





# The Power of MHI Today and Tomorrow



Since its foundation in 1884, the Mitsubishi Heavy Industries Group (MHI Group) has coexisted in partnership with customers and society at large. For over a century since, the MHI Group has consistently delivered products that people everywhere depend on by being at the forefront in pioneering new approaches to manufacturing in every era.

The array of 700 different types of products that have emerged from our passion for manufacturing range from aerospace rockets and power-generation facilities to ships, industrial equipment, and home air conditioners. As the march of globalization gains momentum today, the MHI Group is confronting head-on the challenge of driving sustainable economic growth and resolving energy and environmental concerns—issues shared by countries everywhere.

The MHI Group will capitalize on its comprehensive strengths, leveraging experience and insight from its involvement in the development of social and industrial infrastructure worldwide to contribute to society's ongoing development by resolving issues faced by the entire planet.



# Our Technologies, Your Tomorrow

In 2011, we were strongly reminded again of the vital importance of our corporate mission. During the year, the MHI Group was dedicated to quickly supporting customers involved in infrastructure and areas that suffered tremendous damage in the Great East Japan Earthquake. The reconstruction effort is expected to take years. As a company that helps undergird Japan's social infrastructure, we will continue offering the necessary support to rebuild the most affected areas as soon as possible.

The Japanese economy is widely expected to mount a modest recovery; however, a number of factors continue to fuel uncertainty, among them a deflationary trend, global economic stagnation, and the yen's prolonged strength.

In this daunting economic climate, along with existing competitors from the United States and Europe, Chinese and South Korean companies in the industry are also gaining strength. Consequently, the business environment for the MHI Group is expected to become an even tougher one.

Recognizing these challenges, one key issue the MHI Group now faces is to build the business scale, earnings capability, and financial condition necessary to compete on an equal footing with rival manufacturers overseas. Another is to develop a robust governance structure contributing to society's sustainable development through our corporate activities.

For these reasons, the MHI Group has pursued reform and growth programs outlined in the 2010 Medium-Term Business Plan. To better cope with changes in the social environment, the Group launched the new 2012 Medium-Term Business Plan in April 2012. The two targets of the new plan are to expand business scale and to improve capital efficiency and net income levels. This effort will be driven by five strategies: consolidate and restructure business segments into four domains to realize strengths and synergies; accelerate global expansion; manage the business portfolio based on strategic evaluation; institute corporate reform and efficiency; and manage innovations in corporate governance and operations. In June 2012, the MHI Group formulated the "MHI Environmental Vision 2030," encapsulating its commitment to realizing a sustainable future for the Earth and all mankind. Given that total solutions incorporating our wide-ranging products and technologies are applied on land, at sea, in the air and in space, this vision articulates our pledge to help simultaneously achieve what we call the "3Es": energy security, environmental protection, and economic growth.

We still recognize corporate social responsibility, or CSR, as a top priority for our management. Alongside efforts to contribute through our manufacturing prowess to the sustainable development of global society, we are determined to move forward in creating a corporate culture that will meet the expectations and trust of our customers and society. We would like to thank you for your continued understanding and support.

A, Tankuda

Kazuo Tsukuda, Chairman of the Board

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Hideaki Omiya, President and CEO

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



We base our activities on honesty, harmony, and a clear distinction between public and private life.



We shall strive for innovative management and technological development from an international perspective.

### **Reason for Instituting the Creed**

In Japan there are many enterprises with their own "creeds" which simply represent their management concept.

Mitsubishi Heavy Industries, Ltd. has a creed of this type, also. This creed was instituted in 1970 on the basis of the policy advocated by Koyata Iwasaki, president of Mitsubishi Goshi Kaisha in the 1920s, to indicate the essential attitude of the company, the mental attitude of the employees, and the future directions of the company. The reason for instituting the present creed is so that all of us can call to mind our one hundred years of tradition, and strive for further development in the future.



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### Forward-Looking Statements

Forecasts regarding future performance in these materials are based on judgments made in accordance with information available at the time this presentation was prepared. As such, these projections involve risks and insecurity. For this reason, investors are recommended not to depend solely on these projections for making investment decisions. It is possible that actual results may change significantly from these projections for a number of factors. Such factors include, but are not limited to, economic trends affecting the Company's operating environment, currency movement of the yen value to the U.S. dollar and other foreign currencies, and trends of stock markets in Japan. Also, the results projected here should not be construed in any way as being guaranteed by the Company.



P.36 GENERAL MACHINERY & SPECIAL VEHICLES



P.38 OTHERS

### CONSOLIDATED FINANCIAL HIGHLIGHTS

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries Years ended March 31 of respective years

		In billions of yen exce	pt per share amounts		
	2002	2003	2004	2005	
Net sales	¥2,863.9	¥2,593.8	¥2,373.4	¥2,590.7	
Operating income	78.6	115.3	66.6	14.7	
Interest expense—net of interest income and dividend income	(9.4)	(8.3)	(6.3)	(5.5)	
Ordinary income	67.9	78.1	29.7	12.5	
Income before income taxes and minority interests	48.0	66.1	50.1	16.3	
Net income	26.4	34.3	21.7	4.0	
Research and development expenses	¥ 118.5	¥ 109.4	¥ 99.5	¥ 124.0	
Capital investment	109.7	119.1	109.8	112.2	
Depreciation	95.9	97.0	99.8	99.1	
Per share information of common stock: (yen / U.S. dollars)					
Net income—basic	¥ 7.84	¥ 10.14	¥ 6.46	¥ 1.20	
Net income—diluted	7.82	10.14	6.46	1.20	
Net assets	380.22	376.76	393.17	390.44	
Cash dividends	4.00	6.00	6.00	4.00	
Total assets	¥3,915.2	¥3,666.8	¥3,715.3	¥3,831.1	
Net assets*2	1,282.7	1,270.9	1,324.4	1,309.9	
Current assets	2,598.5	2,389.3	2,402.9	2,465.6	
Current liabilities	1,881.2	1,721.5	1,519.4	1,567.9	
Interest-bearing debts	1,049.9	1,122.9	1,101.2	1,172.8	
Cash flows:					
Cash flows from operating activities	¥ 99.1	¥ 50.0	¥ 134.2	¥ 107.0	
Cash flows from investing activities	(89.5)	(106.1)	(95.3)	(163.3)	
Free cash flows	9.5	(56.0)	38.8	(56.2)	
Cash flows from financing activities	(69.4)	59.3	(44.4)	57.9	
Ratios:					
Return on equity*3	2.1%	2.7%	1.7%	0.3%	
Return on invested capital*4	1.9%	2.2%	1.6%	0.8%	
Return on assets <sup>*5</sup>	0.6%	0.9%	0.6%	0.1%	
D/E ratio*6	81%	87%	82%	88%	
Equity ratio*7	32.8%	34.7%	35.6%	34.2%	
Dividend payout ratio* <sup>8</sup>	51.0%	59.1%	92.8%	333.3%	

Notes: \*1 U.S. dollar amounts in this annual report are translated from yen, for convenience only, at the rate of ¥82.19 = U.S. \$1, the exchange rate prevailing at March 31, 2012.

\*<sup>2</sup> In calculating the net assets, MHI and its consolidated subsidiaries have applied the "Accounting Standard for Presentation of Net Assets in the Balance Sheet" (Accounting Standards Board of Japan (ASBJ) Statement No. 5) and the "Guidance on Accounting Standard for Presentation of Net Assets in the Balance Sheet" (ASBJ Guidance No. 8) since the year ended March 31, 2007.

\*3 Return on equity = net income / (net assets - share subscription rights - minority interests)

\*<sup>4</sup> Return on invested capital = NOPAT / (net assets + interest-bearing debts)

\*5 Return on assets = net income / total assets

 $^{*6}$  D/E ratio = interest-bearing debts / net assets

<sup>47</sup> Equity ratio = (net escrets – share subscription rights – minority interests) / total assets <sup>46</sup> Dividend payout ratio = dividends / net income

							In millions of U.S. dollars except per share
			ons of yen except per sh				amounts*1
2006	2007	2008	2009	2010	2011	2012	2012
¥2,792.		¥3,203.0	¥3,375.6	¥2,940.8	¥2,903.7	¥2,820.9	\$34,321
70.9		136.0	105.8	65.6	101.2	111.9	1,361
(1.9	, , , ,	(5.7)	(6.0)	(15.6)	(14.9)	(12.6)	(153)
50.0		109.5	75.3	24.0	68.1	86.1	1,047
52.0		101.3	64.9	28.1	39.4	69.8	849
29.8	48.8	61.3	24.2	14.1	30.1	24.5	298
V 100	V 100 0	V 107.0	V 101 0	V 100.0	V 100.0	V 101 4	¢ 1 477
¥ 100.7		¥ 107.9	¥ 101.3	¥ 129.2	¥ 123.2	¥ 121.4	\$ 1,477
140.5		191.4	196.6	177.1	126.6	120.7	1,468
100.8	3 106.7	129.2	153.8	140.4	134.4	126.2	1,535
¥ 8.85	5 ¥ 14.56	¥ 18.28	¥ 7.22	¥ 4.22	¥ 8.97	¥ 7.31	\$ 0.089
+ 0.83		18.27	7.21	4.22	8.96	7.30	0.089
410.15		423.17	369.94	380.80	376.17	374.08	4.551
4.00		6.00	6.00	4.00	4.00	6.00	0.073
4.00	0.00	0.00	0.00	4.00	4.00	0.00	0.073
¥4,047.	¥4,391.8	¥4,517.1	¥4,526.2	¥4,262.8	¥3,989.0	¥3,963.9	\$48,228
1,376.2		1,440.4	1,283.2	1,328.7	1,312.6	1,306.3	15,893
2,543.4		2,936.8	3,165.0	2,826.6	2,575.6	2,639.0	32,108
1,626.6		1,825.8	1,994.8	1,555.7	1,534.0	1,714.6	20,861
1,198.6		1,365.3	1,612.8	1,495.3	1,325.6	1,157.1	14,078
	1,210.0	1,000.0	1,012.0	1,100.0	1,020.0	1,10111	1,,010
¥ 73.9	) ¥ 158.7	¥ 161.8	¥ 79.5	¥ 117.9	¥ 337.8	¥ 200.3	\$ 2,437
(104.0	)) (158.6)	(193.0)	(156.5)	(180.7)	(137.2)	(47.0)	(571)
(30.	) 0.0	(31.2)	(77.0)	(62.7)	200.5	153.3	1,865
7.9	48.7	71.2	262.0	(105.2)	(169.7)	(183.6)	(2,233)
2.2%	3.5%	4.3%	1.8%	1.1%	2.4%	1.9%	
1.6%	2.3%	2.7%	1.8%	1.0%	1.5%	1.5%	
0.8%	1.2%	1.4%	0.5%	0.3%	0.7%	0.6%	
86%	88%	95%	126%	113%	101%	89%	
34.0%	32.5%	31.4%	27.4%	30.0%	31.6%	31.7%	
45.1%	41.2%	32.8%	83.2%	94.8%	44.6%	82.0%	

### CONSOLIDATED FINANCIAL PERFORMANCE

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries Years ended March 31 of respective years

**Orders Received** 



### Net Sales



### **Total Assets**



### **Net Assets**



### **Research and Development Expenses**



### **Capital Investment**





### **Operating Income**

### Net Income



### **Interest-Bearing Debts**



### **Cash Flows**



### Per Share Information of Common Stock



### **Ratios**



### MHI GROUP THROUGH THE YEAR

single Baaness Segment system Corporate organization also rearganizad April 28 FY2010 financial results and status of 2010 Medium- Term Business Plan announced Mary 23 MHI Compressor Corporation generating operations in the Middle East Mary 27 MHI U with the Electricity Generating operations in the Middle East Mary 27 MHI U with the Electricity Generating Authority of Task drakes, Authority of the measures of the State Pressures Water 18 Announced interactions in the Middle East Mary 27 MHI U with the Electricity Generating Authority of Task drakes, Authority of the measures of the State Pressures Water 18 Announced interactions in the Middle East Mary 27 MHI U with the Electricity Generating Authority of Task training (EGAR) and Misubelic Corporation MC) completes in Asia Nume 1, 6 Business presentations held Mure 2011 April 1 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating income 1 Y 38.7 billion -0.6% Mure 20 Consolidated operating inc			
single Builaness Segment system Corporate organization also recognized April 28 FY2010 financial results and status of 2010 Moduut Term Business Plan announced May 23 MH Compressor Corporation establishes subalities Subul Asiabi, Thirthe enhancing operations in the Middle East May 27 MH J. Vitithe enhancing operations in the Middle East May 27 MH J. Vitithe enhancing operations in the Middle East May 27 MH J. Vitithe enhancing operations in the Middle East May 27 MH J. Vitithe enhancing operations in the Middle East May 27 MH J. Vitithe enhancing operations (MC) completes a new plant in Thaland for maintenance of gas butthine high-temperature components to respond to needs in Asia June 1, 6 Business presentations held	ment Topics		
April 28       PY2010 financial results and status of 2010 Medium- Tam Business Plan announced       July 14       Established an Arkanced Plan Safety Department to enhance response to safety measures for Pressures Water Reactor (FVRP) nuclear power plants measures for Pressures Water Reactor (FVRP) nuclear power plants part in field plant in Thailand for maintenance of completes a new plant in Thailand for maintenance of gas turbine high temperature components to respond to needs in Asia       Financial results for first 3 months of FV201 announce Group (BSO)         June 1, 6       Business presentations held       Y613.6 billion -7.7.6% Consolidated operating income Y 38.7 billion -0.8%       Zeo Consolidated operating income Y 34.4 billion -1.4 Consolidated operating income Y 34.4 billion +34.3         Z011       June 10       Mary June Scour Development III Prover Splant Reaction Scource Splanter Reaction Scource Splanter Reaction Scource Splanter Reaction Scource Splanter Reaction Scource Splanter Reaction Scource Splanter Reaction Scource Reactor Reaction Scource Report Reactor Reaction Scource Reactor Reaction Scource Report Reactor Reaction Reac	single Business		
Marg 23       Mell Compressor Corporation establishes subdiary in Saudi Arabia, further enhancing operations in the Middle East       Water Reactor (PWR) nuclear power plants         Marg 27       MH J With the Electricity Cenerating Authority of Thellend (EGAT) and Misubishi Corporation (MC) completes a new plant in Thileained for maintenance of gas turbine high-temperature components to respond to needs in Asia       September 6       Anounced intent to establish an engineering com- pany in India jointly with Oman's Suball Eahwan Group (SBG)         June 1, 6       Business presentations held       Y013.6 billion -7.65% Consolidated net sales       Y013.6 billion -7.65% Consolidated net sales       Y0413.6 billion -7.65% Consolidated operating income       Y038.7 billion -0.85%       Consolidated net sales       Y040.0 billion -1.1 Consolidated net sales         Xpril       Marg       June       June       Luty       August       September         April       Marg 20       Stripubling & Cosen Devicement       Power Systems       -Margines Status       -Margines Status         April 15       Commerced Misubish Regional Jet asses by work with stat of tack work at the MH Holishima Plant       September 1       -Margines Status       -Margines Status       -Margines Status         April 15       Received order from POS of Norwy for 2 vessels for 3D case bottom resource exploration of work at the MH Holishima Plant       September 1       Order received for 3 casef-freed, superrolical power generation undits to conthoute to sater handing of contaminated rub			
Merg 27       Merl J. with the Electronic J denerating Automyt of Trailard (EGA) and Misubkell Corporation (MC) completes a new plant in Thailand for maintenance of gas turbine high-resperature components to respond to needs in Asia       pany in India jointly with Oman's Suhall Bahwan Group (SBG)         June 1, 6       Business presentations held       Yes       Yes         Consolidated net sales       Yes       Yes       Yes         Consolidated operating income       Y 38.7 billion       -0.8%       Zes       Consolidated operating income       Y 34.4 billion       +1.43         2011         Vor       Yes       Consolidated operating income       Y 34.7 billion       -0.8%       Consolidated operating income       Y 34.4 billion       +3.43         2011       Mary       June       June       Yes       Septembor       Imathina y 4 Subilify a Subilify Subilify Subilify Subilify Subilify Subilify Subilify	in Saudi Arabia,		
Yearthold	Thailand (EGAT) and Mitsubishi Corporation (MC) completes a new plant in Thailand for maintenance of gas turbine high-temperature components to respond to needs in Asia		
FY2011 Consolidated net sales       ¥613.6 billion       -7.6% V38.7 billion       200       Consolidated net sales       Y680.0 billion       -1.1 Consolidated operating income       ¥ 34.4 billion       -1.4 Consolidated operating income       ¥ 680.0 billion       Killion       -1.4 Consolida	Business prese		
FY2010 Consolidated net sales       ¥613.6 billion       -7.6% V38.7 billion       200       Consolidated net sales       ¥680.0 billion       -1.4 Consolidated operating income       ¥ 34.4 billion       -1.4 Consolidated operating income       ¥ 680.0 billion       -1.4 Consolidated operating income       ¥ 34.4 billion       -1.4 Consolidated operating income       ¥ 34.4 billion       -1.4 Consolidated operating income       ¥ 680.0 billion       -1.4 Consolidated operating income       ¥ 680.0 billion       -1.4 Consolidated operating income       ¥ 680.0 billion       -1.4 Consolidated operating income       ¥ 34.4 billion       -1.4 Consolidated operating income       ¥ 680.0 billion       -1.4 Consolidated operating income       ¥ 34.4 billion       -1.4 Consolidated operating income       ¥ 3			
Consolidated net sales       V613.6 billion       -7.6%       Consolidated net sales       V680.0 billion       -1.1         Consolidated operating income       V 38.7 billion       -0.8%       Consolidated operating income       V 34.4 billion       +34.3         April       Mcry       June       July       August       September         Topics by Segment       ® Stipbulding & Ocean Development       ® Power Systems       @ General Machiney & Special Vehicles       ® Machiney & Steel Infrast         April 5       Commenced Mitsubishi Regional Let assembly work with start of tack work at the MH Tobishima Plant       Commences of Mitsubishi Regional Let assembly work with start of tack work at the MH Tobishima Plant       August 26       MHI-led consortium conducts feasibility study with India's Tata Group for creation of a Smart Community under the Dehi-Mumbai Industrial Corridor Development Plan         April 27       Delivered special heavy-duty forkitis with radiation shielded cabins to contribute to safer handling of contaminated rubble near Fluxushima Dalichi Nuclear Power Station       September 1       Order received for 3 coal-fired, supercritical power generation units from Taiwan Power Company         Mery 26       Achieved 1,600°C turbine inlet temperature in test operation of the word's highest thermal efficience, 'U-Series' gas turbine consolution of word-class 500 tons/day carbon capture demonstration plant for Coal-fired power plants jointy with U.S. based Southern Company       September 27       Heid ceremony marking delivery of final F-2 fighter jet to t			
Consolidated operating income       ¥ 38.7 billion       -0.8%       Consolidated operating income       ¥ 34.4 billion       +34.3         2011       April       May       June       July       August       September         Topics by Segment       • Shipbuilding & Ocean Development • Arrospace Systems       • Power Systems • General Machinery & Special Vehice       • Machinery & Steel Infrast • Others         April 5       Commenced Mitsubishi Regional Jet assembly work with start of tack work at the MHI Tobishima Plant       August 26       MHI-led consortium conducts feasibility study with India's Tata Group for creation of a Smart Community under the Delhi-Mumbai Industrial Corridor Development Plan         April 15       Received order from PGS of Norway for 2 vessels for 3D sea bottom resource exploration cabins to contribute to safer handling of contaminated rubble near Fukushima Daichi Nuclear Power Station       September 1       Order received for 3 coal-fired, supercritical power generation units from Taiwan Power Company         Mary 26       Achieved 1,600°C turbine inlet temperature in test operation of the world's highest thermal effi- ciency "J-Series" gas turbine       September 27       Held ceremony marking delivery of final F-2 fighter jet to the Japan Air September 28       September 28       September 28       Participated in an international collaboration program to develop         June 14       Successfully started operation of world-class 500 tons/day carbon capture demonstration jet for       September 28       Participated in an international c	onsolidated net sal		
AprilMayJuneJulyAugustSeptemberTopics by Segment• Shipbuilding & Ocean Development• Power Systems • General Machinery & Special Vehicles• Machinery & Steel Infrast • OthersApril 5Commenced Mitsubishi Regional Jet assembly work with start of tack work at the MHI Tobishima Plant• August 26MHI-led consortium conducts feasibility study with India's Tata Group for creation of a Smart Community under the Delhi-Mumbal Industrial Corridor Development PlanApril 15Received order from PGS of Norway for 2 vessels for 3D sea bottom resource exploration• Order received for 3 coal-fired, supercritical power generation units from Taiwan Power CompanyApril 27Delivered special heavy-duty forklifts with radiation shielded cabins to contribute to safer handling of contaminated rubble near Fukushima Daiichi Nuclear Power StationSeptember 9Dubai Metro Green Line started commercial operation. Dubai Metro, the first urban rail system in GC region and world's longest driverless transportation system has been completed.September 27Held ceremony marking delivery of final F-2 fighter jet to the Japan Air Self-Defense Force on September 27, 2011June 14Successfully started operation of word-class 500 tons/day carbon capture demonstration plant for coal-fired power Jants jointhy with U.Sbased Southern CompanySeptember 28Participated in an international collaboration program to develop 27, 2011	onsolidated operat		
Topics by Segment       • Shipbuilding & Ocean Development       • Power Systems       • Machinery & Special Vehicles       • Others         April 5       Commenced Mitsubishi Regional Jet assembly work with start of tack work at the MHI Tobishima Plant <ul> <li>April 15</li> <li>Received order from PGS of Norway for 2 vessels for 3D sea bottom resource exploration</li> <li>April 27</li> <li>Delivered special heavy-duty forkifts with radiation shielded cabins to contribute to safer handling of contaminated rubble near Fukushima Dalichi Nuclear Power Station</li> </ul> September 1     Order received for 3 coal-fired, supercritical power generation units from Taiwan Power Company           Mary 26         Achieved 1,600°C turbine inlet temperature in test operation of the world's highest thermal efficiency 'J-Series' gas turbine capture demonstration plant for coal-fired power plants jointly with U.Sbased Southern Company         September 27         Held ceremony marking delivery of final F-2 fighter jet to the Japan Air Self-Defense Force on September 27, 2011         September 28         Participated in an international collaboration program to develop         Topication	l		
I oplic's by Segment• Aerospace Systems• General Machinery & Special Vehicles• OthersApril 5Commenced Mitsubishi Regional Jet assembly work with start of tack work at the MHI Tobishima PlantImage: Community and the Delhi-Mumbai Industrial Corridor Development PlanApril 15Received order from PGS of Norway for 2 vessels for 3D sea bottom resource explorationImage: Community under the Delhi-Mumbai Industrial Corridor Development PlanApril 27Delivered special heavy-duty forklifts with radiation shielded cabins to contribute to safer handling of contaminated rubble near Fukushima Daichi Nuclear Power StationSeptember 1Order received for 3 coal-fired, supercritical power generation units from Taiwan Power CompanyMcry 26Achieved 1,600°C turbine inlet temperature in test operation of the world's highest thermal effi- ciency "J-Series" gas turbine world-class 500 tons/day carbon capture demonstration plant for coal-fired power plants jointly with U.Sbased Southern CompanyImage: September 28 Feribure 28 Participated in an international collaboration program to developImage: September 28 Farticipated in an international collaboration program to develop	1		
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<ul> <li>September 9</li> <li>Dubai Metro Green Line started commercial operation. Dubai Metro, the first urban rail system in GCC region and world's longest driverless transportation system has been completed.</li> <li>June 14</li> <li>Successfully started operation of world-class 500 tons/day carbon capture demonstration plant for coal-fired power plants jointly with U.Sbased Southern Company</li> </ul>	bottom resourc Delivered specia		
May 26       Achieved 1,600°C turbine inlet temperature in test operation of the world's highest thermal efficiency "J-Series" gas turbine       Image: Complete inlet temperature in test operation of the world's highest thermal efficiency "J-Series" gas turbine       Image: Complete inlet temperature in test operation of the world's highest thermal efficiency "J-Series" gas turbine       Image: Complete inlet temperature in test operation of the world's highest thermal efficiency "J-Series" gas turbine       Image: Complete inlet temperature inlet temperature inlet temperature inlet temperature in test operation of the world-class 500 tons/day carbon capture demonstration plant for coal-fired power plants jointly with U.Sbased Southern Company       Image: Complete inlet temperature inlet temperature inlet temperature inlet temperature inlet temperature in test operation of the world-class 500 tons/day carbon capture demonstration plant for coal-fired power plants jointly with U.Sbased Southern Company       Image: Complete inlet temperature inlet te	handling of con near Fukushima		
June 14       Successfully started operation of world-class 500 tons/day carbon capture demonstration plant for coal-fired power plants jointly with U.Sbased Southern Company       Image: Final F-2 fighter jet to the Japan Air Self-Defense Force on September 27, 2011         September 28       Participated in an international collaboration program to develop	temperature in t the world's high		
U.Sbased Southern Company collaboration program to develop	Successfully sta world-class 500		
the next-generation PW1100G-JM engine for the Airbus A320neo	coal-fired powe		

October 31	Financial results for first 6 months	of FY2011 announced	January 1	Established a new organizati	on, the "Engineerin	g Head-
November 10	Announced intent to establish a l handling equipment manufacturir			quarters," to integrate count Procurement Construction (		ng,
	jointly with Anupam Industries tar cost competitiveness with sights MEA markets		January 31	Mitsubishi Heavy Industries Engineering Co., Ltd. establ (Beijing) Co., Ltd., an enviro	lishes MHIEC Envir	onment
November 25	"4th MHI Business Partners Con with focus on reforming the supp	,		keting company in China to closely tailored to the local r	enhance sales act	
November 30	,		February 1	Established the Mitsubishi V Technical Support Office in I reinforce PWR nuclear powe	Fukui Prefecture (J	apan) to
	to Mitsubishi Heavy Industries Me Ltd. to enhance operational efficie new installations through to after-s	ency by integrating	February 3	Financial results for the first FY2011 announced	9 months of	
November 30	Announced intent to establish an to handle industrial machinery bu material handling systems and ru ery, aiming for an agile and resilie	usiness, including ubber & tire machin-	March 29	Transferred small-size air-co business to Mitsubishi Heavy Co., Ltd. (MES) to develop a operational structure	Industries Engine	Systems
		YoY				YoY
		665.3 billion -9.0%		nsolidated net sales	¥862.0 billion	+5.6%
Con	solidated operating income ¥	24.9 billion +52.8%	2012	nsolidated operating income	¥ 13.9 billion	-31.9%
October	November	December	January	y February	Marc	.la
October 6 October 28	Received order for ammonia and urea fertilizer plant in Malaysia, a joint project with APEX Energy ar PT Rekayasa Industri Received orders for the first	a ind	January 11	Received compressor and p generation system order for world's first floating liquefied natural gas facility for Shell p in Australia	the	IL.
November 2	"Sayaendo" new-generation LNC carrier, with two ships earmarked for Osaka Gas/Mitsui O.S.K. Line Received order for two 125,000-to cruise ships for Carnival Corporation & plc, the largest cruise vacation group in the world	d es ton ton	January 27	Launched Smart Communit System Demonstration Proje Spain with Hitachi and Mitsu Corporation to verify busine for next-generation transpor infrastructure to accommod expanded use of EVs	ect in ubishi sses tation	
November 28	Unveiled the world's first 7MW hydraulic driven offshore wind turbine at EWEA OFFSHORE 2011, Europe's largest offshore	X	February 9	Announced launch 17 mode residential-use air conditione offering "energy-saving throu technology"	ers	
		the second se	March 9	Christened and launched la		+
	wind turbine exhibition, on November 28, 2011.			commercial vessel at MHI K Shipyard: EMERALD ACE-	1000	
December 8	,			commercial vessel at MH k Shipyard: EMERALD ACE– pure car carrier for delivery Mitsui O.S.K.	-a	

for efficiency and capacity

### **INTERVIEW WITH THE PRESIDENT**



### Can you give us an overview of business results for fiscal 2011?

### Consolidated orders received were ¥3,188.8 billion. Consolidated net sales were ¥2,820.9 billion, operating income was ¥111.9 billion, and net income was ¥24.5 billion.

While orders in Aerospace Systems declined, the MHI Group endeavored to secure new orders, mainly in Shipbuilding & Ocean Development, particularly for high-value-added vessels and cruise ships, and in Power Systems, obtaining a large Taiwanese order for coal-fired power generation units. Consequently, the value of consolidated orders received was up 6.5% year on year, to ¥3,188.8 billion.

Sales decreased 2.9% year on year to ¥2,820.9 billion, mainly as a result of falling sales in Machinery & Steel Infrastructure Systems, which had been high in the previous fiscal year, offsetting higher sales in General Machinery & Special Vehicles, Aerospace Systems, and other segments. With respect to earnings, the Group was able to increase profits despite the strong yen by boosting profitability in General Machinery & Special Vehicles, together with improvement in the profitability of overseas plant construction in Power Systems. As a result, operating income increased ¥10.7 billion to ¥111.9 billion.

Extraordinary gains included sales of fixed assets, such as the Head Office building. Reflecting the decrease in Japanese corporate tax rates and extraordinary losses from business structure improvement expenses, including an inventory writedown of onshore wind turbines, net income declined ¥5.5 billion, to ¥24.5 billion.

### QuestionHow successful was the 2010 Medium-Term Business Plan in fiscal2011, and what are your impressions of its progress?

Two years have passed since we launched the 2010 Business Plan. As a result of initiatives to reinforce profitability, we reached our operating income targets in both fiscal 2010 and 2011.

Under the 2010 Business Plan, the MHI Group has leveraged its truly comprehensive capabilities to drive reforms in response to significant changes in the market environment and realize global expansion. We thereby achieved three objectives. These were to improve profitability by reinforcing our earnings structure, establish a flexible and agile management structure, and introduce performance indicators to drive corporate value. We achieved our operating income targets for both fiscal 2010 and 2011.

We sought improved profitability despite the impact of the strong yen in fiscal 2010 and 2011, through improvement measures under the 2010 Business Plan. These included expanding our global production system by increasing overseas bases in Power Systems and Machinery & Steel Infrastructure Systems, conducting business restructuring and structural reform, downsizing and withdrawing from lowperforming businesses, and promoting enterprise-wide cross-functional initiatives.

As part of efforts to establish a flexible and agile business management system for coping with significant changes in the business environment, we established a business headquarters structure in April 2011. This change clarified roles and responsibilities for businesses and encouraged operational efficiency and speed. At the same time, we performed organizational revisions to strengthen operations from customer perspectives and reinforce enterprise-wide crossfunctional initiatives.

In taking steps to introduce management indicators for increased corporate value, we positioned return on equity (ROE) as a key management indicator under the 2010 Business Plan to emphasize the pursuit of investment efficiency. We also introduced strategic business evaluations to engage in portfolio management to maximize corporate value with limited resources. We were therefore able to organize business and financial profiles for each of our 64 Strategic Business Units. This made it possible for us to accelerate selection and concentration of businesses under the 2012 Business Plan.

While realizing these achievements under the 2010 Business Plan, we also clarified such issues as sluggish business scale growth and low returns on investment and net income. We aim to address these issues under the 2012 Business Plan.



### What role will the 2012 Business Plan that starts in fiscal 2012 play, and what are its goals?

We have positioned the 2012 Business Plan as a rolling plan for its 2010 predecessor. Our goals are to expand business scale, as well as improve capital efficiency and the net income level. We aim to establish a business scale of ¥4 trillion by fiscal 2014, the final year of the 2012 Business Plan, as a step toward becoming a ¥5 trillion enterprise over the longer term.

The 2012 Business Plan is a rolling plan that factors in global economic instability and other changes in the business environment under the 2010 Business Plan. This new initiative is a first step toward becoming a ¥5 trillion enterprise. Key goals under this plan are to expand business scale, as well as improve capital efficiency and the net income level. We will meet these goals by undertaking the following five strategies:

- Consolidate and restructure business segments (into four domains) to realize strengths and synergies
- 2. Accelerate global expansion
- 3. Manage the business portfolio based on strategic evaluation
- Institute corporate reforms and efficiency improvements (optimize shared resources)
- 5. Manage innovations in corporate governance and operations.

We will attain our initial target of expanding our business scale by undertaking the first two strategies. The first is to consolidate and restructure business segments (into four domains) to realize our strengths and synergies. Second, we seek to accelerate global expansion. We are targeting ¥3.7 trillion in consolidated net sales by fiscal 2014 as a first step for pursuing ¥5 trillion in revenues.

We will achieve the second target of improving capital efficiency and the net income level by pursuing the third and fourth strategies. These are to manage the business portfolio based on strategic evaluation and to institute corporate reforms and efficiency improvements (optimize shared resources). By fiscal 2014, we seek ¥130 billion in net income as a step toward ultimately generating ¥240 billion in earnings. We will therefore undertake portfolio management based on strategic evaluation.

Fiscal 2012 targets are ¥3.4 trillion in consolidated orders received, ¥3 trillion in consolidated net sales, and ¥120 billion in operating income. For fiscal 2014, the final year of the 2012 Business Plan, we look for ¥4 trillion in consolidated orders received, ¥3.7 trillion in consolidated net sales, and ¥250 billion in operating income.

Under the 2012 Business Plan, we will improve capital efficiency by leveraging business segment synergies in four domains and by implementing business portfolio management based on strategic evaluation. We will also reinforce our financial position by enhancing free cash flow, our debt-to-equity ratio, return on equity, and shareholders' equity. By fiscal 2014, we aim to secure a reserve fund-raising potential of more than ¥500 billion in finance capacity. By maintaining efforts in these areas, we will expand our business scale and reinforce that fund-raising potential to around ¥700 billion. We will additionally undertake large mergers and acquisitions and investments in our drive to become a highly profitable ¥5 trillion enterprise that can sustainably generate growth worldwide.

### Question

### Please detail the first strategy of consolidating and restructuring business segments into four domains to realize strengths and synergies.

### We will consolidate and restructure our eight current business headquarters, including 64 Strategic Business Units, to maximize our strengths and business synergies.

Under the 2012 Business Plan, we will restructure the eight business headquarters into four business domains focused on customers, markets and business characteristics, more aggressively cultivating businesses to optimize our strength and business synergies. These domains are "Energy & Environment," "Machinery, Equipment & Systems," "Transportation," and "Defense & Aerospace."

The Energy & Environment domain integrates in-house engineering, procurement, and construction operations with the Engineering Headquarters, which we established in January 2012, as well as covering such power generation businesses as thermal, nuclear and renewable energy, along with environmental and chemical plants. We will rapidly expand energy and environmental businesses, notably gas turbine combined cycle and integrated coal gasification combined cycle operations, through selective and focused investments. In parallel, we plan to engage in such solutions businesses as large infrastructural operations, smart communities, and comprehensive water business, leveraging the world-class engineering, procurement, and construction capabilities of the Engineering Headquarters.

The Machinery, Equipment & Systems domain integrates businesses for products supplied to the steel industry and the automotive industry, such as steelmaking machinery, compressors, turbochargers, machine tools, and other products. 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 establish dedicated operating companies, form alliances, and carry out mergers and acquisitions.

The Transportation domain integrates 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. In the promising commercial aircraft business, we will improve profitability through manufacturing reforms. We will channel our best efforts into the Mitsubishi Regional Jet (MRJ), Japan's first small passenger jet, while further reinforcing cost competitiveness. In the commercial shipbuilding business, we will cultivate businesses in advanced technology and high-value-added fields. We will also reinforce engineering business and develop our shipbuilding business overseas.

The Defense & Aerospace domain covers defense aircraft, defense ships, special vehicles, and land-sea-and-air defense operations, including space systems. We will contribute more to Japan's security by engaging in integrated land-sea-and-air defense systems. Along those lines, we will promote the mutual application of private-sector and defense and space technologies.

				Segi	ment		
Business domain	main Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)
Energy & Environment	<ul> <li>Power companies</li> <li>Gas companies</li> <li>Resource companies (oil, chemicals, steel)</li> </ul>		<ul> <li>GTCC</li> <li>Large-sized thermal power plants</li> <li>Nuclear energy</li> </ul>	<ul> <li>Environmental plants</li> <li>Chemical plants</li> </ul>			
Machinery, Equipment & Systems	<ul> <li>Core industries (steel, etc.)</li> <li>Automotive industry</li> <li>Logistics, etc.</li> </ul>		<ul> <li>Stationary engines</li> </ul>	<ul> <li>Compressors</li> <li>Iron and steel machinery</li> <li>Crane and material handling systems</li> </ul>		<ul><li>Turbochargers</li><li>Forklift trucks</li><li>Engines</li></ul>	<ul><li>Air-conditioning equipment</li><li>Machine tools</li></ul>
Transportation	<ul> <li>Airlines (air)</li> <li>Shipping companies (sea)</li> <li>Railways (land), etc.</li> </ul>	Commercial ships		Transportation systems	Commercial aircraft		
Defense & Aerospace	<ul> <li>Ministry of Defense (land, sea, air)</li> <li>JAXA</li> </ul>	Destroyers and submarines for the Ministry of Defense			<ul><li>Defense aircraft</li><li>Missiles</li><li>Space systems</li></ul>	Special vehicles	

### Four domains aligned to customers and markets

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### Could you also detail your efforts to accelerate global expansion?

We will reinforce competitiveness by defining strategically important regions and enhancing operating structures to increase overseas sales by ¥890 billion by fiscal 2014. On top of that, we will expand overseas procurement, mergers and acquisitions, and alliances while reinforcing overseas production bases as we cultivate operations outside Japan.

To expand business scale, we plan to increase overseas sales from the ¥1,180 billion posted in fiscal 2011 to ¥2,070 billion by fiscal 2014. We will achieve this goal of adding ¥890 billion in sales by defining Asia and North America as strategically promising regions in which we will reinforce sales structures and collaborations and engagement with local leading companies.

We will help reinforce our North American sales structure by establishing a finance subsidiary in the region that efficiently manages our U.S. funds. We will expand business in Asia mainly through alliances with leading Indian conglomerates. We intend to establish a regional headquarters in Singapore to oversee corporate strategy and functions across countries in the area.

In terms of reinforcing collaborations and engagement with leading local companies, we are expanding market entry opportunities. In China, for example, we have proposed a comprehensive automotive business to Shanghai Automotive Industry Corporation. In India, we established joint ventures with Larsen & Toubro Limited to fully launch boiler and turbine production for thermal power plants. At the same time, we intend to fully develop our shipbuilding engineering business.

We will increase overseas procurement and production, mergers and acquisitions, and alliances as we expand overseas businesses. Overseas procurement is currently around ¥400 billion. We intend to raise this level 1.5 times to ¥600 billion by fiscal 2014. We will define procurement strategies by region and product, and expand use of overseas standard products. We will clarify procurement areas and items MHI specializes in for each area, and accelerate global procurement, especially from emerging countries.

We plan to strengthen overseas production bases by transplanting domestic manufacturing technologies and expertise offshore to enhance manufacturing capabilities tailored to local needs. We look to lift overseas production to around ¥670 billion, or about 1.6 times the current level.

We will expand mergers and acquisitions and alliances by pushing ahead with our 2010 Business Plan policies, cultivating more alliances and mergers and acquisitions with overseas partners. We will depart from vertical integration and demonstrate our truly comprehensive capabilities by pursuing speedy management to realize high-level corporate growth.

### **Overseas Sales**

(In billions of yen)



Transportation Machinery, Equipment & Systems

Energy & Environment

### **Overseas Procurement**





### **Overseas Production**

(In billions of yen)



### Please tell us about your third strategy, of managing your business portfolio based on strategic evaluation.

We will improve capital efficiency and the net income level by controlling strategic added value—the return requirement—and allocating invested capital based on strategic positioning after evaluating 64 Strategic Business Units.

To generate constant growth in the global market, we must remain strong financially to manage business and other risks. We will combine financial evaluations based on quantitative assessments and coefficients for business risks, creating an enterprise-wide mechanism to view business management from multiple perspectives, deploying strategic business evaluations to optimally invest management resources in businesses.

The basic approach for portfolio management based on strategic business evaluations is to classify each Strategic Business Unit by business position according to the profitability and financial soundness of each business stage. The next step is to allocate and control the required return—the strategic added value—and invested capital.

For portfolio management, we use the strategic business evaluation framework to position each Strategic Business Unit according to its business life stage, profitability, and financial soundness.

More specifically, we are positioning the business life stage on the horizontal scale and profitability and financial soundness on the vertical scale. We have categorized life stages as Nascent (I), Prime (II) and Maturity (III), with profitability and financial soundness ranking low, medium and high on the vertical axis. We are positioning Strategic Business Units based on combinations of these two scales. We are classifying Strategic Business Units according to whether to grow or maintain, reform, or downscale or withdraw according to business life stages and profitability and financial soundness. For businesses in growth stages, we will strategically and intensively inject the resources required to achieve reforms for generating high returns. For mature businesses, we will institute reforms while maintaining invested capital.



### Please outline strategy 4, which entails instituting corporate reforms and improving efficiency to optimize shared resources.

We will undertake the following four initiatives to optimize the use of shared and common management resources. The first is to make the corporate organization and functions more sophisticated and streamlined. The second is to reorganize Group companies to consolidate corporate functions. The third is to set up financial subsidiaries to reduce financial costs through global cash management. The fourth is to establish an asset management company to make effective use of underutilized assets.

For the first initiative, of making the corporate organization and functions more sophisticated and streamlined, we will reduce fixed costs to boost earnings. At the same time, we will deploy human resources to support global expansion. Under the second initiative, of reorganizing Group companies to consolidate corporate functions, we will lower costs by centrally managing all of our welfare facilities and real estate and cut Group company expenses. For the third step of setting up financial subsidiaries to reduce financial costs through global cash management, we will establish financial subsidiaries in the United States, Europe, and Asia. Under the fourth initiative of making effective use of underutilized assets, we will compress and utilize assets by establishing an asset management company.



### What about strategy 5, which aims to manage innovations in Question corporate governance and operations?

We have enhanced the supervision and auditing functions of the Board of Directors and the Board of Statutory Auditors, and are reinforcing risk management in the course of business for the corporate divisions and business segments, deploying CSR activities aligned with management strategy.

While fostering diversity among directors to strengthen supervision, we have enhanced the auditing functions of the Board of Statutory Auditors. More specifically, we are strengthening the Board of Directors to include individuals who can provide advice based on their wide-ranging international business experience or from government and public policy perspectives. We aim to secure Board of Statutory Auditors members who can advise on quality and safety oversight and on important aspects of corporate risk management. We will secure corporate governance advice from external directors and auditors based on diverse perspectives.

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To date, we have had each division manage its business operational risks, reinforcing internal auditing for enterprisewide management. However, given the accelerating global expansion and growing business scales characterizing the current business climate, we need to reinforce Group risk management to address more complex, broader, and larger risks. Collaboration between divisions and speedy, accurate responses to change are vital. Accordingly, we reviewed

Management Audit Department, CSR, and General Affairs Department functions in April 2012. We set up the Compliance Section within the General Affairs Department, and established the Crisis Management Committee to serve the entire Group. These moves put in place a structure to manage risks from cross-sectional perspectives for the entire Group. We will continue unifying enterprise-wide risk management to broaden the scopes and scales of risks that we must manage. We are drawing on monitoring through the Management Audit Department while working to build an even more solid organization that can prevent Group risks from materializing.

In terms of promoting CSR aligned to management strategy, we will contribute to the sustainability of global society through manufacturing, notably by providing infrastructural products that resolve social issues. At the same time, we will create a corporate culture in which we meet stakeholder expectations and trust by undertaking social contribution activities, including those supporting society's next generation.



CSR Aligned with Management Strategy

Strategies to Ach	lieve Targets						
Target 1	Expand Business Scale	Target <b>2</b>	Improve Capital Efficiency and Net Income Level				
Sal 1			A 243				
Strategy 1	Consolidate and restructure business segments (into four domains) to realize strengths and synergies	Strategy 3	Manage the business portfolio based on strategic evaluation				
Strategy 2       Accelerate global expansion       Strategy 4       Institute corporate reforms and efficiency improvements (Optimize shared resources)							
		innovations in corpora	ite				

nancial Targets		2012 Busi	ness Plan
	FY2011 Actual	FY2012 Forecast	FY2014 Target
Orders received (Shares of overseas orders)	3,188.8 (43%)	3,400.0 (58%)	4,000.0 (64%)
Net sales	2,820.9	3,000.0	3,700.0
Operating income (Ordinary income)	111.9 (86.1)	120.0 (80.0)	250.0 (210.0)
Net income	24.5	40.0	130.0
ROE	1.9%	3.1%	8.9%
ROIC	1.5%	2.1%	6.5%
D/E Ratio	0.9	0.8	0.7
Interest-bearing debts	1,157.1	1,100.0	1,000.0
Dividend per share	6 JPY	6 JPY	10 JPY





### **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)
	C	Orders Receive	d		Net Sales		Oper	ating Income (	Loss)
Domain	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
Total	3,188.8	3,400.0	4,000.0	2,820.9	3,000.0	3,700.0	111.9	120.0	250.0

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





### 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.

### Share of Net Sales



### Shipbuilding & Ocean Development

#### MAIN BUSINESSES

Manufacturing, installation, sale and service of LNG carriers, LPG carriers, cruise ships, car ferries, car carriers, crude oil carriers, container ships and various other ships, defense and patrol vessels and marine structures, etc.







### MAIN BUSINESSES

Power Systems Manufacturing, installation, sale and service of boilers, steam turbines, gas turbines, diesel engines, water turbine plants, wind turbine plants, geothermal power plants, SCR (DeNOx) systems, marine machinery, pumps, desalination plants, lithium-ion secondary batteries, etc.

#### Nuclear Energy Systems

Manufacturing, installation, sale and service of pressurized water reactor (PWR) nuclear power plants and equipment, advanced reactor plants, nuclear fuel cycle plants, etc.







### Machinery & Steel Infrastructure Systems

### MAIN BUSINESSES

Manufacturing, installation, sale and service of transportation systems, toll and fare collection machinery and other ITS equipment, petrochemical plants, flue gas desulfurization systems, flue gas CO<sub>2</sub> recovery plants and various other chemical plants, oil and gas production systems, waste treatment equipment, compressors and turbines, iron and steel machinery, medical systems, transportation equipment, cranes and material handling systems, rubber and tire machinery, bridges, hydraulic gates, stacks, vertical parking garages, social infrastructure, injection molding machines, food and packing machinery, printing machinery, packaging machinery, etc.

### Aerospace Systems

#### MAIN BUSINESSES

Manufacturing, installation, sale and service of jet fighters, helicopters, commercial transport aircraft and various other aircraft, structural parts and components of aircraft, aeroengines, missiles, torpedoes and space systems, etc.







### **General Machinery & Special Vehicles**

#### MAIN BUSINESSES

Manufacturing, installation, sale and service of turbochargers, medium- and small-sized engines, engine generating equipment, forklift trucks, construction machinery, special vehicles, agricultural machinery, tractors, etc.





### Others

#### MAIN BUSINESSES Air-Conditioning & Refrigeration Systems

Manufacturing, installation, sale and service of commercial- and residential-use air conditioners, automotive thermal systems, transport refrigeration units and centrifugal chillers, etc.

#### Machine Tool, Others

Manufacturing, installation, sales and service for power transmissions and machine tools, etc.





#### \*Supplementary Note

The method for calculating operating income will change from FY2012. For comparison, operating income or loss figures for FY2011 based on the revised calculation method are included for reference. Revised figures have also been included in graphs of operating income or loss for FY2011 from p. 28 in the Review of Operations section. Refer to the chart notes on p. 21 for details regarding the change in calculation method.

### **REVIEW OF OPERATIONS**

## Shipbuilding & Ocean Development

**Hisashi Hara** Head of Shipbuilding & Ocean Development

### **Basic Strategy**

• Complement Domestic Shipbuilding Distinguished by Technologically Advanced, High-Value-Added Vessels with the Engineering Business and the Commercialization of Overseas Shipbuilding Operations



### Fiscal 2011 Review

Shipbuilding capacity continues to exceed demand for new ships. In this difficult market environment, MHI sales activities were centered on winning orders for cruise ships and LNG carriers. Consequently, orders were received for a total of 12 ships in FY2011, including orders for two large cruise ships, four new-generation *Sayaendo*-type LNG carriers, one submarine, and one research vessel. The result was a substantial year-on-year increase in consolidated orders received to ¥262.0 billion. Pending consolidated orders for Shipbuilding & Ocean Development at the end of FY2011 were for 40 ships, totaling approximately 2.1 million gross tons.

Consolidated net sales rose year on year to ¥311.6 billion, with deliveries of a total of 25 ships, including seven "pure car carriers," five patrol vessels, three container ships, and two LPG carriers. The segment posted an operating loss of ¥7.7 billion, primarily due to the adverse impact of the strong yen.

Capital investments in this segment consisted of ¥7.6 billion to upgrade and expand ship production facilities. R&D costs were ¥7.0 billion, targeted mainly at developing more ecofriendly cruise ships, LNG carriers, ferries, "pure car carriers," and other vessels, as well as R&D into large offshore structures and the development of energy-efficient devices and systems.

				Segr	nent		
Business domain	Customers/ Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)
	<ul> <li>Power companies</li> </ul>		GTCC	Environmental plants			
Energy &	<ul> <li>Gas companies</li> </ul>		<ul> <li>Large-sized thermal</li> </ul>	<ul> <li>Chemical plants</li> </ul>			
Environment	<ul> <li>Resource compa-</li> </ul>		power plants				
2	nies (oil, chemicals, steel)		<ul> <li>Nuclear energy</li> </ul>				
Maahinan	<ul> <li>Core industries</li> </ul>		<ul> <li>Stationary engines</li> </ul>	Compressors		<ul> <li>Turbochargers</li> </ul>	<ul> <li>Air-conditioning</li> </ul>
Machinery, Equipment	(steel, etc.)			<ul> <li>Iron and steel machinery</li> </ul>		<ul> <li>Forklift trucks</li> </ul>	equipment
& Systems	<ul> <li>Automotive industry</li> </ul>			<ul> <li>Crane and material</li> </ul>		<ul> <li>Engines</li> </ul>	<ul> <li>Machine tools</li> </ul>
,	<ul> <li>Logistics, etc.</li> </ul>			handling systems			
	<ul> <li>Airlines (air)</li> </ul>	<ul> <li>Commercial ships</li> </ul>		Transportation systems	<ul> <li>Commercial aircraft</li> </ul>		
Transportation	<ul> <li>Shipping companies (sea)</li> </ul>						
	<ul> <li>Railways (land), etc.</li> </ul>						
5 / 0	Ministry of Defense	Destroyers and			Defense aircraft	Special vehicles	
Defense &	(land, sea, air)	submarines for the			Missiles		
Aerospace	• JAXA	Ministry of Defense			Space systems		

Relationship Between Shipbuilding & Ocean Development and Business Domains

### 28 MITSUBISHI HEAVY INDUSTRIES, LTD.





New-generation LNG Carrier "Sayaendo"



MALS (Mitsubishi Air Lubrication System)

#### Cruise Ship "DIAMOND PRINCESS"

### Future Initiatives

Ship prices continue to gradually decline, with prices today roughly 30% lower than they were prior to the 2008 global financial crisis. At the same time, a number of factors are expected to spur demand for new shipbuilding. Demand for alternative energy, for example, is triggering increased demand for a new type of LNG carriers. Surging prices for crude oil, meanwhile, are driving increased oil and gas development activity. Replacement demand for domestic vessels, temporarily stopped by the March 2011 disaster, is also set to reemerge.

To successfully complete the 2012 Medium-Term Business Plan, MHI is promoting a domestic shipbuilding business centered on technologically advanced, high-value-added vessels. MHI is also reinforcing its engineering\* business and advancing an overseas shipbuilding business.

In the domestic shipbuilding business, the Cruise Ship Project Office is spearheading efforts to optimize every aspect of quality, cost and production processes, apply 100% threedimensional design, and innovate work methods. Backed by these moves, MHI will use the production of two new cruise ships for Carnival Cruise Lines to establish cruise ships as a core business. MHI will also distinguish itself from competitors with technologically advanced, high-valued-added LNG carriers, resource exploration vessels and other ships. For LNG carriers, MHI will win against intense competition by switching to the next-generation MOSS LNG carrier design, the *Sayaendo*, and adopting the high-efficiency Ultra Steam Turbine (or UST) as a main engine. Together, these innovations will boost fuel efficiency in LNG carriers by roughly 25%.

In the engineering business, operations are growing through outstanding ship models and energy-efficiency technology made possible by MHI technologies for the development of high-performance products and its talented team of veteran design engineers. Where shipbuilding engineering is concerned, MHI will supply energy-efficient vessels tailored to customer needs through cooperation on construction work with domestic and foreign shipbuilders, or by licensing out MHI-owned design schemes. As a marine solution provider, MHI will offer energy-efficient products with robust environmental performance as product packages consisting of the Mitsubishi Air Lubrication System (or MALS) and MHI-GEMS. MALS is a proprietary system developed by MHI that uses the power of air bubbles to reduce friction between the underside of a vessel and the water, resulting in fewer CO<sub>2</sub> emissions. MHI-GEMS is a gas fuel supply system that is set to become a key technology in ships that use LNG as fuel.

In overseas shipbuilding, MHI is seeking to broaden opportunities for market entry through alliances and exchanges with prominent foreign companies, with future joint ventures also possible. In a bid to enter the Indian market, for example, MHI in December 2011 signed a technology support agreement for the provision of shipbuilding technology to India-based Larsen & Toubro (L&T) Shipbuilding Limited.

The targets for Shipbuilding & Ocean Development under the 2012 Business Plan (ending FY2014) are orders of ¥270.0 billion and net sales of ¥250.0 billion, both on a consolidated basis. MHI is also eyeing operating income of ¥8.0 billion, a figure that should reflect improved earnings driven by production framework reconfiguration and the promotion of material cost reduction activities in this segment, coupled with a larger contribution from the engineering business.

<sup>\*</sup>Engineering at MHI refers to a methodology for utilizing the knowledge and technology of product teams (human resource potential) to design and build facilities and systems that meet social needs.

## Power Systems

Masafumi Wani Head of Power Systems

### **Basic Strategy**

(Power Systems)

- Develop an overseas network to enhance competitiveness
- Pursue market-tailored business development
- Advance into new businesses and fields

(Nuclear Energy Systems)

- Promote domestic business by establishing new safety technologies
- Deploy resources to restore TEPCO's Fukushima Daiichi Nuclear Power Station and its future decommissioning
- Promote "selection and concentration" and alliances to accelerate the development of global business



### FY2014 targets

Shigero Masamori Head of Nuclear Energy Systems



### Fiscal 2011 Review

MHI received an order for a large-sized coal-fired thermal power plant, specifically a supercritical-pressure power plant, from Taiwan, as well as continuous orders for 10 state-of-theart gas turbines from customers in Korea. In Japan, MHI received new orders for engineering work to restore powergeneration facilities damaged in the Great East Japan Earthquake, as well as new work to cope with subsequent power shortages since the disaster. In nuclear energy systems, MHI received orders for engineering work on countermeasures to improve nuclear power plant safety. The total value of consolidated orders for the Power Systems segment rose from the previous year to ¥1,235.2 billion.

Consolidated net sales decreased to ¥955.3 billion, primarily due to reduced revenues from wind turbines. Operating income, meanwhile, rose year on year to ¥85.6 billion, mainly atop progress made on improving the profitability of plant construction work overseas. Capital investments in this segment amounted to ¥37.7 billion, and were channeled mainly into the upgrade and expansion of gas turbine production equipment. The segment also recorded ¥39.7 billion in research and development expenses, with a focus on meeting upstream to downstream market needs with respect to

				Seg	nent		
Business domain	Customers/ Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)
Energy & Environment	Power companies     Gas companies     Resource compa- nies (oil, chemicals, steel)		GTCC     Large-sized thermal power plants     Nuclear energy	<ul><li>Environmental plants</li><li>Chemical plants</li></ul>			
Machinery, Equipment & Systems	<ul> <li>Core industries (steel, etc.)</li> <li>Automotive industry</li> <li>Logistics, etc.</li> </ul>		Stationary engines	<ul> <li>Compressors</li> <li>Iron and steel machinery</li> <li>Crane and material handling systems</li> </ul>		<ul><li>Turbochargers</li><li>Forklift trucks</li><li>Engines</li></ul>	<ul><li>Air-conditioning equipment</li><li>Machine tools</li></ul>
Transportation	<ul> <li>Airlines (air)</li> <li>Shipping companies (sea)</li> <li>Railways (land), etc.</li> </ul>	Commercial ships		Transportation systems	Commercial aircraft		
Defense & Aerospace	<ul> <li>Ministry of Defense (land, sea, air)</li> <li>JAXA</li> </ul>	Destroyers and submarines for the Ministry of Defense			<ul> <li>Defense aircraft</li> <li>Missiles</li> <li>Space systems</li> </ul>	Special vehicles	



J-Series Gas Turbine

KU30GSI Gas Engine Power Plant

Rendering of proposed US-APWR North Anna unit-3 U.S Utility, Dominion Virginia Power

energy. Specific R&D targets included utilization technologies for clean fuels, such as natural gas and nuclear, and renewable energy sources, distributed power grid systems, and high-efficiency power generation systems.

### **Future Initiatives**

In power systems, MHI is seeking to maintain a business scale of ¥1 trillion by fiscal 2014, with sights set on increasing that to ¥1.5 trillion in the future. These efforts rest on three points. The first is to develop an overseas network to enhance competitiveness. Here, MHI will create a network of manufacturing, engineering, procurement, sales and service bases. These bases will subsequently be upgraded and expanded to enhance MHI's capacity to win and execute orders for thermal power plant projects worldwide, and strengthen its service framework. The second point is to pursue market-tailored business development. MHI has developed technology for large gas turbines in response to demand in the United States for the upgrade of aging facilities, as well as energy diversification plans in developing countries, and is targeting a global share of over 30% of this market. In emerging markets where economic growth continues, particularly India and in Southeast Asia, MHI is looking to expand both its supply capacity and orders by leveraging overseas procurement and production, and the establishment of joint ventures with local firms, to offer large-sized coal-fired thermal power plants boasting high quality and price

competitiveness. The third key point is the development of future technology. MHI will look to advance into new businesses and fields with the development of large offshore wind turbines, lithium-ion batteries and solid oxide fuel cell (SOFC)-based triple combined-cycle power generation systems<sup>\*1</sup>.

In nuclear energy systems, MHI is seeking ¥400.0 billion in orders for overseas new build in fiscal 2014, with longer-term plans to grow this figure to ¥600.0 billion by applying its current domestic business model outside Japan. MHI will take these steps while maintaining its present business scale in Japan.

In the domestic market, MHI is fully committed to improving PWR plant safety and supporting utility customers in quickly restarting existing PWR plants. In parallel, MHI will reinforce initiatives with respect to the establishment of new PWR plant concepts, the nuclear fuel cycle and fast-breeder reactor (FBR) promotion, and the decommissioning of TEPCO's Fukushima Daiichi Nuclear Power Station. In the global market, MHI is focusing on promising new build projects in the United States, Europe, Jordan, Vietnam and other markets. Moreover, MHI will expand overseas post-operational service business through alliances with overseas companies.

By making steady progress on these initiatives, MHI will fulfill its four-part mission to improve safety, supply stable power, counter global warming and ensure energy security as a leading company in the global nuclear energy field.

\*1 SOFC-based triple combined-cycle power generation systems are systems currently under development that combine a solid oxide fuel cell (SOFC) with gas and steam turbines to achieve targeted power-generating efficiency of over 70%.

### PICKUP

### **Offshore Wind Turbine Business**

MHI is developing 7MW-class offshore wind turbines that eliminate gears, a frequent source of system malfunctions. This was accomplished by incorporating hydraulic drive trains specifically designed for offshore wind turbines based on hydraulic transmission technology from U.K.-based Artemis Intelligent Power, Ltd., which MHI acquired in November 2010. Demonstration testing of a 2.4MW version of the turbine will take place in Japan in 2012, followed by testing of a 7MW system in Europe in 2013. MHI plans to market the new device in 2014, with commercial mass production slated to commence from 2015.

MHI is also combining its technological capabilities in wind turbines and marine structures to develop floating offshore wind turbines, and is a participant in an experimental offshore floating wind farm project sponsored by Japan's Ministry of Economy, Trade and Industry.



## Machinery & Steel Infrastructure Systems



Akira Hishikawa Head of Machinery & Steel Infrastructure Systems

### Basic Strategy

- Expand business domains
- Develop operations globally
- Enhance product competitiveness



### Fiscal 2011 Review

In addition to orders for steel machinery from India and China, MHI received an order for a fertilizer plant in Malaysia. In Japan, despite a challenging market climate in the aftermath of the Great East Japan Earthquake, MHI received orders for engineering work to restore machinery and equipment damaged by the disaster. The Company also reported growth in toll and fare collection machinery and in food and packing machinery. As a result, the total value of consolidated orders for Machinery & Steel Infrastructure Systems increased from the previous year to ¥508.2 billion.

Consolidated net sales decreased from the previous year to ¥428.8 billion, mainly as a result of sales declines in chemical plants and transportation systems. Operating income was largely unchanged year on year at ¥26.3 billion, with business restructuring largely offsetting the impact on earnings of lower sales and the yen's appreciation. Capital investments in this segment amounted to ¥8.4 billion, largely for the upgrade and expansion of steel machinery manufacturing equipment. The segment also recorded ¥8.1 billion in research and development expenses. R&D was chiefly focused on environmental protection technologies, including those to prevent global warming; transport technologies, specifically land-based

					Dionio and	20011000 20	
				Segm	ient		
Business domain	Customers/ Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)
Energy & Environment	<ul> <li>Power companies</li> <li>Gas companies</li> <li>Resource companies (oil, chemicals, steel)</li> </ul>		<ul> <li>GTCC</li> <li>Large-sized thermal power plants</li> <li>Nuclear energy</li> </ul>	<ul><li>Environmental plants</li><li>Chemical plants</li></ul>			
Machinery, Equipment & Systems	Core industries (steel, etc.)     Automotive industry     Logistics, etc.		Stationary engines	Compressors     Iron and steel machinery     Material handling systems     Rubber tire machinery     Printing and packaging     machinery, etc.		Turbochargers     Forklift trucks     Engines	Air-conditioning equipment     Machine tools
Transportation	<ul> <li>Airlines (air)</li> <li>Shipping companies (sea)</li> <li>Railways (land), etc.</li> </ul>	Commercial ships		Transportation systems	Commercial aircraft		
Defense & Aerospace	<ul> <li>Ministry of Defense (land, sea, air)</li> <li>JAXA</li> </ul>	Destroyers and submarines for the Ministry of Defense			<ul> <li>Defense aircraft</li> <li>Missiles</li> <li>Space systems</li> </ul>	Special vehicles	

### Relationship Between Machinery & Steel Infrastructure Systems and Business Domains







Ammonia/Urea Plant for Oman

Automated People Mover (Crystal Mover) for Hartsfield-Jackson Atlanta International Airport

Iron and Steel Manufacturing Machinery for South Korea

transportation and logistics; capital goods for steel, chemicals and other industry sectors; and the provision of high-valueadded products and social infrastructure that contribute to energy supplies.

### **Future Initiatives**

Fiscal 2011 was a successful one for the reform process pursued by MHI under the 2010 Business Plan. Steady progress was made in structural reforms targeting machinery, transportation systems, and environmental and chemical plants, with the printing and packaging machinery business also profitable for the year. From fiscal 2012, three imperatives will comprise the next step for this segment—expand business domains, enhance product competitiveness, and develop operations globally. By addressing these points, MHI will work to expand core businesses by developing and accelerating growth processes.

In transportation systems, a number of projects are slated for Asia and the Middle East, and will likely include urban transportation system projects in Southeast Asia. MHI will bolster its traffic signal and control system technologies, while moving in parallel to improve Automated People Mover (APM) production methods, making these vehicles lighter, more compact, and more competitive. MHI will also reinforce its operation and maintenance business base to expand its business domain and secure more stable earnings. Turning to compressors, the development of new gas fields and increased shale gas production is spurring a strong willingness to invest among customers. As a result, demand for compressors is growing in the gas and petrochemicals sectors, particularly for products used in LNG and ethylene plants. MHI will expand its business domain by aggressively targeting gas sector needs. At the same time, MHI will examine the feasibility of establishing a local production base in Brazil, and will bolster sales and after-sales service bases in the Middle East and North America. Through these actions, MHI is aiming to expand business scale to ¥100.0 billion over the medium to long term, making it one of the top three companies in this market.

In iron and steel machinery, market scale is continuing to grow as raw steel production volume increases. Capital investment also remains vigorous in India, China and other emerging markets. MHI will develop new technologies in a bid to expand its business domain into upstream areas in the steel sector. In tandem, MHI will work to increase orders in emerging markets for cold rolling equipment and turnkey packages, two areas where it possesses strengths.

Based on these measures, MHI is targeting orders of ¥1,020.0 billion, net sales of ¥760.0 billion, and operating income of ¥54.0 billion for fiscal 2014.

### **Aerospace Systems**

Takashi Kobayashi Head of Aerospace Systems

### **Basic Strategy**

- Increase overseas production/procurement for commercial aircraft and improve profitability through drastic innovations
- Propose an integrated defense systems concept by coordinating businesses for land, sea and air
- Continuous successes in the launch of H-II A/B
- Enhance competitiveness through development of next-generation primary launch vehicle, etc.



### FY2014 targets

### Fiscal 2011 Review

Aerospace Systems experienced a significant decline in orders for commercial aircraft from the high level achieved in FY2010 as well as decreased demand for Patriot missile systems in defense-related products. Space systems-related orders increased year on year, driven by increased orders for H-IIA rocket launch services. The total value of consolidated orders received for Aerospace Systems decreased below FY2010's figure to ¥547.8 billion.

Consolidated net sales increased year on year to ¥495.9 billion on increased sales of commercial aircraft, space systems, and defense-related products. Operating income decreased compared to FY2010 and the business experienced a ¥10.9 billion operating loss due to the strong yen and other factors. In addition to capital investments of ¥32.6 billion primarily to upgrade production facilities for commercial aircraft, the segment recorded ¥45.0 billion in research and development expenses. The main targets for these costs were prototypes to demonstrate Advanced Technological Demonstrator-X, specifically small, ultrasonic aircraft offering outstanding mobility and radar avoidance capabilities, as well as development of the cutting-edge Mitsubishi Regional Jet (MRJ).

		Segment							
Business domain	Customers/ Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)		
	Power companies		GTCC	Environmental plants					
Energy & Environment	<ul> <li>Gas companies</li> <li>Resource compa-</li> </ul>		<ul> <li>Large-sized thermal power plants</li> </ul>	Chemical plants					
Environment	nies (oil, chemicals, steel)		<ul> <li>Nuclear energy</li> </ul>						
Machinery,	Core industries     (steel, etc.)		<ul> <li>Stationary engines</li> </ul>	Compressors     Iron and steel machinery		<ul> <li>Turbochargers</li> <li>Forklift trucks</li> </ul>	<ul> <li>Air-conditioning equipment</li> </ul>		
Equipment & Systems	<ul> <li>Automotive industry</li> </ul>			Crane and material		<ul> <li>Engines</li> </ul>	<ul> <li>Machine tools</li> </ul>		
a oystems	<ul> <li>Logistics, etc.</li> </ul>			handling systems		Ť			
	<ul> <li>Airlines (air)</li> </ul>	<ul> <li>Commercial ships</li> </ul>		Transportation systems	Commercial aircraft				
Transportation	<ul> <li>Shipping companies (sea)</li> </ul>								
	Railways (land), etc.								
Defense &	<ul> <li>Ministry of Defense (land, sea, air)</li> </ul>	<ul> <li>Destroyers and submarines for the</li> </ul>			<ul> <li>Defense aircraft</li> <li>Missiles</li> </ul>	Special vehicles			
Aerospace	• JAXA	Ministry of Defense			Space systems				


HIB Launch Vehicle



H-II Transfer Vehicle (HTV) KOUNOTORI (Courtesy of JAXA/NASA)

# Boeing 787 Transport Aircraft

# **Future Initiatives**

In commercial aircraft, MHI is eyeing business scale expansion, reflecting new demand for roughly 30,000 aircraft projected over the next two decades as emerging markets continue to develop and airline companies recover business vitality. For the Boeing 787, plans call for achieving sales and earnings growth by augmenting basic facilities, such as autoclaves for realizing a production rate of 10 airplanes per month, coupled with production automation and other rationalization efforts. To mitigate foreign exchange rate risks and improve earnings, MHI will develop a supply chain with hubs in Asia and North America, and increase overseas procurement and production to denominate more costs in foreign currencies.

In defense-related products, in response to calls for more robust defense industry infrastructure in a security environment marked by rising tensions, MHI will propose integrated defense systems by coordinating its businesses for land, sea and air defense businesses. MHI will also maintain its production and technological bases related to fighter aircraft, and promote international joint development and production of necessary parts. MHI possesses some of the world's most advanced defense and space technologies, and will utilize these in combination with private-sector technologies to develop new products.

In space systems, the budget for space in Japan and overseas demand for the launch of commercial satellites are expected to remain flat. MHI will seek to further enhance its credibility through the continuation of successful H-II A/B rocket launches. At the same time, MHI will move to bolster its launch capabilities and bolster cost competitiveness, and thereby expand orders, by developing a next-generation launch vehicle.

In this climate, the targets for the Aerospace Systems business for fiscal 2014 are orders of ¥530.0 billion, on a par with the previous fiscal year, as increased demand for commercial aircraft covers the gradual decline in defense-and space-related orders. Net sales are projected to be ¥630.0 billion, buoyed by expansion in sales of commercial aircraft and space systems. Plans call for operating income of ¥14.0 billion, primarily from improved profitability in the commercial aircraft business. MHI is targeting the delivery in fiscal 2014 of 100 Boeing 777 airplanes (up 17 from fiscal 2011) and 120 Boeing 787 airplanes (up 93 from fiscal 2011).

# PICKUP

## Mitsubishi Regional Jet (MRJ)

MRJ is a next generation regional jet that will offer both top-class operational economy and outstanding cabin comfort. MRJ has received 230 orders so far including 25 from All Nippon Airways (including 10 option), 100 from Trans States Holdings (including 50 option), 5 from ANI Group Holdings, and 100 from SkyWest.

MRJ's first flight is scheduled for JFY 3Q 2013, and the first delivery is slated for the summer or later half of JFY 2015. Mitsubishi Aircraft Corporation is aggressively conducting the expansion of the sales offices located in America and Europe, sales promotion in Asia and other developing countries, development of the MRJ, confirming the manufacturing quality, and preparation for the mass production.



# General Machinery & Special Vehicles



Atsushi Maekawa Head of General Machinery & Special Vehicles

# **Basic Strategy**

- Achieve a streamlined structure
- Upgrade the service business
- Build up global business (development, production, sales, procurement)



# Fiscal 2011 Review

Orders for forklifts were brisk for the year. Demand was centered on Asia, where economic growth continues, and North America, where market recovery is gaining momentum. MHI also reported growth in orders for medium- and small-sized engines to Asia, including Japan, with the latter driven by demand from reconstruction following the Great East Japan Earthquake. Orders for turbochargers were also higher atop demand primarily from Europe and North America. As a result, the total value of consolidated orders and consolidated net sales for General Machinery & Special Vehicles both increased, to ¥386.0 billion and ¥381.7 billion, respectively. The segment posted operating income of ¥3.5 billion for a substantial yearon-year improvement. In addition to higher sales, earnings rose as MHI stepped up activities to boost profitability that included streamlining the machinery ranges it produces. Capital investments in this segment amounted to ¥10.3 billion, used mainly to upgrade and expand turbocharger production equipment. In terms of research and development, the segment recorded ¥15.0 billion in research and development expenses. R&D focused mainly on efforts to respond to market polarization and diversification of demand. Specific issues included ensuring compliance with environmental regulations, low

		Segment							
Business domain	Customers/ Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)		
	<ul> <li>Power companies</li> </ul>		• GTCC	Environmental plants					
Energy &	<ul> <li>Gas companies</li> </ul>		Large-sized thermal	Chemical plants					
Environment	<ul> <li>Resource compa-</li> </ul>		power plants						
	nies (oil, chemicals, steel)		Nuclear energy						
	<ul> <li>Core industries</li> </ul>		<ul> <li>Stationary engines</li> </ul>	Compressors		<ul> <li>Turbochargers</li> </ul>	<ul> <li>Air-conditioning</li> </ul>		
Machinery, Equipment	(steel, etc.)			<ul> <li>Iron and steel machinery</li> </ul>		<ul> <li>Forklift trucks</li> </ul>	equipment		
& Systems	<ul> <li>Automotive industry</li> </ul>			Crane and material		Engines	<ul> <li>Machine tools</li> </ul>		
a eyeteme	<ul> <li>Logistics, etc.</li> </ul>			handling systems					
	<ul> <li>Airlines (air)</li> </ul>	<ul> <li>Commercial ships</li> </ul>		Transportation systems	<ul> <li>Commercial aircraft</li> </ul>				
Transportation	<ul> <li>Shipping companies (sea)</li> </ul>								
	<ul> <li>Railways (land), etc.</li> </ul>								
5.4	Ministry of Defense	<ul> <li>Destroyers and</li> </ul>			Defense aircraft	Special vehicles			
Defense &	(land, sea, air)	submarines for the			Missiles				
Aerospace	• JAXA	Ministry of Defense			<ul> <li>Space systems</li> </ul>				

Pelationship Between General Machinery & Special Vehicles and Business Domains



fuel consumption, and achieving lighter weight and a more compact form for turbochargers, engines, industrial vehicles, special vehicles, and other products that contribute to social infrastructure and the fields of energy and the environment.

# **Future Initiatives**

MHI positioned fiscal 2011 and 2012 as two years for streamlining and building foundations in General Machinery & Special Vehicles. Action taken in fiscal 2011 to enhance productivity and reduce costs, most notably by encouraging overseas procurement, combined with a more robust, streamlined structure have succeeded in making the segment profitable for the first time in four years. Fiscal 2013 and 2014 have been named as the two years for massive profit growth. To this end, MHI is pursuing three directives to solidify foundations in General Machinery & Special Vehicles in fiscal 2012—achieve a streamlined structure, upgrade the service business, and build up global business (development, production, sales and procurement).

In turbochargers, MHI will leverage simulation technology to develop highly reliable, high-efficiency turbochargers with two goals in mind—building framework for sales volume of 1 million units in fiscal 2016, and achieving a 30% market share. Europe is the biggest market for these products. MHI will assign design staff to MHI Equipment Europe B.V., its regional base there, and establish a customer-based model. Beyond delivering stronger customer support from the development stages, this model will enhance both production and services offered. With respect to production, MHI will develop a global production framework that fully utilizes its overseas bases, a step that should mitigate foreign exchange rate risk and make production more efficient.

In engines, MHI will promote broader sales of its containertype gas engine generator (MEGANINJA) newly developed this year, and will also develop a high-efficiency gas engine generator. These steps reflect a push by MHI to respond to changes in energy demand, as well as working toward the goal of shifting from the sale of stand-alone units to power generation systems. Similarly, MHI will aggressively capture demand from China's distributed generation system policy by establishing a joint venture with Shanghai Diesel Engine Co., Ltd. to carry out local production of medium and large engines. MHI is also proposing to relocate production to India and other regions close to customers.

In forklifts, MHI will further promote the shift to electrification, and will look to strengthen its global collaborative business framework and service business. In line with this, MHI will build a more streamlined structure by reducing global production from six to four sites after reviewing its production framework. To strengthen its hand in electric forklifts, MHI is promoting the development of its own high-capacity, lithiumion battery, and will build a more resilient service business by rolling out globally the service business model of North Americabased Group company Rapidparts, Inc.

# **Others** Air-Conditioning & Refrigeration Systems

Masahiko Arihara Head of Air-Conditioning & Refrigeration Systems





The "Q-ton" commercial-use CO<sub>2</sub> refrigerant heat pump water heater (ESA30)

# **Basic Strategy**

# Air-Conditioning & Refrigeration Systems

- Establish a light, nimble business structure
- Develop business as a dominant niche player

### **Machine Tool**

- Strengthen businesses as pillars of profit
- Expand new growth businesses
- Upgrade process technologies



Orders received (left scale)
 Net sales (left scale)
 Operating income (right scale)

Orders received (left scale)
 Net sales (left scale)
 Operating income (right scale)

# FY2014 targets

Machine Tool

# Air-Conditioning & Refrigeration Systems

# Fiscal 2011 Review

Air-Conditioning & Refrigeration Systems saw lower orders for Automotive Thermal Systems, tracking lackluster automobile production in Japan due to the lingering impact of the Great East Japan Earthquake, a strong yen and other negative factors. Orders increased, however, for Residential Air Conditioners and Commercial Air Conditioners on the back of demand from Europe. As a result, the total value of consolidated orders and consolidated net sales for Air-Conditioning & Refrigeration Systems rose to ¥160.5 billion and ¥159.9 billion, respectively, with operating income of ¥0.5 billion.

# **Future Initiatives**

MHI is taking steps to spur business-scale expansion in the run-up to completion of the 2012 Business Plan by accelerating the overseas development of air-conditioner products and Automotive Thermal Systems. For air-conditioner products, MHI will promote sales expansion in China and other Asian markets, as well as a shift to overseas production for Commercial Air Conditioners. In Automotive Thermal Systems in fiscal 2011, in addition to preparing to bring a new factory built in

Kereinon.	mp berween	All-Condition	ing a kenige.	iunon system	s, machine ic	or and Dusine	.55 Domains		
		Segment							
Business domain	Customers/ Markets	Shipbuilding & Ocean Development	Power Systems	Machinery & Steel Infrastructure Systems	Aerospace Systems	General Machinery & Special Vehicles	Others (Air-Conditioning/ Machine Tool)		
	<ul> <li>Power companies</li> </ul>		• GTCC	<ul> <li>Environmental plants</li> </ul>					
Energy &	Gas companies		Large-sized thermal	Chemical plants					
Environment	Resource compa-		power plants						
Livironment	nies (oil, chemicals, steel)		Nuclear energy						
	Core industries		<ul> <li>Stationary engines</li> </ul>	Compressors		Turbochargers	<ul> <li>Air-conditioning</li> </ul>		
Machinery,	(steel, etc.)			<ul> <li>Iron and steel machinery</li> </ul>		<ul> <li>Forklift trucks</li> </ul>	equipment		
Equipment & Systems	<ul> <li>Automotive industry</li> </ul>			Crane and material		Engines	<ul> <li>Machine tools</li> </ul>		
a oyotomo	<ul> <li>Logistics, etc.</li> </ul>			handling systems		-			
	<ul> <li>Airlines (air)</li> </ul>	<ul> <li>Commercial ships</li> </ul>		Transportation systems	Commercial aircraft				
Transportation	Shipping companies     (sea)								
	Railways (land), etc.								
Defense & Aerospace	Ministry of Defense (land, sea, air)	Destroyers and submarines for the			<ul><li> Defense aircraft</li><li> Missiles</li></ul>	Special vehicles			
	• JAXA	Ministry of Defense			Space systems				

Relationship Between Air-Conditioning & Refrigeration Systems, Machine Tool and Business Domains

#### **38** MITSUBISHI HEAVY INDUSTRIES, LTD.

# Machine Tool





Gear Grinding Machine

Yukio Kodama Head of Machine Tool

Thailand online, full-scale mass production has resumed at MHI's base in the U.S. The establishment of an operating company for Automotive Thermal Systems in 2013, meanwhile, is another action that will enhance cost competitiveness by quickening the pace of global business development. In Heat-Pump Hot Water systems, MHI has a dominant lineup of products that it will leverage to grow sales in Europe and China.

# **Machine Tool**

# Fiscal 2011 Review

Orders for machine tools increased domestically and globally, reflecting vigorous capital investment overseas by Japanese automakers and construction machinery manufacturers, along with order growth from China and Southeast Asia. The total value of consolidated orders and net sales for the Machine Tool segment rose to ¥53.8 billion and ¥51.1 billion, respectively. Operating income rose year on year to ¥3.6 billion, buoyed by growth in sales of machine tools.

# **Future Initiatives**

MHI will strengthen businesses identified as pillars of profit. The objective here is to build a business structure based on two businesses with different market characteristics-machine tools and precision machinery products-that is resistant to market fluctuations. In gear-cutting machines, MHI will establish a production site in India equipped with sales and service functions. Meanwhile. China-based Mitsubishi Heavy Industries (Changshu) Machinery Co., Ltd. will serve as a key base for increased production capacity, as MHI expands operations in China. In precision cutting tools, MHI is establishing MHI-India Precision Tools Ltd. (MHI-IPT) as its main base in India, and will augment production capacity and take steps to reduce product delivery lead times. Elsewhere, MHI is targeting a new customer base and aiming for a top three industry position following the acquisition of U.S.-based Federal Broach Holdings, LLC. In a bid to shore up its earnings potential through expansion of new growth businesses, MHI will also pursue the full-scale commercialization of hollow-head engine valves. With sights set on a business scale of ¥100.0 billion and a world-leading share in gear cutting machines and large machines, MHI is committed to making fast and steady strides in implementing its 2012 Business Plan strategy in this segment.

# **INTELLECTUAL PROPERTY AND R&D**

### MHI's Intellectual Property Activities Policy

The MHI Group's basic policy for intellectual property in fiscal 2012 is to promote assertive intellectual property utilization and to pursue more global intellectual property strategies and activities.

The utilization of intellectual property means building a portfolio of unrivaled intellectual property assets. The starting point for this approach is to conceptualize competition scenarios and utilization of intellectual property to MHI's advantage.

The pursuit of more global intellectual property strategies and activities, meanwhile, involves recognizing that MHI's future markets lie outside of Japan, and developing more carefully analyzed intellectual property strategies with particular emphasis on emerging markets, where long-term market expansion is anticipated.

# Business: An Integrated Approach Linking Businesses, R&D and Intellectual Property

MHI's intellectual property activities are an integral part of its business and R&D strategies.

MHI has established a team made up of members from its business divisions (sales and design personnel) and R&D and intellectual property departments for each core, mainstay and new product line. These members share information from a wide variety of sources—business plans, business prospectuses, product development, R&D policy, technology roadmaps, and analyses of R&D trends and analyses of patents held by MHI and other companies—and the team of members works to formulate an optimal intellectual property strategy.

Amid dynamic changes, among them recovery from economic recession, the budding prominence of emerging markets, and reconstruction in the wake of the Great East Japan Earthquake, both the intensity of global competition and the importance of intellectual property strategies are on the rise. For MHI, bolstering its hand in intellectual property is now more important than ever. This requires business and intellectual strategies be fully integrated to enhance competitiveness. To this end, MHI is defining intellectual property strategies centered on the guiding policies of each business segment, with business and intellectual property departments working closely to implement these strategies. In parallel, the Intellectual Property Department at MHI's head office is now able to consolidate intellectual property strategies from all business segments. This structure makes it possible for the MHI Group to take full advantage of its comprehensive capabilities at any time.

# **Research and Development Activities**

The MHI Group maintains close cooperation between business headquarters and R&D centers, promoting robust research and development supporting future business expansion and greater product competitiveness in power systems, aerospace and other business fields.

In fiscal 2011, total R&D investment for the MHI Group was ¥121.4 billion, including ¥72.4 billion in expenses related to R&D under contract.



# Number of Domestic and Overseas Patents



# Principal R&D Activities by Business Segment

# Shipbuilding & Ocean Development

- Development of large, high-performance cruise ships with energy-saving technologies that cut fuel consumption by over 10% and technologies that reduce labor needs by over 15%
- Development of technologies to broaden the scope of application and achieve higher performance for the Mitsubishi Air Lubrication System (MALS), which cuts CO<sub>2</sub> emissions by reducing friction resistance between ships and seawater

# **Power Systems**

- Development of the J-Series gas turbine, a system boasting world-class output and world-leading thermal efficiency, with a turbine inlet temperature of 1,600°C, that will contribute to realization of a low-carbon society
- Development of 7MW offshore wind turbines equipped with one of the world's largest variable-speed, hydraulic drives

# Machinery & Steel Infrastructure Systems

- Development of technology for capturing CO<sub>2</sub> from coalfired thermal power plant boiler flue gas as a means to help prevent global warming
- Development of high-performance, compact compressor trains and mechanical drive steam turbines for motors compatible with floating liquefied natural gas production, storage and offloading facilities



# **R&D** Investment by Business Segment

# Aerospace Systems

- Development of the MRJ, a state-of-the-art regional jet featuring the world's highest level of operational economy and cabin comfort
- Creation of prototypes to demonstrate advanced technology, specifically small, ultrasonic aircraft offering outstanding mobility (including maneuverability never before possible in flight) and radar avoidance capabilities, as part of efforts to secure technology for future domestic fighter jet production

# **General Machinery & Special Vehicles**

- Development of variable geometry (VG) turbocharger for regular and compact diesel engines offering high performance and high reliability at low cost
- Development of forklifts with radiation-shielded cabins for the removal of debris from the grounds of TEPCO's Fukushima Daiichi Nuclear Power Station

# Others

**R&D** Investment

- Development of 15 models in the SAISON series of HVAC units for stores and 9 models in the HYPERMULTI series of HVAC units for buildings incorporating high-efficiency compressors, meeting performance standards for 2015 stipulated by Japan's Act on the Rational Use of Energy ahead of schedule
- Development of "ZI20A," a machine enabling fast, highprecision grinding of a variety of gears, and incorporating newly developed processing methods making grinding of internal ring gears, external gears and stepped gears possible with a single unit



<sup>\*</sup> Includes expenses related to R&D under contract.

# PURPOSE BEHIND ESTABLISHMENT OF THE NEW ENGINEERING HEADQUARTERS

The twin objectives for the Engineering Headquarters are to build a low-risk, high-return EPC business structure to boost the receipt of orders and earnings, and to become a globally recognized engineering group with worldleading EPC capabilities.



Takato Nishizawa Head of Engineering Headquarters

On January 1, 2012, the MHI Group established a new "Engineering Headquarters" comprehensively responsible for all of the Company's EPC (engineering, procurement and construction) operations by integrating related activities formerly undertaken separately by various business headquarters within the Group. The new head-quarters was established to accomplish three aims: to further strengthen the MHI Group's accumulated EPC technology and know-how through integration; to respond swiftly to business opportunities involving large-scale infrastructure projects, which are on the rise in overseas markets; and to boost profits from EPC operations while providing support for business expansion of core products. The new business unit will also function as a headquarters overseeing the Group's solutions business, including smart community-related matters.

Today numerous projects are planned particularly in emerging economies overseas, among them power generation plants (including thermal and nuclear), environment-related and chemical plants, and large-scale infrastructure projects, such as high-speed railways and water-related projects. While business opportunities involving such projects have increased significantly, so too has market competition. In addition to powerful American and European competitors, Chinese and Korean companies that have rapidly strengthened their competitiveness have also newly entered these markets. Under these circumstances, MHI found it necessary to further bolster its competitiveness in EPC operations, altering its business structure in a way that would enable the Group to attract orders for large-scale projects through enhanced synergies with the strengths of its core products, thereby realizing increased profits from EPC business.

The MHI Group is able to differentiate itself by applying core product technical capabilities unique to manufacturers to its engineering efforts. When implementing projects and in material procurement, the Group also enjoys synergies by leveraging a unified organization and economies of scale. Together, these qualities translate into advantages for the MHI Group.

Until now MHI has focused primarily on attracting orders for large-scale infrastructure projects in emerging economies. The establishment of this new organization has now integrated EPC units once spread across multiple business segments. Coupled with a drive to comprehensively tackle the EPC and solutions businesses, the MHI Group now looks to further strengthen and expand related business.



# FOUNDATION FOR SUSTAINABILITY

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# BOARD OF DIRECTORS AND STATUTORY AUDITORS

(As of July 1, 2012)

# Directors

# Chairman of the Board



#### Kazuo Tsukuda

- Apr. 1968 Joined Mitsubishi Heavy Industries, Ltd. Jun. 1999 Member of the Board, Head of Nagoya Machinery Works
- Apr. 2000 Member of the Board, Senior General Manager, Industrial Machinery Division
- Apr. 2002 Member of the Board (Managing Director), Head of Global Strategic Planning & Operations Headquarters. Senior General Manager, Industrial Machinery Division
- Oct. 2002 Member of the Board (Managing Director), Head of Global Strategic Planning & Operations Headquarters Jun. 2003 Member of the Board, President
- and CEO Apr. 2008 Chairman of the Board

### **Executive Vice Presidents**



Hisashi Hara

- Head of Shipbuilding & Ocean Development
- Apr. 1973 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2006 Senior Vice President, Head of Shimonoseki Shipyard & Machinery
- Works
- Apr. 2009 Senior Vice President, Deputy Head of Shipbuilding & Ocean Development Headquarters Apr. 2010 Executive Vice President, Head of
- Shipbuilding & Ocean Development Headquarters
- Jun. 2010 Member of the Board, Executive Vice President, Head of Shipbuilding & Ocean Development Headquarters



President and CEO

Hideaki Omiva

- Jun. 1969 Joined Mitsubishi Heavy Industries, Ltd. Jun. 2002 Member of the Board, Deputy Head of Air-Conditioning & Refrigeration
- Air-Conditioning a Heingeration Systems Headquarters Apr. 2003 Member of the Board, Head of Air-Conditioning & Refrigeration Systems Headquarters Jun. 2005 Member of the Board, Executive Vice
  - President, Head of Air-Conditioning & Refrigeration Systems Headquarters
- Apr. 2007 Member of the Board, Senior Executive Vice President Apr. 2008 Member of the Board, President
- and CEO



Senior Executive Vice Presidents

Shunichi Miyanaga Assistant to President, Head of the Presidential Administration Office

Apr. 1972 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2006 Senior Vice President, Deputy Head of Machinery Headquarters May 2006 Senior Vice President, Deputy Head of

- Machinery & Steel Structures Headquarters
- Apr. 2008 Executive Vice President, Head of Machinery & Steel Structures
- Headquarters Jun. 2008 Member of the Board, Executive Vice President, Head of Machinery & Steel Structures Headquarters
- Apr. 2011 Member of the Board, Senior Executive Vice President, Head of the Presidential Administration Office



Assistant to President, Head of Technology & Innovation Headquarters

- Apr. 1974 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2007 Senior Vice President, Deputy Head of Power Systems Headquarters Apr. 2008 Executive Vice President, Head of
- Power Systems Headquarters Jun. 2008 Member of the Board, Executive Vice
  - President, Head of Power Systems Headquarters
- Apr. 2011 Member of the Board, Senior Executive Vice President, Head of Technology & Innovation Headquarters



In charge of General Affairs, Legal and Personnel

- Apr. 1973 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2008 Senior Vice President, Senior General Manager, Corporate Planning
- Department of the Presidentia Administration Office Apr. 2009 Senior Vice President, Deputy Head of
- the Presidential Administration Office Jun. 2009 Member of the Board, Senior Vice President, Deputy Head of the Presidential Administration Office
- Apr. 2010 Member of the Board, Senior Vice President, Deputy Head of Machinery
- & Steel Structures Headquarters Apr. 2011 Member of the Board, Executive Vice President



- Apr. 1976 Joined Mitsubishi Heavy Industries, Ltd. General Machinery & Special Vehicle
- Jun. 2009 Member of the Board, Senior Vice President, Head of General Machinery
- & Special Vehicle Headquarters Apr. 2011 Member of the Board, Executive Vice



- Manager, Environment & Chemical Plant Division, Machinery & Steel Structures Headquarters Apr. 2010 Senior Vice President, Deputy Head of
- Apr. 2010 Serial West Resident, Deputy head of Machinery & Steel Structures Headquarters Apr. 2011 Executive Vice President Jun. 2011 Member of the Board, Executive Vice
- President Jan. 2012 Member of the Board, Executive Vice
- President, Head of Engineering Headquarters



#### Takashi Kobayashi Head of Aerospace Systems

- Apr. 1976 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2008 Senior Vice President, Head of Nagoya Guidance & Propulsion Systems Works Apr. 2010 Senior Vice President, Deputy Head of Aerospace Headquarters Apr. 2011 Executive Vice President, Head of
- Aerospace Systems Jun. 2011 Member of the Board, Executive Vice
- President, Head of Aerospace Systems



Masafumi Wani lead of Power Systems

- Apr. 1975 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2007 Senior Vice President, Head of
- Nagasaki Shipyard & Machinery Works Dec. 2008 Senior Vice President, Deputy Head of
- Power Systems Headquarters Apr. 2011 Executive Vice President, Head of
- Power Systems Jun. 2011 Member of the Board, Executive Vice

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President, Head of Power Systems



- Apr. 1976 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2007 Senior Vice President, Head of
- Takasago Machinery Works Dec. 2008 Senior Vice President, Deputy Head of
- Power Systems Headquarters, Head of Takasago Machinery Works Apr. 2010 Senior Vice President, Deputy Head of Power Systems Headquarters
- Apr. 2011 Executive Vice President, Head of General Machinery & Special Vehicles,
- Head of Sagamihara Machinery Works Jun. 2011 Member of the Board, Executive Vice President, Head of General Machinery
  - & Special Vehicles, Head of Sagamihara Machinery Works

- Apr. 2009 Senior Vice President, Head of
- Headquarters
- Jul. 2012 Member of the Board, Executive Vice President, Head of Machinery & Steel Infrastructure Systems







- President, Head of Global Strategic Planning & Operations Headquarters

Shigero Masamori

Head of Nuclear Energy Systems

Systems

Apr. 1974 Joined Mitsubishi Heavy Industries, Ltd.

Apr. 2008 Senior Vice President, Head of Kobe Shipyard & Machinery Works

Jun. 2011 Member of the Board, Executive Vice President, Head of Nuclear Energy

Apr. 2011 Executive Vice President, Head of Nuclear Energy Systems





#### Takato Nishizawa Head of Engineering Headquarters

# **Executive Vice Presidents**



Yoichi Kujirai

In charge of continercial Airplaties				
Apr. 1978	Joined Mitsubishi Heavy Industries, Ltd.			
Apr. 2010	Senior Vice President, Senior General			
	Manager, Industrial & Machinery			
	Business, Technology & Solutions			
	Division of Machinery & Steel			
	Structures Headquarters			
Apr. 2011	Senior Vice President, Head of			

- Machinery & Steel Infrastructure Systems Jun. 2011 Member of the Board. Senior Vice
- President, Head of Machinery & Steel Infrastructure Systems Apr. 2012 Member of the Board, Executive Vice
- President, Head of Machinery & Steel Infrastructure Systems Jul. 2012 Member of the Board, Executive Vice
- President

# **Outside Directors**



Yoshihiro Sakamoto Former Vice-Minister for International Affairs of the Ministry of International Trade and Industry Apr. 1962 Joined the Ministry of International Trade and Industry Jun. 1991 Director-General, Basic Industries Bureau of the Ministry of International Trade and Industry Jun. 1992 Director-General, Machinery and Information Industries Bureau of the above Jun. 1993 Director-General, International Trade Policy Bureau of the above Dec. 1994 Vice-Minister for International Affairs of the above Aug. 1996 Retired as Vice-Minister for International Affairs of the above Oct. 1998 Chairman & CEO of The Institute of Energy Economics, Japan Jun. 2003 Representing Director and President of Arabian Oil Company, Ltd. Or Arabian Oil Company, Luc.
 Jun. 2004 Representing Director and President of AOC Holdings, Inc.
 Apr. 2006 Retired as Representing Director and President of AOC Holdings, Inc.

- Retired as Representing Director and President of Arabian Oil Company, Ltd. Apr. 2007 Advisor of Mitsubishi Heavy
- Industries, Ltd. Jun. 2007 Member of the Board

Tatsuhiko Noiima In charge of Accounting, Finance, Procurement Planning & Administration and Procurement & Sourcing

- Apr. 1976 Joined Mitsubishi Heavy Industries, Ltd.
- Apr. 1976 Joined Mitsubishi Heavy Industries, Lid May 2007 Deputy Head of Shimonoseki Shipyard & Machinery Works Apr. 2011 Senior Vice President, Senior General Manager, Accounting Department
- Apr. 2012 Executive Vice President Jun. 2012 Member of the Board, Executive Vice President

# Senior Vice Presidents



Masahiko Arihara Head of Air-Conditioning & Refrigeration Systems, Head of Nagoya Air-Conditioning & Refrigeration Machinery Works Apr. 1975 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2009 Senior Vice President, Head of Air-Conditioning & Refrigeration Apr. 2011 Senior Vice President, Head of Air-Conditioning & Refrigeration Systems, Head of Nagoya Air-Conditioning & Refrigeration Machinery Works Jun. 2011 Member of the Board, Senior Vice President, Head of Air-Conditioning & Refrigeration Systems, Head of Nagoya Air-Conditioning & Refrigeration Machinery Works



Hisakazu Mizutani Senior General Manager, Management Audit Department

- Apr. 1975 Joined Mitsubishi Heavy Industries, Ltd. Apr. 2010 Senior Vice President, Deputy Head of
- Aerospace Headquarters Apr. 2011 Senior Vice President, Senior General Manager, Management Audit Department
- Jun. 2011 Member of the Board, Senior Vice President, Senior General Manager, Management Audit Department



Yorihiko Kojima Chairman of the Board of Mitsubishi Corporation May 1965 Joined Mitsubishi Corporation Jun. 1995 Director Apr. 1995 Director Apr. 1997 Managing Director Apr. 2001 Executive Vice President, Director Jun. 2001 Member of the Board, Senior Executive Vice President Apr. 2004 Member of the Board, President Jun. 2010 Chairman of the Board Held also the post of Member of the Board, Mitsubishi Heavy Industries, Ltd.



#### Christina Ahmadjian

Professor of Hitotsubashi University Graduate School of Commerce and Management					
Jan. 1995	Assistant Professor, Columbia				
	University, Graduate School of Business				
Oct. 2001	Associate Professor, Hitotsubashi				
	University, Graduate School of				
	International Corporate Strategy				
Jan. 2004	Professor, Hitotsubashi University,				
	Graduate School of International				
	Corporate Strategy				
Apr. 2010	Dean, Hitotsubashi University,				
	Graduate School of International				
	Corporate Strategy				
Apr. 2012	Professor, Hitotsubashi University,				
	Graduate School of Commerce and				
	Management				
Jun. 2012	Held also the post of Member of the				
	Board, Mitsubishi Heavy Industries, Ltd.				

# **Statutory Auditors**

#### Toshiro Yagami

Kichisaburo Nomura Corporate Advisor of All Nippon Airways Co., Ltd. Nobuo Kuroyanagi Senior Advisor of The Bank of Tokyo-Mitsubishi UFJ, Ltd.

Eiji Isu

Haruya Uehara Senior Advisor of Mitsubishi UFJ Trust and Banking Corporation

# **CORPORATE GOVERNANCE**

# **Fundamental Policy**

Committed to the ethos of customer first, MHI conducts its business activities as a responsible corporate citizen based on consideration for all stakeholders.

MHI is implementing a number of initiatives to enhance management efficiency and strengthen compliance, including reforming the management system to allow faster, more effective decision-making in response to radical changes in the economic environment, and promoting fair and sound management. MHI is also working to make management more transparent by disclosing information rapidly and accurately to shareholders and other external stakeholders.

# **Corporate Governance Initiatives**

### Corporate Governance Framework

MHI is a company with a Board of Statutory Auditors. The Board of Directors makes important management decisions and oversees the execution of business operations. Statutory auditors oversee the execution of director duties by attending meetings of the Board of Directors and other key meetings.

As of June 21, 2012, of the Company's 19 directors, 3 are from outside MHI. Through receiving valuable opinions and frank comments from outside directors concerning the management of the Company, MHI works to strengthen the management oversight functions. Additionally, MHI has established an Executive Committee to provide a forum for discussing important matters related to business execution. This allows for a more cohesive approach to discussion as part of the operational execution framework centered on the President, and consequently leads to more appropriate management decisions and business execution.

MHI overhauled its corporate governance framework in June 2005 to improve the soundness and transparency of management and increase efficiency and flexibility and it now implements this corporate governance framework. The main components of this reform included streamlining the Board of Directors while increasing the number of outside directors, shortening the terms of directors, and introducing an executive officer system. These modifications were aimed at enhancing the oversight functions of the Board of Directors and clearly delineating the roles and responsibilities of directors and executive officers. Directors are responsible for general oversight of the Company's operations and making important business decisions, while executive officers are responsible for the dayto-day business and affairs of the Company.

### **Internal Audits**

The Company has established a 30-member Management Audit Department, which conducts internal audits and evaluation of internal control related to financial reports to check the effectiveness of internal control systems.

As part of internal audits, each fiscal year the Management Audit Department formulates an internal audit policy, and the Management Audit Department, or the internal audit departments at each business site, conducts audits. The Management Audit Department also regularly receives reports from the internal control department concerning the status of compliance.

Concerning the internal control reporting system related to financial reports, the Company takes actions appropriately and, abiding by the Financial Instruments and Exchange Act, and as of March 31, 2012, the Company had obtained an evaluation result that the internal controls related to the Company's financial reports were effective.

#### **Statutory Auditors**

The Company's Board of Statutory Auditors has five members, three of whom are outside appointments. In accordance with the auditing policy and auditing plan determined by the Board of Statutory Auditors, statutory auditors attend meetings of the Board of Directors, the Executive Committee and other key meetings related to business planning, enabling them to accurately assess the status of management in a timely manner. As part of the audit, statutory auditors make sure the execution of director duties complies with laws and regulations and the Articles of Incorporation and ascertain whether or not business operations of the Company are being executed appropriately by conducting spot checks and verifying compliance with relevant laws and regulations, and by monitoring the status of establishment and operation of internal control systems including those in relation to financial reporting. In addition to regularly exchanging information and opinions with the Management Audit Department and accounting auditors, statutory auditors also work in close collaboration in other ways, including receiving audit results and being present for the auditing performed by the accounting auditors. The statutory auditors also regularly receive reports from the internal control department concerning the status of compliance, risk management and other activities. As a support to the statutory auditors, the Company has established a Statutory Auditors' Office with a dedicated six-member staff, which assists the statutory auditors in performing their duties more smoothly.

# **Accounting Audits**

MHI's accounting auditor is Ernst & Young ShinNihon LLC. Three of the firm's certified public accountants (designated and engagement partners) audit the Company's financial statements: Masayuki Ueda, Ichiro Ishii and Yoshiaki Morita. None of these individuals have been continually auditing the Company's financial statements for longer than seven years.

In addition to the above, the auditing team includes 16 other certified public accountants and 22 assistant accountants.

The accounting auditor regularly exchanges opinions with designated directors concerning initiatives and other matters related to corporate governance and compliance.

# **Outside Directors and Outside Statutory Auditors**

For the purpose of receiving advice and oversight of the Company's management from an objective standpoint not biased by an internal company perspective and based on abundant experience and broad knowledge as a corporate manager, government official or academic expert, three of the 19 directors elected (Mr. Yoshihiro Sakamoto, Mr. Yorihiko Kojima and Ms. Christina Ahmadjian) and three of the five statutory auditors elected (Mr. Kichisaburo Nomura, Mr. Nobuo Kuroyanagi



# Corporate Governance Structure (including internal control system) (as of April 1, 2012)

The "Report Concerning Corporate Governance" (Japanese only) submitted by MHI to the Tokyo Stock Exchange is available for viewing on the MHI corporate website.

and Mr. Haruya Uehara) are from outside the Company.

The Company judges all of these outside directors and outside statutory auditors to be independent from its management team on the basis that there are no circumstances that compromise independence from the Company. Specifically, there are no personal relationships, capital relationships, trading relationships or other special interests between the individuals and the Company. In addition, there are no circumstances that compromise independence of these individuals from the Company as there are no personal relationships, capital relationships or significant trading relationships between companies to which these individuals currently belong or were employed with or belonged to. As a result, the Company has reported to the Tokyo Stock Exchange and other bourses that these individuals are independent officers.

Mr. Yoshihiro Sakamoto was nominated for the position of outside director since he will provide beneficial views and candid assessments on the management of MHI based on his extensive knowledge regarding industrial policies and corporate management gained through his experience as a government administrator and business manager; as such, he is expected to contribute to the improvement of sound and transparent decision-making processes at MHI.

Mr. Yorihiko Kojima was nominated for the position of outside director since he will provide beneficial views and candid assessments on the management of MHI based on his extensive experience as a business manager; as such, he is expected to contribute to the improvement of sound and transparent decision-making processes at MHI.

In addition, the Company and Mitsubishi Corporation, where Mr. Kojima is chairman, have relationships through outside directors. Specifically, Mitsubishi Corporation appointed MHI's chairman, Mr. Kazuo Tsukuda, as an outside director in 2008. In 2010, MHI appointed Mr. Kojima as an outside director. Both individuals still serve in those positions.

The Company has trading relationships with Mitsubishi Corporation, notably through sales of machinery and components and purchases of raw materials. Such trading volumes are minimal for both parties, however, so the Company deems that there are no impediments to Mr. Kojima making decisions on behalf of shareholders as an independent officer. Ms. Christina Ahmadjian was nominated for the position of outside director since she has extensive knowledge as a researcher in the field of corporate governance and management. Based on this, she is expected to contribute to the improvement of sound and transparent decision-making processes at MHI by providing beneficial views and candid assessments from a global perspective on the management of MHI.

Mr. Kichisaburo Nomura was appointed as an outside statutory auditor in light of his beneficial views and candid assessments on the management of MHI based on his extensive experience as a business manager and MHI's desire that he contribute to ensuring the Company's sound and appropriate management.

The Company has a trading relationship, including for sales of machinery and components, with All Nippon Airways Co., Ltd., for which Mr. Nomura is a corporate advisor. Such trading volumes are minimal for both parties, however, so the Company deems that there are no impediments to Mr. Nomura making decisions on behalf of shareholders as an independent officer.

Mr. Nobuo Kuroyanagi was appointed as an outside statutory auditor in light of his beneficial views and candid assessments on the management of MHI based on his extensive experience as a business manager and MHI's desire that he contribute to ensuring the Company's sound and appropriate management.

The Company has a trading relationship, including through loans, with The Bank of Tokyo-Mitsubishi UFJ, Ltd., for which Mr. Kuroyanagi is a senior advisor. That bank, however, is only one of several major lenders for the Company, and would not significantly affect the Company's decision-making. As of the end of fiscal 2011, that bank accounted for about 22% of the Company's outstanding consolidated borrowings.

Mr. Haruya Uehara was appointed as an outside statutory auditor in light of his beneficial views and candid assessments on the management of MHI based on his extensive experience as a business manager and MHI's desire that he contribute to ensuring the Company's sound and appropriate management.

The Company has a trading relationship, including through loans, with Mitsubishi UFJ Trust and Banking Corporation, for which Mr. Uehara is a senior advisor. That bank, however, is

only one of several major lenders for the Company, and would not significantly affect the Company's decision-making. As of the end of fiscal 2011, that bank accounted for about 12% of the Company's outstanding consolidated borrowings.

All the outside directors and outside statutory auditors are independent from management and they supervise or audit management. In addition, at meetings of the Board of Directors, they receive reports of the status of establishment and operation of internal control systems including compliance, risk management and other activities; and the results of internal audits, and they state their opinions when appropriate. In particular, the outside statutory auditors shall regularly

exchange opinions with directors while conducting effective auditing through collaboration with the full-time statutory auditors, the internal audit department and the accounting auditor. In this way, the Company strives to ensure soundness and appropriateness of management.

In accordance with Article 423, Paragraph 1 of the Companies Act, the Company has entered into liability limitation agreements with each of its outside directors and outside statutory auditors, which provide a limitation on their liabilities to compensate for damages, the amount of which is the higher of ¥10 million or the minimum liability amount specified in Article 425, Paragraph 1 of the Companies Act.

# Attendance at Meetings of the Board of Directors and Board of Statutory Auditors

Category	Name	No. of Board of Directors meetings attended	No. of Board of Auditors meetings attended
Directors	Yoshihiro Sakamoto	14 of 14	—
	Yorihiko Kojima	12 of 14	—
Statutory Auditors	Kichisaburo Nomura	13 of 14	16 of 16
	Nobuo Kuroyanagi	10 of 14	14 of 16
	Haruya Uehara	8 of 10	8 of 10

Statutory auditor Haruya Uehara was elected on June 23, 2011 (date of the 86th Ordinary General Meeting of Shareholders). For this reason, the maximum number of meetings of the Board of Directors and Board of Statutory Auditors differs from that of other officers.

# Director and Statutory Auditor Compensation

		Amounts of Com	Amounts of Compensation by Category (In millions of yen)			
Position	No. of Recipients	Base Compensation	Performance-Linked Compensation	Stock Options	Compensation (In millions of yen)	
Directors (Excluding Outside Directors)	23	707	285	217	1,210	
Statutory Auditors (Excluding Outside Statutory Auditors)	3	70	22	_	93	
Outside Directors and Statutory Auditors	7	80	_	_	80	

Notes 1. The recipients in the table include seven directors and two statutory auditors who retired during the fiscal year under review. Seven are stated under the classification "Directors" (Excluding Outside Directors)" and one is stated under "Statutory Auditors (Excluding Outside Statutory Auditors)," with the remaining officer stated under "Outside Officers."

2. Amounts stated in performance-linked compensation include the difference between the amounts disclosed as compensation in the previous fiscal year (the estimated compensation) and the actual amounts paid.

3. Amounts stated as stock options include the cost associated with the accounting of stock acquisition rights issued in a so-called stock-linked compensation scheme.

4. The maximum permitted financial compensation amounts including both base and performance-linked compensations are ¥1,200 million per fiscal year for directors and ¥160 million per fiscal year for statutory auditors (resolution of the 81st Ordinary General Meeting of Shareholders on June 28, 2006). 5. The maximum permitted total issuance price for stock acquisition rights related to stock-linked stock options is ¥300 million per fiscal year for directors excluding outside directors

(resolution of the 82nd Ordinary General Meeting of Shareholders on June 27, 2007).

6. The retirement allowance program has been abolished effective the conclusion of the 81st Ordinary General Meeting of Shareholders on June 28, 2006. 7. The amount stated in "Directors (Excluding Outside Directors)" includes compensation paid to director Kazuo Tsukuda and director Hideaki Omiya of ¥143 million (base compensation

of ¥84 million, performance-linked compensation of ¥33 million, and stock options of ¥26 million) each. Note that there is no compensation, etc., paid to the two individuals as directors of major consolidated subsidiaries.

# Auditing Certified Public Accountant Compensation

	Fiscal Ye	ear 2010	Fiscal Year 2011		
Category	Audit Attestation Duty-BasedNon-Audit-BasedCompensationCompensation		Audit Attestation Duty-Based Compensation	Non-Audit-Based Compensation	
MHI	185	33	185	77	
Consolidated Subsidiaries	114	_	108	-	
Total	300	33	294	77	

Note 1. In fiscal 2010, the Company's overseas subsidiaries delegated audit attestation duties to the Ernst & Young Group, which belongs to the same network as the Company's accounting auditor, paying Y400 million for fiscal 2010 audit attestation duty-based compensation and non-audit-based compensation. In fiscal 2011, the Company's overseas subsidiaries delegated audit attestation duties to the Ernst & Young Group, which belongs to the same network as the Company's accounting

auditor, paying ¥431 million for fiscal 2011 audit attestation duty-based compensation and non-audit-based compensation.

(In millions of ven)

# Initiatives for Revitalizing the General Meeting of Shareholders and Making It Easier to Exercise Voting Rights

1. Sending out notices of general meetings of shareholders earlier

The Company sends out these notices three weeks before meeting dates, which is earlier than the statutory deadline.

- Providing a copy of the notice in English (summary version) Since the June 1999 General Meeting of Shareholders, the Company has produced and sent a notice in English (summary version).
- 3. Exercising voting rights online

Since the June 2004 General Meeting of Shareholders, the Company has enabled shareholders to vote online. Since the June 2007 General Meeting of Shareholders, we have maintained an online voting platform for institutional investors.

4. Website postings of information on shareholders' meetings The Company posts notices of meetings and decisions from those meetings on our website. We also disclose videos of those meetings.

# **Business Continuity Plan (BCP)**

# **Basic Policies**

The basic policies guiding the Company's business continuity plan (BCP) are as follows:

- 1. Top priority is to ensure human safety
  - The Company's top priority is to ensure the safety of employees, families, customers, business partners, and other people.
- 2. Ensure community safety

The Company prevents secondary disasters and other accidents, including spills of pollutants. We adhere strictly to rules to minimize industry and social impacts and endeavor to exist harmoniously with communities.

3. Swift business recovery

Through rapid startup of projects that help with urban infrastructure recovery or in maintaining defense, we will minimize the adverse impact of suspended operations and reputation risks on business.

We aim to recover crucial head office operations within two weeks, and will deploy key elements and resources to meet that target.

## Framework

Based on our standards for producing and managing guidelines for earthquake-related business continuity plans (BCPs), we are promoting the formulation of BCPs to cope specifically with major earthquakes at all business sites.

Our BCPs determine basic conduct for scenarios, and flexible decision-making and actions are necessary for events beyond the scope of assumptions. We will ensure that our programs are effective by providing ongoing education and training to employees.

The general manager of the Presidential Administration Office heads the BCP Headquarters at head office. To enhance its capacity to bolster business recovery efforts, the BCP Headquarters comprises the Recovery Promotion, Business Continuity, and IT Telecommunications groups.

# **BCP Headquarters Framework**



# Compliance

# Establishing the Compliance Section to Strengthen Our Ability to Respond to Crises

At MHI, enhanced systems and increased numbers of personnel are required so that we can further focus our attention on activities to prevent compliance violations, and also to respond promptly to letters we receive. In addition, reliable responses to the risks that surround MHI—such as the growing risk of cyber attacks through unauthorized network access—are becoming an increasingly important management issue. To that end, the Compliance Section was established inside the General Affairs Department on April 1, 2012.

# Placing Persons Responsible for Compliance in All Departments and Group Companies

MHI's Compliance Committee was established in May 2001 to strictly observe applicable laws and social norms, and to promote fair and honest business practices. This committee is chaired by the director in charge of compliance, and its members consist of (1) senior general managers from relevant departments at the Head Office, (1) senior general managers, deputy heads of all works, and (2) directors/general managers from all Planning & Administration Departments at (3) business segments. The committee meets twice annually to draw up Company-wide compliance promotion plans, confirm progress, and engage in other activities.

In April 2006, Departmental Compliance Committees were established in all departments of the Company in order to strengthen compliance measures for each respective department. These committees are chaired by the department's respective member of the Compliance Committee. At the same time, Compliance Liaison Conferences were set up for regularly exchanging compliance information with Group companies. Through these two types of organizations, each department works to consistently implement its own compliance and to act independently and responsibly in carrying out compliance activities.

Based on the results of compliance awareness surveys and the participation rate for compliance promotion training sessions, in fiscal 2011 it was confirmed that compliance activities have become widespread and employee awareness of compliance has risen. It was also confirmed that appropriate measures are being taken, such as the inclusion of relevant themes in training sessions for issues that need improvement.

# Compliance Promotion System (as of April 1, 2012)



For more detailed information, please refer to the compliance page of MHI's corporate website.

http://www.mhi.co.jp/en/csr/compliance/index.html

# CORPORATE SOCIAL RESPONSIBILITY

# **MHI Group CSR Action Guidelines**

(formulated July 2007)

In order to ensure a secure future for the Earth, we will establish and maintain:

# Close ties with the Earth

Safeguard an abundantly green Earth through environmental technologies and environmental awareness;

# Close ties with Society

Build a relationship of trust with society through proactive participation in society and trustworthy actions;

# A bridge to the next Generation

Contribute to the cultivation of human resources who can shoulder responsibility in the next generation through technologies that can realize dreams.

# Carrying out CSR through manufacturing that contributes to society

The MHI Group adheres to our Creed in fulfilling its obligation to be an innovative partner to society. We strive as a manufacturer to supply the world with energy and environmental protection equipment, as well as products and technologies that support the social infrastructure, thereby helping resolve global issues.

MHI believes the basis of corporate social responsibility (CSR) is to engage in business activities that take its diverse range of stakeholders into consideration and return the profit we have obtained to all stakeholders in an optimum fashion while at the same time providing excellent technologies and products to realize a certain future for people and the Earth.

# Formulating the MHI Environmental Vision 2030

We set targets for 2030 based on our recognition of the need to achieve the "3Es"—energy security, environmental protection, and economic growth—simultaneously to realize a sustainable future. Through this vision, we have articulated our pledges in the various aspects of our energy and environmental technologies and business fields. These are to make, store, distribute, and use power, and explore new resources. The vision lists 17 specific objectives that we categorized according to their applications on land, at sea, in the air, or in space.



# **Undertaking ISO 26000-Focused Initiatives**

The MHI Group has broadened its CSR program from the domestic front to the global stage. From fiscal 2011, we began according priority to ISO 26000, which provides international guidelines on the social responsibilities of organizations. In fiscal 2011, we engaged in dialogue with experts who could be help-ful with certain important initiatives while contributing to communities, providing ongoing assistance to disaster-hit areas, and otherwise involving ourselves with communities. We will continue to draw on ISO 26000 in soliciting stakeholder participation as we identify important initiatives for the entire value chain and pursue CSR management based on global standards.

For more detailed information, please refer to the CSR Report page of MHI's corporate website. http://www.mhi.co.jp/en/csr/csrreport/index.html

# <u>CSR TOPICS</u>

# Close Ties with the Earth

# Contributing to China's pursuit of an energy shift Provision of high-efficiency gas turbines and technologies

Together with Dongfang Turbine Co., Ltd., a partner to which we transferred our large-scale gas turbine manufacturing technology, we delivered a gas turbine combined cycle power plant to supply electricity and heat in Beijing, China's fast-growing capital.

MHI proposed the city adopt a combined-cycle power generation system adaptable to the seasons. In winter, steam generated from the high-temperature waste heat from gas turbines can serve as the primary heating source, and in other seasons the same steam can be utilized to generate electricity. This dual system has enabled a suitable supply of heat and electricity according to demand. In addition, the adoption of the very latest gas turbine, MHI's M701F4, raises generation efficiency by approximately 2% relative to the previous system. Moreover, as the amount of required fuel is reduced, the new system can be expected to lower CO<sub>2</sub> emissions by 35,000 tons, compared to a previous annual emissions volume of roughly 1.6 million tons.



# **Close Ties with Society**

# Helping resolve the world's food problems through construction of fertilizer plants

Harnessing the world's foremost chemical process technologies, MHI to date has constructed and delivered 41 nitrogen fertilizer plants to natural-gas-producing regions worldwide, including Asia, Russia and the Middle East. Other related developments in fiscal 2011 include the receipt of an order in October from a state-owned oil corporation in Malaysia for a large-scale fertilizer plant. Also, in November the MHI, together with three other Japanese firms, concluded a frontend engineering design (FEED) agreement for a fertilizer plant to be built in the Republic of Angola. The agreement covers areas such as basic design, preparation of engineering documents and contracts, and site surveys. Global demand for fertilizer is expected to rise with ongoing population growth. MHI will continue to build its fertilizer plant business around the world and help resolve food problems.



# A Bridge to the Next Generation

# The MHI Group offers science education across Japan utilizing the characteristics of its respective businesses

MHI believes that nurturing personnel who can contribute to global society through science and technology is one of the social responsibilities of a manufacturing company. To this end, the Group's works nationwide have sought to communicate the joys of science and technology to children, using science classes and the study of manufacturing to support an increased interest in manufacturing among the next generation. In fiscal 2011, we held a total of 54 science and manufacturing classes at schools located near our various works for nearly 2,700 students, utilizing our products and technologies. These classes provide the opportunity to learn how interesting science can be, and to interact with the manufacturing process.



# **ENVIRONMENTAL ACTIVITIES**

MHI deploys environmental preservation activities throughout the product lifecycle, from development and design to procurement of raw materials, production, on-site installation and final disposal. MHI is working to alleviate the increasing environmental burdens across the globe by providing environmentally friendly products and technologies in diverse fields.

# **Environmental Management**

MHI has in place an environmental management system that covers the entire group and promotes group-wide, consolidated environmental management efforts. MHI established the Environmental Committee, chaired by the director in charge of the environment, to plan and propose annual environmental actions for the entire company. Decisions are conveyed to the entire company and all group companies. Environmental Committees established at each works promote policies and conduct environmental management corresponding to the specific features of each works.

# Environmental Management Structure (as of April 1, 2012)



# Measures Against Global Warming

The MHI Group is working to reduce CO<sub>2</sub> emissions based on medium-term environmental targets set for the entire company. We are aiming for further emission cuts through the introduction of energy-saving devices and use of renewable energy.

# Promotion of Energy-Saving and CO<sub>2</sub> Emission Control Measures

Consuming One Million Kilowatt-Hours Annually of Green Energy from Wind Power Generation

MHI contracted with Japan Natural Energy Company Limited to purchase one million kilowatt-hours of windgenerated power annually over 15 years from April 2002. In fiscal 2011, MHI used 500,000 kilowatt-hours of this power at its Head Office and 504,000 kilowatt-hours at the Mitsubishi Minatomirai Industrial Museum.



The Certificate of Green Power

# Conserving Resources, Managing Waste, and Protecting Water Resources

In addition to further reducing and properly managing waste, to protect water resources we have set a target to lower the water consumption during production from fiscal 2011.

# **Protecting Water Resources**

# Reducing Water Consumption During Production

In fiscal 2010, MHI decided to cut its annual water consumption to 9,350,000 metric tons by fiscal 2012, a decline of 2% from the average of 9,540,000 metric tons per year for fiscal 2005 through 2007. Reduction efforts at each works enabled MHI to lower the water consumption by 24.3%, to 7,220,000 metric tons in fiscal 2011.

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# SEGMENT INFORMATION

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries Years ended March 31, 2012 and 2011

	Net Sales			Operating Income (Loss)		
	In millio	In the In millions of yen U.S.		In millions of yen		In thousands of U.S. dollars
INDUSTRY SEGMENT	2012	2011	2012	2012	2011	2012
Shipbuilding & Ocean Development	¥ 311,678	¥ 302,439	\$ 3,792,164	¥ (7,733)	¥ 1,826	\$ (94,086)
Power Systems	955,348	996,963	11,623,652	85,675	83,021	1,042,401
Machinery & Steel Infrastructure Systems	428,839	557,515	5,217,654	26,369	27,070	320,829
Aerospace Systems	495,991	472,268	6,034,687	(10,932)	(3,411)	(133,008)
General Machinery & Special Vehicles	381,717	343,079	4,644,324	3,599	(16,681)	43,788
Others	294,477	282,738	3,582,881	14,981	9,394	182,272
Subtotal	2,868,052	2,955,004	34,895,388	111,961	101,219	1,362,221
Eliminations	(47,120)	(51,233)	(573,305)	-	-	-
Total	¥2,820,932	¥2,903,770	\$34,322,082	¥111,961	¥101,219	\$1,362,221

	Total Assets			Capital Expenditures		
	In millions of yen		In thousands of U.S. dollars	In millions of yen		In thousands of U.S. dollars
INDUSTRY SEGMENT	2012	2011	2012	2012	2011	2012
Shipbuilding & Ocean Development	¥ 175,062	¥ 225,528	\$ 2,129,967	¥ 7,812	¥ 9,806	\$ 95,048
Power Systems	1,108,279	1,046,926	13,484,353	39,850	50,718	484,852
Machinery & Steel Infrastructure Systems	621,585	610,253	7,562,781	9,448	12,717	114,953
Aerospace Systems	875,702	910,892	10,654,605	33,537	21,518	408,042
General Machinery & Special Vehicles	353,636	367,095	4,302,664	10,892	16,307	132,522
Others	632,063	618,863	7,690,266	12,578	10,555	153,035
Subtotal	3,766,329	3,779,560	45,824,662	114,119	121,624	1,388,477
Eliminations or Corporate	197,658	209,440	2,404,891	6,636	5,059	80,739
Total	¥3,963,987	¥3,989,001	\$48,229,553	¥120,755	¥126,683	\$1,469,217

	Depreciation and Amortization*			Amortization of Goodwill		
	In millior	ns of yen	In thousands of U.S. dollars	In millions of yen		In thousands of U.S. dollars
INDUSTRY SEGMENT	2012	2011	2012	2012	2011	2012
Shipbuilding & Ocean Development	¥ 9,728	¥ 10,084	\$ 118,359	¥ –	¥ –	\$ -
Power Systems	40,618	43,214	494,196	477	268	5,803
Machinery & Steel Infrastructure Systems	14,060	15,572	171,067	31	78	377
Aerospace Systems	29,995	32,665	364,947	-	-	-
General Machinery & Special Vehicles	15,449	16,602	187,966	1,755	1,871	21,352
Others	14,111	14,019	171,687	48	48	584
Subtotal	123,964	132,159	1,508,261	2,313	2,266	28,142
Corporate	-	-	-	-	-	-
Total	¥123,964	¥132,159	\$1,508,261	¥2,313	¥2,266	\$28,142

\* Amortization of goodwill is not included.

	Net Sales			
BREAKDOWN OF SALES	In millio	ns of yen	In thousands of U.S. dollars	
BY CUSTOMER LOCATION	2012	2011	2012	
Japan	¥1,639,903	¥1,480,579	\$19,952,585	
U.S.A	265,533	304,766	3,230,721	
Asia	381,858	373,733	4,646,039	
Europe	225,759	217,087	2,746,794	
Central and South America	142,165	200,850	1,729,711	
Middle East	68,740	102,690	836,354	
Africa	51,644	169,283	628,348	
Others	45,327	54,780	551,490	
Total	¥2,820,932	¥2,903,770	\$34,322,082	

Note: U.S. dollar amounts in this annual report are translated from yen, for convenience only, at the rate of ¥82.19 = U.S. \$1, the exchange rate prevailing at March 31, 2012.

# Composition of Overseas Net Sales by Geographic Distribution



# MANAGEMENT'S DISCUSSION AND ANALYSIS

#### Analysis of Operating Results

In fiscal 2011, ended March 31, 2012, consolidated net sales of the MHI Group fell ¥82.8 billion or 2.9% to ¥2,820.9 billion. Net sales performance primarily reflected declines in the Machinery & Steel Infrastructure Systems, which outweighed growth mainly in the General Machinery & Special Vehicles and Aerospace Systems.

Operating income rose ¥10.7 billion, or 10.6% year on year, to ¥111.9 billion. While the yen's appreciation was a factor undercutting earnings, income rose mainly due to improved profitability in the General Machinery & Special Vehicles and Power Systems.

Net non-operating expenses were ¥25.7 billion, an improvement of ¥7.3 billion from the previous fiscal year, as improvement in equity in foreign exchange loss offset a worsening equity in losses of unconsolidated subsidiaries and affiliates.

As a result, ordinary income climbed ¥18.0 billion, or 26.5% year on year, to ¥86.1 billion.

The MHI Group posted an extraordinary gain of ¥28.3 billion from sales of fixed assets including the head office building. The Group also posted an extraordinary loss of ¥44.6 billion. This extraordinary loss included business structure improvement expenses, such as the disposal of on-shore wind turbine inventory.

Consequently, income before income taxes and minority interests increased ¥30.3 billion, or 76.8% year on year, to ¥69.8 billion. Net income, meanwhile, decreased ¥5.5 billion, or 18.5%, from the previous fiscal year to ¥24.5 billion, primarily as a result of corporate tax rate revisions.

# Key Factors Affecting Operating Results

Key factors that affect the management of the MHI Group include external factors such as market trends, foreign exchange rate fluctuations and changes in material costs, and internal factors such as risks associated with various overseas business contracts, accidents and disasters, and weakening manufacturing capabilities.

#### Market trends

Market trends are expected to hold to an improvement trajectory overall, supported by robust performance in emerging economies. For the MHI Group, there is recognition that the operating environment will grow more severe going forward, with competition heating up as prominent companies from around the world vie for a stake in fast-growing emerging markets. In this climate, the MHI Group will win out against this stiffer competition to achieve future growth and development by building a management structure capable of responding rapidly to the market's dramatic changes and delivering consistent earnings. At the same time, the Group will endeavor to leverage unrivaled technology to provide products and services that answer customer needs.

# Exchange rate fluctuation

The MHI Group's export and overseas business transactions are mainly denominated in foreign currencies. Consequently, foreign exchange rate fluctuations can significantly affect business competitiveness and operating results. In order to minimize exchange rate fluctuation risk, the Group is increasing its liabilities denominated in foreign currencies by expanding overseas procurement and production, and hedging risk by promoting greater use of yen-denominated contracts, coupled with timely forward foreign exchange contracts.

#### Change in costs of materials

The MHI Group is responding to the impact of certain material price rises, such as for steel products, nonferrous metals and crude oil, promoting design standardization, increasing its utilization of common components, promoting employment of standardized parts, and expanding its signing of comprehensive procurement contracts and its overseas production activities. The Group is also strengthening relationships with its business partners, promoting an even greater level of information sharing, and striving to achieve further cost reductions.

## Overseas business contracts

The MHI Group is exposed to a number of risks associated with individual business contracts it concludes in overseas markets. These include quality issues and delayed delivery dates for locally procured materials, inadequate skill levels and specific labor practices of the local staff, as well as unilateral contractual obligations. In order to prevent or mitigate these risks, all contracts undergo a rigorous internal assessment process prior to their formal conclusion. In addition to the segments concerned, several administrative departments are involved in this process, which includes the verification of local obligations with respect to procurement and labor contracts, extensive advance verification of contract terms with customers, the removal of unilateral conditions, and other prudent steps.

#### Accidents and disasters

Regarding accidents and disasters, the MHI Group is taking steps to minimize the probability of accidents and disasters occurring, which can have a significant impact on management, by carrying out ongoing work-site management activities, including the training of on-site workers to be more aware of risks.

#### Technology and skill transfer

The MHI Group is at risk of manufacturing capabilities weakening due to technology and skill transfer issues, particularly those associated with generational change. In response, the MHI Group invests in production process improvement aimed at rationalization and carries out focused investment in R&D related to manufacturing technology. The Group also strives to maintain and enhance its basic manufacturing capabilities through programs to train and improve the skills of its employees.

# Source of Funds and Liquidity

## Cash flow analysis

Operating activities provided net cash of ¥200.3 billion for the fiscal year under review, a decrease of ¥137.4 billion compared with the previous fiscal year. This outcome mainly reflected increases in trade receivables.

Investing activities used net cash of ¥47.0 billion, ¥90.2 billion less than the previous fiscal year. This decrease was mainly due to an increase in proceeds from sales of property, plant, equipment and intangible assets.

Financing activities used net cash of ¥183.6 billion, ¥13.8 billion more than the previous fiscal year. This rise was due mainly to an increase in repayment of long-term borrowings.

#### Primary funding requirements

The MHI Group primarily requires funds in operating activities for working capital for manufacturing activities (materials, outsourcing and personnel costs), order preparation costs and other sales expenses related to winning new orders, and funds for R&D activities that enhance the competitiveness of its products and strengthen manufacturing capabilities. In investing activities, funds are required for capital investments to grow business and enhance productivity, and for the purchase of investment securities related to the execution of business strategies.

In growth areas, the MHI Group is planning to execute necessary capital investments and R&D investment. As a whole, the Group plans to streamline its assets and selectively concentrate on core investment schemes, while anticipating fund requirements in future growth fields and closely monitoring the latest market environments and order trends. Accordingly, funding requirements are expected to trend lower going forward.

# Breakdown of interest-bearing debt and its applications

The breakdown of interest-bearing debt as of March 31, 2012 was as follows:

			(In billions of yen)
	Total	Due within one year	Due after one year
Short-term borrowings	¥ 152.3	¥152.3	¥ —
Long-term borrowings	684.9	131.7	553.1
Bonds	319.9	69.9	250.0
Total	1,157.1	353.9	803.1

The MHI Group is involved in numerous projects with comparatively long construction periods. It also owns numerous manufacturing facilities that employ large-scale machinery facilities. Consequently, the MHI Group must secure a stable level of working capital and funds for capital investments. Since the start of the global financial crisis in 2008, the Group has worked to streamline its assets, and has repaid long-term borrowings that have come due. As a result, the total interest-bearing debt of the MHI Group at the end of fiscal year 2011 was ¥1,157.1 billion, consisting of ¥353.9 billion due within one year, and ¥803.1 billion due after one year.

The interest-bearing debt mentioned above is utilized as working capital and for capital investments required for business activities, and the MHI Group plans to use these funds mainly in key growth fields expected to require funds, including Power Systems and Aerospace Systems.

# **Financial policy**

The MHI Group funds its working capital and capital investments from its operating cash flows. Any additional requirements can be met with interest-bearing debt.

In appropriately determining the amounts and methods of procuring long-term funds through long-term borrowings, bonds, and other means, the MHI Group takes into account the funding requirements of its business plans, interest-rate trends and various other factors, as well as the repayment schedule for its existing debt.

Additionally, in its efforts to reduce interest-bearing debt, the MHI Group strives to efficiently utilize surplus funds within the Group using a cash management system. At the same time, the MHI Group is working to improve asset efficiency by reducing trade receivables and inventories and by raising the utilization rate of its property, plant and equipment.

The MHI Group flexibly considers the repurchase of treasury stock based on the financial position of the Group, the stock price, as well as recent earnings forecasts and other factors.

# **CONSOLIDATED BALANCE SHEETS**

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries As of March 31, 2012 and 2011

	ns of yen	In thousands of U.S. dollars (Note 2)		
ASSETS	2012	2011	2012	
Current assets:				
Cash and deposits (Notes 3 and 18)	¥ 262,287	¥ 301,047	\$ 3,191,227	
Trade receivables (Notes 3 and 8)	968,064	852,645	11,778,367	
Securities (Notes 3 and 4)	1	8	12	
Merchandise and finished products	155,990	175,630	1,897,919	
Work in process	773,782	803,874	9,414,551	
Raw materials and supplies	123,670	136,701	1,504,684	
Deferred income taxes (Note 6)	180,747	161,823	2,199,136	
Other current assets	180,826	151,383	2,200,097	
Allowance for doubtful accounts (Note 1)	(6,368)	(7,500)	(77,479	
Total current assets	2,639,003	2,575,613	32,108,565	
Non-current assets:				
Property, plant and equipment, net (Notes 8 and 20):				
Buildings and structures	342,243	355,449	4,164,046	
Machinery and transportation equipment	234,037	251,507	2,847,511	
Tools, equipment and furniture	38,051	39,714	462,963	
Land	137,337	166,494	1,670,969	
Leased assets	5,356	6,004	65,166	
Construction in progress	40,557	42,358	493,454	
Total property, plant and equipment, net	797,584	861,528	9,704,148	
Intangible assets.	25,313	25,165	307,981	
Investments and advances:				
Investment securities (Notes 3 and 4)	309,054	321,285	3,760,238	
Long-term loans and advances	5,478	5,180	66,650	
Deferred income taxes (Note 6)	11,180	10,824	136,026	
Others	185,708	198,938	2,259,496	
Allowance for doubtful accounts (Note 1)	(9,335)	(9,535)	(113,578	
Total investments and advances	502,086	526,693	6,108,845	
Total non-current assets	1,324,984	1,413,387	16,120,987	
Total assets	¥3,963,987	¥3,989,001	\$48,229,553	

	s of yen U.S. dollars (No			
LIABILITIES AND NET ASSETS	2012	2011	2012	
Liabilities				
Current liabilities:				
Trade payables (Note 3)	¥ 651,101	¥ 619,107	\$ 7,921,900	
Short-term borrowings (Notes 3, 7 and 8)	152,344	85,488	1,853,558	
Current portion of long-term borrowings (Notes 3, 7 and 8)	131,713	211,114	1,602,542	
Current portion of bonds (Notes 3 and 7)	69,900	14,074	850,468	
Reserve for product warranties (Note 1)	20,812	23,123	253,218	
Reserve for losses on construction contracts (Note 1)	77,565	50,753	943,727	
Reserve for legal claims (Note 1)	3,936	2,167	47,889	
Advance payments received on contracts	399,288	330,275	4,858,109	
Other current liabilities (Notes 6 and 7)	208,034	197,965	2,531,135	
Total current liabilities.	1,714,695	1,534,070	20,862,574	
Non-current liabilities:				
Bonds (Notes 3 and 7)	250,000	330,000	3,041,732	
Long-term borrowings (Notes 3, 7 and 8)	553,189	684,989	6,730,611	
Deferred income taxes (Note 6)	17,832	3,607	216,960	
Reserve for retirement allowance (Notes 1 and 10)	47,002	49,842	571,870	
Reserve for treatment of PCB waste (Note 1)	11,604	7,007	141,185	
Other non-current liabilities (Note 7)	63,296	66,805	770,118	
Total non-current liabilities.	942,925	1,142,251	11,472,502	
Total liabilities	2,657,621	2,676,322	32,335,089	
Net assets				
Stockholders' equity (Note 16):				
Common stock, without par value:				
Authorized shares: 6,000,000,000				
Issued shares: 2012 and 2011—3,373,647,813	265,608	265,608	3,231,634	
Capital surplus	203,942	203,939	2,481,348	
Retained earnings	822,473	815,145	10,006,971	
Treasury stock (2012—18,546,244 shares and 2011—18,582,258 shares) at cost	(5,418)	(5,425)	(65,920)	
Total stockholders' equity	1,286,606	1,279,267	15,654,045	
Accumulated other comprehensive income (loss):				
Net unrealized gains (losses) on investment securities	22,082	25,579	268,670	
Deferred gains (losses) on hedges	12	(467)	146	
Foreign currency translation adjustments	(53,611)	(42,311)	(652,281)	
Total accumulated other comprehensive income (loss)	(31,517)	(17,199)	(383,465)	
Share subscription rights (Note 17)	1,868	1,509	22,727	
Minority interests	49,409	49,101	601,155	
Total net assets.	1,306,366	1,312,678	15,894,464	
Total liabilities and net assets	¥3,963,987	¥3,989,001	\$48,229,553	

# CONSOLIDATED STATEMENTS OF INCOME

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2012 and 2011

	In millio	In thousands of U.S. dollars (Note 2)		
	2012	2011	2012	
Net sales	¥2,820,932	¥2,903,770	\$34,322,082	
Cost of sales	2,375,158	2,461,857	28,898,381	
Gross profit	445,774	441,913	5,423,701	
Selling, general and administrative expenses (Note 19)	333,812	340,693	4,061,467	
Operating income	111,961	101,219	1,362,221	
Non-operating income (expenses):				
Interest income	3,637	4,029	44,251	
Dividend income	4,248	3,499	51,685	
Income (loss) from equity method investments	4,960	6,804	60,347	
Other income	5,107	5,867	62,136	
Interest expense	(20,522)	(22,471)	(249,689)	
Foreign exchange loss	(5,094)	(14,556)	(61,978)	
Loss on disposal of fixed assets	(5,725)	(5,882)	(69,655)	
Other expenses (Note 14)	(12,390)	(10,396)	(150,748)	
Total non-operating income (expenses)	(25,779)	(33,106)	(313,651)	
Ordinary income	86,182	68,113	1,048,570	
Extraordinary gain (loss):				
Gain (loss) on sales of fixed assets (Note 11).	28,344	10,870	344,859	
Gain (loss) on sales of investment securities	-	4,972	-	
Business structure improvement expenses (Notes 12 and 14)	(38,116)	(22,684)	(463,754)	
Expense for treatment of PCB waste (Note 1)	(4,098)	_	(49,860)	
Loss on revaluation of investment securities (Note 4)	(2,479)	(9,519)	(30,161)	
Loss on disaster (Note 13)	-	(10,240)	-	
Loss on the application of the accounting standards for asset retirement obligations	-	(2,012)	-	
Total extraordinary gain (loss)	(16,350)	(28,614)	(198,929)	
Income before income taxes and minority interests	69,831	39,499	849,628	
Income taxes (Note 6):				
Current	46,031	39,905	560,055	
Deferred	(855)	(29,423)	(10,402)	
Total income taxes	45,175	10,481	549,641	
Income before minority interests	24,655	29,018	299,975	
Minority interests in income (loss) of consolidated subsidiaries	114	(1,099)	1,387	
Net income	¥ 24,540	¥ 30,117	\$ 298,576	

		In	yen			S. dollars ote 2)
Per share information of common stock (Note 1):	2	<b>2012</b> 2011		2012		
Net income—basic	¥	7.31	¥	8.97	\$	0.089
Net income—diluted		7.30		8.96		0.089
Cash dividends		6.00		4.00		0.073

# CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2012 and 2011

	In millio	ns of yen	In thousands of U.S. dollars (Note 2)
	2012	2011	2012
Income before minority interests	¥ 24,655	¥ 29,018	\$ 299,975
Other comprehensive income (loss):			
Net unrealized gains (losses) on investment securities	(3,607)	(10,934)	(43,886)
Deferred gains (losses) on hedges	549	(262)	6,679
Foreign currency translation adjustments	(9,455)	(17,337)	(115,038)
Share of other comprehensive income (loss) of entities accounted for using the equity method	(2,051)	(2,676)	(24,954)
Total other comprehensive income (loss) (Note 15)	(14,565)	(31,211)	(177,211)
Comprehensive income (loss)	¥ 10,090	¥ (2,192)	\$ 122,764
Comprehensive income (loss) attributable to:			
Shareholders of the parent	¥ 10,223	¥ (408)	\$ 124,382
Minority interests.	(132)	(1,784)	(1,606)

# CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2012 and 2011

	Common	Stoc	kholders' equit	ty		Accumulated	d other com	nprehensive i				
		Capital										
		Capital			Total	Net unrealized gains (losses)	Deferred gains	Foreign currency	Total accumulated other	Share		
		surplus	Retained earnings	Treasury stock	stockholders' equity	on investment securities	(losses) on hedges	translation adjustments	comprehensive income (loss)	subscription rights	Minority interests	Total net assets
Balance as of March 31, 2010	¥265.608	¥203.938	¥800,199	¥(5.025)	¥1,264,721	¥ 35.942	¥(721)	¥(21,894)	¥ 13.327	¥1.184	¥49,540	¥1,328,772
Cash dividends (Note 16)			(13,425)	(-,,	(13,425)	,.		( / /		, -		(13,425)
Net income			30,117		30,117							30,117
Changes in scope of												
consolidation			(1,763)		(1,763)							(1,763)
Changes in scope of equity												
method application			18		18							18
Purchase of treasury stock				(412)	(412)							(412)
Disposal of treasury stock		0		12	12							12
Net changes in items other than stockholders' equity					_	(10,363)	254	(20,416)	(30,526)	324	(439)	(30,640)
Subtotal	-	0	14.946	(400)	14.546	(10,363)	254	(20,416)	(30,526)	324	(439)	(16,093)
	¥265,608	¥203,939	¥815,145	¥(5,425)	¥1,279,267	¥ 25,579	¥(467)	¥(42,311)	¥(17,199)	¥1,509	¥49,101	¥1,312,678
Cash dividends (Note 16)	,	,	(16,775)		(16,775)	,					, , , , , , , , , , , , , , , , , , , ,	(16,775)
Net income			24,540		24,540							24,540
Changes in scope of												
consolidation			19		19							19
Changes in scope of equity method application			(4)		(4)							(4)
Changes in fiscal year-end of												12.
consolidated subsidiaries			(452)		(452)							(452)
Purchase of treasury stock				(14)	(14)							(14)
Disposal of treasury stock		3		22	25							25
Net changes in items other than stockholders' equity					_	(3,497)	479	(11,300)	(14,317)	359	307	(13,650)
Subtotal	-	3	7.327	7	7.338	(3,497)	479	(11,300)	(14,317)	359	307	(6,312)
Balance as of March 31, 2012	¥265,608	¥203,942	¥822,473	¥(5,418)	¥1,286,606	¥ 22,082	¥ 12	¥(53,611)	¥(31,517)	¥1,868	¥49,409	¥1,306,366

					In thousa	ands of U.S. d	Iollars (Note	e 2)				
		Sto	ockholders' equ	ity		Accumulated	d other con	nprehensive	income (loss)			
									Total			
						Net unrealized	Deferred	Foreign	accumulated	01		
	Common	Capital	Retained	Traccourse	Total stockholders'	gains (losses)	gains	currency translation	other comprehensive	Share	Minority	Total net
	stock	surplus	earnings	Treasury stock	equity	on investment securities	(losses) on hedges	adjustments	income (loss)	subscription rights	interests	assets
Palanaa aa of Marah 21, 2011		\$2,481,311	\$ 9,917,812		\$15,564,752	\$311,217	\$(5,681)	\$(514,794)		\$18,359	\$597.408	
Balance as of March 31, 2011		φ2,401,311	. , ,	\$(66,005)	. , ,	φοτι,21 <i>1</i>	φ(0,001)	ф(014,194)	\$(209,259)	\$10,009	<i>ф091</i> ,400	\$15,971,261
Cash dividends (Note 16)			(204,100)		(204,100)							(204,100)
Net income			298,576		298,576							298,576
Changes in scope of												
consolidation.			231		231							231
Changes in scope of equity												
method application			(48)		(48)							(48)
Changes in fiscal year-end of												
consolidated subsidiaries			(5,499)		(5,499)							(5,499)
				(170)								
Purchase of treasury stock				(170)	(170)							
Disposal of treasury stock		36		267	304							304
Net changes in items other												
than stockholders' equity					-	(42,547)	5,827	(137,486)	(174,193)	4,367	3,735	(166,078)
Subtotal	-	36	89,147	85	89,280	(42,547)	5,827	(137,486)	(174,193)	4,367	3,735	(76,797)
Balance as of March 31, 2012	\$3,231,634	\$2,481,348	\$10,006,971	\$(65,920)	\$15,654,045	\$268,670	\$ 146	\$(652,281)	\$(383,465)	\$22,727	\$601,155	\$15,894,464

# CONSOLIDATED STATEMENTS OF CASH FLOWS

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries For the years ended March 31, 2012 and 2011

	In millions	In millions of yen		
	2012	2011	2012	
Cash flows from operating activities:				
Income before income taxes and minority interests Adjustments to reconcile income before income taxes and minority interests to net cash provided by operating activities:	¥ 69,831	¥ 39,499	\$ 849,628	
Depreciation and amortization	123,964	132,159	1,508,261	
Increase (decrease) in reserve for retirement allowance	(2,956)	819	(35,965	
Interest and dividend income	(7,885)	(7,529)	(95,936	
Interest expense	20,522	22,471	249,689	
(Income) loss from equity method investments	(4,960)	(6,804)	(60,347	
(Gain) loss on sales of investment securities	(123)	(4,972)	(1,496	
Loss on revaluation of investment securities	2,479	9,519	30,161	
(Gain) loss on sales of fixed assets	(28,344)	(10,870)	(344,859	
Loss on disposal of fixed assets	5,725	5,882	69,65	
Loss on the application of the accounting standards for asset retirement obligations	-	2,012	-	
Business structure improvement expenses	38,116	22,684	463,754	
Expense for treatment of PCB waste	4,098	-	49,860	
Loss on disaster	-	10,240		
(Increase) decrease in receivables	(123,811)	82,377	(1,506,399	
(Increase) decrease in inventories and advances to suppliers	33,945	167,088	413,000	
(Increase) decrease in other assets	(1,733)	(22,024)	(21,085	
Increase (decrease) in payables	38,004	(27,390)	462,392	
Increase (decrease) in advance payments received on contracts	70,284	(54,465)	855,140	
Increase (decrease) in other liabilities.	14,622	8,297	177,904	
Others	4,841	(301)	58,900	
Subtotal	256.621	368,694	3,122,289	
Interest and dividends received.	8,447	9,472	102,77	
Interest paid	(20,931)	(22,871)	(254,66	
Income taxes paid	(43,776)	(17,490)	(532,61	
Net cash provided by operating activities	200,361	337,805	2,437,778	
Cash flows from investing activities:	200,001	007,000	2,407,777	
Net (increase) decrease in time deposits	4,417	(154)	53,74 <sup>.</sup>	
Purchases of marketable securities.	(40,000)	(104)	(486,67)	
Proceeds from sales and redemption of marketable securities	40,000	_	486,67	
Purchases of property, plant, equipment and intangible assets	(117,433)	(138,099)	(1,428,79	
Proceeds from sales of property, plant, equipment and intangible assets	66,963	12,899	814,73	
Purchases of investment securities	(2,763)	(16,835)	(33,61	
Proceeds from sales and redemption of investment securities	3,557	6,246	43,27	
Disbursement of long-term loans	(1,930)	(2,729)	(23,48	
Collection of long-term loans	1,887	3,124	22,95	
Others	(1,746)	(1,699)	(21,24	
Net cash used in investing activities	(47,047)	(137,248)	(572,41	
Cash flows from financing activities:	(+1,0+1)	(107,240)	(072,41	
C C	60.079	(20 500)	842.00	
Net increase (decrease) in short-term borrowings and commercial papers	69,278	(32,522) 13,537	842,90 34,49	
Proceeds from long-term borrowings	2,835		-	
	(212,859)	(116,220)	(2,589,84	
Payment for redemption of bonds.	(24,228)	(20,000)	(294,78)	
Proceeds from issuance of stock to minority stockholders of subsidiaries	1,775	1,899	21,59	
Dividends paid to stockholders	(16,733)	(13,351)	(203,58	
Dividends paid to minority stockholders of subsidiaries	(1,375)	(598)	(16,72	
Others	(2,306)	(2,537)	(28,05	
Net cash used in financing activities	(183,614)	(169,793)	(2,234,018	
Effect of exchange rate changes on cash and cash equivalents	(4,045)	(2,512)	(49,21	
Net increase (decrease) in cash and cash equivalents	(34,347)	28,251	(417,89	
Cash and cash equivalents at beginning of year	288,868	261,373	3,514,63	
ncrease in cash and cash equivalents due to changes in scope of consolidation	84	275	1,02	
Decrease in cash and cash equivalents due to changes in scope of consolidation	-	(1,031)		
Cash and cash equivalents at end of year (Note 18)	¥ 254,605	¥ 288,868	\$ 3,097,761	

# NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Mitsubishi Heavy Industries, Ltd. and Consolidated Subsidiaries Years ended March 31, 2012 and 2011

# 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

#### a) Basis of presenting consolidated financial statements

The accompanying consolidated financial statements of the Mitsubishi Heavy Industries Group (the "Group"), which consists of Mitsubishi Heavy Industries, Ltd. ("MHI") and its consolidated subsidiaries ("Subsidiaries"), have been prepared in accordance with accounting principles generally accepted in Japan, which are different in certain respects as to the application and disclosure requirements of International Financial Reporting Standards, and have been prepared from the consolidated financial statements filed with the Financial Services Agency ("FSA") of Japan.

As permitted by the Financial Instruments and Exchange Act of Japan, amounts of less than one million yen have been omitted. Consequently, the totals shown in the accompanying consolidated financial statements (both in yen and U.S. dollars) do not necessarily agree with the sums of the individual amounts.

#### b) Principles of consolidation

The accompanying consolidated financial statements for the years ended March 31, 2012 and 2011 include the accounts of the Group. All significant inter-company transactions and accounts have been eliminated.

Investments in unconsolidated subsidiaries and affiliates, with certain minor exceptions, are accounted for by the equity method.

#### c) Foreign currency translation

Foreign currency monetary assets and liabilities are translated into Japanese yen at the exchange rates in effect at the balance sheet date and the resulting translation gains or losses are included in net income.

All assets and liabilities of overseas subsidiaries and affiliates are translated into Japanese yen at the exchange rates in effect at the balance sheet date, revenues and expenses at the average exchange rates during the year, and stockholders' equity at historical rates. The resulting foreign currency translation adjustments are accounted for as a component of net assets.

## d) Securities

Securities include (1) investments in unconsolidated subsidiaries and affiliates and (2) other securities (available-forsale securities). Their valuation standards and methods are as follows:

- Investments in unconsolidated subsidiaries and affiliates excluding those accounted for by the equity method: Historical cost (moving average method).
- (2a) Other securities with market value:

Market value method based on market prices or other fair values at the balance sheet date. Unrealized holding gains and losses are accounted for as a component of net assets, net of tax effect. The costs of sold securities are computed based on the moving average method.

(2b) Other securities without market value:

Historical cost (moving average method).

As to the presentation of the balance sheet, the Group has classified securities due within one year as securities in current assets and the others as investment securities in "Investments and advances."

### e) Inventories

Merchandise and finished products are principally stated at cost determined by the moving average method. (Balance sheet amounts are determined by the method of writing down to reflect a decline in the profitability of the assets.)

Work in process is principally stated at cost determined by the specific identification method. (Balance sheet amounts are determined by the method of writing down to reflect a decline in the profitability of the assets.)

Raw materials and supplies are principally stated at cost determined by the moving average method. (Balance sheet amounts are determined by the method of writing down to reflect a decline in the profitability of the assets.)

# f) Depreciation of property, plant and equipment

Depreciation of property, plant and equipment (excluding leased assets) is principally computed using the straightline method for buildings (excluding the equipment attached to them) and the declining-balance method for the other items of property, plant and equipment over the assets' useful lives.

Depreciation of leased assets is computed using the straight-line method over the lease terms.

#### g) Amortization of intangible assets

Amortization of intangible assets (excluding leased assets) is computed using the straight-line method over the assets' useful lives.

Amortization of leased assets is computed using the straight-line method over the lease terms. Goodwill is amortized on a straight-line basis over the investment recovery period of up to 20 years.

#### h) Allowance for doubtful accounts

Allowance for doubtful accounts is provided for possible losses on the collection of receivables. The amount of the allowance for general receivables is based on the write-off ratio. As for certain receivables such as the ones from the debtors whose solvency is in doubt, the recoverability of each receivable is examined individually and the estimated unrecoverable amounts are recognized as the allowance.

#### i) Reserve for product warranties

Reserve for product warranties is provided for the product warranty expenditure after products are delivered. The amounts are estimated based on the past statistics and other relevant factors.

#### j) Reserve for losses on construction contracts

Reserve for losses on construction contracts is provided for the expected total losses to be realized in the following years on the construction contracts if (1) those losses are judged inevitable at current year-end and (2) reasonable estimation of the amounts of such losses is possible.

With regard to the construction contracts for which this reserve is recognized, if the year-end balances of their work-in-process already exceed their respective total contract revenues, the exceeding portion is recognized as the loss on devaluation of the work-in-process and, accordingly, is not included in the reserve for losses on construction contracts.

#### k) Reserve for legal claims

Reserve for legal claims is provided based on estimates of damage compensations and other expenses on legal claims.

#### I) Reserve for retirement allowance

Reserve for retirement allowance is provided for employees' retirement benefits. The amounts are based on the balances of retirement benefit obligations and estimated pension fund assets (including a retirement benefit trust) at the end of the fiscal year.

Prior service costs are either expensed as incurred or amortized by the straight-line method over the years shorter than the average remaining service period of employees.

Actuarial gains and losses for each year are amortized by the straight-line method, starting in the following year of incurrence, over the years shorter than the average remaining service period of employees.

#### m) Reserve for treatment of PCB waste

Reserve for treatment of PCB (Poly Chlorinated Biphenyl) waste is provided based on estimated costs of the treatment of PCB products and equipment.

(Change in accounting estimates)

In the year ended March 31, 2012, estimated costs to turn low concentration PCB waste harmless are included in this reserve and expensed under extraordinary loss. Formerly, only high concentration PCB waste was subject to this reserve because reasonable estimates for low concentration PCB waste treatment were not available.

This change caused a decline of 4,098 million yen (\$49,860 thousand) in income before income taxes and minority interests.

#### n) Revenue recognition

With regard to construction contracts, the percentage-of-completion method is applied if reliable estimates of the (1) total costs on and revenues from a contract and (2) percentage of completion at the balance sheet date is available. In applying this method, the percentage of completion at the balance sheet date is estimated based on the costs incurred to date divided by the estimated total costs on the contracts. The completed-contract method is applied when the above conditions are not met.

#### o) Hedge accounting

The principal method in applying the hedge accounting is deferral hedge accounting, where gains or losses on a hedging instrument are deferred (and recognized as a component of net assets, net of tax effect) until the losses or gains on the hedged item are recognized in the income statement.

The Group applies the "assigning method for foreign currency receivables or payables" (hereinafter referred to as the "assigning method") and the "exceptional method for interest rate swaps" (hereinafter referred to as the "exceptional method") when the transactions meet the requirements of relevant accounting standards.

The "assigning method" is applied when a forward exchange contract (hedging instrument) with the corresponding conditions (e.g. amount, currency and settlement period) to the hedged item is concluded to fix the conversion rate of those receivables or payables. Under this method, the hedged item and the hedging instrument are treated as a single item, thus the hedged item is converted by the forward exchange contract rate; the fair value of the hedging instrument is not computed. The assigning method is not applied in case of comprehensive forward exchange contracts.

The "exceptional method" is applied when an interest rate swap (hedging instrument) with the corresponding conditions (e.g. principal amount, maturity and index) to the hedged item is concluded to fix the interest rate on the hedged item. Under this method, the amounts to be paid or received under the contract is added to or deducted from the interest; the fair value of the hedging instrument is not computed.

The Group evaluates the effectiveness of its hedging activities by reference to the accumulated gains or losses on the hedging instruments and those on the hedged items from the commencement of the hedges.

#### p) Tax-effect accounting

Deferred income taxes arise from temporary differences between the financial reporting and tax bases of assets and liabilities. They are accounted for under the asset and liability method, where the amounts of deferred income taxes are calculated using the future tax rates in effect when the temporary differences are recovered or settled.

#### q) Cash and cash equivalents

For the purpose of the consolidated statements of cash flows, cash and cash equivalents consist of cash on hand, demand deposits and short-term highly liquid investments with maturities of three months or less when purchased that have insignificant risk of changes in value.

#### r) Net income per share

The computation of basic net income per share is based on the net income available to common stockholders and the weighted average number of shares outstanding during each period.

Diluted net income per share is computed based on the assumption that all the share subscription rights are exercised at the beginning of the year (or issue date if later).

#### S) Additional information

#### Application of the accounting standards for accounting changes and error corrections

For the accounting changes and error corrections made after the beginning of the year ended March 31, 2012, the Group applies the "Accounting Standard for Accounting Changes and Error Corrections" (ASBJ Statement No. 24, issued on December 4, 2009) and the "Guidance on Accounting Standard for Accounting Changes and Error Corrections" (ASBJ Guidance No. 24, issued on December 4, 2009).

# 2. U.S. DOLLAR AMOUNTS

U.S. dollar amounts are included solely for convenience. These translations should not be construed as representations that the Japanese yen actually represent, or have been or could be converted into, U.S. dollars. As the amounts shown in U.S. dollars are for convenience only, the rate of ¥82.19 = US\$1 prevailing at March 31, 2012 is used for the purpose of the presentation of the U.S. dollar amounts in the accompanying consolidated

financial statements.
## 3. FINANCIAL **INSTRUMENTS**

The carrying amounts on the consolidated balance sheet, fair values and the variance between them of financial instruments as of March 31, 2012 and 2011 are shown in the following table. The ones whose fair values are extremely difficult to determine are excluded from the following table and shown in Footnote 2. See Note 1 o) for the information on hedge accounting.

	Ir	n millions of yen		In tho	usands of U.S. dollars	6
		2012			2012	
	Carrying Amount	Fair Value	Variance	Carrying Amount	Fair Value	Variance
(1) Cash and deposits	¥ 262,287	¥ 262,287	¥ –	\$ 3,191,227	\$ 3,191,227	\$ -
(2) Trade receivables	968,064	968,064	-	11,778,367	11,778,367	-
(3) Securities and investment securities	157,553	222,836	65,283	1,916,936	2,711,230	794,293
Asset Items Total	¥1,387,905	¥1,453,189	¥65,283	\$16,886,543	\$17,680,849	\$794,293
(4) Trade payables	651,101	651,101	-	7,921,900	7,921,900	-
(5) Short-term borrowings	152,344	152,344	-	1,853,558	1,853,558	-
(6) Bonds	319,900	330,120	10,220	3,892,200	4,016,547	124,346
(7) Long-term borrowings	684,902	707,013	22,110	8,333,154	8,602,177	269,010
Liability Items Total	¥1,808,248	¥1,840,579	¥32,330	\$22,000,827	\$22,394,196	\$393,356
(8) Derivatives <sup>(*)</sup>	¥ (1,432)	¥ (1,432)	¥ –	\$ (17,423)	\$ (17,423)	\$ -

(\*) The derivatives positions shown are net amounts. The amounts in parentheses show liability balances.

	In millions of yen						
	Carrying Amount	Fair Value	Variance				
(1) Cash and deposits	¥ 301,047	¥ 301,047	¥ –				
(2) Trade receivables	852,645	852,645	-				
(3) Securities and investment securities	168,795	240,080	71,284				
Asset Items Total	¥1,322,487	¥1,393,772	¥71,284				
(4) Trade payables	619,107	619,107	-				
(5) Short-term borrowings	85,488	85,488	-				
(6) Bonds	344,074	352,480	8,405				
(7) Long-term borrowings	896,104	919,911	23,806				
Liability Items Total	¥1,944,774	¥1,976,987	¥32,212				
(8) Derivatives (*)	¥ (1,620)	¥ (1,620)	¥ –				

(\*) The derivatives positions shown are net amounts. The amounts in parentheses show liability balances.

(Footnote 1) The computation method of the fair values of financial instruments

(1) Cash and deposits

The book values are used as the fair values since all the deposits are short-term and the fair values are almost equal to the book values. (2) Trade receivables

The book values are used as the fair values since a large portion of these are settled in a short period and the fair values could be deemed almost equal to the book values.

(3) Securities and investment securities Market prices are used as the fair values.

(4) Trade payables; (5) Short-term borrowings

The book values are used as the fair values since they are settled in a short period and the fair values are almost equal to the book values. (6) Bonds

If market prices are available, they are used as the fair values. If not, the present values of the principal and total interest (discounted by the rate based on the remaining years and the credit risk of the bonds) are used as the fair values.

(7) Long-term borrowings

The present values of the principal and total interest <sup>(1)</sup> (discounted by the rate assumed to be applied to the new borrowings of the same conditions) are used as the fair values.

() As for the long-term borrowings to which the "exceptional method" for interest-rate swaps is applied, the principal and total interest according to the interest rate under the interest-rate swaps are used. (8) Derivatives

See Note 5.

(Footnote 2) Financial instruments shown below are excluded from the above table because they do not have market prices and it is extremely difficult to determine their fair values.

	In millio	ns of yen	In thousands of U.S. dollars
	2012	2011	2012
Carrying amounts of unlisted securities	¥151,503	¥152,498	\$1,843,326

(Footnote 3) The contractual maturities of monetary receivables and other securities at March 31, 2012 and 2011 were as follows:

		In millions of	of yen		In	J.S. dollars		
		2012				2012		
	Due within one year		Due after five years through 10 years	Due after 10 years	Due within one year	Due after one year through five years	Due after five years through 10 years	Due after 10 years
Cash and deposits	¥ 261,722	¥ –	¥ –	¥–	\$ 3,184,353	\$ -	\$ -	\$-
Trade receivables	903,892	53,852	10,319	-	10,997,590	655,213	125,550	-
Securities and investment securities								
Other securities								
Government bonds	0	9	-	-	0	109	-	-
Total	¥1,165,615	¥53,862	¥10,319	¥–	\$14,181,956	\$655,335	\$125,550	\$-

	In millions of yen							
	2011							
	I	Due within one year		lgh	Due after five years through 10 years	Due after 10 years		
Cash and deposits	¥	300,596	¥	-	¥ –	¥–		
Trade receivables		812,450	38,5	04	1,690	-		
Securities and investment securities								
Other securities								
Government bonds		0		9	-	-		
Total	¥1	,113,047	¥38,5	13	¥1,690	¥–		

## 4. SECURITIES

## a) Breakdown of other securities with market value at March 31, 2012 and 2011

	In millions of yen				In thou	isands	of U.S. dollar	S
		2012				2	012	
	Carrying amount	Acquisition cost	Unrealized gain (loss)		Carrying amount	Ac	quisition cost	Unrealized gain (loss)
<ul> <li>i) Carrying amounts over acquisition costs:</li> </ul>								
Equity securities	¥ 79,346	¥32,400	¥ 46,945		\$ 965,397	\$	394,208	\$ 571,176
Others	1	1	0		12		12	0
Subtotal	¥ 79,347	¥32,402	¥ 46,945		\$ 965,409	\$	394,232	\$ 571,176
ii) Acquisition costs over carrying amounts:								
Equity securities	¥ 56,161	¥67,161	¥(10,999)		\$ 683,306	\$	817,143	\$(133,824)
Government bonds	9	9	(0)		109		109	(0)
Others	4	5	(0)		48		60	(0)
Subtotal	¥ 56,175	¥67,176	¥(11,000)		\$ 683,477	\$	817,325	\$(133,836)
Total (i+ii)	¥135,523	¥99,578	¥ 35,944		\$1,648,898	\$1	,211,558	\$ 437,328

	In millions of yen					
-		2011				
	Carrying amount	Acquisition cost	Unrealized gain (loss)			
i) Carrying amounts over acquisition costs:						
Equity securities	¥105,204	¥ 51,883	¥53,321			
Others	2	1	0			
Subtotal	¥105,206	¥ 51,884	¥53,321			
ii) Acquisition costs over carrying amounts:						
Equity securities	¥ 40,660	¥ 49,457	¥ (8,797)			
Government bonds	9	9	(O)			
Others	10	12	(1)			
Subtotal	¥ 40,680	¥ 49,479	¥ (8,799)			
Total (i+ii)	¥145,887	¥101,364	¥44,522			

Footnote: If the market values of the securities decline substantially and if the Group judges that they have no chance of recovery, impairment losses on them are recognized and the acquisition costs of them are reduced by the same amounts.

b) Sales amounts of other securities with market value and related gains and losses for the years ended March 31, 2012 and 2011

	In millic	In thousands of U.S. dollars	
	2012	2011	2012
Sales amounts	¥175,094	¥704	\$2,130,356
Gains	46	154	559
Losses	-		-

c) Impairment losses on other securities with market value for the years ended March 31, 2012 and 2011

	In millic	ons of yen	In thousands of U.S. dollars
	2012	2011	2012
Impairment losses	¥2,351	¥9,472	\$28,604

Securities with market value are judged as impaired when their market values decline from their book values by (i) 50% or more at the end of a fiscal year, or (ii) between 30% and 50% at four consecutive quarter ends (Q1–Q4) of a fiscal year.

The Group uses derivatives for the purpose of reducing the risks mentioned below and does not enter into derivatives for speculative or trading purposes.

5. DERIVATIVE

**FINANCIAL** 

**INSTRUMENTS** 

The derivative financial instruments which the Group utilizes are principally foreign currency forward and option contracts and interest rate swaps. The former is to hedge against the exchange rate risk on the receivables and payables denominated in foreign currencies and the latter is to fix the interest rate on certain long-term borrowings. See Note 1 o) for the information on hedge accounting.

The use of the derivatives is subject to the internal control policy; the objective of the derivatives transactions is limited to hedging against such risks as exchange rate risks and interest rate risks and their use is limited to the extent corresponding to actual business. Accordingly, the Group believes that market risks resulting from the change in exchange rates and interest rates are insignificant. The Group also believes that the risk of

nonperformance by counterparties is insignificant because all the counterparties are banks with high credit ratings. Summarized below are the notional amounts and the fair values of the derivative positions outstanding at March 31, 2012 and 2011.

## 1. Derivatives to which hedge accounting is not applied

Forward foreign exchange contracts (\*1)

	In	millions of yen		In thous	sands of U.S. dollar	S
		2012			2012	
	Notional amount <sup>(*2)</sup>	Fair value	Unrealized gain (loss)	Notional amount <sup>(*2)</sup>	Fair value	Unrealized gain (loss)
Sell:						
US\$	¥26,030	¥26,873	¥ (842)	\$316,705	\$326,961	\$(10,244)
Euro	23,007	23,034	(26)	279,924	280,253	(316)
Others	4,533	4,792	(258)	55,152	58,303	(3,139)
Buy:						
Euro	18	18	(0)	219	219	(0)
Others	249	256	6	3,029	3,114	73
Total	¥53,303	¥54,425	¥(1,121)	\$648,533	\$662,185	\$(13,639)

	In	millions of yen	
		2011	
	Notional amount (*2)	Fair value	Unrealized gain (loss)
Sell:			
US\$	¥20,658	¥20,603	¥ 55
Euro	17,113	17,471	(358)
Others	3,578	3,749	(170)
Buy:			
US\$	2,468	2,563	95
Total	¥38,882	¥39,260	¥(378)

(\*1) The fair values of exchange contracts are based on forward exchange rates. (\*2) Notional amounts shown above are all due within one year.

## 2. Derivatives to which hedge accounting is applied

(1) Forward foreign exchange contracts (to which deferral hedge accounting is applied)

(1) I of Ward for orgin exertainge e			ago accou	iting io applica)			
		In millions of yen		In thousands of U.S. dollars			
		2012			2012		
	Notional amount	Therein: portion due after one year	Fair value	Notional amount	Therein: portion due after one year	Fair value	
Sell: <sup>(*1)</sup>							
US\$	¥11,109	) ¥–	¥11,241	\$135,162	\$-	\$136,768	
Euro	5,366	; –	5,156	65,287	-	62,732	
Others	3,730	) –	3,813	45,382	-	46,392	
Buy:(*2)							
US\$	8,845	i –	8,993	107,616	-	109,417	
Euro	9,718		9,245	118,238	-	112,483	
Others	4,597	· –	4,616	55,931	-	56,162	
Total	¥ (2,954	•) ¥–	¥ (2,643)	\$ (35,941)	\$-	\$ (32,157)	

	In millions of yen				
		2011			
	Notional amount	Therein: portion due after one year	Fair value		
Sell: <sup>(*1)</sup>					
US\$	¥ 9,955	¥ –	¥ 9,666		
Euro	13,288	-	13,718		
Others	3,396	-	3,399		
Buy:(*2)					
US\$	26,293	14	25,830		
Euro	19,065	-	18,875		
Others	4,824	-	4,378		
Total	¥(23,542)	) ¥(14)	¥ (22,299)		

(\*1) The hedged items on these derivatives are principally trade receivables. (\*2) The hedged items on these derivatives are principally trade payables.

(2) Forward foreign exchange contracts (to which the "assigning method" for foreign currency receivables or payables is applied)

	In millions of yen In thousands of U			ousands of U.S. dollars	6	
		2012		2012		
	Notional amount	Therein: portion due after one year	Fair value	Notional amount	Therein: portion due after one year	Fair value
Sell: <sup>(*1)</sup>						
US\$	¥ 2,440	¥ –	(*3)	\$ 29,687	\$ -	(*3)
Euro	10,132	-	(*3)	123,275	-	(*3)
Others	145	-	(*3)	1,764	-	(*3)
Buy:(*2)						
US\$	1,612	9	(*3)	19,613	109	(*3)
Euro	2,152		(*3)	26,183	-	(*3)
Others	295	-	(*3)	3,589	-	(*3)
Total	¥ 8,657	¥(9)		\$105,329	\$(109)	

	In millions of yen			
	2011			
	Notional amount	Therein: portion due after one year	Fair value	
Sell: <sup>(*1)</sup>				
US\$	¥12,682	¥–	(*3)	
Euro	18,008	-	(*3)	
Buy:(*2)		-		
US\$	2,847	-	(*3)	
Euro	3,891	-	(*3)	
Others	785	-	(*3)	
Total	¥23,166	¥–		

(\*1) The hedged items on these derivatives are principally trade receivables.
 (\*2) The hedged items on these derivatives are principally trade payables.
 (\*3) Since the "assigning method" for foreign currency receivables or payables is applied, the above contracts are treated as part of the hedged trade receivables/payables, thus their fair values are included in those of the trade receivables/payables, which are shown in Note 3.

(3) Interest rate swaps (to which the "exceptional method" for interest-rate swaps is applied) (\*1)

		In millions of yen		In the	ousands of U.S. dollar	s
		2012			2012	
Type of transactions	Notional amount	Therein: portion due after one year	Fair value	Notional amount	Therein: portion due after one year	Fair value
Fixed payment / variable receipt	¥251,001	¥186,556	(*2)	\$3,053,911	\$2,269,813	(*2)
		In millions of yen				
		2011				
	Notional amount	Therein: portion due after one year	Fair value			
Fixed payment / variable receipt	¥342,139	¥251,001	(*2)			

(\*1) The hedged items on these derivatives are principally long-term borrowings.
 (\*2) Since the "exceptional method" for interest-rate swaps is applied, the above interest rate swaps are treated as part of the hedged long-term borrowings, thus their fair values are included in those of the long-term borrowings, which are shown in Note 3.

## 6. INCOME TAXES

The Group is subject to corporation income tax, inhabitants' tax and enterprise tax, based on income, which in the aggregate resulted in the statutory tax rate of approximately 40.5% for the years ended March 31, 2012 and 2011.

a) Significant components of deferred tax assets and liabilities at March 31, 2012 and 2011, which arose as a result of the recognition of the tax effect mentioned in Note 1 p), were as follows:

		ns of yen	In thousands of U.S. dollars
	2012	2011	2012
Deferred tax assets:			
Reserve for retirement allowance	¥ 94,955	¥ 106,470	\$ 1,155,310
Accrued expenses for product warranties	44,903	42,516	546,331
Accrued expenses for construction contracts	26,896	31,469	327,241
Inventory write-downs	32,721	28,081	398,114
Tax loss carryforwards	28,799	24,074	350,395
Reserve for losses on construction contracts	28,807	20,727	350,492
Others	112,108	117,727	1,364,010
Subtotal	369,191	371,066	4,491,921
Valuation allowance	(65,660)	(63,607)	(798,880)
Total gross deferred tax assets	303,530	307,459	3,693,028
Deferred tax liabilities:			
Gain on contribution of securities to retirement benefit trust	(68,146)	(79,798)	(829,127)
Reserve for reduction in costs of fixed assets	(27,404)	(25,963)	(333,422)
Net unrealized gains on investment securities	(16,621)	(21,572)	(202,226)
Others	(17,750)	(11,414)	(215,963)
Total gross deferred tax liabilities	(129,923)	(138,748)	(1,580,764)
Net deferred tax assets (liabilities)*	¥ 173,607	¥ 168,710	\$ 2,112,264

\* Net deferred tax assets (liabilities) at March 31, 2012 and 2011 are reflected in the consolidated balance sheets as follows:

	In millior	In thousands of U.S. dollars	
	2012	2011	2012
Deferred income taxes in current assets	¥180,747	¥161,823	\$2,199,136
Deferred income taxes in investments and advances	11,180	10,824	136,026
Other liabilities in current liabilities	(488)	(329)	(5,937)
Deferred income taxes in non-current liabilities	¥ (17,832)	¥ (3,607)	\$ (216,960)

b) Reconciliation of the statutory tax rate and the income tax rate as a percentage of income before income taxes and minority interests at March 31, 2012 and 2011 are as follows:

	2012	2011
Statutory tax rate	40.5%	40.5%
Reconciliation:		
Items excluded from expenses	4.1	5.3
Items excluded from gross income	(2.1)	(4.3)
(Income) loss from equity method investments	(2.9)	(7.0)
Valuation allowance	12.5	21.3
Tax exemption for research and development expenses	(5.8)	(17.2)
Income taxes for previous periods	1.3	(7.2)
Reduction in deferred tax assets due to changes in statutory tax rate	16.3	-
Others	0.8	(4.9)
Income tax rate as a percentage of income before income taxes and minority interests	64.7%	26.5%

c) Changes in deferred income taxes due to changes in corporation tax rates Following the promulgation of the "Law for Partial Amendment of the Income Tax Law, etc. for the Purpose of Creating a Taxation System Responding to Changes in Economic and Social Structures" (Law No. 114 of 2011) and the "Law on Special Measures for Securing Financial Resources Necessary to Implement Measures for Reconstruction following the Great East Japan Earthquake" (Law No. 117 of 2011) on December 2, 2011, the reduction in the corporation income tax rate and the introduction of a new income tax (special corporate tax for reconstruction) becomes effective for fiscal years beginning on or after April 1, 2012. In conjunction with these changes, the statutory tax rate used to measure deferred tax assets and liabilities for the temporary differences estimated to be resolved in or after the fiscal year beginning on April 1, 2012 have been changed.

As a result, deferred tax assets (net of deferred tax liabilities) decreased by 9,665 million yen (\$117,593 thousand), income taxes (income taxes—deferred) increased by 11,352 million yen (\$138,118 thousand) and net unrealized gains on investment securities increased by 1,686 million yen (\$20,513 thousand).

7.	INTEREST-	a) Short-term interest-bearing debts at March 31, 2012 and 2011 consisted of the following:				
	BEARING DEBTS	-	In millio	ns of yen	In thousands of U.S. dollars	
	AND LEASE		2012	2011	2012	
	OBLIGATIONS	Short-term loans, principally from banks (with weighted-average interest rate of 1.2% at March 31, 2012)	¥152,344	¥ 85,488	\$1,853,558	
		Current portion of long-term loans, principally from banks and insurance companies (with weighted-average interest rate of				
		1.6% at March 31, 2012)	131,713	211,114	1,602,542	
		Current portion of bonds	69,900	14,074	850,468	
		 Total	¥353,957	¥310,677	\$4,306,570	

b) Bonds at March 31, 2012 and 2011 consisted of the following:

	In millic	U.S. dollars		
	<b>2012</b> 2011		2012	
Unsecured bonds issued by MHI:				
1.03% bonds due 2013 (issued in Jan 2003)	¥ 30,000	¥ 30,000	\$ 365,007	
0.70% bonds due 2013 (issued in Jun 2003)	50,000	50,000	608,346	
1.45% bonds due 2011 (issued in Sep 2006)	-	10,000	-	
2.04% bonds due 2016 (issued in Sep 2006)	20,000	20,000	243,338	
1.47% bonds due 2012 (issued in Sep 2007)	39,900	50,000	485,460	
1.69% bonds due 2014 (issued in Sep 2007)	20,000	20,000	243,338	
2.03% bonds due 2017 (issued in Sep 2007)	60,000	60,000	730,015	
0.688% bonds due 2014 (issued in Dec 2009)	50,000	50,000	608,346	
1.482% bonds due 2019 (issued in Dec 2009)	50,000	50,000	608,346	
Unsecured bonds issued by Subsidiaries:				
6.45% bonds due 2011 (issued in Aug 2006)	-	4,074	-	
Total	¥319,900	¥344,074	\$3,892,200	

The aggregate annual maturities of bonds at March 31, 2012 were as follows:

Years ending March 31	In millions of yen	In thousands of U.S. dollars
2013 (= current portion)	¥ 69,900	\$ 850,468
2014	50,000	608,346
2015	70,000	851,685
2016	-	-
2017	20,000	243,338
Thereafter	110,000	1,338,362
Non-current portion subtotal	250,000	3,041,732
Total	¥319,900	\$3,892,200

In thousands of

c) Long-term borrowings at March 31, 2012 and 2011 consisted of the following:				
	2012	2011	2012	
Non-current portion of long-term loans, principally from banks and insurance companies, due 2013 to 2030 (with weighted- average interest rate of 1.7% at March 31, 2012)	¥553,189	¥684,989	\$6,730,611	

The aggregate annual maturities of long-term borrowings at March 31, 2012 were as follows:

Years ending March 31	In millions of yen	In thousands of U.S. dollars
2013 (= current portion)	¥131,713	\$1,602,542
2014	149,926	1,824,139
2015	180,939	2,201,472
2016	49,301	599,841
2017	47,957	583,489
Thereafter	125,064	1,521,644
Non-current portion subtotal	553,189	6,730,611
Total	¥684,902	\$8,333,154

d) The aggregate annual maturities of lease obligations at March 31, 2012 were as follows:

Years ending March 31	In millions of yen	In thousands of U.S. dollars
2013 (= current portion)	¥ 2,177	\$ 26,487
2014	1,875	22,812
2015	1,172	14,259
2016	569	6,922
2017	308	3,747
Thereafter	4,292	52,220
Non-current portion subtotal	8,218	99,987
Total	¥10,396	\$126,487

# 8. PLEDGED ASSETS AND RELATED LIABILITIES

3	In millic	ons of yen	In thousands of U.S. dollars
Assets pledged as collateral	2012	2011	2012
Property, plant and equipment	¥ 9,566	¥14,925	\$116,388
Trade receivables	1,198	1,263	14,575
Others	363	386	4,416
Total	¥11,127	¥16,574	\$135,381

	In millio	ns of yen	In thousands of U.S. dollars
Liabilities related to the assets pledged as collateral	2012	2011	2012
Long-term borrowings	¥3,985	¥ 7,123	\$48,485
Short-term borrowings	1,084	10,276	13,188
Total	¥5,070	¥17,400	\$61,686

9. CONTINGENT LIABILITIES		In millio	ns of yen	In thousands of U.S. dollars
EIABIEITIEU	Contingent liabilities	2012	2011	2012
	Guarantee obligations on such debts as borrowings from financial institutions by companies outside the MHI Group	¥62,034	¥72,543	\$754,763

## 10. RETIREMENT BENEFITS

The Group has several non-contributory defined benefit pension plans and severance indemnity plans, and there are occasions where employees receive special lump-sum payments at retirement. Contributions to the plans are funded in accordance with the applicable laws and regulations. See Note 1 I) for accounting polices and related information.

a) Benefit obligations and related information at March 31, 2012 and 2011 were as follows:

a) Benefit obligations and related mormation at March 31, 2012 a		ns of yen	In thousands of U.S. dollars
	2012	2011	2012
Retirement benefit obligations	¥(610,093)	¥(629,674)	\$(7,422,958)
2 Fair value of plan assets	492,091	527,925	5,987,236
③ Unfunded benefit obligations (① + ②)	(118,002)	(101,748)	(1,435,722)
Unrecognized actuarial losses (gains)	160,268	147,425	1,949,969
Unrecognized prior service costs (credits)	(66)	(136)	(803)
(6) Net benefit liability recognized on the consolidated balance sheets (3) + (3) + (5)	42,199	45,539	513,432
⑦ Prepaid pension expenses	89,202	95,382	1,085,314
Reserve for retirement allowance (6 – 7)	¥ (47,002)	¥ (49,842)	\$ (571,870)

b) The components of net periodic retirement benefit expenses for the years ended March 31, 2012 and 2011 consisted of the following:

	In millio	ns of yen	In thousands of U.S. dollars
	2012	2011	2012
Service cost	¥ 28,330	¥ 28,783	\$ 344,689
Interest cost	12,262	13,026	149,190
Expected return on plan assets	(11,377)	(13,884)	(138,423)
Amortization of actuarial losses (gains)	21,789	18,959	265,105
Amortization of prior service costs (credits)	(270)	(195)	(3,285)
Retirement benefit expenses	¥ 50,734	¥ 46,689	\$ 617,277

c) The principal assumptions used in determining the information above at March 31, 2012 and 2011 were as follows:

	2012	2011
Discount rate	2.0%	2.0%
Expected rate of return on plan assets	2.4%	3.5%
	Expensed as incurred	Expensed as incurred
Amortization period for prior service costs	or 9 to 15 years	or 9 to 15 years
Amortization period for actuarial gains and losses	9 to 19 years	9 to 19 years

	DF	In millions of	of ven	In thousands of U.S. dollars
FIXED ASSETS		2012	2011	2012
	Land	¥23,447	¥10,946	\$285,278
	Others	4,896	(76)	59,569
	Total	¥28,344	¥10,870	\$344,859
12. BUSINESS STRUCTURE IMPROVEMENT EXPENSES	Business structure improvement expenses for the year ended Mara expenses relating mainly to Shipbuilding & Ocean Development bu Machinery & Steel Infrastructure Systems business and General Ma Business structure improvement expenses for the year ended M expenses relating mainly to Power Systems business and Machinery	isiness and Powe achinery & Speci larch 31, 2011 cc	er Systems busin al Vehicles busin nsisted of busine	ess and ess. ss reorganizatio
13. LOSS ON DISASTER	Loss on disaster for the year ended March 31, 2011 arose from the the following items.		an Earthquake. I' In millions of yen	t consisted of
			2011	
	Expenses on restoration or disposal of damaged assets		¥ 9,981	
	Abnormal idle time cost		259	
	lotal		¥10,240	
14. LOSS ON IMPAIRMENT OF	The following is a description of the loss on impairment of fixed asse	ets recognized in	the year ended N	March 31, 2012
	a) Description of the impaired asset group			
FIXED ASSETS	The impaired asset group consisted mainly of machinery and trans purpose which were located in Nagasaki, Fukuoka, etc.	portation equipm	nent and land for	operating
FIXED ASSETS	The impaired asset group consisted mainly of machinery and trans	ental purpose, id	le assets and ass	sets to be
FIXED ASSETS	<ul><li>The impaired asset group consisted mainly of machinery and trans purpose which were located in Nagasaki, Fukuoka, etc.</li><li>b) Method of asset grouping</li><li>The principal unit of asset grouping is works. Basically, assets for market of the principal unit of asset grouping is works.</li></ul>	ental purpose, id ach treated as se	le assets and as parate asset gro	sets to be ups.

e) Impairment loss amount and the breakdown

שייין איז	In millions of yen	In thousands of U.S. dollars
Breakdown by the income statement accounts	2012	2012
"Business structure improvement expenses" under extraordinary loss	¥5,150	\$62,659
"Other expenses" under non-operating expenses	1,841	22,399
Total	¥6,992	\$85,071

	In millions of yen	In thousands of U.S. dollars
Breakdown by the category of the fixed assets	2012	2012
Machinery and transportation equipment	¥3,823	\$46,514
Land	2,193	26,682
Buildings and structures, etc.	975	11,862
Total	¥6,992	\$85,071

The following is a description of the loss on impairment of fixed assets recognized in the year ended March 31, 2011.

#### a) Description of the impaired asset group

The impaired asset group consisted mainly of construction in progress, machinery and transportation equipment for operating purpose which were located in Nagasaki, Hiroshima, etc.

#### b) Method of asset grouping

The principal unit of asset grouping is works. Basically, assets for rental purpose, idle assets and assets to be disposed of due to termination or transfer of some operation are each treated as separate asset groups.

#### c) Reason to recognize the impairment

Because some assets are going out of use in relation to the transfer of some operation, their book values were written down to recoverable amounts.

#### d) Calculation method of recoverable amounts

Recoverable amounts are measured either by fair value less costs to sell or the value in use. The value in use is computed by discounting the future cash flows to be derived from the assets to the present value with the rate of 3.5%.

e) Impairment loss amount and the breakdown

	In millions of yen
Breakdown by the income statement accounts	2011
"Business structure improvement expenses" under extraordinary loss	¥16,203
"Other expenses" under non-operating expenses	1,438
Total	¥17,641
	In millions of yen
Breakdown by the category of the fixed assets	2011
Construction in progress.	¥12,653
Machinery and transportation equipment, etc.	4,987
Total	¥17,641

## 15. CONSOLIDATED Reclassification adjust STATEMENTS OF 2012 were as follows: COMPREHENSIVE INCOME

**15. CONSOLIDATED** Reclassification adjustments and tax effect on other comprehensive income (loss) for the year ended March 31, 2012 were as follows:

	In millions of yen	In thousands of U.S. dollars
	2012	2012
Net unrealized gains (losses) on investment securities		
Gains (losses) arising during the year	¥(11,223)	\$(136,549)
Reclassification adjustments	2,305	28,044
Net unrealized gains (losses) on investment securities, before tax	(8,918)	(108,504)
Deferred taxes relating to net unrealized gains (losses) on investment securities	5,310	64,606
Net unrealized gains (losses) on investment securities, net of tax	(3,607)	(43,886)
Deferred gains (losses) on hedges		
Gains (losses) arising during the year	(1,283)	(15,610)
Reclassification adjustments	2,124	25,842
Deferred gains (losses) on hedges, before tax	840	10,220
Deferred taxes relating to deferred gains (losses) on hedges	(291)	(3,540)
Deferred gains (losses) on hedges, net of tax	549	6,679
Foreign currency translation adjustments		
Gains (losses) arising during the year	(9,455)	(115,038)
Share of other comprehensive income (loss) of entities accounted for using the equity method		
Gains (losses) arising during the year	(1,650)	(20,075)
Reclassification adjustments	(400)	(4,866)
Share of other comprehensive income (loss) of entities accounted for using the equity method	(2,051)	(24,954)
Other comprehensive income (loss), net of tax	¥(14,565)	\$(177,211)

16. CONSOLIDATED STATEMENTS OF CHANGES IN NET ASSETS

**16. CONSOLIDATED** a) Total number of shares issued and treasury stock at March 31, 2012 and 2011 are as follows:

Common	shares	At March 31, 2011	Increase by March 31, 2012	Decrease by March 31, 2012	At March 31, 2012
		3,373,647,813	_	_	3,373,647,813
		18,582,258	39,535	75,549	18,546,244
		18,582,258	39,535	75,549	18,546,2
1) Reason for increase of treasury stor		Common stock Common stock	Common stock         3,373,647,813           Common stock         18,582,258           ck	Common stock 3,373,647,813 – Common stock 18,582,258 39,535 ck	Common stock 3,373,647,813 – – Common stock 18,582,258 39,535 75,549

Disposal resulting from the exercise of share subscription rights, which were issued for the	
purpose of providing stock options	70,000
Disposal resulting from purchase request from shareholders who have some shares that were	
less than the minimum trading unit	5,549
 Total	75,549

## b) Cash dividends

(1) Cash dividends paid

				Cash	n dividends		
				р	er share	Total cash c	lividends paid
Deschaftere	Type of	Descurial		la com	In U.S.	In millions	In thousands
Resolution	shares	Record date	Effective date	In yen	dollars	of yen	of U.S. dollars
June 23, 2011							
Ordinary General	Common	March 31,	June 24,				
Meeting of Shareholders	stock	2011	2011	¥2	\$0.0243	¥ 6,710	\$ 81,640
October 31, 2011	Common	September	December 5,				
Board of Directors	stock	30, 2011	2011	¥З	\$0.0365	¥10,065	\$122,460
Total						¥16,775	\$204,100

(2) Dividends of which record date is within this fiscal year but the effective date is within next fiscal year

					n dividends er share	Total cash o	lividends paid
Resolution	Type of shares	Record date	Effective date	In yen	In U.S. dollars	In millions of yen	In thousands of U.S. dollars
June 21, 2012							
Ordinary General Meeting of Shareholders	Common stock	March 31, 2012	June 22, 2012	¥3	\$0.0365	¥10,065	\$122,460

# 17. SHARE-BASED COMPENSATION PLANS

MHI has the following share-based compensation plans for the directors and corporate executive officers. The share-based compensation expenses, which amounted to 364 million yen (\$4,428 thousand) in the year ended March 31, 2012 and 324 million yen in the year ended March 31, 2011, are included in selling, general and administrative expenses.

a) Conditions for issue of stock options

	Stock options (3rd grant)	Stock options (4th grant)	Stock options (5th grant)	Stock options (6th grant)	Stock options (7th grant)	Stock options (8th grant)	Stock options (9th grant)	Stock options (10th grant)
Grantee (Number of individuals)	Directors & executive officers (26)	Directors & executive officers (25)	Directors & executive officers (30)	Directors & executive officers (33)	Executive officers (2)	Directors & executive officers (33)	Directors & executive officers (35)	Directors & executive officers (38)
Number of shares	502,000	663,000	400,000	806,000	46,000	1,109,000	1,259,000	1,364,000
Type of share	Common stock	Common stock	Common stock	Common stock	Common stock	Common stock	Common stock	Common stock
Grant date	August 11, 2005	August 17, 2006	August 16, 2007	August 18, 2008	February 20, 2009	August 17, 2009	August 17, 2010	December 15, 2011
Exercise period (from)	June 29, 2007	August 18, 2006	August 17, 2007	August 19, 2008	February 21, 2009	August 18, 2009	August 18, 2010	December 16, 2011
(to)	June 28, 2011	June 28, 2036	August 16, 2037	August 18, 2038	February 20, 2039	August 17, 2039	August 17, 2040	December 15, 2041

b) Activities of stock options in the year ended March 31, 2012

				Number	of shares			
	Stock options (3rd grant)	Stock options (4th grant)	Stock options (5th grant)	Stock options (6th grant)	Stock options (7th grant)	Stock options (8th grant)	Stock options (9th grant)	Stock options (10th grant)
Unexercised at March 31, 2011	62,000	562,000	356,000	788,000	46,000	1,109,000	1,259,000	-
Granted	-	-	-	-	-	-	-	1,364,000
Vested	-	-	-	-	-	-	-	1,364,000
Exercised	62,000	-	8,000	-	-	-	-	-
Expired	-	-	-	-	-	-	-	-
Unexercised at March 31, 2012	-	562,000	348,000	788,000	46,000	1,109,000	1,259,000	1,364,000

#### c) Price per share

				In	yen			
	Stock options (3rd grant)	Stock options (4th grant)	Stock options (5th grant)	Stock options (6th grant)	Stock options (7th grant)	Stock options (8th grant)	Stock options (9th grant)	Stock options (10th grant)
Weighted-average exercise price	¥294	¥ 1	¥ 1	¥ 1	¥ 1	¥ 1	¥ 1	¥ 1
Weighted-average market share price when the share subscription rights were exercised in the year ended								
March 31, 2012	386	-	328	-	-	-	-	-
Grant date fair value	-	443	644	471	194	294	258	267
				In U.S.	dollars			
	Stock options (3rd grant)	Stock options (4th grant)	Stock options (5th grant)	Stock options (6th grant)	Stock options (7th grant)	Stock options (8th grant)	Stock options (9th grant)	Stock options (10th grant)
Weighted-average exercise price	\$3.58	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01	\$0.01
Weighted-average market share price when the share subscription rights								

were exercised in the year ended								
March 31, 2012	4.70	-	3.99	-	-	-	-	-
Grant date fair value	-	5.39	7.84	5.73	2.36	3.58	3.14	3.25

d) Estimate method of fair value of stock options

The fair value of stock options granted in the year ended March 31, 2012 was estimated using the Black-Scholes option-pricing model with the following assumptions.

	Stock options (10th grant)
Expected volatility *1	37.726%
Expected life of option *2	15 years
	¥4
	(\$0.049)
Expected dividends *3	per share
Risk-free interest rate *4	1.478%

(\*1) Estimated based on the actual share prices of 15 years (December 15, 1996 - December 15, 2011).

(\*2) Calculated on the assumption that the share subscription rights would be excised at the middle point of the exercise period.
 (\*3) Actual cash dividends for the year ended March 31, 2011.
 (\*4) Yield of Japanese government bonds with the same years to maturity as the above expected life of option.

e) Estimate method of the number of vested share subscription rights

All of the share subscription rights were vested when granted.

**EQUIVALENTS** 

18. CASH AND CASH "Cash and cash equivalents at end of year" in the statements of cash flows for the years ended March 31, 2012 and 2011 consisted of the following: In thousands of

	In millio	ns of yen	U.S. dollars
	2012	2011	2012
Cash and deposits	¥262,287	¥301,047	\$3,191,227
Time deposits with maturities over three months	(7,682)	(12,178)	(93,466)
Total	¥254,605	¥288,868	\$3,097,761

19. RESEARCH AND DEVELOPMENT		In millic	ns of yen	In thousands of U.S. dollars
		2012	2011	2012
EXPENSES	Research and development expenses	¥121,420	¥123,293	\$1,477,308

20. ACCUMULATED DEPRECIATION		In million	s of yen	In thousands of U.S. dollars
DEFRECIATION		2012	2011	2012
	Accumulated depreciation of property, plant and equipment	¥1,754,645	¥1,720,375	\$21,348,643

## 21. ASSET RETIREMENT OBLIGATIONS

When the Group disposes of certain assets belonging to nuclear energy business, those assets are required to be treated with a special care as radioactive wastes. In principle, the Group recognizes asset retirement obligations on those assets. With regard to some of those assets, however, the Group does not recognize asset retirement obligations because estimation of necessary costs to dispose of them is not available due to the fact that the technology necessary to dismantle or dispose of them and the legislation on how they should be disposed of have been developed only partially. Those assets include the facilities conducting research and development concerning the safeness of constituting material of reactors, nuclear fuel and so on.

## 22. SIGNIFICANT AFFILIATES

Disclosure of condensed consolidated financial statements of significant affiliates under statutory criteria is required. Caterpillar Japan Ltd. was a significant affiliate in the years ended March 31, 2012 and 2011.

In millions of yen		U.S. dollars	
2012	2011	2012	
¥202,290	¥139,567	\$2,461,248	
91,291	88,004	1,110,731	
181,544	129,583	2,208,833	
16,189	16,860	196,970	
95,847	81,127	1,166,163	
453,684	367,958	5,519,941	
22,372	37,623	272,198	
¥ 15,108	¥ 22,656	\$ 183,817	
	2012 ¥202,290 91,291 181,544 16,189 95,847 453,684 22,372	2012         2011           ¥202,290         ¥139,567           91,291         88,004           181,544         129,583           16,189         16,860           95,847         81,127           453,684         367,958           22,372         37,623	

## 23. SUBSEQUENT EVENT

On April 2, 2012, MHI sold all the shares it held in an affiliated company accounted for by the equity method, Caterpillar Japan Ltd. (CJL), to CJL itself under the contract concluded on November 7, 2011. The following is a description of the affiliated company and the transaction.

- (1) The name of the buyer / affiliated company: Caterpillar Japan Ltd.
- (2) Date of the transaction: April 2, 2012.
- (3) Description of the business of the affiliated company:

Manufacture and sale of construction machinery including hydraulic excavators, wheel loaders and track-type tractors.

- (4) Business relationship of the affiliated company with MHI: It is a purchaser of MHI's products.
- (5) Number of shares sold under the transaction: 115,500

(6) Transaction price: ¥36,543 million (\$444,616 thousand)

(7) Gain on the sale of the shares: ¥6,267 million (\$76,250 thousand)

# INDEPENDENT AUDITOR'S REPORT



Ernst & Young ShinNihon LLC Hibiya Kokusai Bldg. 2-2-3 Uchisaiwai-cho Chiyoda-ku, Tokyo, Japan 100-0011

Tel: +81 3 3503 1100 Fax: +81 3 3503 1197

## Independent Auditor's Report

The Board of Directors Mitsubishi Heavy Industries, Ltd.

We have audited the accompanying consolidated financial statements of Mitsubishi Heavy Industries, Ltd. (the "Company") and its consolidated subsidiaries, which comprise the consolidated balance sheet as at March 31, 2012, and the consolidated statements of income, comprehensive income, changes in net assets, and cash flows for the year then ended and a summary of significant accounting policies and other explanatory information, all expressed in Japanese yen.

#### Management's Responsibility for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in Japan, and for designing and operating such internal control as management determines is necessary to enable the preparation and fair presentation of the consolidated financial statements that are free from material misstatement, whether due to fraud or error.

#### Auditor's Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in Japan. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. The purpose of an audit of the consolidated financial statements is not to express an opinion on the effectiveness of the entity's internal control, but in making these risk assessments the auditor considers internal controls relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

#### Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the consolidated financial position of the Company and consolidated subsidiaries as at March 31, 2012, and their consolidated financial performance and cash flows for the year then ended in conformity with accounting principles generally accepted in Japan.

#### Convenience Translation

We have reviewed the translation of these consolidated financial statements into U.S. dollars, presented for the convenience of readers, and, in our opinion, the accompanying consolidated financial statements have been properly translated on the basis described in Note 2.

Ernst & Young Shinnihon ILC

June 21, 2012

# CORPORATE DATA

As of March 31, 2012

#### Head Office

16-5, Konan 2-chome, Minato-ku, Tokyo 108-8215, Japan Phone: +81-3-6716-3111 Fax: +81-3-6716-5800

Established: January 11, 1950

Paid-in Capital: ¥265.6 billion

Total Number of Issuable Shares: 6,000,000,000

Total Number of Shares Issued: 3,373,647,813

Number of Shareholders: 326,915

Number of Employees: 68,887 (Consolidated)

#### **Composition of Shareholders**



Stock Listings:	Tokyo, Osaka, Nagoya, Fukuoka and Sapporo Stock Exchanges
Ticker Code:	7011
Manager of the I	Register of Shareholders: Mitsubishi UFJ Trust and Banking Corporation 4-5, Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8212, Japan

#### **Independent Auditors:**

Ernst & Young ShinNihon LLC Hibiya Kokusai Bldg., 2-2-3, Uchisaiwai-cho, Chiyoda-ku, Tokyo 100-0011, Japan

Major Shareholders	Number of shares owned by major shareholders	% of total shares
Japan Trustee Services Bank, Ltd. (Trust Account)	181,910,900	5.39
The Master Trust Bank of Japan, Ltd. (Trust Account)	157,872,000	4.68
The Nomura Trust and Banking Co., Ltd. (Retirement Benefit Trust Account for The Bank of Tokyo-Mitsubishi UFJ, Ltd.)	125,666,000	3.72
SSBT OD05 OMNIBUS ACCOUNT – TREATY CLIENTS	80,524,700	2.39
Meiji Yasuda Life Insurance Company	80,022,741	2.37
Japan Trustee Services Bank, Ltd. (Trust Account 9)	59,612,000	1.77
Tokio Marine & Nichido Fire Insurance Co., Ltd.	50,400,000	1.49
The Nomura Trust and Banking Co., Ltd. (Retirement Benefit Trust Account for Mitsubishi UFJ Trust and Banking Corporation	) 45,934,000	1.36
The Nomura Trust and Banking Co., Ltd. (Investment Trust Account	unt) 42,354,000	1.26
MHI Stock Ownership Plan	38,272,985	1.13

## Monthly Stock Price Range & Trading Volume





# THE MOST SOPHISTICATED EMBODIMENTS OF THE MOST ADVANCED TECHNOLOGIES: WHAT THE WORLD NEEDS.

MHI markets engineering excellence to the world through two overseas liaison offices, eight representative offices, and subsidiaries throughout the world.

Our global activities include expanding our production sites and sales networks to meet worldwide needs. Those efforts do not stop with providing the world with MHI products.

We also emphasize international exchanges in the areas of technology and training.



45 PT. MPS Indonesia

#### Aerospace

- 49 Intercontinental Jet Service Corporation
- 4 MHI Canada Aerospace Inc.
- 49 Mitsubishi Aircraft Corporation America, Inc.
- (1) Mitsubishi Aircraft Corporation Europe, B.V.
- MHI Aerospace Vietnam Co., Ltd.

#### Industrial Infrastructure

- MHCG, Inc. (New Gencoat, Inc.)
- Mitsubishi-Hitachi Metals Machinery USA, Inc.
- MLP Canada Ltd.
- MLP U.S.A., Inc.
- 🚯 MCO Saudi Arabia, LLC
- MHI Engineering and Industrial Projects India Private Ltd.
- MHI Industrial Engineering & Services Private Ltd.
- MHI Machine Tool (H.K.) Ltd.
- Mitsubishi Heavy Industries India Precision Tools, Ltd.
- Mitsubishi Heavy Industries (Changshu) Machinery Co., Ltd.
- Mitsubishi-Hitachi Metals Machinery (Shanghai) Co., Ltd.
- Mitsubishi-Hitachi Metals Machinery South Asia Private Ltd.
- MLP Hong Kong Ltd.

### Social Infrastructure

- 69 Crystal Mover Services, Inc.
- 65 FMS Equipment Rental Inc.
- 69 Mitsubishi Caterpillar Forklift America Inc.
- Mitsubishi Engine North America, Inc.
- 69 Mitsubishi Heavy Industries Climate Control, Inc.

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67 64

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- 69 Rapidparts, Inc.
- 1 Southern California Material Handling Inc.
- MHI Sul Americana Distribuidora de
- Motores Ltda.
- MHI Equipment Alsace S.A.S.
- MHI Equipment Europe B.V.
- Mitsubishi Caterpillar Forklift Europe B.V.
- 🕼 Rocla Oy
- 10 MHI Equipment and Services Africa S.A.
- Anupam-MHI Industries Ltd.
- MCF Forklift (Shanghai) Co., Ltd.
- MHI Automotive Climate Control (Shanghai) Co., Ltd.
- Image: MHI Automotive climate control (Thailand) Co., Ltd.
- MHIEC Environmental (Beijing) Co., Ltd.
- B MHI Engine System (Shenzhen) Co., Ltd.
- ③ MHI Engine System Asia Pte. Ltd.
- Image: Method Market Method Market Method Market Method Market Method Method

I MHI Engine System Middle East (FZE)

13 7) 30

- B MHI Engine System Philippines, Inc.
- 1 MHI Engine System Vietnam Co., Ltd.
- In MHI Residential Air-Conditioners (Shanghai) Co., Ltd.
- ③ MHI Turbo Engineering Co. (Shanghai)
- MHI-Pornchai Machinery Co., Ltd.
- MHI-VST Diesel Engines Private Ltd.
- VIIII-VOT Dieser Engines i Tivate Etd.
- Mitsubishi Caterpillar Forklift Asia Pte Ltd.
   Asia Pte
- Mitsubishi Heavy Industries Air-conditioners Australia, Pty. Ltd.
- Mitsubishi Heavy Industries Air-conditioners (Shanghai) Co., Ltd.
- Mitsubishi Heavy Industries Forklift (Dalian) Co., Ltd.
- Mitsubishi Heavy Industries-Haier (Qingdao) Air-Conditioners Co., Ltd.
- Mitsubishi Heavy Industries-Jinling Air-Conditioners Co., Ltd.
- Industries-Mahajak Air Conditioners Co., Ltd.
- I Mitsubishi Turbocharger Asia Co., Ltd.
- 💿 PT. MHI Engine System Indonesia
- D Thai Compressor Manufacturing Co., Ltd.





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