Hanwha Ocean
Sustainability Report

Hanwha Ocean **SUSTAINABILITY REPORT 2024**



Hanwha Ocean

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ABOUT THIS REPORT

Report Overview

This report has been prepared to disclose Hanwha Ocean Co., Ltd. (hereinafter 'Hanwha Ocean' or 'we')'s strategies and activities related to Environment·Social·Governance (ESG) matters, and is published annually. Through this, we aim to transparently disclose our sustainability performance and actively communicate with stakeholders.

Reporting Period

The reporting period for the financial performance and sustainability activities in this report is from January 1, 2024, to December 31, 2024. For certain performance indicators, results from the first half of 2025 are included considering the timeliness and sustainability context of the information. Quantitative data requiring trend reporting covers four years (2021–2024). The Hanwha Ocean Sustainability Report 2024 was published on June 24, 2025.

Reporting Scope and Boundary

The financial information in this report is prepared on a consolidated basis in accordance with Korean International Financial Reporting Standards (K-IFRS). For non-financial information, the report includes comprehensive data from Hanwha Ocean, along with partial environmental and social data from the major subsidiaries, Hanwha Ocean Ecotech Co., Ltd. (hereinafter 'Hanwha Ocean Ecotech') and Hanwha Ocean Shandong Co., Ltd. (hereinafter 'Hanwha Ocean Shandong Corporation'). Any differences in reporting scope are noted in the footnotes, and significant changes in reporting scope are described in each relevant section.

Reporting Principles

This report is prepared in accordance with the requirements of the Global Reporting Initiative (GRI) Standards, the reporting standards and frameworks of the Sustainability Accounting Standards Board (SASB) and the Task Force on Climate-Related Financial Disclosures (TCFD). Additionally, it references the Disclosure Standards Draft No. 2 (Climate-related Disclosures) by the Korea Sustainability Standards Board (KSSB).

Report Reliability

Hanwha Ocean reports performance for the period from January 1, 2024, to December 31, 2024, in alignment with GRI Standards, SASB, and TCFD. The financial and non-financial information in this report has been verified by a third-party organization to ensure accuracy and objectivity. Furthermore, the Board of Directors has been informed about the publication of this report.

Interactive PDF

This report has been published as an interactive PDF that allows navigation to related pages within the report and to relevant web pages.

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Report Inquiries

For related inquiries, please contact us at the address below.

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CEO Message

Dear Stakeholders,
We deeply appreciate your unwavering interest and trust in Hanwha Ocean.

We are currently shaping a new future for the shipbuilding and marine industry amid global climate change and industrial paradigm shifts. Under Hanwha Ocean's ESG Management vision of 'The Most Trusted Company Enabling Sustainable Voyage,' we are realizing sustainable growth based on more environmental and innovative technologies.

Last year, Hanwha Ocean has further advanced the ESG management system and systematically manages the system through ESG HOST 2030, which contains specific goals and execution strategies for Hanwha Ocean to achieve by 2030. Accordingly, we have selected greenhouse gas reduction, Green ship transition, safety accident prevention, supply chain ESG evaluation, and compliance and ethics management as core tasks and are steadily implementing them step by step.

Hanwha Ocean aims to leap forward as a global innovative company pioneering a sustainable marine energy ecosystem by creating new value through clean and digital technologies. We strive to lead the convergence of existing and next-generation industries through the construction of sustainable resource and energy infrastructures such as Green ships, products of offshore business, and wind power. Furthermore, we seek to present practical solutions for energy transition, which has become more urgent due to global climate change and security crises.

The challenges ahead are significant but, with the execution capability and innovation to overcome them, we can build a stronger future. Hanwha Ocean will continue a voyage toward a sustainable future through responsible ESG management. Furthermore, we will enhance our global competitiveness and embed ESG management into our corporate culture to become a company that delivers sustainable value to customers and society.

We ask for the continued interest and support of our stakeholders and look forward to creating a better future together.

Hanwha Ocean CEO
Kim Hee Cheul



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Company Overview

Hanwha Ocean is evolving into a Global Ocean Solution Provider leading the paradigm of the future maritime industry based on outstanding technological capabilities. Leveraging a variety of products and technologies, we are pioneering the changing green ship market and expanding into the global maritime defense market through the establishment of an automation-based smart yard and entry into the global offshore wind power market.

Company Profile

Company Name	Hanwha Ocean Co., Ltd.
CEO	Kim Hee-cheul
Number of Executives and Employees[1)]	10,202 persons
Establishment Date	October 11th, 1973
Headquarters Location	3370 Geoje-daero, Geoje-si, Gyeongsangnam-do Province
Credit Rating	BBB+ (NICE Credit Rating, Corporate Credit Rating)

1) Based on the 25th business report (January 1 to December 31, 2024).

Business Sites

Headquarters (Geoje Shipyard)	Business Overview	Construction of ships, offshore products, naval ships, etc.
	Location	3370 Geoje-daero, Geoje-si, Gyeongsangnam-do Province
Seoul Office	Business Overview	Sales, management support, etc.
	Location	86 Cheonggyecheon-ro, Jung-gu, Seoul; 14, Sejong-daero, Jung-gu, Seoul; 100 Cheonggyechon-ro, Jung-gu, Seoul
Siheung R&D Campus	Business Overview	Research and development
	Location	96 Baegot 2-ro, Siheung-si, Gyeonggi-do Province

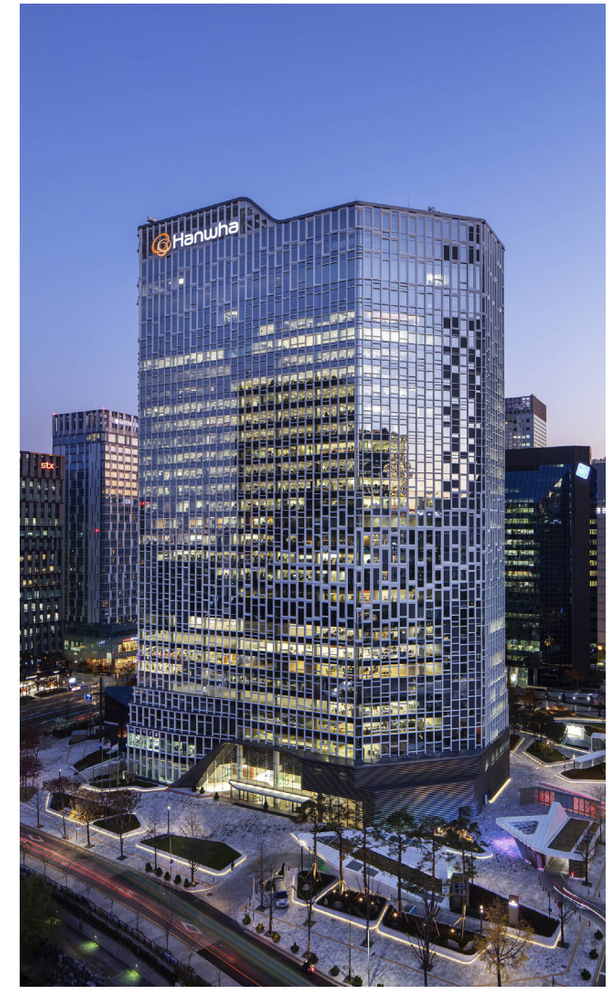
Core Values

Hanwha's growth is based on the spirit of "Trust and Loyalty". In light of this, Hanwha Ocean selected the core values of "Challenge, Dedication, and Integrity" and set them as the basis for the mindset and actions to strengthen the unity across all Hanwha employees. Hanwha Ocean's core values are the driving force behind our corporate culture of innovation to realize our vision.

Challenge
We believe in challenging the status quo in the pursuit of excellence through change and innovation.

Dedication
We are dedicated to our company, customers, and one another to achieve a greater goal.

Integrity
We believe in acting with integrity in everything we do, as individuals and employees.



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Business Introduction

Commercial Vessels, Leading Clean/Future Technology

Hanwha Ocean plays a leading role in the entire commercial vessels sector, including LNG Carriers, VLCCs, VLGCs, and Containership, based on world-class technology and competitiveness. In February 2025, we delivered our 200th LNG Carrier, a world first. We maximize synergy with related affiliates engaged in ship engine manufacturing, shipping, and After Market (AM) businesses. Additionally, we leverage differentiated technologies such as carbon-free/decarbonization solutions and next-generation low-/zero-carbon fuel systems. Through these efforts, we aim to lead the clean and future ship markets.



Main Products

All vessels including Liquefied Natural Gas Carrier (LNGC), Liquefied Petroleum Gas Carrier (LPGC), Very Large Crude Oil Carrier (VLCC), Very Large Gas Carrier (VLGC), Liquefied Gas/Ammonia Carrier (VLGC/VLAC), and Containership (CONT.)

Offshore Business, Opening the Global Marine Energy Ecosystem

The offshore platform business requires product lines, specifications and contract methods tailored to the unique characteristics of oil and gas field locations. Hanwha Ocean has successfully executed projects across the full range of offshore platform products—from offshore drilling/production facilities optimized for various environments to onshore modular plants—based on our best production systems and facilities. We have secured competitiveness through accumulated technology and experience. Amid the era of energy transition, we aim to establish a solid position by expanding our energy value chain to encompass traditional maritime markets, WTIV (Wind Turbine Installation Vessel) orders, and clean product markets.



Main Products

Floating Production Storage and Offloading units (FPSO), Floating Production Units (FPU), Fixed Platform oil production facilities, Floating Liquefied Natural Gas units (FLNG), Onshore modular plants, Deepwater oil drilling ships (Drillships), Semi-submersible Rigs, Jack-up Rigs, Renewable Energy WTIVs, Offshore Substations (OSS), etc.

Naval Ships, Leaping to Global Top Tier

Following the domestically largest 3,000-ton class submarine Dosan Ahn Changho developed with Hanwha Ocean's proprietary technology, we are continuously constructing three of the latest enhanced Jangbogo-III class submarines. We also design and build Ulsan-class Batch-III & Batch-IV frigates and submarine rescue ships, enhancing the status of the national defense projects and the Republic of Korea Navy through our businesses in both submarine and surface ship sectors. We will actively participate in defense power improvement projects, focusing on unmanned systems, manpower-reducing vessel design/construction, and unmanned technology development. Leveraging our unique expertise, cutting-edge defense solutions, and synergies within the Hanwha Group accumulated over 30 years, we aim to leap from a leading Korean defense company to a Global Top Tier player.



Main Products

Submarines, Destroyers, Frigates, Patrol Combat Corvettes, Auxiliary Ships, Unmanned Power Command and Control Ships

E&I, Leading the Clean Energy Industry

To proactively strengthen future energy business capabilities, Hanwha Ocean acquired the wind power and plant business divisions from Hanwha Corporation in 2024 and reorganized them into the E&I (Eco Energy & Industrial EPC Business) division. The wind power business develops and constructs onshore and offshore wind farm projects to facilitate sustainable renewable energy transition. It is expanding its business scope through EPC (Engineering, Procurement, Construction) execution in its own projects. The plant business holds competitiveness across domestic and international chemical, power generation, and industrial plants. To respond to equipment advancement and clean energy development trends, we are expanding into ammonia, hydrogen, Carbon Capture and Storage (CCS), and resource circulation businesses, aiming to lead these related markets.



Main Products

Chemical Plants, Clean/Power Plants (By-product Hydrogen Fuel Cell Power Plants), Offshore Wind Power Plant, Offshore/Onshore Wind Power

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Construction Performance and Order Status

Cumulative Construction Performance

Category	Ships/Units
Commercial Vessels (A)	1,414
Naval Ships (B)	120
Offshore Business (C)	117
Wind Power (D)	3
Plant (E)	172

Grand Total
(A + B + C + D + E) 1,826

Cumulative Construction Performance Details

Category	Ships
Commercial Vessels (A)	1,414
LNG Carriers	269
LNGC	256
LNG–FSRU	13
LPG Carriers	59
Oil Tankers	454
ULCC / VLCC	246
Suezmax TK	77
Aframax TK	35
Others	96
Containerships	361
Above 15,000TEU	101
5,000 ~ 15,000TEU	145
Below 5,000TEU	115
Bulk Carriers	193
Ro/Ro, Car Carriers	64
Ferries	10
Heavy Lift	4

Category	Ships
Naval Ships (B)	120
Submarine	23
Surface Ship	55
Maintenance, Repair, Overhaul	32
Others	10

Category	Ships/Units
Offshore Business (C)	117
FLNG	1
FPSO	7
FPU	5
Fixed Platforms	31
Modular Plants	3
Drillship	29
Semi–Rig	25
Jack–Up	3
Drilling Barge	1
WTIV	4
TLP	4
Others	4

Category	Units
Wind Power (D)	3
Onshore Wind Power Complex	3
Offshore Wind Power Complex	0

Category	Units
Plant (E)	172
Power & Water	37
Petrochemical & Chemical	108
Refinery	9
Industrial	9
Storage Tank Terminal	9

Order Backlog

(As of the end of December 2024)

Total
KRW 304,319 billion

Commercial Vessels Division
KRW 225,903 billion

Offshore platform and Naval Ship Division
KRW 71,935 billion

E&I Division
KRW 6,461 billion

Other Divisions
KRW 20 billion

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Global Network

- 5 Domestic Offices and Sites, 6 Domestic Subsidiaries, 11 Overseas Subsidiaries
- 6 Overseas Branches
- 3 Major Affiliates

* As of the end of May 2025



Region	Category	Corporation/Branch
Seoul	●	Three Seoul Offices
	●	Yeonggwang Chilhae Offshore Wind Power Co., Ltd.
	●	Siheung R&D Campus
Gwangyang	●	Hanwha Ocean Ecotech Co., Ltd.
Mokpo	●	Shinan Ui Offshore Wind Power Co., Ltd.
Geoje	●	Geoje Shipyard
	●	Hanwha Ocean Engineering Co., Ltd.
Shandong, China	●	Hanwha Ocean Shandong Co., Ltd.
Tokyo, Japan	●	Tokyo Branch

Region	Category	Corporation/Branch
Houston, USA	●	Hanwha Ocean USA Holdings Corp.
	●	Hanwha Ocean USA International LLC
	●	Hanwha Ocean Americas LLC
	●	Hanwha Ocean Global Operation Center LLC
	●	Hanwha Shipping LLC
	●	Houston Branch
Philadelphia, USA	●	Hanwha Philly Shipyard Inc.
Cayman Islands	●	Hanwha drilling LLC
	●	Tidal Action LLC
Rio de Janeiro, Brazil	●	Hanwha Ocean Brazil Ltda.

Region	Category	Corporation/Branch
Oslo, Norway	●	Oslo Branch
London, UK	●	Hanwha Ocean Europe Ltd.
Athens, Greece	●	Greece Branch
Luanda, Angola	●	Luanda Branch
Amsterdam, Netherlands	●	Hanwha Ocean Global Project Center B.V
India	●	Hanwha Ocean Global Engineering Center India Private Limited
Almaty, Kazakhstan	●	DSME Kazakhstan LLP
Singapore	●	Hanwha Offshore Singapore Pte. Ltd.
	●	Singapore Branch

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HIGHLIGHTS 2024

Cooperation with the Global Centre for Maritime Decarbonization for a Sustainable Future for the Maritime Industry

Hanwha Ocean has established a strategic partnership with the Global Centre for Maritime Decarbonisation (GCMD), a non-profit organization based in Singapore. Through this collaboration, both organizations are planning to strengthen cooperation in low-carbon and zero-carbon fuels, Onboard Carbon Capture and Storage System (OCCS) technology, and energy efficiency technologies, aiming to lead the sustainable energy transition in the shipping industry. Through these efforts, Hanwha Ocean is pursuing sustainable management by pioneering clean technologies and contributing to marine decarbonization.

Company-wide Innovation for Establishing an Advanced Safety Culture

Hanwha Ocean announced a company-wide safety innovation plan investing a total of KRW 1.976 trillion by 2026, aiming to build the 'world's safest shipyard.' The plan includes establishing an AI-based smart safety system, replacing outdated equipment, fostering advanced safety culture, establishing a safety academy, strengthening support for suppliers, and expanding safety personnel. Regular external evaluations will be conducted to continuously improve safety levels. Through these efforts, Hanwha Ocean aims to realize a zero-accident workplace and establish a world-class safety culture.

Encouragement and Gift Delivery to Naval Personnel

Hanwha Ocean, in collaboration with the nonprofit organization 'People Sharing Hope,' visited the Republic of Korea Navy's 2nd Fleet Command located in Pyeongtaek, Gyeonggi Province, to deliver encouragement funds and gifts to the personnel. This support included of fitness equipment and daily necessities aimed at promoting healthy leisure activities aboard naval vessels. Hanwha Ocean continues social contribution activities by encouraging the dedication of naval personnel serving at sea.

'Gastech 2024' Acquisition of Green Ship Technology Certifications

At 'Gastech 2024,' Hanwha Ocean accelerated a development of green ships by obtaining multiple low-/zero-carbon ship technology certifications from major international classification societies. Through collaboration with the American Bureau of Shipping (ABS), we demonstrated the safety of ammonia-powered vessels and received Type Approval Design Certification for rotor sails with composite materials from the Norwegian Classification Society (DNV). These achievements represent international recognition of Hanwha Ocean's clean technology and are expected to significantly contribute to realizing our decarbonization vision.

Introduction of Green Procurement Policy

Hanwha Ocean has implemented a Green Procurement Policy to practice environmental protection, resource conservation, and social responsibility. This policy applies to all company purchasing activities and aims to prioritize environmentally friendly products and services to minimize environmental impact and promote sustainable development. To this end, we have established classification criteria for green products. We have developed and implemented a systematic green procurement system.

Naval Ship Business Shared Growth Partners Day Held

Hanwha Ocean held the Naval Ship Business Shared Growth Partners Day to discuss mutual growth and cooperation strategies with our suppliers. This event strengthened the close collaborative relationships between Hanwha Ocean and our suppliers and laid the foundation for jointly responding to future industrial changes. Attendees pledged their commitment to achieving shared growth through continuous cooperation.

Unveiling of the 'Carbon-free Propulsion LNG Carrier,' Advancing Marine Decarbonization Vision

Hanwha Ocean has advanced the marine decarbonization vision by unveiling the carbon-free propulsion LNG carrier 'Ocean1.' This vessel is designed with an ammonia gas turbine-based electric propulsion system enabling complete carbon-free propulsion without while also allowing mixed combustion with LNG. It also features flexibility to incorporate fuel cell and battery technologies in the future. The ammonia combustor is being developed by PSM, a Hanwha subsidiary, ensuring close collaboration within the group.

Establishment of Supplier ESG Code of Conduct

Hanwha Ocean requires suppliers to comply with ESG management practices across the entire supply chain beyond our own ESG management. To this end, we have established a Supplier ESG Code of Conduct, clearly stipulating that all suppliers must create safe working environments, respect workers' rights, and fulfill ethical responsibilities. Furthermore, the Code of Conduct has been incorporated into basic transaction contracts to enhance its effectiveness.

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ESG Governance System

Hanwha Ocean Sustainable Strategy System

Hanwha Ocean has established the vision of 'The most trusted company enabling sustainable voyage' and set three strategic directions and seven strategic tasks to achieve this. Additionally, to systematically implement ESG management, the 'GO PLUS+' ESG framework was introduced. This framework embodies the core values pursued by Hanwha Ocean, with key strategic directions including Climate Change Response, Shared Growth and Co-prosperity, and the Establishment of Transparent and Fair Governance.

ESG Vision

The most trusted company enabling sustainable voyage

ESG Slogan

Go Great Ocean, Go Green Builder

ESG Framework

P	L	U	S	+
People	Leadership	Upgrade	Safety	+
We put people at the center of everything, communicate, and respect them.	We develop and research novel technologies that will shape the new future, and lead innovation.	We constantly inspect, improve, and achieve unrivaled quality.	We inspect thoroughly and act promptly to protect our priority and safety.	We constantly strive for a sustainable ocean and humanity.

Directions

Climate Action through the Advancement of Green and Digital Technologies	Shared Growth and Coexistence through Communication and Trust	Establishment of Transparent and Fair Governance

ESG Tasks

• Advancement of environmental management • Leading low-/zero-carbon shipbuilding and marine technology	• Coexistence with suppliers and local communities • Ensuring a safe and pleasant workplace • Strengthening human rights management	• Advancement of ESG management • Reinforcement of the compliance system

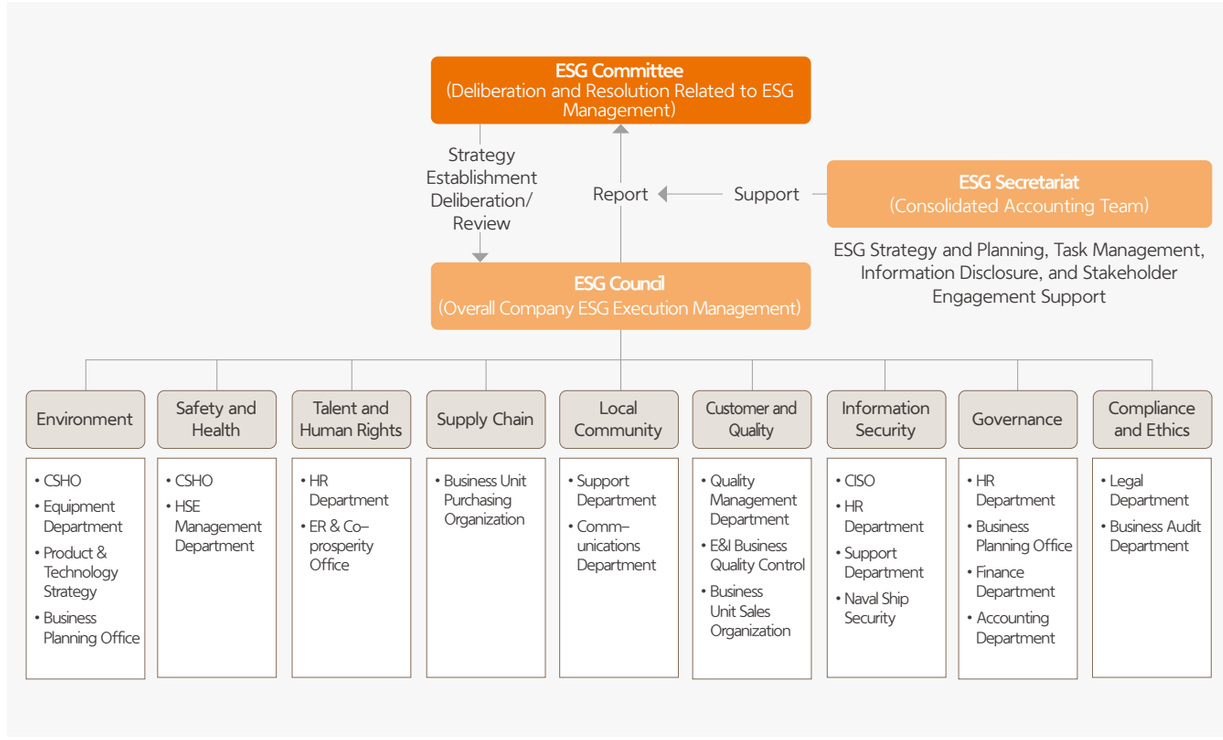
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ESG Governance System

Hanwha Ocean Sustainable Governance

Hanwha Ocean's ESG Committee is composed entirely of independent directors. In December 2023, the ESG Committee passed a resolution to establish HOST (Hanwha Ocean Step-Up Target) 2030, our mid-to-long-term ESG core goal. Following this, in 2024, a compliance and ethics management practice evaluation model was developed. Additionally, through the 2024 ESG Committee, we enacted the Social Responsibility Charter, Green Procurement Policy, and Supplier ESG Code of Conduct. These are important measures to strengthen our ESG governance and effectively internalize the ESG management system. We are committed to continuously managing and to implementing these policies to ensure their execution and strive for the stable operation of ESG governance.

Organization Structure of Hanwha Ocean Sustainable Governance



HOST 2030

Hanwha Ocean has established HOST (Hanwha Ocean Step-Up Target) 2030 to internalize sustainability management and achieve our ESG vision. By setting five core goals and executing company-wide tasks to meet specific performance metrics, we aim to contribute to sustainable economic development and social value creation. To enhance HOST 2030's implementation, we're assigning KPIs to relevant departments, their heads, and executives. We plan to expand this to all executives and management to secure ESG management leadership.

HOST 2030

Environmental

Low-/zero-carbon Technology Development	• Low-/zero-carbon Ship Order Backlog Ratio 100%
Climate Change Response	• GHG Reduction Rate 40% (compared to base year 2018)

Business Unit KPI
- Commercial Vessels Business: Low-carbon Technology Development
- Product & Technology Strategy: Core Technology and New Ship Type Development

Social

Safety Accident Prevention	• Zero Serious Accident • Lost Time Injury Rate (LTIR) 0.15 cases/200,000 working hours
Supplier Co-prosperity	• Supply Chain ESG Evaluation Application Rate 100%

Business Unit KPI
- Chief Production Officer and CSHO: Injury Rate Reduction

Governance

Compliance and Ethics Management	• Compliance and Ethics Management Practice Evaluation Score 5 points[1)]

Business Unit KPI
- Compliance Department: Establishment of Compliance and Ethics Process

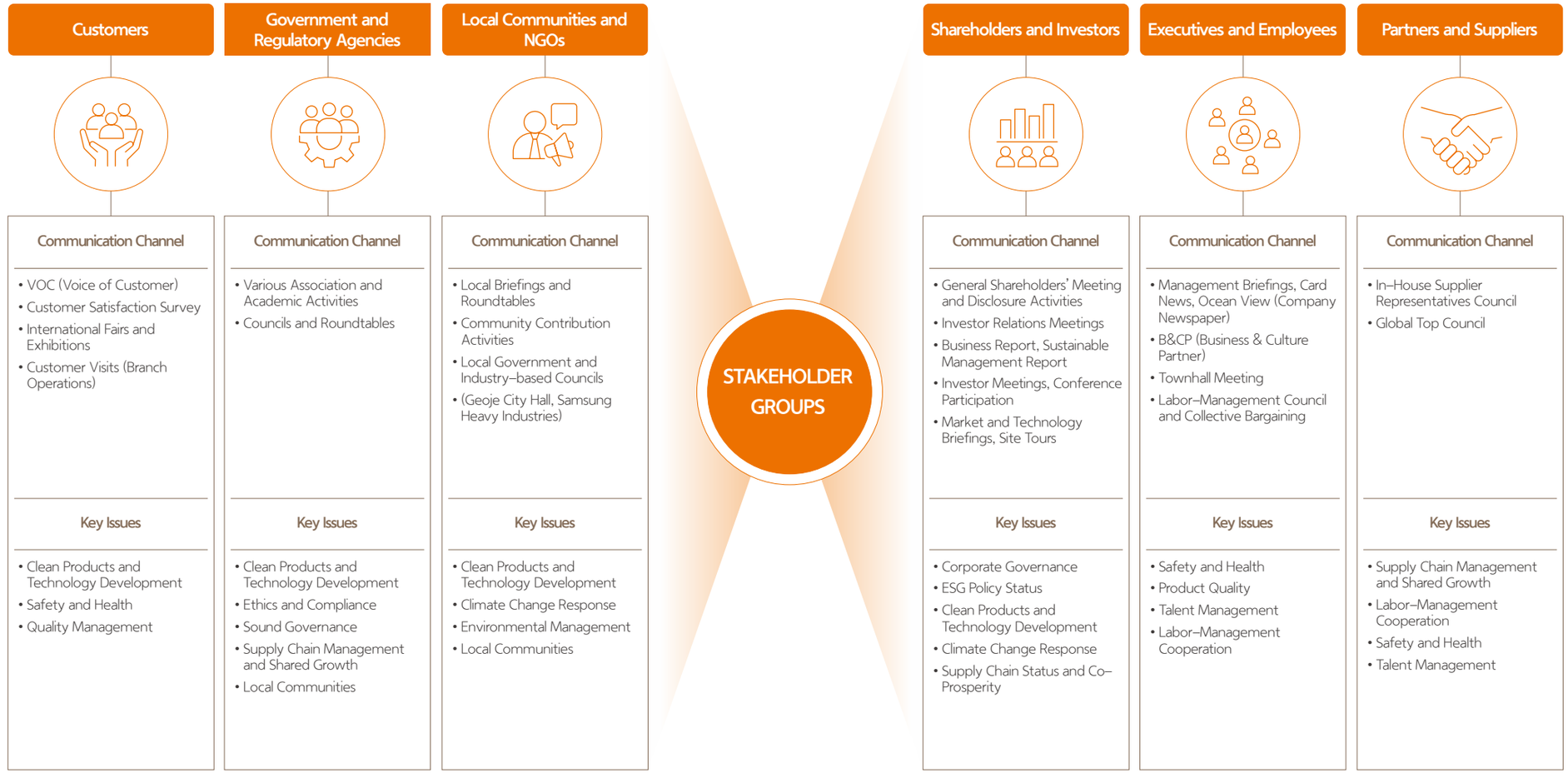
1) 5-point scale: Mixed quantitative and qualitative evaluation of detailed tasks

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Stakeholder Communication

Hanwha Ocean classifies stakeholders into customers, government and regulatory agencies, local communities and NGOs (Non-Governmental Organizations), shareholders and investors, executives and employees, and partners and suppliers. We have established and operate group-specific communication channels tailored to the characteristics of each stakeholder group to understand their expectations of Hanwha Ocean. We will continue to strive to reflect stakeholders' expectations in our sustainable management strategy through active communication.

Communication Channels and Key Issues by Stakeholder Group



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Establishment of Sustainable Value Chain

Building a Value Chain for a Sustainable Future

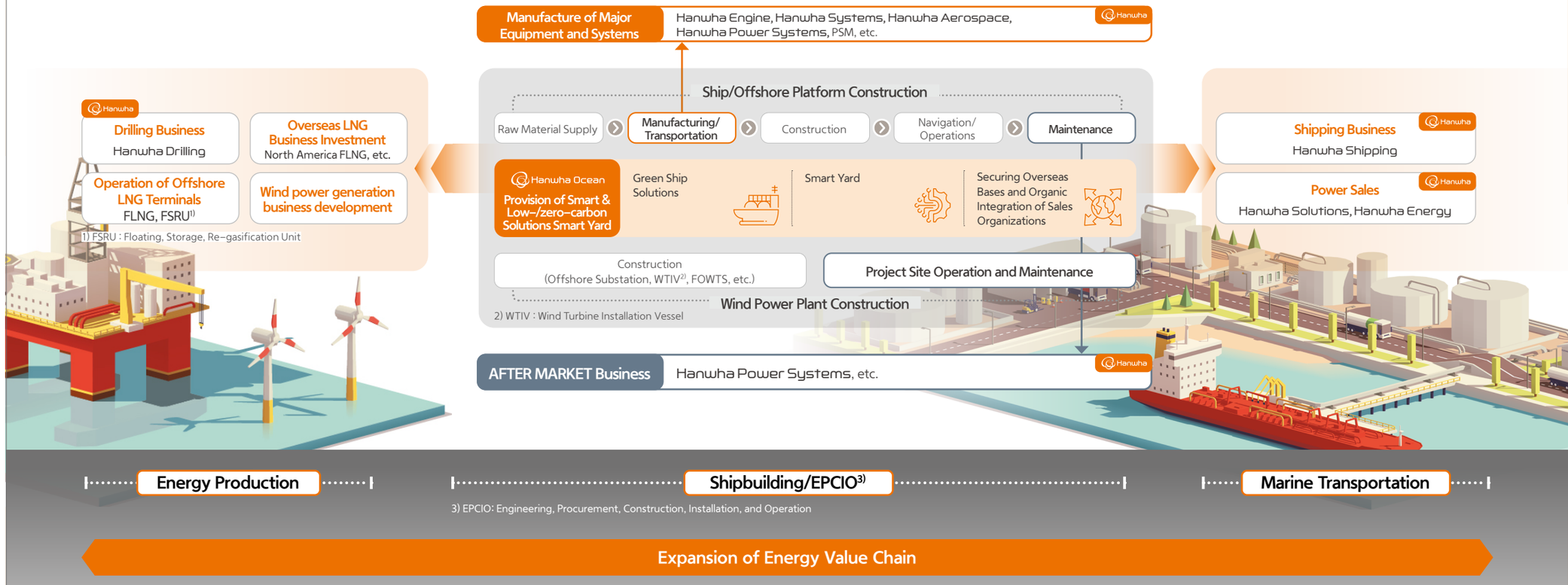
Hanwha Ocean is developing from a traditional shipbuilding and offshore platform construction specialist to complete a green energy value chain extending over the sea. We are enhancing our existing business areas by developing and constructing environmentally considered carriers equipped with carbon-free fuel systems and propulsion. Additionally, we plan to integrate water electrolysis and hydrogen storage technologies, which Hanwha Group is developing, into Hanwha Ocean's business. We will establish a green energy value spanning from hydrogen and ammonia production, storage, to transportation.

Expansion of Marine Energy Solutions: Offshore Wind Power

By acquiring the wind power business of Hanwha Corporation Construction Division and the plant business of Hanwha Corporation Global Division, we have secured experienced design, procurement, and construction (EPC) personnel with abundant business performance and expertise to strengthen our competitiveness. We are advancing the business scope of the existing offshore division, including WTIV construction and offshore wind power facility design, taking a further step toward completing the offshore wind power value chain from project development to power generation and sales.

Leading the paradigm of future marine industry as a
"Global Ocean Solution Provider"

Hanwha Collaboration area of Hanwha affiliates

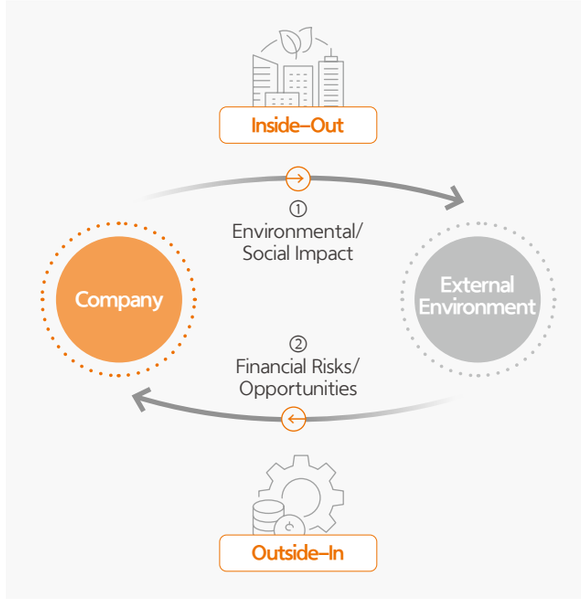


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Double Materiality Assessment

Hanwha Ocean conducts an annual Materiality Assessment to identify internal and external risks and opportunities that may impact the company and to establish the ESG Management strategy. The 2024 Materiality Assessment adopted the double materiality perspective as outlined in the European Sustainability Reporting Standards (ESRS). Hanwha Ocean's Double Materiality Assessment followed a four-step process: understanding the company, identifying impacts/risks/opportunities, impact evaluation, and selecting material issues. Based on the evaluation results of each topic's environmental/social impacts and financial risks/opportunities, material ESG issues were selected.

Overview of Double Materiality Assessment



The Double Materiality Assessment is a process that simultaneously considers environmental/social impacts and financial risks/opportunities related to ESG topics to select topics which requires key sustainable management. Hanwha Ocean's material issues are selected based on the evaluation of the environmental/social impacts and the financial impacts (financial risks/opportunities) related to external environments of the company's business activities related to ESG topics.

Double Materiality Assessment Process

STEP 1: Understanding the Company

Process of understanding the business context including the company's business model, supply chain, and related activities

- Identification of Hanwha Ocean's consolidated subsidiaries and value chain
- Definition and identification of stakeholders related to business activities
- Compilation of ESG topic list (Long-list) considering industry common issues and company-specific issues

STEP 2: Selection of Issues and Identification of Impacts/Risks/Opportunities

Process of identifying impacts, risks, and opportunities related to the company

- Selection of highly relevant issues as evaluation target issues (Short-list) based on company disclosures, media, stakeholder opinions, laws/regulations
- Verification of the company's response activities to the impacts, risks, and opportunities of the relevant issues, Identification of characteristics (positive, negative, actual, potential) of impacts and risks/opportunities

Short-List Derivation Process

1. Internal Company Affairs	2. Investors	3. Industry Peers	4. Customers	5. Media Analysis	6. Value Chain Analysis	7. Short-List Derivation
Review of Board of Directors/ESG Committee agendas, previous issue pool, and core ESG strategic tasks	Mapping indices from global initiatives (SASB and MSCI) to issues on the Long-list	Comparison of materiality of issues among industry peers with issues on the Long-list	Mapping major inquiries and requirements from Hanwha Ocean's customers to issues on the Long-list	Scoring through analysis of articles related to corporate Environmental/Social/Economic and governance issues	Review of major issues of companies in Hanwha Ocean's value chain (upstream and downstream)	Based on the reviews from steps 1 to 6, examination of Hanwha Ocean's relevance to each issue to derive a Short-List of 12 items

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Double Materiality Assessment

Double Materiality Assessment Process

STEP 3: Impact Assessment

Process of evaluating the level of identified impacts, risks, and opportunities

- Online survey conducted
- Assessment period: February 2025
- Assessment target: Internal and external stakeholders

STEP 4: Board Approval and Reporting

Process of selecting material issues based on assessment results and reporting to the highest decision-making body

- Prioritization of issues, setting of thresholds, and selection of material issues
- Review and approval of material issues by the ESG Committee

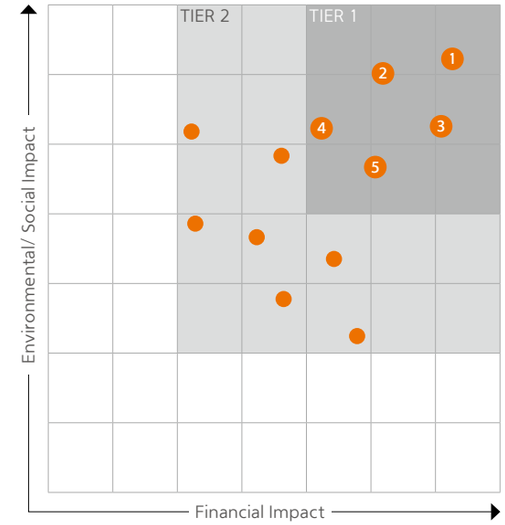
Impact Assessment Criteria

Category	Criteria		Description
Environmental/ Social Impact Assessment	Severity	Scale	• The magnitude of environmental and social impact if the effect occurs
		Scope	• The physical/geographical range affected by each impact
		Remediability	• Assessment of the possibility of restoring negative impacts to their original state, considering the time and cost required
	Likelihood of Occurrence		• Evaluation of the likelihood and expected timing of potential impacts occurring
Financial Risk/ Opportunity Assessment	Magnitude		• Assessment of the severity of financial impact on the company's revenue, cash flow, and profit/loss
	Likelihood of Occurrence		• Evaluation of the likelihood and expected timing of financial impacts occurring

Materiality Assessment Results

For 12 ESG issues highly related to our business, priorities were selected by comprehensively considering the evaluation results of our environmental and social impacts and the financial impact assessment of ESG issues on the company. As a result, five issues—Clean Products and Technology Development, Climate Change Response, Safety and Health, Supply Chain Management and Shared Growth, and Ethics and Compliance—were selected as material issues for 2024. Among the top 12 issues, seven issues including Air Pollution, Biodiversity and Ecosystem Protection are managed as issues of concern with relatively lower importance compared to the material issues.

Tier	Issue Name	Environmental/ Social Impact	Financial Impact
1 (Material Issue)	Low-/zero-carbon Technology Development and Innovation		
	Climate Change		
	Safety and Health of Own workforce		
	Safety and Health of Value Chain Workers		
	Corporate Ethics and Compliance		
2 (Concern Issues)	Air Pollution		
	Biodiversity and Ecosystem Protection		
	Hazardous Substances		
	Waste and Resource Circulation		
	Value Chain Workers Working Environment		
	Equal Treatment and Opportunity for Own Workforce		
	Equal Treatment and Opportunity for Value Chain Workers		



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Double Materiality Assessment

Hanwha Ocean Material Issue Response

Material Issue	Issue Selection Background	Response Strategy	Targets and Performance	Material Topic
Low–/zero–carbon Technology Development and Innovation	As customer demand for sustainable products and technologies increases, sales and revenue of related products are rising. Accordingly, Hanwha Ocean is developing low–/zero–carbon technologies and applying them to our products to minimize environmental impact. We are also positively influencing society by creating new jobs and promoting technological innovation through R&D investment.	• Liquefied Carbon Dioxide (LCO_2) Carrier Development • Liquefied Hydrogen (LH_2) Carrier Development • Zero–carbon Propulsion LNG Carrier 'Ocean1' Development	• Low–/zero–carbon Ship Order Backlog Ratio 100% • Performance: Low Carbon/Carbon Avoidance Products Sales KRW 7,709.3 billion	Clean Products and Technology Development
Climate Change	GHGs directly and indirectly emitted through fuel and power use across the value chain during business operations cause negative environmental impacts such as abnormal weather, natural disasters, and ecosystem destruction. Therefore, costs for responding to strengthened GHG emission regulations, including the European Union Emissions Trading System (EU–ETS) and International Maritime Organization (IMO) regulations, are increasing. From 2024 to 2027, the estimated cost burden for carbon emission trading ranges from approximately KRW 156.8 billion to KRW 602.3 billion. Additionally, as the likelihood of disasters caused by climate change increases, costs for disaster prevention and recovery—such as acquiring new facilities, changing the service life of existing facilities, or early disposal—are rising.	• Conducted Life Cycle Assessment (LCA) for construction of 174K LNGC vessel • Entered into GCMD Partnership Agreement • Energy Patrol Inspection and Improvement Activities	• Target: Reduce 40% of GHG emissions by 2030 compared to 2018, and achieve carbon neutrality by 2050 • Performance: Signed three–year contracts for 26 air compressor inverters, introduced electric trucks and forklifts for energy savings	Climate Change Response
Safety and Health of Own Workforce	In the event of safety accidents during business activities, negative impacts such as deterioration of executives' and employees' health and quality of life due to worker injuries may occur. Additional financial costs may occur due to productivity loss from operational suspension and strengthened management measures such as dedicated safety personnel deployment. Medical treatment costs may arise from worker injuries. Furthermore, costs related to compliance with laws such as the Industrial Safety and Health Act may be incurred, and fines or penalties may be imposed in case of violations.	• Established safety budget worth approximately KRW 1.9 trillion over three years starting from 2024 • Established Yard Basic Safety 4 Rules and 12 Golden Rules • Provided safety and health training to all employees	• Target: Zero serious accidents, LTIR 0.15 by 2030, achieve ISRS Level 8 • Performance: Conducted 196,884 hours of safety training for 9,591 persons in 2024, established and completed risk reduction measures for 1,439 high–risk factors identified in the 2024 regular risk assessment.	Safety and Health
Safety and Health of Supply Chain Worker	As more stakeholders demand responsible management from companies during business operations, Hanwha Ocean must ensure a safe and fair working environment for supply chain workers, enhance their capabilities and welfare, and engage in activities for shared growth with suppliers. Failure to perform these duties may result in fines or penalties due to negligence in supply chain management. Additionally, neglecting supplier risk management may damage corporate image and product competitiveness, leading to decreased sales or additional financial costs for aftercare.	• Conducted pre–safety and health qualification review before supplier contracting • Performed periodic safety and health level evaluations • Provided in–house supplier safety diagnosis consulting	• Target: Complete ESG evaluation of all major primary suppliers by 2030, achieve 'Good' or higher in Shared Growth Index • Performance: Six suppliers received S grade and seventy–nine suppliers received A grade in supplier safety and health level evaluations in 2024	Supply Chain Management and Shared Growth
Corporate Ethics and Compliance	If corruption or bribery occurs in Hanwha Ocean's business operations, it may infringe on the economic and social interests of various stakeholders and increase social costs due to disputes. Violations such as unfair support or unfair trade practices may result in fines and penalties. As the scope of ethics and compliance management expands across the value chain including suppliers and customers, financial impacts may arise.	• Conducted annual ethics and compliance training and promotional activities • Acquired ISO 37001 & 37301 Certification • Implemented whistleblowing system and collected confidentiality agreements for whistleblower protection	• Target: Achieve a perfect score of 5 in the 2030 Compliance and Ethics Management Practice Evaluation • Performance: Achieved a score of 3.09 in the 2024 Compliance and Ethics Management Practice Evaluation, 99.5% signature participation rate among mandatory signatories of the Ethics and Compliance Practice Pledge	Ethics and Compliance

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Governance

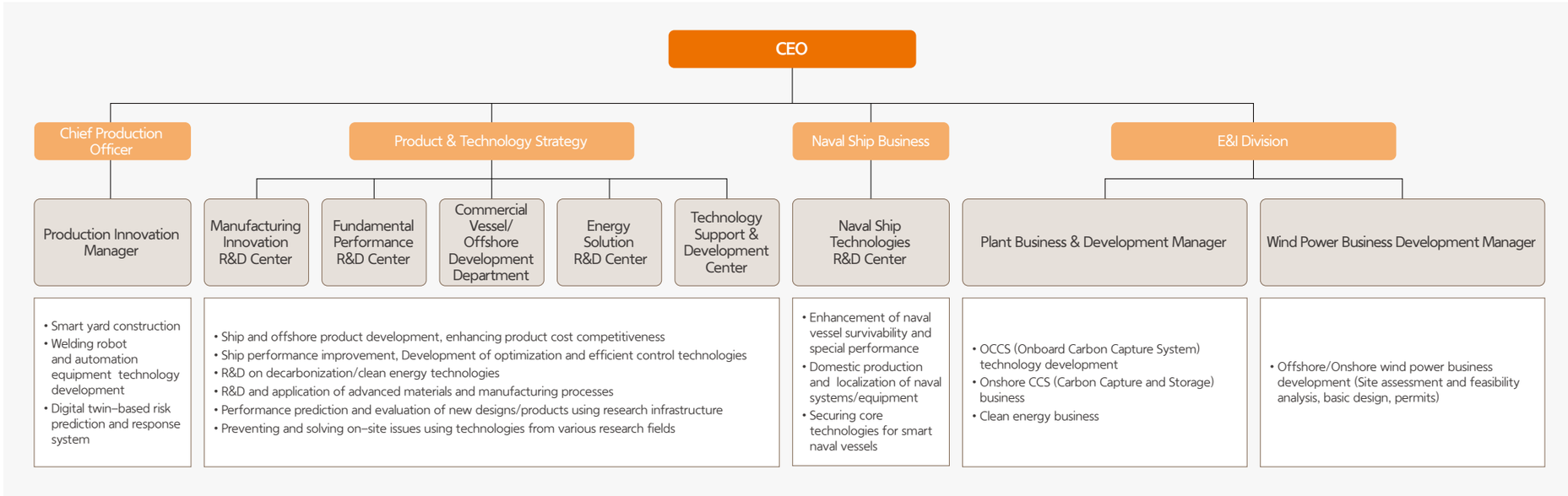
Clean Products and Technology Development Organization

Hanwha Ocean has established and operates a systematic organization to develop differentiated clean products and lead technology development in the shipbuilding and offshore sector. The Product & Technology Strategy holds ownership of technology, performing roles from research and development to commercialization stages, as well as identifying and resolving issues arising in the field where the technology is applied. In the short term, we develop more efficient energy-saving technologies compared to existing ones, provide customers with high value-added ships applying low-/zero-carbon fuel technologies, and ultimately promote the transition to fully carbon-free propulsion ships equipped with differentiated Green Ship technologies.

Within the Naval Ship Business, the Naval Ship Technologies R&D Center conducts research to strengthen the technological competitiveness of defense products. Meanwhile, the Production Innovation Manager under the Chief Production Officer is building an intelligent smart yard based on advanced digital technologies such as IoT and AI. By organically connecting all organizations within the Geoje shipyard using big data, we establish efficient and optimized production processes, automate production stages, and maximize productivity during the construction process.

In 2024, Hanwha Ocean established the E&I Division by acquiring plant and wind power businesses to secure future growth engines in the clean energy business. The Plant Business & Development Manager has established a new business technology team within the organization in line with the global decarbonization trend. This team collaborates with related departments across the company and group to lead the development of onboard carbon capture and storage (OCCS) technology and build a hydrogen value chain. Additionally, the Wind Power Business Development Manager has expanded business areas into offshore wind power by obtaining permits for the Yeonggwang Chilhae Offshore Wind Power Project, leading the establishment of a sustainable marine renewable energy ecosystem.

Organization Structure and Roles for Clean Products and Technology Development



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Clean Products and Technology Development

Strategy

Hanwha Ocean's Mid- to Long-term Roadmap for Clean Technology

Hanwha Ocean has established a roadmap to realize optimal solutions for a sustainable future as a 'Global Ocean Solution Provider'. We are developing low-/zero-carbon fuel propulsion systems to reduce carbon emissions and are advancing the development and scaling-up of clean energy carriers such as liquefied hydrogen and ammonia. We aim to lead the future energy industry by developing and applying carbon reduction technologies like carbon capture and combined cycle gas turbines, as well as building a hydrogen value chain from ammonia cracking hydrogen production to hydrogen power generation. The Geoje shipyard is establishing a digital twin-based smart facility system that enables optimized operations from the production process. We predict and respond to risks that may arise during the construction process in advance, while elevating production efficiency and minimizing work hazards through the application of automated equipment technology.

Global Ocean Solution Provider

Direction	Carbon Reduction Solutions	Energy Solutions		Smart Yard
Short- and Mid-term goals	**Commercialization of low-/zero-carbon solutions and electric propulsion systems** • Performance improvement and optimal combination of energy-saving technologies • Achieving the realization of gas carriers with low-/zero-carbon fuel and electric propulsion • Development of future energy carrier technologies (ammonia/liquefied hydrogen/liquefied CO_2)	**Development of clean energy-based technologies** • Strengthening hydrogen/ammonia power generation capabilities • EPC completion for Shinan Ui Offshore Wind Project (2025-2028) • Development of OCCS technology and expansion of onshore CCS technology (power generation, incineration, petrochemical, etc.)	**Introduction of digitalization technologies and development of low-carbon technologies** • Enhancement of Operating Technology (OT) and cybersecurity • Development of post-combustion carbon capture technology • Development of combined cycle gas turbine application technology	**Shipyard that predicts risks and responds promptly** • Establishment of connecting data and integrating system across sales, design, procurement, and production • Introduction of large-scale welding robots and development of automation equipment technology • Early application of developed robots and technologies on site
Long-term Target	**Expanded application of low-/zero-carbon propulsion technologies** • Development and commercialization of new energy saving technologies • Expanded application of ammonia/hydrogen propulsion technologies • Development of ultra-large future energy (ammonia/liquefied hydrogen/liquefied CO_2) carrier technologies	**Top-tier developer/EPC leading the clean energy industry** • Expansion of low-/zero-carbon energy business • Establishment of hydrogen value chain (From ammonia cracking hydrogen production to hydrogen power generation) • Expansion of low-/zero-carbon energy solutions (Development of Yeonggwang Chilhae and Boryeong Nokdo projects (1,340MW))	**Commercialization of low-carbon technologies and development of renewable energy technologies** • Implementation and utilization of operational digital twin technology • Commercialization of offshore ammonia and hydrogen production technologies • Development of offshore nuclear power application technologies	**Digital twin-based self-working sustainable shipyard** • Operation based on AI and digital twin to predict and respond to risks • Expansion of automation and mechanized welding throughout all production stages
2024 Key Performance	• Strategic partnership agreement with GCMD • Joint development contract for ammonia gas turbine • Obtained first Type Approval Design Certification for rotor sail in South Korea • Acquired Approval In Principle for Large-scale LCO_2 and LH_2 carrier • Revealed LNG carrier with ammonia gas turbine application	• Performed FEED for ammonia cracking hydrogen production facility • Performed FEED for pyrolysis oil production facility utilizing waste plastics • Filed two patents related to anion exchange membrane water electrolysis • Completed project permit for Yeonggwang Chilhae Offshore Wind Power (1,020MW) • Filed four patents for OCCS energy savings	• Signed and progressing joint offshore technology development agreement between Hanwha Ocean and ABS • Established strategy for standard FPSO technology development • Established technical strategy for OT cybersecurity solution development	• Development of multi-axis robot solutions • Built welding robot test bed for technology demonstration • Developed and applied portable robot for onboard welding • Developed improved model of portable robot for internal block welding • Developed Draft Reading System (DRS) using AI

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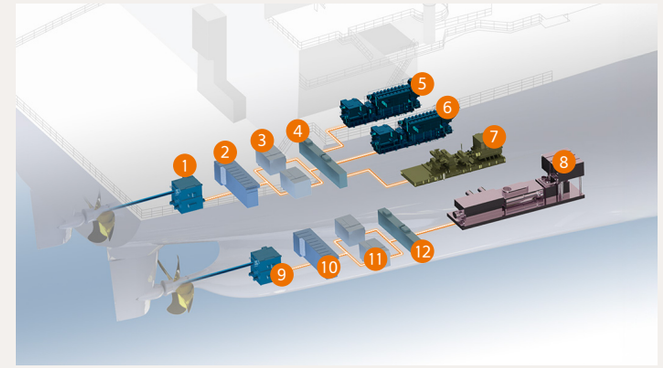
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Carbon Reduction Solutions

According to the IMO GHG strategy, the need for decarbonized shipping and electrification of propulsion systems continues to increase. In particular, with the enforcement of the FuelEU Maritime Regulation starting in 2025, vessels operating in European waters must drastically reduce their carbon emissions. At the 83rd session of the Marine Environment Protection Committee (MEPC), the introduction of the GHG Fuel Intensity Regulations as a mid-term GHG reduction measure was approved, indicating that active decarbonization in international shipping is expected. Hanwha Ocean is strengthening competitiveness by converting existing fossil fuel-based mechanical propulsion systems into carbon-free fuel-based electric propulsion systems and continuously developing clean energy transportation technologies.

Ammonia Gas Turbine

Ammonia does not emit carbon dioxide during combustion, making it an important clean energy source to achieve the Carbon Neutrality (Net-Zero) goal. Hanwha Ocean aims to secure a leading position in the future market by developing the world's first LNG Carrier equipped with an ammonia gas turbine. The ammonia gas turbine achieves complete carbon-free propulsion by not using pilot oil for engine ignition. It also allows co-firing with LNG, a widely used ship fuel, enabling economically optimized operation through simultaneous use of carbon-free ammonia and boil-off gas. When using natural gas as fuel, the turbine significantly reduces methane slip emissions compared to conventional engines. Additionally, it meets nitrogen oxide emission regulations without additional equipment when using ammonia and natural gas as fuels.



Main Configuration of Electric Propulsion based on Ammonia Gas Turbine

Wind Assisted Propulsion System

Hanwha Ocean is promoting the development of various wind-assisted propulsion technologies to improve the fuel efficiency of ships, including the first domestically developed rotor sail in Korea. In September 2024, Hanwha Ocean obtained Type Approval Design Certification (TADC) from Norwegian classification society DNV for its composite material rotor sail, a first in Korea. This certification, involving detailed design reviews prior to actual ship application, confirms that Hanwha Ocean's rotor sail is suitable for practical application on ships. The rotor sail functions as an auxiliary propulsion system, consisting of an internal fixed tower and an external cylindrical rotor. It utilizes pressure differences to assist propulsion, typically achieving 6-8% fuel savings while reducing carbon emissions.

Additionally, in April 2024, Hanwha Ocean commenced construction of a rotor sail demonstration center capable of conducting major experiments simultaneously on land, planning continuous technological investments to address climate change and reduce air pollution. In August 2024, jointly with Japan's Mitsui O.S.K. Lines (MOL), Hanwha Ocean designed a membrane-type LNG Carrier equipped with the Wind Challenger System. This sail-shaped wind-assisted propulsion device, developed by MOL, was incorporated into the design. With Hanwha Ocean's support, the project received Approval In Principle (AIP) from ClassNK (Japanese classification society) for the LNG Carrier design featuring this innovative propulsion system.



Korean First Composite Material Applied Rotor Sail

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Carbon Reduction Solutions

Liquefied Hydrogen (LH_2) Carrier Development

Hydrogen, along with ammonia, is an important clean energy source for achieving carbon neutrality goals, and LH_2 carriers are next-generation energy transportation vessels that will replace existing fossil fuel-based energy transport. Hanwha Ocean obtained AIP in September 2024 from the Norwegian Classification Society (DNV) for an 83,000㎥ class electric propulsion LH_2 carrier. The LH_2 carrier being developed by Hanwha Ocean produces power through carbon-free power sources and utilizes hydrogen gas vaporized in the cargo tanks (Boil-off gas, BOG) during this process, emitting no carbon dioxide at all. In addition to the 83,000㎥ carrier that received AIP, we are developing LH_2 carriers up to 160,000㎥ for large-scale liquefied hydrogen transport and also exploring the application of various power sources for these carriers.

Liquefied Carbon Dioxide (LCO_2) Carrier Development

As Carbon Capture, Utilization, and Storage (CCUS) technology gains attention, demand for LCO_2 carriers transporting captured carbon dioxide to storage facilities is increasing. A small vessel market of 7,500 to 20,000㎥ is established mainly in Europe, and the market for large carriers of 40,000㎥ for long-distance transport to Asia, Australia, and the Americas is expected to expand. Accordingly, Hanwha Ocean obtained AIP in June 2024 from the ABS for a 40,000㎥ LCO_2 carrier and has secured technology for various sizes of LCO_2 carriers ranging from small to ultra-large (12,500㎥ to 100,000㎥). Technology to stably maintain carbon dioxide at minus 50 degrees Celsius and under approximately 7 to 8 times of atmospheric pressure has been verified. By applying a 'Bi-Lobe Type' tank, the cargo capacity was increased by 50% compared to conventional cylindrical tanks, maximizing transport efficiency.

Carbon-free Propulsion LNG Carrier 'Ocean1'

Hanwha Ocean developed the next-generation carbon-free LNG carrier 'Ocean 1' equipped with various environmentally considered digital solutions. 'Ocean 1' adopts an ammonia gas turbine-based electric propulsion system designed for complete carbon-free propulsion without fossil fuels.

The carrier can co-fire with LNG, widely used as ship fuel, and has flexibility to incorporate fuel cell and battery technologies in the future. It also addresses the toxicity risk of ammonia gas turbines by enclosing them in an outer hull with its own ventilation system to reduce the risk of toxic gas dispersal inside the ship. Crew quarters are located at the bow to minimize exposure risk to potential toxic gas leaks.

Furthermore, Hanwha Ocean collaborated with ABS to conduct a quantitative risk assessment and complete safety evaluation of ammonia diffusion. Additionally, a method to use high manganese steel LNG storage tank, MCTIB, as the cargo tank of LNG carriers was developed. This has been applied as fuel tanks in VLCCs and CONT. built by Hanwha Ocean. Using MCTIB as cargo tanks is expected to significantly reduce boil-off gas and improve transport efficiency.

Through these efforts, Hanwha Ocean is solidifying a position as a Global Ocean Solution Provider by presenting optimal solutions for the carbon-neutral era.



LCO_2 Carrier



LH_2 Carrier



Carbon-LCO free Propulsion LNG Carrier

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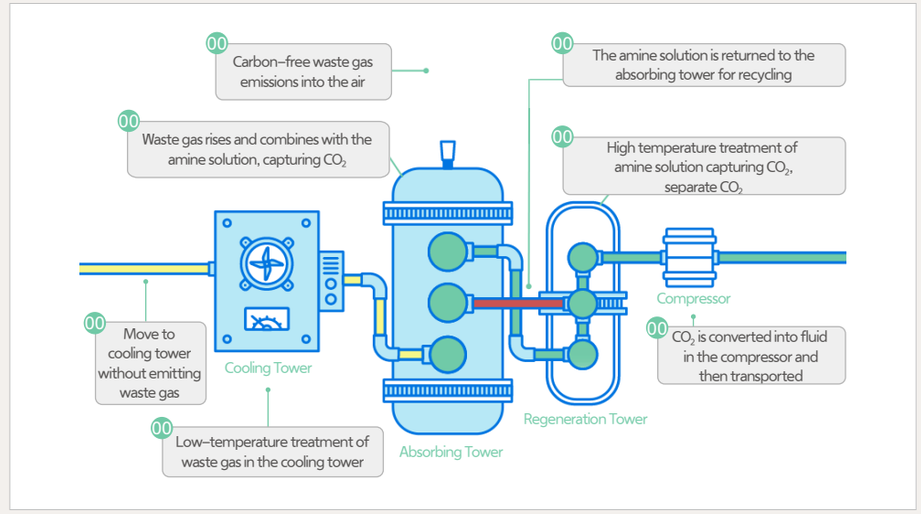
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Energy Solutions

Hanwha Ocean is leading the clean energy industry as a top-tier development and EPC player by developing competitive clean technologies and taking the lead in creating a decarbonized ecosystem. Through the development and commercialization of OCCS and onshore CCS technologies, we contribute to carbon reduction. Additionally, we are promoting hydrogen power generation and offshore wind power projects—carbon-free energy sources—to provide carbon reduction energy solutions.

Development of OCCS Technology and Expansion of Onshore CCS Technology

OCCS is a technology that captures and liquefies carbon dioxide generated during ship operation for safe storage, expected to play a crucial role in decarbonizing the shipping industry. Hanwha Ocean has established the foundation for carbon capture technology through OCCS process optimization and patent applications. In 2023, we obtained AIP from classification societies including ABS, KR, and BV. Based on the differentiated technology, Hanwha Ocean aims to lead sustainable energy transition in the shipping business and plans to expand into onshore CCS projects for NCC, power generation, and incinerators.



CO_2 Capture Process Using Amine

Hydrogen Value Chain Establishment

Hanwha Ocean aims to realize the hydrogen value chain, from ammonia-based production to power generation, to lead the hydrogen market, a key energy source in the carbon-neutral era. We are expanding technology and optimizing design for commercialization, with FEED design for hydrogen-only combustion power generation planned to start in 2025. We will contribute to revitalizing the hydrogen industry ecosystem through active development.



Hanwha Impact Daesan Plant Hydrogen Turbine Demonstration Site

Expansion of Wind Power Business Centered on Offshore Wind Power Generation

To secure future growth in clean energy business, Hanwha Ocean acquired plant and wind power businesses from Hanwha Corporation in July and December 2024, respectively. Considering business characteristics, we reorganized into the E&I Division to strengthen largescale EPC capabilities and operate efficiently. In line with trends of carbon neutrality and energy transition, we aim to lead clean energy transformation. We have experience and capabilities including direct site discovery for 400MWclass projects, obtaining power generation permits and related approvals, continuously expanding offshore wind power business. Currently, we hold permits for offshore wind power projects totaling 1.7GW at Shinan Ui (390MW), Yeonggwang Chilhae (1,020MW), and Boryeong Nokdo (320MW). These projects can generate electricity for approximately one million households, with an expected annual carbon reduction of two million tons. Starting with the Shinan Ui Offshore Wind Power Project, Hanwha Ocean—the first in Korea to install a 15MW large turbine—plans to directly execute EPC for ongoing projects and expand business development to become a Global Ocean Solution Provider.



Shinan Ui Offshore Wind Power Project Aerial View

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Energy Solutions

In the short term, Hanwha Ocean is adopting AI-based digitalization technologies to maximize operational efficiency while conducting R&D forlow-/zero-carbon technology application. In the long term, we are pursuing technology development to apply renewable energy technologies in the marine industry.

Commercialization of Low-Carbon Technology: Post-Combustion Carbon Capture Technology Development

In developing the Standard FPSO, we are implementing advanced clean technologies to promote sustainability and decarbonization. To reduce carbon dioxide emissions during FPSO operations, we are evaluating the application of amine-based carbon capture technology. We are also conducting research to maximize reaction efficiency while minimizing equipment footprint by utilizing Rotating Packed Bed technology. These efforts aim to minimize FPSO carbon emissions and enhance our compliance with global environmental regulations.

Energy Efficiency Improvement Technology Development: Combined Cycle Gas Turbine Technology Development

To maximize FPSO energy efficiency and reduce carbon emissions, we are evaluating the implementation of of combined cycle gas turbine technology. This technology enhances combustion efficiency and reduces total carbon dioxide emissions. In particular, we are exploring the application of high-efficiency steam turbines to maximize additional energy recovery and are reviewing operational safety and technical applicability in marine environments.



1. **Application of Post-Combustion Carbon Capture Technology**
   - Application of Amine-Based Carbon Capture Technology
   - Development of RPB-Based Carbon Capture Technology
2. **Expanded Application of Combined Cycle Gas Turbine Technology**
   - Application of Small High-Efficiency Steam Turbines
   - Review of Durability and Safety Technologies for Marine Environment Response
3. **Development of Energy Efficiency Technologies and Digital Twin/Solutions**
   - Digitalization-Based Energy Management System
   - Fuel Usage Optimization through Simulation

Development of Lifecycle Digital Solution Technology

To optimize FPSO operations, we are developing a digital energy management system and researching fuel usage optimization solutions using advanced simulation techniques. This will enable real-time energy monitoring, predictive analysis, and optimal operation strategies to minimize fuel consumption, reduce operating costs, and mitigate environmental impact.

AIP for Standard FPSO Pre-FEED Design

In October 2024, Hanwha Ocean simultaneously obtained AIP for the 'Standard FPSO Pre-FEED Design' from the ABS and Bureau Veritas (BV) of France. The design accommodates topside oil and gas production facilities weighing up to 55,000 tons and covering 17,600 square meters. It also adopts a hull capable of operating for up to 20 years without re-docking, maximizing operational efficiency.

Signing of Offshore Technology Collaboration Agreement (OTCA)

At Gastech 2024, Hanwha Ocean signed an Offshore Technology Collaboration Agreement (OTCA) with ABS to jointly advance leading technology development projects. Both parties mutually agreed on key future offshore technology focuses: "Sustainability and Decarbonization, Digitalization and Autonomy, OT Cybersecurity." Hanwha Ocean plans to apply these future-focused technologies to the Standard FPSO model while accelerating technology development. This agreement particularly aims to lead innovative clean technology development for energy efficiency improvements such as carbon capture, offshore wind technology integration, and electrification, targeting commercialization of solutions incorporating these technologies.

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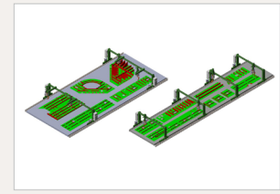
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Smart Yard

Hanwha Ocean aims to operate a shipyard with outstanding productivity by building an intelligent smart yard where all organizations within the site are organically connected based on big data.

Robot-based Welding Process Automation and Optimization

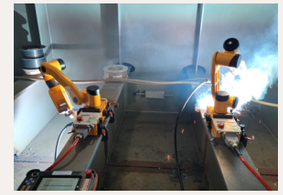
Hanwha Ocean automates the arrangement, fitting, and welding processes for small parts production using a self-developed gantry type welding robot system solution. Additionally, we improve consistent productivity through process automation and load balancing optimization. Based on this, we aim to expand automation and realize unmanned operations in small assembly processes at small parts factories and assembly plants. Furthermore, to design and optimize more precise onsite installation robot systems, Hanwha Ocean prevents potential risks by configuring various robot systems in virtual space and conducting simulations reflecting real work objects before introducing small assembly welding robots.



Gantry-type Welding Robot

Development of Mounted Longi Welding Robot

Hanwha Ocean independently developed a compact, lightweight, high-function welding robot that can be carried directly by workers and pass through manholes. This robot enables smooth welding work even in narrow or enclosed areas of double hulls, ensuring worker safety while improving productivity. Through this innovation, we are leading a paradigm shift in welding automation and continuously pursuing technological innovation to create a more efficient and safe working environment.



Hanwha Ocean's Mounted Longi Welding Robot

R&D on Smart Production Management Systems

Hanwha Ocean is building a smart production management system that monitors production status in real time, predicts and manages process risks in advance, and suggests optimal response scenarios. To this end, we are researching and applying the latest information and communications technologies. These advanced systems support decision-making for optimal production processes, ultimately enhancing efficiency and effectiveness in our operations.



Intelligent Ship Safety & Environmental Monitoring System

To manage ship safety and the environment, various safety sensors such as fire, harmful gases, air quality, and temperature and humidity inside cargo tanks are installed, providing real-time monitoring and alert functions. This minimizes accident risks and enables prompt responses, ensuring worker safety and improving ship quality.

AI-based Draft Measurement System

Hanwha Ocean has developed and commercialized a draft measurement system utilizing drones and AI technology. This system captures the ship's draft using drones and measures the ship's weight and distortion in real time through AI-based image analysis technology. It ensures worker safety while reducing operation time, enabling more efficient and precise draft measurement.

Mobile Drawing App

A mobile drawing app capable of replacing nearly ten million paper drawings annually was developed and applied on site. This allows real-time access to the latest drawings at all times, simultaneously achieving environmental protection and cost reduction by eliminating paper drawing use.



Transporter Training Simulator

Hanwha Ocean developed the world's first virtual reality (VR)-based transporter simulator, enabling training without constraints of time and space. Utilizing virtual reality for driving practice maximizes training efficiency, enhances work safety, and creates a more precise and systematic educational environment.



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Clean Products and Technology Development

Risk Management

Product and Technology Development Process

Hanwha Ocean establishes a product technology roadmap by analyzing the latest technology and regulatory trends, customer requirements, and the company's capabilities across future offshore businesses to derive optimal technological combinations for each ship type. This roadmap undergoes regular evaluation and review in alignment with market conditions and business strategies. The Product & Technology Strategy selects projects based on feasibility, effectiveness, and alignment with company goals. During development, performance and quality are verified, while risks and opportunities are identified for each product and technology, with goals and implementation plans monitored. The E&I division identifies and manages risks associated with new business ventures. For target technologies and priority projects selected through market and technology research, we identify risks, establish management strategies, and conduct response, monitoring, evaluation, and improvement activities.

R&D Review Process

Planning/Proposal and Feasibility Review	• Market and technology trend analysis • Derivation of R&D product/technology concepts and specifications • Review of R&D product/technology specifications and risk factors
Target Setting	• Setting product/technology scope, schedule, key targets, Defining major design specifications
Detailed Plan Development	• Establishment of detailed plans including performance targets, promotion strategies, milestones
Selection Review	• Establishment of development targets, schedule, resource input, verification plans
Verification Review	• Review of specification and development target reflection in design, Verification of design completion quality
Performance Test Evaluation Review	• Verification of prototype quality and performance against targets
Completion of Development Project Review	• Assessing R&D performance against pre-established goals

New Venture Risk Management Process

Market and Technology Research	• Market opportunity analysis • Technology trend research • Competitive environment analysis
Target Business Selection	• Target technology selection • Business priority setting • Business model development
Risk Identification	• Risk workshop • Identification of risks by type • Priority evaluation
Establishment of Risk Management Strategy	• Development of response plans • Identification of required resources • Establishment of new business execution plans
Response and Monitoring	• Risk response activities • Residual risk management • Identification of new risks
Performance Evaluation and Improvement	• Evaluation of response results • Identification of process improvements • Improvement and feedback

Metrics and Targets

Metrics

Low Carbon/Carbon Avoidance Products

At Hanwha Ocean, we aim to contribute to global carbon reduction goals by not only implementing our own operational carbon neutrality but also providing solutions to reduce carbon emissions during the product usage phase. Through technology development and other means, we continuously propose our innovative clean technologies to customers, offering a one-stop solution covering the entire life cycle from order placement to maintenance and repair.

Metric	Unit	2021	2022	2023	2024
Low Carbon/Carbon Avoidance Product Sales*	KRW 100 million	24,922	25,388	44,238	77,093
R&D Expenses	KRW 100 million	722.6	745.4	762.1	666.2
Government Subsidy	KRW 100 million	49.4	59	64.5	64

* Sales revenue includes ships equipped with DF (DUAL FUEL) engines only

Targets

HOST 2030: Development of Low-/zero-carbon Technologies

Hanwha Ocean plans to classify LNG ships and vessels equipped with dual-fuel propulsion systems as carbon reduction products by 2030. This classification aligns with the transportation sector guidelines in K-Taxonomy for transition economic activities that reduce GHG emissions. The company aims to expand sales in these areas.

Low-/zero-carbon Ship Order Backlog Ratio



100%

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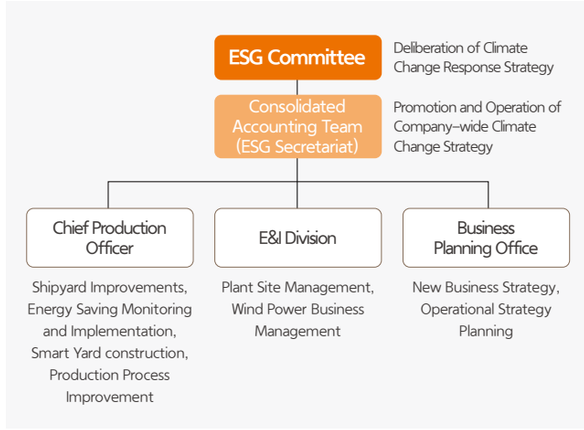
Climate Change Response

Governance

Climate Change Response System

Hanwha Ocean is strengthening the governance system to proactively respond to management environment changes due to climate change. The final decision-making on environmental policies and performance, including climate change, is handled by the ESG Committee under the Board of Directors. Various environmental issues, including climate change and energy, are reviewed as agenda items. The ESG Committee meets quarterly to deliberate and resolve various environmental and climate change-related matters. The responsibility and authority for major issues such as establishing climate change response strategies, implementing tasks, and executing investments rests with the CEO.

Climate Change Response Organization and Roles



2024 ESG Committee Climate-related Resolutions and Reports

Date	Category	Key Items
2024.04.03	Approval	Approval of ESG Management 2024 Plan (Including a 1% GHG reduction target)
2024.12.27	Report	Report on 2024 ESG Implementation Performance (Including replacement of high energy-consuming equipment, etc.)

Strategy

Climate-related Risks and Opportunities

At Hanwha Ocean, we monitor sector-specific risks at business sites according to our risk management process and manual. To identify climate-related risks and opportunities and understand their financial impacts, climate scenario analysis was conducted. Key short-term risk factors include rising carbon emission trading prices, extreme weather, and decreased demand for fossil fuel-based products. The long-term risk includes the expansion of abnormal climate conditions. Major short-term opportunities include increased orders for low-/zero-carbon ships and expansion of renewable energy businesses, while medium-term opportunities include the development of low-carbon and decarbonized fuels and propulsion systems.

Category	Type	Risk Factors	Financial Impact	Potential Occurrence Period			Business Impact	Current Status and Plans
				Short	Medium	Long		
Transition Risk	Regulation/ Policy Risk	Strengthening of IMO regulations on ship related carbon emissions	High			■	• Costs incurred for equipment and R&D investments to comply with IMO CII regulations on reducing ship carbon emissions	• Conducting R&D activities to reduce ship carbon emissions based on a clean technology roadmap
		Increased costs for purchasing emission allowances due to GHG emission trading system	High			■	• Costs incurred from purchasing additional GHG emission allowances – Additional costs from purchasing excess emission allowances	• Participating in the emission trading system (430,000 tons of free GHG emission allowances) • Planning to perform carbon offset by 2050
		Increase in raw material prices due to implementation of Carbon Border Adjustment Mechanism	Medium		■	■	• Increased costs due to rising raw material (steel) prices from carbon tax burden	• Operating order risk management system for stable raw material supply • Managing costs of raw material quotations through order risk verification procedures
	Market Risk	Increased employment and retention costs for future fuel specialists	Medium		■	■	• Increased costs for employing specialists • Increased costs (salary and training) due to workforce expansion	• Strengthening development cooperation with affiliates and external leaders for next-generation fuel propulsion system development
	Technology Risk	Increased costs for operating environmentally considered yards	Low		■	■	• Increased costs for product process improvements and environmental utility • Increased purchase prices for low-/zero-carbon fuels • Costs for managing low-carbon production targets (systems)	• Establishing and implementing CAPEX plans for environmentally considered yard operations over the next five years
Physical Risk	Acute	Typhoon	Medium		■	■	• Fixed cost losses due to business site operation suspension • Increased raw material prices • Costs incurred for restoring business site facilities	• Estimating restoration costs for damaged facilities in case of typhoons, minimizing damage through insurance • Establishing business site operation plans for typhoon preparedness
	Acute	Heatwave	Low		■	■	• Fixed cost losses incurred per extended rest hour for executives and employees • Increased costs for items in high temperature work environments	• Guaranteeing rest time for executives and employees during heatwaves • Budgeting and executing expenses for supplies in high-temperature work environments
Opportunities	Market	Increase in customer demand/ market size for clean products	High			■	• Growth in market size and sales of low carbon/ carbon-free ships (LNG/Methanol/ Ammonia/Hydrogen)	• Continued orders for low-/zero-carbon fuel-powered ships and green ships • Advancement of carbon-free (hydrogen/ammonia) ship R&D
		Expansion of new business sales through business portfolio transformation	High		■	■	• Increased demand related to clean products such as floating offshore power, offshore wind power substructures, hydrogen storage tanks	• Consideration of energy infrastructure projects related to offshore wind power • Review of business operation of low-/zero-carbon ship materials
	Technology	Securing market competitive advantage through proactive development of environmental impact reduction technologies	Medium		■		• Increase in market share and sales revenue in eco-friendly business through technology preemption and competitive advantage	• Accelerated development of methanol, hydrogen, ammonia ships to preempt competitive markets, aiming to achieve 2030 carbon-free technology commercialization goal

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Scenario-Based Financial Impact Analysis

Hanwha Ocean conducted a climate scenario analysis based on the International Energy Agency (IEA)'s Net Zero by 2050 (NZE 2050) scenario to respond to climate change. The NZE 2050 scenario sets a more ambitious reduction target than the IEA's STEPS (Stated Policies Scenario) and APS (Announced Pledges Scenario), aiming to limit global temperature rise to 1.5 degrees Celsius by 2050 by achieving net-zero GHG emissions in the global energy sector by 2050. Based on this, Hanwha Ocean analyzed the financial impact of transition risks through the NZE 2050 scenario. We applied the Global Energy and Climate Model (GECM) methodology, which derives price forecasts for carbon and energy sources through the global energy and climate analysis model presented in the IEA scenarios. Using this model, carbon emission prices per ton, and crude oil and natural gas prices were forecasted for 2030, 2040, and 2050. Additionally, using carbon price forecasts, we predicted carbon tax costs per raw material and emission allowance prices, and estimated conversion costs to each energy source for environmentally considered yard operations based on energy source price forecasts. This provides essential foundational data for Hanwha Ocean to establish climate change response strategies and assess financial impacts.

Methodology for Measuring the Financial Impact of Transition Risks

Selection of IEA NZE 2050 Scenario	Application of GECM (Global Energy and Climate Model)	Deriving forecasted prices (P values) by carbon and energy source
IEA NZE 2050 Selection/Analysis	Derivation of key input data for GECM based on IEA scenarios	Forecasting carbon prices and energy source prices from 2030 to 2050
• Adoption of the IEA NZE 2050 scenario, which presents the most ambitious reduction targets, to enable reflection of strengthened policies/regulations and upwardly revised Nationally Determined Contributions (NDCs)	• Application of GECM, the global energy and climate analysis model presented in IEA scenarios.	• Forecasting carbon prices per ton for 2030, 2040, and 2050 • Forecasting crude oil and natural gas prices for 2030, 2040, and 2050

- Used carbon price forecasts to predict carbon tax costs per raw material and emission allowance prices
- Used energy price forecasts to estimate conversion costs for each energy source during environmentally considered yard operations

Carbon Price : Used carbon price to predict carbon tax imposition costs per raw material and emission allowance prices
– Carbon price forecasts for OECD countries that have declared Net Zero, expecting scenario carbon prices to impact carbon tax costs and emission allowance prices

Energy Source Prices : Used energy price to estimate conversion costs by energy source during environmentally considered yard operations
– Utilized forecasts based on global benchmark prices for crude oil, and used adjusted forecasts for U.S. imported natural gas data for natural gas prices

(Unit: USD per ton)

Carbon Price	STEPS	APS	NZE
2030	42	135	140
2040	67	175	205
2050	89	200	250

(Unit: USD per barrel)

Crude Oil	STEPS	APS	NZE
2030	82	64	35
2040	88	62	29
2050	95	60	24

(Unit: USD per BTU)

Natural Gas	STEPS	APS	NZE
2030	4	3.7	1.9
2040	4.3	3.1	1.8
2050	4.7	2.6	1.8

Financial Impact Analysis Results

KRW 3 billion —— Over KRW 10 trillion

Category	Type	Risk/Opportunity Factors	2030	2040	2050
Transition Risk	Regul-ation/ Policy	Increased R&D investment costs for green ships in response to strengthened IMO regulations			
		Cost increases due to implementation of Emission Trading System (based on BAU)			
		Raw material price increases due to implementation of Carbon Tax			
	Market	Increased employment/retention costs for next-generation fuel ship specialists			
	Tech-nology	Increased investment costs for operating environmentally considered yards			
Physical Risk	Risk Acute	Costs for typhoon risk response (based on RCP4.5 scenario)			
		Costs for heatwave risk response (based on SSP2-4.5 scenario)			
Oppo-rtunity	Market	Revenue from increased customer demand for low carbon/ carbon-free ships			
	Tech-nology	Revenue from securing competitive advantage			

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Climate Change Mitigation and Adaptation Activities

Energy Patrol Inspection and Improvement Activities

Hanwha Ocean operates energy patrol inspection and improvement activities to prevent energy waste and efficiently manage the energy. Team supervisors conduct inspections once a week, and the patrol team performs daily inspections by region throughout the company, promptly identifying and addressing waste cases. Additionally, once a month, inspection results are shared with direct and supplier organizations under the Chief Production Officer to enhance overall energy management levels. In particular, the patrol team, divided into four groups conducting daily rounds, tours all sites to check for unnecessary energy use, gas leaks, and usage standards violations, implementing immediate corrective actions such as power shutdowns. Through these systematic inspections and improvements, energy efficiency is increased and a safe working environment is established.





Energy Saving Awareness Training

Hanwha Ocean conducts daily company-wide broadcasts related to energy saving to raise awareness and shares relevant information through the internal portal. During summer peak electricity periods, we conduct promotional activities to encourage participation in energy saving, emphasizing the importance of reducing consumption across various energy sources such as gas, electricity, water usage, and fuel. In winter, we also implement preventive management promotions for facilities against freezing and provide guidance on preventive actions and measures to preempt accidents. These efforts aim to induce all executives and employees to practice energy saving and realize more efficient energy management.

Investment for Expansion of Energy Infrastructure and Reduction

Hanwha Ocean is continuously expanding power measurement infrastructure company-wide with the goal of energy reduction and digital business sites expansion, planning to establish it by organization and factory. As part of investments for energy saving and environment management, a purchase contract for 26 air compressor inverters (over three years) has been signed, and four electric trucks and twelve electric forklifts have been introduced to enhance energy efficiency.

GCMD Partnership Agreement

In October 2024, Hanwha Ocean signed a strategic partnership with GCMD, a non-profit organization based in Singapore. Through this collaboration, both parties plan to strengthen cooperation in low-carbon and carbon-free fuels, onboard carbon capture and storage (OCCS) technologies, and energy efficiency technologies to lead sustainable energy transition in the shipping industry. Hanwha Ocean pursues sustainable management by leading clean technologies and contributing to marine decarbonization through this partnership.

LCA (Life Cycle Assessment) for 174K LNGC Vessels

Starting October 2024, Hanwha Ocean has entered into a Joint Development Program (JDP) with the Norwegian Classification Society (DNV) to calculate GHG emissions based on LCA during the construction phase of 174K LNG vessels, currently undergoing final review. Furthermore, in 2025, leveraging experience with DNV, Hanwha Ocean is expanding the LCA scope to develop methodologies for calculating and analyzing carbon emissions throughout the entire vessel lifecycle from construction to decommissioning, and aiming to perform LCA and build an LCI (Life Cycle Inventory) database.

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Climate Change Response

Risk Management

Climate Risk and Opportunity Management

Hanwha Ocean conducts a thorough review of climate change risks and opportunities that significantly impact the shipbuilding industry and the company. In the assessment, the likelihood and impact level of business effects are evaluated by integrating opinions from internal stakeholders and external experts to assess potential risks and opportunities. Subsequently, the selected key risks and opportunities are qualitatively examined for their corresponding strategic impacts. We focus on identifying and analyzing various factors that may affect our operations and strategy through a systematically developed process. This process involves collecting extensive internal and external data, analyzing it to identify potential risks and opportunities, prioritizing them, and establishing appropriate response strategies.

Climate-related Risk and Opportunity Management Process

Step 1. Formation of initial long-list (88 units)

External Environment Analysis
- Analysis of global initiatives and sector trends
- Analysis of external trends (media trends, etc.) related to Hanwha Ocean
- Benchmarking within the same industry

Issue Pool Formation
- Formation of climate change risk/opportunity factor pool based on external environment analysis

Step 2. Factor Screening (23 units)

Internal Environment Analysis
- Review of Hanwha Ocean's mid- to long-term management plan, carbon neutrality roadmap, and net-zero strategy

Formation of short-list after factor screening
- Prioritization of 23 Hanwha Ocean business-related risk/opportunity factors
- Reviewed from the perspectives of policy/regulation, technology, and reputation

Step 3. Materiality Assessment

Materiality assessment of 23 factors
- Materiality assessment conducted based on likelihood and strategic/financial impact criteria
- Likelihood (X-axis): past occurrence frequency, future occurrence possibility, policy implementation progress, external environment analysis (reference to policy/regulation trends, expert forecasts, etc.)
- Strategy/Financial Impact (Y-axis): Reference to investment plans, expected scale, media analysis, etc.

Metrics and Targets

Metrics

GHG Emissions

Metric	Unit	2021	2022	2023	2024
Total emissions (Scope 1&2)	tCO_2eq	296,766	317,725	416,679	455,320
Direct emissions (Scope 1)	tCO_2eq	101,295	122,529	187,855	202,343
Indirect emissions (Scope 2)	tCO_2eq	195,471	195,198	228,824	252,979
GHG intensity	tCO_2eq /KRW 100 million	6.61	6.54	5.62	4.23
Other Emissions (Scope 3)	tCO_2eq	33,551,827	20,662,841	29,062,171	41,068,079

Energy Consumption

Metric	Unit	2021	2022	2023	2024
Total energy consumption	TJ	5,417.7	5,731	7,395.4	8,162.8
Direct energy consumption	TJ	1,332.2	1.650.8	2,612.4	2,875.4
Indirect energy consumption	TJ	4,085.5	4,080.2	4,783	5,287.4
Energy intensity	TJ/KRW 100 million	0.121	0.118	0.1	0.076
Reduction rate (per unit)	%	–31.254	2.348	15.343	24.118

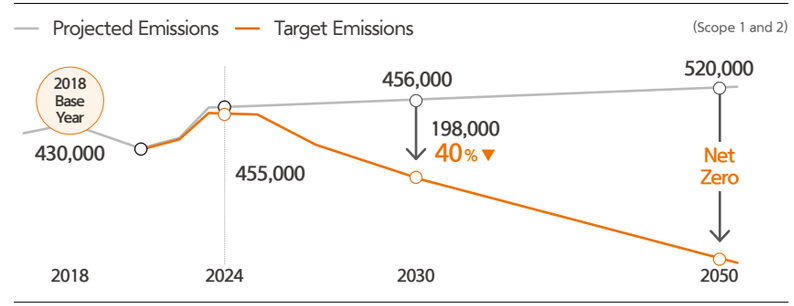
Targets

Carbon Neutrality Roadmap

Hanwha Ocean has established a carbon neutrality roadmap aiming for a 40% reduction by 2030 and achieving carbon neutrality by 2050. To this end, we annually review and manage the achievement status of GHG emissions and energy usage targets. In 2024, Hanwha Ocean expanded the distribution of carbon reduction energy source heavy equipment and converted large energy-consuming facilities to energy-saving facilities. From 2025 onwards, we will enhance our climate change response system and conduct LCA analysis and calculations to pursue more efficient activities to achieve the carbon neutrality roadmap goals.

Hanwha Ocean Carbon Neutrality Roadmap

(Unit: tCO_2eq)



Metric	Unit	2024	2030	2050
Reduction Rate (based on 2018)	%	(5.8)[1)]	40	100
Projected Emissions	10,000 tCO_2eq	44.5	45.6	52
Target Emissions	10,000 tCO_2eq	42.6	25.8	Zero
Target Reduction Amount	10,000 tCO_2eq	1.9	19.8	52

1) Based on reduction rate performance

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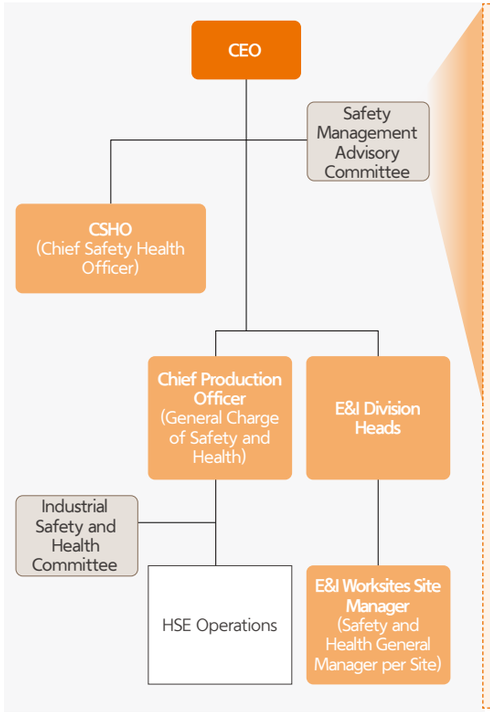
Governance

Safety and Health Management System

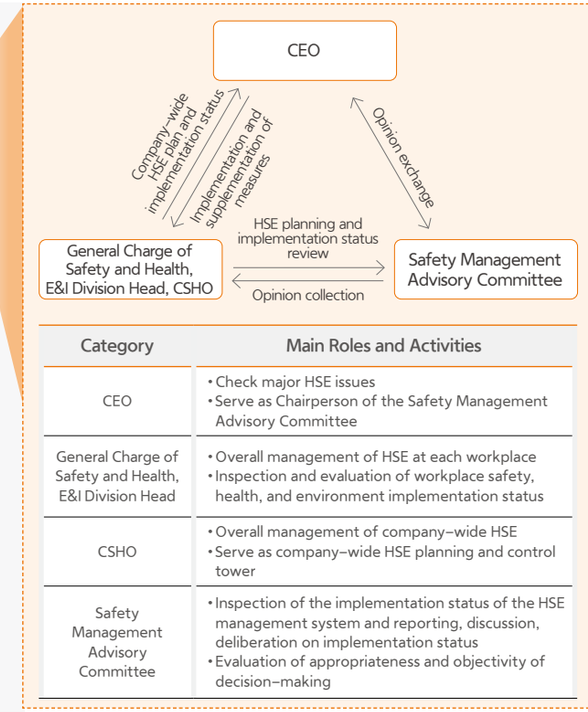
Safety and Health Management Organization

Hanwha Ocean operates an HSE organization focused on strengthening the execution of HSE (Health, Safety, and Environment) at worksites to ensure all employees to work safely. To enhance organizational functions, in October 2024, we established the CSHO (Chief Safety & Health Officer) organization, which serves as the control tower for HSE policy and oversees all company-wide safety, health, and environmental affairs. The CSHO organization establishes, evaluates, and manages company-wide safety KPIs such as accident metrics, and convenes the Industrial Safety and Health Committee quarterly to deliberate and resolve important safety and health matters. At the annual regular Board of Directors meeting held every January, plans related to safety and health are submitted for approval to reinforce accountability in safety and health management. Additionally, a Safety Management Advisory Committee composed of external experts, who review and deliberate on the overall status of HSE implementation semiannually. Furthermore, a monthly Supplier Safety and Health Council is held to discuss safety and health issues with supplier representatives, fostering a safe working environment. Considering characteristics of worksites, the Geoje shipyard operates a joint regular safety council with shipowners, while the E&I worksites operate a labor-management council including worker representatives to strengthen HSE field execution. We regard 'HSE' as our top management value and strive to protect the safety, health, and happiness of all members.

Safety and Health Management Organization



Detailed Roles by Safety and Health Management Organization



Category	Main Roles and Activities
CEO	• Check major HSE issues • Serve as Chairperson of the Safety Management Advisory Committee
General Charge of Safety and Health, E&I Division Head	• Overall management of HSE at each workplace • Inspection and evaluation of workplace safety, health, and environment implementation status
CSHO	• Overall management of company-wide HSE • Serve as company-wide HSE planning and control tower
Safety Management Advisory Committee	• Inspection of the implementation status of the HSE management system and reporting, discussion, deliberation on implementation status • Evaluation of appropriateness and objectivity of decision-making

Safety and Health Management Council Activities

Category	Council	Frequency	Participants (*Host)	
Hanwha Ocean Geoje Shipyard	Safety Management Advisory Committee	Quarterly (Once)	• CEO/CSHO* • Geoje shipyard General Charge of Safety and Health	• Heads of each business division and executives • Advisory members by field
	Industrial Safety and Health Committee	Quarterly (Once)	• CEO* • Labor Union Branch Chair • Geoje shipyard General Charge of Safety and Health	• Safety Manager/Health Manager/Labor Safety and Health Office • Appointed by representative → Equal number of Labor-Management representatives
	Supplier Safety and Health Council	Monthly (Once)	• Geoje shipyard General Charge of Safety and Health*	• Representatives of each supplier
	HSE Management Meeting	Monthly (Once)	• Geoje shipyard General Charge of Safety and Health* • Head of Production Division • Each production manager and team leader	• HSE Operations Manager • Supplier Council Chairperson • Supervisors Council Chair • Labor Union
	Shipowner Joint Regular Safety Council	Monthly (Once)	• Project HSE Part*	• Shipowner Site/Safety Manager
	Team Safety and Health Committee	Monthly (Once)	• Each production team*	• Representatives of suppliers belonging to the production team
Hanwha Ocean E&I Worksites	E&I Worksite Labor-Management Council	Bimonthly (Once)	• E&I Worksite Safety and Health General Manager* • Safety Manager • Health Manager	• Safety and Health Management Responsible Person (for construction amount over KRW 2 billion) • Representative of all workers • Representatives of each related subcontractor's workers (for construction amount over KRW 2 billion)

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Safety and Health Policy

HSE Management Policy

Hanwha Ocean has established the HSE Management Policy, which includes the fundamental management philosophy for safety, health, and environment and general guidelines for decision-making and reflects the opinions of the Safety Management Advisory Committee and all members (management, executives, team leaders, managers, supervisors, on-site workers, and suppliers). This policy is enacted with the approval of the CEO and applied to all workers regardless of employment type as well as regular employees. Hanwha Ocean Ecotech and Hanwha Ocean Shandong Corporation also apply the same policy. To raise awareness and understanding of the policy among all stakeholders, we announce the policy across all sites and hold participatory events. For foreign workers, translations are provided in eight languages (including Nepali, Vietnamese, and Thai) to foster a safe and healthy working environment.

HSE Management Policy

Safety and Health Mid- to Long-term Roadmap

HSE Structural Improvement Roadmap

Hanwha Ocean is striving to improve HSE structure by pioneering the introduction of the International Safety Rating System (ISRS), an international safety rating audit system led by DNV, the first in the shipbuilding industry. Based on over 500 evaluation items across 15 sectors assessing our safety and health management level, an objective evaluation by an external professional organization identifies current safety and health conditions. Through feedback, we drive innovation in safety and health levels. Following the evaluation, 23 strategic tasks based on five long-term core strategies for innovation in people, equipment, and systems have been derived. Through the implementation of 70 short-term detailed action tasks, we aim to achieve ISRS Level 8 and ultimately attain zero serious accident.

Smart Safety Roadmap

Hanwha Ocean is digitalizing industrial safety and health issues to establish a smart safety system. We have developed an integrated safety management platform and are undertaking a two-year project with substantial investment plans to build a smart safety control system that integrates and visualizes various data, displaying it in real-time on large monitors.

Hanwha Ocean Smart Safety Roadmap

Phase I (2024.09~2025.12)	• Platform/infrastructure construction and integration with existing equipment • Application and integration of verified solution
Phase II (2025.04~2025.12)	• Promotion of project demonstration reflecting field needs • Expansion and application of project demonstration

Directions

- Establishment of an integrated safety management platform and integration with various heterogeneous systems (fire/vision sensors/weather information, etc.)
- Infrastructure improvements (networks, etc.) and establishment of real-time accident prevention systems for workers using IoT sensors (location/vital signs/SOS calls, etc.)
- Implementation of advanced worker safety management systems through heavy equipment safety management systems (cranes/aerial work platforms/forklifts, etc.) and smart devices
- Strengthening worker safety monitoring by using AI vision sensors for monitoring access to high-risk areas/equipment/vehicles and upgrading outdated cameras

Mid- to Long-term Safety, Health, and Environment Strategy

Mission	Realizing HSE as the top priority value for our sustainable development		
Vision	A safe workplace where no one gets hurt		
Core Values	Challenging zero accidents, dedicating to accident prevention, and realizing integrity without compromise on safety		
HSE Targets	ZERO Serious Accident	LTIR 0.15 in 2030	Achieve ISRS Level 8 in 2030
Achievement Strategies	Rebuilding the HSE management system	Securing systematic risk management and execution capability	Elevating HSE capability levels
	Strengthening accident and emergency response capabilities	Establishing a safety culture of participation and communication	

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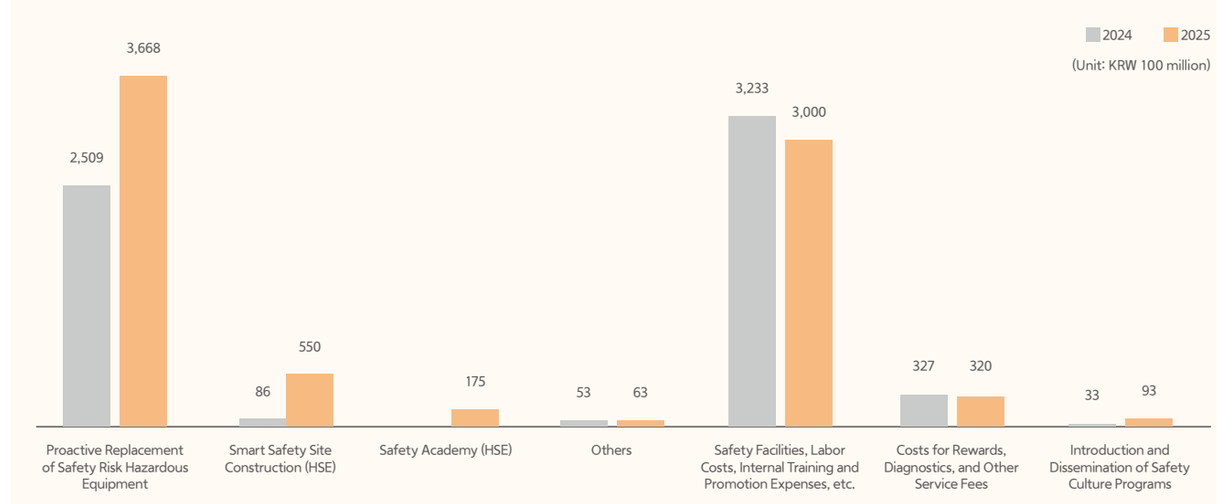
Safety and Health Management Investment

Safety and Health Investment Plan

Hanwha Ocean has established a safety budget of KRW 1.9 trillion over three years starting in 2024 to revitalize safety management and strives to create a safe working environment. We are implementing smart safety solutions at the Geoje shipyard (KRW 63 billion) and making large-scale investments for replacing safety risk facilities and equipment (KRW 250.9 billion in 2024). Additionally, we plan to build an experiential Safety Academy (KRW 50 billion) to establish new safety culture programs.

Investment in Safety Accident Prevention Facilities

Hanwha Ocean has reorganized the facility and equipment investment system to improve identified hazardous and risky factors and create a safe workplace. A separate emergency budget of KRW 9.15 billion for CSHO has been secured and reflected in 2024 to improve and eliminate hazardous and risk factors. For prompt decision-making, the authority for processing tasks under KRW 1 billion has been adjusted to be approved by the responsible executive. In 2025, an additional emergency budget of KRW 10 billion for CSHO will be secured to continue efforts to eliminate urgent and high-risk factors. We are striving to eliminate factors with high urgency and risk. In particular, through improvements in the aging replacement process, cranes, forklifts, aerial work platforms, etc., have been designated as 'Safety Risk Target Equipment', differentiating their investment procedures from 'general equipment'. Unlike general equipment, which undergoes replacement or maintenance decision processes upon reaching its durability limit, Safety Risk Target Equipment bypasses these steps to enable immediate replacement of aging facilities through investment. Furthermore, when introducing or replacing hazardous machinery, the process is always conducted in collaboration with the HSE organization to ensure safety.



(Unit: KRW 100 million)

	Category	2024 Actual Execution	2025 Budget
Investment	Proactive Replacement of Safety Risk Hazardous Equipment	2,509	3,668
	Smart Safety Site Construction (HSE)	86	550
	Safety Academy (HSE)	–	175
	Others	53	63
	Subtotal	2,648	4,456
Expenses	Safety facilities, labor costs, internal training and promotion expenses, etc.	3,233	3,000
	HSE management costs and safety diagnosis service fees	327	320
	Safety culture and safety level improvement programs	33	93
	Subtotal	3,593	3,413
Total		6,241	7,869

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Safety and Health

Strategy

Safety and Health Management Activities

Industrial Safety and Health Management Activities

Hanwha Ocean continuously manages high-risk tasks, safety-vulnerable processes, and personnel, establishing Yard Basic Safety 4 Rules and 12 Golden Rules. We conduct various campaigns, promotions, and guidance activities. For violators, we apply uncompromising safety measures through safety training and on-site inspections. Feedback is gathered via interviews with violators to identify on-site risk factors, focusing on fundamental improvements in work procedures and site conditions to prevent recurrence of workers' violations. Particularly, S-grade high-risk tasks are selected by production units, and supervisory presence is mandated during these tasks for guidance activities.

Strengthening Safety and Health Management for Foreign Workers

Hanwha Ocean operates seven foreign coordinators covering eight countries to manage the safety-vulnerable group of foreign workers. They provide specialized interpretation/translation support, conduct country-specific safety training, develop dedicated educational materials for foreigners, and assist in various safety activities interpretation. To improve safety infrastructure for foreign workers, we developed a dedicated mobile app available in eight languages, featuring safety rules, living information, Korean language learning, welfare, culture, and bulletin boards. Additionally, translated VR safety training content is utilized for foreign workers. Visibility of safety signs throughout the Geoje shipyard has been enhanced for immediate visual recognition of hazards. New foreign worker safety training materials—including translated new hire training manuals, safety guidebooks, and intuitive OX training materials—are continuously developed.

Safety and Health Management for New E&I Sites

E&I worksites differ in client, project scale, process, design, and construction methods; therefore, customized safety systems reflecting site-specific characteristics are applied based on headquarters' established safety and health management regulations, procedures, and guidelines. Smart safety devices such as CCTV are used to monitor unsafe behaviors or conditions in blind spots in real time to effectively control and manage issues. To prepare for various potential hazards at construction sites, monthly emergency scenario training and quarterly emergency drills are conducted for all personnel to establish practical response systems and internalize them, continuously strengthening emergency response capabilities. Through these multifaceted efforts, we aim to achieve 'Zero' serious accident and build a workplace that is 'Safer tomorrow than today'.

Safety and Health Facility Operations

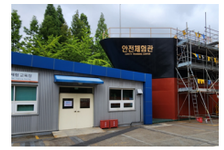
Hanwha Ocean operates an in-house fire brigade 24/7 (day/night shifts) for rapid response in emergencies, equipped with fire trucks, rescue vehicles, and ambulances for firefighting and rescue operations. Firefighters enhance their expertise through emergency medical technician training and specialized rope access rescue training. For employee health management, two affiliated clinics and an industrial accident counseling/health management office operate with full-time doctors and nurses to ensure prompt emergency response. The clinics provide general medical care and emergency treatment, while the counseling/health management office handles musculoskeletal and cerebrovascular risk management and health promotion programs. The in-house Psychological Counseling Center (Useuso: Our Stress Relief Center) employs two professional counselors offering treatment for post-traumatic stress disorder (PTSD) from safety accidents, as well as counseling and psychological assessments for employees and their families.



Hanwha Ocean Geoje Shipyard Safety and Health Facilities



In-House Fire Brigade



HSE Experience Center



In-House Clinic

Psychological Counseling Center

Reward System

Hanwha Ocean has secured a budget of KRW 200 million for 2025 to encourage and promote participation in safety, health, and environmental improvement activities by all members (including supplier employees). Through organizational and individual awards, we strive to enhance employees' safety awareness levels and improve their commitment to compliance.

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Safety and Health Training

Hanwha Ocean provides high-quality safety training to all members, including in-house supplier employees, through contracts with specialized training institutions designated as safety and health training providers by the Ministry of Employment and Labor. We have global foreign coordinators capable of interpreting and translating in eight major languages covering 85% of foreign workers, offering safety training and on-site translation to foreign supplier workers. Additionally, Hanwha Ocean independently identifies new suppliers and new supplier employees as groups with potential risk and manages them intensively, providing necessary support to prevent serious accidents. To enhance educational effectiveness, we conduct experiential training using various facilities such as fall simulation, gondola use, and VR experience centers within the Geoje shipyard. Divided into 12 courses including statutory and non-statutory training, 9,591 persons participated in 196,884 hours of training throughout 2024, improving safety awareness among all employees.

Key Activities in 2024

Strengthening training support due to increased production workforce	Enhancing effectiveness of statutory training: Special Safety Training and Work Changes	Strengthening training items for on-site supervisors and conducting pre- and post-training diagnosis & tests	Development and acquisition of customized HSE training: Disaster (fire, block overturn) Prevention Materials, etc.
• Expansion of new employee/ temporary visitor training sessions (increase of 29 sessions) • Additional online safety and health training for external workers entering due to urgent/ unscheduled tasks	• February: special (278 persons)/ work content change (1,040 persons) • July: work content change (401 persons) • November: special (21 persons) • Enhancement of new and regular training for foreign workers – Basic safety training (2 hours) and regular safety training (1 hour/week) are conducted when recruitment is managed by global pro	• Expansion of job/role training for supervisors related to laws and company regulations (4 hours in 2023 → 8.5 hours in 2024) • Improvement in average scores of pre- and post-training diagnosis (3.14 → 4.12 out of 5) • Average job test score: 86 out of 100	• Training materials for site visitors (visitors, external workers), production of disaster prevention training materials (fire accidents, block overturn), etc. • Special safety and health training materials • Acquisition of training content: addition of 90 video materials and distribution of 69 reference teaching materials

Safety Training Support

Category	Details	Support Objectives
Safety and Health Training Infrastructure	Support for overall infrastructure (indoor classrooms, PCs, projectors, microphones, etc.) necessary for safety training	Support for training locations/facilities
Safety and Health Training Operations	Overall tasks (lectures, operation, course development, and management of statutory safety training and safety and health education)	Prevention of serious accidents and promotion of safety awareness/compliance
'Global Coordinator' Tasks	Providing safety training to in-house foreign workers from eight countries, interpreting/ translating upon operational requests, and maintaining materials	Support for securing safety/quality and early settlement
HSE Academy	Specialized safety and health training conducted through external professional institutions	Strengthening safety and health competency of supervisors

Risk Management

Safety and Health Management System

ISO 45001 Certification

Hanwha Ocean, along with Hanwha Ocean Ecotech and Hanwha Ocean Shandong Corporation, operates the latest safety and health management systems based on the international standard ISO 45001 certification. Hanwha Ocean's safety and health policy applies to executives, employees, in-house suppliers, and company visitors who may face risks. It is reviewed annually to flexibly respond to emerging safety and health issues and regulatory changes within the industry. In response to strengthened government policies such as the Serious Accident Punishment Act and the Industrial Safety and Health Act, we have established a safety and health activity system to prevent serious accidents and accidental disasters, proactively responding and expanding these efforts.

ISO 45001 Certification



*Applicable Site: Geoje shipyard, Hanwha Ocean Ecotech, Hanwha Ocean Shandong Corporation

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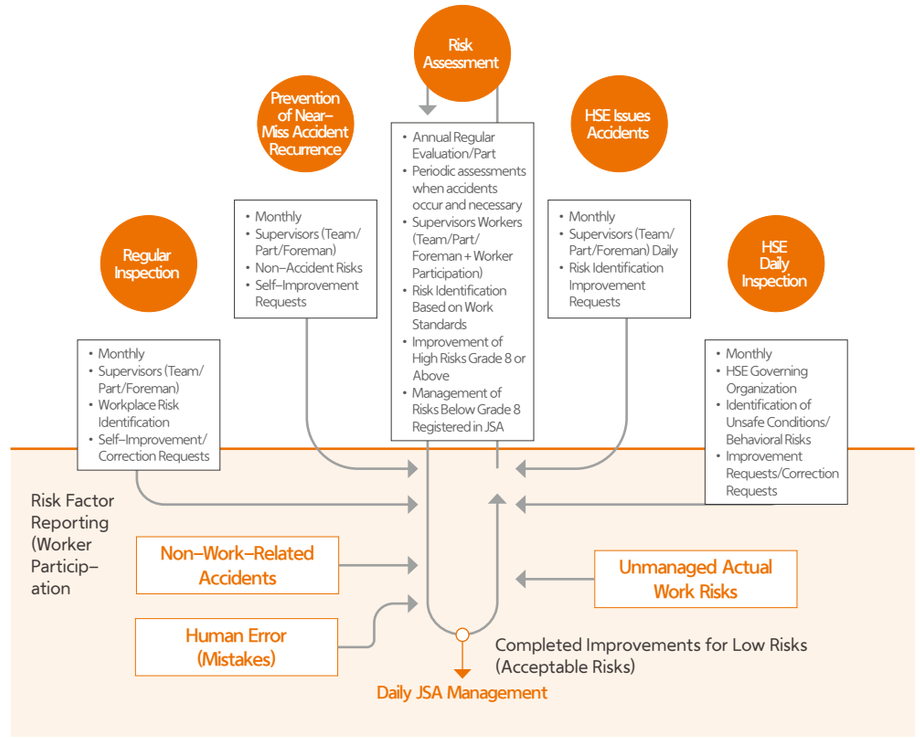
Risk Management

Safety and Health Risk Assessment and Measures

Safety and Health Risk Assessment and Inspection System

Hanwha Ocean has established a safety and health risk assessment and inspection system in accordance with the policy to strengthen safety and health. Based on this system, we identify actual risk factors and implement improvement measures. In the 2024 regular risk assessment, a total of 243 organizations, including 141 direct teams and 102 suppliers at the Geoje shipyard were evaluated. From 5,201 tasks, 85,801 risk factors were identified. Among these, 84,362 low-risk factors below grade 8 were incorporated into the Job Safety Analysis (JSA), while 1,439 high-risk factors of grade 8 or above had risk reduction measures established and improvements completed. Additionally, nine E&I worksites conducted regular risk assessments, identifying a total of 4,083 risk factors. For the 313 cases classified as 'High' grade, measures were established and substantial improvements completed. We inspect the appropriateness and implementation status of risk reduction measures based on the risk assessment results at least once a year, and have achieved 100% improvement of high-risk factors identified in 2024.

Risk Identification/Improvement Tree



Risk Assessment Process



Stages	Implementation Details
Step 1: Preliminary Preparation	• Develop implementation regulations/plan • Establish judgment materials • Collection of safety and health information materials • Conducting risk assessment training
Step 2: Identification of Hazardous and Risk Factors	• Worksite patrol inspection • Listening to workers' opinions • Brainstorming based on work standards • 4M method and classification according to accident types
Step 3: Risk Determination	• Assess risk levels based on pre-established criteria
Step 4: Establishment and Implementation of Risk Reduction Measures	• Review reduction measures according to priority • Establish and implement reduction measures for all high-risk factors
Step 5: Effectiveness Evaluation	• Effectiveness review through inspection of appropriateness and implementation status of reduction measures (at least once a year)
Step 6: Result Sharing	• Posting and notification of evaluation results • Share daily JSA list • Share through pre-work safety meetings (tool box meeting, etc.)
Step 7: Recording and Preservation	• Record evaluation results and actions taken, preserve for 3 years

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Risk Management

Internal Safety Audit

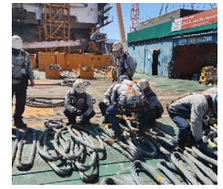
Internal Inspection System and Activities

Hanwha Ocean is transitioning to a continuous on-site inspection system to eliminate workplace hazards. The Chief Production Officer (Safety and Health General Manager) at the Geoje shipyard leads through daily patrol inspections, while production teams and safety supervisors conduct daily thematic cross-inspections to strengthen safety execution. To particularly enhance safety within the site, Area Audits are conducted where the Chief Production Officer, production/HSE executives, relevant employees, and supplier representatives are divided into multiple groups to identify and improve hazards throughout the site. Immediate corrective actions are taken for manageable risks on-site; otherwise, risks are recorded and monitored to ensure zero neglected hazards. Additionally, to prioritize HSE, production-led work stoppage activities are being reinforced. Everyone is authorized to halt work if unsafe conditions such as violations of safety protective equipment standards, unattended safety railings/openings, or breaches of 12 Golden Rules are observed in the production area. The E&I business unit strives to improve safety and health levels by conducting monthly site safety inspections by the division head and daily safety inspections by the site manager to identify unsafe equipment, behaviors, and work methods, ensuring the proper operation of the safety management system.

Hanwha Ocean monitors all accidents caused by non-compliance with safety regulations or inadequate management. Chief Production Officer (Safety and Health General Manager) receives one-to-one reports on recurrence prevention measures. If repeated or serious accidents occur due to failure of these measures, a special safety diagnosis program is activated. This program conducts in-depth cause analysis, safety culture/psychological assessments, and job competency tests to comprehensively analyze root causes, reestablish recurrence prevention measures, and monitor implementation to eradicate accidents.



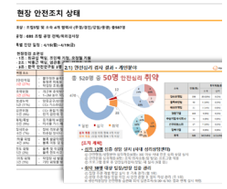
Daily patrol inspection by Chief Production Officer



Daily Thematic/Cross-Inspection



Safety Accident Recurrence Prevention System Operation



Special Diagnosis for Serious/Repeated Accident Organizations

Development and Operation of HSE Leading Metrics

Hanwha Ocean has developed and operates our own 'HSE Leading Metrics' to proactively prevent safety accidents. Six metrics directly or indirectly linked to safety incidents have been identified and are being analyzed for changes and trends. By analyzing these metrics, the expected number of accidents per organization is predicted. Organizations with increased risk receive safety accident alerts to strengthen accident prevention activities, operating a proactive risk warning system.

Furthermore, in 2025, we are working on linking all safety data related to accidents to build highly reliable leading indicators. The HSE Integrated Control Center will analyze real-time safety data from the Geoje shipyard to derive accident risk levels and immediately notify supervisors of high-risk workplaces via alarms, aiming to eliminate hazards within 10 minutes.

Leading Metric Evaluation Results in 2024

Classification by Risk Level[1]	Attention (5 or higher)	Caution (3 or higher ~ less than 5)	Alert (2 or higher ~ less than 3)	Critical (less than 2)

1) Classification by Composite Index

(As of December 2024)

Category	Comp-osite Index	Risk Index		Process Management Index		Number of Vulnerable Workers	
		Accident Prediction Cases per 100 Persons	Cases Improvement Occurrence Rate	Process Compliance Rate	Work Stoppage Hours	Ratio of Workers with Less than 3 Months Tenure	Foreign Worker Ratio
Geoje shipyard	3.1	3.9	2.1	1.6	3.1	4.4	3.8

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Risk Management

Safety Accident Response

Emergency Response Procedures and Safety Accident Response

Hanwha Ocean operates emergency response procedures and safety accident investigation and handling procedures to respond quickly and systematically in the event of safety accidents. In particular, for safety accidents, even after the initial response, recurrence prevention measures are established based on the analysis of accident causes, risk management is improved through statistical analysis, and safety management is strengthened.

Emergency Response Procedures

Emergency Response Procedures

Crisis Determination
- Determination of whether it meets company-wide crisis criteria

Crisis Occurrence (Within 8 Hours)
- Measures to prevent damage spread Formation of Company-wide Crisis Management Committee
- Assessment of damage status
- External monitoring and response

Immediate Response (Within 24 Hours)
- Measures to prevent secondary damage spread
- CEO public apology press conference
- Production/sales plan review
- Distribution of media response guidelines and statements to employees
- Detailed assessment of human/material
- Posting of public apology statement
- Support for victims' families
- Human/material resource support for crisis-affected sites

Crisis Management (Day 1~)
- Response to External Agencies and Media
- Establishment of Damage Recovery Plan
- Identification of Legal Actions and Establishment of Countermeasures
- Consolation and compensation discussions with victims and families
- Accident investigation (Internal/External)
- Adjustment of production/sales plans and customer response

Crisis Recovery and Closure
- Establishment and implementation of recurrence prevention measures
- Stakeholder relationship restoration
- Compensation for victims and damage recovery
- Crisis resolution

Safety Accident Investigation and Handling Procedures

Accident Occurrence
↓
Accident Report and Announce
↓
Accident Site Inspection and Preservation
↓
Emergency Contact Network Activation
↓
Accident Alert Level Determination
↓
Accident Response Measures
↓
Damage Recovery (if necessary)
↓
Victim Compensation Measures Establishment and Implementation
↓
Preparation of Recurrence Prevention Measures and Preventive Inspections, Training Conducted

Metrics and Targets

Metrics

Industry Accident

	Metric	Unit	2021	2022	2023	2024
Employees	Lost time injury (LTI)	Cases	29	18	26	32
	Lost time injury rate (LTIR)	Cases/200,000 working hours	0.28	0.21	0.19	0.29
	Industry accident rate	%	3.04	3.57	3.06	3.34
Suppliers	Lost time injury (LTI)	Cases	25	29	41	70
	Lost time injury rate (LTIR)	Cases/200,000 working hours	0.13	0.18	0.2	0.21
	Industry accident rate	%	1.67	1.86	2.14	3.45
Total recordable incident rate (TRIR)		%	0.32	0.43	0.35	0.38
Fatality rate (Fatality frequency rate)		‰	0	1.28	0[1]	1
Near miss frequency rate (NFMR)		%	26.04	25.25	24.98	13.46

1) Data revised in 2023 as not recognized as an accident based on final court ruling

E&I Division Safety Risk Assessment in 2024

Metric (Evaluation Item)	Score	Grade
Compliance implementation evaluation	90.1	A

Targets

Zero Serious Accident | 2030 LTIR 0.15 | Achievement of ISRS[1] Level 8 in 2030

1) International Safety Rating System

Geoje Shipyard Safety and Health Targets

Metric	Unit	2024			2025
		Target	Performance	Achievement Rate	Target
Lost time injury rate (LTIR)	Cases/200,000 working hours	0.18	0.23	72%	0.18
Fatality rate (Fatality frequency rate)	‰	Zero	1	–	Zero

E&I Division Safety and Health Targets

Hanwha Ocean E&I Division has established safety KPIs for 2025 in three areas: ① Achieving LTIR of 2.98 or less, ② Zero serious accidents, and ③ CEO evaluation (including site inspection management, accident prevention/improvement management, and HSE awareness management). Through this, we aim to strengthen execution and culture regarding safety and advance toward the Global Top Tier goal.

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Key Subsidiary Activities

Hanwha Ocean Ecotech

Establishment of Safety Management ONE Team System

Hanwha Ocean Ecotech operates as the control tower for company-wide HSE management through the HSE Practice Team directly under the CEO, establishing a 'ONE TEAM HSE' system that unifies all HSE activities by managers, including in-house contractors, to enhance on-site operability. The on-site safety managers conduct joint Tool Box Meetings (TBM) every morning to share safety issues, perform weekly thematic inspections, manage the Permit to Safety Work (PTW) system for hazardous tasks, conduct emergency training, and establish measures to prevent recurrence through emergency response and accident investigations. To foster pride and improve work capabilities, weekly safety meetings are held, and quarterly expert-led enhancement training and workshops are conducted.



Safety Managers' Joint TBM and Workshop

Safety Awareness Improvement Activities/Incentive System

Hanwha Ocean Ecotech conducts safety campaigns at least quarterly to raise company-wide safety awareness. Safety and health signs are posted, seasonal personal health management is supported, and accident prevention efforts include distributing zero-accident goal T-shirts to all employees. In 2024, KRW 380 million was allocated for safety activity support. Of this amount, KRW 52 million was used for monthly awards to outstanding safety activity performers and semi-annual awards for excellent teams and individuals, contributing to the establishment of a safety culture.

2024 Metrics and 2025 Targets

Metric	Unit	2024			2025
		Target	Performance	Achievement Rate	Target
Work-related deaths	Cases	0	0	100%	0
Work-related injuries	Cases	3	2	150%	1↓
Lost time injury (LTI)	Cases	3	2	150%	1↓
Lost time injury rate (LTIR)	Cases/200,000 working hours	0.15	0.1	150%	0.085
Industrial accident rate	%	0.2↓	0.13	154%	0.08

Hanwha Ocean Shandong Corporation

Customized Safety Training Implementation

Hanwha Ocean Shandong Corporation is actively promoting safety management activities in accordance with the enhanced safety and health policy. In 2024, regular risk assessments were conducted targeting 13 direct management teams and 13 supplier organizations to identify hidden risks and implement continuous improvements.



Specialized Training for Specific Workers (Heavy equipment-4 times a year, Welding & Fitting-Annually)



Yantai Development Zone Hosted Confined Space Rescue Training (Conducted Annually)



All Workers Safety Training & Test (Conducted Annually)

Operation of Safety Incentive System

Hanwha Ocean Shandong Corporation has been conducting individual awards for all production employees, including suppliers, since August 2024 to foster safety awareness and strengthen motivation for improvement. In 2024, a total of 75 persons will be selected and awarded incentive worth approximately 7,500 RMB in total, encouraging all employees to contribute to creating a safe workplace.

2024 Metrics and 2025 Targets

Metric	Unit	2024			2025
		Target	Performance	Achievement Rate	Target
Work-related deaths	Cases	0	0	100%	0
Work-related injuries	Cases	6	7	86%	6↓
Lost time injury (LTI)	Cases	6	7	86%	6↓
Lost time injury rate (LTIR)	Cases/200,000 working hours	0.14	0.17	81%	0.14
Industrial accident rate	%	0.23	0.27	85%	0.2

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Supply Chain Management and Shared Growth

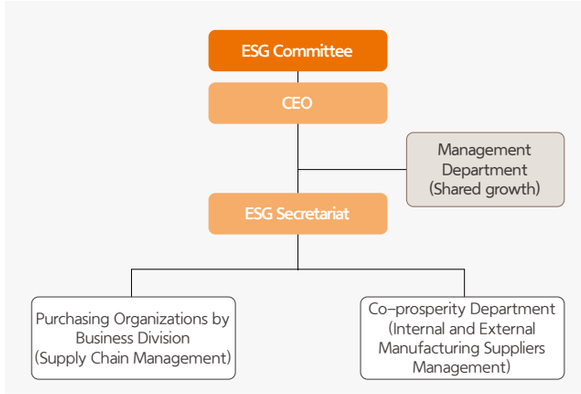
Governance

Supply Chain Management System

Supply Chain Management Organization

Hanwha Ocean acts as a responsible company and secures stakeholder trust by realizing sustainable procurement and supply chain operations considering ESG factors throughout the supply chain. We operate a supply chain management system to select core suppliers and manage high-risk suppliers among all suppliers. To consider business characteristics, each division has a purchasing organization to promote efficiency. Regular vendor meetings are held to share market status and mid- to long-term strategies. At the Geoje shipyard, the Co-prosperity Department strives to establish fair and reasonable business partnerships with internal and external block manufacturing suppliers. Additionally, Management Department performs shared growth tasks to financially, technically, and institutionally support vendors/contract suppliers. Various communication programs have been developed to listen and address the challenges of small and medium-sized suppliers, demonstrating our commitment to support their global competitiveness.

Supply Chain Management Organization and Roles



Strategy

Supply Chain Management Policy

Supply Chain ESG Management Policy

Hanwha Ocean has established the Supply Chain ESG Mana-gement Policy with CEO approval to promote co-prosperity and sustainable growth with stakeholders within the supply chain. This policy applies to all domestic suppliers directly contracted with Hanwha Ocean who have agreed to the Supplier ESG Code of Conduct, and requires compliance throughout the downstream supply chain. We identify and manage key suppliers and priority management suppliers based on their importance. We also incorporate ESG management diagnosis and the Code of Conduct into regular supplier evaluations and new supplier contracts to proactively prevent supply chain risks and promote suppliers' participation in ESG management.

Supply Chain ESG Management Policy

Hanwha Ocean Supply Chain Management Strategy

Hanwha Ocean aims to strengthen suppliers' competitiveness and co-prosperity management for sustainable supply chain management. To this end, we actively encourage suppliers' participation in ESG activ-ities. Our goal is to achieve a 100% ESG evaluation rate for major tier-1 suppliers by 2030.



Supplier ESG Code of Conduct

Hanwha Ocean's Supplier ESG Code of Conduct follows the Universal Declaration of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work, covering five themes: labor and human rights, safety and health, environment, ethical management, and business management. This is applied to Hanwha Ocean's suppliers, their affiliates and subsidiaries, as well as all suppliers and sub-supplier s providing goods or services used in Hanwha Ocean products. Hanwha Ocean enhances practical enforcement by incorporating the ESG Code of Conduct into the basic transaction contract to ensure suppliers comply with the principles of the ESG Code of Conduct.

Supplier ESG Code of Conduct

Conflict Minerals Policy

Hanwha Ocean recognizes human rights violations and enviro-nmental destruction caused by mineral mining in conflict and high-risk areas as critical issues. Accordingly, we have established a Conflict Minerals policy based on relevant laws, the Dodd-Frank Wall Street Reform and Consumer Protection Act's conflict minerals provisions, OECD due diligence guidelines, and other international standards to practice responsible management. We have established a system to avoid using conflict minerals such as tin, tantalum, tungsten, and gold illegally mined in ten African countries. We also require all suppliers to comply with codes of conduct based on OECD due diligence guidelines.

Conflict Minerals Policy

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Shared Growth Program

Support for Suppliers' Joint Labor Welfare Fund

Since 2020, Hanwha Ocean has signed a business agreement with Gyeongsangnam-do and Geoje city to actively cooperate for the welfare of in-house supplier workers in the shipbuilding industry. Through the Joint Labor Welfare Fund, Hanwha Ocean is leading co-prosperity among shipbuilding suppliers. This fund has established a foundation to carry out various welfare projects such as housing purchase subsidies, tuition fees, scholarships, and living stabilization funds for workers within suppliers. In 2024, Hanwha Ocean contributed KRW 2 billion to the Joint Labor Welfare Fund, raising the total fund to KRW 4.73 billion, and plans to contribute another KRW 2 billion in 2025.

Support for Suppliers' ESG

Hanwha Ocean has added ESG management activities as bonus criteria in the evaluation of in-house suppliers and operates management metrics accordingly. This provides an incentive for suppliers to engage in ESG management and establishes an institutional basis to support them. Additionally, Hanwha Ocean provided the ESG Self-Diagnosis 3.0 User Manual, offered free by Korea SMEs and Startups Agency, to in-house suppliers to support their ESG management activities. In 2025, Hanwha Ocean plans to conduct ESG training for suppliers and independently assess their ESG levels to support improvements based on the results.

Shipbuilding Industry Employee Hope Aid Project

Hanwha Ocean is conducting the Shipbuilding Industry Employee Aid Project from 2024 with support from the Ministry of Employment and Labor, and local governments to promote long-term tenure by improving wages and working conditions for internal and external supplier employees. In this project, if a supplier employee deposits KRW 2 million over two years, the government, local governments and Hanwha Ocean each contribute KRW 2 million, allowing the employee to receive KRW 8 million at maturity. In 2024, Hanwha Ocean contributed approximately KRW 2.64 billion and plans to contribute KRW 5.74 billion in 2025.

Suppliers' New Technology Patent Applications

Hanwha Ocean supports technology through joint research and development and technology transfer with suppliers, assisting with joint patent applications and patent filings for developed technologies. In 2024, there were 19 cases of technology support and 37 cases of joint patent applications and patent filing support, with similar levels of support planned for 2025.

Early Payment of Subcontracting Fees

Hanwha Ocean makes early payments of subcontracting fees before and after the Lunar New Year and Chuseok holidays each year to ensure supplier employees can enjoy warm and abundant holidays. In 2024, approximately KRW 160 billion was paid early to about 640 companies for Lunar New Year and about KRW 200 billion to about 770 companies for Chuseok.

Compliance with the Four Major Practices of the Fair Trade Commission

Hanwha Ocean annually signs fair trade agreements with major subcontracting suppliers according to the standards for evaluating fair trade agreement implementation between large and small-medium enterprises (subcontracting sector) and fulfills the terms. We have established internal regulations reflecting our circumstances based on the Fair Trade Commission's four major practice guidelines provided standards.

Support for Maintaining Supplier Employment

Since 2021, Hanwha Ocean has established a co-prosperity policy to maintain supplier employment by securing training facilities, supporting institutional responses, and partially subsidizing supplier burdens. Notably, at Hanwha Ocean from 2024 to 2026, we have been promoting the 'Shipbuilding Industry Employee Hope Aid Project' with a total budget of KRW 11 billion, continuing our supplier employment retention policy. As a result, the workforce increased from approximately 17,000 in 2024 to 19,400, securing an additional 2,400 personnel. Through this, the company has strengthened competitiveness while achieving mutual growth with suppliers.

Supplier Open Recruitment System

Hanwha Ocean implements an annual open recruitment pre-qualification pooling system to transparently select excellent suppliers based on fairness. In 2024, 28 excellent suppliers were newly registered in the pool through open recruitment.

Operation of Job Creation Co-prosperity Fund

On June 29, 2024, Hanwha Ocean signed a financial support agreement for the 'Job Creation Co-prosperity Fund' with Korea Development Bank and joined a co-prosperity fund worth KRW 6 billion to provide financial support (loans) to suppliers.

Suppliers' Executives and Employees Family Invitation Event

On November 9, 2024, Hanwha Group affiliates jointly hosted an event inviting about 3,000 family members of suppliers' executives and employees to Gyeongnam Robot Land Theme Park, providing access to amusement facilities and performances to strengthen shared growth. Hanwha Ocean invited 613 employees and family members from 89 suppliers to practice shared growth while expanding our family-friendly management among suppliers.

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Risk Management

Supplier ESG Evaluation and Management

Hanwha Ocean operates an annual ESG evaluation process to systematically manage ESG risks of our suppliers. Self-assessments and written evaluations are conducted for major tier-1 suppliers and priority management suppliers, with on-site inspections performed as needed to closely review ESG levels. Evaluation results may be reflected in business relationships with suppliers, and necessary support is provided to improve suppliers' ESG performance. Additionally, to enhance the efficiency of ESG evaluations, the company has stipulated that external institution ESG evaluation results may replace internal evaluations if certain conditions are met.

Supplier ESG Evaluation Process

Establishment of Evaluation Plan	• Selection of suppliers for evaluation • Determination of evaluation method (Written/On-site Inspection) • Conducting briefing sessions for suppliers
Conducting Written Diagnosis	• Submission of supplier self-assessment • Utilization of online platform • Verification of evaluation responses and supporting documents
On-site Inspection Check	• On-site inspection of priority management|suppliers • Interviews with supplier company • employees during inspection
Result Analysis and Improvement Actions	• Identification and analysis of risks by ESG area • Derivation of improvement measures

Supplier Regular Evaluation

Hanwha Ocean conducts regular evaluations annually targeting main trading suppliers among in-house and external suppliers. The regular evaluation covers four areas—production, quality, safety, and financial (or design, quality, delivery, contract management)—to encourage voluntary competitiveness improvement by suppliers. The suppliers' ESG evaluation status is included as an element of the regular evaluation. Based on the evaluation results, we classify suppliers by grade and assign incentives or penalties accordingly.

Details of Supplier Regular Evaluation

Category	Frequency	Evaluation Areas	Evaluation Items	Grades
Vendors	At least once a year	Pro-duction	Process compliance rate, Production volume contribution, Achievement rate of production targets, Volume transfer management, etc.	Classified from Grade A to Grade D
		Quality	On-site self-inspections, Re-inspection rate of quality tests, Certification (ISO 9001), Management of major quality incidents (zero tolerance), Quality improvement activities	
		Safety	Safety accidents management, On-site safety activities by supervisors, TBM risk assessment, Safety inspections, Safety training, Self-improvement activities, etc.	
		Financial[1)]	Credit rating, Cash flow rating, ESG management activities (Bonus points for external ESG ratings), Loans and allowance for doubtful accounts, etc.	
	Evaluation Results Reflection		– Awards and bonuses are provided, and ESG consulting such as ESG level diagnosis and on-site inspections are supported. – Termination of transactions is executed if regular quality evaluation results are rated C grade or D grade for two consecutive times.	
Subco-ntractors	At least twice a year	Pro-duction	Production process compliance rate, Production volume contribution, Achievement rate of production targets, Volume transfer management, etc.	Classified from Grade S to Grade D
		Quality	On-site self-inspections, Re-inspection rate of quality tests, Certification (ISO 9001), Management of major quality incidents (zero tolerance), Quality improvement activities	
		Safety	Management of safety accidents, On-site safety activities by supervisors, TBM risk assessment, Safety inspections, Safety training, Self-improvement activities, etc.	
		Financial[1)]	Credit rating, Cash flow rating, ESG management activities (Bonus points for external ESG ratings), Loans and allowance for doubtful debts, Payment of four major social insurances, etc.	
	Evaluation Results Reflection		– In 2024, KRW 420 million in bonuses were paid to 19 in-house suppliers and KRW 30 million to 2 external suppliers. – For outperforming suppliers, we plan to link the expansion of supply chain ESG management through ESG consulting support in 2025. – For underperforming suppliers evaluated as D grade two or more times, a penalty of contract termination will be enforced.	
E&I Suppliers	At least once a year	Design	Evaluation of vendor print quality, Submission schedule compliance, Design capability, etc.	Classified from Grade A to Grade D
		Quality	Occurrence of quality nonconformities, Compliance with inspection procedures and schedules	
		Delivery	Compliance with document submission, production, and delivery schedules	
		Contract Manag-ement	Credit rating, Cash flow rating, Quotation participation rate, Compliance with contract terms	
	Evaluation Results Reflection		– In 2024, 6 outperforming suppliers (5 equipment suppliers and 1 outsourcing company) were selected, awarded, and given special benefits. – Suppliers with low ratings or issues in contracts and deliveries will be subject to penalties such as bidding restrictions and contract termination according to sanction criteria.	

1) When suppliers conduct their own ESG evaluation, additional points are awarded in the "Financial" area of the supplier regular evaluation.

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Supply Chain Management and Shared Growth

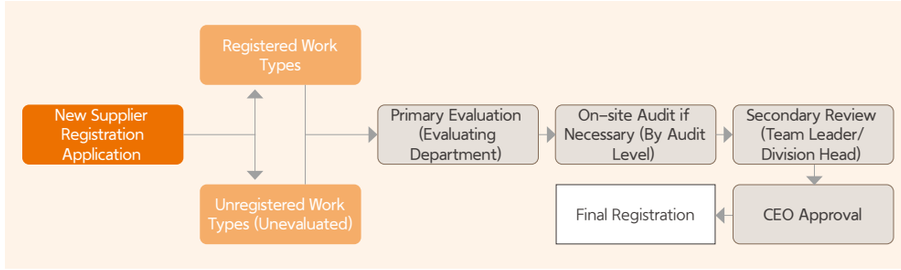
New Supplier Evaluation

Hanwha Ocean manages new supplier registrations by categorizing suppliers into vendors, subcontracting, and E&I, conducting evaluations for 100% of new suppliers. For new vendors, evaluations cover five areas: Financial, Sustainability, Quality, Authorized Economic Operator (AEO), and Technical Assessment (if necessary) to review transaction eligibility. The primary document review assesses basic criteria such as corporate creditworthiness, financial soundness, absence of unethical conduct, and ISO 9001 certification. The secondary evaluation involves related organizations assessing quality and technical (if necessary) fields to verify transaction qualifications. Additionally, ISO 14001 Environmental Management System certification is required upon new supplier registration to consider environmental standards alongside quality and production criteria. From 2024, the Subcontract Transaction Internal Review Committee operates to ensure procedural fairness in supplier selection and registration.

New subcontractors are evaluated in four areas—Quality, Safety, Management, and Production—same as regular evaluations of existing suppliers to assess transaction eligibility. From 2024, a separate safety and health eligibility review has been introduced to strengthen verification. The primary document evaluation checks basic criteria such as creditworthiness, financial soundness, absence of unethical conduct, and ISO 9001 certification. The secondary evaluation is about Quality, Safety, Management, and Production fields assessed by related organizations to verify transaction qualifications. ISO 14001 certification is also required upon new supplier registration to consider environmental standards alongside quality and production criteria. The Subcontract Transaction Internal Review Committee has been in operation since 2024 to ensure procedural fairness in supplier selection and registration.

For new E&I suppliers, evaluations cover four areas: Financial, Management, Performance, and Technical to assess transaction eligibility. The primary document review examines basic criteria (corporate creditworthiness, financial soundness, performance records, quality certifications, etc.). The secondary evaluation includes on-site inspections of supplier factories to assess detailed areas such as Safety, Quality, Production Facilities, and Design Capabilities. Additionally, ISO 14001 Environmental Management System certification is required upon new supplier registration to consider environmental standards alongside quality and production criteria.

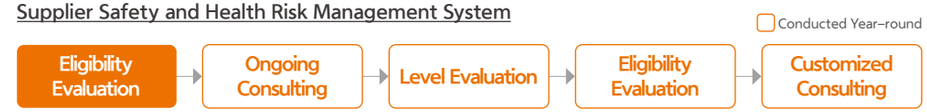
New Supplier Evaluation Process



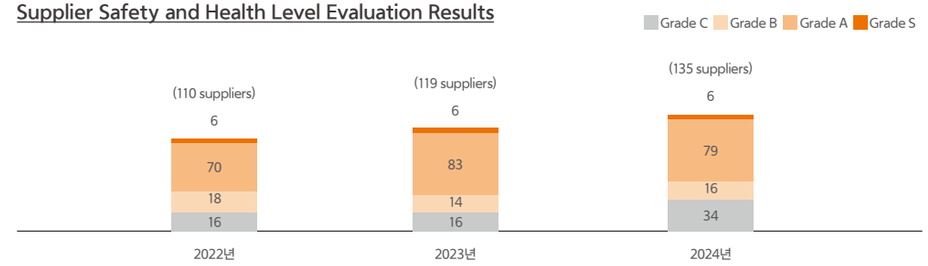
Supplier Safety and Health Risk Evaluation

Hanwha Ocean conducts pre-contract safety and health eligibility reviews through evaluations of industrial accident prevention capabilities and technologies when contracting with internal and external suppliers. We periodically assess supplier safety and health levels to internally diagnose safety awareness and understand the field conditions. Evaluations are based on HSE management performance, safety diagnostics by specialized institutions for suppliers, and other factors. Suppliers with low grade receive safety consulting, focused safety diagnostics, and practical guidance to strengthen their autonomous safety capabilities. We especially invest approximately KRW 500 million annually to enhance supplier's safety and health capabilities by contracting with specialized diagnostic institutions designated by the Ministry of Employment and Labor as safety management experts. These institutions reside on-site and provide safety diagnostic consulting for in-house suppliers.

Supplier Safety and Health Risk Management System



Supplier Safety and Health Level Evaluation Results



Supplier Grievance Handling

Since the corporate merger in May 2023, Hanwha Ocean has reorganized the Code of Ethics and Practice Guidelines, establishing a dedicated Compliance Department to ensure all organizations and members to manage fair transactions with suppliers. In particular, the Business Audit team under the Compliance Department operates the Unethical Report Center (Sinmungo), a grievance channel that not only handles unfair practices reports related to supplier selection or transactions but also collects stakeholder opinions within the supply chain, protecting their rights. Suppliers can report environmental, labor/human rights, safety/health, and ethics issues. All reports are kept confidential and managed to prevent any disadvantages to the reporters. Furthermore, Hanwha Ocean operates an Unethical Report Reward System as a company regulation to encourage internal and external whistleblowing and protect whistleblowers. Reports received through the reporting channels undergo fact-checking procedures and appropriate actions are taken. Proactive preventive activities against potential supplier risks are conducted through an internal monitoring system.

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Risk Management

Raw Material Risk Management

Hanwha Ocean is implementing strategies to reduce dependence on specific countries or suppliers for stable supply items in line with the Ministry of Trade, Industry and Energy's 'Industry Supply Chain 3050 Strategy'. We select key management items to monitor monthly production volumes and company requirements, managing supply risks through mid- to long-term purchasing plans. In case of supply chain risks, we operate based on pre-established scenario-driven Business Contingency Plans to minimize company impact, and when necessary, form Quick Task Forces to continuously enhance our response level to purchasing supply chain risks.

The E&I Division continuously pursues a supplier diversification strategy to prepare for volatility in raw material markets and supply uncertainties. We conduct an annual regular recruitment of new suppliers, providing opportunities for various companies to participate and securing potential supply chains. Additionally, we frequently recruit new suppliers by item during the bidding preparation phase of new projects and the purchasing bidding phase after contract awards. This process reflects project characteristics and market conditions to strengthen practical supply competitiveness and reduce dependence on specific suppliers or regions. Through supplier diversification, the E&I Division disperses risk factors within the supply chain to minimize risks such as sudden raw material price surges or delivery delays. Ultimately, this aims not only to contribute to stable project execution and cost competitiveness but also to achieve sustainable supply chain management.

Metrics and Targets

Metrics

Supplier Management and Support[1)]

Metric		Unit	2021	2022	2023	2024
Supplier Management	Tier 1 Suppliers	Companies	1,440	1,843	1,330	1,334
	Major Tier 1 Suppliers	Companies	275	311	265	338
	Core Tier 1 Suppliers	Companies	46	39	8	29
	New Suppliers	Companies	35	100	56	64
	High-Risk Suppliers	Companies	27	28	26	45
	High-Risk Suppliers Ratio	%	1.9	1.5	2	3.4
Supplier ESG Support	Financial and Funding Support	KRW 100 million	60	10	20	49

1) Based on Geoje shipyard (Commercial Vessels, Offshore, Naval Ship Business)

Targets

Supplier ESG Evaluation Target

At Hanwha Ocean, we aim to complete ESG evaluations for 100% of our major suppliers by 2030. To achieve this, we have established annual plans and intend to assess 30% of major suppliers by 2025 to diagnose ESG levels and support improvements.



Shared Growth Index Evaluation Target

In May 2023, Hanwha Ocean was reinstated as a subject company for the Shared Growth Index evaluation by the Fair Trade Commission and the Shared Growth Committee. We have set the 2024 Shared Growth Index target at 'Satisfactory' or higher and established procedures for the four major practices of the Fair Trade Agreement, revising insufficient regulations. Furthermore, a new system was established through workshops with internal related organizations such as Purchasing and Co-prosperity. We also reviewed the standard subcontract and confidentiality agreements, as well as subcontract payment practices, and compiled details of financial, technical, personnel, and welfare support to submit as 2024 Shared Growth implementation results. The 2024 Shared Growth Index results will be announced by the Shared Growth Committee in September 2025.

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Ethics and Compliance

Governance

Ethics and Compliance System

Ethics and Compliance Organization

Hanwha Ocean's Ethics and Compliance promotion organization is composed of the Legal Department and Business Audit Department under the Compliance Department. The Legal Department conducts legal reviews and handles domestic and international dispute cases, establishes the compliance system, and carries out training, inspections, evaluations, improvements, and overall ethics management activities. The Business Audit Department performs management diagnosis and improvement, plans diagnostics to prevent ethics and compliance risks, investigates fraud and corruption, and manages and investigates unethical reports received through the Sinmungo (Whistleblowing) System.

Ethics and Compliance Organization and Key Roles



Strategy

Ethics and Compliance Policy

Code of Ethics

Based on the Code of Ethics approved by the CEO, Hanwha Ocean strives to enhance corporate value through proactive management activities and responsible behavior, contributing to social development. We have established the Code of Ethics Implementation Guidelines alongside the Code of Ethics to provide executives, employees, and stakeholders with standards for ethical decision-making and behavior. These are posted on the company portal and website for easy access. Hanwha Ocean Shandong Corporation and Hanwha Ocean Ecotech also apply the same standards of Code of Ethics and Implementation Guidelines, which are publicly available on their respective websites.

Code of Ethics | Code of Ethics Implementation Guidelines

Ethics and Compliance Programs and Systems

Hanwha Ocean operates various ethics and compliance programs and systems to ingrain a corporate culture where ethics are practiced, and laws are complied with by all executives and employees.

Ethics and Compliance Programs and Systems

Program	Content
Ethics Promotion	• Regular promotion of the company's ethics policies and major compliance issues through the portal and newsletter
Ethics Campaigns	• Conducting campaigns such as prohibition of gift acceptance during holidays
Gift/Request Voluntary Registration System	• Encouraging voluntary registration when receiving inappropriate gifts or requests from stakeholders • Utilizing registration details to identify issues, manage vulnerable areas, and conduct preventive activities
Ethics Compliance Obligation Contract System	• Requiring ethics management compliance obligations as contract terms with suppliers
Sanctions System for Fraudulent Suppliers	• Imposing sanctions such as warnings and suspension of transactions on partner companies violating ethics management obligations through fraud or corruption

Anti-Bribery and Compliance Policy

Hanwha Ocean established the Anti-Bribery and Compliance Policy in December 2023 with Board approval. We appoint a person responsible for anti-bribery and compliance, who, together with the Compliance Team, operates and improves the Anti-Bribery and Compliance Management System, provides advice and guidance, manages risks, and evaluates performance. This aims to foster a healthy organizational culture and minimize legal risks. We also have internal auditors, monitoring personnel, and risk assessors to strengthen the anti-bribery and compliance culture, proactively identifying and managing risks to reduce legal exposure. To ensure the successful implementation of the system, all executives and employees understand the purpose and content of this management system and incorporate compliance requirements into their daily practices.

Anti-Bribery and Compliance Policy

Compliance Control Regulations

Hanwha Ocean has established and implemented Compliance Control Regulations to promote fair and transparent business conduct, ensuring sound company development and customer trust. In accordance with Article 542-13 of the Commercial Act (Compliance Control Standards and Compliance Officer), we appointed a Compliance Officer through a Board resolution. The Compliance Department supports the Compliance Officer's duties, conducting compliance inspections, training, routine compliance support (including legal advisory), and operating an internal reporting (Sinmungo) system, among others. The Compliance Officer's major activities and their outcomes are disclosed in the company's annual report.

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Strategy

Ethics and Compliance Activities

Ethics and Compliance Training and Promotion

Hanwha Ocean conducts ethics and compliance training and promotional activities to raise compliance awareness among all executives and employees, regardless of employment type, not just regular employees. The training content covers topics related to the Dispatch Act, Subcontracting Act, Unfair Competition Prevention Act, Fair Trade Act, international sanctions and ethical management, anti-bribery, and compliance. These trainings are conducted according to the characteristics and needs of each organization to ensure our commitment to fair competition is upheld.

Ethics and Compliance Training

Category		Content	Target Audience and Organization	Implementation Details
Compliance Academy I	[Dispatch Act]	• Overview of the Dispatch Act and work precautions	• Management level (all team leaders and section chiefs)	November 2024
	[Subcontracting Act]	• Practical considerations in subcontracting transactions	• Organizations responsible for subcontracting transactions (Purchasing, Shared Growth)	November 2024
	[International Sanctions]	• Trends in overseas regulations and response measures	• Key overseas sales, business planning, and strategy organizations	November 2024
Compliance Academy II	[Unfair Competition Prevention Act]	• Concept of trade secrets and employee precautions	• Company-wide (online card news training)	December 2024
	[Fair Trade Act]	• Unfair joint acts (information exchange collusion section)	• Company-wide (online card news training)	December 2024
[Ethics Training]		• Recent violations of the company's Code of Ethics and disciplinary cases • Key points of the Code of Ethics Implementation Guidelines	• Targeted at team leaders	September—October 2024
[Anti-Bribery and Compliance]		• Training on risk assessment, internal audits, and monitoring related to anti-bribery and compliance	• Targeted at internal auditors	February, April, October 2024

Ethics and Compliance Promotion

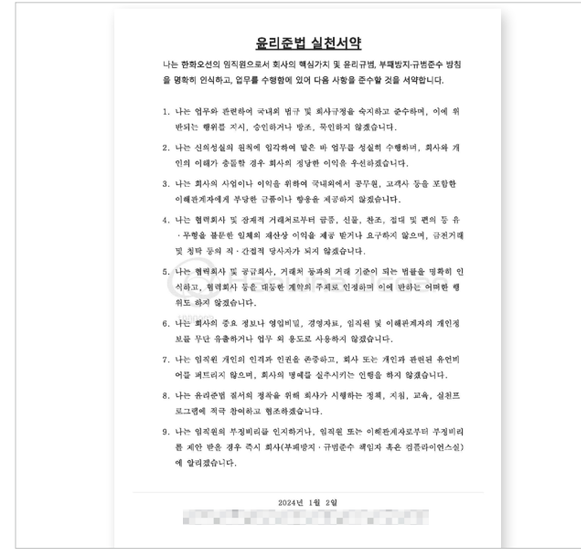
Category	Content	Implementation Details
Card News	• ISO 37001 & 37301 Certification Acquisition	May 2024
Compliance Drama	• Episode 1 (IF I) Topics: Unfair Competition Prevention Act, Personal Information Protection Act, Capital Markets Act, etc. • Episode 2 (Dangerous Office Romance) Topics: Fair Trade Act, Improper Solicitation and Graft Act, etc.	June, August 2024
Motion Graphics	• What is internal trading? (Case study/Procedure sections) • Easy-to-learn Subcontracting Act (Concept/Case study)	July, September 2024

Ethics and Compliance Practice Pledge

Hanwha Ocean annually requires executives and employees to sign the Ethics and Compliance Practice Pledge to check their voluntary compliance awareness. This process disseminates our Anti-Bribery and Compliance Policy to employees, encourages their understanding, and serves as an opportunity for individuals to commit to ethical conduct in their work, thereby strengthening the overall ethical culture of the company.

The signing is conducted via electronic signatures on the company portal for executives and general staff. In 2024, 4,156 mandatory signatories (99.5%) and 458 voluntary signatories participated in the signing.

Ethics and Compliance Practice Pledge



윤리준법 실천서약

나는 한화오션의 임직원으로서 회사의 핵심가치 및 윤리규범, 부패방지·규범준수 방침을 명확히 인식하고, 업무를 수행함에 있어 다음 사항을 준수할 것을 서약합니다.

1. 나는 업무와 관련하여 국내외 법규 및 회사규정을 숙지하고 준수하며, 이에 위반되는 행위를 지시, 승인하거나 방조, 묵인하지 않겠습니다.
2. 나는 신의성실의 원칙에 입각하여 맡은 바 업무를 성실히 수행하며, 회사와 개인의 이해가 충돌할 경우 회사의 정당한 이익을 우선하겠습니다.
3. 나는 회사의 사업이나 이익을 위하여 국내외에서 공무원, 고객사 등을 포함한 이해관계자에게 부당한 금품이나 향응을 제공하지 않겠습니다.
4. 나는 협력회사 및 잠재적 거래처로부터 금품, 선물, 향조, 접대 및 편의 등 유·무형을 불문한 일체의 재산상 이익을 제공 받거나 요구하지 않으며, 금전거래 및 정탁 등의 직·간접적 당사자가 되지 않겠습니다.
5. 나는 협력회사 및 공급회사, 거래처 등과의 거래 기준이 되는 법률을 명확히 인식하고, 협력회사 등은 대등한 계약의 주체로 인정하며 이에 반하는 어떠한 행위도 하지 않겠습니다.
6. 나는 회사의 중요 정보나 영업비밀, 경영자료, 임직원 및 이해관계자의 개인정보를 무단 유출하거나 업무 외 용도로 사용하지 않겠습니다.
7. 나는 임직원 개인의 인격과 인권을 존중하고, 회사 또는 개인과 관련된 유언비어를 퍼트리지 않으며, 회사의 명예를 실추시키는 언행을 하지 않겠습니다.
8. 나는 윤리준법 경지의 정착을 위해 회사가 시행하는 정책, 지침, 교육, 실천프로그램에 적극 참여하고 협조하겠습니다.
9. 나는 임직원의 부정비리를 인지하거나, 임직원 또는 이해관계자로부터 부정비리를 제안 받은 경우 즉시 회사(부패방지·규범준수 책임자 혹은 엠플라이언스실)에 알리겠습니다.

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Risk Management

Anti-Bribery and Compliance Management System

ISO 37001 & 37301 Certification

Hanwha Ocean identifies and improves ethics and compliance risks through the Anti-Bribery and Compliance Management System and reports related progress annually to the Board of Directors. To obtain certification for the Anti-Bribery and Compliance Management System, from the second half of 2023, we analyzed related company regulations, identified obligations, and conducted risk assessments. After internal audits and addressing issues in April 2024, the initial certification was successfully acquired in May 2024. In 2025, reflecting the E&I Division acquired in the second half of 2024, the certification scope was expanded to include the Geoje shipyard, Seoul Office, and Siheung R&D Campus, and the certification was maintained following a follow-up audit.

ISO 37001 Certification | ISO 37301 Certification

Ethics and Compliance Risk Identification and Prevention

Hanwha Ocean annually analyzes and evaluates risks based on the Anti-Bribery and Compliance Management System, conducts improvement activities, and reports these to the Board of Directors. In 2024, company-wide ISO representatives were selected and trained, and risk assessments were conducted across 44 organizations. Approximately 600 unique risks, including trade secret protection and serious accident risks, were identified and classified into high, medium, and low grades. For high-grade unique risks, effective training, regular inspections were performed, and risk-related committees were operated to strengthen internal capabilities and control activities, resulting in all high-grade unique risks being downgraded.

Key Risks in 2024

Risk Category	Unique Risk	Assessment Grade	Control Measures	Post-Action Grade
Corruption	2 Cases	High	• Training • Procedures Revision • Regular Reporting and Inspections • Operation of Management Program	Low
Compliance	7 Cases	High		Low
Corruption, Compliance	2 Cases	High		Low

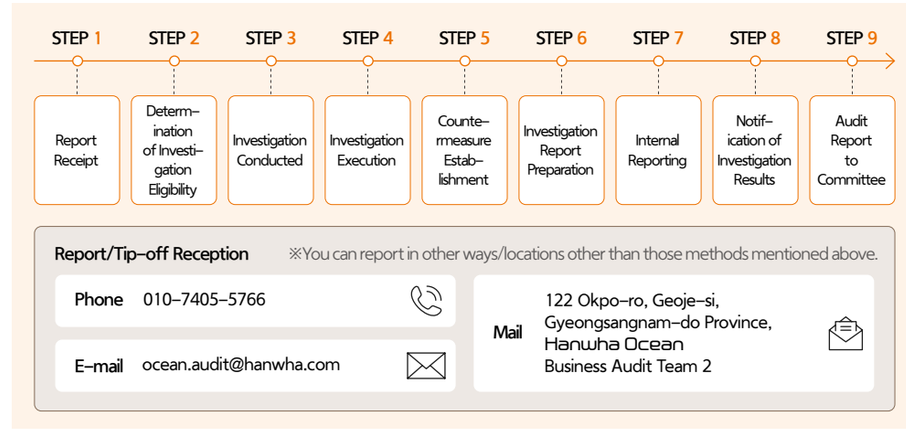
Whistleblowing System

Whistleblowing System and Whistleblower Protection

Hanwha Ocean operates a reporting system for unethical situations occurring within the company. Anyone can report anonymously or with real name via phone, fax, mail, email, etc. To protect the reporter's identity, confidentiality agreements are obtained. When a report is received, it is assessed to determine if it requires investigation. If so, independent investigation is conducted for the selected items and countermeasures are established. The investigation results are documented confidentially, internally reported, and the final results are communicated to the whistleblower and reported to the Audit Committee.

Additionally, to protect whistleblowers, all Business Audit Team members sign confidentiality agreements, and only a minimal number of personnel are granted access to the whistleblowing system. Company regulations, specifically the Unethical Reporting Reward System Operation Guidelines, prohibit disclosure or identification of whistleblowers, and violations result in disciplinary action. If identity exposure occurs, disciplinary measures for disclosers and retaliation for the whistleblower are taken. This fosters a reporting environment without fear of career repercussions, workplace harassment, or personal retaliation, raising awareness and vigilance against unethical conduct within the organization. Hanwha Ocean Ecotech and Hanwha Ocean Shandong Corporation also operate whistleblowing systems on their websites allowing anonymous or named reports. Various reporting methods such as phone and email are provided, along with guidance on whistleblower protection and report processing procedures.

Reporting and Processing Procedures



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Risk Management

Ethics and Compliance Internal Audit

Management Diagnosis

Hanwha Ocean conducts various management diagnosis activities to strengthen ethics management, including compliance checks on regulations and financial records, reviews of work fairness, and detection of fraudulent acts. The scope includes Hanwha Ocean's domestic and overseas corporations, branches, and subsidiaries. In 2024, following Hanwha Ocean's establishment, priority diagnosis was conducted on the Seoul Office, Geoje shipyard, and Siheung R&D Campus, and in 2025, the diagnosis will be expanded to overseas corporations and subsidiaries. The results are regularly reported to the Board of Directors and the Audit Committee. In 2024, key performance and results regarding misappropriation of unfair gains by suppliers and deficiencies in cost management processes were reported to the Board.

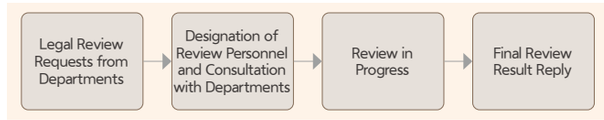
Management Diagnosis Activities

Category		Content
Process and Work Improvement	Regular Diagnosis	• Compliance with regulations, policies, and plans • Accuracy of company financial records and calculations • Identification and recommendation for improvement of work regulations and system enhancements ※ Diagnosis targets include the company and subsidiaries • Review of fairness and validity of work performance • Inspection of company asset management status • Detection of fraud, errors, or falsifications
	Management-directed Diagnosis	• Management diagnosis conducted under instructions from management, etc.
	Occasional Diagnosis	• Conducted occasionally based on reports on specific tasks or matters deemed necessary from management diagnosis
	Implementation Check	• Verification of field implementation for previously diagnosed improvement items
Prevention of Unethical Behavior	Sinmungo (Whistleblowing System)	• Receipt and investigation of reports on unethical acts
	Prevention of Gift Acceptance	• Distribution of guidelines prohibiting gift acceptance during holidays and reporting channels
	Management-directed Tasks	• Investigation of unethical acts/risks under instructions from management, etc.

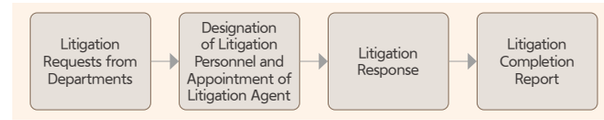
Legal Risk Inspection

Hanwha Ocean performs all legal affairs procedures such as legal reviews and litigation through a legal system. In addition to routine legal consultations, we conduct subcontracting transaction surveys, internal transaction inspections, and serious accident checks, completing a total of 1,619 legal reviews to periodically inspect and prevent our legal risks. In 2024, we inspected the legal systems of Hanwha Ocean's subsidiaries, Hanwha Ocean Ecotech and Hanwha Ocean Digital.

Legal Review Process



Litigation Process



Metrics and Targets

Metrics

Among the 'HOST 2030 Targets', the 'Compliance and Ethics Management Practice Evaluation' under the governance category is defined by five metrics that consider the internal and external environment faced by the company. These metrics include the establishment of risk management systems and processes, and measurement and evaluation of internalization levels, among others.

Category	Unit	Score Allocation	2024 Performance
Institutionalization of Risk Management	Points	1	0.75
Fines	Points	1	1
Code of Ethics Violation Score	Points	1	0.1
Establishment and Disclosure of Ethics and Compliance Policies	Points	1	0.54
ESG Committee Evaluation	Points	1	0.7
Total	**Points**	**5**	**3.09**

Targets

Hanwha Ocean has established the 'HOST 2030 Target', which includes setting specific long-term objectives and managing performance for ESG management. The detailed metrics for the compliance and ethics practice evaluation were approved by the ESG Committee in April 2024. To strengthen our compliance and ethics system and management, we will conduct a compliance and ethics management practice evaluation based on these metrics, aiming to achieve a perfect score by 2030.

HOST 2030: Compliance and Ethics Management

Compliance and Ethics Management Practice Evaluation



5points

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Ethics and Compliance

Key Subsidiary Activities

Hanwha Ocean Ecotech

Ethics and Compliance System and Program

Hanwha Ocean Ecotech operates various ethics and compliance programs to ensure that a corporate culture of practicing ethics and complying with laws becomes second nature to executives and employees.

Ethics and Compliance Program

Program	Details	Targets
Ethics Letter Dispatch	• Prohibition of holiday gift acceptance and guidance on voluntary reporting	• All executives and employees • In-house and external suppliers, other partners
Gift/Request Voluntary Registration System	• Encouragement to voluntarily register when receiving inappropriate gifts or requests from stakeholders • Utilized for identifying issues through registration details, managing vulnerable areas, and for preventive activities	• All executives and employees
Ethical Compliance Obligation Contract System	• Requirement to comply with ethical management as a contract condition with suppliers	• In-house and external suppliers • Other partners
Sanctions System for Unethical Suppliers	• Sanctions such as warnings and suspension of transactions against unethical suppliers violating ethical management obligations	• In-house and external suppliers • Other partners

Ethics Practice Pledge

Hanwha Ocean Ecotech requires signatures for the ethics and compliance practice pledge to check executives' and employees' voluntary compliance awareness, contributing to strengthening the company-wide ethical culture.

Sanctions on Unethical Suppliers and Support for Ethical Management

Hanwha Ocean Ecotech operates systems to eradicate unethical behavior based on Chapter 10 (Ethics Compliance Obligation) of the supplementary agreement when contracting with suppliers. Additionally, the company minimizes corruption risks and establishes a transparent transaction culture by checking ethics compliance during supplier registration and regular supplier assessments.

Hanwha Ocean Shandong Corporation

Ethics and Compliance System and Program

Hanwha Ocean Shandong Corporation conducts ethics and compliance training for all executives, employees, and in-house supplier employees. The main content includes ethics-related company policies and announcements, the code of conduct for practicing ethical management, and anti-bribery measures.

Ethics and Compliance Program

Program	Details	Targets
Ethics and Compliance Training	• Prohibition of accepting money, entertainment, and favors • Prohibition of gift acceptance (including among executives and employees) • Prohibition of direct/indirect monetary transactions • Voluntary reporting of unavoidable unethical acts	• All executives and employees • All in-house suppliers
Ethics and Compliance Practice Pledge	• Compliance with Code of Ethics • Clear awareness of anti-bribery and code compliance reflected in work performance	• Implemented quarterly • All managers/supervisors and above • In-house supplier managers
Ethics letter dispatch before holidays	• Request for cooperation in establishing exemplary transaction culture • Information on disadvantages to employees when gifts are offered • Request to report when gifts are demanded	• Implemented before Lunar New Year and Chuseok holidays • All transaction suppliers
Anti-Bribery Training	• Explanation of types/forms of corrupt acts • Introduction of anti-bribery regulations and promotional methods • Introduction of voluntary reporting and whistleblowing methods • Introduction of reporting and review procedures for unethical suppliers	• All executives and employees • All in-house suppliers

Regulations on the Operation of the Unethical Supplier Sanction Review Committee

Hanwha Ocean Shandong Corporation established the Regulations on the Operation of the Unethical Supplier Sanction Review Committee in December 2024 (approved by General Manager). These regulations prevent all suppliers from engaging in unethical and present sanction criteria for such behavior. The company aims to minimize legal risks by establishing and operating the Corruption Supplier Sanction Review Committee.

Ethics and Compliance Practice Pledge

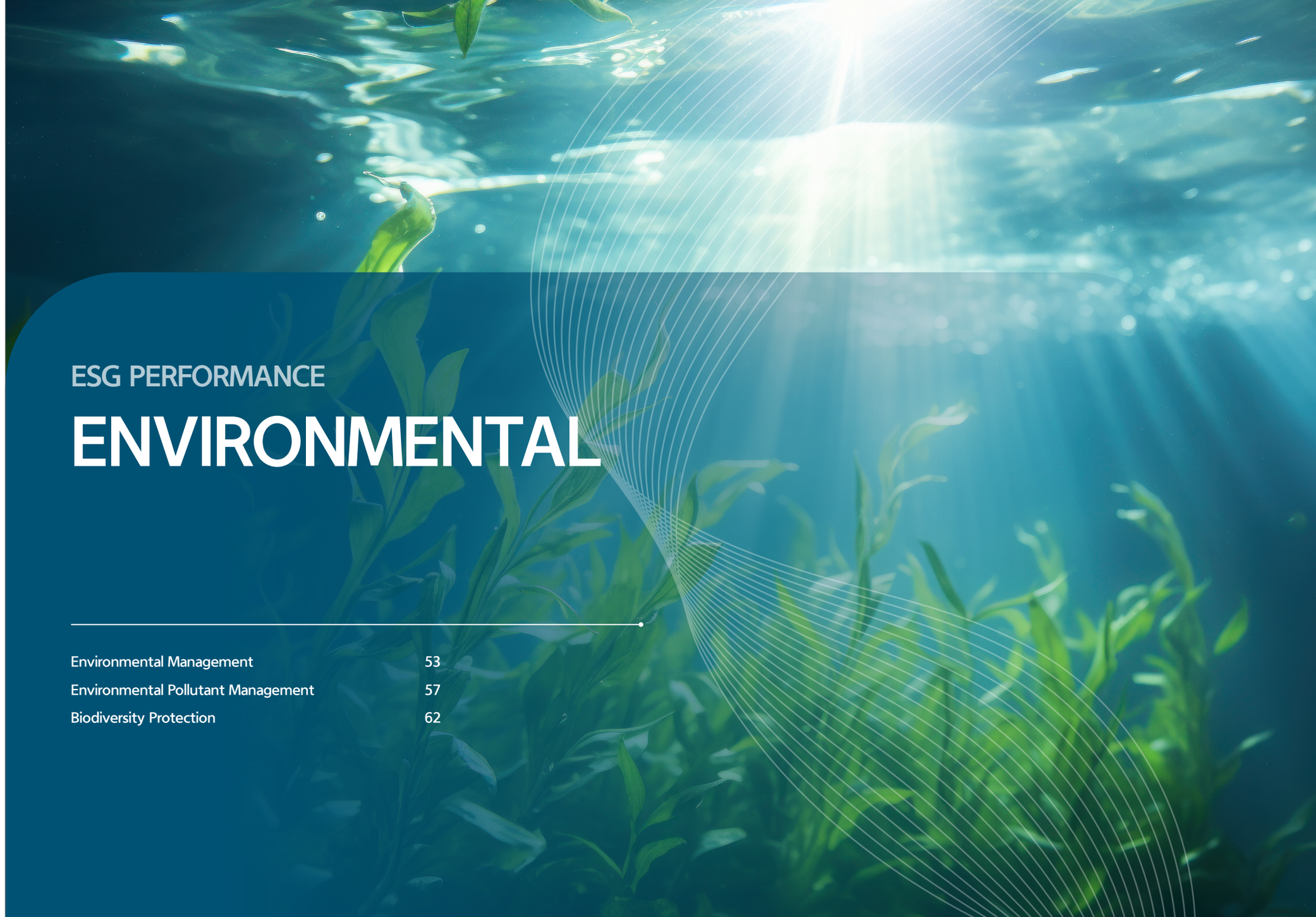
Hanwha Ocean Shandong Corporation conducts quarterly signings of the Ethics and Compliance Practice Pledge to assess the voluntary compliance awareness of all managers (including dispatched personnel), supervisors and above, representatives of in-house suppliers, site managers, and team leaders. In 2024, 100% of the designated signatories signed the pledge.

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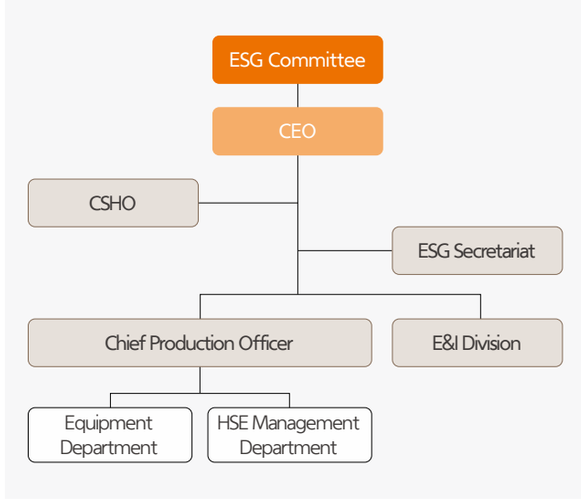
Environmental Management

Environmental Management System

Environmental Management Organization

The ESG Committee under the Board of Directors handles final decision-making on Hanwha Ocean's environmental policies and key performance, regularly reviewing environmental and climate change-related agenda items. The environmental management organization oversees environmental strategy formulation and implementation, performing tasks including regulatory compliance, environmental education and response training, waste and pollutant management, and environmental impact assessments.

Environmental Management Organization



2024 ESG Committee Environmental Resolutions and Reports

Date	Category	Key Items
2024.04.03	Approval	Approval of ESG Management 2024 Plan (Including a 1% GHG reduction target)
2024.12.27	Report	Report on 2024 ESG Implementation Performance (Including replacement of high energy-consuming equipment, etc.)

Environmental Policy

Hanwha Ocean adheres strictly to environmental laws and regulations in all business activities while actively pursuing environmental protection and sustainable development initiatives. In 2024, we revised our Environmental Policy to enhance biodiversity protection commitments, submitting it to the ESG Committee. We operate training programs to raise environmental awareness among staff and establishes guidelines for key environmental issues (greenhouse gases, energy, water, air and water pollution) at each business site, managing activities accordingly.

Environmental Policy

Hanwha Ocean Environmental Policy

1	Participation in global ESG management by complying with domestic and international environmental regulations	We take part in sustainability management and independently prevent and inspect potential environmental pollution factors in all processes.
2	Constant technology development and practices to achieve carbon neutrality	We constantly develop environmental technologies to use less energy.
3	Active adoption of renewable energy sources and relentless 4R practices	We carry out activities to achieve RE100 and reduce and recycle waste to promote constant environmental improvement.
4	Encouraging employee participation and leadership	We provide constant environmental education and practices for all employees.
5	Transparent disclosure of environmental information	We disclose information regularly to ensure transparency in implementing our environmental policy.
6	Pursing sustainable management through biodiversity conservation	We conduct systematic monitoring and enhanced environmental protection activities to maintain ecosystem balance.

Environmental Management System Certification

Hanwha Ocean, Hanwha Ocean Ecotech, and Hanwha Ocean Shandong Corporation have obtained and renewed ISO 14001 (Environmental Management System) certifications for their respective business sites, implementing and internalizing environmental management across all aspects of corporate operations. Notably, Hanwha Ocean has acquired and maintained ISO 50001 (Energy Management System) certification for the Geoje shipyard, which has high energy consumption, continuously improving energy efficiency.

ISO 14001 Certification



* Scope: Design, Manufacture/ Building and Servicing of Ships, Naval ships, Submarine & Special Vessels, On-shore/ Offshore Structures, Industrial Machineries and Plants

ISO 50001 Certification



* Scope: Geoje shipyard (The construction and installation of shipbuilding and offshore)

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Environmental Management

Environmental Management System

Monitoring and Response to Environmental Regulations

Hanwha Ocean's fundamental principle is to thoroughly comply with and deeply understand key environmental laws, including the Air Environment Conservation Act, Water Environment Conservation Act, and Waste Management Act for environmental protection and sustainable management. We conduct frequent site inspections, covering air, water quality, waste, marine environment, and chemical management. We also hold Environmental Liability Insurance, monitors regulatory changes, and implements response strategies, maintaining zero environmental law violations since 2021.

Major Environmental Laws Applicable to Hanwha Ocean and Corresponding Responses

Law	Hanwha Ocean Response
Air Environment Conservation Act	• Plans to gradually replace aging environmental facilities to reduce pollutant emissions and monitors to prevent omissions in permits during facility replacement
Water Environment Conservation Act	• Operates our own wastewater treatment facilities to manage pollutant discharge within 30% of permitted standards, focusing on preventing wastewater leakage through regular inspections, facility improvements, and training
Waste Management Act	• Handles waste generated during production according to legal standards and Ministry of Environment guidelines, practices resource recycling through waste separation and 3R activities
Act on Registration and Evaluation of Chemicals	• Meets legal requirements for newly designated hazardous chemicals through a chemical management system and handles them safely
Chemical Substances Control Act	• Obtained hazardous chemical business permits in 2024 due to classification of major products as hazardous chemicals; will meet facility standards related to hazardous chemicals and prevent chemical accidents through handler training in 2025
Soil Environment Conservation Act	• Prevents environmental pollution through inspections and examinations of designated soil contamination management facilities
Marine Environment Management Act	• Proactively responds through continuous investment in environmental control facilities
Environmental Crime Control Act	• Assigns dedicated personnel for environmental inspections and monitors air and water quality • Ensures compliance with laws through revisions such as Check Sheet updates and thorough monitoring

Environmental Management Activities

Green Procurement

Hanwha Ocean's Green Procurement Policy, applicable to all purchasing activities, prioritizes environmentally friendly products and services for environmental protection, resource conservation, and social responsibility. we aim to minimize environmental impacts by promoting energy-efficient and recyclable purchases. Hanwha Ocean evaluates suppliers' environmental management certifications, product efficiency, and recyclability, encouraging green procurement throughout the supply chain and supplier compliance. The purchasing planning organization monitors policy compliance, product and supplier performance, reporting to management to ensure policy effectiveness.

Green Procurement Policy

Hanwha Ocean Green Procurement Policy

Element	Content
Product Selection Criteria	Purchase of energy-efficient products, recyclable products, environmentally certified products, products with low hazardous chemicals, and use of minimal packaging materials
Supplier Evaluation	Assessment of suppliers' ISO 14001 certification status and environment activities, evaluation of suppliers' product environmental friendliness
Training and Awareness Raising	Regular training sessions, raising awareness of policy importance, information sharing, and promoting cooperation with external stakeholders
Monitoring and Reporting	Monitoring green procurement performance, preparing and sharing reports, evaluating policy effectiveness and identifying improvement measures
Responsibilities and Authority	Responsibility and authority definitions for the Purchasing Planning Team, purchasing officers in each department, and management
Green Procurement System Establishment	Management of purchasing activities and real-time monitoring through an IT system

Environmental Investment

Hanwha Ocean has established environmental investment criteria to manage environmental technology investments. We categorize direct and indirect investments into four items for efficient management. When making investment decisions, Hanwha Ocean considers environmental improvement potential, risk minimization, and compliance with environmental standards. These efforts aim to create environmentally friendly workplaces.

Environmental Investment Costs

Metric	Unit	2021	2022	2023	2024
Environmental Investment	KRW 100 million	418.5	395.4	286.8	754.9

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Environmental Management Activities

Social Contribution Activities Caring Environment

Conducting Underwater/Coastal Cleanup Activities

Hanwha Ocean participated in activities to preserve a clean marine environment hosted by the Tongyeong Coast Guard on May 31, 2024, in the area of Haegan Island in Yongnam-myeon, Tongyeong-si, in celebration of the 29th Ocean Day. The event involved about 90 participants from the Tongyeong Coast Guard, Tongyeong City, and 12 organizations and civic groups. During this event, participants collected trash from nearby coasts and cleaned the beaches, contributing to local environmental preservation.



Participation in 2024 Tongyeong Marine Environment Preservation Activities

Coastal Oil Spill Response Training

Hanwha Ocean participated in the '2024 Joint Coastal Oil Spill Response Training with Related Agencies' hosted by the Tongyeong Maritime Police Station at Wahyeon Sand Forest Beach in Geoje in September 2024. Through this training, we contributed to marine environmental protection activities and plans to continue our ongoing social contribution efforts.





2024 Joint Coastal Oil Spill Response Training with Related Agencies

Environmental Training

Hanwha Ocean conducts systematic environmental training to enhance employees' environmental awareness and ensure compliance with regulations. In particular, to fulfill mandatory legal training for obtaining hazardous chemicals business permits, regular training is provided to workers handling such substances.

Additionally, weekly HSE TBM+ training is conducted for all employees, focusing on strengthening their sense of environmental responsibility. Training topics include environmental laws and regulations, energy-saving measures, waste reduction, and resource circulation, helping employees practice environmental protection in their work.

Furthermore, employees who complete the training and whose work is closely related to the content record their participation through signed confirmations, which are used to monitor ongoing compliance with environmental training requirements.

Environmental Training Implementation Details

Training	Frequency	Purpose
Hazardous Chemicals Handler Training	Once (16 hours) every 2 years	Training on compliance with laws regarding hazardous chemicals
Hazardous Chemicals Operator Training	Once (2 hours) per year	
Weekly HSE TBM+ Training	Once per week	Training to enhance employees' environmental awareness and capabilities

Stakeholder Management

Hanwha Ocean recognizes the importance of environmental management and actively collaborates with various stakeholders to implement it. Key stakeholders related to Hanwha Ocean's environmental management include public institutions, non-governmental organizations (NGOs), local community groups, and internal auditors. Communication with stakeholders plays a vital role in building societal cooperation for environmental protection and developing effective response strategies.

Key Stakeholders of Hanwha Ocean Environmental Management

Stakeholders	Entity	Key Issues and Responses
Public Institutions	• Ministry of Environment • Nakdong River Basin Environmental Office • Korea Environment Corporation • National Institute of Chemical Safety • Korea Marine Environment Management Corporation • Masan Regional Maritime Affairs and Fisheries Office • Gyeongnam Provincial Government • Geoje City Hall • Tongyeong Coast Guard • Police	Information sharing related to environmental hygiene, waste, permits; pollution control and issue review
Non-Governmental Organizations (NGO)	• Tongyeong Geoje Environmental Movement Federation • Green Colored People • Marine Environment National Movement Federation Geoje Branch	Cooperation in environmental protection events
Local Community Groups	• Ajoo-dong, Seomun Yongso • Dumo-dong Prosperity Association • Fisheries Damage Compensation Countermeasures Committee (Geoje City Federation)	Investigation of environmental complaints and provision of data support
Internal Auditors	• Labor Union	Direct work stoppage without going through company channels when environmental issues arise

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Environmental Management

Environmental Management Activities

Environmental Accident Response Training

Marine Pollution Accident Response Training

Hanwha Ocean strengthens environmental accident response capabilities through practical containment operations and planned training to respond swiftly and effectively in the event of marine pollution accidents. In 2024, an environmental accident response training was conducted simulating an oil spill during bunkering operations in offshore sea trials.

The response training was divided into three stages: 'oil spill reporting', 'situation dissemination', and 'containment operations' conducted in a manner similar to actual incidents to ensure smooth handling during real accidents. We conduct regular training at least once a year and continuously reviews and improves the effectiveness of these exercises.

This offshore oil spill preparedness training proceeded smoothly and systematically overall, and we plan to further strengthen employees' response capabilities through periodic training in the future. Additionally, more effective new training methods will be developed by accurately determining the oil absorption time of absorbent pads and expanding practical opportunities with equipment such as oil skimmers.









2024 Marine Pollution Accident Response Training

Hazardous Chemicals Spill Accident Response Training

To enhance understanding and response capabilities for hazardous chemical accidents, Hanwha Ocean participated in the Civil–Military–Government Joint Hazardous Chemical Accident Response Training held at Tongyeong Maritime Police Station in October 2024. The training simulated an ammonia leak caused by damage to the refrigerant pipe of a refrigerated cargo ship. The exercise assessed accident site control, rescue operations, substance detection, spill containment, and decontamination were assessed, while also strengthening the cooperation system among civil, military, and government entities. In the future, Hanwha Ocean plans to further improve accident response capabilities through regular training and continuously enhance collaboration with related organizations.





2024 Hazardous Chemicals Accident Response Training

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Environmental Pollutant Management

Waste Management and Resource Circulation

Waste Management Procedures

Hanwha Ocean conducts waste management and resource circulation in compliance with waste treatment regulations according to internal waste management procedures. Upon waste generation, a waste management and treatment plan are established to classify waste by type and seek appropriate treatment methods, aiming to minimize environmental impact and prepare optimal treatment methods for effective response. During storage, waste is managed safely in compliance with legal standards, with monitoring of classification and storage quantities. At the disposal stage, the environmental management system is used to accurately verify waste, prepare necessary records for safe disposal, and through performance reporting, closely monitor treatment status and proper processing, while proceeding with required reporting procedures.

Waste Management Procedures

Waste Generation	• Waste generated during business activities
Waste Classification	• Classify generated waste into recyclable, hazardous, and general waste
Waste Storage and Preservation	• Store classified waste according to internal standards
Waste Treatment and Recycling	• Transport to treatment facilities and process or recycle/reuse according to waste characteristics
Record Keeping and Performance Reporting	• Document the entire process after treatment is complete and report performance

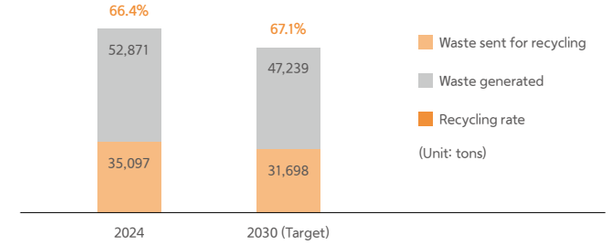
Resource Use Efficiency

Hanwha Ocean has set increasing the waste recycling rate as a key goal for promoting environmental management. To raise the waste recycling rate to 67.10% by 2030, major initiatives include expanding sorting operations at in-house waste collection sites, increasing the proportion of combustible incineration waste sent to recycling companies (from 45% in 2023 to approximately 70% in 2030), and adjusting the volume of firewood support for local residents (targeting 50% of current volume by 2030). Additionally, long-term recycling improvements will be pursued through selecting and improving recyclable items among landfill waste, reviewing partial recycling possibilities for designated waste, and prioritizing recycling companies when disposing of new waste.

Wood Resource Recovery

As a case of waste recycling, Hanwha Ocean sorts various wastes such as waste synthetic resin, waste synthetic rubber, waste wood, and household waste, and sends them to recycling companies that produce Solid Recovered Fuel (SRF), woodchips, plywood, and lumber. The SRF produced by recycling companies using Hanwha Ocean's waste as raw material is utilized as a renewable energy source supplied to power plants, district heating, and as industrial auxiliary fuel, contributing as a clean energy source replacing bituminous coal. Furthermore, by recycling waste wood into woodchips, plywood, and lumber and converting them into high value-added products, we promote resource circulation and contribute to environmental protection.

Geoje Shipyard Waste Recycling Performance in 2024 and Target for 2030



Dust and Steel Resource Recovery

At Hanwha Ocean, when wastes such as dust and steel are generated, they are sorted by type and processed by competitive recycling companies. These recyclers produce molded products used as raw materials for cement additives, embankment materials, and metal and steel products. This recycling process promotes efficient resource use and contributes significantly to environmental protection. Hanwha Ocean's approach transforms industrial waste into valuable resources, contributing to sustainable environmental management and resource circulation.

Waste Material Resource Recovery

Hanwha Ocean sends waste paint cans and waste oil drums to recycling companies to protect the environment and promote resource circulation. Paint cans are recycled into raw materials for steel products, which are important resources in the steel industry. Waste oil drums are used in the production of recycled pipes, converting waste into valuable resources. Additionally, expired paint and waste wires are being repurposed as educational materials at the in-house Technical Training Center. In 2024, materials worth KRW 240 million were converted for educational use. These recycling activities go beyond reducing waste, contributing to sustainable environmental management and efficient resource use.

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Environmental Pollutant Management

Waste Management and Resource Circulation

Resource Use Efficiency

Reduction in Raw Material Purchases through Improved Structural Steel Yield

Hanwha Ocean reduced the purchase of 12,000 tons of steel out of the total scheduled for procurement in 2024 by enhancing nesting drawing preparation, changing scrap standards, and optimizing purchase specifications.

Water Resource Management

Identifying Water-Related Risks and Opportunities

To identify water-related risks and opportunities, Hanwha Ocean analyzed key water-associated capital and assessed their financial impact. This process identified the wastewater treatment plant's effluent supply system as a major opportunity. Introduced in 2023, this system establishes an effective water resource circulation by recycling treated wastewater for use as ship ballast water.

Financial Impact Analysis of Water Resource Opportunities

Hanwha Ocean's analysis confirmed the importance of effluent recycling. We quantitatively analyzed the financial effects of recycling wastewater treatment plant effluent as ship ballast water. In 2024, this resulted in a KRW 113 million financial benefit. This system reduces fresh-water consumption, ensures operational stability, and contributes to efficient water use and improved reuse rates.

Financial Impact Analysis of Recycled Water Supply

Category	2022	2023	2024
Recycled Water Supply	89,087 ton	176,128 ton	210,973 ton
Savings Amount	KRW 48 million	KRW 95 million	KRW 113 million

Air and Water Pollutant Management

Air and Water Pollutant Management Procedures

Air Pollutant Management

Hanwha Ocean manages air pollutants by setting internal standards at less than 30% of the emission allowance limits. We have been progressively replacing aging air pollution prevention facilities and thoroughly replacing consumables (bag filters, activated carbon, etc.) to maintain the facilities. In particular, to reduce Hazardous Air Pollutants (HAPs), Volatile Organic Compounds (VOC) reduction devices were newly installed over five years from 2018 to 2022 in large painting factories with volumes exceeding 50,000m³ Total Hydrocarbon (THC) concentrations are measured semiannually at these prevention facilities, and filters and zeolites used in the facilities are regularly inspected and replaced to suppress VOC emissions.

Air Environment Management Procedures

Pollutant Generation	Operation of Prevention Facilities	Treatment Feasibility Review	Data Review	Record Keeping
• Generation of air pollutants during processes	• Proper operation of prevention facilities installed at emission sources to reduce pollutants	• Evaluation of prevention facility adequacy based on pollutant measurement and analysis	• Review of data reliability through pollutant analysis	• All processes are documented and performance is reported

Water Pollutant Management

Sewage and wastewater generated within the Geoje shipyard are properly treated through on-site sewage treatment plants, wastewater treatment facilities, and external consignment treatment companies according to internal management procedures.

Water Quality Environment Management Procedures

Wastewater Generation	Environmental Assessment	Treatment Feasibility Review	Wastewater Treatment	Record Keeping
• Wastewater generation during business activities	• Analysis of physical, chemical, and biological properties of wastewater and environmental impact assessment	• Effectiveness evaluation through analysis of wastewater characteristics and treatment methods	• After treatment review, self-treatment or consignment treat-ment is conducted	• All processes are documented after treatment and performance is reported

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Environmental Pollutant Management

Waste Management and Resource Circulation

Air and Water Pollutant Management Strategy

Hanwha Ocean is leading the management of air and water pollutants by setting strengthened internal management standards at 30% of the legal emission limits for air and water pollutants to ensure sustainable environmental protection. In particular, to reduce air pollutants, following the first and second agreements in line with government policy, we have signed the third voluntary agreement on fine dust (2025–2029) with Gyeongsangnam-do Province. As a result, we have voluntarily identified fine dust reduction measures and actively implemented reduction activities, leading to our recognition as an 'Excellent Business Site for Voluntary Agreement to Reduce Particulate Matter' with an award from the Governor of Gyeongsangnam-do in 2024.

Hanwha Ocean Water Pollutants Management Standards

Facility	Water Treatment Technology							
	Item	Unit	Legal Standard	Internal Standard[1)]	Item	Unit	Legal Standard	Internal Standard[1)]
Wastewater Treatment Plant	pH	pH	5.8~8.6	5.8~8.6	Cu	mg/L	5	1.5
	TOC	mg/L	50	25	Ni	mg/L	5	1.5
	SS	mg/L	80	10	Mn	mg/L	10	3
	n-H (Mineral Oil)	mg/L	5	1.5	Ba	mg/L	2	0.6
	n-H (Copper)	mg/L	30	9	Zn	mg/L	5	1.5
	T-N	mg/L	60	20	Fe	mg/L	10	3
	T-P	mg/L	8	2	Cr	mg/L	2	0.6
	F	mg/L	15	4.5	Diethylhexyl Phthalate	mg/L	0.02	0.006
	ABS	mg/L	5	1.5	Dichloromethane	mg/L	2	0.6
	Phenols	mg/L	3	0.9	Ecotoxicity (TU)	TU	2	1
Sewage Treatment Plant	pH		5.8~8.6	5.8~8.6	T-N	mg/L	20	6
	BOD	mg/L	10	3	T-P	mg/L	2	0.6
	SS	mg/L	10	3	Total Coliforms	mg/L	3,000	900

1) Approximately 30% of Discharge and Legal Standards Level

2024 Air and Water Pollutant Management Performance and 2025 Targets

Metric (Approximately 30% of Legal Standards)		2024		2025
		Target	Performance	Target
Air	Compliance Rate with Internal Standards for Air Pollutant Emissions	98%	91.7%	93%
Water	(Total Water) Compliance Rate with Internal Standards for Water Pollutant Emissions	99%	97.7%	99%
	Compliance Rate with Internal Standards for Wastewater Pollutant Emissions	–	100%	–
	Compliance Rate with Internal Standards for Sewage Water Pollutant Emissions	–	90.3%	–

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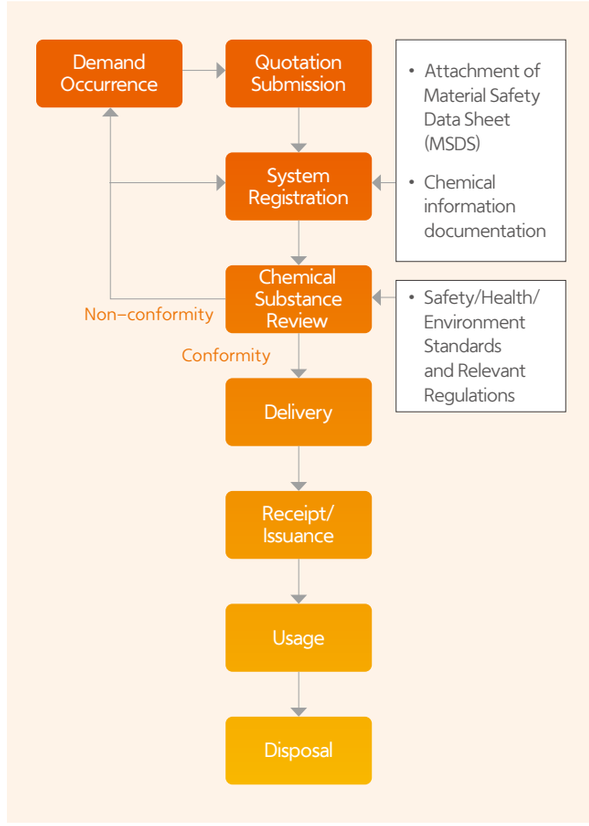
Environmental Pollutant Management

Chemical Management

Chemical Substance Management Procedure

Hanwha Ocean thoroughly manages all processes from the purchase to disposal of chemicals used in shipbuilding to minimize negative impacts on the health of employees and the environment. We strive to ensure the safe use of chemicals through continuous enhancement of our management practices.

Chemical Substance Management Procedure



Chemical Management Strategy

Hazardous Chemicals Management and Phase-Out Plan

In 2022, as some main components of antifouling paints for ships were newly designated as toxic substances, Hanwha Ocean has strictly complied with related legal requirements and worked to ensure safe usage management. In November 2024, we obtained a business license for the use of hazardous chemicals. Additionally, to replace hazardous substances in antifouling paints, our painting research organization is developing antifouling paints in collaboration with paint manufacturers, and in 2024, completed performance verification of ecotoxic antifouling paints containing less than 1wt% of substances with acute human toxicity.

Chemical Substance Management System

Hanwha Ocean is applying and promoting various measures including building an automatic check system, developing AI-based search and alarm functions, conducting surveys on owner/vendor customs-cleared goods, and manual management. Through these efforts, we continuously monitor chemical emission amounts and strengthen compliance and management measures.

Chemical Management System Improvement Activities

Key Activities	Contents
Addressing Oversights in Chemical Product Identification During Material Code Setup	At Hanwha Ocean, to address the issue of omitted necessary checks caused by human error during the creation of material codes for chemical products such as paints, welding materials, and oils, two measures have been implemented. First, for already registered chemical products, a system will be established to automatically perform checks during material code creation. Second, beginning in the first half of 2025, a Health, Safety, and Environment (HSE) review procedure will be incorporated into the material code creation process to further strengthen chemical management. These improvements will help minimize errors in material code creation for chemical products and enable more systematic chemical management.
Management of Chemical Products Received as Equipment Accessories	At Hanwha Ocean, an issue was identified where chemical products (e.g., lubricants, adhesives) received as equipment accessories were not properly recognized during material code creation. To address this, a system will be established to automatically detect chemical product-related terms during new material code creation, and request reviews from responsible personnel. In 2025, an AI-based term search and alert function will be developed and implemented. These enhancements are expected to strengthen the management of chemical products received as accessories and more effectively resolve related issues.
Management of Chemical Products Directly Purchased by Owners/ Vendors	Hanwha Ocean recognized that chemical products directly purchased (customs cleared) by owners or vendors are not currently managed by the system, posing legal risks. To address this, after identifying the types, quantities, and movement routes of owner-supplied products, a usage confirmation and review process will be established by October 2025. In addition, a comprehensive survey of customs-cleared goods supplied via owners or vendors will be conducted, and relevant organizations will implement manual management. These measures will enhance the management of chemical products directly purchased by owners or vendors and help mitigate legal risks.

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Environmental Pollutant Management

Key Subsidiary Activities

Hanwha Ocean Ecotech

Waste Management

Hanwha Ocean Ecotech legally processes waste to proactively prevent environmental hazards within the company and strives for resource conservation and environmental preservation. Upon waste generation, waste management and disposal plans are established, and waste is managed in compliance with legal standards. Waste volumes are monitored at waste and waste wood collection sites, and generated waste is entrusted to waste transport and disposal companies for recycling, incineration, landfill, and other methods. Additionally, to promote waste recycling, we implement a waste reduction initiative that includes separate storage and processing of waste wood and waste plastics.

Air and Water Pollutant Management Strategy

Wastewater and sewage generated on-site are legally treated through direct pipelines from sewage and wastewater collection tanks to public wastewater treatment plants according to internal management procedures. Air pollutants are sampled at legally required intervals by contracted self-measurement agencies, and compliance with emission standards is confirmed through test reports. Furthermore, we have established internal management standards set at 30% of existing legal emission limits for air pollutants to lead pollutant management for sustainable environmental protection. In particular, to reduce pollutants emitted into the air, active reduction activities are implemented through coordinated management between production and support departments in line with government policies.

2024 Air Pollutant Management Performance and 2025 Target

Metric	2024		2025
	Target (30% of Legal Standard)	Performance	Target
Compliance Rate with Legal Standards for Air Pollutant Emissions	95%	93%	95%

Hanwha Ocean Shandong Corporation

Environmental Training

Hanwha Ocean Shandong Corporation endeavors to enhance environmental protection awareness through mandatory training and strengthen the participation and practical actions of all employees in environmental protection.

Environmental Training Implementation Details

Training	Date	Purpose	Attendees
Waste Classification Training	March, November 2024	• Enhance awareness of waste segregation and environmental protection	All employees
Specialized Training	June 2024	• World Environment Day awareness and education	All employees

Stakeholder Engagement

Hanwha Ocean Shandong Corporation recognizes the importance of environmental management tasks and promotes routine supervision by local public institutions as well as effective cooperation with external industries. We practice lawful and compliant environmental management and strives to improve latent environmental risks.

Key Stakeholders of Hanwha Ocean Shandong Corporation's Environmental Management

Stakeholders	Entities	Issues and Responses
Public Institutions	• Yantai Ecological Environment Bureau • Economic Development Zone Construction and Transportation Bureau • Economic Development Zone Comprehensive Enforcement Bureau	Pollution discharge permits, hazardous waste reporting, exhaust gas emission standard management

Air and Water Pollutant Management Strategy

Hanwha Ocean Shandong Corporation invested RMB 24 million to upgrade VOCs purification facilities within the factory in 2023 to strengthen VOCs emission management in accordance with local environmental regulations. In 2024, the company maintains and manages VOCs daily average emission concentration below 10mg/m^3 (emission standard) through the operation of a real-time monitoring system operations.

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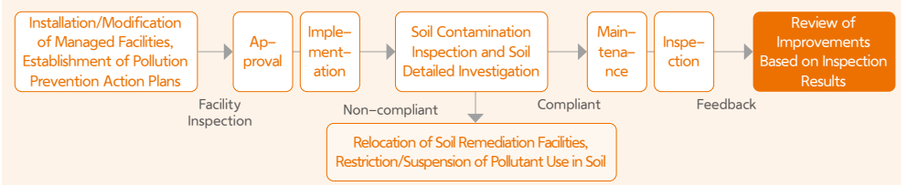
Biodiversity Protection

Ecosystem Environmental Impact Management

Soil Pollution Management Procedure

Hanwha Ocean has established and operates a dedicated management system for soil environment management and protection, striving to protect soil ecosystems and conserve the environment legal compliance in soil pollution prevention and remediation activities.

Soil Environment Management Procedure



Soil Contamination Inspection Overview

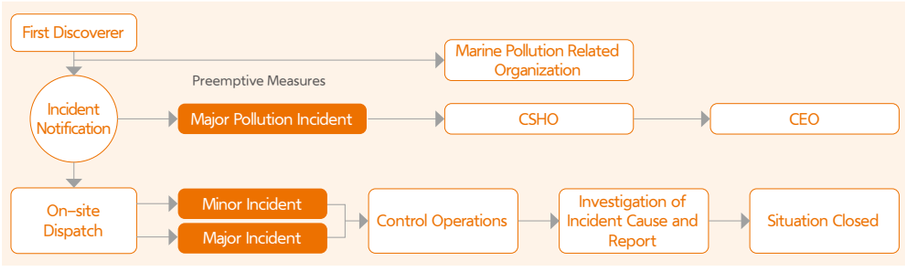
Category	Number of Facilities	Inspection Exemption	Inspection Target[1]	Inspection Status[2]			
				2021	2022	2023	2024
Soil Contamination Inspection	91	69	22	6	26	8	9
Leakage Inspection	91	54	37	2	2	5	3

1) As of 2024 (Inspection cycles vary by facility)
2) 100% of facilities subject to inspection have been completed annually; inspection status includes inspections exempted for new facilities

Marine Pollution Management Procedure

Hanwha Ocean has established a systematic management system for marine pollution prevention and codified marine pollution management response procedures within the company's regulations. Detailed response procedures for potential incidents have been developed to enable prompt, situation-specific actions for various scenarios.

Marine Pollution Incident Response Procedure



Environmental Impact Assessment

Post-Environmental Impact Assessment Execution

Since being designated as an industrial base development zone in 1974, Hanwha Ocean has conducted annual post-environmental impact assessments through third-party organizations. In particular, quarterly surveys of marine flora and fauna are conducted to investigate the types, distribution, ecological roles, and interactions of marine organisms around the business site, identifying changes or pollution impacts on the marine environment. Based on these findings, management and protection plans for marine resources are established. Hanwha Ocean's marine flora and fauna surveys target phytoplankton, zooplankton, intertidal benthic animals, subtidal benthic animals, and algae within the Okpo National Industrial Complex.

Hanwha Ocean regularly surveys marine flora and fauna in the Okpo National Industrial Complex ('business district') and surrounding areas. Samples from 2–5 sites target phytoplankton, zooplankton, benthic animals, and algae. Ecological indices are calculated and cluster analysis performed to understand characteristics. Results show no significant changes in processes or environmental impact compared to previous assessments.

Environmental Impact Survey Results (Q4 2023 – Q3 2024)

Detailed Item		Average Number of Species	Ecosystem Metric per Item
Zooplankton		24	750 indiv./m^3 (Average Count)
Phytoplankton	Surface Layer	39	418,008 cells/L (Average Abundance)
	Bottom Layer	38	473,733 cells/L (Average Abundance)
Subtidal Benthic Animals		27	109 indiv./2.0m^2 (Average Density)
Intertidal Benthic Animals		28	217 indiv./2.0m^2 (Average Density)
Algae		14	278.06 gWWt/2.0m^2 (Average Biomass)

Implementation of Measures to Mitigate Impacts on Marine Flora and Fauna

Suspended solids can affect the reduction in zooplankton and attached organism units due to decreased phytoplankton production and decline. Additionally, oil spills can lead to reduced underwater oxygen levels caused by limited photosynthesis, secondary contamination to humans, and prolonged ecosystem restoration. Hanwha Ocean has implemented measures such as installing double pollution barriers, laying filter gravel and filter mats inside the revetment followed by landfill, deploying oil pollution control equipment and chemicals, and properly treating waste oil generated from vessels to minimize impacts on marine flora and fauna. Furthermore, we have established a marine pollution control system and are implementing mitigation measures, including continuous monitoring.

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Biodiversity Protection

Biodiversity Conservation Efforts

Hanwha Ocean recognizes the importance of protecting and restoring biodiversity and regards it as a significant risk in corporate management and business execution. Biodiversity is an essential element that maintains the health and stability of ecosystems through complex interactions among life forms on Earth. With this understanding, Hanwha Ocean strives to minimize the negative environmental impacts of own operations on local biodiversity. Furthermore, in 2024, Hanwha Ocean revised the Environmental Policy to include related provisions, reinforcing our commitment to biodiversity protection. Additionally, in 2025, we plan to establish biodiversity and deforestation prevention policies to further strengthen our conservation efforts.

Prevention of Marine Waste Discharge

Hanwha Ocean acknowledges the shipbuilding industry's impact on biodiversity and marine ecosystems, striving to build a sustainable marine ecosystem. To prevent marine pollution from pollutants discharged by vessels, we implement regular preventive measures at each stage of ship processes, including management of spill response equipment, maintenance, and operational checks. By supporting oil fence installation, we prevent marine oil slick contamination during sea trials and collect floating debris once daily. Additionally, with a sense of responsibility toward local communities, Hanwha Ocean regularly conducts training for handling land waste caused by natural disasters such as typhoons and prepares for marine pollution emergencies, working to protect ecosystems around the business sites.



Oil Fence Installation

Prevention of Marine Ecosystem Disruption Caused by Ships' Ballast Water

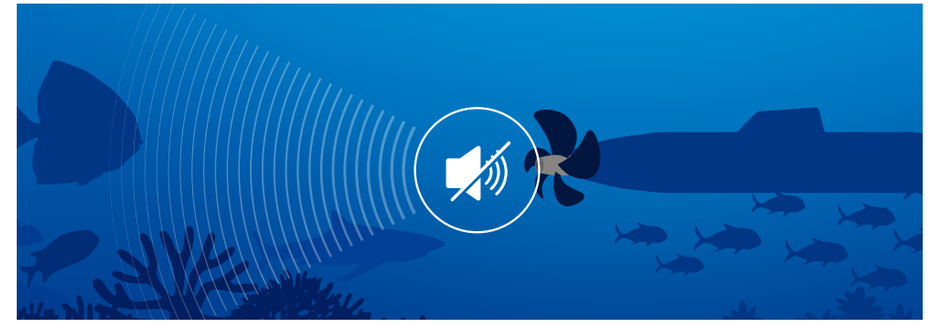
Hanwha Ocean strives to prevent disruption of marine ecosystems caused by ships' ballast water during vessel operations. Ballast water, used to ensure vessel stability, is discharged in different regions during navigation, transporting species from their original habitats to new environments. This species transfer can disturb ecosystem balance and threaten native ecosystems as invasive species proliferate in new habitats. Recognizing this issue, Hanwha Ocean employs top-tier ballast water treatment technology to prevent species transfer when taking in or discharging ballast water. This technology simultaneously enhances marine ecosystem protection and vessel operational safety. Hanwha Ocean's efforts reflect strategic direction aimed at protecting marine ecosystems and promoting sustainable vessel operations. These initiatives play a vital role in preserving marine biodiversity through environmental responsibility and commitment to sustainable practices.

Development of Underwater Radiated Noise Reduction Technology

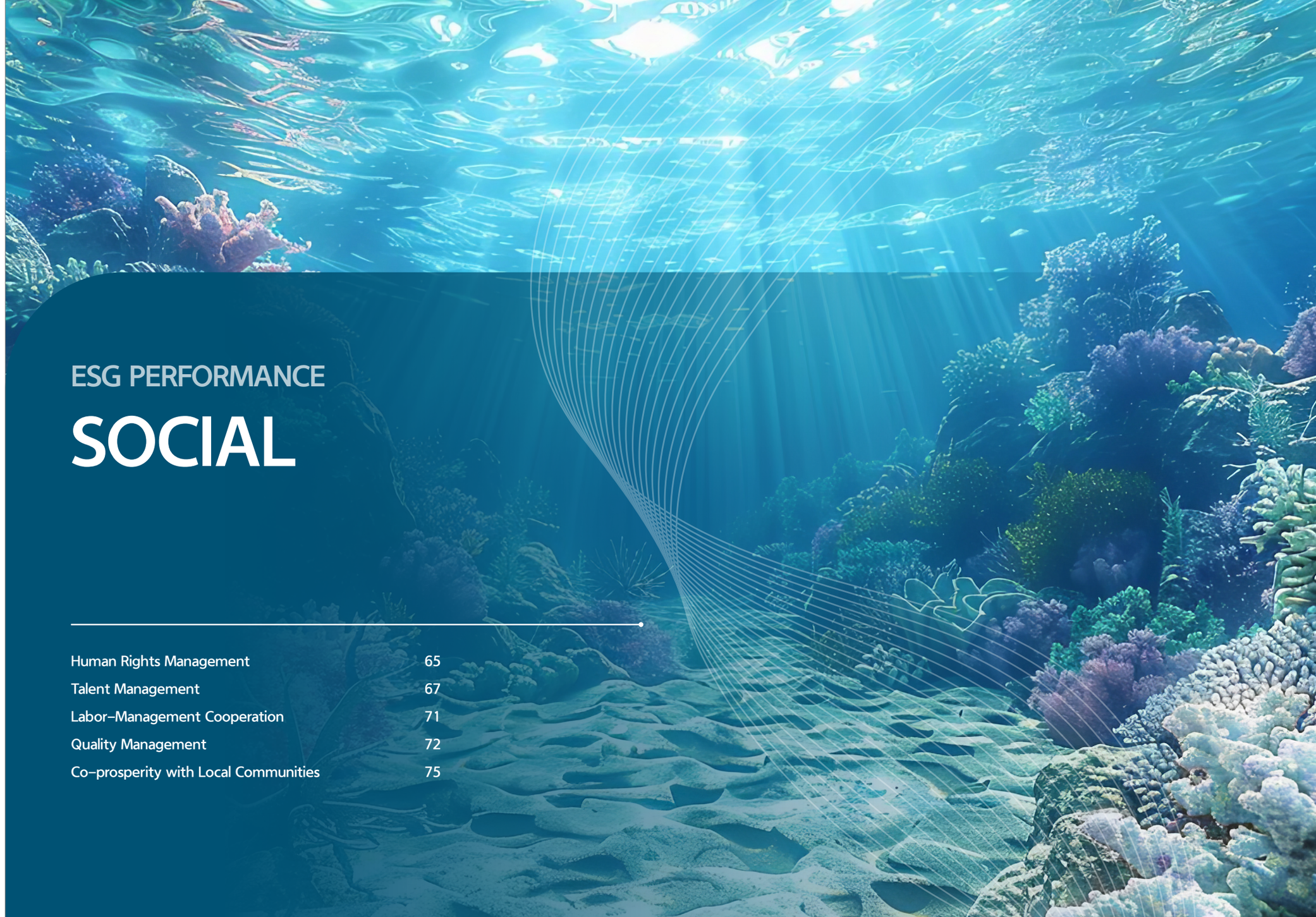
Hanwha Ocean is committed to continuous technological development aimed at reducing underwater radiated noise from vessels. Just as modern humans experience stress from inter-floor noise, underwater radiated noise is identified as a major cause of marine ecosystem disruption. Hanwha Ocean has successfully reduced noise by approximately 5dB overall using the 'Air Lubrication System (ALS)' technology, although noise reduction varies across frequency bands. We also analyze the primary causes of underwater radiated noise and pursues further research and development based on these findings. These ongoing efforts are expected to contribute to minimizing the impact on marine ecosystems during vessel operation.

Development of Naval Vessel Noise Reduction Technology

Driven by the mission to become a GLOBAL TOP TIER defense group, Hanwha Ocean is dedicated to developing technologies to reduce underwater radiated noise from naval vessels. As the first company in South Korea to build submarines and with technical expertise in designing and constructing the world-class diesel submarine Jangbogo-III, Hanwha Ocean has contributed to improving naval vessel underwater radiated noise performance using acoustic tank facilities and underwater noise measurement equipment. We continuously identify and improve noise reduction measures through accumulated experience, including dynamic characteristic testing of submarine structures for noise reduction and developing soundproofing measures to reduce internal air and living noise within vessels. These efforts contribute to meeting naval performance requirements while minimizing the impact of human activities on marine ecosystems.



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Human Rights Management

Human Rights Management System

Human Rights Management Organization

Hanwha Ocean places people at the center of everything and pursues Human Rights Management according to the ESG Framework 'GO PLUS+' emphasizing communication and respect. The ESG Committee, a board committee, serves as the highest decision-making body for Human Rights Management, deliberating and resolving key matters. The CEO establishes detailed plans to efficiently oversee and execute Human Rights Management, setting up necessary systems, procedures, and organizations including grievance remedy mechanisms. The HR Department, as the dedicated organization, is delegated authority from the CEO to establish and implement annual human rights promotion plans, and oversees human rights education, impact assessments, and remediation procedures. The ESG Office supports by sharing updates on human rights-related international standards, regulations, and laws, and assists with Hanwha Ocean's ESG strategy, planning, information disclosure, and stakeholder engagement.

Human Rights Management Organization



Declaration and Policy on Human Rights Management

Hanwha Ocean recognizes the importance of human rights and protects and respects those of all stakeholders including executives, employees, suppliers, customers, and local communities. The CEO has declared Human Rights Management to uphold responsibilities in line with domestic and international human rights laws and regulations and international standards such as the Universal Declaration of Human Rights and the UN Guiding Principles on Business and Human Rights. All executives and employees adopt this Declaration as their code of conduct and value judgment standard in practice.

Hanwha Ocean has established a Human Rights Management policy and system for implementation. This policy includes processes for human rights impact assessments and grievance procedures. The declaration and policy aim to prevent all forms of discrimination and harassment ensuring all stakeholders are respected in a safe environment while valuing diversity. We also stipulate freedom of association and collective bargaining, compliance with working conditions, prohibition of forced labor, supply chain management, protection of community and customer human rights, and environmental rights guarantee.

Human Rights Management Declaration | Human Rights Management Policy

Human Rights Risk Management

Human Rights Management Roadmap

Hanwha Ocean has established a Human Rights Management roadmap for phased implementation and plans to progressively enhance it.

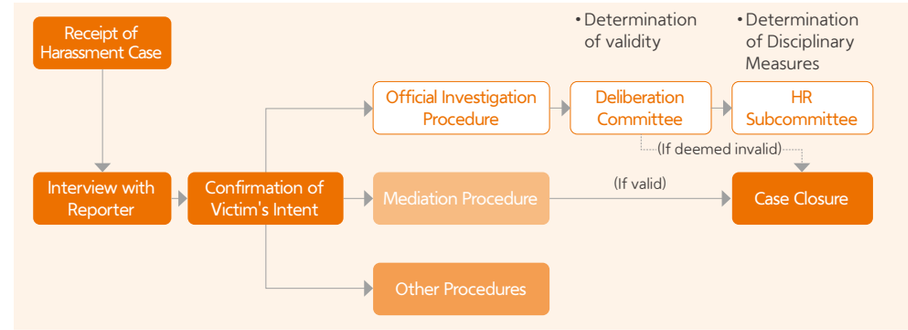
Human Rights Management Roadmap

2024	2025 (Establishment Phase)	2026–2027 (Internalization Phase)	2028–2030 (Expansion Phase)
Declaration of Human Rights Management and Policy and Establishment Governance Setup	Human Rights Risk Inspection and Human Rights Impact Assessment Implementation	Enhancement of Human Rights Impact Assessment	Expansion of Human Rights Risk Inspection Scope

Human Rights Grievance Handling

Hanwha Ocean prohibits all forms of discrimination based on personal characteristics such as age, disability, race, gender, religion, as well as harassment, sexual harassment, and disrespectful or inappropriate behavior. For human rights violations, anyone including executives, employees, and supplier company staff (victims, representatives, witnesses) can safely report through an anonymous whistleblowing system (Sinmungo). Reports can be made via the company website, intranet, email, KakaoTalk, or text messages. We provide ongoing psychological counseling to support affected employees and operates a Deliberation Committee with labor union-recommended members and lawyers for fair resolution of cases. Victims' identities are strictly protected, and appropriate corrective actions or disciplinary measures are taken against perpetrators according to company policies.

Hanwha Ocean Human Rights Grievance Handling Process



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Human Rights Management

Human Rights Protection Activities

Human Rights Training

Hanwha Ocean operates various human rights training programs to establish a culture of respect for human rights and enable all executives and employees to practice human rights management. To foster an atmosphere of respect for human rights throughout the company, we run human rights training programs related to sexual harassment prevention, workplace bullying prevention, and disability awareness. Human rights training is conducted for at least 4 hours per employee.

Human Rights Training Implementation

Metric		Unit	2021	2022	2023	2024
Human Rights Training Hours per Employee		Hours	4	4	4	4
Type	Sexual Harassment Prevention Training	Hours	1	1	1	1
	Workplace Bullying Prevention Training	Hours	1	1	1	1
	Disability Awareness Training	Hours	1	1	1	1
	Information Security Training	Hours	1	1	1	1

Foreign Worker Human Rights Training

Hanwha Ocean provides dedicated human rights training for foreign workers in addition to legally mandated training, aiming to foster mutual respect and understanding as the number of multinational workers increases. The program focuses on challenges foreign workers face in unfamiliar environments, helping domestic employees understand multiculturalism and overcome biases. Emphasizing that cultural differences are not 'wrong' but simply 'different', we conducted country-specific cultural awareness and colleague sensitivity training in October 2024 for team leaders, part leaders, and site managers across 16 organizations initially employing foreign workers. We plan to expand global communication training to all employees to further protect the human rights of foreign workers employed by supplier companies.

Protection of Vulnerable Groups

Hanwha Ocean implements various policies to ensure the safety and fundamental rights of all workers regardless of nationality. To support multinational workers with differences in culture, safety, and human rights understanding, we provide basic Korean language and job training, along with mandatory safety training in local languages to all new hires. We also conduct mentoring activities to help them adapt more stably. To overcome language barriers, we operate coordinators providing interpretation/translation support for eight countries including Nepal, Thailand, Vietnam, and Uzbekistan, and plan to expand the number of countries and scale of coordinator operations as multicultural workers increase.

To help foreign workers settle in at the Geoje shipyard, we operate a dedicated mobile portal accessible at all times, providing key HSE notices, safety phrases, site terminology, and everyday Korean in audio and translated formats. We have also established a confidential channel where anyone can comfortably seek consultation or express concerns, supporting communication in their native languages. Additionally, to facilitate integration into the local community, we plan to expand activities such as Korean cultural experiences and support for club activities.

Trainings for Vulnerable Groups in 2024

Type	Details
Local Korean Intensive Training	Support for 6-week Korean language course in home country before entry (Korean culture, daily expressions, 12 safety rules, etc.)
Korean Language Training	Level-based training according to Korean conversational ability (development and operation of basic, beginner, intermediate, and advanced courses)
Job Training	Specialized training courses for specific job tasks (welding, painting, electrical work)

Key Support Activities in 2024

Category	Details
Improvement of Residential Facilities	Securing and remodeling dormitories exclusively for foreign workers
Foreign Worker Mobile Portal	– Provision of guidance on using convenience facilities such as banks and medical clinics within the Geoje shipyard – Provision of life handbook including safety information and major notices ※ Available in 8 languages
Meal Menu Provided in Local Languages	Meal plans and types of meat (e.g., pork, beef) provided in 8 languages to comply with dietary restrictions based on nationality/religion
Settlement Support	– Distribution of cold weather supplies for workers vulnerable to cold – Networking Events for Foreign Workers in collaboration with Local Governments

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Talent Management

Talent Development

Recruitment

Hanwha Ocean aspires to nurture 'Great Challengers' with a mindset of ownership, exceptional distinction, and adaptability.

Hanwha Ocean Talent Profile

Embracing Responsibility and Engagement **Ownership**	Exceeding Established Norms **Exceptional Distinction**	To Seize Future Opportunities **Adaptability**
• The one who is far-sighted perceives the bigger picture without being swayed by short-term influences. • We think and make decisions with a complete sense of ownership. • The one who brings an idea to life is the rightful owner.	• True innovation stems from a complete overhaul. • We dedicate ourselves to the excellence of one rather than the adequacy of many. • Excellence lies in the details, and glory is in persistence.	• We remain vigilant with humility, unaffected by the intoxication of success. • Without a sense of crisis, the hare will inevitably lose to the tortoise. • Changes cannot be forecasted. We prepare for rain even on clear days.

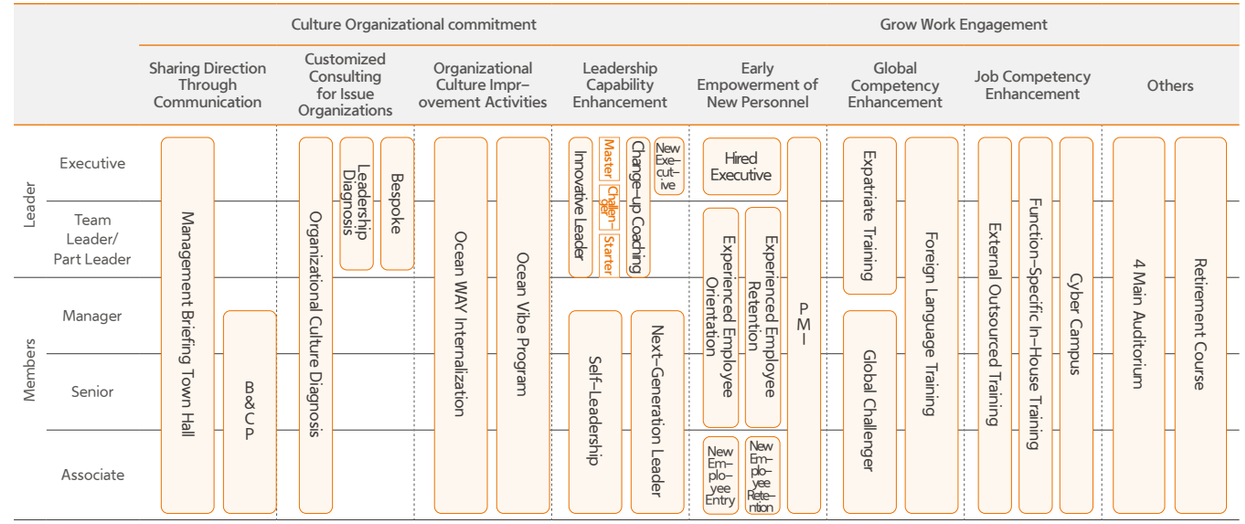
Amid the transformation of the shipbuilding and marine industry driven by clean and digital transitions, Hanwha Ocean strives to lead innovation and secure talent with global competitiveness. In this process, we are committed to securing diverse talent regardless of gender, age, nationality, race, or religion. All recruitment is conducted through open calls and managed transparently and fairly via a recruitment management system. For entry-level recruitment in particular, we operate a hiring process that comprehensively evaluates not only job expertise but also the applicant's potential, growth capability, and fit with Hanwha Ocean's vision and culture through a two-month internship. We also engage in various collaborative activities with universities closely related to the industry to secure outstanding talent. We continue our efforts in this regard.

Training System

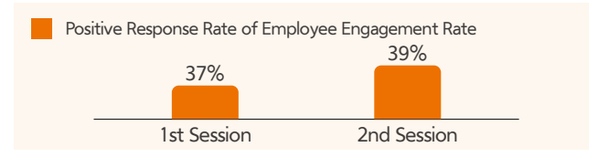
Based on Hanwha Group's core values of 'Challenge, Dedication, and Integrity' and Hanwha Ocean's aspirations of 'Uncompromising Safety, Excellent Operations, Unique Technology', we have established an organizational culture and training system to achieve our management goals. In 2024, aiming for mid- to long-term talent development, we have established a systematic training roadmap providing training programs tailored to job roles, ranks, and situations. For production staff, in addition to leadership and tier-specific training, we conduct special training such as consortium project candidate development courses, construction machinery operator safety training, job training, global communication training, and social integration programs.

Furthermore, Hanwha Ocean conducts satisfaction surveys with participating executives and employees for all training sessions and develops performance measurement metrics suited to each training's characteristics and organizational culture activities to continuously improve them. In 2024, to measure the effectiveness of various organizational culture activities, we conducted two organizational culture surveys and confirmed an increase in employee organizational commitment.

Hanwha Ocean Training System



Training Effectiveness Evaluation in 2024



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Talent Management

Training Program

Support for New Employee Onboarding

Hanwha Ocean provides various support to facilitate smooth organizational adaptation for new employees. For experienced hires, buddy matching and onboarding/buddy manuals are provided to assist adjustment in unfamiliar organizations. Monthly orientation courses for experienced employees and retention programs every six months help deepen understanding of the company and support networking among experienced staff. New employees participate in training on shipbuilding, the company, and production sites at the Geoje shipyard after joining, and learn the group's philosophy and various job competencies necessary for new employees at the Group Talent Management Institute. Additionally, annual retention programs offer time to reflect on oneself and work away from busy tasks.

Support for Strengthening Leadership Competencies

Hanwha Ocean conducted various leadership training programs redefining leaders' roles and enabling executives, team leaders, and part leaders to lead their organizations in the right direction. Training included motivation, communication skills, performance coaching, and other soft skills–based training, along with sessions sharing individual cases of change. In 2025, based on this foundation, courses will be provided for focused acquisition of leadership competencies needed by each individual to cultivate leaders who can drive organizational change.

Workshops on Transforming Work Culture for All Employees

Over two months in 2024, Hanwha Ocean conducted workshops for approximately 3,000 general employees to recognize the need for change, identify improvement tasks independently, discover desired directions, and encourage voluntary participation in change. Highly capable employees with strong understanding of the company were selected as internal instructors, and a total of 44 internal instructors led the workshops. Post–workshop satisfaction surveys showed that many participants empathized with our commitment to change and found motivation for mutual growth of the company and individuals.

Company–wide ESG Newsletter Publication

Hanwha Ocean publishes a monthly company–wide ESG newsletter to share key ESG trends and news with all employees, promoting awareness by highlighting importance of ESG within the industry. As a company committed to developing carbon–neutral products and technologies, Hanwha Ocean provides diverse information to encourage employee engagement in ESG. Additionally, ESG training was conducted for the Board of Directors in May 2025, and we plan to gradually expand its regular ESG training system.

Evaluation and Compensation

Performance Evaluation System

Hanwha Ocean operates a performance evaluation based on the Management By Objective (MBO) system and conducts an annual achievement evaluation. In the first half of the year, top–level goals are established by organization during goal–sharing meetings, which are then assigned to individuals to set personal goals. In the second half, progress toward goals is reviewed mid–term and feedback to members is monitored. Hanwha Ocean implements personnel evaluations not merely as scoring and rating but as a system to objectively diagnose members' performance and capabilities and suggest growth directions, thereby enhancing fairness and trust in evaluations.

Reward Systems Including Awards and Incentive Payments

Since May 2023, Hanwha Ocean has revised internal regulations and policies to introduce a Restricted Stock Unit (RSU) system as long–term performance–based stock compensation. Notably, from July 2024, team leaders can opt for a new RSU program called 'Leader Incentive', replacing existing team leader allowances, enabling them to participate in decision–making on par with executives from a long–term perspective and take a leading role in strategy execution.

RSU System Operation Procedures

Category	Details
Grant Procedures	–Decisions on grant scale and vesting periods for registered executives including the CEO are made through resolutions of the Board of Directors/General Shareholders' Meeting. –At payment timing, stock value of Hanwha Ocean's common shares is calculated based on reference stock price within 200% of the base salary of the recipient, according to set criteria; payment is made after vesting period elapses. –Vesting conditions and grant quantities may be adjusted or canceled according to established criteria.
Payment Procedures	–Determination of payment scale at the Board of Directors and General Shareholders' Meeting (when approving the compensation limit for directors, approval is obtained separately by listing the total compensation amount based on the amount). –Payment is made upon fulfillment of the vesting period.

RSU Grant and Payment

Grant Timing	Grant Target/Number of Personnel	Total Quantity Granted (Based on Reference Stock Price)	Payment Timing	Unpaid Quantity	Cancelled Quantity
First Half of 2024	Registered Executives/ 2 persons Unregistered Executives/ 23 persons	342,506 shares (KRW 25,768/share)	Upon fulfillment of vesting conditions	342,506 shares	None
	Employees/3,044 persons	429,940 shares (KRW 29,088/share)		416,978 shares	12,832 shares
Second Half of 2024	Unregistered Executives/ 50 persons	35,550 shares (KRW 31,171/share)		35,550 shares	None
	Employees/954 persons	155,644 shares (KRW 31,672/share)		155,006 shares	638 shares

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Organizational Culture Improvement

Organizational Culture

Activation of Internal Communication

Hanwha Ocean strives to foster a healthy organizational culture by enhancing mutual understanding and communication between management and employees, as well as among employees themselves, through various communication channels and programs. In particular, through the activities of B&CP (Business & Culture Partner) selected at each business unit level, we disseminate our strategies and directions throughout the organization, fostering consensus among employees and facilitating open communication within the organization. Town Hall meetings serve as a platform for two-way communication between management and employees, allowing employees to understand each business unit's strategy. These meetings share key management indicators and long-term strategies, aligning employees with Hanwha Ocean's goals and direction. Communication is further enhanced through various channels, including online platforms, face-to-face interactions, and both large and small gatherings. To support foreign workers' integration and foster a cohesive organizational culture, Hanwha Ocean hosts an annual 'Warm Winter' event. This initiative provides winter supplies to about 2,400 new foreign workers from both direct employment and supplier companies, while also gathering valuable on-site feedback.

Work-Life Balance

Hanwha Ocean enhances autonomy and responsibility among executives and employees by fostering a flexible work culture, thereby improving work engagement and work-life balance. As of 2024, a flexible working hours system is available for all employees, with approximately 34.3% utilizing it. Additionally, various maternity protection measures are provided for pregnant workers.

Key Communication Activities in 2024

Category		Details
Communication Between Management and Employees	Speech	• Formation of employee consensus on our vision and direction through CEO letters, New Year's and year-end addresses, encouragement speeches, safety messages, etc.
	Town Hall	• Talk-show style meetings where each business unit head meets face-to-face with employees – Purpose: Share business unit strategies and vision, foster unity through communication, understand business unit direction
	Management Briefing	• Quarterly interviews on performance with management and dissemination of interview content through the company newspaper (Ocean View) and internal broadcasting (Hanwha TV)
Operation of Business & Culture Partner		• Dissemination of vision and strategy throughout the organization, fostering a healthy organizational culture where members can empathize with organizational direction – Role: Operate open communication channels and act as facilitators of innovative change within the organization – Composition (Total 123 persons): Manufacturing Division 48, Commercial Vessels 39, Naval Ship 21, Product & Technology Strategy 15 – Activities: Regular meetings (once every two months), participation in workshops, hosting business unit and team meetings (Townhall), leading communication/change activities, sharing activity results and information through communication channels
Change Management Workshop	Internalization of Ocean Way	• Organizational culture campaigns, internalization activities, and training conducted to achieve Hanwha Ocean's three goals: uncompromising safety, excellent operations, and unique technology.
	(Team) Way of Working (WOW) Workshop	• Ongoing workshops to review team working methods and enhance synergy to achieve team goals
	(Inter-team) Cross-functional Workshop	• Inter-team workshops focused on agendas requiring collaboration or problem-solving to prioritize tasks and eliminate inefficiencies
Positive Experience Program	Warm Winter	• Communication time sharing opinions from foreign workers (cultural differences, difficulties adapting to the site, etc.) • Event distributing winter protection supplies in preparation for the local and different Korean winter climate

Key Maternity Protection and Work-Life Balance Programs

Category	Program	Details
Maternity Protection System	Childbirth Congratulatory Money	• Maternity leave (20 days), congratulatory money of KRW 1 million per child
	Pregnant Worker Support Policies	• Dedicated parking spaces for pregnant workers • Support for Mom's Package • Four hours of paid leave during regular health check-ups
	Parental Leave, Reduced Working Hours During Childcare Period, etc.	• Free use by employees according to legal standards
Work-Life Balance Systems	Flexible Working Hours System	• Choice of working hours: 07:00–16:00, 08:00–17:00, or 09:00–18:00
	Flexible Lunch Break (Seoul)	• Option for 1.5-hour lunch break in Seoul Office
	Annual Leave Split Usage System	• Annual leave: Flexible use in half-day or quarter-day increments

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Organizational Culture Improvement

Organizational Culture

Organizational Culture Survey

Hanwha Ocean measures employee engagement (organizational commitment/work engagement) three times a year, analyzes factors affecting engagement, and specifically proposes programs and educational activities to improve organizational culture. In the February 2025 Hanwha Ocean employee survey, 72% of the surveyed employees responded, and 23 items (9 Organizational Commitment, 9 Work Engagement, 1 Way Awareness, 1 Mindset, 1 Leadership, 1 Organizational Trust, 1 Open-ended question) were measured.

Hanwha Ocean's engagement level results are not simply compared by numerical highs and lows but categorized into nine types (High Engagement, Expert, Independent, Loyal, Moderate, Transitional, Complacent, Passive, Low Engagement) based on survey responses. Customized engagement programs are provided according to each type to effectively enhance organizational health. The survey results are compiled into a separate report for all employees and shared transparently for communication.

Hanwha Ocean Engagement Type Chart

Organizational Commitment				
	(8~)	**Settler Type** Feels strong belonging to the organization but is passive in performing tasks (Values stability & passive toward change/challenge)	**Loyal Type** Has strong attachment and belonging to the organization but lacks special passion or deep interest in assigned tasks	**High Engagement Type** Shows strong attachment and passion for both organization and work
	(3~7)	**Passive Type** Has shallow sense of belonging to the organization and performs only minimum duties (lacks clear passion or will)	**Moderate Type** Shows appropriate level of interest and effort in both organization and work (no overengagement or dedication)	**Professional Type** Has moderate attachment to the organization but values personal career development more than the organization
	(1~2)	**Low Engagement Type** Has very low interest and commitment toward organization and work	**Transitional Type** Has low sense of belonging to the organization, basic responsibility for work but lacks passion	**Independent Type** Low loyalty to the organization but high professionalism and pride in work (potentially at risk of leaving)
		(1~2)	(3~7)	(8~)
Work Engagement				

* Based on the 9 Organizational Commitment and 9 Work Engagement questions: 8 or more positive responses are rated as High, 3–7 as Medium, and 1–2 as Low.

Welfare Benefits

Hanwha Ocean operates various support and welfare benefit programs and facilities for the welfare of employees.

Welfare Support Performance

Metric	Unit	2021	2022	2023	2024
Tuition Payment	KRW Thousand	10,143,124	9,436,989	9,380,131	8,827,228
Medical Expense Support	KRW Thousand	8,543,110	8,780,223	8,862,791	9,806,831
Congratulatory and Condolence Expense	KRW Thousand	618,900	745,460	664,800	806,600

Hanwha Ocean Welfare Benefit Program

Category	Main Programs	Details
Housing Support	Housing Loans	Support linked with financial institution loans for purchasing or renting houses
	Dormitory/Company Housing	Provides dormitories and rental apartments to reduce employees' housing costs
Family Support	Child Education Expenses	Supports tuition for children in preschool, middle/high school, and university
	Medical Expenses	Supports hospitalization/surgery costs and dental prosthetics for employees and dependents
	Group Insurance	All employees are enrolled in group insurance to support future liabilities from illness or accidents (death, cancer, accidents, coverage, etc.)
	Congratulatory and Condolence Expense	Supports leave and leave expenses for spouse and relatives' events
	Health Checkups	Annual health checkups conducted (comprehensive checkup every other year)
	Childcare Facilities	Operates daycare centers (two at Geoje shipyard, one at Seoul Office)
Leisure Support	Long-term Service	Provides long-term service leave, leave pay, gold gifts (10 years: 10 don, 20 years: 20 don), etc. to boost morale
	Accommodation/ Resort Facilities	Provides self-development allowances and operates voluntary competency development lectures
	Accommodation/ Resort Facilities	Supports condominiums and resort facilities, operates summer resorts, etc.
Others	Labor Day, Foundation Anniversary	Gift Support
	Transportation Support	Supports commuter buses (Geoje shipyard, Siheung R&D Campus), holiday return buses for Lunar New Year/Chuseok, weekend Seoul return buses
	In-house Employee Welfare Fund	Operates in-house employee welfare fund to support grievances, rehabilitation for disabled children, sports and cultural activities
	Employee Stock Ownership Association	Operation of a company stock acquisition system to support employees' wealth creation, management participation, and foster a sense of ownership

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Labor–Management Cooperation

Labor–Management Council

Hanwha Ocean holds Labor–Management Council meetings based on the "Act on the Promotion of Employees' Participation and Cooperation" to strengthen trust and cooperation between labor and management. The council discusses matters such as management performance status and workforce operation plans, and consultations are held on agenda items proposed by both the company and the labor union. Additionally, issues aimed at improving employee welfare are also discussed, demonstrating efforts to enhance labor–management relations. Matters agreed upon through labor–management consultations are applied to all employees.

Hanwha Ocean Labor–Management Council Organization

Category	Main Discussion Items	Frequency
Collective Bargaining	Matters related to wages, welfare, and working conditions	Collective Bargaining: Once every 2 years; Wage Negotiation: Annually
Labor–Management Council	Items as per Article 20 (Matters for Consultation) of the Act on the Promotion of Worker Participation and Cooperation (productivity improvement and profit sharing, worker recruitment, placement, and training, etc.)	Quarterly
Major Grievance Handling Committee	All matters related to serious grievance handling	Ongoing
Labor–Management Relations Improvement Committee	Improvement of production safety and welfare; improvement of labor–management relations and systems	Ongoing
Welfare Improvement Promotion Committee	General labor–management consultation matters regarding employees' welfare benefits (meals, dormitories, work uniforms, commuter buses, lounges, shower rooms, etc.)	Ongoing
Industrial Safety and Health Committee	Consultations related to industrial safety and health promotion	Quarterly

2024 Collective Bargaining

Hanwha Ocean conducts annual collective bargaining or wage negotiations in the first half of each year. These negotiations are based on mutual trust and understanding between labor and management, aiming to ensure our sustainable development and improve employees' wages, welfare, and working conditions. In 2024, an agreement was reached on improving working conditions and treatment, including base salary increases, expansion of bereavement leave, and welfare programs. Additionally, for agenda items not finalized during the collective bargaining, it was agreed to establish and operate a labor–management task force. Through such rational labor–management relations, Hanwha Ocean collaborates with the labor union to promote the mutual growth of the company, its employees, and the local community.

Labor Union

At Hanwha Ocean, we guarantee the freedom of association and collective bargaining for our employees, thereby strengthening trust between labor and management. Collective agreements are renewed every two years to improve working conditions, and annual wage negotiations are conducted. Furthermore, a Labor–Management Council is operated to facilitate communication and consultation.

Labor Union Operations and Labor–Management Council Meeting Records in 2024

A Labor–Management Council composed of seven members from each side was formed, with agenda items including reports on our current management performance, workforce management, and training plans. Additionally, agenda items for mutual agreement were proposed to improve employee welfare, such as expanding the scope of flexible working hours, selecting workers for specific agreements, and implementing overseas training for union members. Consultations on these matters were conducted between labor and management.

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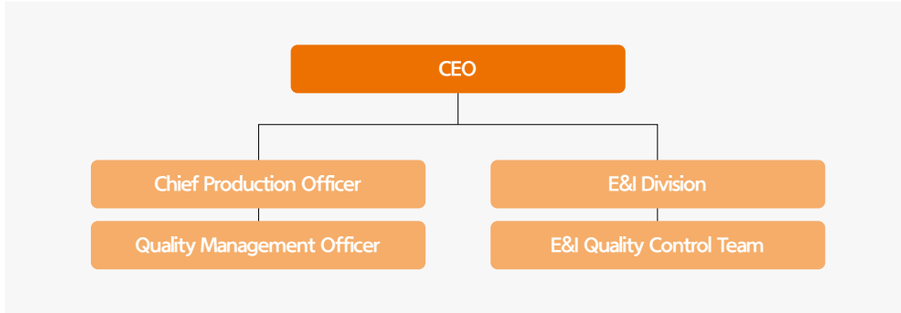
Quality Management

Quality Management System

Quality Management Organization

Hanwha Ocean has a systematic organization for quality management and provides services to ensure quality and customer satisfaction through the roles assigned to each organization.

Quality Management Organization and Key Roles



Organization	Role
Quality Planning	• Quality planning and improvement • Welder qualification management • Quality management system certification management • Non-Destructive testing quality control
Structural Quality	• Ship/Offshore structural quality management and inspection (assembly/mounting/external BLK)
Painting Quality	• Ship/Offshore painting quality management and inspection (preliminary/final/external BLK)
Commercial Vessels Outfitting Quality	• Ship outfitting quality management and inspection (pipe penetration/electrical outfitting/sea trial/mechanical/CCS/woodwork/insulation) • External cabin & engine casing
Offshore Outfitting Quality	• Offshore outfitting quality management and inspection (piping/electrical & instrumentation/machinery/cabin/steel outfitting) • Offshore construction project quality management (Project Quality Management, PQM) operations
Materials Quality	• Equipment quality inspection and quality issue management • Quality audit and evaluation on domestic and international equipment suppliers

Quality Management Control

Quality Management System Evaluation and Audit

Hanwha Ocean strives to achieve quality by providing services for customer satisfaction throughout the product lifecycle, from ship orders to post-delivery maintenance, based on international standard quality management system certifications such as ISO 9001, ISO 29001, and ISO 3834. Additionally, through customer communication channels, we regularly monitor the quality of products, services, technologies, and evaluation results, actively implementing improvements for customer complaints.

Hanwha Ocean conducts internal and external audits to periodically evaluate the effectiveness of the quality management system. We establish and implement preventive and corrective actions for risks identified through audits, supplementing processes of enterprise-wide quality management and ensuring consistency.

2024 Quality Management System Audit Overview

Category	Target	Number of Preventive/Corrective Actions (Improvement Rate)
Internal Audit	35 organizations	124 cases (100%)
External Audit	18 organizations	24 cases (100%)

Quality Management System Certification

Hanwha Ocean maintains certifications for product safety and quality such as ISO 9001, ISO 29001, and ISO 3834 for the Geoje shipyard, Siheung R&D Campus, Seoul Office, Hanwha Ocean Ecotech, and Hanwha Ocean Shandong Corporation. In 2025, following the integration of the E&I Division, we plan to pursue an integrated ISO 9001 certification.

ISO 9001 Certification | ISO 29001 Certification | ISO 3834 Certification

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Quality Management

Quality Management Activities

Quality Management System Improvement Activities

Identification and Response to Key Issues in 2024

Hanwha Ocean has selected Turn Around Tasks to improve key quality management issues in 2024, optimizing inspection methods and items, enhancing customer satisfaction and production efficiency through customer quality demonstrations, and strengthening self-directed quality activities. Additionally, quarterly quality management meetings are held to regularly review goals and performance metrics for quality control in production, design, and procurement.

Identification and Response Activities for Key Issues in 2024

Key Issues	• Product Safety and Quality Control • Responsibility to Customers
2024 Key Activities	• Internalization of quality through acquisition of a specialized quality inspection subsidiary • Joint initial product quality demonstration with customers
2024 Key Performance	• Assembly Shop DNV QA System Certification obtained (Newbuilding Survey Arrangement, NbSA) • Internal audit preventive/corrective actions in quality management system: 124 cases (100% implementation rate)

Advancement of Integrated Quality Management System

Hanwha Ocean manages all quality control activity processes through a digital quality management system as part of the Integrated Quality Management System. By implementing a mobile quality system to enhance production accessibility, an environment has been established where all inspection-related tasks can be handled on-site, improving inspectors' efficiency. In 2025, an upgrade of the existing Integrated Quality Management System is planned, including detailed initiatives such as improving input data logic between processes and linking systems to enable expanded remote and delegated inspections. These activities aim to enhance the system and establish a smart quality inspection environment to improve work efficiency.

Quality Risk Prevention Activities

Hanwha Ocean utilizes pre-inspections and claim analyses, in addition to regular internal and external audits, for proactive quality risk management, conducting preventive actions immediately upon risk identification.

Quality Risk Prevention Activities in 2024

- One-Team Activities for Company-wide Equipment Risk Elimination
- Strengthening Self-Directed and Basic Quality in Production
- Pre-inspection of Key Items by QM (Quality Management)
- Quality Management for LNGC Production System Response
- Quality Hi-Pass Activities
- Enhancement of Quality Supplier Capabilities

Operation of Integrated Quality Cost System

Hanwha Ocean continuously pursues improvement and advancement by establishing a quality failure cost system to visualize and align costs arising from quality issues. This system prioritizes preventive activities for quality enhancement and systematically manages costs caused by internal quality problems and customer complaints by measuring the effectiveness of quality management activities. Through this, Hanwha Ocean strives for continuous quality improvement, enhancing customer satisfaction, and strengthening competitiveness.

Quality Failure Cost Management Process

Identifying Costs Related to Quality Issues → Systematic Management of Cost Data → Deriving Issues through Cost Analysis → Establishment and Execution of Improvement Activities → Monitoring and Feedback on Improvement Effects

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Quality Management Activities

Quality Management System Implementation Plan

Hanwha Ocean has finalized the key directions for the Quality Management System in 2025 and based on this, has established plans for Smart Quality Management and process improvements to carry out related activities.

2024 Quality Management Performance and 2025 Targets

Metric[1]		Unit	2024			2025
			Target	Performance	Achievement Rate	Target
Process Inspection	Re-inspection Rate	%	0.65	0.52	124.05	0.56
	Accuracy Rate	%	98.08	97.44	99.34	98.19
Non-Destructive Inspection	Re-inspection Rate (RT)[2]	%	1.01	1.2	84.03	1.01
	Re-inspection Rate (UT)[3]	%	0.34	0.43	79.07	0.34
Customer Satisfaction[4]		Points	7	7	100%	7

1) Shipbuilding business related metrics (Metrics for offshore business and naval ship are managed separately.)
2) Radiographic Test (RT)
3) Ultrasonic Test (UT)
4) Based on a 10-point scale

2025 Quality Management System Directions and Activities

Key Directions	Main Activities
Minimizing Failure Costs through Process Innovation	• Innovation of quality inspection/management work processes (Specifications/ contracts, Inspection and Test Plan (ITP), linkage between production operations and inspection, etc.) • Proactive quality verification and completeness enhancement for the first vessel products of projects • Advancement of the system for aggregating failure cost items
Proactive Quality Prevention Activities and Early Quality Stabilization	• Preventive activities for quality issues/process quality control and expansion of owner-delegated inspections • Effective customer response and proactive quality risk management • Quality Hi-Pass Activity (Offshore)
Strengthening Quality Subsidiary Capabilities	• Job training programs to enhance subsidiary personnel capabilities • Open seminars on quality-related roles
Securing Quality of Major Equipment and Stabilizing Supplier Quality	• One-Team activities to eliminate company-wide equipment quality risks (11 units for commercial vessels/23 units for offshore equipment, risk extraction and verification at each stage) • Activities to secure LNGC equipment quality • Improvement of supplier quality management systems and quality control for new overseas equipment orders • Support for supplier technical/quality management capabilities and training on key quality control points (Line Quality Control evaluation and compensation)
Establishment of Responsible Quality Culture and Enhancement of QM Capabilities	• Establishment of a responsible company-wide quality culture (Zero Tolerance activities) • Establishment of quality-specific safety culture and basic order • Improvement of QM management capabilities and cultivation of professional skills

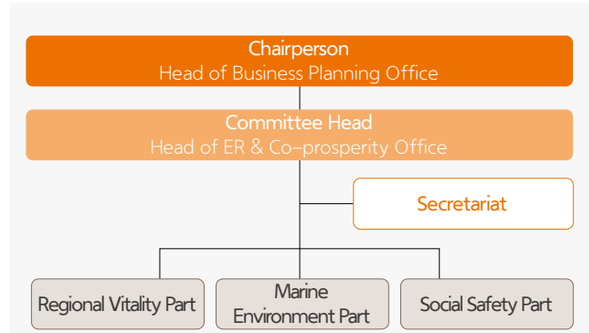
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Co-prosperity with Local Communities

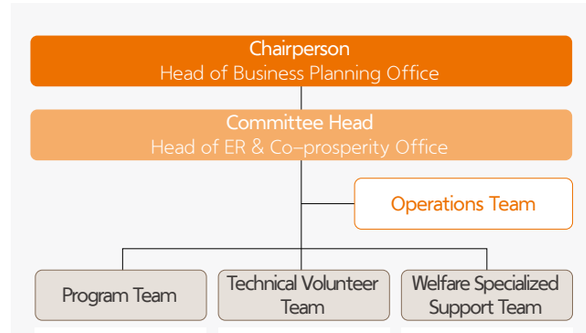
Co-prosperity with Local Communities System

Hanwha Ocean launched a social volunteer group led by executives and employees as part of the 'Hope 90s' management innovation movement initiated in 1993, continuously promoting various social volunteer activities for the community. On March 19, 2025, Hanwha Ocean and the community jointly established the Regional Co-prosperity Committee 'Empowering Geoje', an official communication channel with 36 key local organizations and groups, and the voluntary 'Ocean Social Volunteer Group' under the slogans 'Hope for Mutual Growth with the Region' and 'Go Together Far'. We focus our volunteer activities on the Ocean Social Volunteer Group, founded in 2023 to realize the social contribution value of 'Go Together Far', and in 2025, we formed the committee and structured the existing volunteer group into specific divisions to enhance the social contribution system.

Local Community Engagement Organization



Social Contribution Operating Committee (Ocean Social Volunteer Group)



Launch Ceremony of 'Empowering Geoje'



Overview of Hanwha Ocean Volunteer Group in 2024

Category	Purpose	Number of participants
Ocean Social Volunteer Group	Support for general marginalized groups	2,258 persons
Hanwha Ocean Volunteer Group	Support for local marginalized groups	711 persons
Voice of Sprouts Association	Assisting children with leukemia and cancer	371 persons
Chamsarang Welfare Association	Enhancing life quality for marginalized communities	225 persons

Co-prosperity with Local Communities Program Roadmap

Hanwha Ocean aims to fulfill a role as a global corporate citizen through a corporate culture based on challenge, dedication, and integrity, balancing growth and sharing. To this end, we have announced a Social Responsibility Charter and strives to share these values with all stakeholders. Based on this policy, we practice honest corporate management and contribute to community development.

Social Responsibility Charter

In 2025, we established a Regional Cooperation Team and developed a roadmap to move beyond company-led volunteer activities and individual local event support programs, aiming for co-prosperity and development with the community. We plan to implement various mid- to long-term projects in three core areas: regional economic development and revitalization programs, marine environment protection and improvement programs, and social safety net development programs. In the short term, activities will focus on boosting regional economic vitality, while in the mid- to long term, we will expand secondary projects to stabilize the system and gradually promote additional initiatives.

Co-prosperity with Local Communities Program Roadmap

2024	• Conduct social volunteer activities • Implement co-prosperity with local communities programs • Support for local public and government affairs
2025	[Focus on Enhancing Regional Economic Vitality] • Establish dedicated organization • Launch official channels/Sign MOUs • Analyze community needs • Systematize co-prosperity programs
2026	[Expansion of Secondary Projects] • Focus on social safety net support • Establish 'Hanwha' social contribution program alliance
2027~	[System Stabilization/Implementation of Additional Initiatives] • Program stabilization • Pursue large-scale investments and long-term additional projects

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Co-prosperity with Local Communities

Major Social Contribution Activities in 2024

Revitalization of the Local Economy

Support for Local Events

Hanwha Ocean supports various cultural events within the community annually, providing entertainment for local residents and aiding in attracting tourists to promote economic revitalization of local businesses. In 2024, approximately KRW 230 million was allocated to support 19 local events.



Deokpo International Penguin Swimming Festival

Geoje Shipyard Tour Program

Hanwha Ocean operates an annual Geoje shipyard tour program to support industrial tourism in Geoje. Through this program, visitors can directly experience the vast facilities including a 4 million m² site, the world's largest one-million-ton dock, and a 900-ton Goliath crane. In 2024, 12,502 people visited the Geoje shipyard. This tour program provides an accessible opportunity for the general public to understand the shipbuilding industry.



Geoje Shipyard Tour

Employee Volunteer Participation

Hanwha Ocean operates its own volunteer organization, the Ocean Social Volunteer Group, with 1,047 executives and employees participating voluntarily in activities such as providing daily necessities to low-income families, home repairs, meal services at welfare facilities, bathing assistance for people with disabilities, environmental cleanup, and support for families of children with leukemia. To promote volunteerism, financial support is provided for Ocean Social Volunteer Group activities, and outstanding social volunteer awards are presented to individuals and organizations. Additionally, voluntary donations are expanded through joint contributions by employees and the company via the Employee 1004 Donation and donations to local private welfare organizations.

The in-house volunteer group, Voice of Sprouts Association, held the 'New Life Sea Festival' in August 2024 with approximately 230 participants including children with leukemia and their families nationwide, as well as members of the Korea Leukemia and Childhood Cancer Association. Except during the COVID-19 period, the festival has been held annually since its founding, supporting treatment costs of about KRW 116 million for 866 children over the past 34 years. Hanwha Ocean, the labor union, and Dabonghoe also supported this event.



Leukemia Patient Family Invitation 'New Life Sea Festival'

Educational Support

Technical Training Center

Hanwha Ocean recruits technical trainees annually to provide technical training aimed at nurturing skilled professionals in the local community. The curriculum includes CO_2 welding, LNGC invar welding, hull assembly, and ship production. The training is completely free of charge, and trainees receive allowances during the training period. After completion, outstanding talents are offered employment opportunities with excellent suppliers. In 2024, approximately 2,500 individuals completed technical training, and in 2025, the number of trainees is planned to increase by 20% through expansion and improvement of training facilities.



VR Training Center in Technical Training Center

Ocean Scholarship Center — Support for Youth English Education

Since 2021, Hanwha Ocean has operated a scholarship center for children of direct employees and in-house supplier employees to improve English skills among elementary and middle school students in the local community. The center offers a practical English curriculum rather than exam-oriented instruction.

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Sound Governance

Composition of Board of Directors

Hanwha Ocean operates the Board of Directors fairly and transparently to establish sound governance. Currently, the Board consists of nine members and meets the legal minimum standard for independent directors as stipulated in Article 542–8 Paragraph 1 of the Commercial Act. The CEO concurrently serves as the chairperson, efficiently resolving various board matters and reflecting them in management. As the highest decision–making body, the Board deliberates and resolves on management issues such as mid– to long–term strategies, major investments and financial matters, and significant internal transactions. Furthermore, director qualifications are strictly reviewed according to relevant laws and the Articles of Association. independent directors are composed of professionals with expertise in accounting, law, and management to ensure transparency and accountability in management.

Board Composition

(As of March 2025)

Name	Classification	Gender	Expected Expiration Date of Term	Expertise	Career
Kim Hee cheul	Inside director	M	26th AGM (2026.03.31)	General management	• Former CEO, Hanwha Energy
Kim Jong seo	Inside director	M	27th AGM (2027.03.31)	General corporate management	• Former director in charge of Hanwha Aerospace
Philippe Levy	Inside director	M	27th AGM (2027.03.31)	Industry	• Former CNOOC/Exxon, Executive Consultant
Kim Dong–kwan	Non–executive director	M	27th AGM (2027.03.31)	General corporate management	• CEO, Hanwha Corporation • CEO, Hanwha Aerospace • CEO, Hanwha Solutions • CEO, Hanwha Impact
Kim Bong–hwan	Independent director	M	27th AGM (2027.03.31)	Accounting	• Professor at the Graduate School of Public Administration, Seoul National University • Former Financial City Director, Seoul Metropolitan Government • Former Assistant Professor at the Dept. of Business Administration, American University (USA)
Ahn Wan–gi	Independent director	M	27th AGM (2027.03.31)	Policy	• Endowed Professor, Industrial Technology Policy Research Center, Korea Polytechnic University • Former President, Korea Productivity Center • Former President, Korea Technopark Association
George P. Bush	Independent director	M	27th AGM (2027.03.31)	Law	• Partner at Michael Best & Friedrich LLP • Former Founder, St. Augustine Partners • Former Texas General Land Office Commissioner
Choi Hoon	Independent director	M	27th AGM (2027.03.31)	Finance	• Invited Research Fellow, Korea Accounting Policy Research Institute • Former Ambassador to Singapore • Former Standing Commissioner, Financial Services Commission
Hyun Nak–hee	Independent director	F	27th AGM (2027.03.31)	Law	• Associate Professor, Sungkyunkwan University Law School • 34th class of the Judicial Research and Training Institute)/New York State Attorney (USA) • Former Judicial Researcher, Supreme Court of Korea

Ensuring Board Independence and Diversity

Hanwha Ocean ensures the independence and fairness of the Board by transparently managing all matters including director appointments, resolutions, and committee operations in accordance with the Articles of Incorporation and Board regulations. During the director appointment process, qualifications are thoroughly reviewed pursuant to Article 382 (Appointment of Directors, Relationship with Company and independent Directors) and Article 542–8 (Appointment of independent Directors) of the Commercial Act, followed by fair appointments through the General Shareholders' Meeting. Additionally, as of March 2025, the Board will appoint all members of its committees as independent directors to create a decision–making environment free from conflicts of interest involving the company, management, or controlling shareholders. Hanwha Ocean complies with Article 165–20 of the Capital Market Act regarding gender composition on the Board to secure diversity, imposing no restrictions on gender, age, region, or nationality during appointments. Currently, diversity is ensured with one female director included, and continuous improvements will be pursued.

Board Independence and Diversity Policy

Board Skills Matrix

(As of March 2025)

Classification		Inside director				Independent Directors				
		Kim Hee cheul	Kim Jong seo	Philippe Levy	Kim Dong–kwan	Kim Bong–Hwan	Ahn Wan–gi	George P. Bush	Choi Hoon	Hyun Nak–hee
Com–petence	Leadership	○	○	○	○	○	○	○	○	○
	Global Experience	○	○	○	○	○	○	○	○	○
	Industry	○	○	○	○		○		○	
	Management	○	○	○	○	○	○		○	
	Accounting&Finance					○	○			○
	Policy & Administration					○	○	○	○	
	Law & Regulation						○	○	○	○
	ESG	○	○	○	○	○	○			○
Diversity	Year of Appointment	2024	2023	2025	2023	2023	2025	2023	2025	2023
	Independence					○	○	○	○	○
	Nationality	Korea	Korea	France	Korea	Korea	Korea	USA	Korea	Korea
	Gender	M	M	M	M	M	M	M	M	F
Com–mittee	Audit					○	○			○
	Internal Transaction					○	○		○	○
	Independent Director Recommendation					○	○		○	
	ESG					○	○			○

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Sound Governance

Operation of Board of Directors

Activities of Board of Directors

In deliberating agenda items for the Board of Directors or its committees, Hanwha Ocean ensures expertise in decision-making. and efficiency in decision-making by involving relevant executives and employees or inviting external experts to attend and provide opinions, in accordance with Board regulations. This ensures effective and careful deliberation and decision-making, maintaining substantial independence from management and controlling shareholders, and effectively performing management oversight functions. In 2024, a total of 21 Board meetings were held, with 152 agenda items resolved and reported.

2024 Board Activities

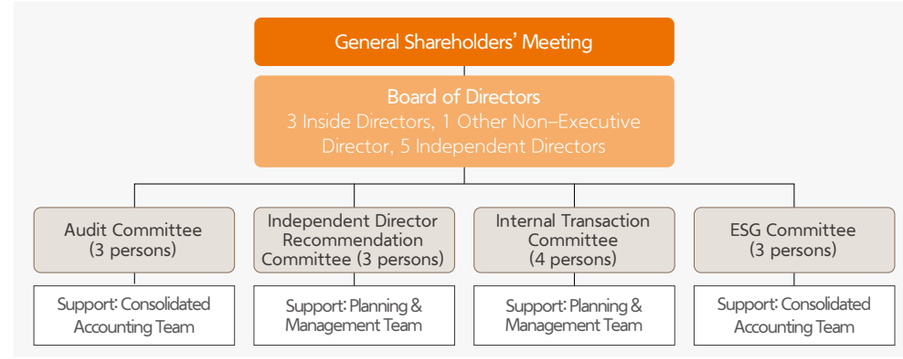
Metric		Unit	2024
Meetings Held and Attendance	Number of Meetings Held	time	21
	Attendance Rate	%	95.8
	Independent Director Attendance Rate	%	97.1
Opinions by Agenda Item	Reported Agenda Items	time	8
	Resolved Agenda Items	time	144
	In Favor	%	100
	Opposed	%	0
	Abstained	%	0
ESG Agenda*	Environment (Climate Change Response, etc.)	time	4
	Social (Safety and Health, Social Contribution, etc.)	time	8
	Governance (Anti-bribery, etc.)	time	6

* Excluding agenda related to Naval Ship Business

Committees under the Board of Directors

Hanwha Ocean has established and operates the Audit Committee, Independent Director Recommendation Committee, ESG Committee, and Internal Transaction Committee under the Board to enhance expertise and efficiency in decision-making.

Organizational Chart within the Board and its Committee



Committee	Main Roles	Members*	2024		
			Meetings Held	Resolved / Deliberated	Reported
Audit	• Audit of directors' and management's performance of duties and accounting • Selection of external auditors • Other audit-related matters per Articles of Incorporation or internal regulations	3 Independent Directors (3 members)	6 times	11 cases	21 cases
Independent Director Recommendation	• Establishment, review, and supplementation of independent director appointment principles • Recommendation of independent director candidates to be appointed • Continuous management and verification of independent director candidate pool	3 Independent Directors (3 members)	–	–	–
Internal Transaction	• Deliberation and resolution on largescale internal transactions under Monopoly Regulation and Fair Trade Act	4 Independent Directors (4 members)	15 times	103 cases	–
ESG	• Deliberation and resolution on ESG strategies, plans, and investment-related matters • Reporting on ESG-related initiatives and performance	3 Independent Directors (3 members)	4 times	1 case	12 cases

* As of the end of March 2025

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Sound Governance

Committees under the Board of Directors

Audit Committee

The Audit Committee is composed entirely of independent directors to establish a system that can effectively oversee and check overall corporate management. It independently and effectively handles supervisory duties over the execution of duties by directors and management, the selection of external auditors, and audits related to accounting. The Audit Committee evaluates the establishment, revision, and operational status of internal accounting management regulations.

Independent Director Candidate Recommendation Committee

This committee establishes, reviews, and continuously improves appointment principles related to independent director appointments. It also conducts recommendation, candidate pool management, and verification procedures for independent director candidates. The final confirmed director candidates are appointed at the General Shareholders' Meeting, ensuring a transparent Board composition process.

Independent Director Appointment Process

Submission of Candidate Pool → Final Candidates Recommended to the General Shareholders' Meeting → Final Candidates Recommended to the General Shareholders' Meeting → Appointment of Independent Directors

ESG Committee

The ESG Committee receives reports and approves ESG strategies, plans, investments, and performance to achieve sustainable management by enhancing corporate value from environmental, social, and governance perspectives.

ESG Committee Activities in 2024

Date	Agenda	
	Category	Details
2024. 01.19	Report	• Report on 2023 ESG performance and 2024 plans • Report on 2024 ESG goal setting
	Resolution	• Approval of ESG 2030 targets
2024. 04.03	Report	• Report on ESG performance of Q1 and plans of Q2 • Report on materiality assessment results • Report on establishing ethics and compliance management evaluation model
2024. 08.13	Report	• Report on ESG performance of Q2 and plans of Q3 • Report on publication of sustainability report • Report on establishment of Social Responsibility Charter • Report on Establishment of Green Procurement Policy
2024. 12.27	Report	• Report on 2024 ESG Implementation Performance • Report on consulting results for selecting ESG initiatives roadmap • Report on establishment and revision of ESG-related Policies

Internal Transaction Committee

The Internal Transaction Committee reviews major internal transactions stipulated by the Monopoly Regulation and Fair Trade Act and its Enforcement Decree to enhance transparency through inspection and monitoring of internal transactions among affiliates.

Board Compensation

In accordance with Article 45 of Hanwha Ocean's Articles of Incorporation, directors' compensation is determined and paid based on the executive compensation regulations within the compensation limit approved by the General Shareholders' Meeting (GSM). Additionally, separate from the amount approved at the General Shareholders' Meeting, to strengthen accountability in management and continuously generate performance, a Restricted Stock Unit (RSU) system was introduced in 2023 to grant inside directors the right to receive cash equivalent to stock value (stock value-linked cash) in the future.

GSM's Approved Amount and Compensation Paid

(As of December 31, 2024)

Category	Unit	Compensation Limit	Actual Payment Amount	Average Compensation per Person
Audit Committee Members	KRW Million	5,000	252	84
Independent Director (excluding Audit Committee members)			198	99
Inside Director			2,926	732

Director Compensation Criteria

Category	Payment Basis	Compensation Element
Independent Director	Company Internal Regulations	Activity allowance
Inside Director		Base salary, Variable salary, Other compensation

Enhancement of Shareholder Rights

Hanwha Ocean provides shareholders with various methods to exercise their voting rights.

Systems to Strengthen Shareholder Rights

Category	Electronic Voting System	Cumulative Voting	Proxy Voting	4-Wk Advance Notice of GSM	Diversified Meeting Dates	2-Wk Advance Submission of Financial Statements before GSM
Details	Introduced through Board resolution (Feb. 2024)	Reflecting Minority Shareholders' Opinions	Encouraging Smooth Exercise of Shareholders' Voting Rights	Disclosure of General Shareholders' Meeting Date, Location, and Agenda	Supporting Smooth Exercise of Shareholders' Voting Rights	Effective Exercise of Voting Rights by Shareholders

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Risk Management

Risk Management System

Risk Management Organization

Hanwha Ocean operates a risk management system that continuously identifies, responds to, and monitors risks that may arise throughout corporate activities. For each risk type, operational teams primarily recognize potential risks in their respective tasks, analyze the inherent nature, impact, and likelihood of occurrence of these risks, and establish response measures including elimination, mitigation, and monitoring procedures. They then establish response measures to eliminate or mitigate these risks and perform continuous monitoring procedures. Significant matters are reported to the Board of Directors and its committees through a management council involving the CEO, business unit heads, Chief Production Officer, and department heads. ESG-related items are handled by the ESG Committee or submitted to the Board. Business risks are managed by the Management Planning Office and Manufacturing Division, while financial and ESG risks are handled by the Finance Department in collaboration with relevant departments.

In March 2025, Hanwha Ocean expanded the Project Management Team to comprehensively manage risks for all products (ships and offshore structures) and projects (plants, wind power complexes, etc.) from pre-order to post-delivery. We also designate the Compliance Department head as the compliance officer to oversee company-wide risk inspections, evaluations, and improvements as part of the compliance control system. The internal compliance organization conducts audits through regular and ad-hoc inspections and ethical management promotion activities, and assessment of these practices and activities are reported to the Audit Committee.

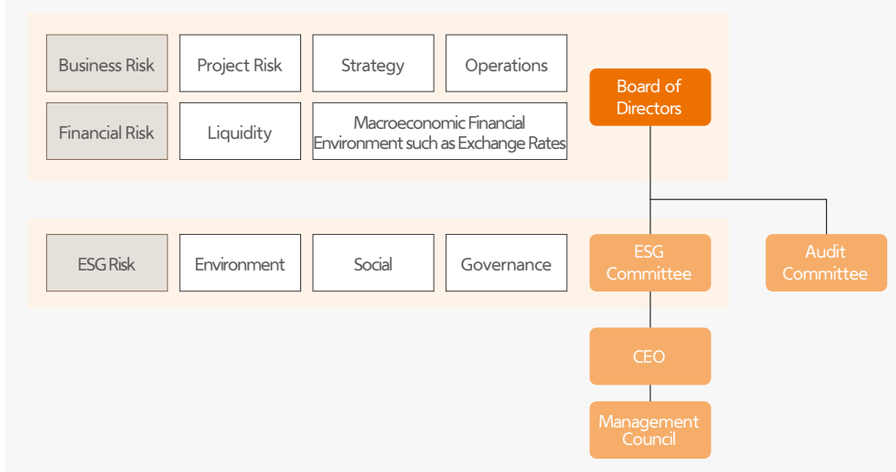
Crisis Management Response

Hanwha Ocean has established a company-wide crisis management manual to prepare for situations that could seriously impact company operations and reliability or cause significant economic, safety, health, environmental, legal, or security issues.

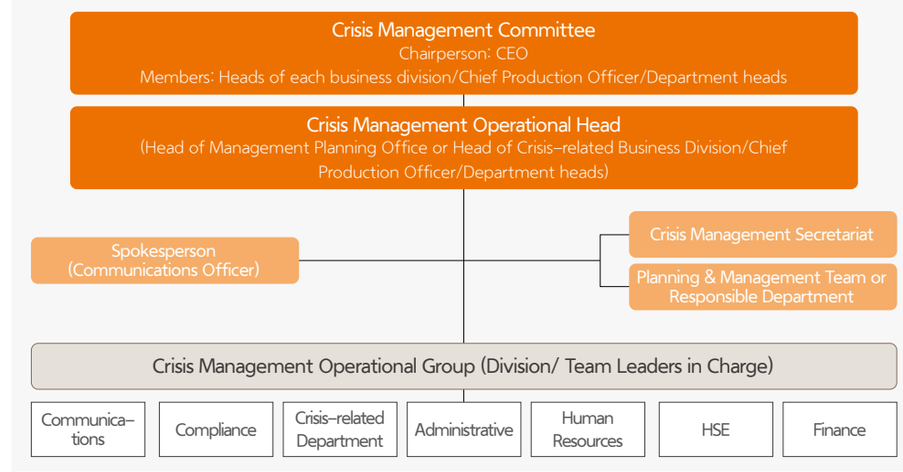
The Crisis Management Committee is chaired by the CEO, with participation from heads of each business division, Chief Production Officer, and department heads as members. To ensure systematic response and rapid information sharing, the head of the Management Planning Office or the head of the crisis-occurring division, Chief Production Officer, or department head is appointed as the Crisis management operational head. Then the secretariat and a crisis management operational group are consisted with relevant teams and divisions.

In the event of a company-wide crisis, the CEO declares the crisis after consulting with the Crisis Management Committee, forms related committees and operational groups, and discusses initial response measures according to the manual. The crisis response procedure consists of four stages: prevention and mitigation, preparation, response, and closure.

Company-wide Risk Management Organization



Crisis Response Management Organization



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Risk Management

Risk Management Process

Risk Identification and Assessment

Hanwha Ocean has identified a total of 52 risks related to strategy, operations, finance, and compliance, as well as 10 project-related risks, considering factors that could potentially impact our stability and growth. Identified inherent risks are assessed at least once a year based on impact and possibility criteria. Risks are categorized into monitoring, general management, and intensive management risks according to their assessment scores. Depending on the risk score, responses range from routine monitoring, establishment and implementation of risk response plans by operational departments, to company-wide measures. For project risks, impact and possibility are evaluated at every stage from pre-order to delivery using a separate grading system. Due to changes in the existing business structure and organization in 2024, such as the acquisition of plant and wind power businesses, the risk management process will be reestablished in 2025 considering these new characteristics.

Risk Management Process

[Step 1] Risk Identification and Clasification (Responsible Department) → [Step 2] Evaluation and Prioritization (Responsible Department) → [Step 3] Response to High-Risk (Company-wide) → [Step 4] Monitoring (Company-wide)

Risk Identification and Type Classification

Strategy	• Portfolio Change Risk • Technology • Investment • Competitive Environment • Affiliates	• Reputation • Management/ Decision-making • Exogenous Macro Environment • Climate Change
Operations	• Organization/ Manpower • Design • Production • Procurement	• ESG • HSE • Security/IT
Financial	• Liquidity	• Macro-financial Environment
Compliance	• Ethics/Compliance	
Project Risks	• Order Suitability • Purchasing/ Procurement • Contract	• Design • Production

Risk Assessment Criteria

Impact Score[1]	Evaluation Target	1 Point	↔	5 Point
	Specific event conditions identified during the period/ average impact of events over the past 5 years	Resolved within organization		Crisis stage equivalent to company-wide disaster declaration level
Financial Loss[2]	• Financial loss in terms of sales cost and liquidity	• Up to KRW 47.6 billion		• KRW 237.9 billion or more
Reputation	• Media exposure affecting reputation among customers/personnel/suppliers	• One-time Regional (Gyeongnam) media onetime exposure		• Domestic and international central media exposure (broadcast/major media for over one month)
Compliance	• Internal and external legal sanctions	• Reprimand under internal regulations, caution/ warning to superiors		• Business suspension/license revocation by regulatory authorities
HSE	• Accidents, illnesses • Environmental issues in Geoje shipyard operations	• One person requiring medical care for over three months or permanent disability injury occurs • Environmental issue at one workplace unit		• Three or more deaths, simultaneous occurrence of occupational diseases in 50 or more persons • National-level environmental issue
IT/Security	• IT system errors and information security (data leakage)	• Leakage or damage of other company data		• Leakage or damage of national core technology defense industry technology (military secrets) that could lead to legal sanctions
Operations	• Manpower Supply • Schedule Delay	• Supply rate over 90% • Schedule delay within 2 weeks		• Supply rate below 60% • Schedule delay over 12 weeks
Quality/ Performance	• Number of quality failure cases • Customer Satisfaction score	• 1 case of quality failure • Customer Satisfaction below 7 points		• 300 or more quality failure cases • Customer Satisfaction below 3 points

Possibility Score[3]	Evaluation Target	1 Point	↔	5 Point
	Specific event conditions identified during the period/average occurrence probability of events over the past 5 years	No occurrence history within company/industry		High probability of occurrence within the period
Risk Occurrence Probability[4]	Individual risk items	0–1%		Over 60%

1) The 1-5 point scale within each evaluation area is set based on threshold inputs according to descriptions from relevant departments (Finance/PR/Safety/IT/Quality, etc.)
2) 20~100% of operating profit on the 2024 consolidated income statement
3) Descriptions by score and occurrence probability adopted from multiple leading EPC (Engineering, Procurement, and Construction) companies
4) Company-wide risk: annual occurrence probability, Project risk: probability of occurrence per project

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Risk Management Process

Risk Response and Mitigation

As a result of mapping and prioritizing the items identified in 2024 based on the level of exposed risk, five items were selected for intensive risk management. These include external factors such as global energy industry market conditions, regulations, and macroeconomics, as well as internal operational aspects like workforce management, safety, and technology development. We aim to minimize residual risks by implementing response activities and monitoring for these selected items.

Risk Assessment Results

Focused Risk Management Items	Area	Risk Description	Potential Impact	Key Response Activities
① Fluctuation Risk of Offshore Plant Demand	Strategy	Uncertainty in orders increases due to fluctuations in offshore plant order volumes and timing caused by global energy demand and geopolitical issues	• Decrease in sales or profit/loss • Occurrence of idle workforce and negative impact on operations • Increased facility operation and fixed cost burden	• Strengthen market information and market condition monitoring • Continue sales activities based on extensive construction experience and technological competitiveness • Diversify order portfolio (Drilling, production facilities, onshore Modular Plant, offshore wind installation vessels, etc.) • Establish flexible workforce and production systems
② Timing Fluctuation Risk of Future Ship Commercialization	Strategy	Possibility of uncertainty or delay in the commercialization timing of ships that meet high efficiency/environmental standards (Example: technology development delays, lack of international agreements, and infrastructure deficiencies)	• Investment losses in facilities • Production downtime (Decrease in existing ship orders and delay in future ship orders) • Continued environmental pollution • Increased burden in meeting environmental regulations	• Establish and implement technology roadmap • Form strategic partnerships • Promote joint development with academia, research institutes, and international organizations
③ Workforce Shortage Risk in Direct/In-House Production	Operations	Possibility of production schedule delays due to insufficient skilled production personnel, potentially leading to product quality degradation and cost increases	• Production schedule delays • Quality decreases and increased safety accidents • Decreased productivity	• Improve internal workforce skill levels • Expand recruitment numbers and diversify channels
④ Safety Accident Risk	Operations	Risk of accidents causing human and material damage	• Deterioration of workers' health and quality of life • Productivity decreases due to work stoppage • Sanctions and costs due to legal/administrative penalties • Reputation decline	• Establish and implement mid- to long-term HSE roadmap (expand facilities and safety experts) • Disseminate Ocean way [Uncompromising Safety] • Reflect KPIs
⑤ Fluctuation Risk in Exchange Rate	Financial	Profit/loss exposure to exchange rate fluctuation risks as shipbuilding and offshore products are mostly contracted in foreign currencies ($, €, etc.)	• Profit/loss decreases when exchange rates fall • As of the end of 2024, a 10% exchange rate fluctuation on foreign currency net financial assets of KRW 2.7781 trillion may cause a KRW 277.8 billion change in current profit/loss (before corporate tax effect).	• Managed with the aim of minimizing sales revenue volatility • Conduct currency forward contracts for a certain proportion or more of exchange rate exposure

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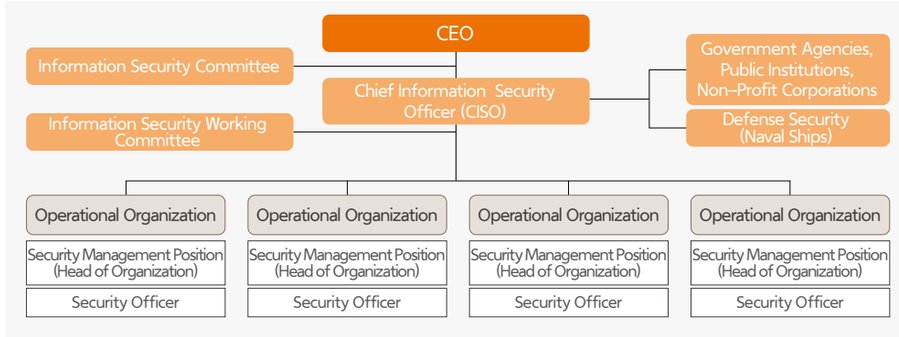
Information Security

Information Security Management System

Information Security Management Organization

Hanwha Ocean designates a Chief Information Security Officer (CISO) who is an executive with expertise in information security. The CISO is solely responsible for information security tasks specified by law and does not hold any other positions beyond as stipulated in relevant legislation. Additionally, we operate an Information Security Committee that oversees information protection and cybersecurity strategies. The Information Security Committee consists of the security management representative, CISO, Chief Privacy Officer (CPO), and heads of each division. Chaired by the CEO, the committee deliberates and decides on key matters related to the information security management system, including information protection strategies and implementation directions.

Information Security Management Organization and Roles



Key Decision-Making Bodies	Information Security Committee	Information Security Working Committee
Operation Cycle	Operated at executive meetings chaired by the chairperson	Operated as needed when issues arise
Roles	Chairperson: CEO – Review the appropriateness and effectiveness of major security management policies – Deliberate on incident handling related to industrial security reports (rewards, disciplinary actions) – Review matters concerning transfer and acquisition of national core technologies – Review the appropriateness of security classification for national core technologies – Review mid- to long-term security management roadmaps – Other matters requiring consultation and coordination in security management operations	Chairperson: CISO – Review and deliberate on major security management policies and issues – Other matters delegated by the Information Security Committee
Scope	Information Security Management System for Design and Production Technology Information	

Information Security Policy

Hanwha Ocean establishes and implements thorough information security policies to securely protect critical information. To safely maintain important assets including confidential information, national core technologies, and personal data, Hanwha Ocean's administrative, physical, and technical security measures are executed to ensure the safety and reliability of information. Furthermore, regular security training and practical sessions are provided to all employees to raise security awareness, and a system has been established to respond promptly and effectively to security incidents.

Hanwha Ocean Security Declaration and Asset Protection Policy



Assets to Protect	Asset Protection Policy
❶ Company's confidential information, national core technologies, and personal data	❶ Establish and implement a security management system to protect tangible and intangible assets.
❷ I mportant business information generated and managed through work processes	❷ Establish and implement administrative, physical, and technical security policies for tangible and intangible assets.
❸ Equipment, media, and devices of information systems supporting business operations	❸ Establish and implement training plans to enhance all executives' and employees' ability to execute security policies.
❹ Physical locations and equipment associated with business operations	❹ Establish and implement fundamental measures for security incident management, business continuity management, and legal compliance.

Information Security Pledge

Hanwha Ocean requires all personnel entering the premises, including executives, employees, and suppliers, to sign an information security pledge (confidentiality agreement) in accordance with security management regulations. In particular, individuals handling external personal data or employees handling national core technologies are required to sign the relevant security pledge upon hiring, resignation, changes in related laws or regulations during employment, special position changes, or occurrence of major issues as necessary.

Information Security Disclosure

Hanwha Ocean faithfully complies with Article 8 of the Act on the Promotion of Information Security Industry and Article 13 of its Enforcement Decree by disclosing information security activities. To this end, we annually submit electronic files to the Ministry of Science and ICT's electronic disclosure system and the Korea Internet & Security Agency (isda@kisa.or.kr), publicly disclosing key information security activities such as investments, personnel, and certifications.

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Information Security

Information Security Management Areas

Hanwha Ocean operates an information security management system compliant with international standards, categorizing key management areas into five areas.

Hanwha Ocean Information Security Management Areas

Area	Details
Management Security	Security management regulations, information security disclosures and audits, maintenance of ISO 27001/27017 Certification, asset classification and management, personnel security management, management of employees scheduled for retirement, security training for executives and employees, simulated phishing training and inspections of domestic and overseas business sites, security inspections of subsidiaries/suppliers and collection of security pledges to manage security vulnerabilities.
Technical Security	Management of information security systems, incident response, security management of terminals, IT servers, networks, and application systems, monitoring guidelines for information asset leakage, cyber intrusion detection and prevention, and management of network security vulnerabilities.
Physical Security	Operation of company entry and access method systems and security guard procedures to protect the company's physical assets, including security guards and mechanical security systems (security keys, CCTV, etc.), and continuous inspection and management of security vulnerabilities related to the international ship and port facility security (ISPS) operations at Hanwha Wharf in Okpo Port.
National Core Technology Protection	Strengthening the security management system for National Core Technology, classification of security levels and systematic management by specialized personnel, security training and collection of security pledges from handlers, approval applications and reporting for export and overseas mergers & acquisitions of National Core Technology, establishment of leakage incident response systems, disciplinary actions, and compliance with the Industrial Technology Protection Act, etc.
Personal Information Protection	Establishment and operation of personal information protection policies (personal information protection regulations, internal management plans, leakage incident response manuals), internal procedures for video information processing, preparation of personal information handling policies for executives and employees, revision of personal information handling guides for staff, and companywide personal information protection training to enhance security management.

Information Security Certification

Hanwha Ocean has acquired and maintains ISO/IEC 27001 and ISO/IEC 27017 certifications. We securely manage key IT systems and customers' personal information against cyber threats. Through this security framework, we also safely maintain information exchange with customers, strengthens trust, and enhances global business competitiveness.


DNV
MANAGEMENT SYSTEM CERTIFICATE
Hanwha Ocean Co., Ltd. Okpo shipyard
ISO/IEC 27001:2022

ISO/IEC 27001, 27017

Security Systems

Hanwha Ocean operates the 'Hanwha Ocean Cybersecurity Control Center' in collaboration with specialized security firms to enhance cybersecurity through proactive monitoring, real-time threat detection, and systematic response. To prepare for the surge in cyberattacks, we establish mid- to long-term information security strategies based on security consulting. Continuous investments, institutional improvements, and system maintenance further strengthen security levels. All business sites connected to the network (including subsidiaries and in-house suppliers) are controlled under integrated IT security policies. Through regular self inspections, we apply site-specific security policies, and create a safe work environment using unified security policies, including blocking malware/ransomware distribution sites through continuous monitoring.

Hanwha Ocean ICT Security System

Category	Status
Network Security	To prevent cyber intrusion incidents, internet segment security systems such as internet firewalls, intrusion detection/prevention, DDoS defense, and spam mail blocking systems are operated. Additionally, connection of unauthorized terminals or those without mandatory security programs to the company network is fundamentally blocked.
Client Security	To prevent external data leakage of internal information assets, security policies such as document encryption, printout security, media security, and external upload control are operated. For intrusion prevention via internal terminals, various security programs including antivirus software, Endpoint Detection and Response (EDR) & Advanced Persistent Threat (APT) response, and unauthorized program installation blocking are applied to maintain a secure work environment.
Defense Industry Security	A dedicated security system approved by government agencies is established and operated to protect defense industry technology.
Servers/DB/ Application Security	Key IT services and infrastructure within the data center are protected by security systems such as server farm firewalls, web firewalls, web shell detection systems, and access control systems (server/DB), etc. Additionally, applications undergo stepwise development security measures (secure coding, penetration testing) to verify safety and continuously enhance security levels.
Integrated Security Control	The Cybersecurity Control Center operates 24/7 real-time security monitoring year-round. Through packet analysis, it promptly responds to internal and external IT attacks and information leakage threats. It receives real-time updates on the latest vulnerabilities and threat information from national agencies and non-profit security organizations and operates a security system with an automated and visualized integrated security monitoring system.
Vulnerability Diagnosis	Regular group-wide vulnerability diagnostics are conducted on key internal infrastructure and applications. Continuous vulnerability assessments and penetration tests proactively identify and improve security weaknesses to build a safer IT environment.

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Information Security

Information Security Activities

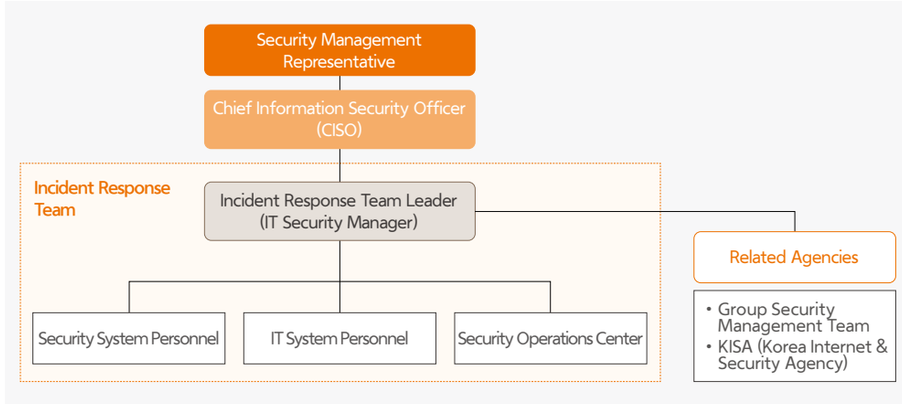
Security Incident Response

Hanwha Ocean operates an Incident Response Team to prevent and respond to cyber intrusion incidents, minimizing risks to information assets, blocking internal and external intrusion threats, and supporting stable server operations. In the event of an incident, the response team leader oversees the team, reviews analysis and response tasks of security system personnel, establishes response plans and security measures, and shares them with executives and employees. Additionally, the team leader promptly shares the situation and, if necessary, proceeds with reporting procedures to supervisory authorities.

Incident Response Procedures

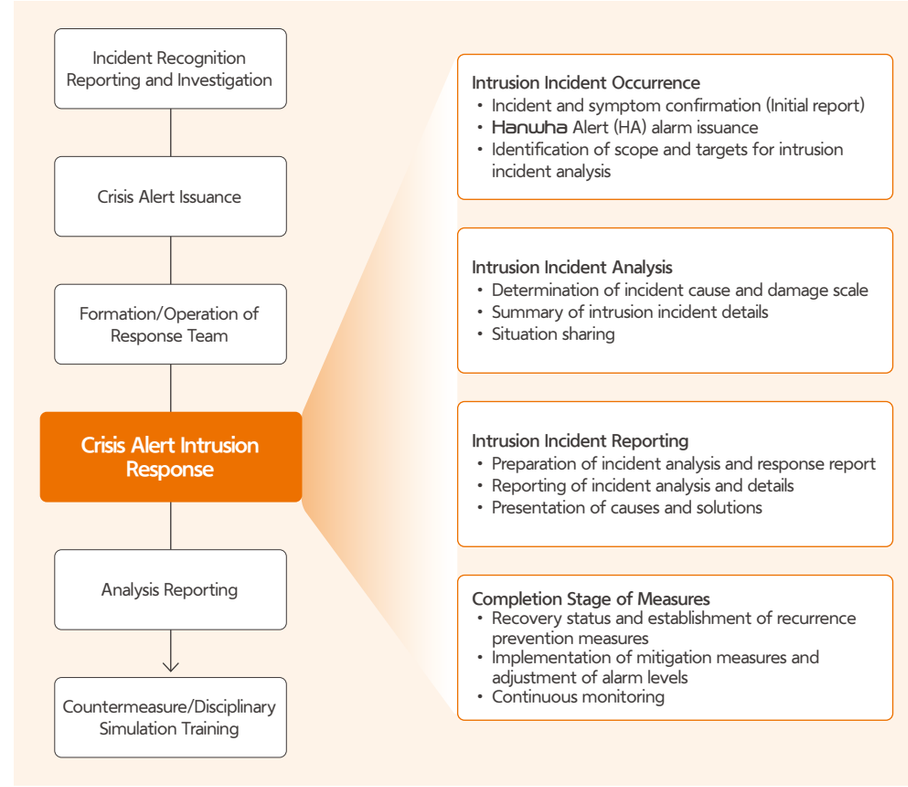
We operate an emergency response system to promptly address intrusion incidents and prevent leakage of critical internal technical data. All employees must immediately report any suspected or recognized incidents during work to the IT security manager. Furthermore, if an incident by information security–related agencies is notified, it is also recognized as an intrusion incident and responded to swiftly. The Incident Response Team, composed of experts from various fields, performs rapid and effective emergency responses according to their respective roles for all reported incidents.

Roles and Responsibilities by Position



Position	Roles and Responsibilities
Group Security Management Team	Supports group security incident response and disseminates damage status to other affiliates
Chief Information Security Officer (CISO)	Holds overall management responsibility during intrusion incident response and decides response measures
Incident Response Team Leader	Overall head of the Incident Response Team, establishes response plans and security measures
Security Operations Center	Real–time monitoring, analysis of detection patterns/infected PCs (remote investigation)
Security System Manager	Diagnoses and addresses system vulnerabilities, provides security recommendations, and conducts compliance checks
	Analyzes vulnerabilities when equipment or security issues arise
IT System Manager	Supports investigation and remediation of security incidents involving servers, business systems, networks, databases, etc.

Security Incident Response Procedures



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Information Security

Information Security Activities

Security Incident Prevention

Security Incident Response Drills

Hanwha Ocean conducts vulnerability assessments of IT infrastructure and applications to prevent and respond to information security incidents, and continuously implements improvement measures and checks for identified vulnerabilities. Additionally, we perform cybersecurity vulnerability diagnostics and compliance checks led by the Defense Acquisition Program Administration. Regular emergency plan simulations are conducted to check for errors in rapid response and recovery procedures in case of IT disasters.

These drills focus on verifying system integrity during incidents and clarifying responsibility allocation by identifying role confusion within the organization. The results of these drills are systematically recorded to enhance response capabilities in the event of actual incidents and to prepare for quick responses to emergency disasters.

Security Incident Response Drill Performance

Drills	2022	2023	2024
Security Incident Response Drills[1)]	2 times	2 times	1 times
Disaster & Emergency Plan Response Drills	–	1 times	1 times
Malicious Email Response Training	4 times	2 times	4 times

1) Including training for Distributed Denial–of–Service Attack (DDoS), Denial–of–Service Attack (DoS), large–scale spam mail & malware influx and anomaly detection, and other security incident preparedness

Malicious Email Response Training Performance

Effectiveness Metric	Unit	2022	2023	2024
Infection Rate	%	2.5	7.9	2.8
Reporting Rate	%	20.8	20.5	41

Information Security Inspection

Hanwha Ocean conducts regular internal security inspections and unannounced audits to assess security conditions and proactively identify potential risk factors. Through these efforts, we promote a security culture and actively responds to security threats. Annual assessments are conducted not only domestically but also at overseas sites. Additionally, internal and external suppliers submit quarterly self–inspection results, which are used to verify the implementation of information security measures through security status checks. This process ensures the continuous maintenance of a high–level security management system. To enhance executives' and employees' security awareness, the first Monday of every month is designated as 'Security Day', during which all staff are required to review mandatory security training materials. Furthermore, procedures for reporting spam emails have been refined, and malicious email response drills are conducted to prepare against hacking and spam email threats. We also share information assets and related policies that must be protected with executives and employees through the publication of a security declaration.

Key Prevention and Response Activities in 2024

- 4 Malicious Email Response Trainings
- 17 Promotions via Card News/Ocean View (Internal Media)
- 1 CEO Message (Security Declaration Announcement)

Information Security Training

We regularly conduct annual security education, promotion, and training to raise employee awareness and prevent incidents. Ongoing trainings are provided for new employees, key personnel, upcoming retirees, security policy violators, and suppliers. We promote internal security inspection regulations to suppliers and strengthens measures such as access control. Security training is conducted to quantify organizational security levels and enhance awareness. Information security awareness levels are evaluated, with results used to analyze training effectiveness at each stage. These insights contribute to the improvement of the following year's security education plan.

Hanwha Ocean Information Security Training Program

Category		Details	
Offline	New Employees	• Industrial security, national core technologies, malicious email response training, access control	
	Job specific	• Security management regulations, laws related to national core technologies	
		• Information Security Management System (ISO 27001/27017) certification audit preparation training, malicious email response training	
	Suppliers	• In–house security, industrial security, national core technologies, and access control	
		• Promotion of security inspection content related to partner companies	
Online	Job–specific	• Laws related to national core technologies • Malicious email response training	• Company regulations on technology protection • Security training for employees scheduled to retire
Training Materials		• National core technology security education	

Information Security Training Hours per Person

Category	Unit	2022	2023	2024
Employees	hour	2.55	2.52	2.26
Suppliers	hour	0.65	0.86	0.90
Subsidiaries	hour	0.17	0.17	0.17
Total	hour	1.15	1.30	1.25

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ENVIRONMENTAL

Hanwha Ocean

Greenhouse Gas Emissions

	Unit	2021	2022	2023	2024
Scope 1&2					
Total emissions (Scope 1&2)[1]	tCO_2eq	296,766	317,725	416,679	455,320
Direct emissions (Scope 1)	tCO_2eq	101,295	122,529	187,855	202,343
Indirect emissions (Scope 2)	tCO_2eq	195,471	195,198	228,824	252,979
GHG intensity[2] [3]	tCO_2eq/ KRW 100 million	6.61	6.54	5.62	4.23
Reduction rate (intensity)[4]	%	–29.03	1.17	13.96	24.88
GHG emissions target (current year)	tCO_2eq	–	–	428,000	426,000
Reduction rate (from the target)	%	–	–	2.65	–6.88
Scope 3[5]					
Other indirect emissions (Scope 3)[1]	tCO_2eq	33,551,827	20,662,841	29,062,171	41,068,079
Purchased products and services	tCO_2eq	2,520,374	3,253,208	3,466,950	3,908,013
Capital goods	tCO_2eq	13,401	5,705	6,484	11,164
Fuel– and energy–related activities	tCO_2eq	20,759	21,599	27,215	50,225
Upstream transportation and distribution	tCO_2eq	31,933	25,762	39,697	37,200
Waste generated in operations	tCO_2eq	53,869	54,948	57,600	67,107
Business trips	tCO_2eq	965	2,143	3,644	4,850
Employee commuting	tCO_2eq	3,901	4,006	4,183	4,326
Use of sold products	tCO_2eq	30,887,616	17,234,930	25,386,299	36,904,036
End of life treatment of sold products	tCO_2eq	4,284	3,209	4,639	4,315
Investments	tCO_2eq	14,725	57,333	65,460	76,841
GHG verification					
GHG verification by third party	Y/N	Y	Y	Y	Y

1) Figures may differ slightly due to rounding.
2) 2023 data has been corrected due to input errors.
3) GHG intensity calculation: Total emissions / Consolidated sales
4) Data for 2021, 2022, and 2023 have been revised due to changes in calculation criteria (percentage change in intensity compared to the previous year).
5) Data for 2021, 2022, and 2023 have been adjusted to align with the 2024 calculation criteria changes.

Energy Consumption

	Unit	2021	2022	2023	2024
Total energy consumption	TJ	5,417.7	5,731	7,395.4	8,162.8
Direct energy consumption	TJ	1,332.2	1,650.8	2,612.4	2,875.4
LNG	TJ	1.7	32.1	293	671
Diesel (total)	TJ	581.8	828.5	1,406.7	1,199.3
Gasoline	TJ	8.2	9.3	10.4	11.4
LPG	TJ	201.9	237.2	279.4	270.3
B–A (total)	TJ	77.7	91.5	133.8	109.8
Indoor kerosene	TJ	150.4	161.7	176	177.4
B–C[1]	TJ	310.5	290.5	313	436
Indirect energy consumption	TJ	4,085.6	4,085.5	4,783	5,287.4
Energy intensity[2]	TJ/ KRW 100 million	0.121	0.118	0.1	0.076
Reduction rate (intensity)[3]	%	–31.254	2.348	15.343	24.118

1) Addition of energy sources
2) Energy intensity calculation: Total energy consumption / Consolidated sales
3) Data for 2021, 2022, and 2023 have been revised due to changes in calculation criteria (percentage change in intensity compared to the previous year)

Environmental Investments and Sales

	Unit	2021	2022	2023	2024
Environmental investments[1]	KRW 100 million	418.5	395.4	286.8	754.9
Greenhouse gas/Energy reduction	KRW 100 million	272.3	176.9	229.8	676.2
Environmental facilities	KRW 100 million	142.8	218.5	56.6	75.7
Environment–related R&D	KRW 100 million	3.3	0	0	2.9
Other environmental investments	KRW 100 million	0	0	0.4	0
R&D expenses	KRW 100 million	722.6	745.4	762.1	666.2
Government subsidies	KRW 100 million	49.4	59	64.5	64
Low–carbon/Carbon avoidance products[2]	KRW 100 million	24,922	25,388	44,238	77,093

1) Data revised due to changes in internal environmental investment criteria
2) The relevant revenue is calculated based on ships equipped with DF (Dual Fuel) engines

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Environmental Education and Training

	Unit	2021	2022	2023	2024
Environmental education					
Number of participants	Person	–	–	–	9,287
Total training hours	Hour	–	–	–	111,444
Environmental training hours per employee	Hour	–	–	–	12
Hazardous chemical training[1)2)]					
Number of hazardous chemical handlers trained	Person	–	–	–	302
Total training hours for hazardous chemical handlers	Hour	–	–	–	4,832
Number of hazardous chemical workers trained	Person	–	–	–	21,187
Total training hours for hazardous chemical workers	Hour	–	–	–	42,374
Environmental incident response					
Environmental incident response drills	Y/N	Y	Y	Y	Y

1) The 2024 data includes the sum of Hanwha Ocean employees and supplier employees
2) Training initiated from 2024

Environmental Regulatory Compliance and International Certifications

	Unit	2021	2022	2023	2024
Environmental regulatory compliance					
Number of inspections	Case	N/A	N/A	16	18
Environmental regulation violations	Case	0	0	0	0
Fines	KRW million	0	0	0	0
Environmental incidents	Case	0	0	0	0
Certifications[1)]					
ISO 14001	Y/N	Y	Y	Y	Y
ISO 50001	Y/N	Y	Y	Y	Y
Environmental liability insurance					
Environmental liability insurance coverage	Y/N	Y	Y	Y	Y

1) ISO 14001 certification obtained for Geoje shipyard, shipyard, R&D Campus, Anjeong site, and Hanwha Ocean Shandong Corporation.
ISO 50001 certification acquired for Geoje shipyard, which accounts for over 98% of energy consumption.

Raw Materials Consumption[1)]

	Unit	2021	2022	2023	2024
Commercial vessels					
Raw material consumed	KRW Million	2,413,663	3,651,521	4,065,783	5,140,951
Raw material consumed ratio	%	85.7	89.6	73.7	75.9
Main raw materials					
STEEL PLATE	ton	779,651	928,133	949,677	936,109
SECTION	ton	72,433	72,433	75,325	71,029
PAINT	L	12,244,387	12,244,387	14,535,144	15,697,440
Offshore and naval ships					
Raw material consumed	KRW Million	347,280	389,544	1,436,942	1,242,804
Raw material consumed ratio	%	12.3	9.6	26.1	18.4
Main raw materials					
STEEL PLATE	ton	13,315	84,864	46,422	6,118
SECTION	ton	2,528	4,840	12,279	3,911
PAINT	L	245,961	378,142	883,832	854,078
Others					
Raw material consumed	KRW Million	53,891	33,224	11,489	386,671
Raw material consumed ratio	%	1.9	0.8	0.2	3.3
Main raw materials					
STEEL PLATE	ton	140	242	30	2,717
SECTION	ton	10	18	2	229
PAINT	L	2,011	8,872	2,115	1,485

1) Data for 2021, 2022, and 2023 have been revised due to changes in data collection criteria, now based on the internal management system.

Green Procurement

	Unit	2021	2022	2023	2024
Low-/zero-carbon Vehicles					
Total no. of vehicles	Vehicles	549	690	640	840
No. of zero emission vehicles	Vehicles	2	12	13	19
Percentage of zero emission vehicles	%	0.4	1.7	2	2.3

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Waste[1)]

	Unit	2021	2022	2023	2024
Total waste generated	ton	33,659	36,264	41,493	57,367
Waste generation intensity[2)]	ton/ KRW 100 million	0.75	0.75	0.56	0.53
General waste treatment					
Total general waste treatment	ton	30,659	33,346	37,686	53,107
Landfill	ton	4,873	6,015	7,247	7,499
Incineration	ton	6,998	6,920	6,655	8,223
Recycling	ton	17,841	19,515	23,021	36,882
Others/physicochemical treatment	ton	946	895	763	503
Hazardous Waste Treatment					
Total hazardous waste treatment	ton	3,000	2,919	3,807	4,260
Landfill	ton	16	55	40	38
Incineration	ton	1,136	1,014	1,484	1,658
Recycling	ton	1,846	1,844	2,274	2,561
Others/physicochemical treatment	ton	2	6	9	3

1) Based on Geoje shipyard, Siheung R&D Campus, and Anjeong site
2) Waste generation intensity calculation: Total waste generated / Consolidated sales

Waste Generation by Major Sites

	Unit	2021	2022	2023	2024
Total waste generated (Geoje Shipyard)	ton	31,134	34,835	39,907	52,870
Landfill	ton	4,890	6,070	7,287	7,539
Incineration	ton	8,044	7,884	8,055	9,717
Recycling	ton	17,252	19,979	23,793	35,097
Others/Physicochemical Treatment	ton	948	901	772	518
Total waste generated (Anjeong Site)	ton	2,521	1,424	1,581	3,674

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Water

	Unit	2021	2022	2023	2024
Water					
Total water withdrawn[1]	ton	2,249,671	2,270,475	2,783,331	3,106,857
Service water (yard)	ton	2,101,567	2,161,661	2,682,168	3,003,285
Groundwater	ton	52,013	66,555	69,353	63,358
Service water (others)	ton	96,091	42,259	31,810	40,214
Intensity of water withdrawn[2]	ton/ KRW 100 million	50	47	38	29
Water stress[3]					
Water Withdrawals in the regions of Water stress	ton	16,621	16,474	18,197	21,277
Service water (Seoul)	ton	4,482	5,690	6,607	12,542
Service water (Siheung)	ton	12,139	10,784	11,590	8,735
Water Withdrawals rate in the regions of Water stress	%	0.7	0.7	0.7	0
Wastewater treatment					
Total wastewater treatment	ton	19,294	23,558	25,299	27,470
Sewage management					
Total sewage flow	ton	771,445	843,352	1,006,056	935,081
Recycled sewage	ton	162,025	89,087	176,128	210,973
Recycled sewage rate	%	21	10.6	17.5	23

1) From 2021, water withdrawal data includes not only the Geoje shipyard but also Dumo Dormitory, Nongso Research Institute, Neungpo Dormitory, West Gate Sports Center, and Anjeong site
2) Intensity of water withdrawn calculation: Total water withdrawal / Consolidated sales
3) Water withdrawal in water-stressed areas is separately disclosed for the Seoul Office and Siheung R&D Campus

2024 Water Consumption by Site

	Unit	2024
Total water consumption		
Total	ton	3,106,857
Geoje shipyard	ton	3,003,285
Anjeong site	ton	13,690
Dumo dormitory	ton	19,159
Sports plaza	ton	46,178
Seoul office (including Siheung R&D Campus)	ton	21,277
E&I Site	ton	174
Others[1]	ton	3,094
Service water		
Total ton	ton	3,043,499
Geoje shipyard	ton	3,003,285
Anjeong site	ton	13,690
Dumo dormitory	ton	163
Sports plaza	ton	2,482
Seoul office (including Siheung R&D Campus)	ton	21,277
E&I Site	ton	174
Others[1]	ton	2,428
Groundwater		
Total	ton	63,358
Geoje shipyard	ton	0
Anjeong site	ton	0
Dumo dormitory	ton	18,996
Sports plaza	ton	43,696
Others[1]	ton	666

1) Includes Neungpo Dormitory, Seomun Sports Center, and Admiral Residence

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Chemical Management

	Unit	2021	2022	2023	2024
Hazardous chemicals used	ton	0	0.05	913.8	1,445
Hazardous chemicals use intensity[1]	ton/ KRW 100 million	0	0	0.012	0.013
Chemical substance emissions					
Total chemical emissions	ton	672	1,463	1,002	1,082
Xylene (O, M, P)	ton	456.627	931.026	813.945	852.005
Ethylbenzene	ton	201.99	510.329	159.498	193.419
2–Propanol	ton	2.056	3.516	0	3.599
Ethylene	ton	10.958	11.569	13.92	14.408
Toluene	ton	0	0.152	0	5.384
Ethyl Acetate	ton	0	6.782	11.702	10.236
Methyl Ethyl Ketone	ton	0	0	2.499	3.313

1) Hazardous chemicals use intensity calculation formula: Hazardous Chemicals Usage / Consolidated sales

Air Pollutant Management[1]

	Unit	2021	2022	2023	2024
NOx					
NOx emissions	ton	6.896	8.107	9.012	10.661
NOx emissions intensity[2]	ton/ KRW 100 million	0.000154	0.000167	0.00012	0.000098
SOx					
SOx emissions	ton	0.023	0.124	0.47	0.44
SOx emissions intensity[2]	ton/ KRW 100 million	0.000001	0.000003	0.000006	0.000004
VOCs					
VOCs emissions	ton	1,871	1,257	1,375	1,732
VOCs emissions intensity[2]	ton/ KRW 100 million	0.041702	0.025863	0.01856	0.01607
PM					
Dust (PM10) emissions	ton	13.54	13.5	13.36	20.2
Dust (PM10) emission intensity[2]	ton/ KRW 100 million	0.000302	0.000278	0.00018	0.00018

1) Based on Geoje shipyard, Siheung R&D Campus, and Anjeong site
2) Air pollutant emission intensity calculation: Air pollutant emissions / Consolidated sales

Water Pollutant Management[1]

	Unit	2021	2022	2023	2024
TOC					
TOC emissions	ton	0	0.145	0.259	0.262
TOC emission intensity[2]	ton/ KRW 100 million	0	0.000003	0.000003	0.000002
COD					
COD emissions	ton	0.16	Changed to TOC	Changed to TOC	Changed to TOC
COD emission intensity[2]	ton/ KRW 100 million	0.0000036	Changed to TOC	Changed to TOC	Changed to TOC
SS					
SS emissions	ton	0.035	0.031	0.019	0.023
SS emission intensity[2]	ton/ KRW 100 million	0.00000078	0.00000064	0.00000026	0.00000021
BOD[3]					
BOD emissions	ton	–	–	–	0.316
BOD emission intensity[2]	ton/ KRW 100 million	–	–	–	0.0000029

1) Internal water quality standards for discharged wastewater: TOC 25mg/L, SS 10mg/L
2) Water pollutant emission intensity calculation: Water pollutant emissions / Consolidated sales
3) Measured from February 2024

Compliance Rate with Internal Standards[1)2)]

	Unit	2021	2022	2023	2024
Air pollutants	%	–	95.4	96	91.7
Water pollutants					
Total	%	–	97.7	96.6	97.7
Wastewater	%	–	100	95.4	100
Sewage	%	–	90.3	100	90.3

1) Compliance with 30% of legal standards for air/water pollutant emissions
2) Compliance rate calculated as the number of compliant cases divided by the total number of cases

Soil Contamination Tests

	Unit	2021	2022	2023	2024
Soil contamination tests	Case	6	26	8	9
Leakage tests	Case	2	2	5	3

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Greenhouse Gas Emissions

	Unit	2024
Scope 1&2		
Total emissions (Scope 1&2)	tCO_2eq	20,912
Direct emissions (Scope 1)	tCO_2eq	8,969
Indirect emissions (Scope 2)	tCO_2eq	11,944
GHG intensity[1)]	tCO_2eq/ KRW 100 million	9.9
Reduction rate (intensity)	%	3.74
GHG emissions target (current year)	tCO_2eq	20,159
Reduction rate (from the target)	%	–3.74
GHG verification		
GHG verification by third party	Y/N	Y

1) GHG intensity calculation: Total emissions / Subsidiary sales

Energy Consumption

	Unit	2024
Total energy consumption	TJ	321.7
Direct energy consumption	TJ	72.1
LNG	TJ	50
Diesel (total)	TJ	21.9
Gasoline	TJ	0.3
LPG	TJ	0.03
Indoor kerosene	TJ	0.003
Indirect energy consumption	TJ	249.6
Energy Intensity[1)]	TJ/ KRW 100 million	0.15

1) Energy intensity calculation: Total energy consumption / Subsidiary sales

Environmental Education and Training

	Unit	2024
Environmental education		
Number of participants	Person	837
Total training hours	Hour	957
Environmental training hours per employee	Hour	1
Environmental incident response		
Environmental incident response drills	Y/N	Y

Environmental Regulatory Compliance and International Certifications

	Unit	2024
Environmental regulatory compliance		
Number of inspections	Case	4
Environmental regulation violations	Case	0
Fines	KRW million	0
Environmental incidents	Case	0
Certifications		
ISO 14001	Y/N	Y
ISO 50001	Y/N	N
Environmental liability insurance		
Environmental liability insurance cov erage	Y/N	Y

Green Procurement

	Unit	2024
Low–/zero–carbon Vehicles		
Total no. of vehicles	Vehicles	16
No. of zero emission vehicles	Vehicles	3
Percentage of zero emission vehicles	%	18.8

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Raw Materials Consumption

	Unit	2024
Commercial vessels		
Main raw materials		
STEEL PLATE	ton	19,082
SECTION	ton	1,193
PAINT	L	49,639

WASTE

	Unit	2024
Total waste generated	ton	3,364
Waste generation intensity[1]	ton/ KRW 100 million	1.59
General waste treatment		
Total general waste treatment	ton	2,741
Landfill	ton	551
Incineration	ton	387
Recycling	ton	1,804
Others/physicochemical treatment	ton	0
Hazardous Waste Treatment		
Total hazardous waste treatment (designated waste)	ton	623
Landfill	ton	0
Incineration	ton	315
Recycling	ton	307
Others/physicochemical treatment	ton	0

1) Waste generation intensity calculation: Total waste generated / Subsidiary sales

Water

	Unit	2024
Water		
Total water withdrawn	ton	74,970
Service water (yard)	ton	38,621
Service water (others)	ton	36,349
Intensity of water withdrawn[1]	ton/ KRW 100 million	35
Water stress		
Withdrawals	ton	74,970
Water withdrawal rate	%	100
Wastewater treatment		
Total wastewater treatment	ton	336
Sewage management		
Total sewage flow	ton	39,623

1) Intensity of water withdrawn calculation: Total water withdrawal / Subsidiary sales

2024 Water Consumption by Site

	Unit	2024
Total water consumption		
Total	ton	74,970
Ecotech 1 Yard	ton	62,436
Ecotech 2 Yard	ton	12,534

Chemical Management

	Unit	2024
Hazardous chemicals used	ton	0.575
Hazardous chemicals use intensity[1]	ton/ KRW 100 million	0.00027

1) Hazardous chemicals use intensity calculation formula: Hazardous Chemicals Usage / Subsidiary sales

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Air Pollution Management

	Unit	2024
NOx		
NOx emissions	ton	0.271
NOx emissions intensity[1)]	ton/ KRW 100 million	0.00013
SOx		
SOx emissions	ton	0.0079
SOx emissions intensity[1)]	ton/ KRW 100 million	0.000004
VOCs		
VOCs emissions	ton	47.1
VOCs emissions intensity[1)]	ton/ KRW 100 million	0.0223
PM		
Dust (PM10) emissions	ton	3.6
Dust (PM10) emission intensity[1)]	ton/ KRW 100 million	0.0017

1) Air pollutant emission intensity calculation: Air pollutant emissions / Subsidiary sales

Water Pollution Management[1)]

	Unit	2024
TOC		
TOC emissions	ton	0.001
TOC emission intensity[2)]	ton/ KRW 100 million	0.000001
COD		
COD emissions	ton	0.001
COD emission intensity[2)]	ton/ KRW 100 million	0.000001
SS		
SS emissions	ton	0.002
SS emission intensity[2)]	ton/ KRW 100 million	0.000001
BOD		
BOD emissions	ton	0.002
BOD emission intensity[2)]	ton/ KRW 100 million	0.000001

1) Internal water quality standards for discharged wastewater: TOC 25mg/L, SS 10mg/L
2) Water pollutant emission intensity calculation: Water pollutant emissions / Subsidiary sales

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Greenhouse Gas Emissions

	Unit	2024
Scope 1&2		
Total emissions (Scope 1&2)	tCO_2eq	48,496
Direct emissions (Scope 1)	tCO_2eq	8,740
Indirect emissions (Scope 2)	tCO_2eq	39,756
GHG iantensity[1)]	tCO_2eq/ RMB Million	38.5
GHG verification		
GHG verification by third party	Y/N	N

1) GHG intensity calculation: Total emissions / Subsidiary sales

Energy Consumption

	Unit	2024
Total energy consumption	TJ	2,378
Direct energy consumption	TJ	145
LNG	TJ	111.3
Diesel (total)	TJ	32.8
Gasoline	TJ	1
Indirect energy consumption	TJ	2,233
Energy Intensity[1)]	TJ/RMB Million	1.9

1) Energy intensity calculation: Total energy consumption / Subsidiary sales

Environmental Education and Training

	Unit	2024
Environmental education		
Number of participants	Person	1,285
Total training hours	Hour	642.5
Environmental training hours per employee	Hour	0.5
Environmental incident response		
Environmental incident response drills	Y/N	Y

Environmental Regulatory Compliance and International Certifications

	Unit	2024
Environmental regulatory compliance		
Number of inspections	Case	44
Environmental regulation violations	Case	0
Fines	KRW Million	0
Environmental incidents	Case	0
Certifications		
ISO 14001	Y/N	Y
ISO 50001	Y/N	N
Environmental liability insurance		
Environmental liability insurance coverage	Y/N	N

Green Procurement

	Unit	2024
Low-/zero-carbon Vehicles		
Total no. of vehicles	Vehicles	200
No. of zero emission vehicles	Vehicles	7
Percentage of zero emission vehicles	%	3.5

Raw Materials Consumption

	Unit	2024
Commercial vessels		
Main raw materials		
STEEL PLATE	ton	202,869
PAINT	L	4,686,349
Offshore and naval ships		
Main raw materials		
STEEL PLATE	ton	12,734
SECTION	ton	694
PAINT	L	116,986

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Water

	Unit	2024
Water		
Total water withdrawn[1]	ton	195,892
Intensity of water withdrawn[2]	ton/RMB Million	156
Water stress		
Withdrawals	ton	195,892
Water withdrawal rate	%	100
Sewage management		
Total sewage flow	ton	76,792

1) Withdrawn from service water
2) Intensity of water withdrawn calculation: Total water withdrawal / Subsidiary sales

Chemical Management

	Unit	2024
Hazardous chemicals used	ton	175.3
Hazardous chemicals use intensity[1]	ton/RMB Million	0.139

1) Hazardous chemicals use intensity calculation formula: Hazardous Chemicals Usage / Subsidiary sales

Air Pollution Management

	Unit	2024
NOx		
NOx emissions	ton	1.073
NOx emissions intensity[1]	ton/RMB Million	0.00085
SOx		
SOx emissions	ton	0.28
SOx emissions intensity[1]	ton/RMB Million	0.00022
VOCs		
VOCs emissions	ton	151.1
VOCs emissions intensity[1]	ton/RMB Million	0.12006
PM		
Dust (PM10) emissions	ton	2.183
Dust (PM10) emission intensity[1]	ton/RMB Million	0.00173

1) Air pollutant emission intensity calculation: Air pollutant emissions / Subsidiary sales

Water Pollution Management[1]

	Unit	2024
COD		
COD emissions	ton	9.115
COD emission intensity[2]	ton/RMB Million	0.007243
SS		
SS emissions	ton	4.187
SS emission intensity[2]	ton/RMB Million	0.003327
BOD		
BOD emissions	ton	3.512
BOD emission intensity[2]	ton/RMB Million	0.002791

1) Internal water quality standards for discharged wastewater: SS 3mg/L, BOD 3mg/L
2) Water pollutant emission intensity calculation: Water pollutant emissions / Subsidiary sales

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Safety and Health Training

	Unit	2021	2022	2023	2024
Employees					
Participants	Person	8,684	8,375	8,833	9,591
Training hours	Hour	202,810	169,858	179,892	196,884
Training hours per employee[1)]	Hour	23	20	20	21
Participation rate	%	100	100	99	100
Suppliers					
Participants	Person	10,424	12,056	15,574	20,296
Training hours	Hour	290,166	355,214	515,292	637,207

1) Data for 2023 have been corrected due to data entry errors.

Safety Management and International Certifications

	Unit	2021	2022	2023	2024
Safety management					
Regular risk assessment	Session	1	1	1	1
Occasional risk assessment	Session	82	71	80	123
Supplier safety prevention management	Y/N	Y	Y	Y	Y
International certifications					
ISO 45001	Y/N	Y	Y	Y	Y

Occupational Accidents

	Unit	2021	2022	2023	2024
Employees					
Work-related fatalitie	Person	0	0	1	0
Work-related injuries	Person	39	26	33	40
Lost time incident (LTI)	Case	29	18	26	32
Lost time incident rate (LTIR)	Cases/200,000 working hours	0.28	0.21	0.19	0.29
Occupational accident rate	%	3.04	3.57	3.06	3.34
Suppliers					
Work-related fatalities	Person	0	3	0	3
Work-related injuries	Person	61	71	89	130
Lost time incident (LTI)	Case	25	29	41	70
Lost time incident rate (LTIR)	Cases/200,000 working hours	0.13	0.18	0.2	0.21
Occupational accident rate	%	1.67	1.86	2.14	3.45
Total recordable incident rate					
Total recordable incident rate (TRIR)	%	0.32	0.43	0.35	0.38
Fatality rate					
Fatality rate (fatality rate per 10,000 workers)	‰	0	1.28	0[1)]	1
Near-miss frequency rate					
Near-miss frequency rate (NMFR)	%	26.04	25.25	24.98	13.46
NMFR (Regular employees)	%	38.66	33.55	31.06	26.1
NMFR (Non-regular employees)	%	18.56	19.83	21.42	8.74

1) Data for 2023 revised as the incident was not recognized as an accident according to the final court ruling.

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Employee Status

	Unit	2021	2022	2023	2024
Total					
No. of employees[1]	Person	8,808	8,635	8,900	10,288
By age					
Below 30	Person	539	605	598	816
30–49	Person	5,599	5,203	5,265	6,159
50 or older	Person	2,670	2,827	3,037	3,313
By employment type					
By employment type	Person	8,662	8,315	8,423	9,610
Male	Person	8,364	8,008	8,107	9,171
Female	Person	298	307	316	439
Non-regular employees	Person	146	320	477	678
Male	Person	70	226	381	547
Female	Person	76	94	96	131
Workforce diversity					
Total no. of female employees	Person	374	401	412	570
Senior management (executives)	Person	0	0	1	2
Head of organization	Person	0	2	4	7
Office position	Person	369	394	402	556
Production-related position	Person	5	5	5	5
STEM-related position	Person	140	144	153	155
Persons with disabilities	Person	305	268	266	380
National veterans	Person	212	220	217	213

1) Total number of employees and executives (internal directors, external directors) based on the business report

	Unit	2021	2022	2023	2024
By nationality					
United States	Person	2	1	3	9
Vietnam	Person	0	0	32	149
Philippines	Person	1	2	0	1
New Zealand	Person	1	1	0	1
Russia	Person	1	1	0	1
India	Person	3	6	0	5
Australia	Person	1	0	1	1
Canada	Person	0	0	1	1
Non-employed workers[1)2)]					
Total	Person	12,351	14,108	18,788	20,656
Male	Person	10,489	11,979	16,259	18,498
Female	Person	1,862	2,129	2,529	2,158

1) Workers in workplaces that are not part of the company (design suppliers, cleaning service providers, etc.)
2) Data for 2021 and 2023 have been corrected due to data entry errors.

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Labor Union

	Unit	2021	2022	2023	2024
People eligible for union membership	Person	4,925	4,783	4,737	4,797
Union membership rate	%	100	100	100	100
Collective bargaining agreement coverage rate	%	57	58	57	50
Labor–management council meetings held	Case	1	0	1	1

Recruitment and Retention

		Unit	2021	2022	2023	2024
Recruitment						
Total		Person	120	622	839	2,122
By type	Entry–level	Person	94	374	326	615
	Experienced	Person	26	248	513	1,507
By gender	Male	Person	100	530	765	1,846
	Female	Person	20	92	74	276
By nat–ionality	South Korea	Person	120	618	800	1,800
	United States	Person	0	0	3	7
	Vietnam	Person	0	0	32	118
	Others	Person	0	4	4	197

Recruitment and Retention

		Unit	2021	2022	2023	2024
Turnover						
Total no. of employee turnover		Person	815	741	482	743
By gender	Male	Person	761	667	419	626
	Female	Person	54	74	63	117
By age	Below 30	Person	14	42	28	91
	30–49	Person	143	452	179	340
	50 or older	Person	658	247	275	312
Turnover rate		%	9.3	8.6	5.4	7.2
By gender	Male	%	8.6	7.7	4.7	6.1
	Female	%	0.6	0.9	0.7	1.1
By age	Below 30	%	0.2	0.5	0.3	0.9
	30–49	%	1.6	5.2	2	3.3
	50 or older	%	7.5	2.9	3.1	3
Voluntary turnover						
Voluntary turnover		Person	109	469	172	354
Voluntary turnover rate[1)]		%	1.26	5.65	1.93	3.44
Retention						
Average employee tenure		Year	19	19	18.5	17
By gender	Male	Year	19.4	19.5	19	17.6
	Female	Year	9.1	8.6	8.4	7

1) Compared to the total number of employees in the year

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TRAINING

		Unit	2021	2022	2023	2024
Training hours						
Total training hours		Hour	346,484	396,566	234,042	284,404
By employment type	Regular employees	Hour	327,592	370,099	217,366	260,075
	Non-regular employees	Hour	18,892	26,467	16,676	24,330
By gender	Male	Hour	311,489	347,515	202,832	256,714
	Female	Hour	34,995	49,051	31,210	26,970
By age	Below 30	Hour	35,659	47,501	26,394	46,343
	30–49	Hour	232,480	263,711	160,224	167,127
	50 or older	Hour	78,345	85,354	47,424	70,574
Training hours per employee		Hour	40.23	47.98	27.92	61.52
Training costs						
Total training costs		KRW thousand	2,306,170	3,432,487	5,234,978	2,972,581
By employment type	Regular employees	KRW thousand	2,180,424	3,203,404	4,861,968	1,812,796
	Non-regular employees	KRW thousand	125,746	229,083	373,010	157,360
By gender	Male	KRW thousand	2,073,244	3,007,924	4,536,877	1,538,521
	Female	KRW thousand	232,926	424,563	698,101	1,763
By age	Below 30	KRW thousand	237,346	411,146	590,364	1,889
	30–49	KRW thousand	1,547,369	2,282,557	3,583,838	1,368
	50 or older	KRW thousand	521,455	738,784	1,060,776	5,357
Training cost per employee		KRW thousand	268	415	625	643
Training satisfaction						
Satisfaction		Point	4.41	4.49	4.65	4.58

Evaluation and Remuneration

		Unit	2021	2022	2023	2024
Wage						
Employee average wage		KRW thousand	67,912	73,665	83,000	89,000
By gender	Male	KRW thousand	68,901	74,685	84,000	91,000
	Female	KRW thousand	45,624	52,589	58,000	62,000
CEO and employee remuneration						
Total CEO remuneration		KRW million	378	370	892	2,368
Gender pay gap						
Registered executive level average base salary						
By gender	Male	KRW million	226	284	388	558
	Female	KRW million	–	36	19	84
Registered executive level average total salary[1]						
By gender	Male	KRW million	342	1,004	1,127	845
	Female	KRW million	–	53	30	84
Unregistered executive level average base salary						
By gender	Male	KRW million	142	158	93	155
	Female	KRW million	–	–	–	–
Unregistered executive level average total salary[1]						
By gender	Male	KRW million	163	169	128	236
	Female	KRW million	–	–	–	–
Managerial level average base salary						
By gender	Male	KRW million	60	62	68	73
	Female	KRW million	–	74	62	105
Managerial level average total salary[1]						
By gender	Male	KRW million	80	86	97	105
	Female	KRW million	–	96	69	116
Non-managerial level average base salary						
By gender	Male	KRW million	51	53	57	61
	Female	KRW million	40	43	48	55

1) Total of fixed salary, variable salary, and other salaries

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Evaluation and Remuneration

		Unit	2021	2022	2023	2024
Gender pay gap						
Non-managerial level average total salary[1]						
By gender	Male	KRW million	68	75	83	89
	Female	KRW million	48	54	58	67
Performance evaluation						
Scope of evaluation		Person	3,650	3,546	3,660	4,295
No. subject to evaluation		Person	3,580	3,414	3,651	4,076
Evaluation coverage rate		%	98	96	99.8	94.9

1) Total of fixed salary, variable salary, and other salaries

Work-life balance[1]

	Unit	2021	2022	2023	2024
Work-life balance					
Usage rate of flexible working options	%	7.2	15.3	22.7	34.3
Employees who used parental leave					
Total	Person	246	262	158	155
Male	Person	197	211	116	129
Female	Person	49	51	42	26
Employees who returned to work after parental leave					
Male	Person	166	198	112	126
Female	Person	35	45	38	24
Employees who worked for a year or more after returning to work					
Male	Person	165	413	464	516
Female	Person	105	138	139	133

1) Data for 2021, 2022, and 2023 were corrected by recalculating based on the 25th period (January 1, 2024 – December 31, 2024) business report disclosure standards.

Welfare Benefits

	Unit	2021	2022	2023	2024
Children's tuition fees	KRW thousand	10,143,124	9,436,989	9,380,131	8,827,228
Medical expense	KRW thousand	8,543,110	8,780,223	8,862,791	9,806,831
Congratulatory and condolence allowance	KRW thousand	618,900	745,460	664,800	806,600

Human Rights Training

		Unit	2021	2022	2023	2024
Training hours per employee		Hour	4	4	4	4
By type	Sexual harassment prevention	Hour	1	1	1	1
	Workplace bullying prevention	Hour	1	1	1	1
	Disability awareness	Hour	1	1	1	1
	Information security	Hour	1	1	1	1

Grievance handling and whistleblowing

		Unit	2021	2022	2023	2024
Total number of reports received and processed		Case	0	0	0	2
By type	Conflict of interest[1]	Case	–	–	–	2
	Money laundering and insider trading	Case	0	0	0	0

1) Includes activities such as abuse of power and using information obtained through official duties for personal gain

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Supplier Management

	Unit	2021	2022	2023	2024
Tier 1 suppliers					
Total no. of tier 1 suppliers	Companies	1,440	1,843	1,330	1,334
Major tier 1 suppliers	Companies	275	311	265	338
Core tier 1 suppliers	Companies	46	39	8	29
New suppliers					
New suppliers	Companies	35	100	56	64
High-risk suppliers					
High-risk suppliers	Companies	27	28	26	45
High-risk suppliers ratio	%	1.9	1.5	2	3.4
Supplier Grievance Handling[1]					
Number of cases received	Case	–	–	–	0
Number of cases resolved	Case	–	–	–	0
Resolution rate	%	–	–	–	–

1) Managed as a metric from 2024

Supplier ESG Support

	Unit	2021	2022	2023	2024
Financial support					
Financial and Funding Support	KRW 100 million	60	10	20	49
Project support					
Human rights & ethical management guidelines	Y/N	Y	Y	Y	Y
Technology development support and technology protection program	Y/N	Y	Y	Y	Y
Employee job competency development training	Y/N	Y	Y	Y	Y
Support Performance[1]					
Suppliers receiving job competency development support	Companies	–	–	–	42
Participants	Person	–	–	–	575
Number of support cases	Case	–	–	–	66

1) Managed as a metric from 2024

Social Contribution[1]

	Unit	2021	2022	2023	2024
Cash donation	KRW 100 million	5,010	9	2	4,742

1) Not providing donations or support for political purposes in accordance with the Political Funds Act

Employee Volunteering Activities

	Unit	2021	2022	2023	2024
No. of participating employees	Person	1,167	785	830	1,047
Total volunteering hours	Hour	6,275	3,910	4,205	3,711
Volunteering hours per employee	Hour	5.4	5	5.1	3.5

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Customer Satisfaction

	Unit	2021	2022	2023	2024
Customer satisfaction score[1)]	Point	8	7.4	6.6	7
No. of customers responded	Companies	12	13	17	20

1) Based on a 10-point scale

Quality Management International Certifications

	Unit	2021	2022	2023	2024
ISO 9001 certification	Y/N	Y	Y	Y	Y
ISO 29001 certification	Y/N	Y	Y	Y	Y
ISO 3834 certification	Y/N	Y	Y	Y	Y

Production

		Unit	2021	2022	2023	2024
Production output by category						
Total output		Ships/ Equipments	40	19	35	31
By product	LNG carriers	Ships	18	4	3	13
	LPG carriers	Ships	0	2	6	4
	Containerships	Ships	5	5	8	12
	Tankers	Ships	9	6	11	1
	Drillships	Ships	0	1	3	0
	Surface ships	Ships	5	0	2	1
	Submarines	Ships	2	0	1	0
	Production equipment	Equipments	1	1	1	0

Membership Fees[1)]

	Unit	2021	2022	2023	2024
Total membership fees					
Total membership fees	KRW 100 million	12.6	12.5	14.5	41.6
Major association membership fees paid					
Korea Offshore & Shipbuilding Association	KRW 100 million	6	6.2	6.6	8.6
Korea Defense Industry Association	KRW 100 million	3.6	3	4.9	6.8
Korea Enterprises Federation	KRW 100 million	0.6	0.8	0.8	0.8
Geoje Chamber of Commerce and Industry	KRW 100 million	0.5	0.5	0.5	0.5
Korea Gas Union	KRW 100 million	0.3	0.1	0	0
Korea LNG Bunkering Industry Association	KRW 100 million	0.4	0.3	0.3	0.3

1) Not providing financial support or sponsorship for lobbying/interest groups, local election campaigns/candidates, or other political purposes in accordance with the Political Funds Act

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Safety and Health Training

	Unit	2024
Employees		
Participants	Person	133
Training hours	Hour	3,192
Safety and health training hours per employee	Hour	24
Participation rate	%	100
Suppliers		
Participants	Person	1,367
Training hours	Hour	32,808

Safety Management and Internal Certifications

	Unit	2024
Safety management		
Regular risk assessment	Session	1
Occasional risk assessment	Session	31
Supplier safety prevention management	Y/N	Y
International certifications		
ISO 45001	Y/N	Y

Occupational Accidents

	Unit	2024
Employees		
Work-related fatalities	Person	0
Work-related injuries	Person	2
Lost time incident (LTI)	Case	2
Lost time incident rate (LTIR)	Cases/200,000 working hours	0.1
Occupational accident rate	%	0.13
Suppliers		
Work-related fatalities	Person	0
Work-related injuries	Person	2
Lost time incident (LTI)	Case	2
Lost time incident rate (LTIR)	Cases/200,000 working hours	0
Occupational accident rate	%	0
Total recordable incident rate		
Total recordable incident rate (TRIR)	%	0
Fatality rate		
Fatality rate (fatality rate per 10,000 workers)	‰	0
Near-miss frequency rate		
Near-miss frequency rate (NMFR)	%	53
NMFR (Regular employees)	%	53
NMFR (Non-regular employees)	%	0

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Employee Status

		Unit	2024
Total			
No. of employees		Person	138
By age			
Below 30		Person	22
30–49		Person	93
50 or older		Person	23
By employment type			
Regular employees		Person	130
Male		Person	116
Female		Person	14
Non-regular employees		Person	8
Male		Person	8
Female		Person	0
Workforce diversity			
Total no. of female employees		Person	14
Senior management (executives)		Person	0
Head of organization		Person	0
Office position		Person	14
Production-relate position		Person	0
STEM-related position		Person	0
Persons with disabilities		Person	2
National veterans		Person	0

Labor Union

	Unit	2024
Labor-management council meetings held	Case	4

RECRUITMENT AND RETENTION

		Unit	2024
Recruitment			
Total		Person	16
By type	Entry-level	Person	4
	Experienced	Person	12
By gender	Male	Person	11
	Female	Person	5
By nationality	South Korea	Person	16
Turnover			
Total no. of employee turnover		Person	1
By gender	Male	Person	1
	Female	Person	0
By age	Below 30	Person	1
	30–49	Person	0
	50 or older	Person	0
Turnover rate		%	0.72
By gender	Male	%	0.86
	Female	%	0
By age	Below 30	%	4.55
	30–49	%	0
	50 or older	%	0
Voluntary turnover			
Voluntary turnover		Person	1
Voluntary turnover rate[1)]		%	0.72
Retention			
Average employee tenure		Year	9.1
By gender	Male	Year	9.4
	Female	Year	7.1

1) Compared to the total number of employees in the year

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Training

		Unit	2024
Training hours			
Total Training hours		Hour	1,410
By employment type	Regular employees	Hour	1,366
	Non-regular employees	Hour	44
By gender	Male	Hour	1,263
	Female	Hour	147
By age	Below 30	Hour	307
	30–49	Hour	934
	50 or older	Hour	169
Training costs			
Total training costs		KRW thousand	6,991
By employment type	Regular employees	KRW thousand	6,835
	Non-regular employees	KRW thousand	156
By gender	Male	KRW thousand	6,065
	Female	KRW thousand	927
By age	Below 30	KRW thousand	923
	30–49	KRW thousand	5,429
	50 or older	KRW thousand	640
Training cost per employee		KRW thousand	51

Evaluation and Remuneration

		Unit	2024
Wage			
Employee average wage		KRW thousand	78,050
By gender	Male	KRW thousand	79,315
	Female	KRW thousand	66,842
CEO and employee remuneration			
Total CEO remuneration		KRW million	182
Gender pay gap			
Registered executive level average base salary			
By gender	Male	KRW million	168
	Female	KRW million	–
Registered executive level average total salary[1]			
By gender	Male	KRW million	182
	Female	KRW million	–
Unregistered executive level average base salary			
By gender	Male	KRW million	105
	Female	KRW million	–
Unregistered executive level average total salary[1]			
By gender	Male	KRW million	121
	Female	KRW million	–
Managerial level average base salary			
By gender	Male	KRW million	66
	Female	KRW million	–
Managerial level average total salary[1]			
By gender	Male	KRW million	96
	Female	KRW million	–
Non-managerial level average base salary			
By gender	Male	KRW million	50.6
	Female	KRW million	48.6

1) Total of fixed salary, variable salary, and other salaries

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Evaluation and Remuneration

		Unit	2024
Gender pay gap			
Non-managerial level average total salary[1]			
By gender	Male	KRW million	70.8
	Female	KRW million	66.8
Performance evaluation			
Scope of evaluation		Person	126
No. subject to evaluation		Person	126
Evaluation coverage rate		%	100

1) Total of fixed salary, variable salary, and other salaries

Work-life balance

		Unit	2024
Work-life balance			
Usage rate of flexible working options		%	57
Employees who used parental leave			
Total		Person	0
By gender	Male	Person	0
	Female	Person	0
Employees who returned to work after parental leave			
Male		Person	1
Female		Person	0
Employees who worked for a year or more after returning to work			
Male		Person	1
Female		Person	0

Welfare Benefits

	Unit	2024
Children's tuition fees	KRW thousand	35,510
Medical expense	KRW thousand	23,322
Congratulatory and condolence allowance	KRW thousand	9,700

Human Rights Training

		Unit	2024
Training hours per employee		Hour	5
By type	Sexual harassment prevention	Hour	1
	Workplace bullying prevention	Hour	1
	Disability awareness	Hour	1
	Others	Hour	2

Grievance handling and whistleblowing

		Unit	2024
Total number of reports received and processed		Case	0
By type	Discrimination and harassment	Case	0
	Conflict of interest[1]	Case	0
	Money laundering and insider trading	Case	0

1) Includes activities such as abuse of power and using information obtained through official duties for personal gain

Supplier Management

	Unit	2024
Tier 1 suppliers		
Total no. of tier 1 suppliers	Companies	36
Major tier 1 suppliers	Companies	36
Core tier 1 suppliers	Companies	–
New suppliers		
New suppliers	Companies	3
High-risk suppliers		
High-risk suppliers	Companies	2
High-risk suppliers ratio	%	6
Supplier Grievance Handling		
Number of cases received	Case	9
Number of cases resolved	Case	8
Resolution rate	%	89

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Quality Management International Certifications

	Unit	2024
ISO 29001 certification	Y/N	N
ISO 3834 certification	Y/N	Y
ISO 9001 certification	Y/N	Y

Production

		Unit	2024
Production output by category			
By product	LNG carriers		
	T/DECK	ton	38,702
	CMR	ton	7,523
	T/BHD	ton	3,032
	E/ROOM	ton	1,812
	Containerships		
	H/C	ton	22,606
	T/BHD	ton	16,348
	BENCH	ton	581

Membership Fees[1)]

	Unit	2024
Total membership fees		
Total membership fees	KRW million	4.48
Major association membership fees paid		
Korean Nursing Association	KRW million	0.07
Korea Industrial Safety Association, Jeonnam Branch	KRW million	0.36
Korea Mechanical Construction Contractors Association	KRW million	0.2
Gwangju, Jeonnam Environmental Engineers Association	KRW million	0.2
Yeosu–Gwangyang Port Authority	KRW million	0.6
Yulchon Haeryong Industrial Complex Council	KRW million	1.36
Shipbuilding & Offshore Plant Engineering Cooperative	KRW million	1.2
Korea Fire Safety Institute	KRW million	0.13
Korea Electrical Engineers Association	KRW million	0.36

1) Not providing financial support or sponsorship for lobbying/interest groups, local election campaigns/candidates, or other political purposes in accordance with the Political Funds Act

Customer Satisfaction

	Unit	2024
Customer satisfaction score[1)]	Point	9
No. of customers responded	Companies	18

1) Based on a 10–point scale

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Safety Management and International Certifications

	Unit	2024
Safety management		
Regular risk assessment	Session	1
Occasional risk assessment	Session	63
Supplier safety prevention management	Y/N	Y
International certifications		
ISO 45001	Y/N	Y

Occupational Accidents

	Unit	2024
Employees		
Work-related fatalities	Person	0
Work-related injuries	Person	7
Lost time incident (LTI)	Case	7
Lost time incident (LTI)	Cases/200,000 working hours	0.17
Occupational accident rate	%	0.27
Suppliers		
Work-related fatalities	Person	0
Work-related injuries	Person	0
Lost time incident (LTI)	Case	0
Lost time incident rate (LTIR)	Cases/200,000 working hours	0
Occupational accident rate	%	0
Total recordable incident rate		
Total recordable incident rate (TRIR)	%	0
Fatality rate		
Fatality rate (fatality rate per 10,000 workers)	‰	0
Near-miss frequency rate		
Near-miss frequency rate (NMFR)	%	0.81
NMFR (Regular employees)	%	0.81
NMFR (Non-regular employees)	%	0

Employee Status

	Unit	2024
Total		
No. of employee	Person	1,300
By age		
Below 30	Person	125
30–49	Person	1,089
50 or older	Person	86
By employment type		
Regular employees	Person	1,300
Male	Person	1,193
Female	Person	107
Non-regular employees	Person	0
Workforce diversity		
Total no. of female employees	Person	107
Senior management (executives)	Person	0
Head of organization	Person	3
Office position	Person	81
Production-related position	Person	23
STEM-related position	Person	13
Persons with disabilities	Person	10
National veterans	Person	0

Labor Union

	Unit	2024
People eligible for union membership	Person	1,300
Union membership rate	%	100

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Recruitment and Retention

		Unit	2024
Recruitment			
Total		Person	55
By type	Entry-level	Person	32
	Experienced	Person	23
By gender	Male	Person	48
	Female	Person	7
By nationality	China	Person	55
Turnover			
Total no. of employee turnover		Person	34
By gender	Male	Person	31
	Female	Person	3
By age	Below 30	Person	15
	30–49	Person	15
	50 or older	Person	4
Turnover rate		%	2.5
By gender	Male	%	2.3
	Female	%	0.2
By age	Below 30	%	1.1
	30–49	%	1.1
	50 or older	%	0.3
Voluntary turnover			
Voluntary turnover		Person	18
Voluntary turnover rate[1]		%	1.4
Retention			
Average employee tenure		Year	13.4
By gender	Male	Year	13.7
	Female	Year	9.8

1) Compared to the total number of employees in the year

Evaluation and Remuneration

		Unit	2024
Wage			
Employee average wage		RMB	133,880
Male		RMB	134,278
Female		RMB	129,448
CEO and employee remuneration			
Total CEO remuneration		KRW million	192
Gender pay gap			
Managerial level average base salary			
By gender	Male	RMB	99,172
	Female	RMB	91,165
Managerial level average total salary[1]			
By gender	Male	RMB	142,039
	Female	RMB	130,667
Non-managerial level average base salary			
By gender	Male	RMB	64,421
	Female	RMB	60,555
Non-managerial level average total salary[1]			
By gender	Male	RMB	132,750
	Female	RMB	124,999
Performance evaluation			
Scope of evaluation		Person	1,253
No. subject to evaluation		Person	1,253
Evaluation coverage rate		%	100

1) Total of fixed salary, variable salary, and other salaries

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Training

	Unit	2024
Training hours		
Total training hours	Hour	5,240
Training hours per employee	Hour	4.1
Training costs per employee		
Total training costs	RMB	135,530
Training cost per employee	RMB	106
Training satisfaction		
Satisfaction	Hour	4.87

Work–life balance

	Unit	2024
Usage rate of flexible working options	%	0.31

Welfare Benefits

	Unit	2024
Congratulatory and condolence allowance	RMB	48,500

Grievance handling and whistleblowing

		Unit	2024
Total number of reports received and processed		Case	4
By type	Discrimination and harassment	Case	2
	Conflict of interest[1)]	Case	2
	Money laundering and insider trading	Case	0

1) Includes activities such as abuse of power and using information obtained through official duties for personal gain

Supplier Management

	Unit	2024
Tier 1 suppliers		
Total no. of tier 1 suppliers	Companies	19
Major tier 1 suppliers	Companies	19
Core tier 1 suppliers	Companies	–
New suppliers		
New suppliers	Companies	2

Supplier ESG Support

	Unit	2024
Financial support		
Financial and Funding Support	RMB	3,520,412
Project support		
Human rights & ethical management guidelines	Y/N	Y
Technology development support and technology protection program	Y/N	Y
Employee job competency development training	Y/N	Y

Employee Volunteering Activities

	Unit	2024
No. of participating employees	Person	4
Total volunteering hours	Hour	1
Volunteering hours per employee	Hour	0.25

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Quality Management International Certifications

	Unit	2024
ISO 29001 certification	Y/N	N
ISO 3834 certification	Y/N	N
ISO 9001 certification	Y/N	Y

Production

		Unit	2024
Production output by category			
By product	LNG carriers	ton	36,351
	LPG carriers	ton	0
	Containerships	ton	183,760
	Tankers	ton	8,963

Membership Fees[1)]

	Unit	2024
Total membership fees		
Total membership fees	RMB	19,000
Major association membership fees paid		
Yantai Development Bureau Human Resources Association	RMB	5,000
Yantai Korean Chamber of Commerce and Industry	RMB	6,000
Yantai Port Association	RMB	6,000
Safety Production Association	RMB	2,000

1) Not providing financial support or sponsorship for lobbying/interest groups, local election campaigns/candidates, or other political purposes in accordance with the Political Funds Act

Customer Satisfaction

	Unit	2024
Customer satisfaction score[1)]	Point	7.8
No. of customers responded	Companies	8

1) Based on a 10-point scale

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Board of Directors Composition

	Unit	2021	2022	2023	2024[1]
Independence					
Ratio of independent directors	%	57	57	56	56
No. of other external position allowed	Positions	2	2	2	2
Diversity					
Ratio of female directors	%	0	14	11	11
No. of female directors who are neither the controlling shareholders nor relatives of registered directors	Person	0	1	1	1
Expertise					
No. of independent directors with industry experiences	%	43	43	44	67
Financial expert	Person	1	1	1	2
Reduction or exclusion of liability					
Subscription of liability insurance	Y/N	Y	Y	Y	Y

1) Board of Directors composition as of May 2025

Independent Director Recommendation Committee

	Unit	2021	2022	2023	2024
No. of members	Person	5	5	3	3
Ratio of independent directors	%	80	80	66.7	67
No. of meetings held	Session	1	1	2	0
Attendance rate	%	100	75	100	–
Attendance rate	Case	1	1	2	–

Board of Directors Operation Status

	Unit	2021	2022	2023[1]	2024
Meeting and attendance					
No. of meetings held	Session	13	16	9	21
Attendance rate	%	97.8	94.3	93.8	95.8
Independent director attendance rate	%	96.2	91.7	100	97.1
Agenda items					
Agenda for report	Case	21	23	0	8
Agenda for resolution	Case	25	27	54	144
Approved[2]	%	92.4	99.2	100	100
Opposed[2]	%	5.9	0.4	0	0
Reserved[2]	%	1.2	0.4	0	0
ESG-related items[3]					
Climate change and environmental management performance	Y/N	–	Y	Y	Y
Materiality Assessment	Y/N	–	Y	Y	Y

1) Data for 2023 is calculated based on the following the official launch of Hanwha Ocean in May 2023.
2) Data has been revised after recalculation to include reserved opinions.
3) Data has been collected from 2022 with the establishment of the ESG Committee in May 2022.

Audit Committee

	Unit	2021	2022	2023	2024
No. of members	Person	3	4	3	3
Ratio of independent directors	%	100	100	100	100
Financial expertise of chairperson	Y/N	Y	N	Y	Y
Accounting expert	Person	2	1	1	1
Industrial expert	Person	0	3	1	1
No. of meetings held	Session	10	13	11	6
Attendance rate	%	97	100	100	100
No. of agenda items approved	Case	6	14	11	11
No. of agenda items reported	Case	34	39	23	21
No. of against or amendment	Case	0	0	0	0

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Hanwha Ocean

ESG Committee[1)]

	Unit	2021	2022	2023	2024
No. of members	Person	–	5	3	3
Ratio of independent directors	%	–	80	67	67
Members with ESG expertise	Person	–	2	0	1
Attendance rate	%	–	100	100	100
No. of meetings held	Person	–	2	2	4
No. of agenda items approved	Case	–	1	2	1
No. of agenda items reported	Case	–	3	0	12
No. of against or amendment	Case	–	0	0	0

1) Data has been collected from 2022 with the establishment of the ESG Committee in May 2022.

Internal Transaction Committee[1)]

	Unit	2021	2022	2023	2024
No. of members	Person	–	–	3	3
Ratio of independent directors	%	–	–	100	100
Attendance rate	%	–	–	100	100
No. of meetings held	Session	–	–	8	15
No. of agenda items approved	Case	–	–	33	103
No. of agenda items reported	Case	–	–	0	0
No. of against or amendment	Case	–	–	0	0

1) Data has been collected from 2023 with the establishment of the Internal Transaction Committee in May 2023.

Stock Ownership

		Unit	2024[1)]
Shareholders with 5% or more			
Korea Development Bank	No. of stocks	Share	59,738,211
	Shares owned	%	19.5
National Pension Service	No. of stocks	Share	18,002,428
	Shares owned	%	5.9
Hanwha Aerospace Co., Ltd.	No. of stocks	Share	70,901,820
	Shares owned	%	23.1
Hanwha Systems Co., Ltd.	No. of stocks	Share	35,450,910
	Shares owned	%	11.6
Hanwha Impact Partners Inc.	No. of stocks	Share	28,360,726
	Shares owned	%	9.3

1) As of December 31st, 2024

Code of Conduct

	Unit	2021	2022	2023	2024
Code of Conduct Coverage					
Employee coverage rate	%	100	100	100	100
Audit					
Audit of reporting and disciplinary actions	Case	45	44	42	62

Violation of Law related to Corruption

	Unit	2021	2022	2023	2024
No. of non-monetary sanctions related to anti-corruption	Case	0	3	9	0
Fines and settlements related to anti-trust/ competitive business practices	KRW 100 million	159	0	0	0

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Hanwha Ocean

Ethics and Compliance Training

		Unit	2021	2022	2023	2024
Ethics Training[1]						
Training hours per employee		Hour	0.42	0.52	0	0.46
Participation rate		%	42	52	0	46
No. of training sessions		Session	15	23	0	12
No. of participants		Person	2,767	5,356	0	4,683
Compliance Training						
No. of participants		Person	937	240	801	1,029
By employment type[2]	Regular employees	Person	–	–	–	993
	Non-regular employees	Person	–	–	–	36

1) For 2023 data, ethical management activities were restructured and training was not conducted due to ongoing affiliate incorporation and corporate merger processes.
2) Data has been categorized by employment type from 2024.

Data Breach

	Unit	2021	2022	2023	2024
Total no. of data protection violations	Case	0	0	0	0
No. of customer data protection violations	Case	0	0	0	0
Total amount of data breach fines and penalties	KRW thousand	0	0	0	0

International Certifications and Investments in Information Security

	Unit	2021	2022	2023	2024
ISO27001 certification coverage rate[1]	%	100	100	100	100
ISO27701 certification coverage rate[2]	%	–	–	100	100
Percentage of information security investments	%	2.14	3.8	3.7	5.9

1) Certification acquired and maintained from 2008 onwards
2) Certification acquired and maintained from 2023 onwards

Information Security Training

	Unit	2021	2022	2023	2024
Employees					
Participants	Person	8,903	8,779	8,732	10,287
Training hours[1]	Hour	18,378	22,393	22,133	23,241
Training hours per employee[1]	Hour	2.04	2.55	2.52	2.26
Participation rate	%	100	100	100	100
Employees of Supplier[2]					
Participants	Person	10,695	12,328	17,215	20,030
Training hours	Hour	6,786	7,964	14,887	18,114
Training hours per employee	Hour	0.63	0.65	0.86	0.90
Participation rate	%	100	100	100	100
Employees of subsidiaries and invested companies[3]					
Participants	Person	6,070	6,251	2,956	3,198
Training hours	Hour	1,014	1,044	494	534
Training hours per employee	Hour	0.17	0.17	0.17	0.17
Participation rate	%	100	100	100	100
Training Program					
Personal data protection training	Y/N	Y	Y	Y	Y
Information security training	Y/N	Y	Y	Y	Y

1) For 2021 and 2023 data, figures have been corrected due to data entry errors.
2) Includes employees of regular and short-term in-house suppliers, on-site external suppliers, on-site resident suppliers, and design and general affairs suppliers
3) Includes employees of the company's subsidiaries and invested companies for each respective year.

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Hanwha Ocean Ecotech

Data Breach

	Unit	2024
Total no. of data protection violations	Case	0
No. of customer data protection violations	Case	0
Total amount of data breach fines and penalties	KRW thousand	0

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Data Breach

	Unit	2024
Total no. of data protection violations	Case	0
No. of customer data protection violations	Case	0
Total amount of data breach fines and penalties	RMB	0

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Financial Performance

Consolidated Statement of Financial Position

(Unit: KRW)

Category	22nd Term (2021.12.31)	23rd Term (2022.12.31)	24th Term (2023.12.31)	25th Term (2024.12.31)
Assets				
Current Assets	6,481,079,243,776	7,822,464,527,787	9,217,523,943,523	11,246,034,307,660
Cash and Cash Equivalents	1,778,939,684,909	659,721,353,644	1,799,307,748,627	588,259,735,081
Other Financial Assets	310,692,716,217	492,254,450,925	124,947,864,867	46,003,529,174
Trade receivables and other receivables	345,121,592,212	404,741,920,827	332,546,692,552	894,491,362,699
Contract Assets	1,936,517,059,375	2,566,075,039,882	2,517,851,299,530	4,986,595,942,873
Liquid Fixed Contract Assets	34,411,945,934	199,897,728,490	229,691,055,607	343,936,218,148
Liquid Currency Forward Assets	909,972,738	2,711,793,379	1,610,817,795	1,002,957,856
Inventories	1,139,095,854,036	2,202,075,920,366	2,890,783,261,031	2,779,695,381,926
Current Income Tax Assets	90,457,208	5,831,757,234	5,494,680,690	8,632,120,022
Other Current Assets	773,335,846,429	1,288,871,598,880	1,315,290,522,824	1,597,417,059,881
Assets Held for Sale	161,964,114,718	282,964,160	–	–
Non-current Assets	4,142,130,311,297	4,413,200,777,089	4,727,248,748,871	6,597,774,853,635
Long-term Other Financial Assets	233,164,697,372	40,246,059,616	39,489,678,769	254,635,467,179
Investments in Associates and Joint Ventures	3,989,401,680	3,694,655,545	4,243,075,789	324,219,319,430
Long-term Trade Receivables and Other Receivables	103,932,421,700	203,539,473,132	273,802,161,219	267,215,330,308
Fixed Contract Assets	230,251,395,246	233,363,839,105	87,209,373,024	37,718,500,441
Currency Forward Assets	1,521,816,452	792,219,774	–	–
Tangible Assets	3,469,402,806,831	3,786,679,503,146	4,062,170,717,055	4,648,353,653,506
Right-of-use Assets	82,802,612,559	71,585,233,175	76,561,755,134	133,041,573,649
Intangible Assets	1,207,778,907	1,532,333,909	4,343,852,391	394,140,100,251
Deferred Tax Assets	352,575,328	267,523,592	164,100,774,141	506,573,927,196
Other Non-current Assets	15,504,805,222	11,793,626,167	14,179,608,164	30,417,385,073
Net Defined Benefit Assets		59,706,309,928	1,147,753,185	1,459,596,602
Total Assets	**10,623,209,555,073**	**12,235,665,304,876**	**13,944,772,692,394**	**17,843,809,161,295**

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Consolidated Statement of Financial Position

(Unit: KRW)

Category	22nd Term (2021.12.31)	23rd Term (2022.12.31)	24th Term (2023.12.31)	25th Term (2024.12.31)
Liabilities				
Current Liabilities	7,464,467,860,107	10,672,486,378,148	7,459,444,078,866	10,346,614,469,478
Borrowings	2,228,998,330,994	2,465,575,164,918	526,449,916,188	3,237,744,026,040
Bonds Payable	238,442,634,884	121,954,044,653	–	–
Financial Liabilities at Fair Value Through Profit or Loss	–	31,440,478,273	–	–
Trade Payables and Other Payables	669,851,318,850	921,458,489,386	1,176,410,906,419	1,671,989,516,015
Current Lease Liabilities	16,873,930,908	20,405,473,884	23,279,576,577	30,464,359,467
Current Fixed Contract Liabilities	140,129,827	916,144,617	661,829,091	–
Current Currency Forward Liabilities	53,158,224,933	291,512,617,442	227,839,639,278	347,617,380,226
Contract Liabilities	2,094,172,332,343	4,681,596,485,441	4,366,249,553,528	4,315,343,882,051
Current Provisions	1,758,206,811,661	1,570,254,834,637	715,250,595,682	364,183,967,238
Current Corporate Tax Liabilities	2,336,385,912	1,386,701,553	837,311,710	3,007,758,109
Other Current Liabilities	402,287,759,795	565,985,943,344	422,464,750,393	376,263,580,332
Non-current Liabilities	941,158,242,076	818,206,994,770	2,173,171,492,831	2,633,844,801,092
Long-term Borrowings	122,512,939,771	99,715,361,820	1,664,742,451,152	2,028,126,039,778
Bonds Payable	111,743,389,546	–	–	–
Long-term Trade Payables and Other Liabilities	6,993,081,698	5,244,465,650	5,234,394,539	15,320,021,342
Net Defined Benefit Liabilities and Other Long-term Employee Benefits Liabilities	31,910,021,912	22,406,070,610	113,616,425,911	228,230,525,516
Provisions	334,794,548,254	328,991,337,637	229,959,699,304	187,901,658,681
Lease Liabilities	61,166,932,659	48,605,249,624	51,346,196,336	98,270,130,554
Fixed Contract Liabilities	1,062,990,620	69,292,789	–	–
Currency Forward Liabilities	207,082,399,695	194,199,712,629	88,420,592,902	53,181,890,916
Deferred Tax Liabilities	63,891,937,921	118,975,504,011	19,851,732,687	22,814,534,305
Total Liabilities	**8,405,626,102,183**	**11,490,693,372,918**	**9,632,615,571,697**	**12,980,459,270,570**

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Financial Performance

Consolidated Statement of Financial Position

(Unit: KRW)

Category	22nd Term (2021.12.31)	23rd Term (2022.12.31)	24th Term (2023.12.31)	25th Term (2024.12.31)
Capital				
Parent's Shareholders' Equity	2,217,583,452,890	744,971,931,958	4,307,452,654,474	4,858,676,068,261
Share Capital	541,453,345,000	541,453,345,000	1,536,794,495,000	1,537,066,970,000
Capital Surplus	10,128,903,215	10,128,903,215	2,740,229,781,604	118,688,521,746
Capital Adjustment	6,800,304,360	6,800,304,360	6,800,304,360	6,456,534,060
Innovative Capital Securities	2,332,832,256,181	2,332,832,256,181	2,332,832,256,181	2,332,832,256,181
Accumulated Other Comprehensive Income	327,644,791,270	554,468,110,646	558,952,944,640	627,183,507,282
Retained Earnings (Accumulated Deficit)	-1,001,276,147,136	-2,700,710,987,444	-2,868,157,127,311	236,448,278,992
Non-controlling Interests	-	-	4,704,466,223	4,673,822,464
Total Capital	**2,217,583,452,890**	**744,971,931,958**	**4,312,157,120,697**	**4,863,349,890,725**
Total Liabilities and Capital	**10,623,209,555,073**	**12,235,665,304,876**	**13,944,772,692,394**	**17,843,809,161,295**

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Consolidated Income Statement

(Unit: KRW)

Category	22nd Term (2021.12.31)	23rd Term (2022.12.31)	24th Term (2023.12.31)	25th Term (2024.12.31)
Sales	4,486,585,681,366	4,860,150,249,534	7,408,312,265,643	10,776,004,933,627
Cost of Solid	6,033,692,327,985	6,207,032,528,586	7,309,503,815,084	10,092,078,699,901
Gross Profit (Loss)	-1,547,106,646,619	-1,346,882,279,052	98,808,450,559	683,926,233,726
Selling, General and Administrative Expenses	207,544,728,888	266,682,254,646	295,306,750,925	446,049,854,409
Operating Profit (Loss)	-1,754,651,375,507	-1,613,564,533,698	-196,498,300,366	237,876,379,317
Financial Income	277,457,665,098	540,128,000,445	552,678,716,465	696,500,462,509
Financial Expenses	761,410,435,090	1,137,043,236,621	898,893,098,681	1,172,189,542,295
Other Income	604,483,219,423	510,617,026,458	555,048,620,441	504,266,507,102
Other Expenses	92,012,143,298	94,693,342,483	130,113,539,083	100,869,543,531
Equity Method Income (Loss)	-1,325,874,883	229,653,865	1,498,420,244	15,450,802,575
Profit (Loss) Before Tax	-1,727,458,944,257	-1,794,326,432,034	-116,279,180,980	181,035,065,677
Income Tax Expense (Gain)	-27,629,514,523	-49,547,984,377	-276,323,035,463	-347,177,832,470
Net Profit (Loss) for the Period	-1,699,829,429,734	-1,744,778,447,657	160,043,854,483	528,212,898,147
Attributable Net Profit (Loss) for the Period				
Owners of the Parent Company	-	-1,744,778,447,657	159,885,949,584	528,119,120,128
Non-controlling Interests	-1,699,829,429,734	-	157,904,899	93,778,019
Earnings per Share				
Basic Earnings per Share	-16,072	-16,493	736	1,648
Diluted Earnings per Share	-16,072	-16,493	659	1,449

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Financial Performance

Consolidated Statement of Comprehensive Income

(Unit: KRW)

Category	22nd Term (2021.12.31)	23rd Term (2022.12.31)	24th Term (2023.12.31)	25th Term (2024.12.31)
Net Profit (Loss) for the Period	-1,699,829,429,734	-1,744,778,447,657	160,043,854,483	528,212,898,147
Other Comprehensive Income	49,539,950,941	272,166,926,725	-169,893,511,347	40,186,513,133
Items Not Subsequently Reclassified to Profit or Loss				
Remeasurement of Net Defined Benefit Plans	17,631,218,781	7,319,881,280	-174,404,367,153	-53,815,018,489
Revaluation Surplus of Tangible Assets	17,147,102,635	274,847,406,350	71,184,088	-744,666,228
Other Comprehensive Income — Gains and Losses on Financial Assets at Fair Value	-784,511,691	1,362,591,000	-946,186,300	30,256,539,316
Items Subsequently Reclassified to Profit or Loss				
Foreign Currency Translation Gains and Losses	15,546,141,216	-11,362,951,905	5,385,858,018	54,575,379,784
Changes in Equity of Associates and Joint Ventures	-	-	-	9,914,278,750
Total Comprehensive Income (Loss) for the Period	-1,650,289,478,793	-1,472,611,520,932	-9,849,656,864	568,399,411,280
Attributable Comprehensive Income				
Owners of the Parent	-1,650,289,478,793	-1,472,611,520,932	-10,004,486,513	568,323,552,983
Non-controlling Interest	-	-	154,829,649	75,858,297

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GRI 1 : FOUNDATION 2021

Disclosure	내용
Statement on Reporting	Hanwha Ocean reports information from January 1, 2024 to December 31, 2024 in accordance with GRI Standards 2021.
Used GRI 1	GRI 1: Foundation 2021
Applicable GRI Sector Standards	As of June 2025, no sector standards applicable to Hanwha Ocean have been published.

GRI 2 : GENERAL DISCLOSURES 2021

Topic	No.	Disclosure	Report Page
The Organization and its Reporting Practices	2–1	Organizational details	6, 9
	2–2	Entities included in the organization's sustainability reporting	2, 9
	2–3	Reporting period, frequency and contact point	2
	2–4	Restatements of information	2, 89, 90, 99, 100, 103, 115, 117
	2–5	External assurance	2, 129~132
Activities and workers	2–6	Activities, value chain and other business relationships	6~9, 15
	2–7	Employees	100, 107, 112
	2–8	Workers who are not employees	100
Governance	2–9	Governance structure and composition	78~80
	2–10	Nomination and selection of the highest governance body	78~80
	2–11	Chair of the highest governance body	78
	2–12	Role of the highest governance body in overseeing the management of impacts	13, 78~80
	2–13	Delegation of responsibility for managing impacts	13, 78~80
	2–14	Role of the highest governance body in sustainability reporting	17, 80
	2–15	Conflicts of interest	78, 116
	2–16	Communication of critical concerns	79~80, 115~116
	2–17	Collective knowledge of the highest governance body	68
	2–18	Evaluation of the performance of the highest governance body	13
	2–19	Remuneration policies	80
	2–20	Process to determine remuneration	80
	2–21	Annual total compensation ratio	102
Strategy, Policies and Practices	2–22	Statement on sustainable development strategy	5
	2–23	Policy commitments	41, 46, 65
	2–24	Embedding policy commitments	41~45, 46~47, 65~66
	2–25	Processes to remediate negative impacts	44, 48, 65
	2–26	Mechanisms for seeking advice and raising concerns	44, 48, 49, 65, 71, 86
	2–27	Compliance with laws and regulations	90, 94, 97, 116, 117, 118 Business Report p.761
	2–28	Membership associations	133
Stakeholder Engagement	2–29	Approach to stakeholder engagement	14, 55
	2–30	Collective bargaining agreements	101

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GRI 3 : MATERIAL TOPICS 2021

Topic		No.	Disclosure	Report Page
Disclosure of Material Topics		3-1	Process to determine material topics	16~18
		3-2	List of material topics	17~18
Safety and Health	GRI 3: Material Topics 2021	3-3	Management of material topics	18, 36~39
	GRI 403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	32~33, 36~37
		403-2	Hazard identification, risk assessment, and incident investigation	35~39
		403-3	Occupational health services	35, 70
		403-4	Worker participation, consultation, and communication on occupational health and safety	32
		403-5	Worker training on occupational health and safety	36, 106
		403-6	Promotion of worker health	35, 70
		403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	33~39
		403-8	Workers covered by an occupational health and safety management system	32~33, 36
		403-9	Work-related injuries	34~39, 99, 106, 111
Climate Change Response	GRI 3: Material Topics 2021	3-3	Management of material topics	18, 28-31
	GRI 301: Energy 2016	302-1	Energy consumption within the organization	31, 89, 94, 97
		302-2	Energy consumption outside of the organization	31, 89, 94, 97
		302-3	Energy intensity	31, 89, 94, 97
	GRI 305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	31, 89, 94, 97
		305-2	Energy indirect (Scope 2) GHG emissions	31, 89, 94, 97
		305-3	Other indirect (Scope 3) GHG emissions	31, 89
		305-4	GHG emissions intensity	31, 89, 94, 97
		305-5	Reduction of GHG emissions	31, 89, 94
		305-6	Emissions of ozone-depleting substances (ODS)	Not Applicable
		305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	96
Supply Chain Management and Shared Growth	GRI 3: Material Topics 2021	3-3	Management of material topics	18, 41~45
	GRI 308: Supplier Environmental Assessment 2016	308-1	New suppliers that were screened using environmental criteria	44, 104, 109, 114
		308-2	Negative environmental impacts in the supply chain and actions taken	43~44, 104
	GRI 414: Supplier Social Assessment 2016	414-1	New suppliers that were screened using social criteria	44, 104, 109, 114
		414-2	Negative social impacts in the supply chain and actions taken	43~44, 104
Ethics and Compliance	GRI 3: Material Topics 2021	3-3	Management of material topics	18, 46~49
	GRI 206: Anti-competitive Behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No lawsuits
	GRI 205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	48
		205-2	Communication and training about anti-corruption policies and procedures	46~47, 49, 117
		205-3	Confirmed incidents of corruption and actions taken	116

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KSSB

As calls for disclosure of information on climate-related risks and opportunities grow worldwide, the Korea Accounting Standards Board Sustainability Standards Committee has established Sustainability Disclosure Standard Draft No. 2. Following the mandatory implementation of KSSB No. 2, companies are required to disclose information on climate-related risks and opportunities. This enables companies to promote sustainable growth and development while proactively responding to stakeholder demands and enhancing transparency by providing high-quality sustainability financial information in global capital markets.

Topic	Metric	Report Page
Governance	Governing body overseeing climate-related risks and opportunities	13, 28
	Management responsible for managing climate-related risks and opportunities	13, 28
Strategy	Climate-related risks and opportunities reasonably expected to affect the company's prospect	28
	Current and anticipated impacts of climate-related risks and opportunities on the company's business model and value chain	28
	Impact of climate-related risks and opportunities on the company's strategy and decision-making	28~30
	Current and anticipated impacts of climate-related risks and opportunities on financial status, financial performance, and cash flows during the reporting period	28~29
	Climate resilience of company strategy and business model considering climate-related changes, developments, and uncertainties	29
Risk Management	Company processes for identifying, assessing, prioritizing, and monitoring climate-related risks and opportunities	31
Metrics and Targets	Cross-industry metrics – Scope 1, 2, 3 Emissions – Assets or business activities vulnerable to climate-related risks or aligned with opportunities – Capital deployed related to climate-related risks and opportunities – Internal Carbon Pricing – Compensation	31, 89
	Industry-based metrics	128
	Climate-related Targets	13, 31

TCFD

Countries participating in the 2015 Paris Agreement set targets to reduce greenhouse gas emissions and resolved to implement global efforts to prevent global warming. In response to global societal movements and demands, the Financial Stability Board (FSB) established the Task Force on Climate-related Financial Disclosures (TCFD) in December 2015 to promote disclosure of financial information related to climate change. The TCFD recommends that companies directly identify climate-related risks and opportunities and disclose their financial impacts.

Topic	Recommendation	Report Page
Governance	a. Describe the board's oversight of climate-related risks and opportunities	13, 28
	b. Describe management's role in assessing and managing climate-related risks and opportunities	13, 28
Strategy	a. Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	28
	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	28~30
Risk Management	a. Describe the organization's processes for identifying and assessing climate-related risks	31
	b. Describe the organization's processes for managing climate-related risks	31
	c. Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	31
Metrics and Targets	a. Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process	31, 89
	b. Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	31, 89
	c. Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets	13, 31

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SASB

TOPIC	CODE	Metric	Unit	2021	2022	2023	2024	Remarks
Energy Management	RT-IG-130a.1	Total energy consumed	TJ	5,418	5,731	7,395	8,163	
		Percentage grid electricity	%	75	71	65	65	
		Percentage renewable	%	0	0	0	0	
Workforce Health and Safety	RT-IG-320a.1	Total Recordable Incident Rate (TRIR)	%	0.32	0.43	0.35	0.38	
		Fatality Rate		0	1.28	0	1	
		Near Miss Frequency Rate (NMFR)	%	26.04	25.25	24.98	13.46	
		(a) Near Miss Frequency Rate (NMFR) for Direct Employees	%	38.66	33.55	31.06	26.1	
		(b) Near miss frequency rate (NMFR) for Contract Employees	%	18.56	19.83	21.42	8.74	
Fuel Efficiency and Emissions in Use-phase	RT-IG-410a.1	Sales-weighted fleet fuel efficiency for medium- and heavy-duty vehicles	L/100 ton km	-	-	-	-	Not Applicable
	RT-IG-410a.2	Sales-weighted fuel efficiency for nonroad equipment	L/hour	-	-	-	-	Not Applicable
	RT-IG-410a.3	Sales-weighted fuel efficiency for stationary generators	KJ/L	-	-	-	-	Not Applicable
	RT-IG-410a.4	(1) Emissions of Nitrogen Oxide (NOx)	ton	6.9	8.11	9.01	10.66	
		(a) Sales-weighted emissions of marine diesel engines	ton	-	-	-	-	Not Applicable
		(b) Sales-weighted emissions of locomotive diesel engines	ton	-	-	-	-	Not Applicable
		(c) Sales-weighted emissions of on-road medium-and heavy-duty engines	ton	-	-	-	-	Not Applicable
		(d) Sales-weighted emissions of other non-road diesel engines	ton	-	-	-	-	Not Applicable
		(2) Emissions of Particulate Matter (PM)	ton	13.54	13.5	13.36	20.2	
		(a) Sales-weighted emissions of marine diesel engines	ton	-	-	-	-	Not Applicable
		(b) Sales-weighted emissions of locomotive diesel engines	ton	-	-	-	-	Not Applicable
		(c) Sales-weighted emissions of on-road medium-and heavy-duty engines	ton	-	-	-	-	Not Applicable
		(d) Sales-weighted emissions of other non-road diesel engines	ton	-	-	-	-	Not Applicable
Materials Sourcing	RT-IG-440a.1	Description of the management of risks associated with the use of critical materials	-					Refer to page 45
Remanufacturing Design and Services	RT-IG-440b.1	Revenue from remanufactured products and remanufacturing services	KRW	-	-	-	-	Not Applicable
Activity Metrics	RT-IG-000.A	Number of units produced by product category	Units or Ships	40	19	35	31	
	RT-IG-000.B	Number of employees	Persons	8,808	8,635	8,900	10,288	

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Third-Party Assurance Statement

To Management and Stakeholders of Hanwha Ocean

Daishin Economic Research Institute (hereinafter "DERI") has been requested by Hanwha Ocean (hereinafter "the Company") to perform an independent assurance on the "Hanwha Ocean Sustainability Report 2024" for Hanwha Ocean (hereinafter "the Report").

Responsibility and Independence

The Company is responsible for all information and claims contained in the Report regarding establishment of the Company's sustainability management goals, performance management, etc. DERI is not engaged in any other commercial activities, except for its role as an independent assurance provider.

Assurance Standards and Level

Assurance Standards

This assurance engagement was conducted in accordance with the international assurance standard AA1000AS v3, and assessed whether the reporting met the requirements for reporting in accordance with the GRI Standards 2021.

- Compliance with AA1000AS Principles of Inclusivity, Materiality, Responsiveness, and Impact Assurance Standards
- Compliance with GRI Standards 2021 Reporting requirements

Assurance Type and Level

DERI performed a Type2, Moderate Level of assurance using AA1000AP(2018) with the adherence to the Principles of Inclusivity, Materiality, Responsiveness, Impact and verified the accuracy and integrity of the performance data related to sustainability.

Assurance Scope

This assurance includes the following.

- Data and information included in the Report regarding sustainability management activities from January 1st to December 31st 2024(with some quantitative data extending to the first half of 2025)
- Claims, commitments, plans, material issues included in the Report
- Correspondence between data and information included in the Report and those publicly available
- Validation of management system and process

Universal Standards	2-1, 2-2, 2-3, 2-4, 2-5 (The organization and its reporting practices) 2-6, 2-7, 2-8 (Activities and workers) 2-9, 2-10, 2-11, 2-12, 2-13, 2-14, 2-15, 2-16, 2-17, 2-18, 2-19, 2-20, 2-21 (Governance) 2-22, 2-23, 2-24, 2-25, 2-26, 2-27, 2-28 (Strategy, policies and practices) 2-29, 2-30 (Stakeholder engagement) 3-1, 3-2, 3-3 (Material Topics Disclosures)
Topic Standards	205(Anti-corruption), 206(Anti-competitive behavior), 302(Energy), 305(Emissions), 308(Supplier Environmental Assessment), 403(Occupational Health and Safety), 414(Supplier Social Assessment)
Organization specific indicators	Clean products and technologies
Other	▶ TCFD recommendations: Climate-related governance, Strategy, Risk management, and Metrics and Targets ▶ SASB Sustainability Disclosure Topics & Accounting Metrics

Assurance Methodology

The assurance was conducted through the following procedure.

- Review of materiality test process and appropriateness of material issue
- Review of the appropriateness of the evidence provided to meet index requirements through on-site due diligence
- Review of creation, collection, reporting process of data used for key performance index performance evaluation

Limitations

This assurance is subject to the following limitations.

- Interview individuals in charge of preparing and collecting the performance related to sustainability and review of the data included in the Report
- Review based on publicly available data during the corresponding period

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Assurance Findings

DERI could not find further any material misstatements or bias from the Report against the following principles.

Inclusivity

The company identifies customers, government and public bodies, local communities and NGOs, shareholders and investors, employees, partners as its stakeholders and has established a stakeholder engagement process. DERI has verified the effort to provide stakeholder engagement opportunities for all management processes, collect their opinions and reflect them in business decisions.

Materiality

The company has identified key sustainability issues—namely, those that reflect the undertaking's significant impacts on the environment and society, and/or affect, or are likely to affect, its financial position, performance, and development—through its own defined process. The company has reported comprehensively on five key issues, categorized under the Environmental, Social, and Governance (ESG) pillars, with no material omissions identified.

Responsiveness

The company operates appropriate communication channels for each type of stakeholder in order to satisfy and meet the interests and demands of major stakeholders. It has been confirmed that the company, through the established communication channels, adequately addresses the demands raised by stakeholders and manages relevant sustainability-related issues.

Impact

The company has identified the influence of stakeholders and material issues on the organization, and conducts analysis and ongoing monitoring of the impacts of its business operations on stakeholders, with such information appropriately reflected in the report.

Reliability and quality of specified performance

DERI assessed the reliability of the sustainability performance information. To verify the disclosed information, interviews were conducted with relevant personnel based on supporting documents and publicly available data. DERI concludes that the performance information presented in the report was collected and disclosed through reliable processes and substantiated evidence. Furthermore, the assurance process did not identify any evidence indicating that the specific sustainability information was inaccurately or misleadingly reported.

GRI-Reporting

The company has self-declared its compliance with the GRI Standards 2021. DERI has verified that the report has been prepared by reporting in accordance with the GRI Standards, and confirms that, based on the information and data provided by the company, there is no evidence of material misstatement in the organization's claim of compliance with the GRI requirements, including both the Universal Standards and Topic Standards. Sector standards were not applied.

Qualifications of the Assurance Provider

DERI is a leading ESG research and consulting institute in Korea and an officially licensed provider of AA1000. DERI engagement was conducted by an assurance team with sufficient knowledge of ESG and professional expertise in assurance practices, including ACSAP(AccountAbility Certified Sustainability Assurance Practitioner) professionals.



June 2025
Seoul, Republic of Korea
Baek, Jae-wook
CEO of Daishin Economic Research Institute

AA1000
Licensed Report
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Daishin
경제연구소

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GHG Emissions Assurance Statement

SCOPE 1, 2 GHG Emissions

Introduction

DNV Business Assurance Korea Ltd. ("DNV") was commissioned by Hanwha Ocean Co., Ltd.(here after "Company") to perform third party verification for the Company's Greenhouse Gas Statement. The Company is responsible for the preparation of the GHG statement on the basis set out within the guidelines on the operation of GHG emissions trading scheme(ETS) (Notification No. 2025-28), Korea Ministry of Environment) based on 'ISO 14064-1:2018' . The Company has full responsibility of the GHG statement. According to terms of contract, DNV expressly disclaims any liability or responsibility for any decisions, based upon the verification opinion.

Objective and Scope of Verification

The objective of the verification is to present an independent verification opinion on the company's GHG statement, and the
scope of verification is as follows;

- Organizational Boundary: Hanwha Ocean Co., Ltd.'s domestic business sites in Korea
- Reporting Boundary: Scope 1 (Direct emissions), Scope 2 (Indirect emissions) (fugitive emissions from refrigerant are excluded)
- Reporting Period: 2024.01.01 ~ 2024.12.31

Verification Approach

The verification has been conducted in accordance with the verification principles and tasks outlined in the guidelines on the operation of GHG ETS(Notification No. 2024-169, Korea Ministry of Environment) based on 'ISO 14064-3:2019'. DNV planned and concluded our work so as to obtain all the information and explanations deemed necessary to provide us with sufficient evidence to provide a verification opinion with 5% materiality level. As part of the verification process, we have reviewed as follows;

- Adequacy of GHG data control, collection and emission calculation applied in GHG inventory report and report process
- The GHG inventory is based on measurements and has inherent limitations that may arise from the process of calculating, estimating, and finalizing the reported data.

Conclusions

Based on the verification conducted, the information related to the GHG statement has been properly calculated and reported.

- DNV represents "unmodified" opinion on Greenhouse Gas Emissions

(Unit : ton CO_2eq)

Yr 2024	Direct emissions (Scope 1)	Indirect emissions (Scope 2)	Total emissions
Hanwha Ocean Co., Ltd.	202,343	252,979	455,320

※ Greenhouse gas emissions may differ by less than ± 1 tCO2eq due to rounding to report as an integer.

2025. 6. 2
Seoul, Republic of Korea

Lee, Jang Sup
Country Representative
DNV Business Assurance Korea Ltd.

DNV
DNV BUSINESS ASSURANCE

This Assurance Opinion is valid as of the date of the issuance. Please note that this Assurance Opinion would be revised if any material discrepancy which may impact the Greenhouse Gas Emissions of the Company is subsequently brought to our attention.

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GHG Emissions Assurance Statement

SCOPE 3 GHG Emissions

Introduction

DNV Business Assurance Korea Ltd. ("DNV") was commissioned by **Hanwha Ocean Co., Ltd.("Company")** to perform third party verification for the Company's Greenhouse Gas Statement. The Company is responsible for the preparation of the GHG statement on the basis set out within Audit Standard, 'WRI/WBCSD GHG Protocol: A Corporate Accounting and Reporting Standard ', 'The Corporate Value Chain (Scope 3) Accounting and Reporting Standard', 'IPCC Guidelines: 2006'. The Company has full responsibility of the GHG statement. According to terms of contract, DNV expressly disclaims any liability or responsibility for any decisions, based upon the verification opinion.

Objective and Scope of Verification

The objective of the verification is to present an independent verification opinion on the company's GHG statement, and the scope of verification is as follows;

- Organizational Boundary : **Hanwha Ocean Co., Ltd.**'s sites (Korea)
- Reporting Boundary : Scope 3 (Other Indirect emissions — Category 1, 2, 3, 4, 5, 6, 7, 11, 12, 15)
- Reporting Period : 2024.01.01 ~ 2024.12.31

Verification Approach

The verification has been conducted in accordance with the verification principles and tasks outlined in the 'ISO 14064-3:2019', based upon a Limited Level of assurance. DNV planned and concluded our work so as to obtain all the information and explanations deemed necessary to provide us with sufficient evidence to provide a verification opinion with 5% materiality level. As part of the verification process, we have reviewed as follows;

- Adequacy of GHG data control, collection and emission calculation and report process
- The GHG inventory is based on measurements and has inherent limitations that may arise from the process of calculating, estimating, and finalizing the reported data.

CONCLUSIONS

Based on the verification, there is no evidence that the GHG statement is not materially correct and is not a fair representation of GHG data and information.

- DNV represents "unmodified" opinion on Greenhouse Gas Emissions.

(Unit : ton CO_2eq)

2024	Other indirect emissions (Scope 3)[1]		Total emission
	Upstream	Downstream	
Hanwha Ocean	4,082,886	36,985,193	41,068,079

※ In order to report the GHG emissions as an integer, the rounded number might be different from the number on the calculation tool with ± 1 tCO2eq.
1) Refer to Annex for GHG emissions by categories.

Annex. Hanwha Ocean's Scope 3 emissions for 2024 Year

(Unit : ton CO_2eq)

	Categories	Upstream	Downstream	Emissions
1	Purchased Goods and Services	3,908,013		3,908,013
2	Capital Goods	11,164		11,164
3	Fuel- and Energy-Related Activities (not Included in Scope 1 or Scope 2)	50,225		50,225
4	Upstream Transportation and Distribution	37,200		37,200
5	Waste Generated in Operation	67,107		67,107
6	Business Travel	4,850		4,850
7	Employee Commuting	4,326		4,326
11	Use of Sold Products		36,904,036	36,904,036
12	End-of-Life Treatment of Sold Products		4,315	4,315
15	Investments		76,841	76,841
	Total emissions	4,082,886	36,985,193	41,068,079

※ In order to report the GHG emissions as an integer, the rounded number might be different from the number on the calculation tool with ± 1 tCO2eq.

2025. 6. 2
Seoul, Republic of Korea
Lee, Jang Sup
Country Representative
DNV Business Assurance Korea Ltd.

DNV BUSINESS ASSURANCE

This Assurance Opinion is valid as of the date of the issuance. Please note that this Assurance Opinion would be revised if any material discrepancy which may impact the Greenhouse Gas Emissions of the Company is subsequently brought to our attention.

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Memberships in Key Associations

List of Associations and Societies

Geoje Chamber of Commerce and Industry
The Korean Welding and Joining Society
The Society of Naval Architects of Korea
Defense Industry Infringement Response Council (NIS-led 15 Defense Companies)
Korea AEO Association
Korea LNG Bunkering Industry Association
Korea Enterprises Federation
Korea Customs Logistics Association
Korea Defense Industry Association
The Korean Association for Industrial Technology Security
Korea Listed Companies Association
Korea Engineering & Consulting Association
Korea Offshore & Shipbuilding Association
Korea Project Management Association
GCMD(Global Centre for Maritime Decarbonisation)
SGMF(Society for Gas as Marine Fuel)


Hanwha Ocean