Hanwha Ocean

BROCHURE

Sustainable Oceanic Solutions begin here!

Hanwha Ocean is driving a paradigm shift in the maritime energy industry toward an lower emission ship market, powered by world–class technology and a steadfast commitment to ocean safety. **Hanwha Ocean** is advancing sustainable growth through its cutting–edge 'Smart Yard,' utilizing automation to ensure safety and efficiency. **Hanwha Ocean** is committed to enriching lives and advancing sustainability through the ocean—the source of all life. **Hanwha Ocean** stands with you for a sustainable future.

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ABOUT Hanwha Group

Hanwha — Your partner in building a sustainable future for humanity and the planet

Year of Foundation	1952 — 73rd anniversary in 2024	Global Network	821 — As of end-2024
Total Sales	64.1B USD — As of 2024	Ranking on *Fortune* Global 500®	372 — in 2024
Domestic Ranking	Top7 — Based on total assets as of the end of 2024	One of the TIME100 Most Influential Companies	TIME 100 MOST INFLUENTIAL COMPANIES 2024 — in 2024

Established in 1952, **Hanwha** has been at the forefront of Korea's economic and industrial growth, guided by a founding philosophy rooted in social progress, trust, and shared prosperity. Embracing challenges and driving innovation, we have evolved into a leading global enterprise. **Hanwha** continues to advance its business structure and portfolio across clean energy and ocean solutions, aerospace and mechatronics, finance, and retail and services—while strategically investing in advanced technologies to drive future growth.



ABOUT Hanwha Ocean

Hanwha Ocean Navigates Boldly Toward Limitless Oceans

Geoje Shipyard

Key Products

Commercial Vessels	LNG carriers, ice-breaking LNG carriers, LPG carriers, crude oil carriers, container ships
Offshore Business	Drilling facilities (drillship, semi-submersible rig, etc.), production facilities (LNG-FPSO, FPSO, fixed platform, FSRU, FPU, etc.), WTIVs.
Naval Ships	Destroyers, frigates, submarines
Wind Power	Onshore, offshore
Plants	Petrochemical plants, power plants, industrial/environmental plants

Corporate Profile

Name	Hanwha Ocean
Date of foundation	October 11, 1973
Headquarters & Geoje Shipyard	3370, Geojedae-ro, Geoje-si, Gyeongsangnam-do, South Korea Phone: +82-55-735-2114
Seoul Office	86(Hanwha Building), Cheonggyecheon-ro, Jung-gu, Seoul, South Korea Phone: +82-2-2129-0114
	14(Grand Central Building B), Sejongdae-ro, Jung-gu, Seoul, South Korea Phone: +82-2-2129-0114
Siheung R&D Campus	96 Baegot 2-ro, Siheung-si, Gyeonggi-do, South Korea Phone: +82-2-2129-1114
Surface Area of Shipyard	4.9 million m²
Personnel	Approx. 30,000

WHO WE ARE

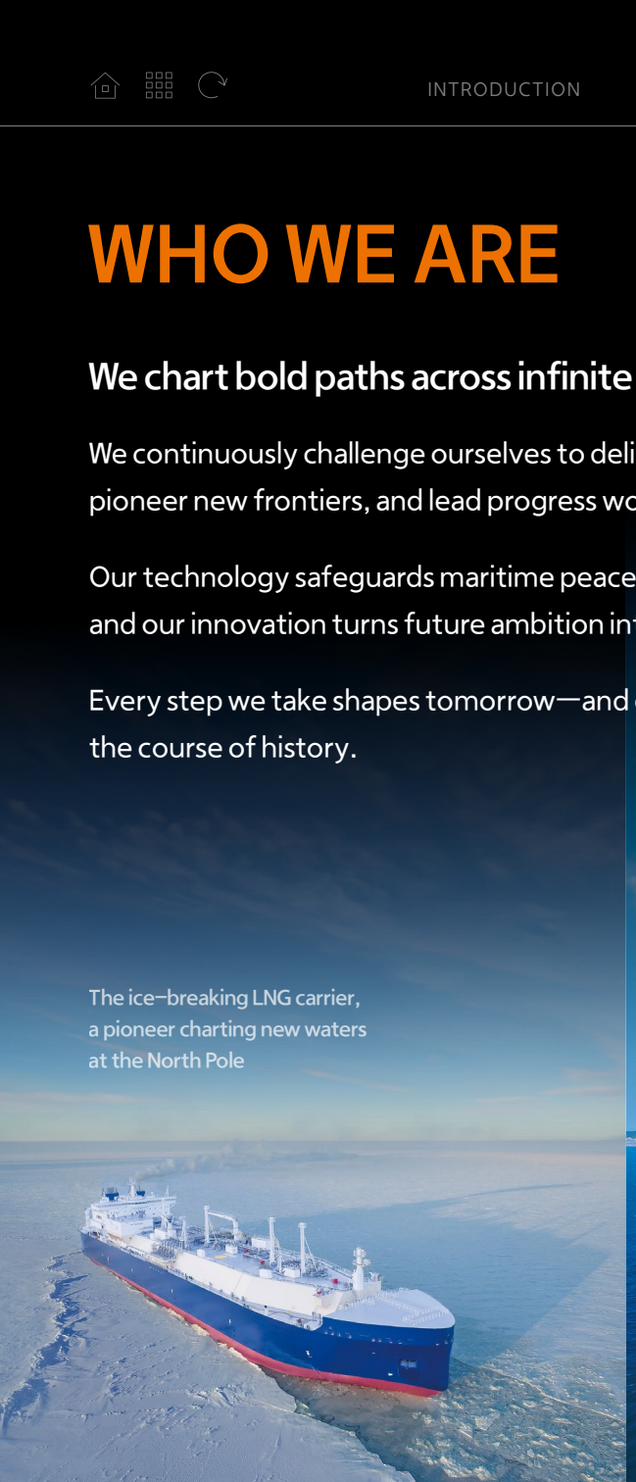
We chart bold paths across infinite oceans

We continuously challenge ourselves to deliver energy, pioneer new frontiers, and lead progress worldwide.

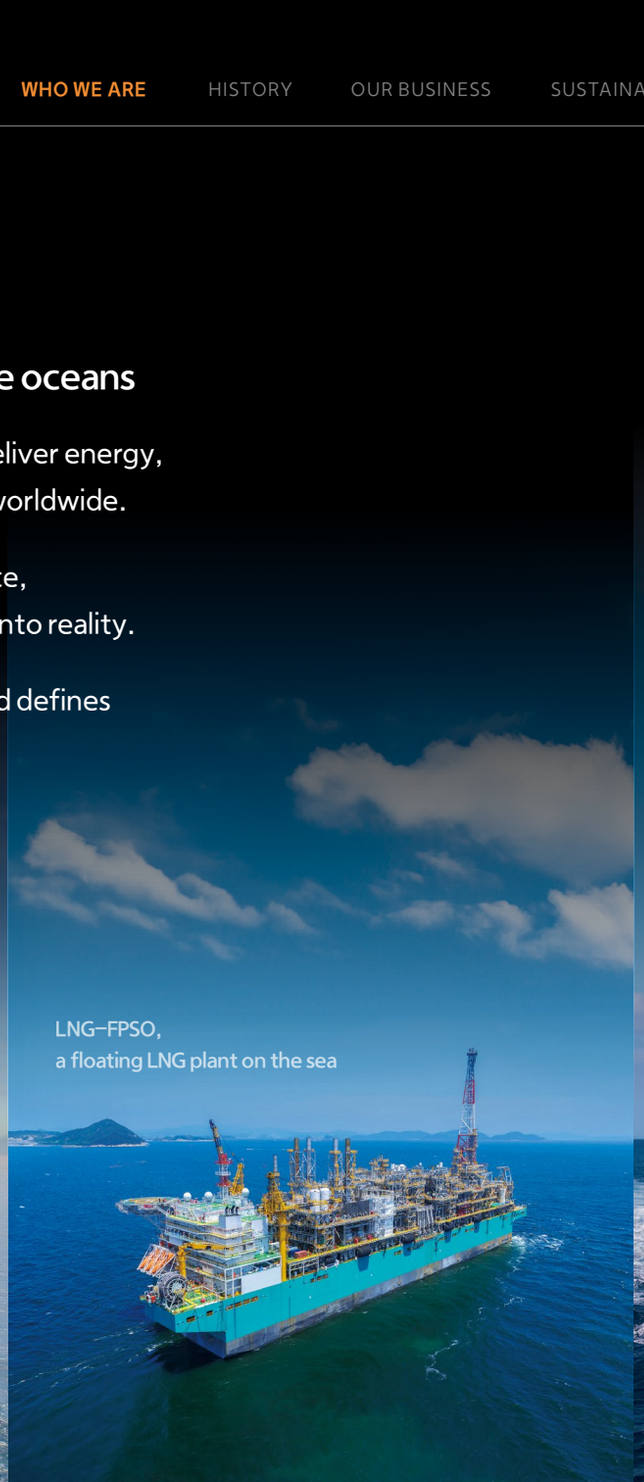
Our technology safeguards maritime peace, and our innovation turns future ambition into reality.

Every step we take shapes tomorrow—and defines the course of history.

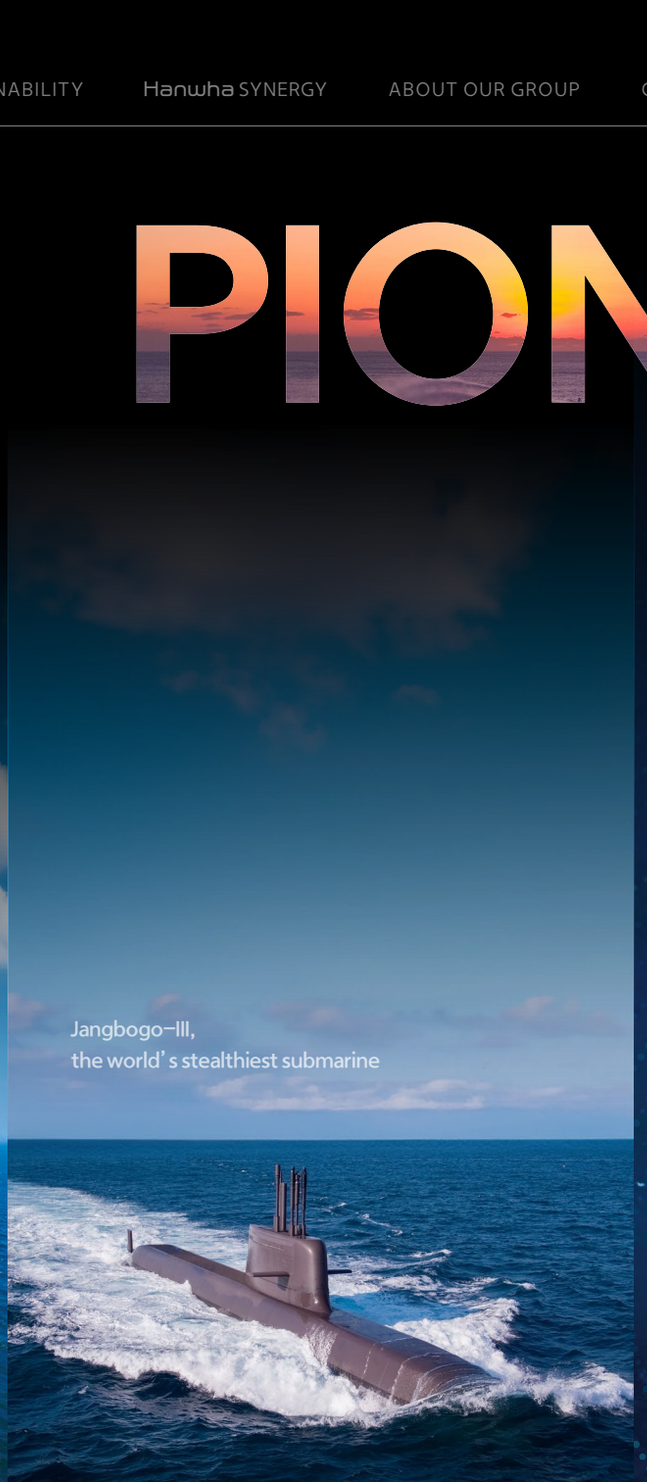
PIONEER



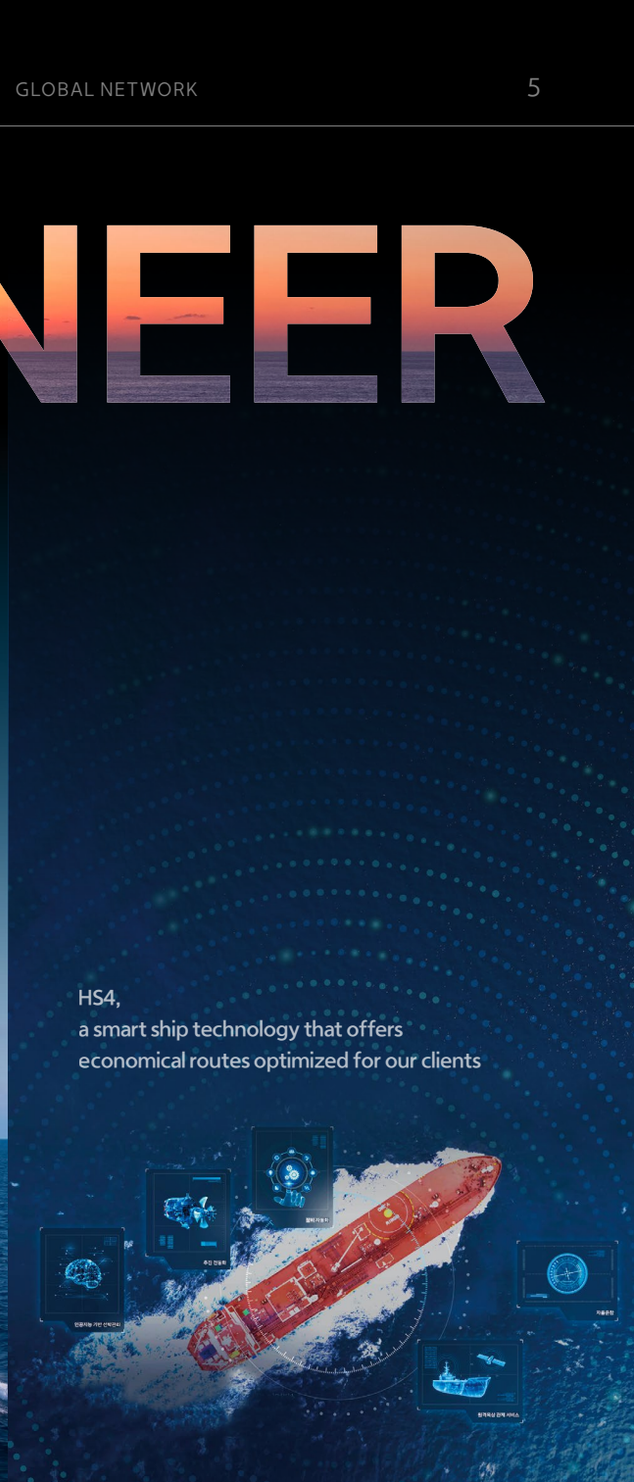
The ice-breaking LNG carrier,
a pioneer charting new waters
at the North Pole



LNG-FPSO,
a floating LNG plant on the sea



Jangbogo-III,
the world's stealthiest submarine



HS4,
a smart ship technology that offers
economical routes optimized for our clients

HISTORY

2024
- Hanwha Ocean becomes the first Korean shipbuilder to win an MRO contract from the US Navy
- Becomes the first Korean corporation to run a shipbuilding business in the U.S. with the acquisition of Philly Shipyard
- Acquires the wind power and plant business of Hanwha Corporation

2023
- Large Offshore Wind Turbine Installation Vessel is included on the list of World's First-Class Products
- Becomes the first Korean corporation to join the First Movers Coalition (FMC)



2020
- The world's first successful ship-to-ship LNG loading within the quay wall of a shipyard
- Launches, "Ahn Mu", a 3,000-ton submarine
- Delivers the world's largest container ship, "HMM Algeciras"

2019
- Delivers 15 ice-breaking LNG carriers for use in Artic operations

2018
- Opens the Siheung R&D Center
- Launches, "ROKS Dosan Ahn Changho", a 3,000-ton independently developed medium-sized submarine
- Successfully builds the world's first FRS LNG carrier to run on both low- and high-pressure engines

2017
- Delivers KRI Nagapasa, the first independently developed submarine, to Indonesia
- Develops a cryogenic, high-manganese steel-based LNG fuel tank (MCTIB)
- Delivers the world's largest jack-up rig

2016
- Completes the construction of the world's first ice-breaking LNG carrier for use in Artic operations
- Delivers the world's first LNG-FPSO
- Becomes the first Korean company to export a submarine (Indonesia)

2015
- Builds the world's first LNG carrier equipped with an LNG propeller engine and a PRS
- Delivers the world's largest container ship (19,224 TEU)

2013
- Wins an order to build the world's largest 263K LNG-FSRU

2011
- Becomes the first Korean company to export submarines
- Builds the world's largest FPSO, "Pazflor FPSO"

2004
- Operates the world's first PI system in the shipbuilding industry

1996
- Launches Korea's first independently developed destroyer, "ROKS Gwanggaeto the Great"





1993
- Korea's first combat submarine, "ROKS Icheon" (SS-062), is listed in the Guinness World Records (Korean edition)
- Simultaneously launches two double-hull crude oil carriers for the first time in the world

1992
- Builds Korea's first 1,200 ton-submarine, "Icheon"

1985
- Builds a 300,000-ton crude oil carrier

1984
- Opens the Ships & Ocean Engineering Research Institute
- Introduces a floating dock

1981
- Completes the construction of the Okpo Shipyard/ Goliath Crane

1979
- Wins the first order to build a chemical tanker

1973
- Begins the construction of the Okpo Shipyard of the Korea Shipbuilding and Engineering Corporation

Business Areas

COMMERCIAL VESSELS

Hanwha Ocean applies lower emission digital technologies to provide sustainable solutions and continues to lead the commercial shipbuilding industry with globally competitive expertise.



Very Large Gas/Ammonia Carrier (VLGC/VLAC)

Container Ship





Very Large Crude Oil Carrier (VLCC)



LNG Carrier (LNGC)

HIGHLIGHT

- 2025 Hanwha Ocean becomes the world's first shipbuilder to deliver the 200th LNGC
- 2020 The world's first successful ship–to–ship LNG loading within the quay wall of a shipyard
  Delivers the world's largest container ship, "HMM Algeciras" (24,000 TEU)
- 2018 Builds the world's first FRS LNG carrier to run on both low– and high–pressure engines
- 2017 Develops a cryogenic, high–manganese steel–based LNG fuel tank (MCTIB)
- 2016 Builds the world's first ice–breaking LNG carrier for use in Arctic operations
- 2005 Delivers the world's first LNG–RV
- 1993 Becomes the first shipbuilder to simultaneously launch two double–hull VLCCs

Business Areas

OFFSHORE BUSINESS

As a trailblazer in the global energy ecosystem, **Hanwha Ocean** leverages the world's most advanced production systems and facilities to develop and deliver cutting-edge plants and platforms tailored to diverse offshore environments.

OFFSHORE BUSINESS

HIGHLIGHT

- 2017 Delivers the world's largest jack-up rig
- 2016 Delivers the world's first LNG-FPSO to Malaysia
- 2013 Wins an order to build the world's largest 263K LNG-FSRU
- 2011 Builds the world's largest FPSO, "Pazflor FPSO"



Production Facilities

Floating Production, Storage, and Offloading (FPSO) Unit



Onshore Modular Plant



Fixed Platform



LNG-FPSO



Floating Production Unit (FPU)

OFFSHORE BUSINESS

Drilling Facilities

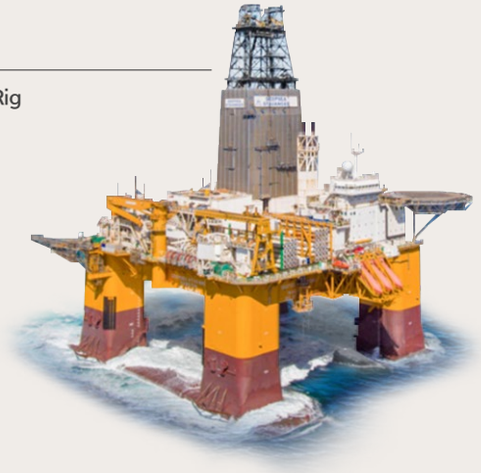
Drillship



Jack-Up Rig



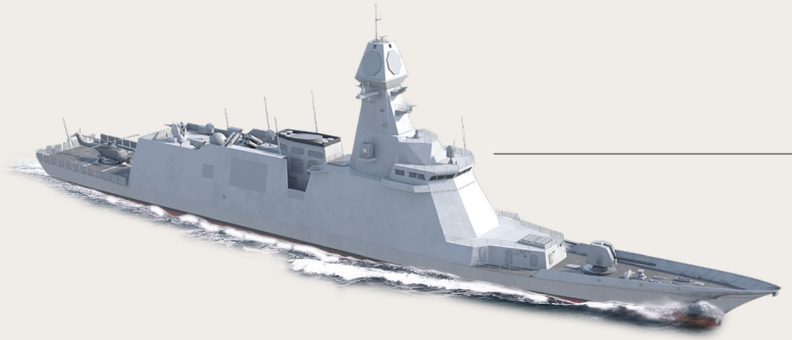
Semi-Submersible Rig



Business Areas

NAVAL SHIPS

As a Global Top Tier Naval Solution Provider, **Hanwha Ocean** is expanding its role in ocean engineering and defense through the development of breakthrough technologies designed to lead the global market.



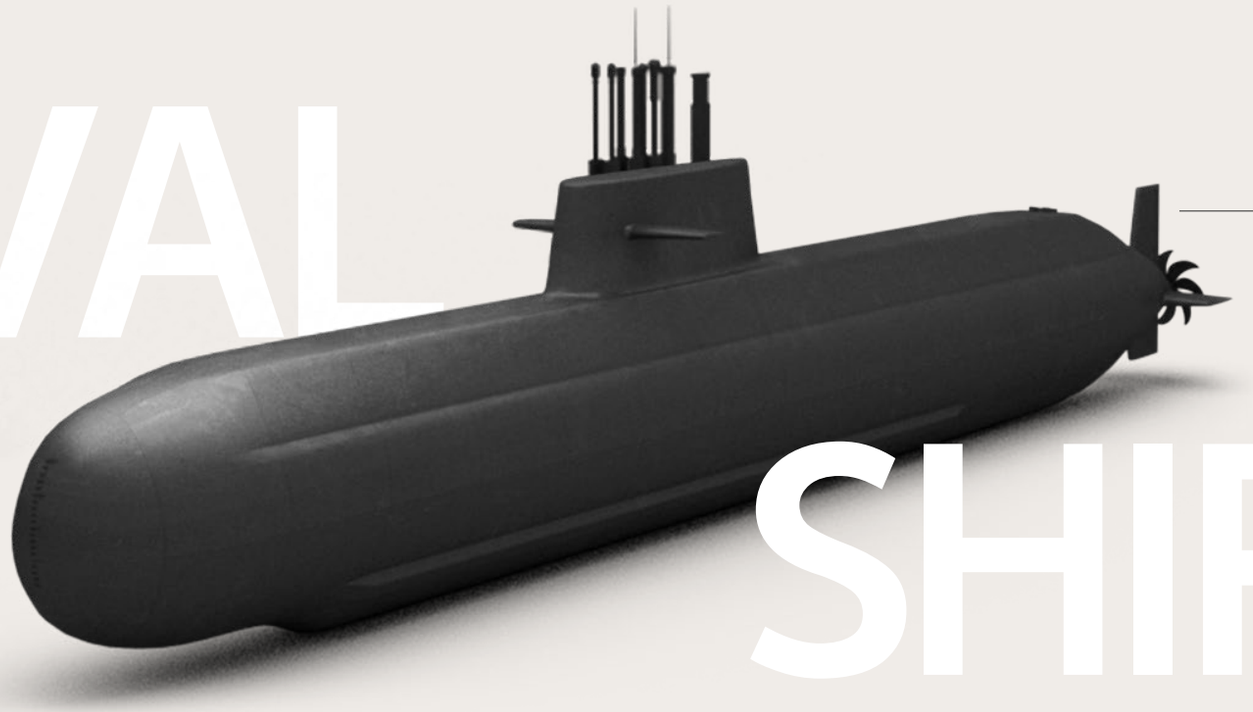
Frigates

FFX Batch–III



Destroyers

KDX–III



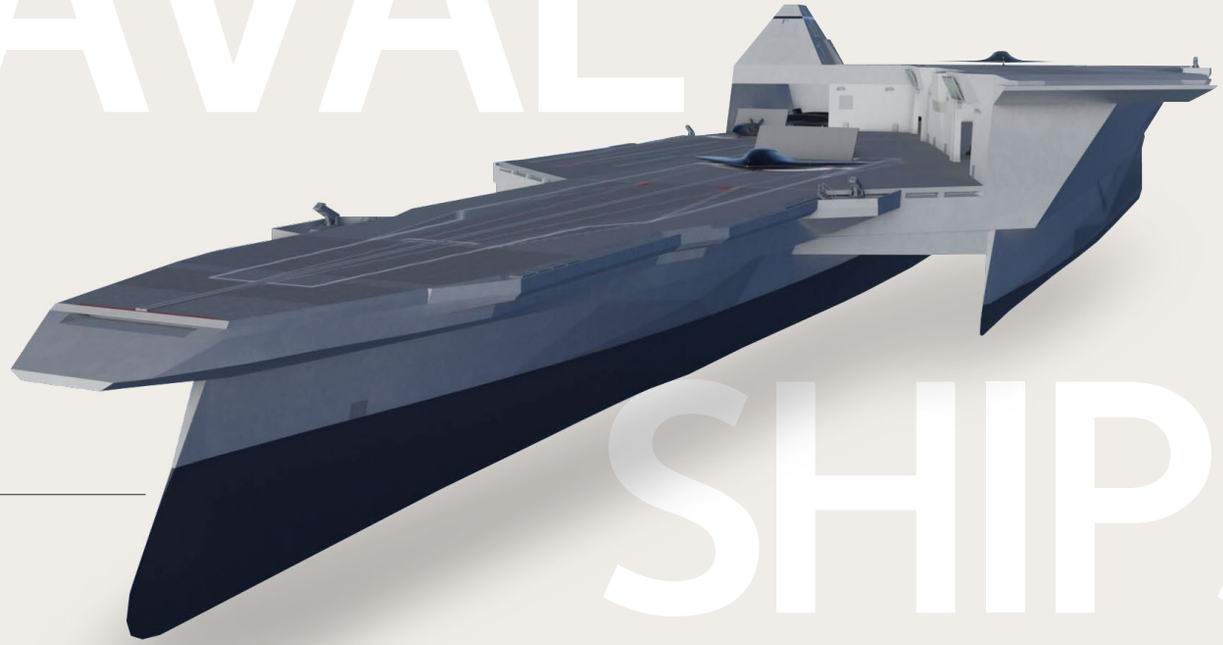
Submarines

Jangbogo–III

HIGHLIGHT

2022	Commences the construction of 3 Batch–II, a home–grown 3,000–ton medium–sized submarine
2018	Launches, "ROKS Dosan Ahn Changho", a 3,000–ton independently developed medium–sized submarine
2017	Becomes the first Korean shipbuilder to export the first home–grown submarine to Indonesia
2014	Begins the construction of Jangbogo–II, a 1,800–ton submarine
2011	Becomes the first Korean shipbuilder to win an order to build a submarine (1,400–ton) for export
1996	Launches Korea's first independently developed destroyer, "ROKS Gwanggaeto the Great"
1993	Builds Korea's first 1,200 ton–submarine, "Icheon"

NAVAL SHIPS



Unmanned Command and Control Ship (Ghost Commander)



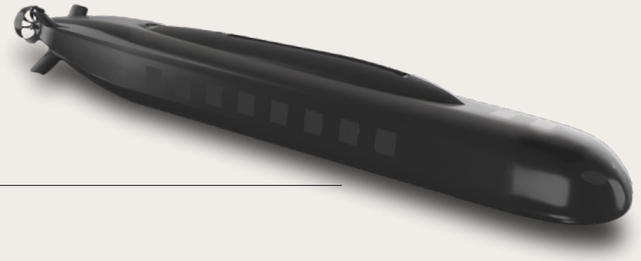
Auxiliary Submarine Rescue Vessel



Maintenance, Repair and Overhaul



Unmanned Combat Surface Vehicle



Unmanned Combat Underwater Vehicle

Business Areas

WIND POWER & PLANT

Hanwha Ocean harnesses innovative technologies to develop nature–based energy solutions and build sustainable resource and energy infrastructure—creating a better future for the planet.

WIND POWER & PLANT

New Renewable Energy

Wind Turbine Installation Vessel (WTIV)



Offshore Substation (OSS)



Wind Power/Plant

Offshore Wind Power/Onshore Wind Power



Petrochemical Plants/Lower emission Power Plants



Sustainability Management

Hanwha Ocean strives to be the world's most trusted company, dedicated to making sustainable maritime journeys a reality

SUSTAINABILITY

Go Great Ocean, **Go** Green Builder

G O P L U S +

People

At Hanwha Ocean, we place people at the center of everything we do, promoting a culture of open communication and mutual respect.

Leadership

We usher in a new era of innovation through cutting-edge R&D and technological advancement.

Upgrade

We relentlessly inspect, enhance, and refine our processes to deliver unrivaled quality.

Safety

We prioritize safety through rigorous inspections and swift implementation of protective measures.

+

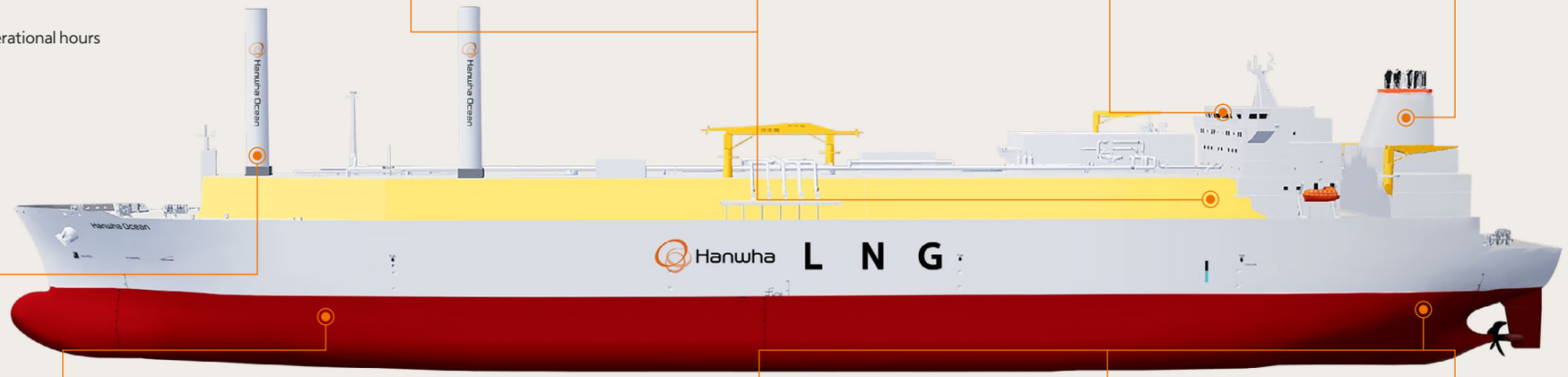
We constantly strive to safeguard the ocean and secure a sustainable future for humanity.

Synergy among Affiliates

Hanwha SYNERGY

The Hybrid LNG carrier is equipped with a high-efficiency electric propulsion system

- It maintains high efficiency and stability at all speeds and in all output modes
- Lightweight design and reduced installed power compared to conventional two-stroke engine LNG carriers
- Enables engine checkups at sea, increasing availability and operational hours
- Optimized propeller and hydrodynamic performance beyond traditional engine torque limits
- Designed with a modular concept to enable transition to fuel cells and next-generation energy sources



Reliquefication
(NRS, PRS, FRS, MRS-F)

BOG technology for LNG carriers is an lower emission solution that prevents LNG emissions and lowers operating costs

Hanwha Ocean

Maximized Cargo Capacity

The compact engine room design maximizes cargo capacity

Hanwha Ocean

Smartship

Smartship offers optimized sailing solutions via the integrated control of core equipment

with Hanwha Aerospace

Onboard Carbon Capture and Storage
(OCCS)

OCCS refers to a technology that captures and stores carbon dioxide from the gases emitted during a ship's operation

Hanwha Ocean

Rotor Sail

The rotor sail uses the Magnus effect for wind propulsion, creating an energy saving effect of 3 to 5%

Hanwha Ocean

Air Lubrication System

The air lubrication system reduces friction resistance on the surface of a ship, creating an energy saving effect of 5 to 8%

with Hanwha Power Systems

Shaft Generator Motor
(SGM)

SGM uses the torque of the main engine axis, which is responsible for the propulsion of the ship, to generate the power needed to operate the ship

Hanwha Ocean

Energy Storage System

The Energy Storage System (ESS) functions as both a backup power source during voyages and a solution for peak load management, spinning reserve, and power outage prevention and recovery

with Hanwha Aerospace

Gas Turbine

The gas turbine minimizes carbon emissions and enables efficient transition to ammonia fuel, featuring enhanced efficiency and zero methane slip technology

with Hanwha Power Systems

Electric Power Generating System

The Electric Power Generating System ensures optimal efficiency and stability through an advanced power management system

Hanwha Ocean

Synergy among Affiliates

Hanwha SYNERGY

Cutting-edge defense technology from the ocean to outer space

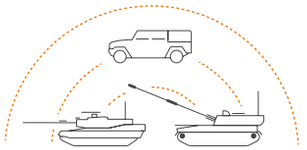
Hanwha Ocean delivers sustainable defense solutions across sea, land, and space through proprietary innovation in advanced defense technologies.

From submarines and K9 self-propelled artillery to radar systems and precision-guided missiles, **Hanwha Ocean** develops globally competitive capabilities that strengthen national security.



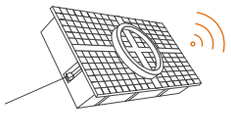
- Destroyers
- Frigates
- Corvettes
- Offshore Patrol Vessels
- Submarines
- Auxiliary Vessels
- Submarine Rescue Ships
- Unmanned Vehicles

Hanwha Ocean



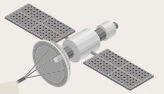
- Fire Power Systems
- Combat Vehicles (Redback)
- Air Defense System
- Energy Storage System
- Aircraft Engines
- Space Launch Services
- Guided Weapon System
- Unmanned & Underwater
- Monitoring System

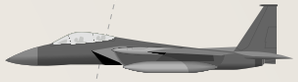
with Hanwha Aerospace



- Radar·Electro-optics Avionics· Aviation Sensors
- Combat Management System
- Tactical Data Links
- Low Earth Orbit Satellite Communication
- Hyper connected Multi-layer Communication Command Control

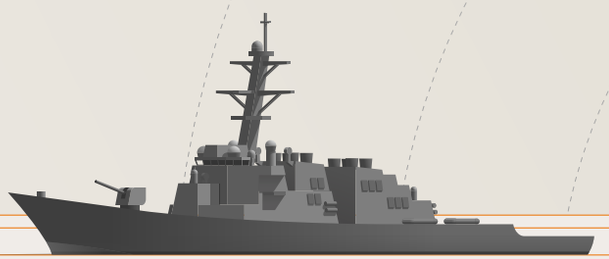
with Hanwha Systems



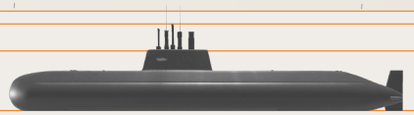












Affiliates

ABOUT OUR GROUP

Clean Energy & Ocean Solutions

- Hanwha Ocean
- Hanwha Engine
- Hanwha Power Systems
- Hanwha Solutions
- Hanwha Impact
- Hanwha Energy
- Hanwha Total Energies Petrochemical
- YEOCHUN NCC
- Hanwha Advanced Materials

Aerospace & Mechatronics

- Hanwha Corporation
- Hanwha System
- Hanwha Robotics
- Hanwha Aerospace
- Hanwha Precision Machinery
- Hanwha Vision
- Hanwha Momentum

Finance

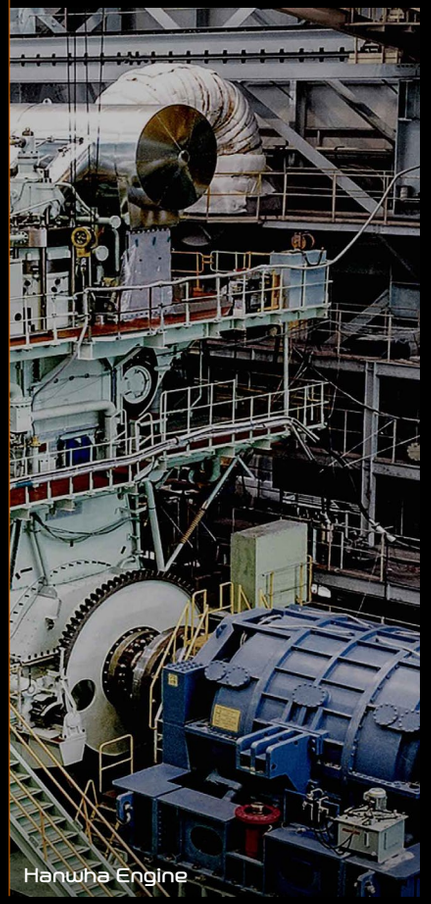
- Hanwha Life
- Hanwha Asset Management
- Hanwha Savings Bank
- Carrot General Insurance
- Hanwha General Insurance
- Hanwha Investment & Securities
- Hanwha Life Financial Service

Retail & Services

- Hanwha Hotels & Resorts
- Hanwha Connect
- Hanwha Galleria

Clean Energy & Ocean Solutions

Hanwha provides lower emission energy and material solutions essential for building a more sustainable planet.



Hanwha Engine

Aerospace & Mechatronics

With its own technological innovation in the aerospace and high-tech defense sectors, Hanwha offers solutions for the construction of sustainable infrastructures for the Earth and space.



Hanwha Aerospace

Finance

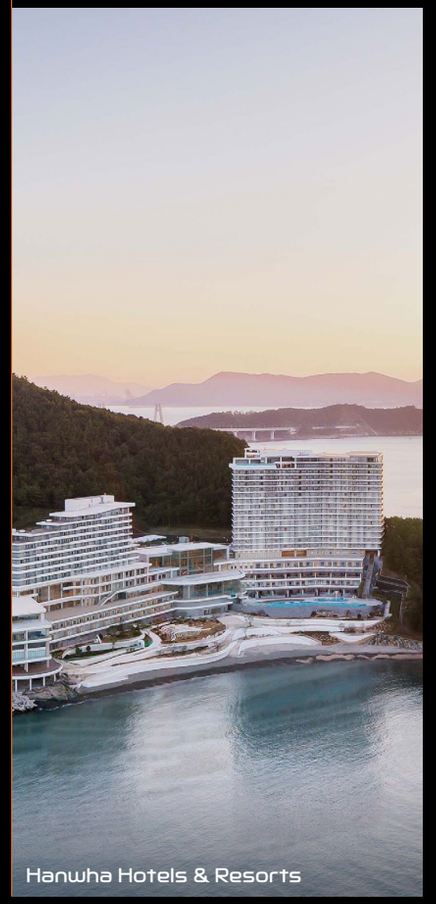
Our digitally-based financial solutions are optimized for diverse lifestyles to help our customers and society to achieve sustainable prosperity and growth.



Hanwha Life Insurance

Retail & Services

Hanwha strives to enable sustainable and aspirational lifestyles through integrated retail and service platforms, both online and offline.



Hanwha Hotels & Resorts

GLOBAL NETWORK

Hanwha Ocean Connects the World across the Oceans

Asia

Hanwha Ocean Shandong Corporation

Website	www.hanwhaoceansd.com
Address	264006, Qingdao Street 2-1, Yantai Economic & Technical Development Zone, Shandong Province, China
Phone	+86-535-308-2400
Products	– R&D, production and sale of products and parts related to blocks for ships – Design, manufacture, installation, and construction of onshore and offshore plants

Tokyo Branch

Address	Hanwha Building 6F 10-1 Shiba 4-Chome Minato-Ku Tokyo 108-0014 Japan
Phone	+81-90-4723-2386
Email	hs.lee23@hanwha.com

Hanwha Offshore Singapore

Website	www.hanwhaoffshoresingapore.com
Address	45 Gul Road Singapore 629350
Phone	+65-6415-0880
Products	Offshore business modules

Singapore Branch

Address	#14-01 Suntec City Tower 1, 7 Temasek Boulevard, Singapore 038987
Phone	+65-6336-0940
Email	hyunsic.kim@hanwha.com

Hanwha Ocean Ecotech

Website	www.hanwhaoceanecotech.com
Address	111, Yulchonsandan 3-ro, Gwangyang-eup, Gwangyang-si, Jeollanam-do, South Korea
Phone	+82-61-780-3000
Products	– Hatch Cover – Trans Bulkhead – Side Shell (Bench Block) – LNGC Trunk Deck – CMR (Cargo Machinery Room) – Lashing Bridge – Rudder – Other steel structures

Hanwha Ocean Engineering

Website	www.hanwhaoceanengineering.com
Address	3370 Geojedae-ro, Geoje-si, Gyeongsangnam-do, South Korea
Phone	+82-61-780-3000
Business Area	Quality inspection for ships

Americas

Hanwha Ocean Americas LLC

Address	Galleria Tower II, 5051 Westheimer Rd Suite 1400, Houston, Texas USA 77056
Phone	+1-832-389-8892
Business Area	Marketing and contracts for commercial Vessels in the Americas

Hanwha Shipping LLC

Address	Galleria Tower II, 5051 Westheimer Rd Suite 1400, Houston, Texas USA 77056
Business Area	Lower emission/digital solutions, ship-based LNG transportation

Hanwha Ocean Global Operation Center LLC

Address	580 Westlake Park Blvd, Suite #800, Houston, Texas USA 77079
Business Area	Global control tower for offshore businesses

Houston Branch

Address	580 Westlake Park Blvd., Suite 500, Houston, TX 77079
Phone	+1-281-2024242
Email	skylee@hanwha.com, skylee@hanwhaoceanus.com

Hanwha Philly Shipyard

Address	2100 Kitty Hawk Ave, Philadelphia, PA 19112
Phone	+1-215-875-2600
Business Area	Builds Commercial vessels & US Naval Ships, MRO

Hanwha Drilling LLC

Address	Galleria Tower II, 5051 Westheimer Rd Suite 1400, Houston, Texas USA 77056
Business Area	Drillship technology-based energy infrastructure solutions

Europe

Hanwha Ocean Europe Ltd.

Address	C402, Westfield London Shopping Centre, Ariel Way, W12 7FD, London
Phone	+44-(0)20-3249-1150
Business Area	Marketing and contracts for commercial Vessels in Europe

Luanda Branch

Address	Rua Rainha Ginga n ° 187, Edificio Rainha Ginga, Piso Intermedio, Ingombota, Luanda, Angola
Phone	+244-222-02-78-18
Email	jbwee@hanwha.com

Greece Branch

Address	2 Leof. Amfitheas, nea smyrni 17122, Greece
Phone	+30-210-422-6786
Email	athens@hanwhaocean.gr

Oslo Branch

Address	C.J. Hambros Plass 2C, 0164, Oslo
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Email	juk6240@hanwha.com


Hanwha Ocean