Status of 2010 Medium-Term Business Plan

April 28, 2011

MITSUBISHI HEAVY INDUSTRIES, LTD.

Hideaki Omiya, President
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We extend our heartfelt sympathies to the people affected by the earthquake that struck eastern Japan.

To restore promptly infrastructure, including the nuclear power plant, that was damaged by the earthquake, we have dispatched about 200 members of our staff to stricken areas and have given aid, including the shipment of critical materials using our helicopters and airplanes.

We are providing as much aid as possible. We have given assistance in response to power shortage, including support to Tokyo Electric Power in moving gas turbine electric power facilities that the Thai government offered to lend without charge and the emergency delivery of small and midsize power-generating facilities, which can be used as emergency power-generating facilities.

We modified a megafloat that will be used to store contaminated water, including radioactive materials from the Fukushima Daiichi power plant.

We have begun to consider providing support, jointly with Hitachi.

To contribute to relief activities and the reconstruction of devastated areas, we have decided to donate 500 million yen and are collecting contributions from employees at our works.

The reconstruction of stricken areas is expected to take a long time. As an organization playing a major role in developing social infrastructure, the entire Company will continue to help restore affected areas as quickly as possible.
1. FY2010 Business Summary

- The strategies in the 2010 Business Plan made good progress overall.
  (Operating income exceeded the plan.)

- Shifted to a business headquarters system completely to move ahead of the global competition.

- Introduced business grading to increase ROE.
  (It will be fully introduced in a 2012 Business Plan.)
2. Strategies in 2010 Business Plan

Exercise truly comprehensive strengths

Transform business models from customer perspectives
1. Strengthen the core businesses further
2. Expand the solution business
3. Expand business areas
4. Expand businesses primarily in a new market (emerging nations)

Transform business processes for a strengthened structure
1. Commoditize/standardize and sophisticate the business processes
2. Globally optimize the business process allocation
   - Departure from vertical integration-

Establish a system that enables to exercise comprehensive strengths

Strategies 1

Establish a flexible and agile management system
- Clarify the structure and responsibility-
- Enhance horizontal cross-divisional functions-

Strategies 3

Introduce management indicators for increased corporate value

Strategies 4

Strategies 5

- Enhance human resources
- Enhance the intellectual property (IP) strategies
3. Progress of Strategies (1)

Strategy 1  Transform business models from customer perspectives

(1) Strengthen the core businesses further
- The J-Series gas turbine, a system featuring the world’s largest power generation capacity and highest thermal efficiency, will be commercially available.
- MRJ assembly work commenced.
- The world’s first engine/battery hybrid forklift (equipped with a lithium-ion secondary battery) was launched.
- The development of floating production, storage, and offloading units for liquefied natural gas (LNG-FPSO) was completed.
- A heat pump water heater, featuring a CO$_2$ compressor, for commercial use was developed.

(2) Expanding the solution business
- Agreed with Scottish and Southern Energy of the U.K. to develop low-carbon energy.
- Received an order from E.ON UK plc, a U.K. electric power company, for a preliminary design of a carbon dioxide capture and storage facility for coal-fired power station.
- Signed a memorandum of understanding with a state government of India on the creation of a Smart Community (environmentally friendly community).
- Signed an agreement with the city of Kyoto on demonstration experiments of electric buses and a Next-Generation Electric Vehicle Kyoto Project.

(3) Expanding business areas
- Completed a commercial production verification plant for lithium-ion secondary batteries.
- Enhanced the after-sales service system.
  - Acquired equity in ATLA, an Italian gas turbine parts manufacturing and repair company.
  - Established a subsidiary that will handle the machinery and steel structures business in Singapore.
3. Progress of Strategies (2)

Strategy 1 Transform business models from customer perspectives

(4) Expand businesses primarily in new markets (emerging nations)

◆ Business development in emerging countries

India
- Plants of joint ventures of MHI and L&T launched full-scale operation, producing supercritical-pressure boilers and steam turbines/generators.
- Licensed carbon dioxide recovery technology to a state fertilizer company in India.
- Licensed crane and heavy-duty material handling equipment technology for large-scale ports for Anupam Heavy Industries.

China
- Licensed marine boiler manufacturing and marketing to state-owned Jiujiang Haitian Equipment Manufacture.
- Provided 2.5MW wind turbine technology to Ningxia Yinxing Energy.
- Established a subsidiary to comprehensively oversee MHI’s air-conditioning and refrigeration system business and a nationwide network of K-POINT dedicated stores (119 stores at the end of March 2011).

◆ Expand manufacturing bases overseas

United States
- Built a gas turbine assembly plant in Georgia.
- Built a windmill nacelle assembly plant in Arkansas.

China
- Launched production of gear cutting machines in Changshu, Jiangsu Province, applying a shared factory (producing multiple types of products) scheme.
3. Progress of Strategies (3)

Strategy 2 Transform business processes for a stronger structure

(1) Commoditize/standardize and sophisticate the business processes
   - The Technical Headquarters and the Production Systems Innovation Department promoted a modular design project and cut costs.
   - Carried out a value chain reform, involving a marketing support system, prototype-less system, and service support system through enhanced IT.

(2) Globally optimize the business process allocation
   • Departure from vertical integration
     - Began discussions on the details of a photovoltaic module business tie-up with Auria Solar of Taiwan.
     - Acquired Artemis Intelligent Power, a UK venture company (applied a wind turbine hydraulic power drive technology to products of MHI).
     - Cooperated with Hitachi in railway systems for overseas markets.
     - Consolidated the hydroelectric power generation system businesses with Hitachi and Mitsubishi Electric.
     - Established new subsidiaries manufacturing compressors and printing machinery.
     - Reorganized the production system of the Shipbuilding and Ocean Development Business (consolidated the merchant vessel building yards into the Nagasaki Shipyards & Machinery Works and Shimonoseki Shipyards & Machinery Works).
3. Progress of Strategies (4)

**Strategy 3 Establish a flexible and agile management system**

- From a matrix of business headquarters and sites to a business headquarters system

**Enhance the vertical functions**
- Business headquarters system
- Decentralization

- **Focus more on customer perspectives**
  - Global Strategy Headquarters
  - Sustainability Energy & Environment Strategic Planning Dept.

- **Enhance horizontal functions**
  - Technical Administration Headquarters (Technical Headquarters + Production System Innovation Planning Dept.)
  - Corporate
    - Corporate Planning, Finance, Procurement, Personnel Affairs

**Promote sales by region.**

**Develop solution businesses that will combine multiple products and technologies.**

**Demonstrate the Group’s comprehensive capability**

- Enhance technical foundations (R&D, manufacturing, business processes)
- Enhance corporate strategy functions
  - Integrate business support functions
### Strategy 4  Introduce management indicators for increased corporate value

In the 2010 business plan, we positioned ROE as a management indicator. Emphasizing investment efficiency

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#### Introduction of a business grading system

- Evaluating the profitability and efficiency of each SBU
- Considering a business portfolio that will maximize added value, using limited management resources
- (to be introduced fully in a 2012 business plan)

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SBU: Strategic Business Unit

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**A big step forward for new business management**

Accelerating our focus on select businesses
4. Changes in Business Environment

Our understanding until recently

- The focus of attention in markets is shifting from Japan, the United States, and Europe to emerging countries.
  - Intensifying competition in emerging countries
  - Low-priced products offered by manufacturers in emerging countries
- The yen will remain strong, and materials costs will continue to rise.
- Global environmental initiatives will be sluggish.

Changes in environment

- Political uncertainty in the Middle East and North Africa
- Great Eastern Japan Earthquake

Effects on MHI’s businesses

- Negotiations on certain projects are delayed.
- The progress of projects is delayed.

Countermeasures

- Expanding orders in other promising areas

Expected changes

- Power outages in Japan
- Reviews of energy policies in Japan and abroad
- Enhancement of the safety of nuclear energy facilities
- Paradigm shift

Reaction of MHI

- Help reconstructing affected areas.
- Cooperate in rolling outages.
- Offer our wide range of energy products in accordance with new energy policies in Japan and abroad.
- Support actions at the Fukushima Daiichi nuclear power plant.
- Enhance the safety of nuclear (PWR, nuclear fuel cycle) facilities.

PWR: Pressurized Water Reactor
5. FY2010 Business Summary and FY2011 Plan (1)

2010 Business Plan making good progress

**FY2010**
- Operating income exceeded the initial plan.
- Completing the **reform process** and accelerating the implementation of the growth process (anticipating needs in earthquake reconstruction and in society after the earthquake)

**FY2011**
- Responding to changes in society after the earthquake
- Great Eastern Japan Earthquake

![Graph showing business summary and plans](image_url)

- **Orders Received (trillion yen)**
  - 2005: 2.79
  - 2006: 3.06
  - 2007: 3.20
  - 2008 [Actual]: 3.26
  - 2009: 2.94

- **Net Sales (trillion yen)**
  - 2005: 70.9
  - 2006: 108.9
  - 2007: 136.0
  - 2008 [Actual]: 105.8
  - 2009: 24.7

- **Operating income (billion yen)**
  - 2005: 250.0
  - 2006: 60.0
  - 2007: 116.0
  - 2008 [Actual]: 106.0
  - 2009: 160.0

- **ROE (%)**
  - 2005: 2.2
  - 2006: 3.5
  - 2007: 4.3
  - 2008 [Actual]: 1.8
  - 2009: 1.1

- **Foreign exchange (JPY/US$)**
  - 2005: 111
  - 2006: 115
  - 2007: 115
  - 2008 [Actual]: 103
  - 2009: 95

- **2010 Business Plan**
  - **Reform process**
    - Initial plan for FY2010
    - Forecast: 2.99, Targets: 3.00
  - **Growth process**
    - Forecast: 2.90, Intermediary targets: 2.85

- **2011 Business Plan**
  - Forecast: 3.40, Targets: 3.80

- **2014 Targets**
  - Forecast: 4.10, Targets: 4.40

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*Note: The graph and data are placeholders and not actual content.*
Analysis of change in operating income from FY2007 to FY2010 (-34.8 billion yen)

Despite the adverse effect of exchange rates, there were improvements in FY2010, reflecting the continuation and deepening of business process reform, an initiative in the 2008 Medium-Term Business Plan.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign exchange</td>
<td>+137.6</td>
<td>Others (+125.8)</td>
<td>+49.8</td>
<td>+101.2</td>
</tr>
<tr>
<td>Change in material costs</td>
<td>+27.0</td>
<td>Change in R&amp;D costs</td>
<td>+41.3</td>
<td>+37.0</td>
</tr>
<tr>
<td>Change in material costs (including change in product mix)</td>
<td>+25.8</td>
<td>Effect of changes in net sales</td>
<td>+34.7</td>
<td>+7.1</td>
</tr>
<tr>
<td>System revision: Lower-of-cost- or-market method and depreciation</td>
<td>+34.7</td>
<td>2008 Medium-Term Business Plan</td>
<td>2009</td>
<td>2010 Medium-Term Business Plan</td>
</tr>
</tbody>
</table>

- Despite the adverse effect of exchange rates, there were improvements in FY2010, reflecting the continuation and deepening of business process reform, an initiative in the 2008 Medium-Term Business Plan.
Orders declined in FY2009 because of the global economic downturn, but recovered from FY2010.

Although net sales declined, operating income improved steadily.

Components of Change in Operating Income
6. MHI’s Energy Products

Expected global energy demand

Source: IEA’s demand forecast (FY2010 New Policies Scenario)

Meet the diversified needs of customers, using our strength, namely our broad range of energy products.
7. MHI’s Nuclear Power Business

- Position nuclear power generation as an important business in our energy policy in the medium to long term.
- Take the accident at the Fukushima I Nuclear Power Plant seriously and dedicate all our strength to a recovery in confidence in nuclear power.
- Have begun to consider providing support to actions at the Fukushima Daiichi nuclear power plant, jointly with Hitachi.
- Improve the safety of the PWR further.
- A U.S. customer of a project has indicated its intention to continue with the project, and it is being implemented as planned.

Continue to provide safe and reliable products that will contribute to stable power supply.

PWR: Pressurized Water Reactor
## 8. MHI’s Manufacturing Sites - Japan

### Major manufacturing sites relating to energy and infrastructure

<table>
<thead>
<tr>
<th>Sites</th>
<th>Energy</th>
<th>Infrastructure</th>
</tr>
</thead>
<tbody>
<tr>
<td>A Nagasaki</td>
<td>●</td>
<td>●</td>
</tr>
<tr>
<td>B Kobe</td>
<td></td>
<td></td>
</tr>
<tr>
<td>C Yokohama</td>
<td></td>
<td></td>
</tr>
<tr>
<td>D Takasago</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>E Hiroshima</td>
<td></td>
<td></td>
</tr>
<tr>
<td>F Sagamihara</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Major manufacturing sites of suppliers

- □: under 10
- ●: 10-20
- ◼: 20-40
- ■: 40-60
- ▼: 60-80
- ▼▼: over 80

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![Map of MHI’s Manufacturing Sites in Japan](image-url)
8. MHI’s Manufacturing Sites (2)—Overseas

A global network of manufacturing and service sites

- Social infrastructure
- Energy
- Industrial infrastructure
- Aerospace
- Overseas office
- Representative
- Overseas group company

- Breakdown by region (FY2014):
  - Asia: 24%
  - North America: 43%
  - Europe: 15%
  - Latin America: 6%
  - Middle East: 7%

- Overseas Orders (Trillion yen):
  - 2009: 0.8
  - 2010: 1.3
  - 2014: 2.7

- Overseas sales ratio:
  - 2009: 36%
  - 2010: 44%
  - 2014: 63%

- Overseas procurement:
  - 2009: 3.4 times
  - 2010: 2.7 times
  - 2014: 2.6 times

- Overseas manufacturing:
  - 2009: 2.2 times
  - 2010: 2.0 times
  - 2014: 1.8 times

Continue worldwide optimal distribution of management resources.
9. MHI’s Role in Reconstruction (1)

We strongly believe that the customer comes first and that we are obliged to be an innovative partner to society.

As a company playing a major role in infrastructure building in Japan and with a broad range of products and technologies for stable energy supply, the entire Company will support people’s lives and economic activities.

Future action

To eliminate power outages in the Tohoku and Kanto regions as quickly as possible, we will provide as much aid as we can, including technical assistance, checking and repairs, along with the prompt supply of equipment for the restoration of thermal power plants and other facilities.
9. MHI’s Role in Reconstruction (2)

MHI’s lineup of electric power facilities

<table>
<thead>
<tr>
<th>Product</th>
<th>Use</th>
<th>Output (kW)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Thermal power plant</strong></td>
<td>Electric power company, IPP</td>
<td></td>
</tr>
<tr>
<td>(Power Systems)</td>
<td>Factory, steelworks</td>
<td></td>
</tr>
<tr>
<td><strong>Gas turbine GTCC</strong></td>
<td>Factory, steelworks, electric power company, IPP</td>
<td></td>
</tr>
<tr>
<td>(Power Systems)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Large-sized gas diesel engine</strong></td>
<td>Factory, electric power company (remote places, isolated islands)</td>
<td></td>
</tr>
<tr>
<td>(Power Systems)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Medium-sized gas diesel engine</strong></td>
<td>Factory, building, hospital, plant</td>
<td>15,000</td>
</tr>
<tr>
<td>(General Machinery &amp; Special Vehicle)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>General-purpose diesel engine</strong></td>
<td>General generators (construction machinery, agricultural machinery)</td>
<td>30,000</td>
</tr>
<tr>
<td>(General Machinery &amp; Special Vehicle)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Small-sized gasoline engine</strong></td>
<td>General purposes</td>
<td>300,000</td>
</tr>
<tr>
<td>(General Machinery &amp; Special Vehicle)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

IPP: Independent Power Producer, GTCC: Gas Turbine Combined Cycle power plant
9. MHI’s Role in Reconstruction (3)

Helping to create a smart, safe and secure, and sustainable society, using MHI’s wide range of products and technologies
9. MHI’s Role in Reconstruction (4)

Helping realize advanced smart community resistant to disasters

Current smart community aiming at low carbon emission society

Supply
- Integrated energy management with distributed and multiple power supply and DSM
- Renewable energy
- Electric storage devices
- Nuclear power
- DSM: Demand Side Management
- Secure and supply of sufficient energy in case of disasters
- Power feeding from electric buses
- Smart houses securing electricity needed in lives

Consumption
- Transportation System providing with traffic information and emergency vehicles in case of disasters
- ITS: Intelligent Transport Systems
- LRT: Light Rail Transit
- EV: Electric Vehicle
- V2H: Vehicle-to-Home
- H2V: Home-to-Vehicle

Normal Operation: Low Carbon Emission Mode

Emergency Operation: Stable and Safety Mode

MITSUBISHI HEAVY INDUSTRIES, LTD.

Our Technologies, Your Tomorrow
### (Supplementary Information) Numerical Targets

(In billion yen)

<table>
<thead>
<tr>
<th></th>
<th>2009 Actual</th>
<th>2010 Actual</th>
<th>2011 Forecast</th>
<th>2012 Target</th>
<th>2014 Target</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Orders received</strong></td>
<td>2,476.2</td>
<td>2,995.4</td>
<td>3,000.0</td>
<td>3,800.0</td>
<td>4,400.0</td>
</tr>
<tr>
<td>(shares of overseas sales)</td>
<td>(38%)</td>
<td>(44%)</td>
<td>(56%)</td>
<td>(61%)</td>
<td>(63%)</td>
</tr>
<tr>
<td><strong>Net sales</strong></td>
<td>2,940.8</td>
<td>2,903.7</td>
<td>2,850.0</td>
<td>3,400.0</td>
<td>4,100.0</td>
</tr>
<tr>
<td><strong>Operating income</strong></td>
<td>65.6</td>
<td>101.2</td>
<td>110.0</td>
<td>160.0</td>
<td>250.0</td>
</tr>
<tr>
<td><strong>Ordinary income</strong></td>
<td>24.0</td>
<td>68.1</td>
<td>70.0</td>
<td>110.0</td>
<td>200.0</td>
</tr>
<tr>
<td><strong>ROE</strong></td>
<td>1.1%</td>
<td>2.4%</td>
<td>3.0%</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td><strong>ROIC</strong></td>
<td>1.0%</td>
<td>1.5%</td>
<td>2.0%</td>
<td>3%</td>
<td>5%</td>
</tr>
<tr>
<td><strong>D/E ratio</strong></td>
<td>1.1</td>
<td>1.0</td>
<td>1.0</td>
<td>0.9</td>
<td>0.8</td>
</tr>
<tr>
<td><strong>Interest-bearing debt</strong></td>
<td>1,495.3</td>
<td>1,325.6</td>
<td>1,300.0</td>
<td>1,300.0</td>
<td>1,200.0</td>
</tr>
<tr>
<td><strong>Dividend per share</strong></td>
<td>4JPY</td>
<td>4JPY</td>
<td>6JPY</td>
<td>6JPY</td>
<td>10JPY</td>
</tr>
</tbody>
</table>
### (Supplementary Information) Numerical Targets

**(In billion yen)**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Orders Received</th>
<th>Net Sales</th>
<th>Operating Income</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Systems</td>
<td>982.2</td>
<td>1,022.8</td>
<td>1,100.0</td>
</tr>
<tr>
<td>Machinery &amp; Steel Structures</td>
<td>404.3</td>
<td>492.6</td>
<td>610.0</td>
</tr>
<tr>
<td>Aerospace</td>
<td>435.5</td>
<td>708.1</td>
<td>470.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>1,822.0</td>
<td>2,223.5</td>
<td>2,180.0</td>
</tr>
<tr>
<td>Shipbuilding &amp; Ocean Development</td>
<td>150.8</td>
<td>173.2</td>
<td>210.0</td>
</tr>
<tr>
<td>GM &amp; SV</td>
<td>291.0</td>
<td>344.1</td>
<td>360.0</td>
</tr>
<tr>
<td>Air-Con</td>
<td>138.4</td>
<td>159.1</td>
<td>170.0</td>
</tr>
<tr>
<td>Machine Tool-Others</td>
<td>113.4</td>
<td>128.8</td>
<td>125.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>693.6</td>
<td>805.2</td>
<td>865.0</td>
</tr>
<tr>
<td>Inter-group consolidation adjustments</td>
<td>△ 39.7</td>
<td>△ 33.6</td>
<td>△ 45.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>2,476.2</td>
<td>2,995.4</td>
<td>3,000.0</td>
</tr>
</tbody>
</table>