

Infrastructure Business Area

May 2023

Mitsubishi Electric Corporation

Index

1. Executive Summary	.....	P3
2. Business Structure	.....	P5
3. Market Environment and Directions of Growth Strategy	.....	P7
3-1. Concentrated Investment into Decarbonization Components	.....	P9
3-2. Energy & Facility Solutions Business	.....	P10
3-3. Focused Allocation of Resources to Defense & Space Business	.....	P11
4. The Big Picture for Strengthening Business Foundation	.....	P12
4-1. Rebuild Business and Production Foundation that Generates Cash	.....	P14
4-2. Merge Engineering Capabilities and Digital Technology to Support Solution Business	.....	P15
4-3. Enhance Capability to Address Business Risk	.....	P16
5. Portfolio Strategy	.....	P17
6. The Ideal Form	.....	P19

1

Executive Summary

Executive Summary

Solve social challenges

Balance carbon neutrality and stable power supply to contribute to a sustainable society

Contribute to stable operation and development of safe & secure social infrastructures with digital technologies

Management target

Revenue of ¥1,200 billion or more, operating profit margin of 7.0% or more for FY 2026
(Results for FY 2023: Revenue ¥973.1 billion, operating profit margin 2.8%)

Growth strategies

Concentrated Investment into Decarbonization Components

Integrated Solutions: Develop Energy & Facility Solutions business

Focused Allocation of Resources to Defense & Space Business

Worldwide customer base & supply record

Strengths

Strong engineering capabilities accumulated in large-scale projects

SYSTEM & PLANT ENGINEERING



World's top-level components and cutting-edge technologies in Defense & Space Business

UNIQUE TECHNOLOGY

Enhance business foundation

Rebuild business and production foundation that generates cash

Merge engineering capabilities and digital technology to support solution business

Enhance capability to address business risk

2 Business Structure

Business Structure

Business/product groups that support wide-ranging social infrastructures in and out of Japan

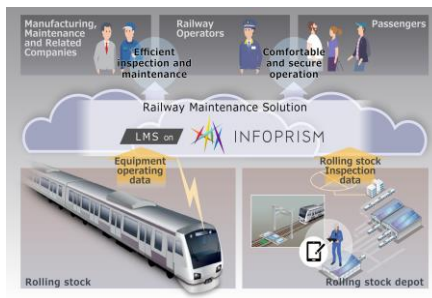
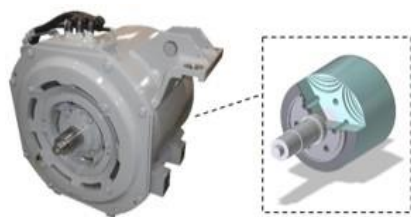
Public system



- 5,300 water treatment facilities

Delivery record

Transportation system



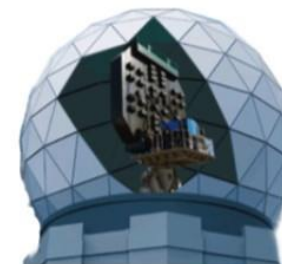
- Electrical equipment for 93,600 railcars

Power system



- Power generator: 2,800 units
- HV Switchgear: 24,000 units
- Power transformer: 9,000 units

Defense system



- Radar, electronic warfare system, information and communication command system, etc.
- Ranked 3rd in the contract order amount from ATLA* (FY 2022)

ATLA*: Acquisition, Technology & Logistics Agency

Space system



- Track record of manufacturing more than 70 satellites
- Equipment mounted on more than 650 satellites across the globe

3

Market Environment and Directions of Growth Strategy

Market Environment and Directions of Growth Strategy

Balancing carbon neutrality with economy, and national/energy security are growth opportunities.
 (Focus on improving profitability of core business)

Business field		Market environment (market trend)	Growth strategies
Public-use/Transportation/Electricity	Core Business (water environment, railcars, electricity generation and transmission)	<ul style="list-style-type: none"> • Demand for National Resilience and upgrading aged infrastructures 	<p>Focus on cash-generating businesses & components (Restructure less profitable/non-core businesses)</p> <p>Concentrated Investment into Decarbonization Components</p> <p>Integrated Solutions: Develop Energy & Facility Solutions business</p> <p>Focused Allocation of Resources to Defense & Space Business (Establish development/production structures)</p>
	Decarbonization Business	<ul style="list-style-type: none"> • Energy security • Demand for grid stabilization and distributed energy resource control from expanding renewable energy • Greenhouse gas control (SF6-free), DC transmission demand 	
	Solution Business for energy /infrastructures	<ul style="list-style-type: none"> • Solve the issue of labor shortage to keep infrastructure operation • Achieve carbon neutrality with economic rationality 	
Defense/Space	Defense	<ul style="list-style-type: none"> • Defense budget increase based on government policy "Defense Build-up Plan" 	<p>Focused Allocation of Resources to Defense & Space Business (Establish development/production structures)</p>
	Space	<ul style="list-style-type: none"> • Growing security demand in the space domain • Japan participates in international space exploration (Lunar Exploration Program) 	

Growth Strategy 1: Concentrated Investment into Decarbonization Components

Development of components corresponding to renewable energy expansion and strategic alliance



72.5kV VCB



Acquisition of Scibreak

BLEnDer[®]

smarter
grid solutions

1. Power Transmission Business

- Promote joint development with Siemens in the field of SF6-free switchgears (VCB)
- Acquisition of Scibreak of Sweden for DC Circuit Breakers (DCCB)

2. Power Generation Business

- Promote SMR Business through cooperation with Holtec in U.S.

3. Digital Energy Business

- Acquisition of Smarter Grid Solutions in U.K. for distributed energy resource control

Growth Strategy 2: Energy & Facility Solutions Business

Circular Digital-Engineering business initiatives



1. Business Development Based on Strengths of IBA*

MELCO's strong customer base & supply record

Synergy
Strong engineering capabilities of IBA + Superior components & cutting-edge technologies in IBA

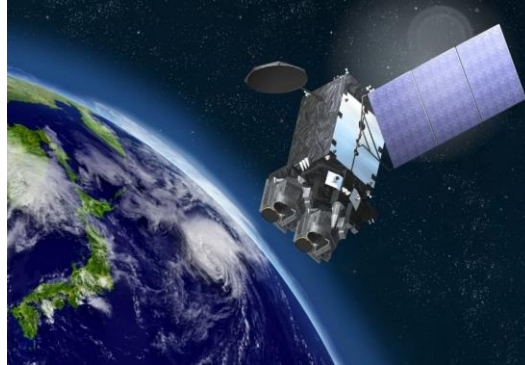
2. Energy & Facility Solutions

- Energy solutions that achieve carbon neutrality with economic rationality
- Facility solutions that achieve safety and security
- Digital twin that creates new customer value

IBA*: Infrastructure BA

Growth Strategy 3: Focused Allocation of Resources to Defense & Space Business

Improvement of development/production structures by bold resource shifting and strategic alliance



1. Address and contribute to the government policy

- Establish development/production structures contributing to government's "Defense Build-up Plan" and "Basic Plan for Space Policy"
 - (1) Increase approx. 1,000 persons (including resource shifting)
 - (2) Plan capital investment in Kamakura Works and Electronics and Communication Systems Center (approx. ¥70 billion)

2. Strategic alliance

- Joint development of mission avionics system for next-generation fighter electronics (cooperation among 4 companies from Japan, U.K. and Italy)
- Cooperation with Astroscale in Japan for joint development/manufacturing of satellite bus for security use

4

The Big Picture for Strengthening Business Foundation

The Big Picture for Strengthening Business Foundation

Rebuild business and production foundation that generates cash

1. Rebuild business/production foundation to respond to changes in the market
2. Focus resources on cash-generating businesses
(Restructure less profitable/non-core businesses)

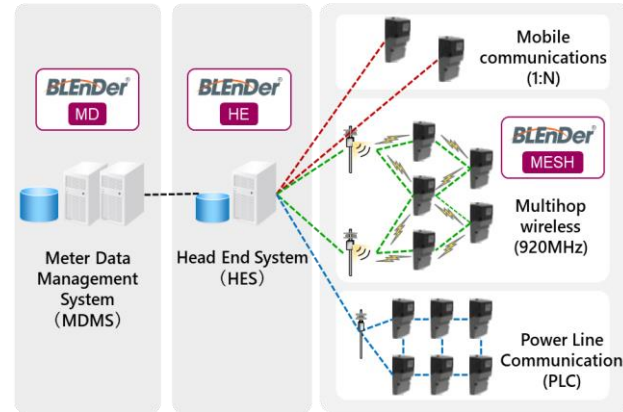
Merge engineering capabilities and digital technology to support solution business

1. Establish a company-wide engineering organization
2. Structure manufacturing-driven analysis technologies and digital twin based on field knowledge

Enhance capability to address business risk

1. Address risk of declining profitability of large projects
2. Reinforce responsiveness to changes in the market environment

Strengthen Business Foundation 1: Rebuild business and production foundation that generates cash



1. Rebuild business/production foundation to respond to changes in the market

- Establish power generator JV company with Mitsubishi Heavy Industries, Ltd.
- Optimize production systems for transportation business and transmission business (revise yard plan, streamline staff functions, etc.)
- Reduce cross-shareholdings

2. Focus resources on cash-generating businesses (Restructure less profitable/non-core businesses)

- Promote ambidextrous management in the water environment business (service business expansion)
- Expand domestic digital energy business (smart meter system, etc.)
- Accelerate restructuring of businesses with issues



1. Establish a company-wide engineering organization

- Establish E&F Solution Dept. to provide Energy and Facility solutions to all our customers
- Cooperation with DX Innovation Center

2. Structure manufacturing-driven analysis technologies and digital twin based on field knowledge

- Reinforce analysis technology based on manufacturing (abnormality signals detection, deterioration diagnosis, condition estimation, etc.)
- Algorithmize field knowledge obtained from construction, maintenance, and operation
- Establish high-precision digital twin (utilize modeling and simulation technologies)

Strengthen Business Foundation 3: Enhance Capability to Address Business Risk



1. Address risk of declining profitability of large projects

- Improve current project profitability (measures have already been deployed)
- Frontloading (delivery, quality and cost) upon signing contract

2. Reinforce responsiveness to changes in the market environment

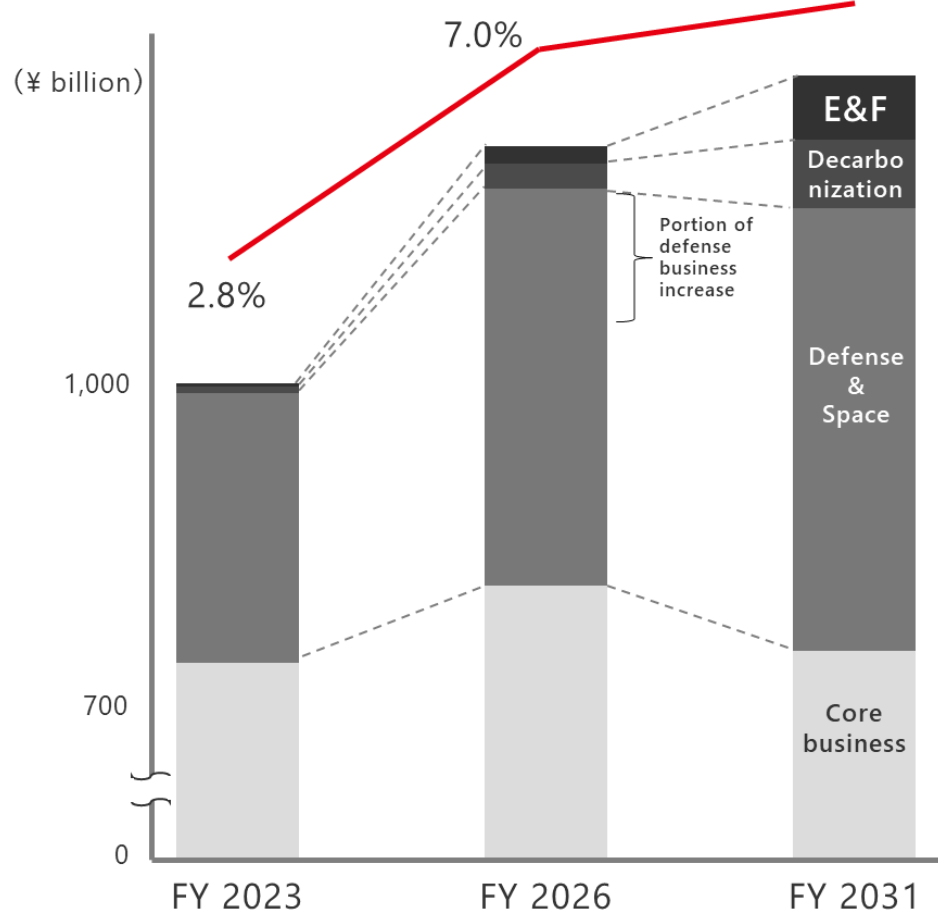
- Responding to innovation risk (disruptors) (utilize open innovation, CVC*, etc.)
- Strengthen core component solution business (asset-light orientation)

CVC*: Corporate Venture Capital

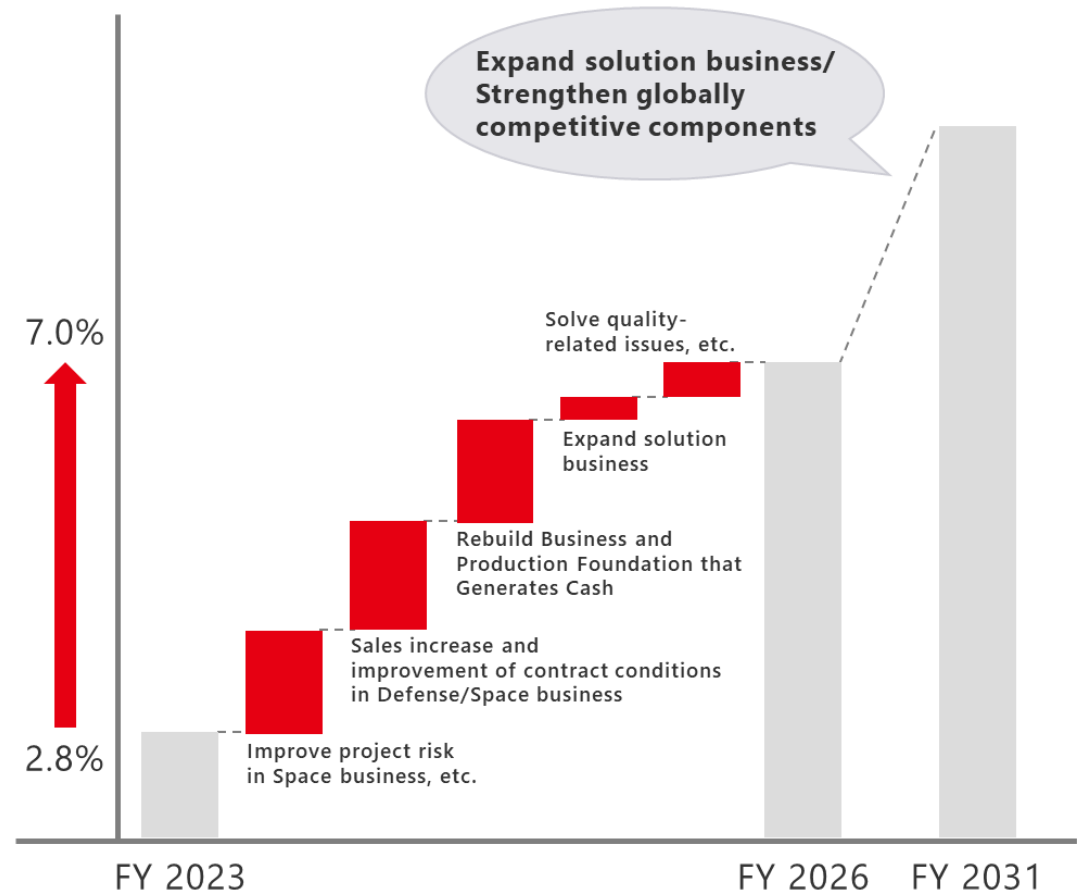
5 Portfolio Strategy

Portfolio Strategy

Consolidated revenue/Operating profit margin

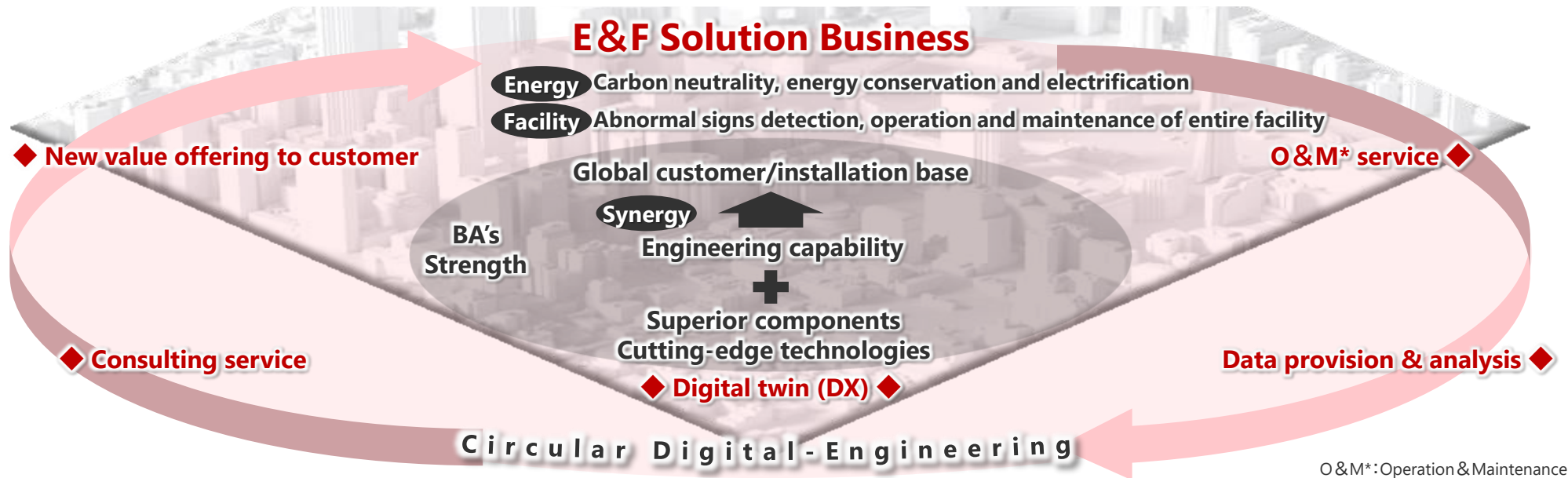


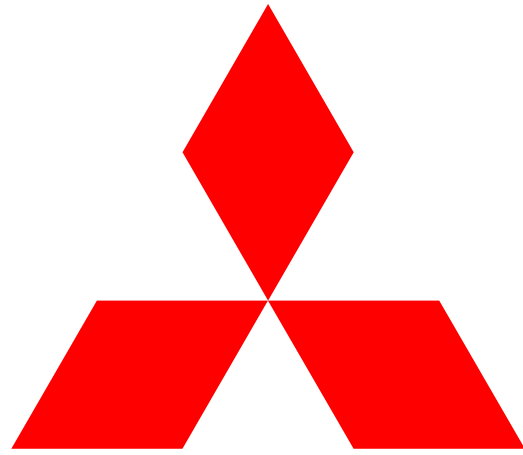
Operating profit margin



6 The Ideal Form

The Ideal Form





**MITSUBISHI
ELECTRIC**

Changes for the Better