HD KOREA SHIPBUILDING & OFFSHORE ENGINEERING

BEYOND BLUE
FORWARD TO GREEN

2024 HDKSOE ESG Highlight

Contents

Report Overview

HD Korea Shipbuilding & Offshore Engineering (HDKSOE) publishes Sustainability Report annually to transparently disclose its ESG strategies and performance to stakeholders. This ESG Highlight has been prepared to concisely present the key contents of the 2024 HDKSOE Sustainability Report. For more detailed information, please refer to the full Sustainability Report available on our website.

Contact Information

For any inquiries or comments regarding 2024 HDKSOE ESG Highlight, please contact the ESG Department at HDKSOE.

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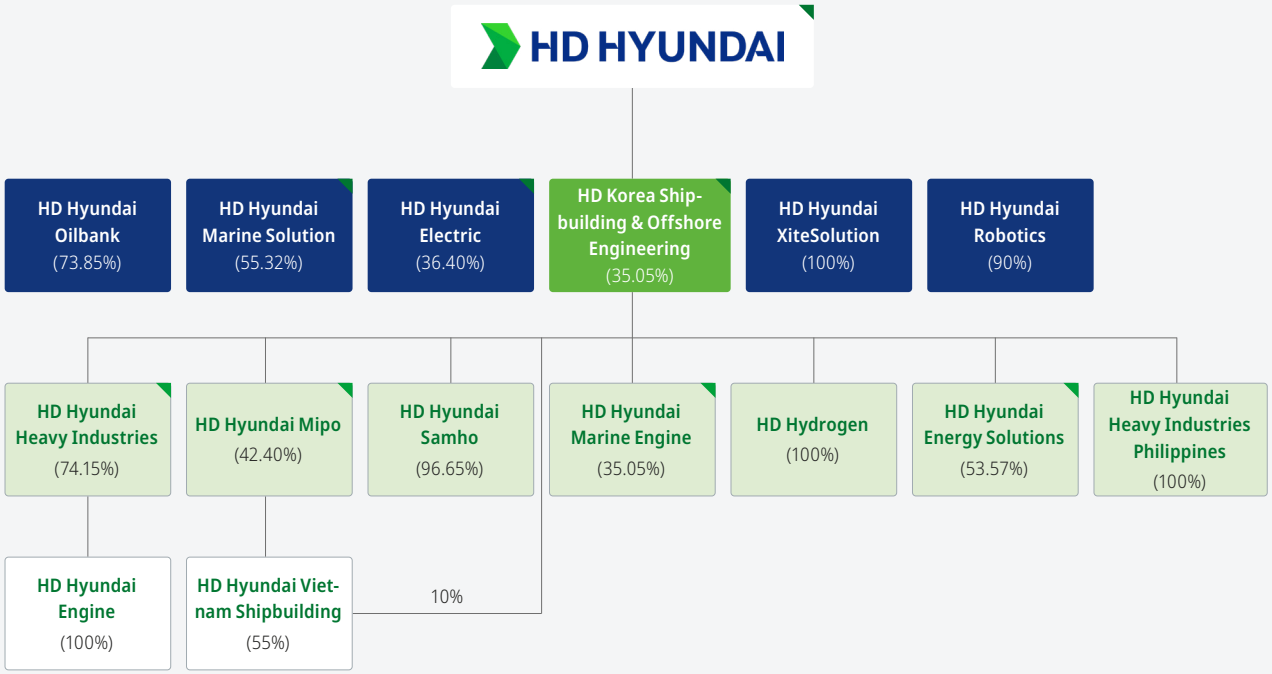
Group Affiliates



- ◥: Listed on KOSPI
- As of September 2025, based on HD Hyundai's major subsidiaries
- HD Hyundai Mipo is scheduled to merge into HD Hyundai Heavy Industries in December 2025

General Information of HDKSOE

Company Name	HD Korea Shipbuilding & Offshore Engineering Co., Ltd
CEO	Chung Ki-sun, Kim Sung-joon
Founding date	December 28, 1973
Address	477, Bundangsuseo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea
Key Business	• Shipbuilding • Engine and Machinery • Offshore and Energy • Research and Development

General Information of Major Subsidiaries

Company Name	HD Hyundai Heavy Industries Co., Ltd.
CEO	Lee Sang-kyun, Noh Jin-yul
Founding date	June 1, 2019
Address	1000, Bangeojinsunhwan-doro, Dong-gu, Ulsan, 44032, Republic of Korea

Company Name	HD Hyundai Mipo
CEO	Kim Hyung-kwan
Founding date	April 28, 1975
Address	100, Bangeojinsunhwandoro, Dong-gu, Ulsan, Republic of Korea

Company Name	HD Hyundai Samho
CEO	Kim Jae-eul
Founding date	November 4, 1998
Address	93, Daebul-ro, Samho-eup, Yeongam-gun, Jeollanam-do, Republic of Korea

Company Name	HD Hyundai Energy Solutions
CEO	Park Jong-hwan
Founding date	December 21, 2016
Address	477, Bundangsuseo-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Republic of Korea

Shipbuilding

HDKSOE and its shipbuilding subsidiaries lead the global shipbuilding industry with world-class capabilities.

Main Products

Commercial Ship

Oil tankers, containerships, petrochemical carriers, LNG carriers, LPG carriers, car carriers, Ro-Pax, Ro-Ro, LNG bunkering vessels, etc.

Special Purpose Ship

Drillships, semi-submersible drilling rigs, offshore service vessels (OSV), etc.

Engine and Machinery

With world-leading technological capabilities, HDKSOE and its subsidiaries are leading the high-efficiency marine engine and machinery market.

Main Products

Marine Engines

2-Stroke Engine, 4-Stroke HiMSEN Engine (diesel, gas, dual fuel, etc.)

Sternpost

Propeller, shaft and rudder stock

Marine Eco-Machinery

Selective Catalytic Reduction (SCR) systems, Methane Oxidation Catalyst Systems (MOCS)

Offshore and Energy

With advanced technology and extensive experience, HDKSOE and its subsidiaries create new value from the ocean and drive the future of energy.

Main Products

Offshore Plants

Fixed offshore facilities, floating offshore facilities, offshore substations
(Fixed Platform, FPSO, Cylindrical FPSO, FPS, FOWT Substructure, OSS)

Other Projects

Floating offshore wind structures, small modular reactor (SMR) facilities, carbon capture and storage (CCS) facilities

Energy

Green hydrogen, solid oxide fuel cells (SOFC) for onshore and marine applications, and solid oxide electrolysis cells (SOEC)

Research and Development

Through innovative research and development, HDKSOE and its subsidiaries are shaping the next 50 years of the Group's future.

Key R&D Areas

- Next-generation ships and integrated propulsion system packages
- Environmental impact reduction systems and integrated engineering solutions
- Smart manufacturing and production with new materials and processes
- Hybrid electric propulsion, autonomous navigation and digital twin models for ships
- AI-based solutions and AI agents for automation and intelligent operations
- New hull forms, production optimization, and gas cargo and fuel tank technologies
- Specialized technologies for offshore plants
- Performance improvement for naval vessels

HD Hyundai Group ESG Management System

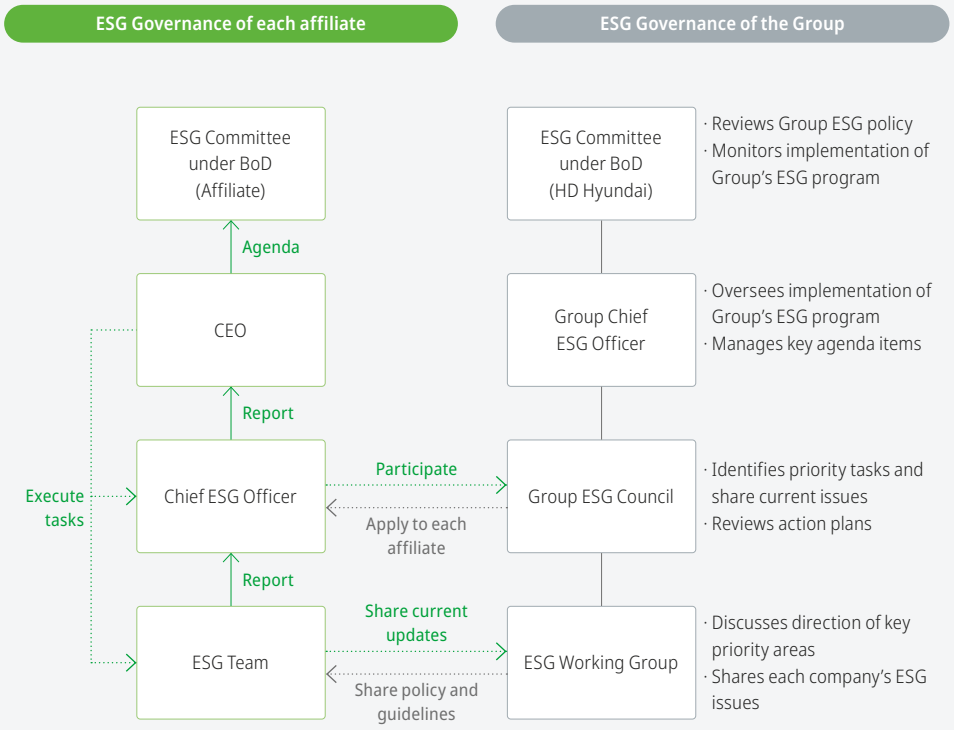
Future From the Ocean

HD Hyundai has established the Group's ESG management vision, "Future From the Ocean," which represents our commitment to realizing a sustainable future that begins from the sea. Our slogan "Beyond Blue Forward to Green" embodies the Group's determination to innovate its core businesses and transform into future-oriented industries based on eco-friendly technologies. HD Hyundai has established a Group-level ESG governance structure, where the Chief ESG Officers and ESG teams of each affiliate hold regular Council meetings and discuss key ESG policies and current issues.

HD Hyundai ESG VISION Framework

VISION	Future From the Ocean		
SLOGAN	Beyond Blue Forward to Green		
Strategic Direction	Blue Ocean with Green Tech	Green Together with People & Society	Green Leadership with Responsibility
Focus Areas	Develop and increase investment in environmental impact reduction technologies	Strengthen health and safety management	Improve corporate disclosure for stakeholders
	Strengthen climate risk management	Improve labor-management relations and welfare benefits	Advance BoD operating framework
	Initiate environmental impact reduction activities	Promote co-prosperity and ESG among contractors	Advance ethical management, internal control, and risk management

ESG Governance of each affiliate and the Group



HDKSOE ESG Management System

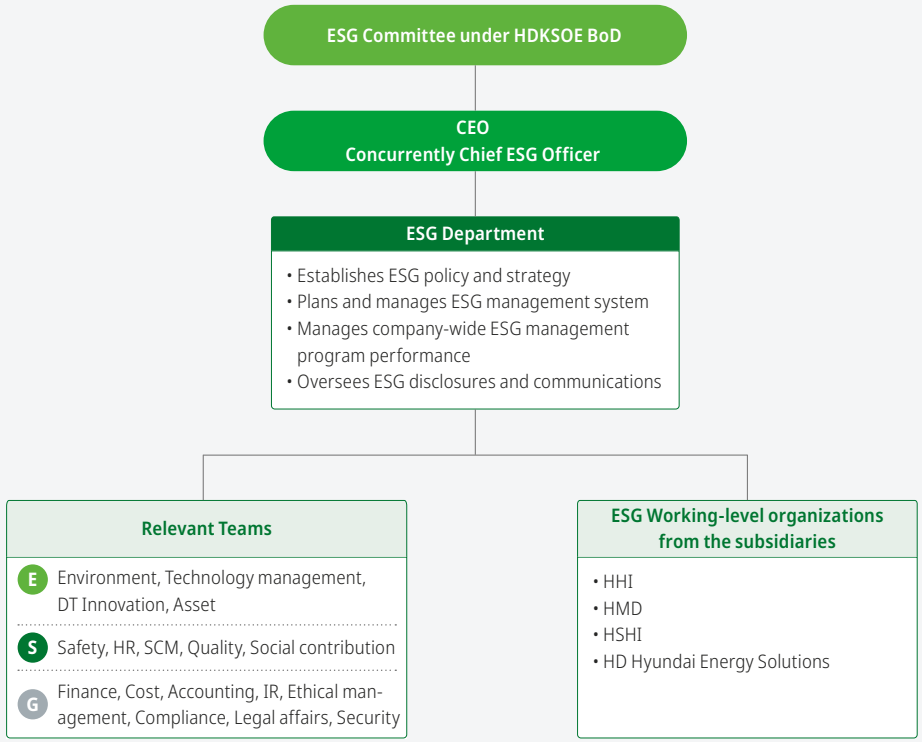
Toward ECO-Ocean With Green Wave

Under the vision of "Toward ECO-Ocean With Green Wave," **HDKSOE** is promoting strategies for climate change response, human rights management, and ESG disclosure transparency. HDKSOE's ESG Committee under the Board of Directors, reviews and manages key ESG policies and priority tasks. The CEO concurrently serves as the Chief ESG Officer, demonstrating company-wide leadership in ESG management, while the ESG Department (working-level organization) oversees the implementation of ESG programs for both the Group-level governance and the shipbuilding and offshore engineering divisions.

HDKSOE ESG Management Strategies for 2025

VISION	Future From the Ocean – A Clean Future Beginning from the Sea		
Area	Advance climate change response framework	Strengthen human rights management system	Enhance transparency of ESG disclosures
Strategic Direction	Establish carbon management governance framework	Establish standardized process for human rights management	Establish integrated Group ESG indicator management framework

HDKSOE ESG Management Organizational Structure

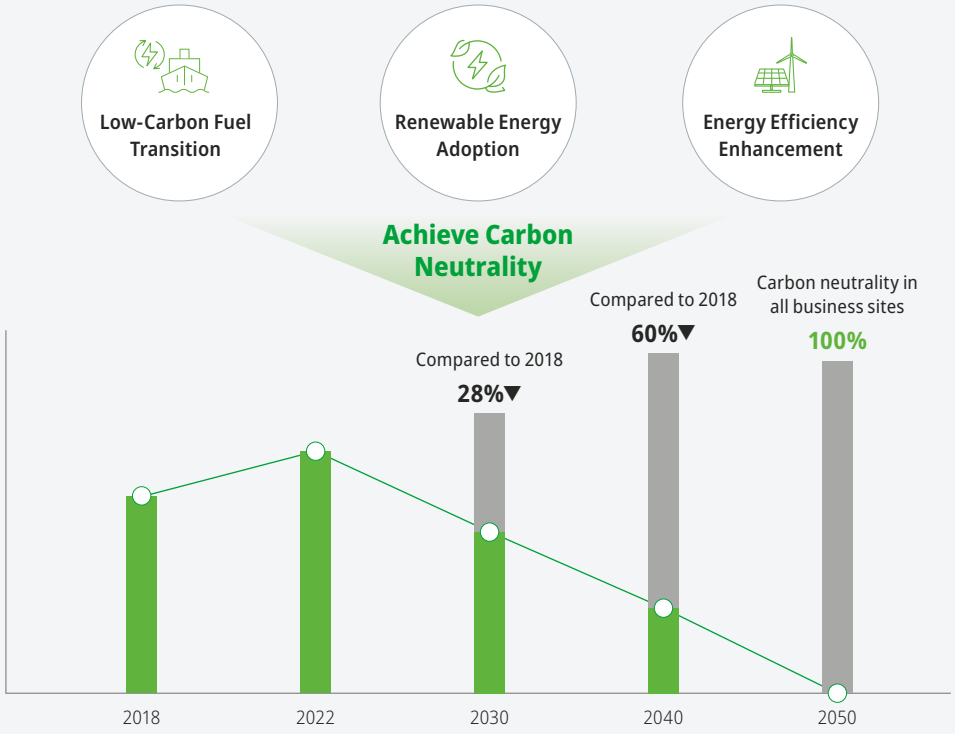


① Climate Change Response

Carbon neutrality has emerged as a major global issue, with international organizations as IMO strengthening the environmental regulations. In line with this global trend, HDKSOE has established a 2050 Carbon Neutrality Roadmap and is striving to build a carbon management governance framework, conduct life cycle assessments (LCA) for ships, and support the contractors in reducing GHG emissions.

2050 Carbon Neutrality Roadmap

- Established 2050 Carbon Neutrality Roadmap for the shipbuilding subsidiaries and developed implementation plans based on industry characteristics
- Developing energy efficiency systems for ships and expanding the use of low-carbon fuels
- Introducing renewable energy through both self-generation and external procurement



Carbon Management Governance Framework

Incorporating Carbon Reduction Targets into Executive Performance Evaluation

- The CEO and executive management include in their KPIs key items such as GHG emission reduction targets based on the Carbon Neutrality Roadmap and the establishment of an integrated energy monitoring system.
- Based on the climate change response KPIs set for senior executives, each department and team establishes detailed objectives aligned with their respective roles and responsibilities, which are reflected in their performance evaluations.

Establishment of Integrated Energy Monitoring System

- HDKSOE operates working-level meetings on carbon credit management and monitors real-time energy consumption data across business sites.
- The company aims to collaborate with clients, partners, and other stakeholders across the value chain to identify effective carbon reduction measures.
- HDKSOE also promotes risk hedging related to carbon credits, including participation in external GHG reduction projects.

Management and Oversight of Carbon Credits and GHG Emissions

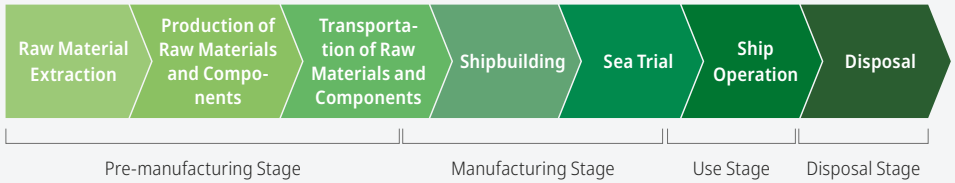
- HDKSOE has introduced an Internal Carbon Pricing (ICP) system that assigns a notional carbon price to evaluate financial impacts to strengthen climate change compliance, promote carbon emission reduction, and encourage low-carbon investments and technology development.
- The company is establishing an ICP operational framework and governance structure to integrate carbon pricing into future investment decisions, promoting low-carbon investments, enhancing energy efficiency, and driving behavioral changes across the organization.

① Climate Change Response

Life Cycle Assessment (LCA)

- In accordance with international standards such as the GHG Protocol and ISO 14040 and 14044, HDKSOE calculates the GHG emissions throughout the entire life cycle of ships using a Full-LCA approach.
- The LCA covers four stages: ① Pre-Manufacturing Stage, ② Manufacturing Stage, ③ Use Stage, and ④ Disposal Stage.

Defining Scope of LCA



Ships Subject to LCA

HDKSOE, HHI	LNG DF Carrier (174K class)
HMD	Containership (2,100 TEU class)
HSHI	Containership (7,900 TEU class), Containership (15,600 TEU class)

LCA Implementation Plan

2023 - 2024

- **Conduct LCA on three representative ship types**
  - LNG DF LNG Carrier
  - LNG DF Containership
  - Methanol DF Containership

2025

- **Establish LCA calculation framework**

2026 and beyond

- **Expand ship types subject to LCA**
- **Conduct environmental impact analysis and performance improvement**

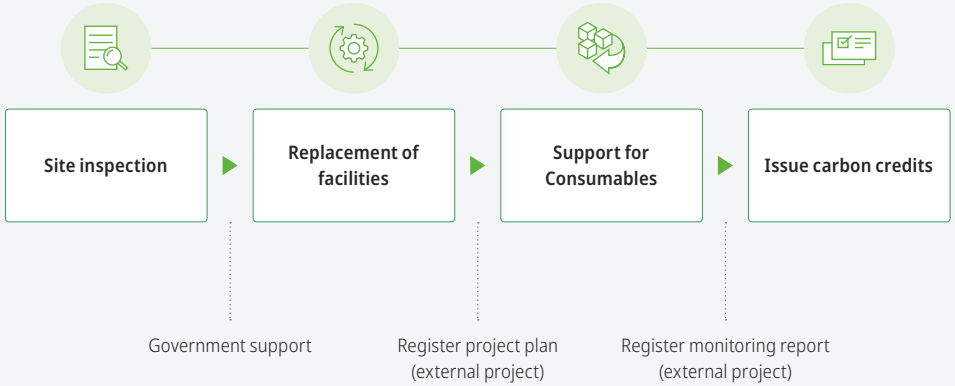
Supporting Contractors in Reducing GHG Emissions

- Promote GHG reduction support projects for contractors based on cooperation among the private enterprise, government, and public institutions.
- Operate various programs, including support for replacing high-efficiency equipment and consumables, and installation of monitoring systems.
- Expand the number of beneficiaries and GHG reduction items each year.

Air Compressor Replacement Support

- Provided financial support in replacing the outdated facilites with high-efficiency inverter air compressors.
- Estimated to reduce approximately 30–60 tons of GHG emissions per year for each unit replaced.

Procedure for Project Implementation



② Environmental Impact Reduction Technologies

Environmental impact reduction technologies have become key factors influencing the shipbuilding industry's order competitiveness and corporate value. To respond to the diverse needs of the market, HDKSOE is striving to expand its shipbuilding portfolio as a Total Solution Provider, developing low- and zero-carbon fuel propulsion technologies. In addition, various technologies are applied during the shipbuilding process to minimize environmental impacts and enhance sustainability across all production stages.

Low- and Zero-Carbon Fuel Propulsion Ship

LNG DF Ship
- A dual-fuel ship that uses both bunker C oil and LNG as fuels.

Electric Propulsion Ship
- A next-generation eco-friendly ship powered by propulsion motors driven by generators and battery electricity.

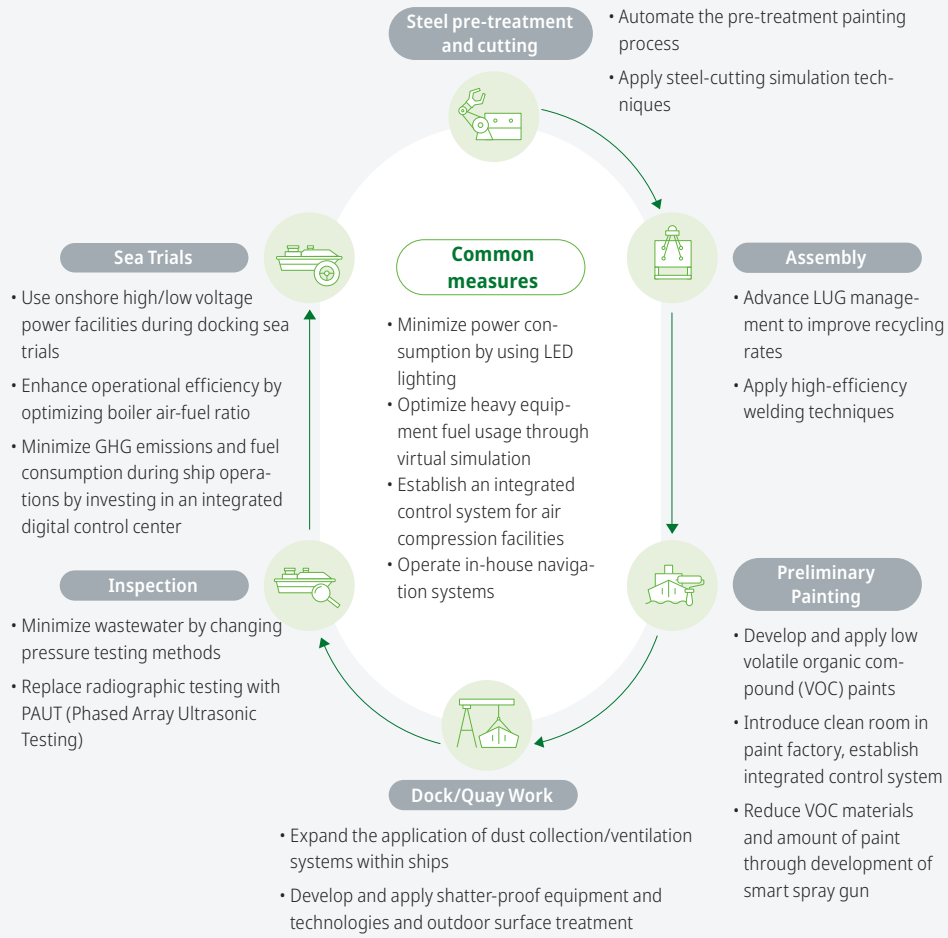
Methanol DF Ship
- A dual-fuel ship that uses both bunker C oil and methanol as fuels.

Hydrogen Carrier & Hydrogen-Fueled Ship
- A ship that utilizes hydrogen boil-off gas generated during voyage to power the electric propulsion system.

Ammonia-Fueled Ship
- A dual-fuel ship that uses both bunker C oil and ammonia as fuels.

SMR-Powered Ship
- A zero-carbon ship powered by next-generation Molten Chloride Fast Reactor technology.

Environmental Impact Reduction Technologies Across Shipbuilding Stages



③ Occupational Safety and Health

HDKSOE and its shipbuilding subsidiaries are making various efforts to manage occupational safety and health including ISO 45001-based management system, regular risk assessments, safety incentives and training, Integrated Control Center and Big Data platform. The same safety policies are applied to the contractors, through which HDKSOE provides safety inspections, technical guidance, and health management support.

Mid- to Long-term Safety and Health Goals

HD HYUNDAI HEAVY INDUSTRIES — Safety Vision 2027 System

VISION	A workplace where everyone is safe, a company that embodies safety as its brand		
Goals	Industrial accident rate below 0.15	Fatality rate per 10,000 people below 0.29	Safety Culture Index above 3.7
Strategy	SYSTEM Establish an Autonomous Safety Management System	CULTURE Establish a Safety-first Culture	TECHNOLOGY Achieve a smart safe workplace
Priority Tasks	Implement safety and health activities based on risk assessment Establish the operability of an autonomous safety management system	Improve safety culture level Improve safety capability of all employees	Upgrade a big data-based prediction system Implement an AI-based safety monitoring system

HD HYUNDAI MIPO — ESG GOAL TO 2030

UN SDGs: GOAL 03 : Good Health and Well-being

Goals

Safety Indicators	2025	2026	2030
Fatality rate	0	0	0
Lost Time Injury Frequency Rate (LTIFR)	1.53	1.64	1.50
Near-Miss Frequency Rate (NMFR)	12.52	12.85	12.10

HD HYUNDAI SAMHO — Safety and Health Vision 2028

VISION	Valuing Life, Greening the Earth		
Goals	Accident rate below 0.139	Disease rate below 2.4	
Strategy	SYSTEM Secure the functionality of autonomous safety and health system	SPECIAL Achieve the highest level of professionalism	SMART Employ the best smart safety technologies
Priority Tasks	Implement the principle of safety first (Back to the Basic)	Conduct safety culture assessments and provide feedback Strengthen safety education programs	Enhance intelligent video analysis, real-time detection, safety monitoring, and usability

Establishment of Systematic Occupational Safety and Health Management Foundation

Systemized Safety Management

Occupational Safety and Health Management System

- Operate and maintain certification of the Occupational Safety and Health Management System based on ISO 45001.
- Advance the system by reflecting domestic and international regulatory trends and the expectations of stakeholders such as employees and clients.

OHS Risk Assessment

- Identify hazardous and risk factors and analyze the likelihood and severity of injuries and illnesses.
- Conduct regular and ad-hoc risk assessments and implement mitigation measures.

Expansion of Safety Culture

Safety Award System

- Reward organizations and employees who have achieved or contributed to excellent safety performance.
- Evaluate and reward safety performance for partner companies as well.

Occupational Safety and Health Education

- Provide customized safety and health education considering working environment and job characteristics.
- Strengthen safety and health education for foreign workers.

Smart Safety Innovation

Integrated Control Center

- Operate a real-time monitoring system utilizing video control and analysis systems and emergency reporting applications.
- Establish accident prevention, response, and action systems.

Safety Management Based on Big Data and AI

- Develop visualization tools for safety information and accident prediction models.
- Derive preventive implications through analysis of accident status, types, and trends.

Occupational Safety and Health Support for Contractors

- Apply the same occupational safety and health policies, standards, and guidelines to partner companies, and promote regular assessments and improvement support for their safety and health levels.
- Support the contractors to establish autonomous safety system with active communication, safety education, on-site safety inspections and technical guidance.
- In cooperation with local health centers, inspect health vulnerabilities of the contractors, promote health improvement programs, and strengthen health management capabilities.

④ Talent Management

A trust-based labor-management relationship is directly linked to corporate competitiveness, with the international emphasis on responsible talent management and working environment suggested by the ILO conventions and UNGC principles. HDKSOE pursues the sound working conditions and active communication based on employee rights and mutual trust, which leads to stable business activities and sustainable growth.

Welfare Programs for Stable Working Environment

Family-Friendly Programs

- Childbirth (maternity leave and congratulatory payment, support for infertility treatment, miscarriage leave and condolence payment)
- Childcare (operation of in-house daycare center, reduced working hours, provision of nursing space)
- Family care (child care leave, and family care leave due to illness or accident)

Health Management

- Health checkups and in-house health facilities
- Operation of in-house fitness center
- Operation of stress management support programs

Work–Life Balance and Self-Development

- Adjust work-life balance using flexible working hour arrangements and remote work
- Support for self-development such as degree programs, language tests, and online learning platforms
- Support for retirement planning education

Communication for Cooperative Labor–Management Culture

Labor–Management Council

- Hold regular labor–management council meetings to discuss work systems, welfare programs, and workplace convenience facilities related to working conditions.
- Establish improvement measures through open communication, and seek solutions to difficult issues through mediation systems and continued discussions.

Executive Meetings

- Share management status and difficulties through various channels such as meetings with the CEO, management briefings, and communication activities with foreign workers.
- Enable direct communication between management and employees to reflect on-site opinions in management activities.

Feedback System

- Strengthen fairness in performance evaluation through various systems such as MBO-based performance evaluation, key task assessment, and multi-dimensional leadership evaluation.
- Conduct regular and ongoing feedback during the performance achievement process to create an environment where all members can actively participate in organizational goals.

⑤ Supply Chain Management

HDKSOE promotes co-prosperity with contractors to build a healthy corporate ecosystem based on its Sustainable Sourcing policy. In particular, to strengthen ESG management capabilities within the supply chain, HDKSOE requires the contractors to comply with Supplier Code of Conduct. Based on this policy, HDKSOE operates a risk assessment process that includes providing ESG guidelines, conducting desk- and on-site assessments, identifying risks, and supporting the implementation of improvement measures.

Supply Chain Philosophy

VISION	Establish a Sustainable SCM (Supply Chain Management) through Innovation and Coexistence		
Goal	Encouraging the Growth and Development of Contractors, Supporting Increased Competitiveness of Contractors		
Priority Areas	Continuous System Improvement	Strengthen Communication with Contractors	Strengthen Competitiveness of Contractors
Key Policies	• Develop contractor-tailored ESG indicators • Provide ESG training for contractors • Support comprehensive ESG consulting	• Improve policies through Transaction Satisfaction Survey • Collect opinions through regular meetings • Organize knowledge-sharing workshops and seminars	• Operate Total Solution Support Program • Support Safety through Safety and Health Management System • Create Co-prosperity Fund, support welfare programs

Sustainable Sourcing Policy

Sustainable Supply Chain Operation Policy

- Human Rights Management
- Occupational Safety and Health
- Environment
- Business Ethics

Risk Management of Supply Chain Sustainability

- Supplier Code of Conduct
- Supply Chain Risk Assessment
- Conflict Minerals Policy
- Grievance Handling System

Supply Chain ESG Risk Assessment Process

01 Code of Conduct Pledge
- All contractors in business relationships pledge to comply with the Code of Conduct by through electronic signature

02 Guidance on Evaluation Indicators
- Provide contractors with ESG assessment and audit guidelines, and implement ESG awareness-raising and specialized training

03 Screening of Significant Contractors
- Identify "Significant Contractors," considering potential ESG characteristics such as business region, type of industry, and items supplied

04 Desk Assessment
- Contractors conduct self-assessment of ESG risk levels based on ESG assessment and audit guidelines

05 On-site Inspection
- Independent auditor (third-party consulting firm) to visit contractors to review internal documents and inspect on-site conditions

06 Identification of Potential & Actual Risks
- Identify high risk factors from the results of the desktop assessment and on-site inspection

07 Recommendations to Establish Improvement Plan
- Recommend setting improvement plans to mitigate risk factors and implement plan within timeframe of plan based on discussion with contractors

08 Support Implementation by Providing ESG Consulting
- Provide consulting to help contractors to comply with ESG legal requirements and establish management systems (including benchmarking data)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