# Medium- & Long-Term Management Plans

We launched the new Mid-Term Business Plan in 2017 as the first step toward achieving the MES Group 2025 Vision, which is the long-term vision of the MES Group. In this plan, we have set "Maximize MES Group strengths collectively to improve profitability and stabilize earnings" as our ideal vision, under which we pursue innovations aiming to ensure that we achieve our long-term vision.

# MES Group 2025 Vision

Long-term vision (2025) P22 ►	<u>Ideal Situation</u> Engineering team that creates social value	<u>Domains of our focus</u> Environment & Energy Marine Logistics & Transportation Social & Industrial Infrastructure
Mid-term Business Plan 2017		Key strategies

**Ideal Situation** Mid-Term **Business Plan 2017** Maximize MES Group strengths collectively to improve profitability P24 ► and stabilize earnings

□ Market expansion attributable to the

countries and business expansion

attributable to the development of an

economy, which includes the formation

of economic blocs and a slowdown in

the growth of emerging countries.

□ Increased volatility of the exchange

market and resource industry.

economic growth of emerging

information-intensive society.

Uncertain outlook of the global

○ General

1. Improving added value of products & services

2. Reforming structure of manufacturing & EPC

3. Expanding & enhancing ancillary services

Numerical targets (FY2020 : Year ending March 31, 2020)

Net sales: ¥920 billion Ordinary income: ¥37.0 billion

# Perceived business environment

□ Offshore oil and gas development projects: Predicted to increase again in the medium to long terms.

○ Environment & Energy

- □ Electricity and other energy: Increase in demand driven by the development of emerging countries.
- □ Renewable and clean energy: Demand continues, driven by rising environmental awareness.

## O Marine Logistics & Transportation

- □ Shipbuilding: Fierce price competition continues due to a decline in new shipbuilding demand.
- □ Marine engine and equipment: Demand for environmentally friendly technologies has been rising although demand for ship engines has been declining due to the continued excess capacity.
- Container cranes: Demand is increasing in Southeast Asia, Latin America, and other regions. Demand for the renewal and upgrade of those cranes has also been brisk.
- □ Maintenance, inspections and upgrades: There remains strong demand for projects for improving environmental friendliness/energy efficiency and those for extending the service life, despite the uncertain economic outlook

Gas products: Demand has been increasing due to the global shift to clean energy.

Numerical targets (FY2026 : Year ending March 31, 2026)

# Net sales : ¥1.1 trillion Ordinary income rate : 6%

Mid-Term **Business Plan** 2020

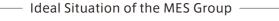
Mid-Term **Business Plan** 2023

#### ○ Social & Industrial Infrastructure

- □ Industrial machinery: Demand for upgrades and renovations has been growing while demand for new construction has remained weak.
- Public works projects: Demand has been growing for large-scale upgrades and renovations, including the full-scale implementation of measures for deteriorating infrastructure.
- Chemical industry: Investments in the industry have been recovering but it will take a while before a full-scale recovery occurs, due to the uncertainty of the economic environment.

# MES Group 2025 Vision

The MES Group 2025 Vision outlines the MES Group's long-term direction for the period between fiscal 2017 and fiscal 2026. To achieve the MES Group company philosophy of "To continue working as a company trusted by society and individuals through our products and services," we outlined the direction of our future initiatives based on an evaluation of our rapidly changing external environment.



# An engineering team that creates social value

**Diverse products** and services

Connections with customers **Engineering prowess** and partner corporations

and engineering

Commitment to manufacturing

Environment

& Energy

The three domains

full-scale efforts

on which we will make

Quantitative Target

# Achieving net sales of ¥1.1 trillion and ordinary income rate of 6% in FY2026 (Year ending March 31, 2026)

**Marine Logistics & Transportation** 

# We will contribute to social development by providing energy-saving and environmental performance, fuel diversity, and labor-saving equipment

The economic development of developing countries is expected to result in an increase in marine transportation volume. The MES Group's work in port logistics has included providing container cranes and other structures, not to mention building ships. Accordingly, the MES Group is expected to serve as a marine logistics professional with expertise in every aspect of the global supply chain. The MES Group excels not only at manufacturing hardware, but also at the development of related software. By combining our strengths in both hardware and software, we can achieve even greater innovation in the field of marine logistics and transportation, such as use of IT for engine control and container terminal management.

Maior products



Medium- and small-sized gas carriers

Marine Logistics

&

Transportation

Social &

Industrial

Infrastructure

# Social & Industrial Infrastructure

We will contribute to creating a safe and comfortable living environment by providing the plant facilities and public transportation infrastructure vital to the development of developing countries and the maintenance services necessary for infrastructure in Japan and other advanced economies.

Developing countries in Asia and Africa require social and industrial infrastructure and facilities. We are heavily involved in developing countries, from bridge construction in China and Vietnam to power plant construction in Indonesia and chemical plant construction in the Middle East and Southeast Asia. Now is the time for us to fuse the various product technologies available to us to provide new solutions. In Japan and other advanced economies, the need for our maintenance technology as a measure against aging infrastructure will only grow stronger. We can provide new solutions in these segments as well by fusing technologies such as radar and robotics-based safety management.





## **Environment & Energy**

Major

products

# We will contribute to the future of a sustainable earth through the effective utilization of ocean resources, energy and waste products.

Asia and Africa are projected to experience dramatic population growth. How will we support the subsequent increase in global energy consumption? We have reached a point in time where the MES Group must make even greater contributions to energy creation. The MES Group is already widely involved in energy creation, including the development of renewable energies such as wind power, bio-gas, and biomass power plants, and we are participating in the ocean resource development sector by constructing floating production, storage, and offloading (FPSO) system for offshore oil and gas production. Moving forward, we will further concentrate and strengthen our know-how and resources.

Ocean development and submersible equipment



O Renewable energy



○ Environmental plants

O Power generation plants

Floating production, storage, and offloading (FPSO) system

Gas power generation barge



○ Port cranes ○ Ships O Marine diesel engines



Electronically-controlled duel fuel gas injection diesel engine (ME-LGI)

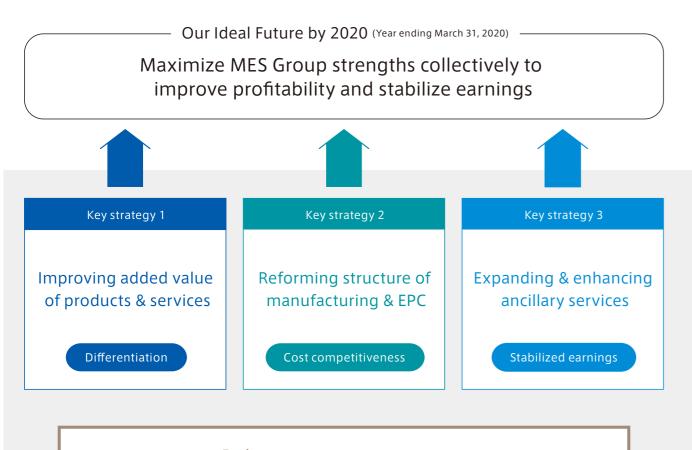


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# Mid-term Business Plan 2017

The Mid-Term Business Plan 2017 will be followed by the Mid-Term Business Plan 2020 and the Mid-Term Business Plan 2023. This series of our medium-term business plans constitute a long-term strategy for achieving our 2025 Vision.

Under the vision of "Maximize MES Group strengths collectively to improve profitability and stabilize earnings," we will make best use of the MES Group's network and resources, in our efforts to achieve stable earnings and improve our corporate value.



Robust group management

Reinforced business foundation

Numerical targets		Net sales	¥920 billion
	I	Ordinary income	¥37 billion
	>>>	Ordinary income rate	4%
		ROIC	6.5%
		Interest-bearing debt	¥270 billion or less

# Key strategy 1 | Improving added value of products & services

## Improving our planning ability and capability of making proposals

- O Formulating a strategy for creating value for society based on the three domains Increasing our competitiveness in the service domain by strengthening intra-group cooperation
- and alliances with other companies

O Enhancing technology and product development in view of the future market (energy-saving/ labor-saving/ environmental performance) O Strengthening technologies for increasing the competitiveness of our core products

# Key strategy 2 | Reforming structure of manufacturing & EPC

#### Building a dynamic, flexible production system

• Enhancing the system for production in optimal overseas locations/building a global production base O Improving the productivity of domestic bases by applying IoT and robotics

# Establishing a system for flexible EPC

O Promoting collaboration within the Group in the field of ocean business O Strengthening cooperation within the Group in the field of renewable energy/gas power generation

# Key strategy 3 Expanding & enhancing ancillary services

○ Enhancing after-sales services

• Expanding FPSO charter business, power generation business, and other businesses that result in constant profits based on medium- or long-term contracts

### Evolving services by applying IoT

O Enhancing maintenance and services based on remote monitoring O Provision of preventive maintenance services (remaining life assessment and suggestion of optimal maintenance)

# Robust group management

Organization and human resources	<ul> <li>Strategic use of Group companie</li> <li>Effective utilization of human res</li> </ul>
Financial affairs	O Maximizing consolidated earnin

# Reinforced business foundation

Common strategies	<ul> <li>Improving the risk management ca</li> <li>Selection and concentration of bus</li> </ul>
Organization and human resources	O Building and implementing a hum

### Improving our product development capability

### Enhancing domains and areas of services we provide

ies (clarifying the positions of operating companies and subsidiaries) esources in the Group (increasing the mobility of human resources)

ngs of the Group

capability (elimination of excessive loss) isinesses based on growth potential and investment effect

nan resources rotation program (other departments/ subsidiaries)