Nabtesco
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Innovation In Action
Vision 2030

Investor Briefing
Marine Vessel Equipment

Growth Strategies Driven by Decarbonization and Autonomous Navigation

Nabtesco Corporation
Marine Control Systems Company

Sep. 7, 2026

Profiles of today's main speaker

Mr. Yukihiro Mizutani, Executive Officer

President of the Marine Control Systems Company

2004	Group Leader, Intellectual Property Department, Technology and R&D Division
2011	Head of Development Planning Department, Technology and R&D Division
2016	Corporate Officer, Head of Technical Department, Accessibility Innovations Company
2019	Executive Officer, Head of Domestic Business and Product Planning Department at Accessibility Innovations Company
2022	Executive Officer, President of Marine Control Systems Company (to present)

Hobbies: Driving, Golfing and Watching Sumo wrestling

Today's Agenda

Today, I will explain the overview of the marine control systems company, its business environment, and its growth strategy centered on decarbonization and autonomous operations, all in below 3 pillars.

01 Overview of Marine Control Systems Company

Business Development and Technology Evolution / Domestic and Overseas Bases / Products and Global Market Share / Business Model and Sales Outlook

02 Business Environment and Market Trends

Global Demand for New Ship Building / Trends of Governments Policies Around the World / Environment Surrounding the Maritime Shipping Industries / Environmental Regulations and Our Measures

03 Growth Strategy and Future Developments

Overview of Growth Strategy / Growth Image / Alternative Fuel Shift / Expansion to Autonomous Operation / Today's Message

01

Overview of Marine Control Systems Companies

Business History and Technological Evolution | Domestic and Overseas Bases | Products and Global Market Share | Business Model and Sales Outlook

Business Development: Technology Evolution

Since entering the marine business in 1950, we have built up pneumatic → electronic and hydraulic control → digital and autonomous navigation technologies.

1925 — NABCO
Founding of Nippon Air Brake Co., Ltd. (formerly Nabco Ltd.)

1950
marine vessel equipment Started business

2003 — Nabtesco
In the business integration Establishment of Nabtesco Corporation

2009
Built a valve assembly plant at the Seishin Factory

2020 — MEGURI 2040 / THE NIPPON FOUNDATION
Participation in the unmanned vessel project "MEGURI 2040"

2023
Acquisition of DeepSea

deepsea

2026 — TELEGRAPH NEXUS
Deployment of navigation optimization solutions

Three Steps of Technology Evolution in Marine Vessel Equipment

Pneumatic control
Remote Control and Safety Devices for Marine Main Engines in 1950s

→

Electronic and hydraulic control
Remote control systems, electronic governors, and electronically controlled hydraulic valves for marine main engines

→

Digital/Autonomous Navigation
AI-optimized Navigation Tools & Autonomous Navigation Solutions

Global Bases (1): Japan

With the Seishin Plant (Kobe City) as our main base, we conduct research and development, production, sales, and after-sales service of marine vessel equipment.

Seishin Factory (Nishi-ku, Kobe City, Hyogo Prefecture) / Marine Company Mother Factory

Marine Control Systmes Company Mother Factory : Seishin Plant

Location	Nishi-ku, Kobe City, Hyogo Prefecture
Number of employees	Approximately 280 employees (including temporary and outsourced staff)
Main Products	Remote control systems for marine main engines, electronically controlled hydraulic valves, electronic governors, etc.

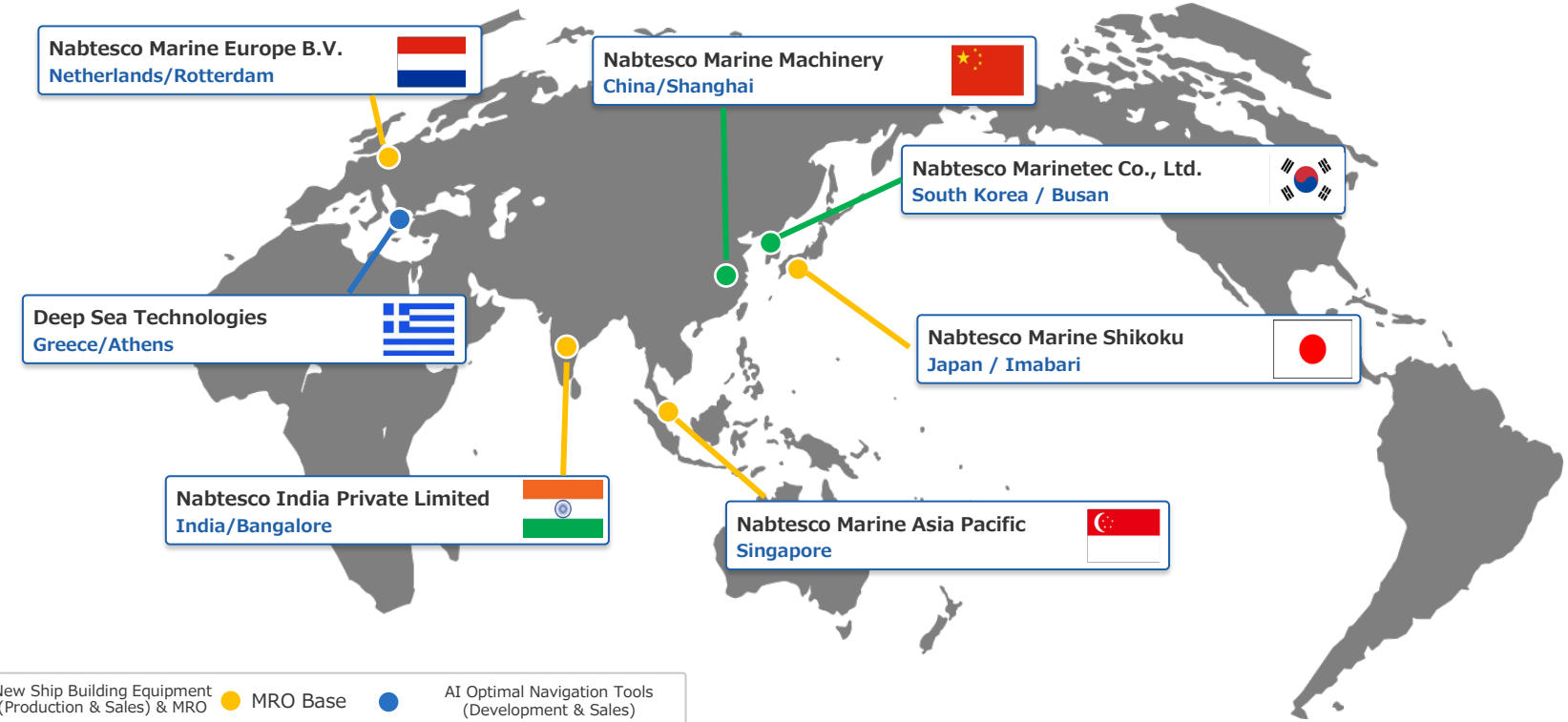
* Number of employees includes temporary and outsourced staff

Main four functions of the Seishin Plant

Research and Development	Design, development, testing, and evaluation of main engine remote operation and control equipment, as well as hydraulic valves
Production	As a mother factory, we consistently produce key products and ensure quality,
Sales	Proposals and order responses to domestic shipyards and marine main equipment manufacturers
After-sales Service	Continued provision of maintenance, parts supply, and technical support for vessels in service

Global bases (2): Group Companies in Overseas

We have production and sales bases in China and South Korea, and provide 24/7 after-sales service from our global MRO sites



Products and Global Share :

With core products that control the main engine, the "heart" of ships, it has established about a 40% global market share in remote control systems for main engines with large vessels.

Main installation points and key products of our products

Bridge

Main Engine Remote Control System / Speed Control (Telegraph Agent)

Engine Control Room (ECR)

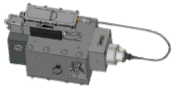
Remote Control System

* Control/safety device for adjusting the start/stop of the main engine and rotation speed

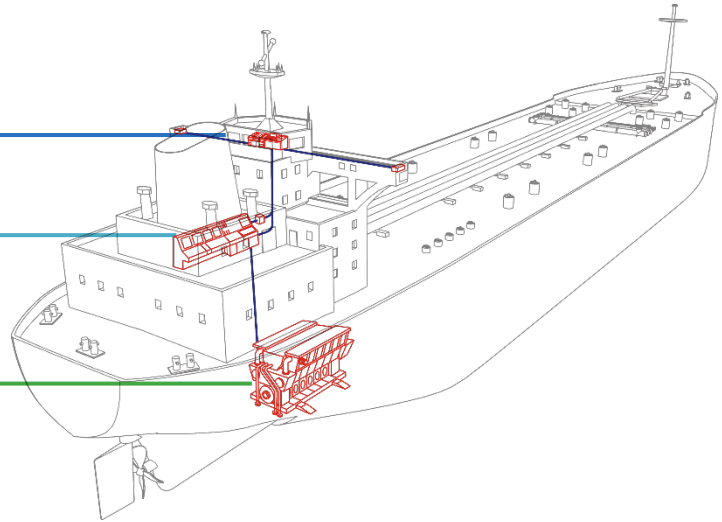
Main product: M-800-VII

Around the Main Engine

Engine control panel, hydraulic valve, electronic governor, etc.



Electronically controlled hydraulic valve



Remote Control System for Main Engine for Large Vessels | Global

About 40%

Remote Control System for Main Engine for Large Vessels | Japan

About 45%

The above figures are estimated by Nabtesco Corp.

Business Model : Valu chain

In-house "development, inspection, certification, and MRO" serve as entry barriers and sources of stable revenue. A business model aim to secure high profitability and stock revenue with low assets.

1 Planning, Development/Design

Our company

- Customize controls according to customer requirements and reflect them in product specifications
- Design intellectual property is the starting point of competitive advantage

2 Parts Production and Parts Processing

Supplier Outsourcing

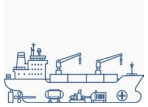
- Fabless limits CAPEX and fixed costs
- Variable costs absorb demand swings
- Diversified supply risk multiple procurements sources

3 Assembly, Inspection, and Classification Acquisition

Our company

- Ensuring quality through in-house assembly and pre-shipment inspections
- Obtaining major class type approvals in each country
- Classification certification know-how creates barriers to entry

4 Product Loading and Delivery



In-house (at shipyards, etc.)

- Loading and commissioning at shipyards etc.
- Accumulated installation track record of approx. 40% global market share
- The number of products around the main engine has increased per vessel

5 MRO & After

In-house (Global Five Poles)

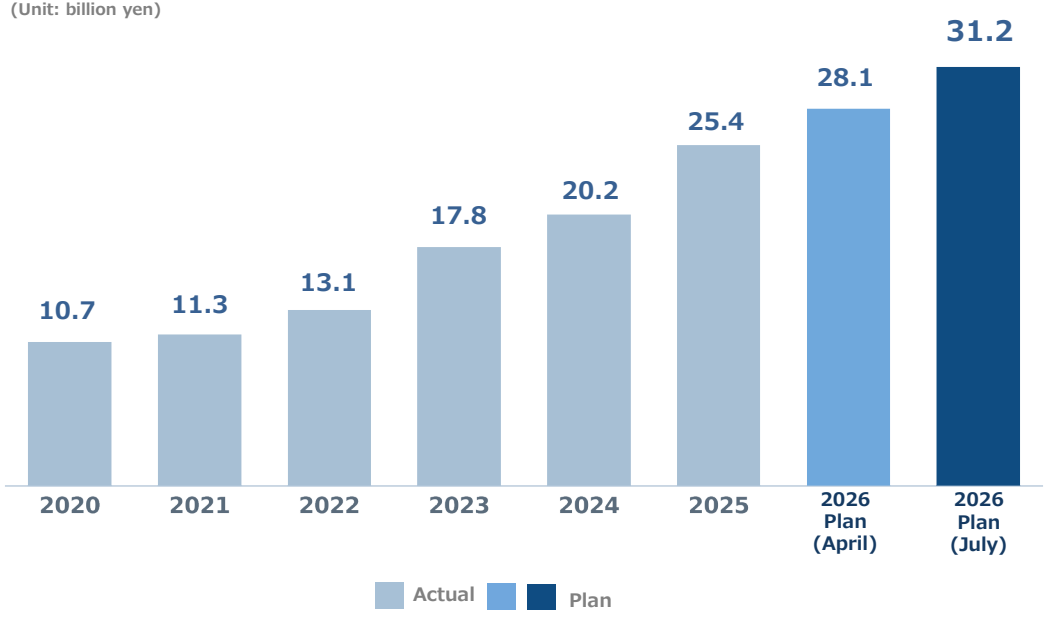
- 24-hour service in Japan, Netherlands, Singapore, Korea and China
- Genuine parts supply and predictive maintenance menu
- Maintenance revenue for approximately 25 years since the vessel entered operations

Sales Track Record : Consolidated Sales

Backdrop of strong new ship buildings and maritime markets, both new ship building and after-sales service sectors are growing, and this fiscal year is expected to reach a record high of 31.2 billion yen.

Fiscal Year 2026 Sales Outlook	2020→ 2025 FY Actual CAGR	FY2025 Actual Comparison
31.2 billion yen	**18.9%**	**+23%**
To be reached a Record High	Five-year average annual growth rate	25.4→31.2 billion yen

(Unit: billion yen)



01 Driven by new ship building

Main eigine remote control devices with approx. 40% global market share as well as sales of electronically controlled hydraulic valves expanded.

02 After-sales service as a foundation

After the vessel entered operations, it has undergone about 25 years of regular maintenance,

Steadily capturing upgrade demand amid strengthened environmental regulations

03 Revised the original guidance to upward

Estimated in strong orders, the target is 28.1→31.2 billion yen

(+3.1 billion yen upside revision)

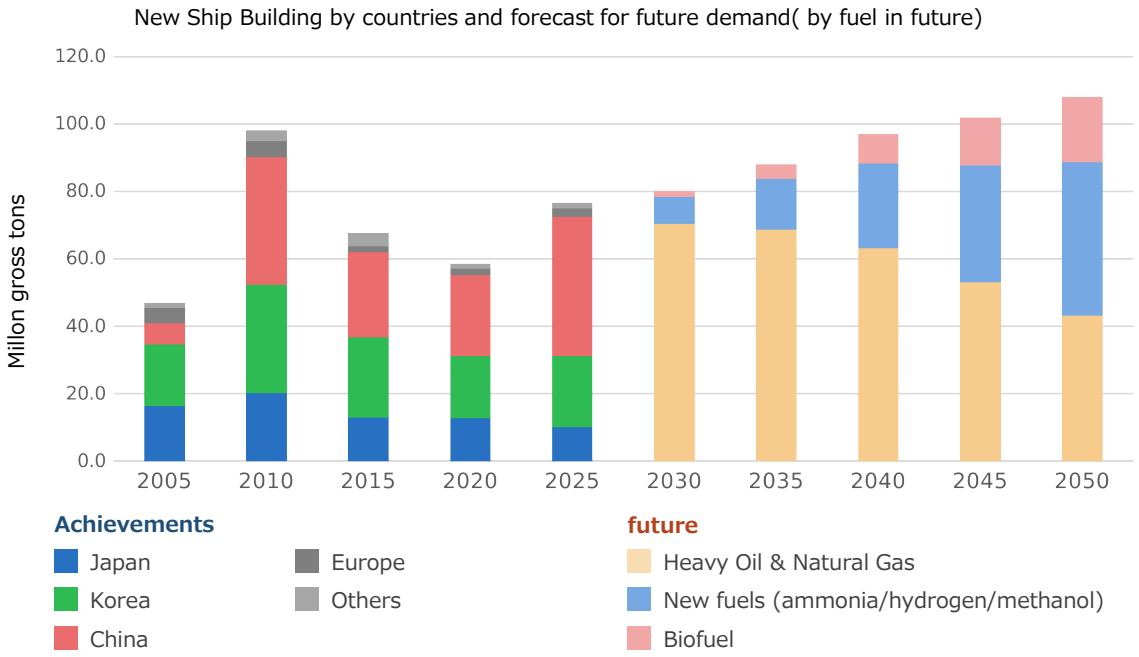
02

Business Environment and Market Trends

Global New Shipbuilding Demand | Government Trends in Various Countries | Environment Surrounding the Shipping Industry | Environmental Regulations and Our Initiatives

New Shipbuilding Demand: Results and Outlook

New ship building demand is expected to expand about 110 million gross tons by 2050. Fuel will gradually shift from heavy oil and natural gas to new fuels and biofuels.



Future Trends (2026→2050)

- Total demand for new ships is increasing → annual growth rate is expected to be about +2.4% from 2026 to 2050, and about 110 million gross tons by 2050.
- In recent years, construction in China and South Korea has dominated.
- Going forward, fuel conversion will progress, and the ratio of heavy oil to natural gas will gradually decrease.
- By 2050, new fuels (such as ammonia, hydrogen, methanol, etc.) will be expanded to about 40%.

* Future fuel composition ratios are estimates based on the Ministry of Land, Infrastructure, Transport and Tourism's published outlook.

Source: Completion results are based on the Japan Shipbuilding Industry Association's 'Shipbuilding Related Materials (March 2026)'; future construction demand is based on the Ministry of Land, Infrastructure, Transport and Tourism's July 31, 2026 publication 'Ship Demand Forecast to Support Global Maritime Cargo Volume (Final Summary)', and data is integrated by our company.

Government Policy Trends and Opportunities

Japan, China and South Korea are focusing on decarbonization and autonomous navigation alongside increased construction volumes. We are seizing opportunities by capturing the growth in construction volume and developing next-generation vessels.

	National policy	Focus Areas	Opportunities for Nabtesco
Japan	・Formulation of the 'Shipbuilding Industry Revitalization Roadmap' (Ministry of Land, Infrastructure, Transport and Tourism) ・Double size of construction volume by 2035 (18 million gross tons) ・Supporting revitalization with 1 trillion JPY public-private investment	・Leading the world with next-generation ships such as decarbonized vessels ・Strengthening the construction system, human resources, and collaboration with allied countries ・Doubling construction capacity through industry restructuring and DX/AI utilization	・Capturing new shipbuilding demand by expanding resources ・Promoting next-generation ship development through collaborative with partnership to increase added value
China	・Expanding construction capacity to the world's largest through a maritime power strategy and massive subsidies ・Focusing on high-tech ships in "Made in China 2025" ・Merged two state-owned companies and reorganized into CSSC	・Promotion of Green Supply Chain (2024-2030) ・Rapidly expanding LNG and methanol carrier construction capacity ・Expanding order share through public subsidies	・Continued supply of main products (main engine remote control devices, hydraulic valves, etc.) from local sites ・Strengthen local production capability and steadily capturing the expanding new ship building demand
Korea	・Public financial support for struggling shipyards ・2 trillion Korean won invested by public and private sectors under the 'K-Shipbuilding Super Disparity Vision 2040' ・Enforcement of the "Autonomous Ship Act" in 2025	・Commercialization of LNG, ammonia, and hydrogen fuels ・Robot Adoption and Digital Transformation ・Leading the world with autonomous ships and smart yards	・Continued supply of main products from local bases ・Exploring opportunities for joint development for autonomous and alternative fuels

Source: Ministry of Land, Infrastructure, Transport and Tourism and Cabinet Office, 'Roadmap for Shipbuilding Industry Revitalization', compiled by our company based on various media reports.

Maritime Industry: Challenges and Opportunities

Environmental regulations, crew shortages, and fleet renewals are progressing simultaneously, and the challenges facing shipping directly increase demand for Nabtesco.

Strengthening Environmental Regulations

- IMO* adopts the Net Zero Framework
  . Towards Net Zero GHG Emissions Around 2050
- EEXI/CII regulations (2023~) restrict the operation and fuel efficiency of existing vessels
- Regional regulations for EU-ETS and FuelEU Maritime are progressing simultaneously

Our Opportunities

Growing demand for marine equipment and energy-saving controls compatible with alternative fuels

Seafarer shortage and aging population

- There is a global shortage of domestic and international seafarers.
- In Japan, the number of people taking on the role continues to decrease due to the declining birthrate and aging population.
- Diversification of work styles and harsh onboard labor conditions hinder the establishment of work

Our Opportunities

Accelerated adoption of labor-saving and autonomous operation solutions

New construction investment and renovation needs

- Demand for new builds and retrofits is expanding due to decarbonization and replacement of aging ships
- The proportion of alternative fuel ships in new orders has increased.
- Longer construction periods have tightened shipyard construction slots, resulting in a backlog of medium- to long-term orders.

Our Opportunities

Building high-priced next-generation marine vessel equipment and long-term MRO revenue

*IMO (International Maritime Organization)... A United Nations specialized agency that sets international rules for ship safety and marine environmental protection.

03

Growth Strategy and Future Developments

Overview of the Growth Strategy | Shift to Alternative Fuel | Expansion to Autonomous Navigation

Overview for Growth Strategy: Opportunities

In response to changes in the external environment, our company has shifted to two growth strategies: "increasing the unit price per vessel" and "expanding business areas" aiming to increase profits.

External environment

■ Strengthening Environmental Regulations

IMO sets a goal of net zero by 2050, accelerating the transition to alternative fuels such as ammonia and hydrogen

■ Seafarer shortage and labor-saving measures

Backdrop of an aging and shortage of seafarers, the demand for autonomous operation and digitalization is increasing.

■ Expansion of construction demand

Construction backlog is expected to expand at an annual rate of +2.4% until 2050, covering five years' worth of work.

■ Maintenance and Renewal Needs

Expansion of vessels and advanced equipment is driving medium- to long-term expansion in after-sales MRO demand.

Our Growth Strategy

(1) Shift to Alternative Fuels

Higher Price & Demand

- Product range expanded to dedicated valves compatible with the characteristics of ammonia, hydrogen and methanol
- More high-value-added electronic control valves and other equipment are being installed, raising the unit price per vessel.
- The spread of alternative fuel vessels has boosted demand for new builds and expanded the overall market.

(2) Autonomous Operation

Wider Business Scope

- We have expanded business area by providing optimal navigation tools for control
- Commercializing knowledge cultivated through demonstrations to support labor-saving for seafarers
- From single item sales to solution provision and services, creating ongoing revenue opportunities

Capturing the dual upside of increased demand for alternative fuel marine vessel due to strengthened environmental regulations and rising unit prices per vessel

Market environment: Medium- to long-term solid construction demand and tightening environmental regulations

120 million gross tons

2025: Orders for new ships (third in history)

5 years' worth construction backlog

Shipyards around the world continue to operate at high levels amid slipway shortages

+2.4 % annual growth rate (CAGR)

2026→2050 World Construction Demand

Around 2050: Zero GHG Emissions

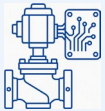
By 2030, the goal is to use 5–10% zero-emission fuel

Upside structure: Increased onboard units and higher functionality drive up the unit price per vessel

Main Engine: Dual Fuel (ammonia/hydrogen, etc.) and electrification compatible

Creating high added value with advanced control and safety requirements.
Promoting joint development with main equipment manufacturers.

Unit Price ++



Main engine: Electronic control, heavy oil

In addition to the main engine remote control system, it is equipped with a single electronic control valve per cylinder, increasing both the number of devices installed and the unit price

Unit Price +

Main engine: mechanical control, heavy oil

Standard unit price (mainly main unit remote control devices)

Unit Price Standard

Unit Price increase

Source: Ministry of Land, Infrastructure, Transport and Tourism and Cabinet Office 'Shipbuilding Industry Revitalization Roadmap,' 'Ship Demand Forecast,' NEDO published materials, etc., compiled by our company. Unit price levels are estimated by our company.

Growth Strategy | Autonomous Operation by steps

At each stage of the MEGURI 2040, we gradually expand the value we provide, starting from our experience in remote control of main machines.

無人運航船プロジェクト MEGURI 2040 | 日本財団 THE NIPPON FOUNDATION

A demonstration project for unmanned vessels led by the Nippon Foundation.
With an all-Japan system of industry, academia, and government, technology development and demonstration are being carried out, aiming to enable unmanned operation of coastal vessels.

Stage 1: World's First Unmanned Operation Demonstration

- 5 Consortium Successfully Conducted 6 Ships Demonstration Operations
- World's first in congested sea areas and long-distance routes
- Verification of the effectiveness of elemental technologies

Stage 2: Demonstration and Social Implementation for Practical Application

- 4 ships conducted long-term demonstration with a team of over 50 companies
- Remote support for multiple vessels from the Land Support Center
- Challenges include technology, regulations and social understanding

Stage 3: 50% of domestic vessels will be unmanned

- 50% of coasting vessels have been unmanned
- Level 4 equivalent steady-state operation begins
- Full-scale Adoption of Autonomous Navigation Equipment

Fully autonomous vessels in service

Nabtesco

Our Initiatives and Opportunities	2020 thru 2022	2023 thru 2026 (Practical Implementation Target)	Until 2040
	・Participation in MEGURI2040 ・Started joint development with TOKYO KEIKI INC. For autonomous vessels	・Promote for retrofit of Telegraph Agent ・Acquisition of DeepSea (AI optimized operational tool) ・Joint demonstration conducted in MEGURI 2040	・Launch of navigation optimization solution "Telegraph Nexus" ・Expansion to Automated Landing Docks and Autonomous Navigation Equipment ・Expanding revenue from renovation services through MRO network

Source: The stage definition was created based on the Nippon Foundation's "MEGURI2040 Unmanned Ship Project" public materials; our initiatives and opportunities are organized in-house.

Growth Strategy | Autonomous Hard + Software

Expanding the strengths of main engine control to autonomous operation. Retrofitting ship speed control equipment to existing main engine remote control devices as well as adding software revenue

Technological Advancement: Building on the Proven Track Record of Main Engine Control into Software and Demonstration

Demonstration collaboration: MEGURI 2040

The demonstration vessel is equivalent to Level 4 and certified by the Ministry of Land, Infrastructure, Transport and Tourism. Applying expertise to next-generation equipment

AI-Optimized Voyage: DeepSea / Telegraph Nexus

Approximately 10% Improvement in Operational Efficiency with AI / Providing Route and Equipment Monitoring

Automatic Ship Speed Control: Telegraph Agent

DNV Type Approval (2024) / 3 mode automatic control of speed, load, and fuel

Infrastructure: Main unit remote control device (about 40% global market share)

Core product for precise control of main engine speed. Proven Installation Numbers for Software Deployment

Customer Value and Our Revenue Opportunities

Demonstration and Certification:

Pioneering Knowledge for the Commercialization of Autonomous Operation

Reflecting the requirements of on-site demonstration in product specifications lowers adoption barriers

Operational efficiency:

Reducing fuel and costs on AI-optimized routes

Reducing fuel efficiency and GHG emissions through route and equipment visualization

Labor-saving and safety:

Automating detailed handling to reduce crew burden

Solving crew shortages and fuel efficiency through automated ship handling and ETA compliance

Revenue Opportunities:

Expansion of stock-type revenue based on actual installation performance

Retrofitting Telegraph Agents and other equipment to existing ships through port and dock construction

**DeepSea's AI optimal navigation tool (Pythia) and our Telegraph Agent are connected via ship-to-land communication.
Approved voyage plans are automatically handed over to the main engine remote control system, enabling semi-automated operation.**

TELEGRAPH NEXUS

Landside (Office)

deepsea

AI-optimized navigation tools

Calculate optimal routes and ship speeds based on weather, ocean conditions, and operational performance

Operators input and send voyage plans

Ship and Land Communications gateway

Ship side (main vessel)

Vessel Manager

Confirm the received plan with ECDIS, and adjust and approve routes and vessel speeds

Command speed/horsepower

TELEGRAPH AGENT™

Vessel speed control device + main engine remote control device

Automatically controls the main engine's rotation speed according to command speed and horsepower

Feeding back navigation information, main engine rotation speed, and more to land

Value Provided

Labor-saving and safety

Automatically linking from planning to execution reduces crew operational load and human error.

Fuel Efficiency & GHG Reduction

Reducing fuel consumption and emissions by maintaining optimal ship speed and routes

Deployment to Existing Vessels

Can be retrofitted into the main unit remote control system, offering wide opportunities for installation.

(Note) Telegraph NEXUS is a concept that integrates our Telegraph Agent with an AI-optimized navigation tool. The actual onboard equipment and functions may vary depending on the customer's vessel specifications.

Today's summary

Message to Investors

Today's summary: Message to investors

Based on high market share and entry barriers, we secure unit prices and quantities through new ship building demand and decarbonization, while autonomous operation and MRO drive up stock revenue.

Global Market Share	Fiscal Year 2026 Sales Outlook	Revenue CAGR (2020→2025)	New Ship Building Construction Demand (2026→2050)
About 40%	**31.2 billion yen**	**18.9%**	**CAGR +2.4%**
Main Engine Remote Control System	Record high / +23% YoY base	Achievements	Gross ton base

01

Continuity of Competitive Advantage

- Approx. 40% global market share in main unit remote control systems
- Four Barriers: Class Certification, Alignment Development, Installation Achievements, and the Global MRO Network
- 75 Years of Marine Business Accumulation Since 1950

02

Increasing Demand for Newbuilding and Decarbonization

- Demand for newbuilding is expected to expand to approximately 110 million gross tons by 2050 (annual rate +2.4%)
- New fuel vessels account for about 40%. High added value drives up the unit price per vessel.
- Joint development with major manufacturers for valves compatible with ammonia fuel, etc.

03

Autonomous Navigation and Stock-Based Revenue

- Telegraph Agent and AI-optimized voyage reduce fuel use by 5-10%(Telegraph Nexus)
- Vessels with our equipment offer retrofit and upgrades.
- Stabilizing revenue in the stock business of MRO, parts, and digital services

Expanding new ship building demand, increasing unit prices, growing installed units drive our sustained growth

Motion control technology as the "driving force" for sustainable maritime transport.