental emissions include wastewater, waste (general/designated), air pollutants, and substances depleting the ozone layer.

4.4 Improvement of Resource Efficiency: Doosan Fuel Cell's suppliers shall utilize resources used within the business efficiently through improvement activities such as process efficiency, raw material substitution, and recycling and reuse of resources. Resources include raw/subsidiary materials, energy, and water used in production activities.

4.5 Response to Product Environmental Regulations: Doosan Fuel Cell's suppliers shall comply with all relevant laws, regulations, and customer requirements regarding recycling and processing labels related to products, as well as prohibition, permission, and registration of specific substances stipulated by local laws and regulations.

4.6 Energy Consumption and GHG Emission Management: Doosan Fuel Cell's suppliers shall calculate and record energy consumption and greenhouse gas emissions (direct emission Scope 1, indirect emission Scope 2) company-wide. Suppliers also shall find ways to increase energy efficiency while minimizing energy consumption and greenhouse gas emissions.

4.7 Preservation of Biodiversity and Prohibition of Deforestation: Doosan Fuel Cell's suppliers shall respect the efforts of the global community, such as the Convention on Biological Diversity and the UN Strategic Plan for Forests agreed upon by the international community under the leadership of the United Nations Environment Program (UNEP), and strive to avoid negative environmental impacts during business activities.

5. Ethics and Fair Trade

5.1 Transparent Management and Anti-Corruption: The highest ethical standards are required in all business relationships. A zero-tolerance policy that strictly prohibits all forms of corruption, extortion, embezzlement, bribery, kickbacks, and entertainment, among other unethical practices, shall be maintained. Doosan Fuel Cell's suppliers shall implement monitoring and enforcement procedures for such unethical behavior to practice voluntary ethical compliance, and apply monitoring, record-keeping, and enforcement procedures to comply with anti-corruption laws and regulations.

5.2 Compliance with Fair Trade: Doosan Fuel Cell's suppliers shall prohibit providing or accepting means of profiting through unfair or inappropriate transactions in business. They shall comply with all laws and regulations related to fair trade, and shall not engage in any actions that undermine the fair trade order, such as unfair trade practices. Additionally, suppliers shall not agree to any action that unfairly restricts competition with other business operators regarding the price, supply volume, trading area, trading conditions, etc. of products or services, and shall not use or disclose information illegally obtained or acquired from the company, competitors, partners, or third parties.

5.3 Transparent Information Disclosure: Doosan Fuel Cell's suppliers shall comply with relevant laws and regulations and disclose information about business activities, financial situation, business performance, etc. without false information. All business transactions must be carried out transparently and accurately reflected in the supplier's business books and records. Information regarding the supplier's labor, health and safety, environmental management practices, business activities, structure, financial status and performance must be disclosed in accordance with relevant general industry practices. Falsification or misrepresentation of records regarding actual conditions and practices in relevant areas within the supply chain is not acceptable.

5.4 Protection of Intellectual Property Rights: Doosan Fuel Cell's suppliers do not infringe or illegally use intellectual property such as patents, software, designs, trademarks, etc. of others in business. Intellectual property rights must be respected, and transfers of technology and know-how must be conducted in a way that protects those rights.

5.5 Personal Information Protection: Doosan Fuel Cell's suppliers shall systematically manage and protect the personal information of all stakeholders (suppliers, customers, employees, etc.) and comply with relevant laws and regulations when collecting, storing, using, providing, and destroying personal information.

5.6 Identity Protection and Prohibition of Retaliation: Doosan Fuel Cell's suppliers shall establish and operate procedures to ensure confidentiality, anonymity, and identity protection so that workers can raise concerns without fear of retaliation.

Supply Chain ESG Management

6. Management System

6.1 Compliance: Doosan Fuel Cell's suppliers must strive to adhere to all relevant laws, regulations, and customer requirements related to business activities, and continuously work towards improving compliance.

6.2 Supplier Responsibility: Suppliers shall communicate these rules to their subcontractors, encourage them to comply, and recommend improvements where any violations of laws and regulations or risks are identified.

6.3 Risk Assessment and Management: Doosan Fuel Cell's suppliers shall have procedures in place to identify risks related to this Code of Conduct. If significant risks are discovered, suppliers shall prepare and implement measures to mitigate these risks.

6.4 Establishment and Management of Goals: Doosan Fuel Cell's suppliers shall document goals, targets, and action plans aimed at improving social, environmental, and safety and health performance, and periodically evaluate progress.

6.5 Guideline Posting and Training: Doosan Fuel Cell's suppliers shall ensure that employees understand and comply with these guidelines. To this end, suppliers shall make the guidelines easily accessible to employees and prepare training programs to support effective compliance.

6.6 Feedback and Reporting: Doosan Fuel Cell's suppliers shall receive feedback from employees regarding the standards and conditions to which these guidelines apply, and operate procedures to promote improvements based on this feedback. Additionally, any actions that may violate these guidelines can be reported through Doosan Fuel Cell's Cyber Reporting Center (02-3398-0922 / https://ethicshelpline.doosan.com/cbrpt/frontView.do).

7. Responsible Purchasing of Materials

7.1 Responsible Minerals: As part of a responsible supply chain, Doosan Fuel Cell's suppliers shall ensure that the Doosan supply chain does not use minerals such as tin, tungsten, tantalum, and gold from specific origins where their use is restricted due to serious concerns about human rights violations and environmental destruction. Suppliers shall establish and operate policies to comply with relevant international regulations and the laws of each country. Furthermore, suppliers must strive to verify the origin of these substances and provide relevant information.

Supply Chain ESG Management

To evaluate the sustainability of supply chains, Doosan Fuel Cell select an ESG diagnosis agency and conducts self-diagnosis and inspection diagnosis of supplier ESG risks. In addition, we verify self-diagnosis through on-site visits to suppliers and operate a process to support ESG improvement activities.

STEP 01	STEP 02	STEP 03	STEP 04	STEP 05
Awareness raising education	**Online self-diagnosis**	**Inspection diagnosis** (including DB cross-verification)	**On-site consulting** (supporting inspection diagnosis on-site verification and ESG improvements)	**Reporting overall results**
• Concept of ESG management • Supply chain ESG methods according to EU CSDDD • Mandatory disclosure of ESG information such as ISSB-KSSB • ESG relief measures such as CBAM, Serious Accident Punishment Act • Guide to diagnosis process	• Providing a customizable model with questions and weight • Utilizing ESG guidelines by providing reports • K-SRM + raw data for main contractors	• Checklist preparation and evidence upload • DB verification and non-face-to-face inspection through email and phone interviews • Increasing understanding through explanation of questions/items during on-site inspection	• Preparing a checklist and unloading evidence on the platform • Preliminary diagnosis after DB verification and on-site interview • Providing improvement tasks and guidelines considering industry characteristics and implementation level • Identifying improvement status through post-diagnosis • Supporting environmental information disclosure system	• Selecting tasks and detailed analysis of improvement status based on the diagnosis results of each item • Comparing the level of the company with overall data • Analyzing actual data and providing future prospects

Support Programs for Suppliers in Fulfilling Social Responsibilities

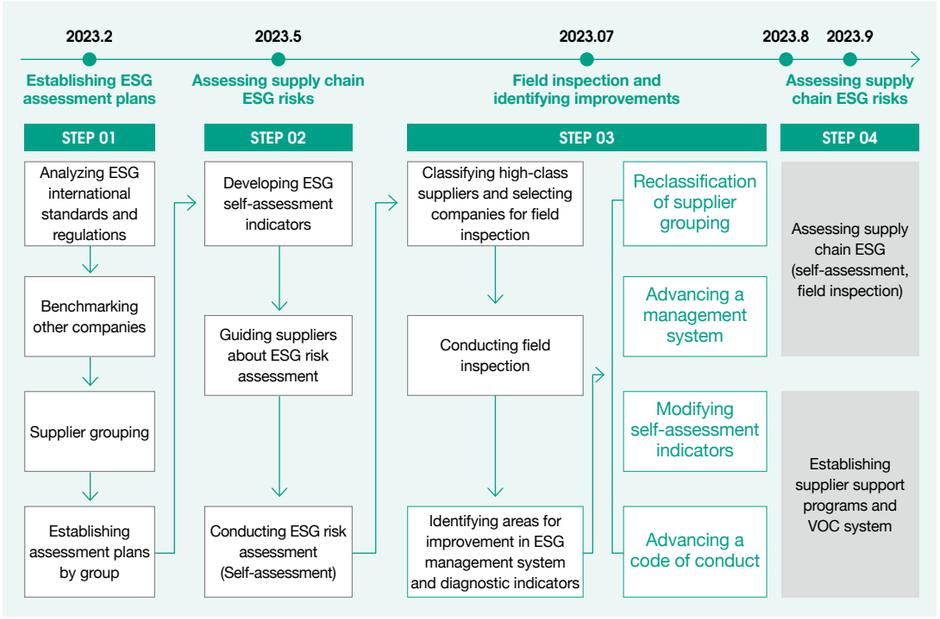
Doosan Fuel Cell has been operating support programs to improve the ESG level of its suppliers starting since 2023. Every May, we invite our key component suppliers to provide ESG-related training. In 2023, specialized consultants visited 3 suppliers in person and provided training on how to manage ESG data. In May 2024, we provided 43 suppliers subject to ESG evaluation with lectures on the following topics: ▲ ESG basics ▲ supply chain due diligence system ▲ mandatory information disclosure ▲ CBAM and GHG management.

Supply Chain Risk Management Assessment and Follow-up

Doosan Fuel Cell has been building its supply chain ESG management system since 2023 and is conducting an assessment. First, we reviewed Doosan Fuel Cell's existing supply chain management system and analyzed the current status by benchmarking international standards and other companies' practices. Based on this, we classified suppliers into 4 types, such as Critical, Bottleneck, Leverage, and Routine, according to these standards: ▲ Parts Purchasing Proportion ▲ Critical Parts ▲ Replaceability ▲ Expertise and Core Technology ▲ Procurement Period ▲ Country/Regional Risk ▲ and Organization/Resource Size.

We then developed questions and indicators to evaluate ESG risks in the supply chain, and established evaluation methods, cycles, and follow-up measures for each type. Using the indicators, we conducted a self-diagnosis for all first-tier suppliers of parts (43 companies) from June to August 2023, and for Critical suppliers, we verified the validity and reliability of the indicators through on-site due diligence conducted by a consultant and an independent third party.

As a result of the assessment, no high-risk suppliers were identified. If high-risk suppliers are identified in the future, we plan to provide remediation programs and periodically monitor the progress by reporting to the ESG Committee chaired by the CEO.



Supply Chain ESG Management

Supply Chain Strategy and ESG Integration (Linking Purchase Strategy and ESG)

Doosan Fuel Cell plans to designate a person within the purchasing sector to provide supply chain ESG-related training to purchasing employees, and offer continuous support to strengthen the ESG capabilities of the supply chain. In addition, we are integrating ESG policy into the assessment of new supplier registrations, and will reflect ESG policies in the annual supply chain evaluations.

Conflict Minerals Policy

Doosan Fuel Cell does not purchase or procure conflict minerals, as the four minerals classified as conflict minerals (tin, tungsten, tantalum, gold) are not used in any products developed by Doosan Fuel Cell.

Shared Growth Implementation System

To achieve shared growth with its suppliers, Doosan Fuel Cell stabilizes supply and demand through the dualization of raw materials with a focus on the participation of suppliers, which also enables reduced costs for the company and its suppliers. To enhance productivity, we support facility investments and improvement of manufacturing and inspection processes, thereby increasing efficiency and stabilizing quality.

Shared growth strategy

Doosan Fuel Cell strives to become a company that grows together with its suppliers based on the philosophy of a “virtuous cycle of partnerships” in which the growth of our partners is directly linked to enhancing our competitiveness.

Main support activities

Activities to strengthen supplier competitiveness	- Process improvement activities - Technical competency support activities
Supporting management activities	- Supporting supplier performance creation - Supporting facility investment, factory expansion, staffing, etc.
Win-win cooperation	- Supporting processing inventory of suppliers - Supporting supplier material supply
Enhancing communication with suppliers	- Launch of supplier council - Listening to difficulties, discussing improvement plans - Conducting meetings with suppliers

Shared Growth Support Program

Support for Productivity Improvement of Suppliers

Doosan Fuel Cell supports direct investments in some facilities and technical training for new facilities to enhance the productivity of suppliers.

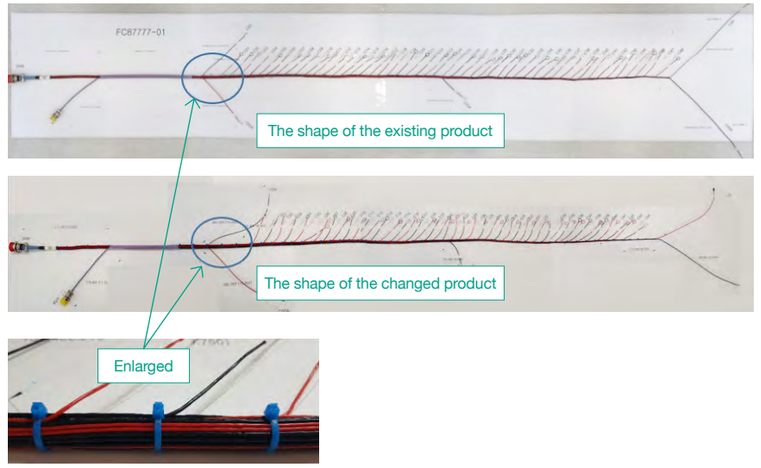
Stabilizing Supply and Demand and Supporting Cost Competitiveness Activities through Dualization of Raw Materials

Doosan Fuel Cell is implementing technical support activities such as stabilizing supply and demand of materials and securing cost competitiveness by providing support activities for the dualized development of raw materials used to produce suppliers’ products.

CSA Harness Dualization

To stabilize the supply and price of key raw materials and parts provided by Doosan Fuel Cell's primary suppliers, we identified alternative suppliers and conducted reliability assessments, resulting in a cost reduction of approximately 12.8%, while maintaining performance equivalent to existing products.

Before and After CSA Harness Improvement

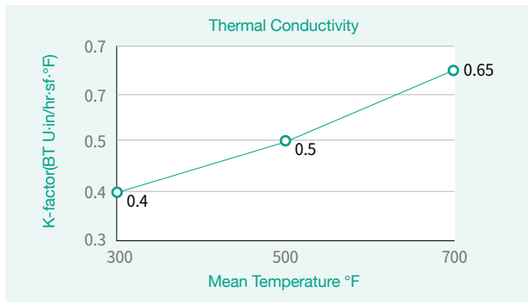


Supply Chain ESG Management

Support for Dualization and Domestic Development of Insulation Materials

The external insulation materials for major fuel cell components are imported from overseas and supplied by Doosan Fuel Cell's suppliers. To address production and delivery delays from domestic suppliers caused by instability in the supply and demand of imported materials, or excessive logistics costs from air transportation, Doosan Fuel Cell explored domestic companies for material substitution with the suppliers. As a result, we stabilized supply and demand by dualizing material suppliers, successfully meeting delivery deadlines and reducing costs.

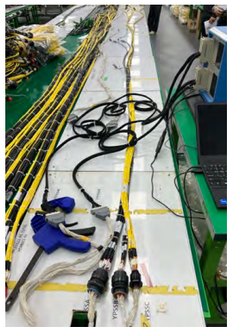
Product delivery delayed due to supply and demand issues of overseas insulation materials



Supporting Substitutability Tests by Discovering Domestic Material Suppliers

Support for Domestic Development of Cables

materials. To address the rising unit prices of imported cables, we promoted domestic production to stabilize prices and ensure supply stability. The project, conducted from April to December 2023, resulted in the successful domestic production of all 20 types of imported cables, achieving 100% localization of all 56 types of cables used in fuel cells.



Domestically Developed Cable

CERTIFICATE OF COMPLIANCE

Certificate Number: UL-US-2231264-0
Report Reference: E529479-20210521
Date: 9-Aug-2022

Issued to: KIMSUBQ Co Ltd
Rm 903 250 Hagal-Ro Dongan, Gyeonggi-do 14056
Republic of Korea

This is to certify that representative samples of: QPOR - Power and Control Tray Cable
See Addendum Page for Product Designation(s).

Have been evaluated by UL in accordance with the Standard(s) Indicated on this Certificate.

Standard(s) for Safety: UL 1277, 6th Ed., Issue Date: 2018-09-12, Revision Date: 2021-07-12

Additional Information: See the UL Online Certifications Directory at https://iq.ulprospector.com for additional information

This Certificate of Compliance indicates that representative samples of the product described in the certification report have met the requirements for UL certification. It does not provide authorization to apply the UL Mark. Only the Authorization Page that references the Follow-Up Services Procedure for ongoing surveillance provides authorization to apply the UL Mark.

Only those products bearing the UL Mark should be considered as being UL Certified and covered under UL's Follow-Up Services.

Look for the UL Certification Mark on the product.

UL Certification Support

Support for Domestic Development of Air-Cooled Dummy Load

Air-cooled dummy loads, imported from overseas by domestic suppliers, previously faced a cost burden due to an extended delivery period of more than 8 weeks and additional transportation and customs fees. Accordingly, Doosan Fuel Cell identified domestic companies and facilitated their development and testing processes, promptly responding to the need for domestic production of key components, reduced costs, and shortened delivery time.

Existing Imported Product

Domestically Produced Product

Supply Chain ESG Management

Support for Manufacturing and Quality Improvement Activities

Supporting Quality Improvement of VT Cable

In locations where our fuel cells were installed on sites with adverse conditions, we conducted moisture resistance (water, seawater) tests on cables and monitored improved products during the rainy season. Based on the results, we supported quality improvement of our suppliers by enabling them to develop and mass-produce cables with improved specifications.

Joint Field Test at Sites with Adverse Conditions

Finding Improvement Points in the Field and Requesting Application

Providing Retrofit Documents to Suppliers

When applying newly designed parts or software to a product currently in operation or accepted for delivery, we provide retrofit documents to our suppliers to ensure proper setting and assembly.

1) Scope and description
A document for installing vibration monitoring equipment for PMP400
Expected completion time: 1-2 hours

2) Required tools and materials
1 Core Shield Cable: 5m
18awg Cable: Signal cable (3m), power cable (50cm)
Ring terminal
10mm hex socket
13mm hex socket
Crosshead screwdriver
Nipper
Adjustable wrench
Wire stripper
Safety helmet, safety shoes

Retrofit Document Table of Content

3) Installation Guide for RETROFIT – Pump vibration monitoring equipment

1. Disconnect the power supply following the LOTO procedures
2. Open the ESM and DC side doors as well as WTS/TMS doors
3. Remove the lid of PMP400 as in the picture below (using a 10mm socket)

4. Remove the bolt inside the pump (using a 13mm socket) and separate the top part of the pup as shown

5. Identify and disconnect G1 and G2 from the bottom. / Disconnect all U, V, W cables from the molded circuit.

6. After taking out the molded circuit only, reconnect the G1, G2, U, V, and W cables and Reassemble the top part of the pump (install the pin to G1 as shown to connect).

Retrofit Document Body Text

Supply Chain ESG Management

Safety and Health Consultative Group and Labor- Management Joint Inspection

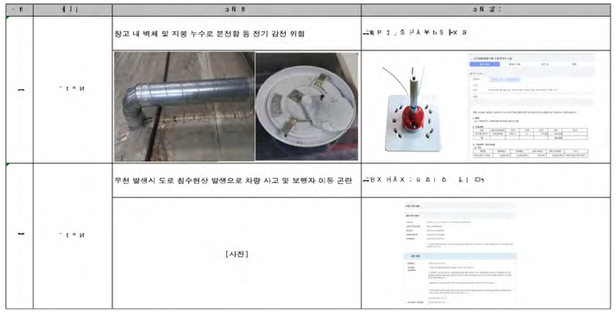
Doosan Fuel Cell operates a safety and health consultative group and carries out joint labor-management inspections with internal and external suppliers. Through these activities, we proactively minimize the impacts of issues that may arise. With these regular operations, we will continue to support and cooperate with suppliers to identify areas for improvement in safety and health, and carry out voluntary safety and health activities so that employees can work in a safe workplace.

Improvement of Safety and Health Management Level of Suppliers

Doosan Fuel Cell only enters into business contracts with suppliers that have secured safety and health capabilities through a systematic safety and health evaluation process. We regularly evaluate various items such as the safety and health management system, safety and health execution level, and disaster occurrence status for previously contracted suppliers that have already exceeded the contracted safety and health evaluation standards to reflect the results in additional or extended contracts. In 2023, a total of 40 new evaluations and one contract renewal evaluation were conducted, resulting in the elimination of four out of 41 companies for failing to meet the evaluation standards. Additionally, we are committed to enhancing safety and health management levels across all our suppliers by recognizing and rewarding excellent suppliers while providing educational support and implementing disciplinary measures for those with poor performance.

Supporting Supplier Risk Assessment

Doosan Fuel Cell provides technical guidance on risk assessment for suppliers, and reviews the risks in the field to minimize safety accidents. In 2023, we conducted technical guidance following one regular risk assessment and one non-scheduled risk assessment. Moving forward, we will strive to prevent accidents at our partner companies through technical guidance on safety and health, including risk assessments.



Risks and Improvements History Management Data

Safety Education for Employees of Suppliers

Doosan Fuel Cell provides safety education related to major safety and health laws, company standards, and accident cases to improve the safety and health management capabilities of employees of suppliers. We will continuously strive to enhance the safety mindset of suppliers' employees by strengthening our safety inspections and support systems for suppliers.

Photo of Safety Education for Employees of Suppliers

Supplier Meeting

Doosan Fuel Cell holds regular meetings with our critical suppliers. At the meeting, EHS goals, legal compliance, disaster prevention activities, and plans for new promotional campaigns are shared to encourage the participation of suppliers. Information exchange and areas requiring support from suppliers are also discussed to maintain mutual cooperation. In 2023, employees of suppliers participated in the promotional campaign.

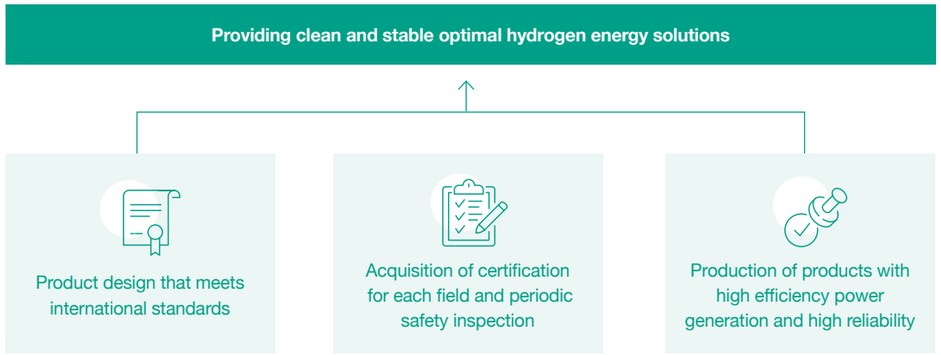
Supplier Safety and Health Reward System

Doosan Fuel Cell actively encourages workers of suppliers to participate in risk resolution activities by expanding the scope of the "EHS Potential Risk Discovery" and "Near-miss Accident Discovery" reward systems to include suppliers. As a result, in 2023, potential risk discovery was rewarded once each in the first and second half of the year, totaling 12 rewards in all.

Customer Satisfaction

Quality Policy

Doosan Fuel Cell constantly strives to provide a ‘clean and stable optimized hydrogen energy solution,’ through the efforts of all employees striving to achieve goals such as designs that meet international standards, acquisition of certifications in each field, regular safety inspections, high-efficiency power generation, and manufacturing of products with high reliability. As they were first applied in aerospace engineering, fuel cells have the strictest quality standards of any industrial sector, and Doosan Fuel Cell has been leading the fuel cell market based on stability and quality for decades - beginning with UTC in the United States. In addition, we follow the quality process strictly, upholding the values of ‘customer value creation,’ ‘high efficiency and low cost,’ and ‘promotion of sustainable growth.’



Quality Management Implementation System

Doosan Fuel Cell has standardized all work and tasks based on the quality manual that reflects customer requests in product design, production, and service. We operate the Spec Center to enable workers to browse and use the latest copy of the manuals. In addition, we established the manufacturing/operation system based on MES(Manufacturing Execution System) and built an integrated quality database based on real-time process management encompassing manufacturing and production result/defect checks, plant inventory checks, supplier test reports, and shipment inspections. Based on this, we implemented the paperless process and have been operating it since 2023.

Strengthening Execution of the Quality Management System

We regularly conduct patrol (PQC) activities for the entire process from warehousing to shipment. We focused on field distribution/utilization of the latest 2023 work standards and on-site application and validity review of measures to address nonconformities. The identified supplementary needs are communicated with relevant departments to foster continuous improvement. In 2024, our focus will be on verifying compliance with work standards across each process, aiming to achieve 100% consistency between work standards and field operations.

Strengthening Job Competency

To enhance the job competency of internal operating personnel, we conduct regular in-house training related to quality. In 2023, after considering the training needs of engineering center office workers, we provided training on utilizing the testing process and statistical quality control tool (Minitab) to enhance their job understanding and performance. In addition, we strengthened our capabilities in managing measuring instruments through internal training on measuring instrument management and understanding measurement uncertainty.
Externally, we host regular quality meetings with major suppliers to discuss a shift in the quality mindset among relevant personnel and drive continuous improvement. To ensure effective execution, we conduct regular themed audits involving quality personnel from suppliers, taking into account the level of individual proficiency, to address any shortcomings.

Expansion of the Quality Management System

Doosan Fuel Cell performs continuous quality management based on quality management system certifications such as ISO 9001, KGS design inspection, and KS. We applied for certification based on the early inspection of fuel cell generation facilities and registration of manufacturing facilities to establish a quality management system that conforms with the Electrical Safety Management Act enacted in 2021, and obtained and maintain the related certification, a first for a domestic fuel cell company. Through the ISO 9001 recertification review in 2023, we re-verified our compliance with quality system requirements. We are committed to continuous improvement in our process and product quality by adhering to and maintaining manufacturing facility inspection certification from the Korea Electrical Safety Corporation (KESCO) four times a year.

ISO 9001, Certificate of Early Inspection of KESCO Generation Facilities, Certificate of Manufacturing Facilities Registration

Customer Satisfaction

Ensuring Product Safety

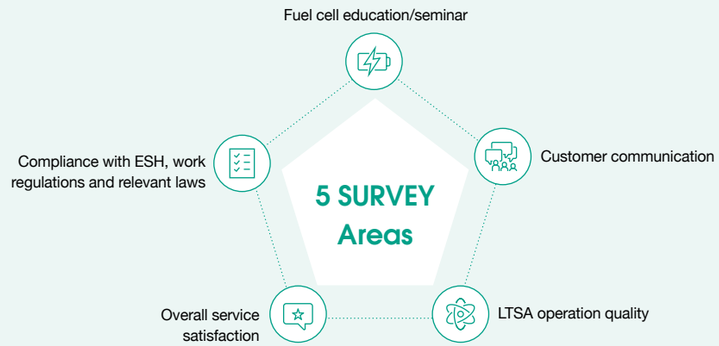
With the implementation of the 'Clean Hydrogen Power Generation Mandatory System' (CHPS) in 2024, Doosan Fuel Cell, a leader in the domestic hydrogen fuel cell market for power generation, is adopting a proactive approach to manage and advance this market by leveraging 'phosphoric acid fuel cells' (PAFC) and 'solid oxide fuel cells (SOFC)' currently in development. We will strive to prioritize continuous quality verification to uphold product quality and safety, emphasizing activities and customer satisfaction.

As fuel cells can be installed and operated in residential and urban environments, we prioritize securing safety over any other power generation facilities and manufacture them through primary and secondary verification and quality inspections. We install and operate fuel cells in the field that have passed the manufacturing facilities certification and product safety-related pre-use inspection from the beginning of product design and production, in accordance with the strict international standards and domestic electrical safety standards from the Korea Electrical Safety Corporation (KESCO) based on Article 63 of the Electricity Business Act and Article 31 of its Enforcement Rule.

Development of Customer Satisfaction Assessment Indicator and Satisfaction Survey

Development of Customer Satisfaction Assessment Indicator

Doosan Fuel Cell is constantly listening to its customers through diverse channels, and is making various efforts to satisfy customers by providing training to improve product understanding. Additionally, we have developed customer satisfaction survey indicators and we conduct a survey to manage VOC more efficiently. The survey consists of five topics: ▲ LTSA operation quality, ▲ customer communication, ▲ compliance with EHS, work regulations, and relevant laws, ▲ fuel cell education/seminars, and ▲ overall service satisfaction.



Implementation and Result of Satisfaction Survey

Doosan Fuel Cell conducted a service satisfaction survey targeting its customers ents from May 7 to May 30, 2024. Satisfaction survey information was sent via email to a total of 20 customers, and the results below were derived based on the responses from 11 customers.

In terms of LTSA operation quality, positive opinions were collected regarding the efficiency of facilities, regular performance reports, and on-site responses. Regarding customer communication, we received overall positive opinions on the friendliness of the contract manager and active participation and support in exchange activities with customers.

In the EHS (Environmental Safety and Health) sector, there was a high level of satisfaction regarding compliance with work procedures, wearing safety equipment, and participation in the customer safety and health council. Lastly, regarding regular customer training, it was confirmed that all customers had a high level of participation. They have made various suggestions regarding content, and we will reflect them in future training.

We were able to confirm that the overall average score in the satisfaction survey was 80, and we will strive to provide even higher satisfaction by reflecting the opinions of customers collected through this survey.

Definition of "Customer"	- Public power generation company or private/SPC company that signed fuel cell LTSA contract with Doosan Fuel Cell
Background of Indicator Setting	- We are operating LTSA by securing a list of 20 customers (approximately 160 persons), and we have set up five questionnaires reflecting customer VOD received during many years of LTSA operation Service satisfaction / Operation quality / Customer communication / Work regulations/ EHS / Education/ seminar ※ Preparing a detailed questionnaire that can quantify and evaluate service satisfaction for each indicator
Utilization and Future Plans	- Conduct a pilot customer satisfaction survey in 2024 and identify service improvement needs based on result analysis - Disseminate the results to related organizations of Doosan Fuel Cell classified according to the survey items and encourage them for improvement - Conduct an annual customer survey on a regular basis and manage customer opinions numerically as database - Develop products and improve services by reviewing and applying survey results for each item/indicator to relevant departments
Final Goal	- Enhance quality competitiveness of the LTSA service through systematic VOC management and monitoring

Governance

Operation of the Board of Directors

The Board of Directors(BOD) deliberates on and resolves important management matters of the company, and decides on matters defined by the laws or articles of association, matters delegated by the general meeting of shareholders, and important matters related to the basic principles of company management and business execution.

As of the end of June 2024, the BOD of Doosan Fuel Cell is comprised of two internal directors and four independent directors. Doosoon Lee is the chairperson of the BOD and convening authority. He was appointed as the chairperson of the BOD due to his expertise in terms of job execution and efficiency in BOD operations. The Audit Committee, the independent Director Candidate Recommendation Committee, and the Internal Transaction Committee, comprised entirely of independent directors, have been established and operate within the BOD.

The term of a director is about three years, running until the end of the general meeting of shareholders for the final account settlement period within three years from the date of appointment. As of the end of 2023, the average tenure of a BOD member is 41 months.

The BOD is classified into regular board meetings held every March, from the starting date of the business year, and temporary board meetings. Temporary board meetings can be hosted frequently, as needed. Resolutions of the BOD are passed through the attendance of a majority of members and the vote of a majority of the attending directors. The BOD convened eight times in 2023, and the average attendance rate of directors was 98%.

The ratio of independent directors was 67% as of the end of 2021, and 60% as of 2022 and the end of 2023. No female director has been appointed, and all members of the BOD are over 50 years old. It is stipulated in the articles of association that Board members be notified of the convening of the BOD at least one day in advance. There is no independent director with a low attendance rate(less than 75%) and the ratio of independent directors with experience in the same industry was 33% in 2022 and as of the end of 2023, up from 25% in 2021.

As of the end of 2023, there was no case of objection or modification of opinions raised by independent directors. The ownership percentage of registered members, excluding the largest shareholder and affiliated parties, is 0%, and the ownership percentage of the affiliates was 30.33% from 2020 to 2023. As of the end of 2023, the total investment amount of affiliates against equity and credit offering of affiliates against equity capital was 0 for both. The amount of business transactions with affiliates and transactions that support the largest shareholder and affiliated parties* was KRW 302,580 / KRW 313,516 / KRW 102,294 million in 2021, 2022, and 2023, respectively.

* In the financial statement footnotes on related party transactions, the transaction amount with Daesan Green Energy, which is not an affiliate of our company, is excluded.
**Including preferred shares

Current Status of the Board of Directors (As of the End of 2023)

Category	Name	Gender	Career	Position	Year Appointed	Tenure
Internal directors	Hyungrak Chung	Male	CEO of Doosan Fuel Cell	CEO	2022	21 months
	Hooseok Che	Male	COO of Doosan Fuel Cell	CEO, Chairperson of BOD	2019	51 months
Independent directors	Changhyeon Ko	Male	Lawyer at Kim & Chang Director of Korean Securities Law Association	Member of Audit Committee Chairperson of Internal Trade Committee Member of Independent Director Candidate Recommendation Committee	2019	51 months
	Dongsu Kim	Male	Chair Professor at Korea University Chairperson of Fair Trade Commission (Former) President of Export-Import Bank of Korea (Former)	Chairperson of Audit Committee Member of Internal Trade Committee Member of Independent Director Candidate Recommendation Committee	2021	33 months
	Kwanyoung Lee	Male	Professor at the Department of Chemical and Biological Engineering at Korea University Executive Vice President for Research at Korea University	Member of Audit Committee Member of Internal Trade Committee Chairperson of Independent Director Candidate Recommendation Committee	2019	51 months

Current Status of the Board of Directors (As of the End of June 2024)

Category	Name	Gender	Career	Position	Year Appointed	Tenure
Internal directors	Hyungrak Chung	Male	CEO of Doosan Fuel Cell	CEO	2022	27 months
	Doosoon Lee	Male	CEO, COO of Doosan Fuel Cell	CEO, Chairperson of BOD	2024	3 months
Independent directors	Changhyeon Ko	Male	Lawyer at Kim & ChangDirector of Korean Securities Law Association	Member of Audit Committee Chairperson of Internal Trade Committee Member of Independent Director Candidate Recommendation Committee	2019	57 months
	Kwanyoung Lee	Male	Professor at the Department of Chemical and Biological Engineering at Korea University	Member of Audit Committee Member of Internal Trade Committee Chairperson of Independent Director Candidate Recommendation Committee	2019	57 months
	Chanseok Park	Male	First Deputy Secretary General of the Board of Audit and Inspection (Former)Advisor to Samsung Life Insurance Co., Ltd. (Former) Accountant at Ilshin CPA	Chairperson of Audit Committee Member of Internal Trade Committee Member of Independent Director Candidate Recommendation Committee	2024	3 months
	Seongkwon Jung	Male	CEO of Asiana Airlines (Former)	Member of Audit Committee Member of Internal Trade Committee Member of Independent Director Candidate Recommendation Committee	2024	3 months

The number of voluntary disclosures was 1, 3, and 2 in 2021, 2022, and 2023, respectively. The number of independent directors with expertise in risk management was 2 in 2021, but this was decreased to 1 in 2022 and 2023. Risk management of the company is performed on-site and reported to the Board of Directors and the Audit Committee. There are no particulars related to the establishment and operation of additional committees. As of the end of 2023, of Doosan Fuel Cell's independent directors, two serve as directors of other companies, each of them concurrently serving as an independent director for one additional company.

2023 Status of Doosan Fuel Cell Shareholders

Total percentage of shares owned by government institutions(National Pension Service)	4.60%
Percentage of shares owned by the owner's family and foundation	6.34%
Number of shares without voting rights (treasury shares)	12,564
Number of shares with voting rights (float shares)	81,831,662

Meanwhile, since 2023 Doosan Fuel Cell has established various institutional foundations to strengthen the BOD's ESG management and supervision functions. First, the BOD regulations were revised to include professional support regulations for independent directors. Additionally, the Audit Committee regulations were revised to grant the committee the right to consent to the appointment of the head of the internal audit department. Furthermore, we have decided to regularly discuss major ESG items in the first and second half of each year. As a starting point, in December 2023, we reported the ESG management strategy system and the mid- to long-term roadmap for greenhouse gas reduction.

Assessments and Rewards

Remuneration for directors is paid according to the company regulations for executives within the remuneration limit for directors that is set at the general meeting of shareholders. Remuneration for internal directors is classified into base salary and incentives reflecting management performance according to the 'Executive Officer HR Management Regulations,' and only base salary is paid to independent directors.
We pay directors' remuneration fairly and transparently and disclose relevant information according to the related laws. Remuneration for the management is paid according to the results of a performance evaluation on metric indexes (MBO), including financial performance tasks and strategic performance tasks, and non-metric indexes(qualitative evaluation), including growth, market situation, portfolio improvement, and design level.

Independence of the BOD

Doosan Fuel Cell ensures the independence of the BOD by setting the goal of having independent directors constitute the majority of the directors, and by appointing more than three independent directors. We conduct periodic reviews and take appropriate measures to facilitate the supervisory role of the BOD while allowing balanced and objective decision-making. As of the end of 2023, there were three independent directors, accounting for 60% of the BOD. After the regular general shareholders' meeting in March 2024, the number of independent directors was increased to four, raising the percentage of independent directors within the BOD to 67%.
The voting right of directors affiliated with particular entities is restricted according to the applicable law. The BOD operates three committees including the Audit Committee, and each committee is comprised of independent directors to secure the independence and transparency of decision-making

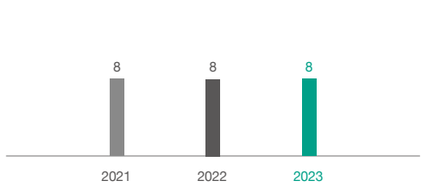
Operating Status of Committees under the BOD (As of 2023)

Category	Audit Committee	Internal Trade Committee	Independent Director Candidate Recommendation Committee
Composition	All independent directors	All independent directors	All independent directors
Role	Auditing the accounting and business of the company	Screening and approval of internal trades according to the Fair Trade Act	Recommending independent director candidates
Activity	Selecting outside auditors, reporting the accounting audit results, etc.	Approval of affiliate trades, etc.	Recommending independent director candidates
Number of meetings held	5	1	-
Participation ate	100%	100%	-
Agenda	9 cases including audit results report, etc.	1 case including approval of internal transaction approval, etc.	-

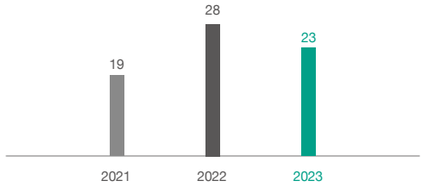
Major Resolutions of the BOD

The BOD makes decisions on important matters of company management, such as the disposal and transfer of important assets and the borrowing of large properties, in accordance with the relevant laws and internal regulations. A total of eight BOD meetings were convened in 2023 and 23 reports and agenda items, such as the approval of the 5th term financial statement and sales report, were proposed and resolved.

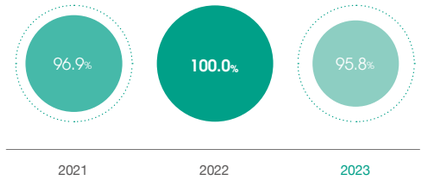
Board of Directors Meetings Convened — Unit: No. of Times



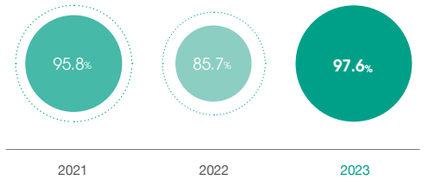
Agenda — Unit: Case



Participation of Independent Directors — Unit: %



BOD Participation Rate — Unit: %



Diversity of Independent Directors

In appointing directors, Doosan Fuel Cell does not engage in discrimination based on religion, gender, race, age, disability, political stance or region or country of origin. We consider diversity when composing the BOD.

Selection Procedures and Standards of Independent Directors

In appointing directors, Doosan Fuel Cell does not engage in discrimination based on religion, gender, race, age, disability, political stance or region or country of origin. We strive to form a board of directors that values diversity. Candidates for independent director positions are selected through a review and recommendation process by the Independent Director Candidate Recommendation Committee, which is composed entirely of independent directors. In this process, a candidate's qualifications, independence, and expertise are considered. Following candidate selection, an independent director is appointed through approval by the BOD and the general shareholders' meeting. The term of office for independent directors is 3 years, with reappointment limited to one term in accordance with the relevant laws and regulations, such as Article 542-8 of the Commercial Act.

Stakeholder Communication

The BOD communicates internally and externally with stakeholders through various communication channels, including disclosure and IR activity. In addition, the BOD immediately discloses decisions made at the general meetings of shareholders and matters pertaining to key managerial decisions to provide management information to shareholders and stakeholders. The general meeting of shareholders was announced 14 days before the meeting date from 2019 to 2021 and 21 days before the meeting date in 2022 and 2023.

Electronic Voting and Paper Voting

Doosan Fuel Cell uses a paper voting system, as specified in Article 35 of the Articles of Association, to safeguard the voting rights of minority shareholders. We have introduced an electronic voting system with the regular general shareholders' meeting for the settlement of accounts in 2021, as per Article 368-4 of the Commercial Act, to increase convenience for our shareholders. Shareholders can thus exercise their voting rights electronically without attending the meeting. Meanwhile, at the regular general shareholders' meeting for the 2023 settlement of accounts, voting rights were able to be exercised by proxy.

Shares that Participated via Electronic Voting — Unit: Share

The 3rd General Meeting of Shareholders	The 4th General Meeting of Shareholders	The 5th General Meeting of Shareholders
6,904,290 ('22.03.29)	5,566,440 ('23.03.29)	3,969,222 ('24.03.26)

Percentage of Electronic Voting against Total Shares

The 3rd General Meeting of Shareholders	The 4th General Meeting of Shareholders	The 5th General Meeting of Shareholders
14.0% ('22.03.29)	13.3% ('23.03.29)	9.9% ('24.03.26)

Ethical Management

Code of Conduct

To foster Doosan's continuous growth, Doosan Fuel Cell is committed to improving its competitiveness and fulfilling its corporate social responsibility through Inhwa, the Doosan Group's customer-focused business philosophy, transparent business operations and innovation. To this end, we have adopted and implemented the Code of Conduct as our guiding principles. This Code of Conduct(the "Code") applies to all employees("Doosan people") of Doosan Fuel Cell, and third parties working with Doosan Fuel Cell are also encouraged to comply with the Code.

Doosan people are responsible for understanding and complying with internal regulations, including the Code and related laws. Matters not covered by the Code or areas that require detailed explanation are covered in supplementary policies, which can be found on the Company's intranet or obtained from the Legal/Compliance Team. To the extent that any provision of this Code comes into conflict with applicable laws, the law shall take precedence.

If you believe that a violation of internal regulations has occurred, you are requested to report the matter in accordance with the procedure established by the company. The identity and other information of the reporter shall remain anonymous, and any form of retaliation against Doosan people for reporting such violations in good faith is strictly prohibited.

Link to Doosan Fuel Cell Code of Conduct

Help Desk Operation

We have opened a Help Desk on our website to provide counseling and guidelines for inquiries or questions related to ethical management policies, details of the Code of Conduct, or other reports. We have been able to successfully enhance the understanding of employees and outside stakeholders of Doosan Fuel Cell regarding the principles of ethical management and work policies.

If you have any inquiries or need help regarding a violation of the Code of Conduct and ethics

Mailing address: Doosan Fuel Cell, 17F, Doosan Tower, 275 Jangchungdan-ro, Jung-gu, Seoul, Republic of Korea

Email: inhye.jo@doosan.com

Managing Division: Legal/Compliance Team, Doosan Fuel Cell

Operation of the Internal Reporting System

Doosan Fuel Cell operates an internal reporting system and establishes a transparent and fair ethics management system by maintaining complete anonymity to avoid any disadvantages to the person making the report. The main issues are reported to the CEO and Audit Committee. Doosan Fuel Cell also operates the Cyber Report Center on the website, through which anyone can submit a report under his or her name or anonymously.

Link to Doosan Fuel Cell Cyber Report Center Operation Policy

Link to Doosan Fuel Cell Cyber Report Center

Violations of Ethics Management and Measures

In 2023, there was one report made related to ethical standard violations. In this regard, one voluntary resignation was issued, with the contents focusing on infractions of regulations and procedures as well as verbal abuse. As per the 'Personal Information Protection Guide' of the Ministry of Employment and Labor, when a violation of the Code of Conduct is verified, we prevent recurrences of similar cases through sharing information about the unethical act among employees, with personal information excluded, through white papers, ethics education case studies, ethics management letters, and more. In addition, we determine rewards and disciplinary actions according to the employee evaluation by linking compliance and employee rewards based on the reward and punishment regulations.

Operation Policy of the Cyber Report Center

01 The Cyber Report Center of Doosan Fuel Cell is open to employees and outsiders. Violations of internal regulations such as the Doosan Fuel Cell Credo and the Code of Conduct and other unfair acts are subject to reporting.

02 Reports can be made anonymously or under one's own name. However, the company may not investigate anonymous reports that fail to present concrete evidence.

03 The company guarantees the confidentiality of the reporter's identity and the details of the report. It is prohibited for management to cause any disadvantages to a person who submits a report in good faith.

04 The operating regulations of the internal reporting system are applicable to reports made by employees, and these regulations can be checked through DoDream or the responsible division.

05 The company receives reports through various routes including postal mail, phone, fax, email, and in person at the division, in addition to the Cyber Report Center.

Ethical Management

Education on Anti-corruption and Code of Conduct

All employees of Doosan Fuel Cell take online and face-to-face code of ethics training every year to foster awareness of ethical management. In addition, they express their will to observe ethical values and perform their work honestly and transparently by submitting a pledge to adhere to the code of ethics and a statement of interest. As well, through a message from the CEO, we ask all employees to practice and comply with the code of ethics. During holidays and other gift-giving periods in particular, we raise awareness among employees through a CEO's Announcement that emphasizes the need for honesty, transparency, and legal compliance.

CEO Letter

Hello, all employees of Doosan Fuel Cell.
The importance of corporate social responsibility and ethical management is continuously growing, and I would like to once again remind you of the need to comply with our code of ethics and the laws.

First, honesty and transparency are non-negotiable values and each individual's mission that must be put into practice.

Second, legal compliance is the basic obligation of all employees as members of our company, and is essential for business continuity.

I urge you to have a strong sense of duty and interest as employees of Doosan Fuel Cell in the company's code of ethics, honesty and transparency, and legal compliance. If you discover or recognize any wrongdoing, please report and share it immediately so that it can be promptly resolved.

Thank you.

CEO Announcement

Percentage of workers participated in education in 2023

100 %

Average education hours per person in 2023

56 minutes

Anti-corruption Survey of Suppliers and Employees

Doosan Fuel Cell conducts surveys of employees and suppliers to ensure the company's standard of ethics management is being met. The survey results are analyzed thoroughly and used in establishing plans for ethical management activities, such as the establishment of corruption prevention plans and finding improvements for insufficiencies. In January 2023, we conducted an anonymous online survey of our employees to ensure transparency and encourage active participation. It comprised a total of 24 questions, including descriptive ones.

Anti-corruption Survey Composition

Diagnosis Area	No. of Questions
Basic information (Affiliation/Position)	2
Ethical management system	6
Healthy organization culture	4
Honesty and transparency	5
Fair competition	4
Employee relationship	3

Employees answers were on a scale of strongly disagree (0 points) - disagree (25 points) - average (50 points) - agree (75 points) - strongly agree (100 points). The average result of the survey was 78 points, a value between agree (75 points) and strongly agree (100 points), indicating that ethical management is being relatively well maintained. Doosan Fuel Cell plans to prepare and implement improvement measures for vulnerable items with values below the average.

Ethical Management

Major Activities of Fair Trade

Distribution of Fair Trade Guidelines

Doosan Fuel Cell distributed the Guidelines to Prevent Violation of Prohibition against Unfair Special Agreements of the Subcontracting Act. These guidelines include Guidelines for Prevention of Unfair Support and Related-Party Transactions, Technical Data Provision Consent, and Guidelines for Preparation and Issuance of Confidentiality Agreement when requesting data from subcontractors, and were distributed to help employees to understand the changing regulatory environment and prevent unintended violations of related laws.

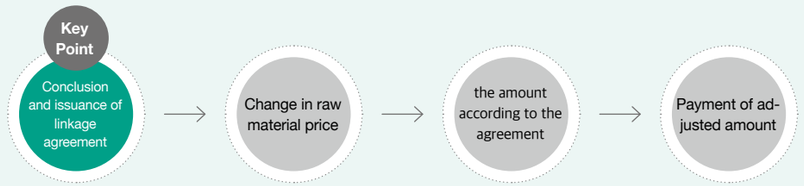
Implementation of Delivery Payment Linkage System

Following the implementation of the 'Delivery Payment Linkage System' on October 4, 2023, we are ensuring compliance with the law by providing relevant information through internal announcements.

The "Delivery Payment Linkage System" will be implemented from October 4 2023 as follows. Please keep this in mind when making subcontract transactions to avoid any disadvantages resulting from non-compliance.

"Delivery Payment Linkage System"?

① When consignment company entrusts the manufacturing, construction, repair, etc. of goods, etc. to the consignee,
② the matters related to delivery payment linkage name of goods, major raw materials, adjustment requirements, standard indicators, formula, etc.) are included in ③ the agreement ④ by writing and ⑤ issued to the consignee, and based on the agreement, the delivery payment is ⑥ adjusted and ⑦ paid.



(Note) Even if the “Delivery Payment Linkage System” is applied, Article 16 and Article 16-2 (Adjustment of Subcontract Consideration due to Fluctuations in Price of Raw Materials) of the Fair Transactions in Subcontracting Act may still apply.

Operation of Fair Trade Education

Doosan Fuel Cell conducted online education on the Subcontracting Act and an online presentation about the job manual for preventing unfair support and related-party transactions to enable employees to apply the laws and guidelines related to fair trade in actual work. In addition, to comply with the recently enacted Subcontract Payment Linkage System, we conducted training for related departments including the closely related purchasing team, regarding key provisions of the act and the sanctions for violating the system, and we emphasized the considerations required to ensure compliance with this act. We raised the level of education and presentation from simple delivery of knowledge through Q&A sessions, and minimized the occurrence of trials and errors by sharing actual cases.

Reinforcement of Monitoring on Internal Fair Trade

To ensure compliance with the Fair Trade Act, Doosan Fuel Cell included the legal manager in the approval line for internal transactions of affiliates and obtained approval from the BOD before signing a contract to review any unjust support in advance and prevent violations of laws. Additionally, in compliance with subcontracting regulations, the holdings shared growth team visited the Seoul, Gwanggyo, Iksan, and Gunsan sites to investigate the status of unfair special contracts, training sessions on the scope of the subcontracting law, conclusion of confidentiality agreements, and guidance on drafting consent forms for subcontractor data requests. The aim of this was to strengthen regular internal monitoring. In addition, the "Tech-Bridge" document sharing system was updated to provide a function to ensure that a prior confidentiality agreement is signed, a consent form for data provision is signed, and to indicate the purpose of the data request, the number of people to be shared, and the period of data use when a subcontractor requests the provision of data. The purpose of the system is to ensure continuous compliance with the relevant laws and regulations.

Future Plans

Doosan Fuel Cell is planning to operate various fair trade compliance programs according to the main policy direction of the Fair Trade Commission for 2024. We are currently planning a fair trade compliance manual and declaration of the CEO’s commitment, and are preparing to appoint a compliance manager. We will make sure employees are fully aware of the related laws and follow them thoroughly through guidebooks customized for particular divisions that are directly affected by fair trade laws and education.

Innovative Management

R&D Investment

Doosan Fuel Cell Technology Competitiveness

Doosan Fuel Cell is working on the development of innovative technologies and making a continuous investment in technologies to secure future markets through improved product competitiveness and the development of new power fuel cell products. We strive to develop technologies that can lead the market toward the hydrogen economy.

Development of Technologies to Reduce Power Generation Costs

With the increasing supply of new and renewable energy, there is an increasing demand for the reduction of power generation costs associated with PAFC products. Doosan Fuel Cell now aims to achieve LCOE reduction through continuous development of cost reduction technologies.

Safe Technology

Doosan Fuel Cell's technology is safe in that it does not require high pressure and combustion in the power generation process. It has been proven safe ever since its first application in a project by NASA (United States). Doosan Fuel Cell maintains a high of level safety that can be used for a wide range of building types by developing designs that meet international standards and implementing inspections and safety certifications.

High Durability

The system lifespan can be maintained for longer thanks to the operating temperature lower than 200℃ and stable stack technology.

Easy Installation

Thanks to its container size (dimensions: 8.3m x 2.5m x 3.0m), Doosan Fuel Cell's PAFC fuel cell is easy to transfer and enables excellent space utilization. It has no locational restrictions according to the environment and climate conditions. This means that it is possible to minimize the installation area and initial investment costs compared to new and renewable energy technologies with the same capacity.

Fuel Flexibility

As natural gas and LPG can be used as fuel, in addition to hydrogen, we can flexibly address customers' demands and field conditions.

Fast Response and High Capacity Ratio

We offer a flexible power system that responds to load changes instantaneously through output adjustment at the speed of 10kW/sec for ramp up and 20kW/ sec for ramp down of 440kW rated output. This guarantees energy production under any circumstances with durability that allows an average capacity ratio of over 95% rated output for 365 days a year. Furthermore, it supports excellent system restoration in emergencies such as outside blackouts. There is no emission of hazardous substances, unlike the conventional combustion generation method, and it can be operated in residential areas with less than 60dB of noise.

Electricity and Hot Water Supply

It is a highly efficient energy conversion technology that supplies electricity and heat to fulfill the heating and cooling requirements of industrial facilities with up to 90% efficiency.

Domestic Production of Parts

As of 2019, we achieved 98% domestic production of parts, by working with 280 suppliers in Korea. We perform manufacturing, testing, maintenance, and performance improvements of all key parts, including cell and stack, domestically.

Metal Separator

The cost ratio of a separator in a stack, the core part of phosphoric fuel cells, is about 30%, which is a key factor in determining the total cost. For this reason, the separator is very important in terms of performance. Doosan Fuel Cell is developing a cost-effective, long-life separator that can apply low-cost materials and processes by replacing expensive graphite with metal.

Next-generation Catalysts

Phosphoric acid fuel cells use platinum electrode catalysts, an affiliation of precious metals that have been commercialized. Since platinum catalysts come with a high cost ratio and their availability is highly dependent on imports, Doosan Fuel Cell is developing a next-generation catalyst with high performance and durability that can be produced domestically, through working in cooperation with domestic suppliers and institutions.

Water Electrolysis System

The demand for technology in hydrogen production systems is increasing, highlighting the need to expand hydrogen charging stations and hydrogen infrastructure. Doosan Fuel Cell completed the development, verification, and operational evaluation of a 1MW water electrolysis system based on PEMEC technology, supported by the 2023 national project. In 2024 and 2025, we plan to verify performance and durability through domestic and overseas demonstration operations and pursue commercialization.

Internalization of Electrode Business

In May 2024, we acquired Doosan Electronics BG's electrode division and began producing fuel cell electrodes in-house. This allows us to directly produce and manage the raw materials sector, increasing efficiency, mitigating supply chain risks, and strengthening cost competitiveness.

Innovative Management

Open Innovation

Innovation Activities	Details
Collaboration with a domestic professional research team	- Selecting a professional domestic university research team as an institution specializing in catalyst structure design and collaborating through a service contract to develop a high-efficiency/high-durability electrode catalyst
Fuel Cell Society Seminar	- Through participation in the Fuel Cell Society seminar, introducing and promoting various products using hydrogen such as water electrolysis systems of solid oxide fuel cell (SOFC), phosphoric acid fuel cell (PAFC), and cation exchange membrane fuel cell (PEMEC) for power generation and marine applications
Shortening development period and reducing resource usage through collaboration with companies specializing in structural analysis	- Reducing time required to recruit suitable companies through regular use of existing pool of multiple companies - Reducing costs by outsourcing high-performance equipment and high-cost licenses required for verification of large products - Performing high-density work in a short period of time by utilizing a large number of highly skilled outsourced personnel essential for complex analysis, shortening the actual time required
Collaboration with outsourcing companies	- Reducing costs for high-performance equipment and high-cost licenses required for verification of large products by regularly utilizing a pool of companies specializing in structural analysis, and shortening the time by utilizing a large number of highly skilled outsourcing personnel essential for complex analysis to perform high-density work in a short period of time - Shortening the time required for simple tasks (low value) through outsourcing contracts with companies that have persons skilled in simple 2D/3D drawing tasks, and strengthening synergies by utilizing companies with customized capabilities through many years of collaboration
Collaboration between Doosan group companies	-The metal separator being developed by Doosan Fuel Cell is done in collaboration with Doosan Enerbility, a member of the same group -Doosan Fuel Cell and Doosan Enerbility's separator design and coating technology know-how are expected to create synergies to develop high-level components

Product Innovation

We improve and develop existing PAFC NG models to accelerate growth and secure the future market, promoting the development of new products like LPG fuel models and tri-gen models.

LPG fuel models enable efficient power generation depending on the fuel prices and fuel use characteristics in the installed region through the use of NG and LPG together. We have completed the development, demonstration, and commercialization of these models.

Tri-gen models can produce electricity, heat, and hydrogen. They are under development through a national task and will be commercialized after a pilot project. Tri-gen models can be used in infrastructures to implement the hydrogen economy in the future, as they can function as HV/EV charging stations in cities while supplying electricity and heat as distributed power.

In addition, our company is developing SOFC technologies, in addition to the existing Phosphoric Acid Fuel Cell(PAFC) technologies, to ensure competitiveness in the power generation market. The SOFC system for power generation shows high power efficiency at high temperatures above 800℃, but has the disadvantage of a short life expectancy. Our company is developing a medium- and low-temperature SOFC system to make up for this shortcoming. To this end, we are developing the mass-production technology for cell stacks, which are the core parts of fuel cells, in cooperation with Ceres Power, a British fuel cell technologies company. Through investing KRW 72.4 billion by 2023, we will install production facilities on a scale of 50 MW. Mass production will begin in 2025.

Doosan Fuel Cell defines innovative products as products that undergo significant improvements with regard to major parts and modules that account for over 10% of the material cost and changes in the fuels or fuel compositions used(mixed use of two or more fuel types), apart from producing new product models. Innovative products accounted for sales that occurred for five years, including the year in which improvements were made. The ratio was 90% of total sales in 2020 and 100% in 2021, 2022, and 2023.

Meanwhile, the 5CSA model, which is anticipated to reduce power generation costs and increase production efficiency by increasing the output of the current M400 model by more than 25% within the same footprint, is slated for development in the first half of 2024. Mass production is scheduled to begin in the second half of 2024. This development project has been recognized for its effectiveness in Korea, winning the grand prize in the hydrogen utilization category at the 2023 H2 Innovation Awards.

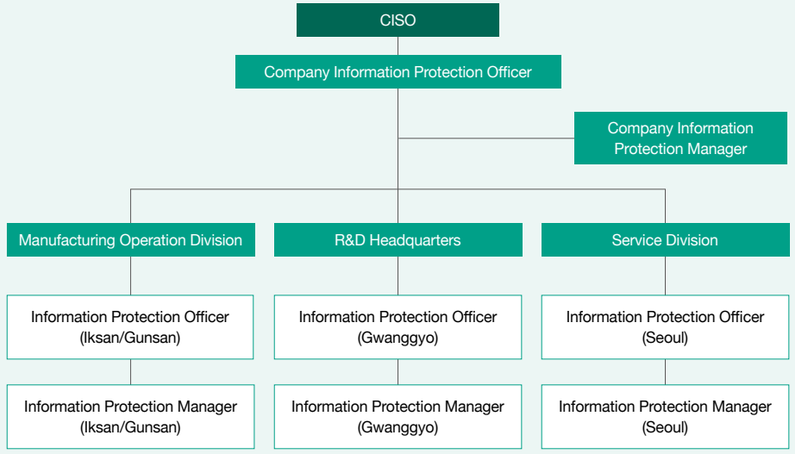
Information Security & Protection of Customer Information

Information Security Operating System

Doosan Fuel Cell is a handler of a national core technology (hydrogen, designated in April 2023) and is responsible for implementing protective measures and management activities to safeguard this technology, which are led by the security department under the Chief Information Security Officer (CISO) and the Chief Privacy Officer (CPO). We protect the company's assets from internal and external security threats by checking for vulnerabilities in in-house IT/OT systems, applications, and network infrastructure.

The security department is responsible for monitoring harmful traffic to prevent leaks of core national technologies. It also holds regular security councils to promote efficient work and communication between related departments that handle personal information. When security abnormalities occur, we discuss measures to establish and implement action plans and prevent recurrence through the security council.

As an affiliate of the Doosan Group, we acquired ISMS, an information security certification, from Doosan. Doosan Fuel Cell strives to strengthen its information security by participating in simulated hacker training programs hosted by Doosan.



Security Management System

We established security regulations(HR and suppliers, IT systems, security audits, security management, responses to security accidents, facility security, protection of business secrets, information assets, information devices, cloud security policy) in 2020 and review them every year to introduce necessary revisions. We share our security policies with employees by posting them on the in-house portal.

The security system of Doosan Fuel Cell and Doosan Group responds proactively to security threats by detecting and analyzing invasion attempts. Our 24/7 monitoring solutions safely protect internal information assets.

Multi Factor Authentication(MFA) was applied to the in-house system access solutions, VPN[1] and VDI[2], to use One Time Passwords(OTP) when accessing internal systems from the outside. Using these methods, we prevent outsiders from accessing our internal systems by stealing accounts.

1) Virtual Private Network(VPN): A solution that allows users to use a public network, such as the Internet, in the same manner as an intranet
2) Virtual Desktop Infrastructure(VDI): A solution that provides a virtual desktop and data storage to each user by utilizing resources of a server operated by virtualization technology

Protection of Corporate

We make a list of business secrets and update it every year to legally protect and manage the security of important business secrets. A policy to detect leakage history and block leakages has been applied to minimize the risk of business secrets reaching unscrupulous entities. We have introduced measures to raise the security awareness of departments. We appointed the security officer and manager for each department to collaborate with the security department when a security accident or sign occurs.

When an employee retires, we check the history of emails sent out by the retiree in the last six months to check for the leakage of business secrets.

To prevent leakage of in-house business secrets in the event of personal PC theft or loss, BitLocker(remote hard disk encryption) is applied to all employees' PCs for management.

We are conducting preemptive risk management by subscribing to personal information protection damage insurance.

We established security regulations(HR and suppliers, IT systems, security audits, security management, responses to security accidents, facility security, protection of business secrets, information assets, information devices, cloud security policy) in 2020 and review them every year to introduce necessary revisions. We share our security policies with employees by posting them on the in-house portal so that all employees can freely access and utilize them.

Information Security & Protection of Customer Information

Enhancing Information Protection Awareness

Doosan Fuel Cell holds annual online security education for all employees on the prevention of information leakage, protection of business secrets, management of information devices, and protection of personal information.

We conducted simulated training every quarter(four times a year) (3 simulated hacking email trainings and 1 personal information protection simulated training for leakage) to prevent damage from ransomware, remittance fraud, and information leakage using phishing emails that are intended to steal accounts. By following up with a campaign, we improved the response capability of employees by educating them on how to identify and report hacking emails (i.e., Security issue report, processing report, report to the department in charge, post-processing, etc.).

We designate six Security Diagnosis Days per year to deliver security-related news and important announcements, and provide checklists and guidelines so that employees can self-check their security status.

Major Activities for Information Security and Protection of Personal Information

Education and Training Activity	Details	Target	Cycle
Security/Personal Information Production Training for Employees	Security compliance information	All employees	Annually
Information Protection Training for New/Experienced Employees	Security regulations and process information	New/experienced employees	At the time of employment
Training for Information Manager/ Officer by Department	Security regulations and process information	Security managers/ officers of each department	Annually
Supplier Security Training	Information on information protection compliance for suppliers	Employees of suppliers	Annually
Hacking Mock Training	Response to hacking emails, personal information protection leaks	All employees	4 times a year
Security Diagnosis Day	Enhancing security awareness of employees (security news, etc.)	All employees	6 times a year

Inspections on Security Diagnosis Day

Purpose	Details	Target
Security inspections and measures	PC DI everyday security	Individuals
	Information system	Departments
	Business secrets and documents	
	Facilities, areas, access	Persons in charge of security
	Focused security management	
Raising awareness	Security newsletter	

Subscription to Personal Information Compensation Insurance

In compliance with the 'Personal Information Damage Liability Guarantee System' under the ‘Personal Information Protection Act,’ Doosan Fuel Cell has subscribed to the relevant insurance from January 17, 2023, to January 17, 2024. While no incidents involving personal information occurred during this period, we are preparing institutional measures to promptly address and recover potential damage through insurance subscription.

Information Security & Protection of Customer Information

Information Security Management Process

Initial Response

❶ Employees shall refrain from responding discretionally to information security risks/incidents, but shall immediately report them to the security department, and follow the instructions of the security department. If there is concern of damage spreading through the company's network via ransomware, the affected computer equipment shall be removed from wired and wireless corporate networks and immediately reported to the security department.

❷ The security department shall provide information on the security incident or risk to the information system managing department in each area, operating department, and related departments, have them take initial actions to prevent the spread of damage, and evaluate the seriousness of the issue. The security department shall determine the seriousness of the incident, report the matter to the executive in charge of security, isolate the accident site if necessary, and secure the body, evidence, and traces of related persons.

❸ If a security incident occurs and has a serious adverse impact on the company, the head of the security department shall report the matter to the executive in charge of security and senior management, call an "emergency accident response organization," and discuss response measures. If external communication is necessary, the channels shall be combined into one channel, such as the PR Department, to prevent additional damage from communication errors.

Incident Investigation and Report

❶ The security department or emergency accident response organization shall investigate the security accident after taking initial actions to prevent collected evidence and traces from losing their evidentiary power. If necessary, the department or organization may seek cooperation from external agencies.

❷ Preemptive measures can be taken during the investigation if necessary to prevent the spread of damage.

❸ Upon completion of the investigation, the security department or emergency accident response organization shall prepare a report containing the following and submit it to the executive in charge of security, depending on the seriousness of the incident. If necessary, these matters may be reported to the executive in charge of security even during the investigation.
1) Person who caused the incident and personal profile; 2) Date, time, and place of occurrence; 3) Details and course of the incident;

❹ Details of the security incident shall not be disclosed until the investigation is concluded. The investigation results are only disclosed to the relevant employees, the executive in charge of security, and the top management.

Follow- up Actions on Security Accidents

❶ If actions are required to prevent the recurrence of the security incident, persons in charge of the target department shall take preventive actions or establish an action plan within two weeks of being notified of the results, and report the measures to the security department.

❷ Members of the security department shall confirm that the persons in charge of the target department took appropriate preventive actions. However, the time of confirmation may be adjusted according to the urgency and importance of the matter.

❸ The company may take disciplinary actions or punish related employees and persons in charge based on the investigation results, taking legal action as necessary.

Information Security & Protection of Customer Information

Training Progress

Reinforcement of Personal Information Protection

Doosan Fuel Cell continuously monitors the laws around information security to protect personal information safely and ensure compliance with domestic and overseas laws related to personal information protection, as well as to disseminate best practices to internal management plans and personal information protection regulations. We conduct inspection on implementation status, consignor/consignee education, and internal auditing of the main areas every year for the personal information handlers and personal information handling system, and address and manage all vulnerabilities discovered.

- To raise the level of awareness and management of personal information protection at companies entrusted with our personal information, we designate a person in charge to take information protection training and conduct an internal assessment once a year. A trustee who fails to complete the training or who does not submit the relevant grounds is subject to a penalty, such as termination of the consignment contract.
- The current status of personal information protection is audited once a year by Doosan Co., Ltd.(the external auditor), and matters pointed out are addressed within the year.
- The person in charge of personal information protection installs Personal Information Encryption SW to prevent issues related to personal information from occurring even in the event of leakage.

Internalization of Personal Information Protection Culture

Doosan Fuel Cell conducts annual education programs for personal information protection managers and handlers who are required to complete compulsory education on personal information protection. In addition, we carry out various activities and release material protection such as posters, newsletters, and PC screensavers to strengthen the culture of personal information protection.

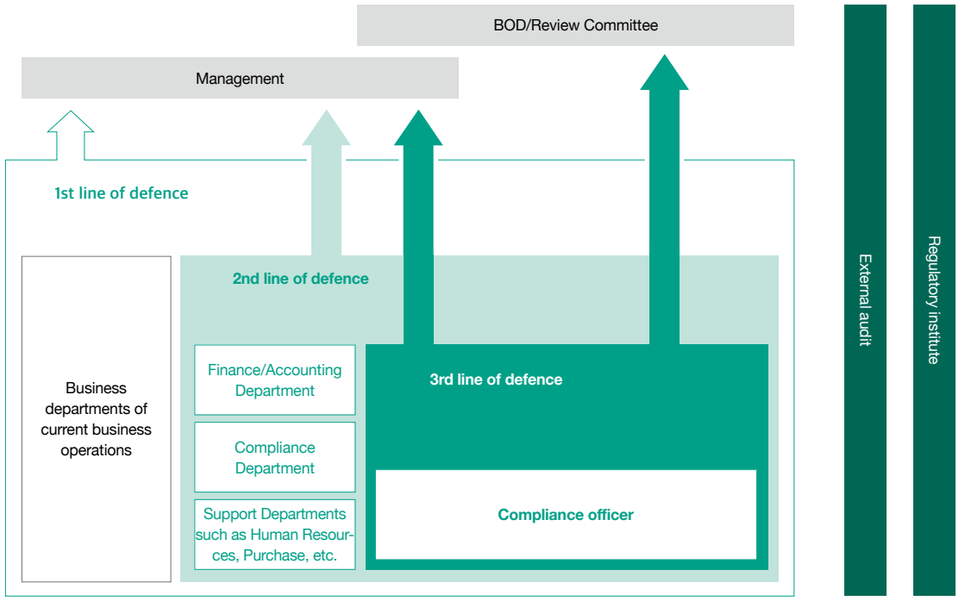
Principles of Personal Information Protection

01. Scope of gathering personal information	We do not collect sensitive information (race, religion, ideology, place of origin, domicile, political stance, criminal record, health condition, sexual preference, etc.) that may violate basic human rights, or ask for uniquely identifying information of the subject.
02. Items of personal information collected and method of collection	**1) Handling of complaints** - Required items: Name, email address **2) Service analysis and service level** - Service use history, access logs, cookies, access IP information **3) Recruitment screening/decision** - General information: Name(Korean/Chinese/English), birthdate, gender, photograph, password, etc. - Sensitive information: Disability status and disability type/rating
03. Purpose of collection and use of personal information	**When receiving separate consent from the subject of information** - When there are specific regulations under the law, or it is unavoidably necessary to comply with legal obligations - When prior consent cannot be received because the subject of information or a legal representative is unable to express one's intention or the address is unknown
04. Purpose of collection and use of personal information	**1) Customer-related** - Enhancing the service analysis and service level: Providing better services through the analysis of service use and improving the level of the website's usability(improving service analysis and service level), etc. - Handling grievances/ complaints: Checking the complaint, notice of contact for fact finding, notice of the handling result, etc. **2) Recruitment-related** - Recruitment screening/decision: Identification and name verification, employment screening, contact with the applicant, referring to matters related to employment(veteran, disability information, etc.) such as the Act on the Honorable Treatment of and Support for Persons of Distinguished Service to the State and the Act on the Employment Promotion and Vocational Rehabilitation of Persons with Disabilities
05. Personal information protection officer and manager	**A. Personal information protection officer** - Name : Wonjo Bang. Managing Director **B. Personal information managing division** - Name : OE Part, Production/OE Team, Doosan Fuel Cell - Tel : 063-722-2019 - Fax : 063-831-0717 - Email : gon.kim@doosan.com

Risk Management

Risk Management Governance

Doosan Fuel Cell has implemented a comprehensive internal control system designed to effectively and efficiently achieve organizational goals, such as enhancing sales efficiency, ensuring the reliability of financial reporting, and maintaining compliance with laws and regulations through systematic and company-wide risk management activities. Firstly, business departments directly involved in manufacturing, producing, and supplying products are responsible for managing and monitoring risks in daily operations. Secondly, there are dedicated departments and functionally divided departments focused on monitoring risks. Lastly, Doosan Fuel Cell has appointed a compliance officer in accordance with relevant regulations, such as Article 542-13 of the Commercial Act. The compliance officer can perform work independently, ensures adherence to compliance control standards, and reports the results directly to the board of directors.



Risk Management Culture

Doosan Fuel Cell recognizes the importance of risk management and strives to create a risk management culture that proactively prepares for potential risks. We review risks at least once a year according to the risk management process, and disclose the definition and impact of identified risks and risk response activities in the business report.

RCM

Doosan Fuel Cell posts the RCM (Risk Control Matrix) document on its internal portal. This document supports the individual risk management capabilities of employees by specifying the objectives, activities, owners, assessment procedures, etc. for risk management items for each major function of the company, enabling employees to identify and report potential risks before problems occur.

Rewards for proposing potential risks at workplaces

Doosan Fuel Cell instituted a biannual reward system to encourage a proactive approach to identifying EHS-related risks in the field. In 2023, a total of 697 and 672 potential risks were identified and reported by employees in the first and second halves, respectively, and 174 cases in the first half and 148 cases in the second half were rewarded to enhance the risk identification and management capabilities of employees.

Reflection of risk management factors in performance evaluation

Doosan Fuel Cell evaluates the performance of employees through DCM (Doosan Competency Model), the Doosan Group's competency evaluation model. Of the six relevant categories in the Doosan Credo, potential risk management factors are evaluated under the Execution category to assess the risk response capabilities of employees.

Risk Management Process

The Chief Operating Officer (COO) and Chief Financial Officer (CFO) oversee the management and supervision of business, financial, and sustainability risks at Doosan Fuel Cell. Financial risks are managed by the finance department under the CFO, which collaborates closely with related departments to establish financial risk management policies, and to identify, evaluate, and hedge financial risks. In addition, they are dedicated to minimizing potential financial risk impacts through regular reorganization of financial risk management policies and financial risk monitoring. For sustainability risks, risk management strategies and mitigation and response measures related to domestic and international regulatory trends, environmental concerns, supply chain issues, and human rights are regularly reviewed and addressed through the ESG Committee, which is held twice a year under the supervision of the ESG Team managed by the COO.

Risk Management

Identification and Response to Financial/Non-financial Risks

Category	Description	Potential Impact on Doosan Fuel Cell		Doosan Fuel Cell's response
		Positive	Negative	
Business risk	Risk related to new product development, business contracts, investment, etc. due to technological development and increased demand	Improved image as a leading hydrogen fuel cell company and increase sales	Increased financial burden due to investment expansion	- Began construction of the Saemangeum plant for mass production of next- generation SOFC - Prepare for commercialization of new products/ models in terms of product diversification - Strengthen competitiveness of existing businesses
Foreign exchange risk	Exposure to the risk of exchange rates changing due to international business activities	Increase in net profit before tax when the exchange rate rises	Uncertainty and profit/loss fluctuations due to exchange rate fluctuations	- Offset the amount of foreign exchange exposure through Natural Hedging by responding to export and import currencies - Conduct exchange risk management in accordance with the exchange risk management regulations; foreign exchange management for speculative purposes is prohibited in accordance with the regulations
Price risk	Changes in the fair instruments or future cash flows due to changes in market prices in relation to listed equity instruments	Increase in the fair investment products due to market price fluctuations	Decrease in the financial investment products due to market price fluctuations	- Management regularly measures the price - Individual management of important investments within the portfolio - Prepare a process that requires the approval of the board of directors for all acquisition and sale decisions
Credit risk	Financial loss that occurs when one of the parties to a financial instrument fails to fulfill its obligations	Strengthened management capabilities such as establishing a credit rating system for new customers	Incurring company losses, such as unexpected insolvency	- Evaluate credit quality using financial information and information from credit rating agencies when contracting with new customers, determine a credit limit, and receive collateral or a payment guarantee - Periodic re-evaluation of customer credit rating and readjustment of credit limit
Liquidity risk	Satisfy obligations related to financial liabilities	Reinforcement of fund balance planning capability through cash flow management	The company's credit rating fell due to insolvency caused by a mismatch between the repayment of funds and the procurement period	- Establish a system to respond to the maturity structure of financial liabilities and financial assets by regularly predicting the balance of funds in sales, investment, and finance activities

Category	Description	Potential Impact on Doosan Fuel Cell		Doosan Fuel Cell's response
		Positive	Negative	
Operational risk	Quality/production and service-related risks	Reduced risks related to quality/production and service	Customer claims due to quality issues, delivery disruptions and company losses due to production schedule disruptions	- Improve work capabilities by dispatching manufacturing engineers to R&D-Secure rapid production and quality systems by reducing the lead time for design changes
Supply chain risk	The occurrence of risks in terms of business continuity for parts suppliers	Provides an opportunity to establish a supply chain risk management system, strengthens suppliers' ESG risk management capabilities	Disruptions in product production and delivery and company losses due to the inability to procure parts	- Develop an ESG evaluation index for each group, and self-assess - Reflect on follow-up measures (support or penalty) and purchase policies based on self-diagnosis results
	Raw material purchase risks	The degree of monopoly in the raw material market is relatively low except for electrodes	Increased costs due to fluctuations in international raw material prices and exchange rates	- Acquire/internalize the BG Electrode Department of Doosan Electronics, an existing client - Use locally sourced materials and diversify supply chains
Information security risk	Threat to internalsystems through hacking	Advanced informationsecurity system and internalization through employee training	Economic loss due toexposure of trade secrets	- Protect in-house information assets with 24-hour monitoring - Simulated training to prevent damage from information leakage 4 times a year
Human risk	Risk due to securing,maintaining, and leaking outstanding human resources	Creates a better work environment and strengthens learning programs	Increased uncertainty due to delays in hiring key personnel	- Establish strategic manpower plan in connection with company-wide business strategy - Establish and execute core talent recruitment plans to create new business performance
Legal/ ethical risk	Risk due to corruption and violations of fair trade	Securing corporate trust through fair and transparent management	Increased criminal/ administrative penalties and response costs for violations of law, decline in corporate image	- Apply ethics regulations and operate the cyber/Internal Report Center - Fair trade, anti-corruption/ethics education - Introduced the Fair Trade Compliance Program

Association and Organization Activities

UNGC Activities

In June 2023, Doosan Fuel Cell joined the UN Global Compact and declared support for its 10 principles. We go beyond mere membership, actively participating in various working groups and accelerator programs to internalize ESG for each and every employee. In 2023, four representatives from related departments participated in the ESG Working Group, Environment Working Group, Human Rights Working Group, and Anti-Corruption Working Group. Starting in 2024, a total of 10 employees are participating in five working groups and Business and Human Rights, Climate Ambition, and Target Gender Equality Accelerator programs.

Association and Group Activities

Doosan Fuel Cell is deeply involved in various associations and organizations dedicated to the hydrogen and renewable energy sectors. Notably, Doosan Fuel Cell's CEO serves as the president of the Korea Hydrogen Fuel Cell Industry Association, through which he actively engages with stakeholders throughout the hydrogen industry ecosystem and demonstrates his great interest in the development of the hydrogen industry.

Year of Participation/Joining	Association/Group Name
2024	RE100 · CF100 Energy Solution Alliance
2023	Hydrogen City Convergence Forum
2022	Korea Hydrogen Fuel Cell Industry Association
2021	Energy Alliance
	Clean Ammonia Council
	Energy Future Forum
	Energy Transition Forum
2017	Hydrogen Convergence Alliance
2016	Fuel Cell Industry Promotion Association
2003	Korea New & Renewable Energy

ESG Data

Environmental

Greenhouse Gas

Classification		Unit	2021	2022	2023
Greenhouse gas emissions (Scopes 1+2)		tCO_2eq	3,540	6,293	4,798
Greenhouse gas emission intensity (Scopes 1+2)		tCO_2eq/KRW 100 million	0.93	2.02	1.84
		tCO_2eq/Unit*	28.095	36.587**	52.747
Greenhouse gas emissions	Scope 1 (Direct emissions)	tCO_2eq	948	1,267	924
	Scope 2 (Indirect emissions)	tCO_2eq	2,592	5,026	3,874

*Based on the number of fuel cells produced
**36.590 in the 2023 report was rounded to four decimal places and it was corrected to 36.587

Water*

Classification			Unit	2021	2022	2023
Iksan Head Office	Water withdrawal	Waterworks	Ton	30,622	31,681	28,151
		Underground water	Ton	0	0	0
		Fresh water (lake, river, etc.) used	Ton	0	0	0
		Total	Ton	30,622	31,681	28,151
	Water discharge**		Ton	161	283	333
	Water consumption***	Water consumption volume	Ton	30,461	31,398	27,818
		Water consumption intensity	Ton / KRW 100 million	8	10.1	10.7
	Water recycling	Water recycling volume	Ton	4,083	8,769	9,669
		Water recycling rate	%	13.4	27.9	34.8
Seoul Office	Water withdrawal	Waterworks	Ton	39	89	23
		Underground water	Ton	0	0	0
		Fresh water (lake, river, etc.) used	Ton	0	0	0
		Total	Ton	39	89	23
	Water discharge**		Ton	7	10	8
	Water consumption***	Water consumption volume	Ton	32	79	15
		Water consumption intensity	Ton / KRW 100 million	0.0084	0.0253	0.0057
Gwanggyo R&D Center	Water withdrawal	Waterworks	Ton	4,383	3,653	4,848
		Underground water	Ton	0	0	0
		Fresh water (lake, river, etc.) used	Ton	0	0	0
		Total	Ton	4,383	3,653	4,848
	Water discharge**		Ton	0	0	0
	Water consumption***	Water consumption volume	Ton	4,383	3,653	4,848
		Water consumption intensity	Ton / KRW 100 million	1.15	1.17	1.86

* Additional reporting from Gwanggyo R&D Center and Seoul Office since 2023
** Water discharge calculation standard: Wastewater discharge
*** Water consumption calculation standard: Water withdrawal – Water discharge

Energy (Consumption)

Classification	Unit	2021	2022	2023
Total energy consumption*	TJ	66.6	135.2	98.78
	MWh	18,499	37,567	27,438
Total non-renewable energy consumption	TJ	66.6	135.2	98.78
	MWh	18,499	37,567	27,438
Electricity	TJ	52.99	103.71	80.29
Steam	TJ	5.94	18.95	6.89
LNG	TJ	7.67	12.59	11.61
Total renewable energy consumption**	TJ	0	0	0
	MWh	0	0	0
Percentage grid electricity***	%	79.56	76.86	81.28
Energy intensity****	TJ/KRW 100 million	0.017	0.043	0.038
	TJ/Unit	0.529	0.786	1.085
	MWh/KRW 100 million	4.85	12.04	10.52
	MWh/Unit	146.82	218.41	301.52
Data scope	%	100	100	100

* It was reported as the sum of non-renewable energy and total new and renewable energy consumption in the 2023 report, but it is reported as the sum of total non-renewable energy and renewable energy consumption since 2024 in accordance with the KCGS evaluation standards
** It was reported as new and renewable energy consumption in the 2023 report, but it is reported as renewable energy consumption since 2024 in accordance with the KCGS evaluation
*** Ratio of electrical energy in total energy consumptionstandards
**** Energy intensity also changes with the change in total energy consumption

ESG Data

Environmental

Waste

Classification	Unit	2021	2022	2023
Total general waste generation	Ton	527	923	705
Total general waste generation intensity	Ton/KRW 100 million	0.14	0.30	0.27
Data scope	%	100	100	100
Total general waste recycled				
Total general waste recycled/reused	Ton	291.54	444.37	301.80
Waste recycling rate	%	55.3%	48.1%	42.8%
Waste disposed				
Total waste disposed	Ton	235.73	478.87	403.48
Waste reclaimed	Ton	212.39	405.92	336.5
Waste incinerated with energy recovery	Ton	0	0	0
Waste incinerated with no energy recovery	Ton	23.34	72.95	66.98
Hazardous waste treated with different methods (on-site storage)	Ton	0	0	0
Waste with no record of disposal method	Ton	0	0	0

Designated waste

Classification	Unit	2021	2022	2023
Total Designated waste generation	Ton	5.49	7.41	248.05*
Total Designated waste generation intensity	Ton/KRW 100 million	0.001	0.002	0.095
Data scope	%	100	100	100
Total Designated waste recycled				
Total Designated waste recycled/reused	Ton	4.34	6.34	247.36
Waste recycling rate	%	1%	1%	35%
Designated waste disposed				
Total Designated waste disposed	Ton	1.15	1.07	0.69
Designated waste reclaimed	Ton	0	0	0
Designated waste incinerated with energy recovery	Ton	0	0	0
Designated waste incinerated with no energy recovery	Ton	0.3	0.11	0.21
Designated waste treated with different methods (on-site storage)	Ton	0.85	0.96	0.48
Designated waste with no record of disposal method	Ton	0	0	0

* Temporary increase due to batch treatment of waste (ILS, reformer) accumulated since 2020 in 2023

ESG Data

Environmental

Pollutants

Classification		Unit	2021	2022	2023
Chemical generation		Ton	0	0	0
Hazardous chemical usage		Ton	0.004	0.005	0.230
Water pollutant emissions*	Chemical oxygen demand (COD)	Ton	0.000039396	0.000134946	0.000098784
	Biochemical oxygen demand (BOD)	Ton	0.000039396	0.000134946	0.000098784
	Suspended solids (SS)	Ton	0.000034692	0.000087318	0.000409248
	Total organic carbon (TOC)	Ton	-	0.000089964	0.000310464
Air pollutant emissions**	Dust (PM)	Ton	0.28	0.26	0.28
	NOx emissions	Ton	0	0	0
	SOx emissions	Ton	0	0	0

* The unit of 'water pollutant emissions' in the 2023 report was mg/L, but it was changed to ton since 2024
** The unit of 'dust (PM)' in the 2023 report was mg/Sm3, but it was changed to ton since 2023.

Status of Eco-friendly Vehicles

Classification	Unit	2021	2022	2023
Number of eco-friendly vehicles owned	EA	0	5	9
Ratio of eco-friendly vehicles owned	%	0	15.2	27.3

Product Responsibility

Classification			Unit	2021	2022	2023
Management of end-of-life products		Ratio of products sold that can be recycled or reused	%	-	-	37.8
		Weight of recovered end-of-life (EOL) material	Ton	-	-	16
		Recycling rate of recovered end-of-life (EOL) material	%	-	-	11.5
Product efficiency	Purecell® M400 NG	Power efficiency	%	43	43	43
		Thermal efficiency	%	47	47	47
		Overall efficiency	%	90	90	90
		Operating time	Hour	87600	87600	87600
	Purecell® H2	Power efficiency	%	50	50	50
		Thermal efficiency	%	35	35	35
		Overall efficiency	%	85	85	85
		Operating time	Hour	87600	87600	87600
	Purecell® LPG/NG Dual	Power efficiency	%	41/43	41/43	41/43
		Thermal efficiency	%	49/47	49/47	49/47
		Overall efficiency	%	90	90	90
		Operating time	Hour	87600	87600	87600
Eco-Friendly sales*	Sales		KRW million	381,412	312,149	260,886
	Percentage of total sales		%	100	100	100
Eco-Friendly purchases**	Purchase		KRW million	0	30	69
	Percentage of total purchases		%	0	0.3	0.4

* Sales abased on 'eco-friendly sales standards' (see page 44 of the report)
** Purchase amount based on 'eco-friendly purchasing standards' (see page 38 of the report)

ESG Data

Environmental

Material Usage

Classification	Unit	2021	2022	2023
Total usage	Ton	3,265	4,183	2,226
Non-renewable materials usage	%	100	100	100
Renewable materials usage	%	0	0	0

Environmental Education

Classification	Unit	2021	2022	2023
Number of employees participating*	Person	116	117	440
Education hours per person**	Hour	1	4	4

* Among 4 face-to-face trainings in a year
** Education cycle: Once a quarter, training time: 1 hour/session

Environmental Management

Classification		Unit	2021	2022	2023
Environmental law violations	Number of violations	Case	0	0	0
	Fines/penalties	KRW million	0	0	0
	Environmental liabilities incurred at the year-end	KRW million	0	0	0
Environmental managementand eco-friendly product certification	Number of business places certified with ISO 14001	EA	3	3	3
	Total number of business sites	EA	-	1	1
	Ratio of business places certified with ISO 14001*	%	-	100	100
Environmental investment	Capital investment	KRW million	22.9	408.1	0
	Operating costs	KRW million	126.2	200.7	70.9
	Total costs	KRW million	149.1	608.8	70.9
	Cost reduction (profit, tax benefits)	KRW million	4,154.6	8,920.0	7,785

* Proportions of sales of ISO 14001 certified business sites compared to sales by business sites

Supply Chain Environmental Impact Assessment

Supply Chain Environmental Impact Assessment	Unit	2021	2022	2023
Number of new suppliers	EA	68	153	64
Number of new suppliers that passed environmental standards evaluation	EA	1	14	3
Number of suppliers subject to environmental impact assessment	EA	0	2	0
Number of high-risk suppliers	EA	0	0	0

ESG Data

Social

Status of Employees

Classification		Unit	2021	2022	2023
Total number of employees		Person	481	471	470
By gender	Male	Person	425	418	417
	Female	Person	56	53	53
Full-time employees*	Number of males	Person	411	407	405
	Number of females	Person	55	45	43
	Total number of employees	Person	466	452	448
	Ratio of males	%	88.2*	90.0*	90.4
	Ratio of females	%	11.8*	10.0*	9.6
	Ratio of total number of employees	%	96.9	96.0	95.3
Contract employees**	Number of males	Person	14	11	12
	Number of females	Person	1	8	10
	Total number of employees	Person	15	19	22
	Ratio of males	%	93.3*	57.9*	54.5
	Ratio of females	%	6.7*	42.1*	45.5
	Ratio of total number of employees	%	3.1	4.0	4.7
By age group	Under 30	Person	208	153	149
	30-50	Person	263	287	286
	Over 50	Person	10	31	35
	Ratio under 30	%	43.2	32.5	31.7
	Ratio 30-50	%	54.7**	60.9	60.9
	Ratio over 50	%	2.1**	6.6	7.4

* The 2023 report calculated the ratio using the total number of employees as a parameter, but it was changed to the ratio of regular workers and contract workers since 2024
** Corrected due to numerical error in the 2023 report

Classification		Unit	2021	2022	2023
By region	Domestic	Person	481	471	470
	Overseas	Person	0	0	0
By nationality	Korean	Person	479	470	469
	Ratio of Korean**	%	99.6	99.8	99.8
	American	Person	1	0	0
	Ratio of American	%	0.2	0.0	0.0
	Canadian	Person	1	1	1
	Ratio of Canadian	%	0.2	0.2	0.2
Manager ratio by nationality	Korean	%	99.0	99.5	99.5
	American	%	0.5	0.0	0.0
	Canadian	%	0.5	0.5	0.5
Persons with disabilities****	Number of employees	Person	1	9	9
	Ratio	%	0.21	1.91	1.91

* Contract workers, dispatched workers
** Targeting to hire 14 persons with mild disability (7 persons with severe disability)

ESG Data

Social

Diversity of Employees-Gender*

Classification		Unit	2021	2022	2023
Number of Management positions by gender**	Total	Person	202	202	210
	Male	Person	190	187	195
	Female	Person	12	15	15
	Ratio of female managers	%	5.9	7.4	7.1
Number of higher-rank managers***	Total	Person	7	8	9
	Male	Person	0	7	7
	Female	Person	0	1	2
	Ratio of female higher-rank managers	%	0	12.5	22.2
Number of lower-rank managers	Total	Person	193	188	198
	Male	Person	181	174	185
	Female	Person	12	14	13
	Ratio of female lower-rank managers	%	6.2	7.4	6.6
Number of managers within profit-making divisions****	Total*****	Person	62	63	50
	Female	Person	5	5	3
	Ratio of female managers within profit-making divisions	%	8.1	7.9	6
Number of managers within STEM division	Total	Person	91	93	94
	Female	Person	2	5	4
	Ratio of female manager within STEM division	%	2.2	5.4	4.3

*The standard for calculating 'Diversity of Employees' in the FY2022 report was the number of female managers compared to the total number of employees, but it is changed to the number of female managers compared to the total number of managers since 2024
**Principal or higher
***Excluding executive, independent director, auditor
****Excluding Management Support Headquarters, General Management Headquarters, Management Innovation Sector, independent director, and Technical Strategy Team
***** Excluding seniors, disabled athletes, and employees (excluding employees to assistant managers for technical positions)

Turnover (Job Change Status)

Classification		Unit	2021	2022	2023
Voluntary turnover rate		%	11.64	21.02	10.28
Turnover rate		%	11.64	21.02	10.28
By gender	Male	Person	51	81	40
	Female	Person	5	18	8
By age group	Under 30	Person	31	54	18
	30-50	Person	21	44	26
	Over 50	Person	4	1	4
By region	Domestic	Person	56	99	48
	Overseas	Person	0	0	0
By nationality	Korean	Person	56	98	48
	American	Person	0	1	0
	Canadian	Person	0	0	0

ESG Data

Social

New Hires

Classification		Unit	2021	2022	2023
Number of new hires		Person	122	88	55
By gender	Male	Person	110	79	44
	Female	Person	12	9	11
By age group	Under 30	Person	76	41	26
	30-50	Person	42	39	24
	Over 50	Person	4	8	5
By position*	Number of higher-rank managers	Person	3	2	2
	Number of middle-rank managers	Person	8	13	7
	Number of lower-rank managers	Person	17	13	10
Diversity	Persons with disability	Person	0	8	2
Total employment costs		KRW million	190	177.4	121.9
Average employment costs		KRW million	1.56	2.02	2.22
Persons subject to department transfer		Person	98	114	92
Open positions filled by inside candidates**		%	44.5	56.4	62.6

* Higher-rank management: Executive, Middle-rank management: Team leader~Deputy manager, Lower-rank management: Manager
**Recalculated due to a formula error in the 2021 and 2022 data

Labor Union and Collective Agreement

Classification	Unit	2021	2022	2023
Ratio of employees with union membership	%	25.7	27.0	27.7

Performance Evaluation

Classification	Unit	2021	2022	2023
Ratio of higher-rank managers receiving long-term incentives	%	100	100	100
Ratio of employees below higher-rank managing positions receiving long-term incentives	%	0	0	0
Ratio of employees who received performance evaluations	%	100	100	100
Number of target employees of performance evaluations*	Person	307	319	318
Number of employees who received performance evaluations*	Person	307	319	318
Ratio of employees subject to MBO**	%	70.7	62.7	67.7
Ratio of employees subject to multilateral performance evaluations	%	0	0	0
Ratio of employees subject to priority evaluation of same positions	%	70.7	62.7	67.7

*Including executive
**Number of employees under performance evaluation/Total number of employees

ESG Data

Social

Safety and Health

Classification		Unit	2021	2022	2023
Occupational accident rate		%	0.21	0	0.21
Lost time incident rate (LTIR)	Employees	Cases/ 1 million hours	1.06	0	1
	Suppliers	Cases/ 1 million hours	0	0	15.19
Occupational illness frequency rate (OIFR)	Employees	Occupational accident frequency per 200 thousand hours	0	0	0
Workers in charge of work and/or workplaces within the organization	Person	Person	89	61	65
	Ratio	%	18	13	13.83
Workers subject to the occupational health and safety management system (Laws and systems)	Person	Person	506	485	505
	Ratio	%	100	100	100
Workers subject to the occupational health and safety management system (Internal audit)	Person	Person	196	226	139
	Ratio	%	39	47	29.57
Workers subject to the occupational health and safety management system (External audit or certification)	Person	Person	196	226	139
	Ratio	%	39	47	29.57
Total recordable incident rate (TRIR)		%	-	-	1.79*
Number of occupational deaths of employees		Person	0	0	0
Number of occupational deaths of suppliers		Person	0	0	0
Total rate of deaths recorded		%	0	0	0
Number of recordable work-related injuries of employees		Person	1	0	9
Ratio of recordable work-related injuries of employees		%	0.21	0	1.89
Number of deaths of workers in charge of work and/or workplaces within the organization (excluding employees)		Person	0	0	0
Site safety inspection (number of inspections per site)		Case	9	18	17 (24)

*Initial report in 2023

Human Resources Development

Classification		Unit	2021	2022	2023
Total hours of education		Hour	13,568	4,053	5,308
Education hours per person*		Hour	28.2	8.6	11.3
Education expenses per person*		KRW million	1.9	2.1	1.4
By age	Under 30	Hour	5,879	1,484	1,694
	30-50	Hour	7,355	2,378	3,319
	Over 50	Hour	334	191	295
By gender	Male	Hour	11,924	3,593	4,706
	Female	Hour	1,644	460	602
By position	Number of employees above higher-rank managing positions	Hour	251	87	136
	Number of employees above lower-rank managing positions	Hour	5,265	1,631	2,236
	Number of employees below lower-rank managing positions	Hour	8,052	2,335	2,936
Education type	Compulsory education	Hour	1,704	1,413	460
	Job training	Hour	11,864	2,640	4,848
Educational satisfaction	Satisfaction with education (business benefits/effects of education)	Point	98.8	88.0	92.0

*The parameter is the total number of employees

ESG Data

Social

Equal Compensation

Classification		Unit	2021	2022	2023
Average base pay	Males in management (executive or higher)	KRW million	220.4	228	230
	Females in management (executive or higher)	KRW million	0	210	217
Average wage (base pay + incentive)	Males in management (executive or higher)	KRW million	375.1	299	273
	Females in management (executive or higher)	KRW million	0	408	257
Average base pay	Males in management (Team leader~Principal rank)	KRW million	74.7	80	81.7
	Females in management (Team leader~Principal rank)	KRW million	73.9	76	79.5
Average wage (base pay + incentive)	Males in management (Team leader~Principal rank)	KRW million	89.7	91	90.8
	Females in management (Team leader~Principal rank)	KRW million	88.1	87	90.1
	Males in non-management (Senior rank or lower)	KRW million	50.8	51	46.1
	Females in non-management (Senior rank or lower)	KRW million	53.4	54	52.4
	Difference between wages for men and women (Ratio of total employees)*	%	92.9	95	99.7
	Difference between median wage values for men and women (Ratio of total employees)**	%	101.5	108	105
	Average difference in bonus (Ratio of total employees)***	%	92.2	108.4	161.2
	Difference in median bonus (Ratio of total employees)****	%	98.4	132.4	113.3

* (Average hourly wage for female employees / Average hourly wage for male employees)*100, the 2021 data was corrected due to calculation error
** (Median salary for females / Median salary for males)*100, the 2021 and 2022 data were corrected due to calculation error
*** (Average bonus payment for females / Average bonus payment for males)*100
**** (Median bonus for women / Median bonus for men)*100 / Median bonus: The middle value of bonuses received by employees within a specific group, organization, or industry

Parental Leave

Classification		Unit	2021	2022	2023
Number of employees with parental leave rights	Male	Person	103	190	143
	Female	Person	5	7	10
	Total	Person	108	197	153
Number of employees who received parental leave	Male	Person	0*	1	1
	Female	Person	1*	3	0
	Total	Person	1*	4	1
Number of employees who returned after parental leave	Male	Person	1	1	1
	Female	Person	0	2	2
	Total	Person	1	3	3
	Work return rate after using parental leave	%	25	100	100
Number of employees who worked for 12 months or longer after returning from parental leave	Male	Person	2	3	0
	Female	Person	0	0	2
	Total	Person	2	3	2
	Ratio of returners who worked for 12 months or longer	%	100	100	50

* The data based on the number of individuals who took parental leave in the current year based on the recommendation from the third-party assurance of this report.

ESG Data

Social

Human Rights Management

Classification		Unit	2021	2022	2023
Number of discrimination and harassment cases		Case	2	1	0
Human rights training	Time	Hour	1,704	1,413	1,265
	Ratio of employees participating	%	100	100	98
Human rights impact assessment	Time	Hour	1,704	1,413	1,265
	Ratio of employees participating	%	100	100	98
	Total number of workplaces that performed human rights reviews or human rights impact evaluations	EA	3	3	4
	Total ratio of workplaces that performed human rights reviews or human rights impact evaluations	%	100	100	100
	Suppliers that performed human rights reviews or human rights impact evaluations	EA	0	0	0
	Joint venture companies that performed human rights reviews or human rights impact evaluations	EA	0	0	0
	Ratio of employees affiliated with independent union or covered by a collective bargaining agreement	%	25.7	27.0	27.7

Social Contribution Investment

Classification	Unit	2021	2022	2023
Ratio of workplaces operating community participation, impact evaluation, or development programs	%	100	100	100
Social Contribution expenditures	KRW million	1,076	1,713	1,683.8
Donations in Cash	KRW million	1,076	1,076.4	1,643.1
Employee voluntary activities during working hours (excluding weekends)	KRW million (conversion to the amount of money)	0	4.6	13.9

Employee Satisfaction Survey

Classification	Unit	2021	2022	2023*****
Employee satisfaction*	%	-	76.0	-
Employee satisfaction**	Point	-	68.0	-
Purpose**	Point	-	69.7	-
Happiness***	Number of keywords	-	328	-
Stress****	Number of keywords	-	544	-
Data scope	%	-	75.0	-

*Percentage of employees who responded with the highest level of satisfaction (7 or higher out of 10)
**Average score of all respondents
***Number of positive keywords selected from the 'most experienced emotions in the past week,' with up to three keywords per person
****Number of negative keywords selected from the 'most experienced emotions in the past week,' with up to three keywords per person
*****No data as the survey was not conducted in 2023

ESG Data

Economic and Governance

Consolidated Statement of Financial Position

Classification	Unit	2021	2022	2023
Revenue	KRW million	381,412	312,149	260,886
Total revenue	KRW million	48,202	44,679	39,537
Operating income	KRW million	17,990	7,222	1,642
Net income before income taxes	KRW million	18,630	4,277	(12,541)
Current net income	KRW million	8,695	3,864	(8,500)
Liabilities	KRW million	180,667	503,865	558,191
Capital	KRW million	518,188	523,064	512,652
Total assets	KRW million	698,855	1,026,930	1,070,843

Economic Profits Distribution

Classification	Unit	2021	2022	2023
Dividends to shareholders (Dividend)	KRW million	-	-	-
Total tax paid to government (Corporate tax)	KRW million	9,934	413	-4,041
Total amount provided to employees	KRW million	37,745	42,330	41,418
Amount purchased from suppliers	KRW million	257,467	374,860	169,962
Amount invested in the community	KRW million	1,053	1,680	1,643
Expenditures on investors*	KRW million	5,042	4,931	17,626
Total economic results distributed	KRW million	311,241	424,214	226,608

* Changed from 'Interest Expenses' in the existing Cash Flow Statement to 'Interest Expenses' in Annotation 8. Financial Income and Financial Expenses of the business report.

ESG Data

Economic and Governance

Breaches

Classification	Unit	2021	2022	2023
Corruption or bribery	Case	0	0	0
Discrimination or harassment	Case	0	2	0
Customer information protection	Case	0	0	0
Conflict of interest	Case	0	0	0
Money laundering or insider trading	Case	0	0	0

Ethical Management

Classification	Unit	2021	2022	2023
Ratio of application of employee code of conduct	%	100	100	100
Ratio of signing of code of ethics by employees	%	97	100	100
Ratio of education provision of employee code of conduct	%	97	98.5	100

Notices and Training Relating to Anti-Corruption Policy and Procedure

Classification		Unit	2021	2022	2023
Number of governance (BOD) members		Person	6	5	5
Number of governance (BOD) members who have taken anti-corruption training		Person	0	0	0
Ratio of governance members who have taken training		%	0	0	0
Number of workers who have taken training (By employment type)	Regular worker	Person	466	445	438
	Contract worker	Person	0	0	0
	Total	Person	466	445	438
Ratio of workers who have taken training	Total	%	96.9	98.5	100
Ratio of workers who have taken training (By employment type)	Regular worker	%	100	98.5	100
	Contract worker	%	-	0	0
	Number of workers who have taken training (Domestic)	Person	466	445	438
	Ratio of workers who have taken training (Domestic)	%	96.9	98.5	100

Amount of Government Expenditures

Classification	Unit	2021	2022	2023
Lobbying	KRW million	0	0	0
Political contributions	KRW million	0	0	0
Trade associations or tax-exempt organizations (e.g., think tanks)	KRW million	295	624	499
Other expenditures	KRW million	0	0	0
Total donations and other expenditures	KRW million	295	624	499

ESG Data

Economic and Governance

Main Policy-related Expenditures*

Classification	Unit	2021	2022	2023
Korea Hydrogen Fuel Cell Industry Association	KRW million	-	400	305
Korea H2 Business Summit	KRW million	-	-	113
Hydrogen Convergence Alliance	KRW million	10	50	50

* No records of donations made to political organizations, lobbyists, etc.

Supply Chain Risk Management

Classification	Unit	2021	2022	2023
Total number of suppliers*	EA	68	105	132
Number of key suppliers**	EA	13	13	11
Suppliers subject to ESG risk evaluation	%	13	13	32.6
High-risk suppliers	EA	1	1	0

* Limited to direct material suppliers
** Domestic partners accounting for more than 1% of material costs

IT Infrastructure Accidents

Classification	Unit	2021	2022	2023
Number of IT infrastructure accidents	Case	0	0	0
Amount of damage from IT infrastructure accidents	KRW million	0	0	0

Composition of the Board of Directors

Classification		Unit	2021	2022	2023
Board size	Number of inside directors	Person	2	2	2
	Number of independent directors	Person	4	3	3
Board expertise	Directors with industry experience	Person	1	1	1
Board diversity	Number of female registered executives	Person	0	0	0

Information Security

Classification	Unit	2021	2022	2023
Number of information security violations	Case	0	0	0
Number of customers and employees affected by information security violations	Person	0	0	0
Ratio of information security investment (Compared to total IT costs)*	%	5.04	6.95	-**

* Based on data sourced from the Information Security Industry Promotion Portal.
** Not calculated for 2023 due to exemption from mandatory disclosure requirements

Operation of the Board of Directors (Average Attendance Rate)

Classification	Unit	2021	2022	2023
Internal directors	%	93.8	66.7	100.0
Other non-executive directors and independent directors	%	96.9	100.0	95.8
Total	%	95.8	85.7	97.5
Average tenure of directors	Year	2.0	2.5	3.5

ESG Data

Economic and Governance

Board Compensation

Classification		Unit	2021	2022	2023
Internal directors	Base salary	KRW million	404	523	429
	Incentives	KRW million	384	280	59
Independent directors	Base salary	KRW million	246	216	212
	Incentives	KRW million	-	-	-

Share Voting Rights

Classification	Unit	2021	2022	2023
Number of shares without voting rights	Share	5,432	12,564	12,564
Number of shares with voting rights	Share	81,838,794	81,831,662	81,831,662

GRI Index

Overview: Doosan Fuel Cell's report covers the period from January 1, 2023, to December 31, 2023, based on the revised GRI Standard 2021. (Includes some information for the first half of 2024)
Applied GRI Standard: GRI Foundation 2021
Applicable GRI Sector Standard: Currently (as of the reporting date in 2023), the GRI Sector Standard applicable to the company's industry group has not been published.

Classification	Index	Disclosure	Page
General Disclosures	2-1	Organizational details	6
	2-2	Entities included in the organization’s sustainability reporting	2
	2-3	Reporting period, frequency and contact point	2
	2-5	External assurance	114
	2-6	Activities, value chain and other business relationships	9~13
	2-7	Employees	99
	2-9	Governance structure and composition	79-81
	2-10	Nomination and selection of the highest governance body	79-81
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	2-13	Delegation of responsibility for managing impacts	15~16
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	2-15	Conflicts of interest	Disclosed in the Business Report
	2-16	Communication of critical concerns	25
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GRI 3 Material Issues	3-1	Process to determine material topics	25~27
	3-2	List of material topics	25~27
	3-3	Management of material topics	25~27

GRI Index

Classification	Index	Disclosure	Page
GRI 302 Energy (Material Topic)	302-1	Energy consumption within the organization	95
	302-2	Energy consumption outside of the organization	Not enough information to use
	302-3	Energy intensity	95
	302-4	Reduction of energy consumption	95
	302-5	Reductions in energy requirements of products and services	97
GRI 305 Emissions (Material Topic)	305-1	Direct (Scope 1) GHG emissions	95
	305-2	Energy indirect (Scope 2) GHG emissions	95
	305-3	Other indirect (Scope 3) GHG emissions	Not enough information to use
	305-4	Reduction of GHG emissions	95
	305-5	Emissions of ozone-depleting substances (ODS)	95
	305-6	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Not applicable
	305-7	Direct (Scope 1) GHG emissions	97
GRI 306 Waste (Material Topic)	306-1	Waste generation and significant waste-related impacts	30
	306-2	Management of significant waste-related impacts	30
	306-3	Waste generated	96
	306-4	Waste diverted from disposal	96
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Classification	Index	Disclosure	Page
GRI 205 Anti-corruption	205-1	Operations assessed for risks related to corruption	Not enough information to use
	205-2	Communication and training about anti-corruption policies and procedures	106
	205-3	Confirmed incidents of corruption and actions taken	106
GRI 308 Supplier Environmental Assessment	308-2	Negative environmental impacts in the supply chain and actions taken	67~76
GRI 401 Employment	401-1	New employee hires and employee turnover	100~101
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	53~54
	401-3	Parental leave	103
GRI 403 Occupational Health and Safety	403-1	Occupational health and safety management system	59~61
	403-2	Hazard identification, risk assessment, and incident investigation	59~61
	403-3	Occupational health services	59~61
	403-4	Worker participation, consultation, and communication on occupational health and safety	59~61
	403-5	Worker training on occupational health and safety	59~61
	403-6	Promotion of worker health	59~61
	403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	59~61
	403-8	Workers covered by an occupational health and safety management system	59~61
	403-9	Work-related injuries	102
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GRI 404 Training and Education	404-1	Average hours of training per year per employee	102
	404-2	Programs for upgrading employee skills and transition assistance programs	52~53, 102
GRI 414 Supplier Social Assessment	414-2	Negative social impacts in the supply chain and actions taken	67~76
GRI 416 Customer Health and Safety	416-1	Assessment of the health and safety impacts of product and service categories	77~78

SASB Index

Renewable Resources & Alternative Energy (Fuel Cells & Industrial Batteries)

Topic	Metric	Category	Unit of measure	Code	Page
Energy Management	(1) Total energy consumed	Quantitative	Gigajoules (GJ)	RR-FC-130a.1	95
	(2) percentage grid electricity	Quantitative	Percentage (%)	-	95
	(3) percentage renewable	Quantitative	Percentage (%)	-	95
Workforce Health & Safety	(1) Total recordable incident rate (TRIR)	Quantitative	Rate	RR-FC-320a.1	102
	(2) fatality rate	Quantitative	Rate	-	-
	Description of efforts to assess, monitor, and reduce exposure of workforce to human health hazards	Discussion and Analysis	N/A	RR-FC-320a.2	59-61
Product Efficiency	Average storage capacity of batteries, by product application and technology type	Quantitative	Specific energy (Wh/kg)	RR-FC-410a.1	N/A
	(1) electrical efficiency	Quantitative	Percentage (%)	RR-FC-410a.2	97
	(2) thermal efficiency, by product application and technology type	Quantitative	Percentage (%)	-	97
	Average battery efficiency as coulombic efficiency, by product application and technology type	Quantitative	Percentage (%)	RR-FC-410a.3	N/A
	Average operating lifetime of fuel cells, by product application and technology type	Quantitative	Hours (h)	RR-FC-410a.4	-
	Average operating lifetime of batteries, by product application and technology type	Quantitative	Number of cycles	RR-FC-410a.5	N/A
Product End- of-life Management	Percentage of products sold that are recyclable or reusable	Quantitative	Percentage (%) by weight	RR-FC-410b.1	-
	Weight of end-of-life material recovered	Quantitative	Metric tonnes (t)	RR-FC-410b.2	-
	percentage recycled	Quantitative	Percentage (%)	-	-
	Description of approach to manage use, reclamation, and disposal of hazardous materials	Discussion and Analysis	N/A	RR-FC-410b.3	37-38, 40
Materials Sourcing	Description of the management of risks associated with the use of critical materials	Discussion and Analysis	N/A	RR-FC-440a.1	-

Activity metric	Category	Unit of measure	Code	Page
Number of units sold	Quantitative	Number	RR-FC-000.A	9
Total storage capacity of batteries sold	Quantitative	Megawatt- hours (MWh)	RR-FC-000.B	N/A
Total energy production capacity of fuel cells sold	Quantitative	Megawatt- hours (MWh)	RR-FC-000.C	9

TCFD Index

In order to fulfill its leading responsibilities related to climate change, Doosan Fuel Cell will promote climate change activities in accordance with the Task Force on Climate-related Financials Disclosures(TCFD).
TCFD, launched by the FSB (Financial Stability Board) in December 2015, announced TCFD Guidance 2.0 in July 2020. TCFD, which has a large number of companies from more than 100 countries, is developing as a standard for climate change disclosure. Doosan Fuel Cell intends to transparently disclose the activities under TCFD through this report and ensure reliability and transparency.

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

Organizational and Group Membership

Name of Organization

Korea Industrial Safety Association Seoul Regional Headquarters	H2KOREA Promotion Team	Energy Future Forum
Energy Alliance	Clean Ammonia Association	Korea H2 Business Summit
Iksan Chamber of Commerce and Industry	Korea Industrial Technology Association	Korea Listed Companies Association
Korea Hydrogen Fuel Cell Industry Association	Korea New&Renewable Energy	UN Global Compact Network Korea
Iksan Business Environment Council	Iksan Region Safety and Health Council	Korea Project Management Association
Jeonbuk Region Chemical Plant Council	Jeonbuk Environmental Engineers Association	Korea Investor Relations Service
Korea Fire Safety Institute	RE100 · CF100 Energy Solution Alliance	The Korean Institute Of Chemical Engineers
Hanguk Industrial Safety Association		

Third-party Assurance Statement

To readers of Doosan Fuel Cell Sustainability Report 2024

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

Scope and Standards
Doosan Fuel Cell described its sustainability performance and activities in the Report. Our Assurance Team carried out an assurance engagement in accordance with the AA1000AS v3 and KMR’s assurance standard SRV1000. We are providing a Type 1, moderate level assurance. We evaluated the adherence to the AA1000AP (2018) principles of inclusivity, materiality, responsiveness and impact, and the reliability of the information and data provided using the Global Reporting Initiative (GRI) Index provided below. The opinion expressed in the Assurance Statement has been formed at the materiality of the professional judgment of our Assurance Team.

Confirmation that the Report was prepared in accordance with GRI standards 2021 was included in the scope of the assurance. We have reviewed the topic-specific disclosures of standards which were identified in the materiality assessment process.
- GRI Sustainability Reporting Standards 2021
- Universal standards
- Topic specific standards
  - GRI 302: Energy
  - GRI 305: Emissions
  - GRI 306: Waste

As for the reporting boundary, the engagement excludes the data and information of Doosan Fuel Cell’s partners, suppliers and any third parties.

KMR's Approach
To perform an assurance engagement within an agreed scope of assessment using the standards outlined above, our Assurance Team undertook the following activities as part of the engagement:
- reviewed the overall Report;
- reviewed materiality assessment methodology and the assessment report;
- evaluated sustainability strategies, performance data management system, and processes;
- interviewed people in charge of preparing the Report;
- reviewed the reliability of the Report's performance data and conducted data sampling;
- assessed the reliability of information using independent external sources such as Financial Supervisory Service’s DART and public databases.

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

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

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

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

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

Impact
Doosan Fuel Cell identifies and monitors the direct and indirect impacts of material topics found through the materiality assessment, and quantifies such impacts as much as possible.

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

June 2024 Seoul, Korea

kmr Korea Management Registrar
SRV1000 Sustainability Committee Assurance
AA1000 Licensed Report 000-129/V3-OC979

대표이사 E. J Hwang

GHG Verification Statement

GI-24245

Verification Opinion Statement

GHG Emissions — **Doosan Fuel Cell co., Ltd.**

Verification Target

Korean Foundation for Quality (hereinafter 'KFQ') has conducted a verification of Scope 1, 2 Greenhouse Gas Emissions (hereinafter 'GHG emissions') for domestic business worksites of Doosan Fuel Cell co., Ltd. (hereinafter 'Company') for 2023.

※ Domestic business worksites : the headquarters of Doosan Fuel Cell in Iksan, the Seoul office, and the R&D Center in Gwanggyo

Verification Scope

KFQ's verification scope covered on all facilities and emission sources under the operational control and organizational boundary of Doosan Fuel Cell co., Ltd. during 2023.

Verification Criteria

The verification process was based on [Rule for emission reporting and certification of greenhouse gas emission trading Scheme[1]], [2006 IPCC Guidelines for National Greenhouse Gas Inventories] and [ISO14064-1] for every applicable part.

1) Notification No. 2023-221 of Ministry of Environment

Level of Assurance

The Verification has been planned and conducted as the 'Rules for verification of operating the greenhouse gas emission trading scheme', and the level of assurance for verification shall be satisfied as reasonable level of assurance. And it was confirmed through an internal review whether the process before the verification was conducted effectively.

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 from the report through the verification, KFQ provides our verification opinions as below;

1) GHG emissions for 2023 of Company were properly calculated according to the verification standards.
2) The data and information used in calculating the GHG emissions were appropriate, reasonable, and no significant errors or omissions could affect verification statement were not found.
3) Thus, KFQ concludes that the GHG emissions of Company in 2023 is correctly calculated and stated in accordance with 'Rule for emission reporting and certification of greenhouse gas emission trading Scheme'.

Unit : tCO_2eq

Scope 1	Scope 2	Total
924.810	3,875.157	4,798

* The totals in this verification statement do not match the totals in emission trading scheme because the total emissions of each facility are calculated by truncating to integer units

May 24th, 2024

Ji Young Song

CEO Ji-Young Song
Korean Foundation for Quality

National Institute of Environmental Research

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Doosan Fuel Cell Co., Ltd Emissions in 2023

Name of Corporation

Doosan Fuel Cell co., Ltd

Emission calculation period

The emission data collection period is from January 1, 2023 to December 31, 2023.

Emissions

tCO_2eq

Corporation	Site	Scope1	Scope2	Total (Scope1+Scope2)
Doosan Fuel Cell co., Ltd	Iksan Head Office	795	3,630	4,425
	Seoul Office	129	125	254
	Gwanggyo R&D Center	0	119	119
Total		924	3,874	4,798[1]

1) GHG emission totals are calculated in integer units for each business site, and there may be a difference of less than ±1 tCO_2eq from the actual value in the GHG calculation sheet.

kfq Korean Foundation for Quality

National Institute of Environmental Research

DOOSAN

www.doosanfuelcell.com