

## BUSINESS STRATEGIES BY DOMAIN

The MHI Group reorganized into four business domains to leverage its strengths and synergies. These are “Energy & Environment,” “Machinery, Equipment & Systems,” “Transportation,” and “Defense & Aerospace.” We will realign our management structure and develop businesses by executing business-specific strategies.

(Billion yen)

Domain	Orders Received			Net Sales			Operating Income (Loss)		
	FY2011 Actual	FY2012 Forecast	FY2014 Target	FY2011 Actual	FY2012 Forecast	FY2014 Target	FY2011 Actual	FY2012 Forecast	FY2014 Target
Energy & Environment	1,290.0	1,350.0	1,740.0	970.0	1,130.0	1,460.0	90.0	80.0	150.0
Machinery, Equipment & Systems	970.0	1,030.0	1,240.0	920.0	1,000.0	1,160.0	30.0	40.0	80.0
Transportation	420.0	620.0	600.0	450.0	440.0	580.0	-15.0	-1.0	10.0
Defence & Aerospace	470.0	350.0	370.0	440.0	390.0	460.0	15.0	15.0	22.0
Others	80.0	80.0	80.0	80.0	80.0	80.0	10.0	8.0	10.0
Inter-group consolidation adjustments	-41.2	-30.0	-30.0	-39.1	-40.0	-40.0	-18.1	-22.0	-22.0
<b>Total</b>	<b>3,188.8</b>	<b>3,400.0</b>	<b>4,000.0</b>	<b>2,820.9</b>	<b>3,000.0</b>	<b>3,700.0</b>	<b>111.9</b>	<b>120.0</b>	<b>250.0</b>

• Change in method for calculating operating income:

In line with management system changes, certain Company-wide R&D expenses and headquarters administration costs, which have conventionally been fully distributed over each segment, will no longer be distributed over each segment from FY2012.

• Operating income for FY2011 in the table lists the figures based on the new calculation method.

### Domain 1

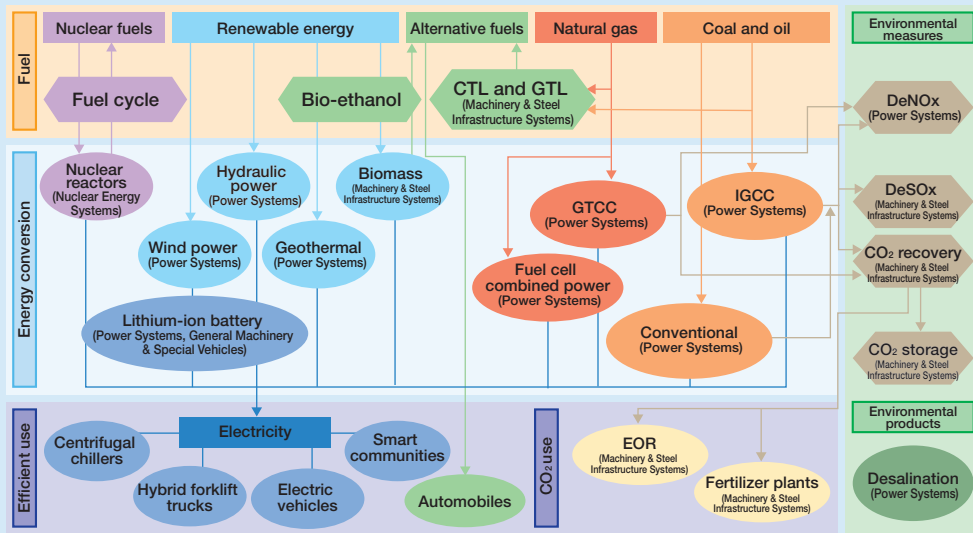
# Energy & Environment

This domain resulted from integrating in-house engineering, procurement, and construction (EPC) operations with the Engineering Headquarters, which we established in January 2012. The domain encompasses such power generation businesses as thermal, nuclear and renewable energy, and environmental and chemical plants. This domain is a top priority under our 2012 Business Plan. We will rapidly expand energy and environmental businesses, notably gas turbine combined cycle (GTCC) and integrated coal gasification combined cycle (IGCC) operations, by focusing investments. With efforts spearheaded by the Engineering Headquarters, we will endeavor to expand orders for large-scale infrastructure projects and develop smart communities and other new businesses.

By fiscal 2014, we seek to boost GTCC sales by ¥210 billion in overseas markets, mainly in North America and Asia. Following orders from Kansai Electric Power Co., Inc. for our J-Series gas turbine, which offers world-leading efficiency, we received orders from South Korea for 10 units. We will accelerate the market launches of new technologies and products. Currently we are developing a J-Series successor—an ultra-high-temperature gas turbine that will further enhance competitiveness by delivering a turbine inlet temperature of 1,700°C. At the same time, we are conducting verification testing on a triple combined cycle power generation system that integrates a GTCC system and solid oxide fuel cells (SOFCs). The objective here is to exceed 70% generating efficiency, an extremely high figure.

By fiscal 2014, we aim to increase sales of large coal-fired power plants by around ¥40 billion, mainly in Asia. We will establish a global production and procurement network, including through a joint venture with major Indian heavy industries manufacturer Larsen & Toubro Limited, to reinforce our cost competitiveness in existing coal-fired thermal power generation areas and expand our business. We will develop clean coal technology as a next-generation offering. In renewable energy, we will focus on advances in such next-generation setups as large offshore wind turbines with hydraulic drive trains, and a large-capacity, high output lithium-ion rechargeable battery.

In January 2012, we integrated the Sustainability Energy and Environment Strategic Planning Department and EPC units from the Power Systems, Nuclear Energy Systems, and



CTL: Coal to Liquid, GTL: Gas to Liquid, EOR: Enhanced Oil Recovery

Machinery & Steel Infrastructure Systems to establish the Engineering Headquarters, which has world-class engineering, procurement, and construction implementation capabilities. This integration has enhanced responsiveness by consolidating common resources. We will draw on this new organization to accelerate cross-sectional efforts to expand large infrastructure businesses, including for existing EPC operations, and push ahead in such new fields and businesses as smart communities and the comprehensive water business.

The MHI Group has a very diverse product lineup. Our broad energy and environmental product capabilities range from thermal, nuclear and renewable energy to environmental technologies. We will take advantage of our strengths to provide integrated solutions for customer needs. Projects around the world for new fields and businesses include those for smart communities, a large high-speed railway, nuclear power plants overseas, and a carbon dioxide recovery plant.

## Domain 2

# Machinery, Equipment & Systems

This domain integrates businesses for products supplied to the steel industry, which underpins many sectors, and the automotive industry. We will reinforce production and sales in emerging markets in which such core industries are rapidly expanding, and aim to increase market shares and expand profitability. At the same time, we will engage in agile and flexible organizational management while establishing business companies, forming alliances, and engaging in mergers and acquisitions to build world-class businesses.

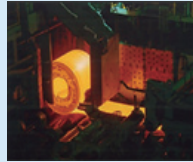
In metals machinery, we will differentiate our products, proceed with tie-ups with other companies, move upstream with new models and increase market share. In compressors, we seek to become one of the world's top three players, expanding our presence in the natural gas sector primarily by securing a foothold among major oil and gas companies. We will strengthen our global network and reinforce collaboration with other companies to that end. In turbochargers for passenger vehicles, we will strengthen development and verification testing in Europe, boost production in China and Thailand, and cultivate demand in North America, targeting annual sales of seven million units by fiscal 2014, for a 25% market share.

### Metals machinery

Drive product differentiation and alliances

- Cold rolling: Retain top market share
- Hot rolling: 30% market share

Enter upstream market with new models



### Automotive turbochargers

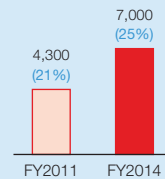
Pave way to become world leader

- Enhance development and validation functions in Europe
- Boost production in China and Thailand
- Expand in North America

#### Units sold

(thousand units)

(Market share)



### Compressors

Expand gas sector with foothold in oil and gas majors

Build global operating structure and strengthen alliances to become one of the “world’s top three”



### Machine tools

Aim for world leadership in niche markets (gear machine tools and large-sized machine tools)

- Increase sales and production in China and India

Alliances

- Acquire Federal Broach (machine tool manufacturer)



## Domain 3

# Transportation

The Transportation domain encompasses land, sea and air transportation-related businesses, in which safety and compliance with stringent regulations are vital. These areas include commercial aircraft, commercial ships, and transportation systems. We will optimize our business model and construct an optimal mass production system.

The commercial aircraft market offers long-term growth prospects. We can overcome high entry barriers in this industry by drawing on the Group’s technological and financial strengths. We believe that there will be few competitors in this industry once we are part of it. The MHI Group is developing Japan’s first commercial jetliner, the Mitsubishi Regional Jet (MRJ), to make aircraft a core business.

To prepare for growth in orders for the MRJ, we are moving to expand our sales bases in the U.S. and Europe, to acquire orders for the MRJ in Asia and other emerging markets, to ramp up the pace of development, manufacturing and quality verification work, and to establish a robust mass production framework.

In our current commercial aircraft business, we are endeavoring to improve profitability through manufacturing innovations. In Japan, MHI is deploying production automation facilities for high-value-added products, such as composite-material wing boxes for the Boeing

787. We are streamlining production flows by integrating lines to handle everything from components through assembly. We will accelerate overseas procurement and production to further reduce our currency exposure. North America and Asia will be broadly positioned as the two largest bases for this segment as we build a global supply chain management (SCM) setup that includes Japan.

In the commercial ships business, domestic shipbuilding remains a core area, and we will differentiate our capabilities with cruise ships and new types of LNG carriers incorporating advanced technologies and high added value. We will cultivate our engineering operations by externally selling the Mitsubishi Air Lubrication System (MALS) and collaborating with other Japanese shipbuilders. In our overseas shipbuilding operations, we will reinforce MHI's presence in India and other emerging markets. The end result will be the creation of a business structure encompassing domestic and overseas shipbuilding and engineering.

In land transportation systems, we will strengthen our capabilities to handle various tasks, from basic design to operations and maintenance. The fully automated, driverless rail system that we built for Dubai to resolve traffic congestion and reduce noise and vibration is an example of this approach.

## Domain 4

# Defense & Aerospace

This domain encompasses defense aircraft, guided weapon systems, defense ships, special vehicles, and other land-sea-and-air defense businesses, as well as space systems. The MHI Group provides various systems to efficiently support the integrated operational structure of Japan's self-defense forces. Our offerings include the F-2 fighter currently active on the frontlines of Japan's airspace defenses, the next-generation SM-3 missile for ballistic missile defense, destroyers and submarines that safeguard Japan's maritime borders, and the Type 10 main battle tank.

Through collaboration between our land, sea, and air defense businesses, we will become even more responsive to the integrated operating requirements of the self-defense forces, contributing to Japan's security by developing and producing, and boosting performance and operational support for, advanced defense equipment.

To help maintain a domestic defense production and technology infrastructure, we will prepare for a relaxation of Japan's restrictions on arms exports. At the same time, we will engage in mutually employing defense technologies for civilian purposes and advanced private-sector product technologies for defense applications.