

CSR DATA BOOK 2017

For the Year Ended March 31, 2017

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CSR Management

► CSR Framework

Policy

In accordance with the three principles that define the spirit of our creed, the MHI Group serves as a manufacturing corporation that contributes to societal progress through its business endeavors of delivering products and technologies in support of social and industrial infrastructure worldwide. In this way MHI is contributing to the resolution of global issues. Furthermore, 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 profits to all stakeholders in optimum fashion, while at the same time providing excellent products and technologies to realize a sustainable society and a secure future for people and the planet.

In 2007, we formulated CSR Action Guidelines to serve as collective standards for all MHI Group employees. These guidelines provide a concrete and easy-to-understand way for employees to consistently keep CSR in mind as the Group contributes to societal progress through its business endeavors and through a corporate creed centered on the principles of CSR.

In 2015, we formulated the MHI Group Code of Conduct in response to the Group's globalization and diversification. As a global company, the MHI Group employs individuals from difference backgrounds, nationalities, and cultures, and the code of conduct describes how MHI employees should conduct themselves.

In 2011, the United Nations adopted the Guiding Principles on Business and Human Rights. In keeping with international society's increasing emphasis on human rights, in 2014 we formulated the MHI Basic Policy on Human Rights.

In 2017, we stepped up our global activities, such as participating in the World Business Council for Sustainable Development (WBCSD). Going forward, as well, we aim contribute further toward the realization of a sustainable society.

CSR Action Guidelines

MHI strives to move the world toward a more secure future. Through our technology, our business practices and our people, we:

► Care for the planet

We are eco-conscious, and engineer environmentally-friendly technologies that improve sustainability and protect the Earth

► Create a more harmonious society

We embrace integrity and proactive participation to solve societal challenges

► Inspire the future

We cultivate global talent who share a vision and desire to move the world forward for generations to come

(Others)

MHI Group Code of Conduct	http://www.mhi.com/company/aboutmhi/policy/conduct.html
MHI Basic Policy on Human Rights	http://www.mhi.com/company/csr/social/huamnrights.html
Privacy Policy	http://www.mhi.com/privacy.html
Policy of Safety and Health	http://www.mhi.com/company/aboutmhi/policy/safety_health.html
Procurement Policy	http://www.mhi.com/company/procurement/policy/index.html
MHI Group Supply Chain CSR Promotion Guidelines and Basic Policy Concerning Conflict Minerals	http://www.mhi.com/company/procurement/csr/index.html
MHI Group Policy for Social Contribution Activities	http://www.mhi.com/company/csr/social/contribution.html

CSR Promotion System

MHI has established the CSR Committee as the management-level body for making decisions related to CSR. The CSR Committee comprises four members and is chaired by the representative director CFO and head of the Business Strategy Office (representative director, executive vice president). In principle, the committee meets twice each year to determine various policies and material items related to CSR and to conduct status reports.

As is outlined below, we have also put in place various committees, such as the Compliance Committee and the Environment Committee, to deliberate material items related to CSR.

■ Audit and Supervisory Committee	Member: Audit and Supervisory Committee Members (five) Number of times: 17 times a year (FY2016)
■ Nomination and Remuneration Meeting	Member: Outside directors (five) and the President and CEO Number of times: 2 times a year (FY2016)
■ Outside Directors Meetings	Member: Outside directors (five) + management personnel (as necessary) Number of times: Once a year (FY2016)
■ CSR Committee	Member: Chaired by the head of the Business Strategy Office (the executive officer in charge of CSR), the CSR Committee includes the GC (general counsel), CFO, CTO, and the officer in charge of Human Resources. Number of times: 2 times a year
■ Compliance Committee	Member: Chairman is Executive vice president, General Council, mad composed of 22members. Number of times: 2 times a year (FY2017)
■ Committee for Raising Awareness of Human Rights	Member: Chairman is Executive vice president, in charge of HR, and composed of 23 members. Number of times: Anytime, if necessary
■ MHI Group Environment Committee	Member: Chairman is Chief Technology Officer and composed of 10 members. Number of times: Once a year
■ International Trade Control Committee	Member: Chairman is Executive vice president, General Council, and composed of 13 members. Number of times: 2 times a year

Conformity to International Code of Conduct

Being a global company, MHI always conducts its business activities in accordance with international codes of conduct. In 2004, MHI became a participant in the United Nations Global Compact, committing itself to making ongoing efforts throughout the Group to respect and carry out its Ten Principles spanning four basic areas: human rights, labor, environment, and anti-corruption. We promote CSR activities that are in accordance with ISO 26000, which was formulated in 2010 as an international guideline on the social responsibilities of organizations. We endeavor to disclose information in accordance with Japanese and overseas reporting standards. One such international standard for the reporting of non-financial information is the Sustainability Reporting Guidelines (Fourth Edition, or G4) of the Global Reporting Initiative.

Pick Up

The Ten Principles of the Global Compact

The "United Nations Global Compact" is a voluntary initiative initially proposed by Kofi Annan, the UN Secretary General, at the World Economic Forum at Davos in 1999. On that occasion, Mr. Annan called for business corporations and organizations worldwide to embrace and promote a set of principles, now ten in number, within their respective capacities. The Global Compact principles address four issues: human rights, labor, the environment and anti-corruption.

In keeping with the compact's principles, the company is contributing in myriad ways that include the development and dissemination of technologies to protect the environment, support to areas that suffer natural disasters, and promoting the awareness of human rights.

Participation in the UN Global Compact

Human Rights	■ Principle 1	Businesses should support and respect the protection of internationally proclaimed human rights; and
	■ Principle 2	make sure they are not complicit in human rights abuses.
Labour Standards	■ Principle 3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining;
	■ Principle 4	the elimination of all forms of forced and compulsory labour;
	■ Principle 5	the effective abolition of child labour; and
	■ Principle 6	the elimination of discrimination in respect of employment and occupation.
Environment	■ Principle 7	Businesses should support a precautionary approach to environmental challenges;
	■ Principle 8	undertake initiatives to promote greater environmental responsibility; and
	■ Principle 9	encourage the development and diffusion of environmentally friendly technologies.
Anti-Corruption	■ Principle 10	Businesses should work against all forms of corruption, including extortion and bribery.

The seven core subjects of ISO 26000, and MHI's main efforts

1. Organizational governance

Organizational governance

■ Corporate Governance ■ Risk Management

2. Human rights

Due diligence / Human rights risk situations / Avoidance of complicity / Resolving grievances / Discrimination and vulnerable groups / Civil and political rights / Economic, social and cultural rights / Fundamental principles and rights at work

■ Human Rights ■ Supply Chain Management

3. Labour practices

Employment and employment relationships / Conditions of work and social protection / Social dialogue / Health and safety at work / Human development and training in the workplace

■ Labor Practice ■ Occupational Health and Safety ■ Human Capital Development ■ Talent Attraction and Retention

4. The environment

Prevention of pollution / Sustainable resource use / Climate change mitigation and adaptation / Protection of the environment, biodiversity and restoration of natural habitats

■ Environmental Management ■ Climate Change ■ Water Risk ■ Biodiversity ■ Waste Pollution

5. Fair operating practices

Anti-corruption / Responsible political involvement / Fair competition / Promoting social responsibility in the value chain / Respect for property rights

■ Compliance

6. Consumer issues (responsibility towards customers)

Fair marketing, factual and unbiased information and fair contractual practices / Protecting consumers' health and safety / Sustainable consumption / Consumer service, support, and complaint and dispute resolution / Consumer data protection and privacy / Access to essential services / Education and awareness

■ Product Stewardship ■ Customer Relationship Management

7. Community involvement and development

Community involvement / Education and culture / Employment creation and skills development / Technology development and access / Wealth and income creation / Health / Social investment

■ Corporate philanthropy

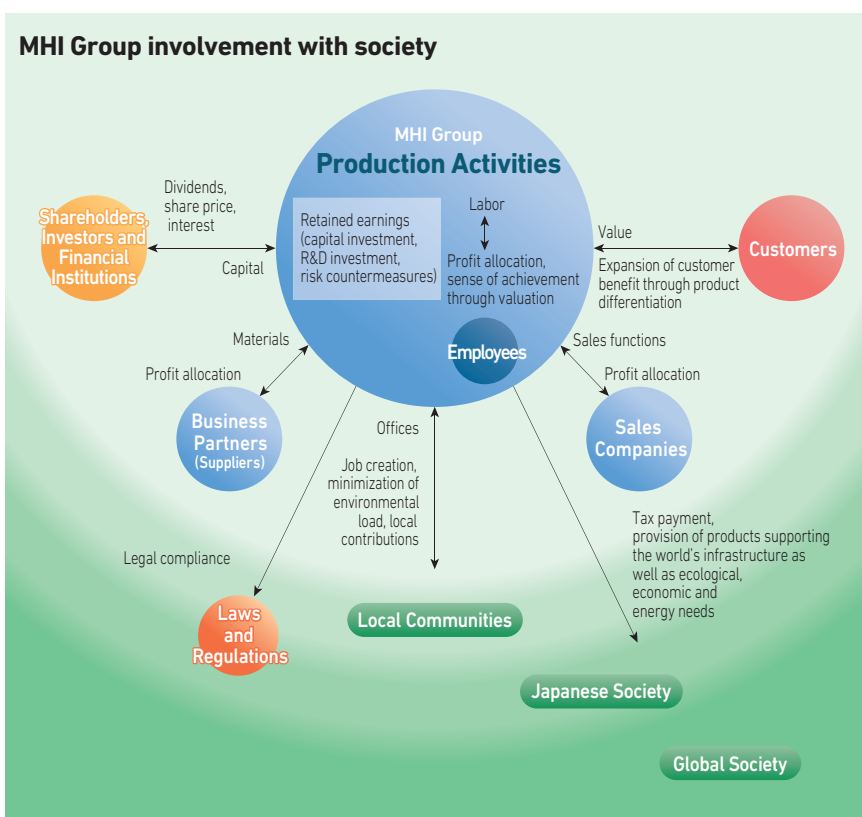
(Note) The core subjects and issues were determined in reference to Understanding ISO 26000 (November 2010), translated by the Japan Standards Association.

► Stakeholders

Our Stakeholders

In accordance with the three principles that define the spirit of our creed, the MHI Group serves as a manufacturing corporation that contributes to societal progress through its business endeavors of delivering products and technologies in support of social and industrial infrastructure worldwide. In this way MHI is contributing to the resolution of global issues.

Furthermore, 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 profits to all stakeholders in optimum fashion, while at the same time providing excellent products and technologies to realize a sustainable society and a secure future for people and the planet.



Relationship with Stakeholders

The MHI Group prioritizes management initiatives that reflect input from the various stakeholders in its business activities, including customers, suppliers, business partners, Group employees, and local communities. In addition to seeking out stakeholder input in its everyday activities, MHI engages in dialogue with experts and NGOs having specialized expertise related to CSR and global issues, striving to incorporate societal viewpoints.

In fiscal 2016, the MHI Group conducted dialogue with two overseas experts on the themes of business and human rights.

Date:	✓	September 14, 2016
Overseas experts:	✓	Roel Nieuwenkamp (Chair of the Organisation for Economic Co-operation and Development (OECD) Working Party on Responsible Business Conduct) Thomas Thomas (CEO, the ASEAN CSR Network (ACN))
Attendees from MHI:	✓	Heads of the Corporate Communications Department and CSR Group, and two CSR Group employees
Facilitator:	✓	Saul Takahashi (Representative for Japan of the Business & Human Rights Resource Centre)

■ Stakeholder dialogues

Contents	Date	Attendees (Note)	Outline
The material issues and future initiatives	September 15, 2015	Motoko Aizawa (Managing Director and Chair, IHRB US Board, Institute for Human Rights and Business) Amol Mehra (Director, International Corporate Accountability Roundtable) Christopher Schuller (Legal Adviser on Business and Human Rights, German Institute for Human Rights) Allan Lerberg Jørgensen (Department Director of Human Rights and Development, Danish Institute for Human Rights)	Held dialogue with overseas experts centered on formulating a global debate on business and human rights with regard to the content of material issues and future initiatives
The material Issues Identification Process	September 3, 2014	John Morrison (Institute for Human Rights and Business) Catherine Poulsen-Hansen (Danish Institute for Human Rights) Amol Mehra (International Corporate Accountability Round Table)	The MHI Group conducted a dialogue with three experts from overseas concerning our Material Issues Identification Process, which determines what social issues are to be prioritized and addressed.
The main human rights issues in the manufacturing sector	March 13, 2013	Makoto Teranaka (Visiting Professor, Faculty of Contemporary Law, Tokyo Keizai University) Hiroshi Ishida (Executive Director of Caux Round Table Japan, Global CRT Senior Advisor, Professor at Institute of Business and Accounting, Kwansai Gakuin University, Part-time Lecturer Kyushu University Business School)	MHI held a stakeholder dialogue to learn from two experts, Mr. Makoto Teranaka and Mr. Hiroshi Ishida, in order to identify human rights impacts.
Approach to Environmental and Energy Technologies In Line with MHI's "Environment Vision 2030"	February 27, 2012 March 8 and 27, 2012	Mariko Kawaguchi (Head of ESG Research Department Daiwa Institute of Research) Norio Fukao (Professor and Director of Publicity Strategy Headquarters, Nagasaki University)	The MHI Group conducted a dialogue about our "Environment Vision 2030," with outside experts.
Expectations for Science Class Support Activities	February 17, 2011	Takuya Suga (Teacher and Vice Principal, Hiroshima Minamikanon Elementary School) Sumio Endo (Director, Kodomo Uchu Mirai Association) Yuichi Taguchi (Kodomo Uchu Mirai Association)	Discussions were held with the Board of Education and NPO to exchange opinions on "Meeting of Future Space Child" (KU-MA). Kodomo Uchu - Mirai Association.

(Note) Indicated roles and titles are as of the indicated date.

■ Collaboration with our Stakeholder

MHI has operated the in-house system Funds for Community Engagement (former Social Contribution Fund) since fiscal 2012 to promote active involvement in social contribution activities designed to address needs and issues of the local communities around company facilities and contribute to the solution of global societal issues. Under this system, time donated by company employees to volunteer work is converted to a monetary value, which is then converted to an equivalent budget allocation. Money in the budget is used along with the dispatch of employee volunteers to build collaborative relationships with NPOs and other local groups and address social issues together.

List of support recipients in fiscal 2016 ✓

Region of activity	Affiliated organization	Field of activity
Myanmar	Myanmar Engineering Society	Education and environment
Nagasaki (Japan)	Fine Network Nagasaki (NPO)	Social welfare
Yamaguchi (Japan)	Shimonoseki Misaka Sakura Tomonokai (NPO)	Environment
Yamaguchi (Japan)	Pukupuku Pocket	Social welfare
Yamaguchi (Japan)	Food Bank Shimonoseki	Social welfare
Yamaguchi (Japan)	Shimonoseki Women's Association for a Better Aging Society	Social welfare
Hiroshima (Japan)	Hitachi Science Club (NPO)	Education
Hyogo (Japan)	Community Support Center Kobe (NPO)	Social welfare
Shiga (Japan)	Ritto Forest Club projects, Ritto-city Society of Commerce and Industry	Environment
Shiga (Japan)	Network for Protection Lake Biwa with the Common Reed (<i>Phragmites Australis</i>)	Environment
Aichi (Japan)	MACH B&F (NPO)	Education
Aichi (Japan)	Toki-Shonai River Support Center (NPO)	Environment
Kanagawa (Japan)	Sagamihara City Rugby Ball Association (NPO)	Health and sports

► Materiality

Material Issues of MHI Group

We at the MHI Group consider issues that could give significant impact on the creation of corporate and social values within the group as material issues to be addressed with high priority.

The following have been identified as material issues in a materiality assessment conducted within the MHI Group from both corporate and social perspectives in due consideration of internationally recognized standards and the concerns of our stakeholders.

Material Issues

1. An Optimal Governance Structure Based on Our Corporate Culture

- An optimized organization to continually contribute to society through business
- The assurance of fair operating practices and appropriate labor practices

Objective

- Ensure an organizational culture in which values are shared globally and universally

Strategic KPIs

- Instill globally consistent policies that conform with the international code of conduct (establish universality)
- Enhance transparency (assure universality)
Enhance disclosure and stakeholder engagement

2. The Use of Global Human Resources

- The attraction and development of human resources with the ability to respond to globalization
- Diversity and equal opportunity, including the empowerment of female employees.

Objective

- Be an organization that embraces diversity (Ensure that barriers to diversity are removed)

Strategic KPIs

- Improvement in diversity-related indicators

3. Response to Mega Trends

- Innovation and quality control to meet global needs
- Enhanced safety and security, including improved information disclosure and transparency

Objective

- Enact strategic measures and business operations that meet the needs of global society

Strategic KPIs

- Improvement in stakeholder evaluations (SRI surveys, customer satisfaction surveys, etc.)

Key Performance Indicators for Material Issues

The MHI Group has set KPIs to enable the specific evaluation of strategic KPI successes and progress toward the achievement of target material issues, and conducts CSR activities accordingly. As the number of initiative indicators increases, we will report on targets, results, and case studies for specific initiatives.

KPI for material Issue 1: Number of whistleblowing cases

We have provided two hotlines where any actual or potential breach of the Code of Conduct, and any other actual or potential breaches of ethics (including bribery and corruption), can be reported: the MHI Whistleblowing Hotline, which is available to all employees, including those of Group companies, and the MHI External Whistleblower Hotline. The Compliance Committee secretariat promptly investigates all reports made to these hotlines, and takes appropriate remedial or preventive action where breaches are identified.

Number of whistleblowing cases, by Type

Type	FY 2014	FY 2015	FY 2016
Labor and the work environment	48	39	42
Overall discipline and breaches of manners	49	24	28
Transaction-related laws	14	8	11
Consultations and opinions	26	11	3
Other	48	49	34
Total (number of corrections and improvements)	185(110)	131(85)	118(64)

KPI for material Issue 2: Number of female managers

In July 2014, MHI set a target to increase the number of the Company's female managers (in positions of section manager and higher) threefold from the current level by 2020, and is promoting the active participation of women in the workplace in conjunction with its pursuit of diversity management.

Number of female managers

FY 2015	FY 2016
102	126

(Note) The values given are the numbers reported by Mitsubishi Heavy Industries, Ltd. and Mitsubishi Hitachi Power Systems, Ltd., in principle.

Processes Defining Material Issues

Material issues are specified and verified in the following cycle from the perspective of stakeholder dialogue.

<p>Incorporating Society's Perspective</p> <p>Arranging the Issues from the Perspective of MHI's Business</p> <p>Confirming Appropriateness</p> <p>Narrowing Down the Issues in Line with Mega Trends</p>	<p>Taking a stakeholder perspective (Note1) on the core subjects of ISO 26000, we narrowed down to 84 the items of importance to MHI. We then referred to such guidelines as the Global Reporting Initiative (GRI) "Sustainability Reporting Guidelines (Fourth Edition, or G4)" and subsequently grouped together similar items and reduced the list to 49 items in seven departments.</p>
	<p>We conducted hearings of our 16 departments, confirming the importance to our business of the 49 issues. We also ascertained that three major changes were consistently raised as issues with the business reorganizations the Company has undergone in recent years: changes in the ideal state of the organization, globalization, and changes in the business model.</p>
	<p>We engaged in dialogue with specialized overseas institutions to confirm that our process of identifying material issues was appropriate.</p>
	<p>We referred to priority items from 2015 in Building the Post-2015 Business Engagement Architecture, (Note2) published by the United Nations Global Compact, confirming that our business perspective was not divergent from sustainability mega trends, consolidating the number of items to 25.</p>
<p>Identifying Material Issues</p>	<p>Based on the shortlist of 25 items determined from the perspectives of the Company's business and mega trends, we identified three material issues for the Company.</p>
<p>Obtaining Management Authorization</p>	<p>The CSR Committee (Note3) deliberated and decided on the items.</p>

(Note1) We referred to the results of stakeholder questionnaire surveys, SRI surveys, records of meetings with institutional investors, supplier surveys submitted to customers, and stakeholder engagement programs, among others.

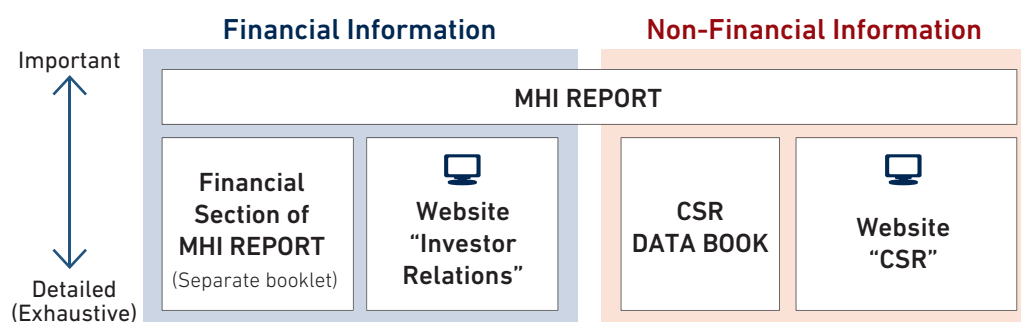
(Note2) This publication is a call for companies to commit to and promote and support activities to achieve targets set by the United Nations.

(Note3) Chaired by the head of the Business Strategy Office (the executive officer in charge of CSR), the CSR Committee includes the GC (general counsel), CFO, CTO, and the officer in charge of Human Resources.

▶ Reporting

Structure of Information Disclosure

MHI Report contains information that is material. More detailed information is available on our website.



MHI Report (Annual Report) and Other Reports <http://www.mhi.com/finance/library/index.html>

The Financial Section of MHI Report <http://www.mhi.com/finance/mr2017/data/index.html>

"CSR" section of our website. <http://www.mhi.com/company/csr/>

Coverage

In principal, the scope of reporting includes MHI and its consolidated subsidiaries. The scope of some information is for MHI on a non-consolidated basis, in which case it is identified as such.

Third-party Assurance

To enhance the reliability of data, we have received third-party assurance. (For details, please see pages 84-87.)

(Note) Data subject to third-party assurance is indicated with ✓.

Reference Guidelines

- International Integrated Reporting Council (IIRC)
International Integrated Reporting Framework
- Global Reporting Initiative
Sustainability Reporting Guidelines (Fourth Edition, or G4)
- Ministry of the Environment of Japan
Environmental Reporting Guidelines (2012 version)

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.

Recognition from Society

The MHI Group practices management with a focus on CSR and conducts a wide range of activities to enhance its business, environment and society, including corporate governance and risk management. Thanks to efforts like these, MHI has been selected for inclusion in the Asia Pacific Index of the Dow Jones Sustainability Index (DJSI), a representative environmental, social, and governance (ESG) index. We are also included in the FTSE Blossom Japan Index and the MSCI Japan Empowering Women (WIN) index.

MEMBER OF

**Dow Jones
Sustainability Indices**

In Collaboration with RobecoSAM 



2017 Constituent
MSCI Japan Empowering
Women Index (WIN)

Governance

► Corporate Governance

As a company responsible for developing the infrastructure that forms the foundation of society, MHI Group's basic policy is to execute management in consideration of all stakeholders and strive to enhance corporate governance on an ongoing basis in pursuit of sustained growth of the MHI Group and improvement of its corporate value in the medium and long terms. In accordance with this basic policy, MHI endeavors to improve its management system, such as by enhancing its management oversight function through the separation of management oversight and execution and the inclusion of outside directors, and develop "Japanese-style global management," focusing on the improvement of the soundness and transparency of its management as well as on diversity and harmony.

As part of a corporate governance reform, in 2015 MHI transitioned to a company with an Audit and Supervisory Committee, with outside directors numbering five, including three who are Audit and Supervisory Committee members. In 2016, we established the Nomination and Remuneration Meeting and reduced the number of directors from 14 to 11 (maintaining the number of outside directors at five). Through this reform, we aim to accelerate decision-making and strengthen the supervisory function.

(Reference) Corporate Governance of Mitsubishi Heavy Industries, Ltd. <http://www.mhi.com/company/aboutmhi/governance/>

Number of Outside Directors

2017 **5**

Ratio of Outside Directors

2017 **45%**

Performance Data

Corporate Governance

Independence of the Board of Directors

Independence policy, target

(Reference)

Article 20 of the Corporate Governance Guideline of Mitsubishi Heavy Industries, Ltd. clearly address our goal: "MHI shall endeavor to make the number of independent Outside directors who meet MHI's independence criteria ... constitute one third or more of all members of the Board of Directors. "

Corporate Governance Guidelines of Mitsubishi Heavy Industries, Ltd.

http://www.mhi.com/company/aboutmhi/governance/pdf/corporate_governance.pdf

Diversity of Board of Directors

When selecting directors who are not Audit and Supervisory Committee Members, it is MHI's policy to nominate as candidates who have extensive experience in executing MHI's business, and who see things from the perspective of a senior management; and in addition, to invite more than one individual as candidates for the role of outside directors to perform supervision from an objective standpoint while giving consideration to external stakeholders.

Furthermore, from the perspective of ensuring effective audits, as directors who are Audit and Supervisory Committee Members, MHI's policy is to select individuals who have extensive knowledge and experience in various fields such as corporate management, legal, finance and accounting in a well-balanced manner.

Corporate governance structure

Number of directors		Total	
			11
	Executive directors		3
	Non-executive directors		8
	Independent directors		5
	Female directors		1
	Non-Japanese directors		1

Separation of role of Chairman and CEO		
		Separate

Functions and committees

Audit		
Name		Audit and Supervisory Committee
Member		Audit and Supervisory Committee Members (five)
Number of times		17 times a year (FY2016)

Selection and nomination		
Name		Nomination and Remuneration Meeting
Member		Outside directors (five) and the President and CEO
Number of times		2 times a year (FY2016)

Others-relate to governance		
Name		Outside Directors Meetings
Member		Outside directors (five) + management personnel (as necessary)
Number of times		Once a year (FY2016)

CSR		
Name		CSR Committee
Member		Chairman is the head of the Business Strategy Office, the executive officer in charge of CSR, and composed of the GC (general counsel), CFO, CTO (Chief Technology Officer), and the officer in charge of Human Resources (HR).
Number of times		2 times a year

Compliance	Name	Compliance Committee
	Member	Chairman is Executive vice president, General Council, and composed of 22 members.
	Number of times	2 times a year (FY2017)
Human Rights	Name	Committee for Raising Awareness of Human Rights
	Member	Chairman is Executive vice president, in charge of HR, and composed of 23 members.
	Number of times	Anytime, if necessary
Environment	Name	MHI Group Environment Committee
	Member	Chairman is CTO and composed of 10 members.
	Number of times	Once a year
Others-relate to governance	Name	International Trade Control Committee
	Member	Chairman is Executive vice president, General Council, and composed of 13 members.
	Number of times	2 times a year

Effectiveness of the Board of Directors

Board meeting attendance	Average	unit	
		%	97 (FY2016)
	The minimum attendance	%	90 (FY2016)
Directors' terms of office	Average	year	1 (2 for Audit and Supervisory Committee members)
		year	4 (As of December 2017)
Standards related to restrictions on number of concurrent positions			Around three for inside directors

Board evaluation results	<p>MHI has been engaged in multiple measures for enhancement of corporate governance. Taking advantage of enactment of Corporate Governance Code, we have introduced an annual evaluation of Board of Directors (MHI Corporate Governance Guideline, Article 31) aiming at ensuring further effectiveness of Board of Directors by verifying its functional efficiency as an entity and being fully accountable for stakeholders, by conducting holistic analysis and evaluation of the Board.</p> <p>In fiscal 2016, we conducted analysis and evaluations, with GC as the secretariat, from four main perspectives: Board of Directors composition, operation of the Board of Directors, the supervisory function of the Board of Directors, and a structure to support outside directors.</p> <p>In conducting this analysis and evaluation, to make the Board evaluation more meaningful, the individual directors exchanged views and held discussions in advance regarding the evaluation criteria and evaluation process. As a result, this fiscal year the Board evaluation was conducted according the evaluation process outlined below.</p>
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- Self evaluation by all directors including outside directors based on questionnaires.
- At a meeting of independent outside directors, analysis and evaluation related to the effectiveness of the overall Board of Directors was raised as a theme, and views were exchanged among the independent outside directors.
- Discussing results of the self evaluation at the Board meeting.
- Results of the evaluation is reported and resolved at the Board meeting based on the self evaluation and the discussions.

As a result of the evaluation based on the process above mentioned, overall effectiveness of the Board of Directors in 2016 was ensured with no major concern.

The status of activity concerning the issues recognized in the Board evaluation conducted in the previous year (fiscal 2016), major issues recognized this time, and future responses are as follows.

1. Initiatives to address principal issues recognized in the previous year

- (1) Reconfirming issues that should be delivered in the Board meetings and further deliberating roles of the Board of Directors in MHI, as a company with an Audit and Supervisory Committee.
- (2) We continued working to decentralize and avoid the concentration of agenda items, based on the proposed annual schedule for the Board of Directors, sending Board of Directors materials in advance. We will continue working to enhance deliberations.
- (3) We provided and operated an information environment in which outside directors have access to basic management data at all times.

2. Issues recognized this time and future initiatives

- (1) Training directors
To ensure a more effective Board of Directors supervisory function, we will consider the expansion of opportunities for training on changes in the environment and MHI's initiatives in response.
- (2) Enhancing deliberations at the Board of Directors
We will further enhance deliberations at the Board of Directors by providing more extensive materials in advance.
- (3) Strengthening the Board of Directors supervisory function as a company with an Audit and Supervisory Committee
We will continue to consider the appropriate setting of agenda items in order to strengthen the Board of Directors supervisory function.
- (4) Augmenting communication among outside directors
To make deliberations at Board meetings more meaningful, we will expand opportunities for communication among outside directors.

Remuneration of directors

Remuneration (Note)	Position	Number	unit	Total	Base remuneration	Performance-linked remuneration
	Directors who are not serving as Audit and Supervisory Committee members (excluding outside directors)	7	millions of yen	505	242	176
	Directors who are not serving as Audit and Supervisory Committee members (excluding outside directors)	2	millions of yen	160	160	—
	Outside directors	6	millions of yen	76	76	—

(Note) Table above includes four directors retired this fiscal year.

Measurement metrics for variable remuneration		
	Internal Financial Success Metrics	The remuneration is determined based on the business performance of which he/she is in charge.
	External Financial Success Metrics	The remuneration is determined based on the consolidated earnings of the company.

Variable remuneration linked to long-term performance

ratio

22%

Stock remuneration

Individual remuneration (Note)	Name	Position	unit	Total	Base remuneration	Performance-linked remuneration	Stock options
	Hideaki Omiya	Director	millions of yen	150	68	52	29
	Shunichi Miyanaga	Director	millions of yen	150	68	52	29

(Note) Officers more than 100 million yen in total sum

Average salary of all employees and CEO remuneration

unit

CEO remuneration

millions of yen

150

Mean employee salary

millions of yen

8.4

Ratio

time

17.9

Management ownership requirements

Management ownership requirements

MHI has specific stock ownership requirements for executives, but there is no limit set for the number of stocks they can own. The stock holdings of each of the executives are disclosed in the annual security report.

Commitment to initiatives

Commitment to initiatives

UN Global Compact
Global Reporting Initiative
ISO26000

► Risk Management

Under the direct control of the CEO, independent departments manage risks appropriately according to the nature of those risks. Risks are regularly evaluated and analyzed and necessary avoidance or mitigating measures are taken. In addition, internal audits monitor the effectiveness and appropriateness of these measures and reports are regularly submitted to the Board of Directors and the Audit and Supervisory Committee. To prepare for cases where significant risk may materialize, MHI ensures the means to immediately communicate information to senior management to respond promptly and accurately to emergency situations. Individuals responsible for crisis management are also appointed in each business division. To evaluate and manage risks, MHI defines nine categories and 17 items as key risks to be managed. Based on the probability of occurrence and severity of impact, overall risk exposure is assessed by management. Based on that assessment, departments/personnel are assigned to individual risks to address preventive measures and properly respond to identified risks when they arise. The status of important risk situations is reported and deliberated by the Executive Committee and the Board of Directors.

Key risks

2016 **9** categories **17** items

Pick Up

Enhancement of business risk management

Throughout its history, MHI Group has achieved sustained growth by taking up diverse new challenges and initiatives in numerous business areas. At the same time, on occasion we have experienced losses on a large scale. In recent years especially, with the globalization of its business activities, the expanding scale of individual projects, and ongoing development of increasingly complex technologies, the scale of attendant risks is becoming larger than ever before.

In order for MHI Group to mark sustained growth amid an ever-changing business environment, it is necessary to continue to take up challenges in new fields, new technologies, new regions, and new customers as well as to improve and strengthen operations in its existing business markets. Such challenges will entail business risks, and a company's ability to curb risks yields significant influence on its business results and growth potentials.

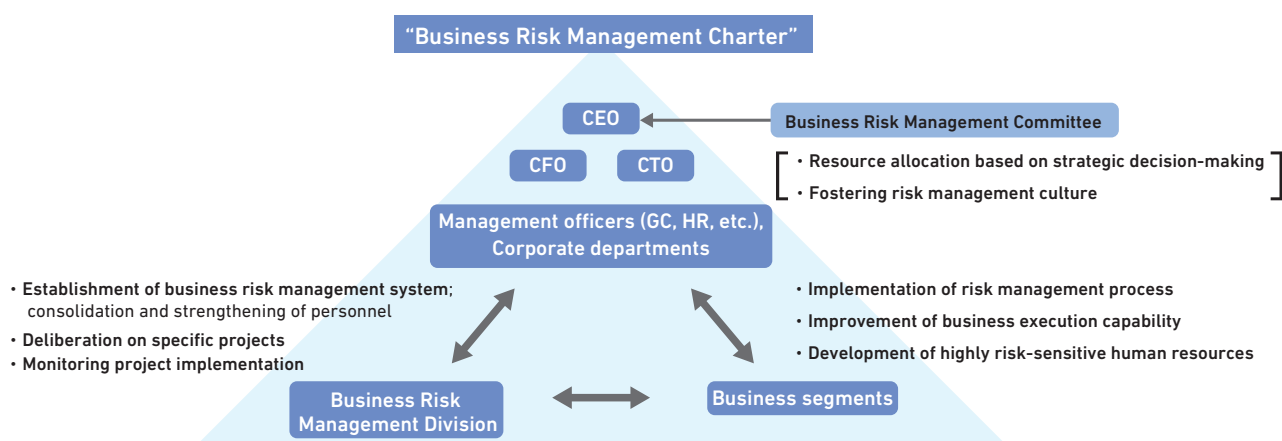
To promote challenges of this kinds and prepare for the next leap into the future, MHI Group, applying its past experience and lessons learned, aims to create the mechanisms that will ensure the effective execution of business risk management, to foster a culture responsive to risk, and to forge the foundation for consistent growth.

Organized Business Risk Management

Specifically, through the following measures we are pursuing more organized business risk management and clarifying the roles of management, business segments, and corporate departments.

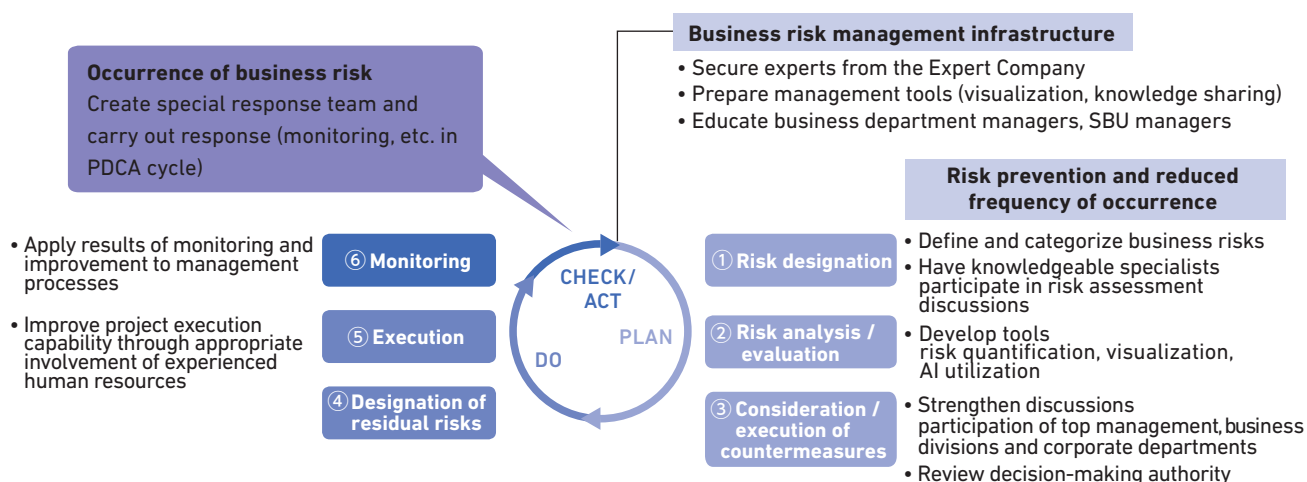
1 Establish "Business Risk Management Charter" as Company's foremost set of rules
→ Clarify risk management targets, etc.

2 Establish "Business Risk Management Committee" headed by CEO
→ Discuss policy response by top-level management



Content of Activities

With the Business Risk Management Department as the responsible department that reports directly to the CEO, MHI Group engages in business risk management activities in line with the activity cycle outlined below, bringing together management, business segments, and corporate departments.



Performance Data

Risk Management

Risk governance

Chief executive	Shunichi Miyanaga (President and CEO)
Independence of risk management function	<ul style="list-style-type: none"> • Under the direct control of CEO, independent department properly manage risks depending on the nature of risks. • Assess risks, implement necessary preventive and/or mitigation measures, audit its effectiveness and validity by internal audit, and report to Board of Directors and Audit and Supervisory Committee. • Preparing for occurring significant risks, keep the structure for reporting important information immediately to CEO, at the time of crisis.

Risk awareness

Key risks

MHI defines 9 categories and 17 items as key risks

1. Economy

-Economic Climate: Risks associated with changing domestic/overseas macro economy and financial market

2. Environment

-Natural Disaster: Business continuity risks associated with wind storm, earthquake, lightning strike, flood and fire

3. Society

-Pandemic of Infectious Disease: Business continuity risks associated with infectious disease pandemic

4. Technology

-Information Security: Risks of loss/leak of confidential information

5. Governance

-Law / Regulation: Risks of administrative disposition/compensation for damage associated with breach of laws/regulations; risks associated with new establishment/revision of laws/regulations

-Environmental Regulation: Risks of administrative disposition/compensation for damage associated with breach of environmental regulations; risks associated with new establishment/revision of environmental regulations

6. Human Resources

-Recruitment: Risks associated with hiring and development of talented personnel

7. Supply Chain

-Material Procurement: Material price risks; supply risks; quality risks; trade credit risks

-Affiliated Companies: Risks associated with business and performance of affiliated companies

8. Business (Strategy, Operation)

-Export / Overseas Business: Business execution risks; partner risks; customer credit risks; competitor risks

-M&A, Alliance: Business risks of acquired/partner company; risks associated with synergy

-Product Competitiveness: Risks associated with advantage in quality, performance, reliability and price

-Product Quality: Risks of defect or fault in performance, delivery time and safety

-Intellectual Property: Risks of intellectual property right infringement associated with use of intellectual property; risks associated with leveraging and integration of intellectual property.

9. Finance

-Funding: Interest rate risks; liquidity risks; credit risks

-Exchange Rate Fluctuation: Risks of instability in revenue, cost, assets and liability associated with exchange rate fluctuation

-Retirement Benefit Expense and Debt: Asset management risks; national bond (interest rate) risks

Risk assessment

Risk assessment measures

- MHI defines 9 categories and 17 items as key risks.
- Based on probability of occurrence and severity of impact, overall risk exposure is assessed by management.
- Based on that, department/personnel is assigned to individual risks to address preventive measures and properly respond to identified risks at the time.
- Progress of key risk situation is reported and deliberated in the Executive
- We refrain from explaining the details of our risk management process, as it involves confidential information.

Emerging risk

Long-term risk

Global Compliance Risk: Along with expansion of business scale and globalization, compliance risks at different countries and region also increase.

Potential business impact of the risk
 Incompliance can result in significant impact for business continuity and corporate reputation.

Mitigating actions
 We prevent the risks by managing the risks specific to individual regions, as well as thoroughly implementing clearly defined activity guidelines and rules consistent around the world.

Risk culture

Training
 Education and training programs are implemented targeting both general employees and executives, in order to instill importance of risk management and enhance sensitivity to the risks.

Feedback process
 Researching on risk management practices in overseas competitors; assessment of risk management at MHI to identify issues to be improved; and transforming management/business system while enhancing risk handling capacity of personnel.

Tax risks

Policies related to tax strategy

- We respect individual countries' tax laws, tax-related legislation, and tax treaties, and report and pay taxes.
- We take advantage of preferential taxation in individual countries and strive to avoid international double taxation, minimizing our tax expenses and deferring taxes.
- We aim to optimize taxes by balancing efforts to lower tax costs and reduce tax risks.

Key tax risks
 We comply with individual countries' tax-related legislation and file taxes appropriately. We also respond appropriately to transfer pricing taxation. As a result, we do not consider taxation risk to have a material impact on our businesses.

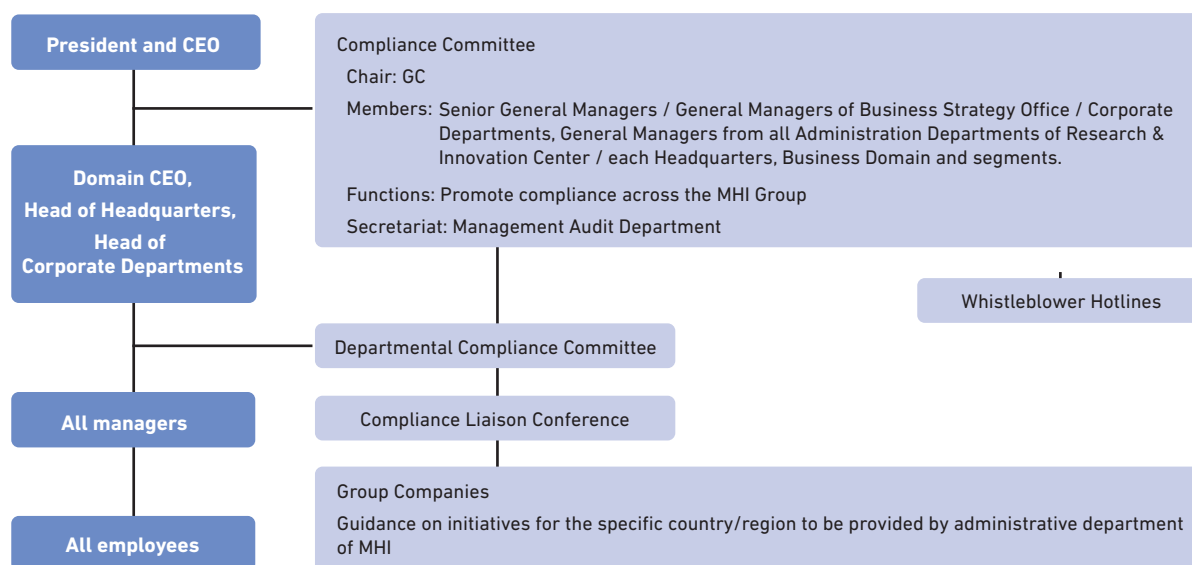
► Compliance

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. The committee meets twice annually to draw up company-wide compliance promotion plans, confirm progress, and engage in other activities. In particular, to increase awareness of compliance among individual employees, each year since 2003 we have conducted face-to-face, discussion-based compliance training themed on compliance cases that could arise on-site. MHI advanced "Compliance Principle" set out in 2001 to "MHI Group Global Code of Conduct" in May 2015. As a global company, MHI employs thousands of individuals from different backgrounds, nationalities and cultures. This diversity of talent and perspectives is one of our greatest assets. At the same time, however, MHI as a company must operate with a single corporate culture that enables it to compete successfully in the global market while maintaining our reputation as a company of high integrity and ethics. The Code of Conduct describes how MHI employees should conduct themselves. We disseminate this Code of Conduct to MHI Group employees around the world through e-learning and other education, as well as by distributing booklets.

In September 2017, we formulated a global policy on compliance promotion, which we communicated within the MHI Group. This policy, which is shared globally throughout the MHI Group, serves as the minimum level of regulations and rules. This global policy sets forth fundamental rules that must be complied with in regard to compliance promotion by MHI Group companies, regardless of country or region. We are aiming for further compliance promotion throughout the Group, by defining the fundamental code of conduct and rules common to the Group, along with the abovementioned Global Code of Conduct.

(Reference) MHI Group Global Code of Conduct <http://www.mhi.com/company/aboutmhi/policy/conduct.html>

Compliance Promotion System (as of January 1, 2018)



Number of participants at compliance training

2016 **93,353**

Pick Up

Firm response to unjust demands made by antisocial forces

In keeping with the spirit of its Global Code of Conduct, MHI at all times makes a firm response to unjust demands made of the Company by antisocial forces and maintains a staunch stance to block any and all unsavory relationships with such elements.

All MHI facilities have established departments to take measures in the event that unjust demands of the Company are made by antisocial forces. The departments work together, as a united body, to deal comprehensively with any incident that arises. In addition, MHI has taken steps, including internal notices and compliance training, to thoroughly instruct all employees in the essentials of how to be prepared for and respond to any unjust demand made of them. To gain advice and support for dealing with such demands, the Company also works proactively to build close cooperative relationships with police, attorneys of law, and institutions specialized in such matters.

Since ordinances to eliminate organized crime groups were enacted by all prefectures in Japan in 2011, the MHI Group has added clauses to its contracts with clients and business partners based on these ordinances in order to further step up efforts to eliminate antisocial forces.

Performance Data

Compliance

Compliance structure

Chief executive	Mutsuo Hiroe (Executive Vice President, GC)	
Responsible institution or committee	Name	Compliance Committee
	Member	Chairman is Executive vice president, General Council, and composed of 22 members.
	Number of times	2 times a year (FY2017)
Whistle-blowing system	<p>We have established the MHI Whistleblowing Hotline, which is available to all employees, including those of Group companies, and the MHI External Whistleblower Hotline. The Compliance Committee secretariat promptly investigates and responds appropriately to all reports made to these hotlines. Information on what should be reported is contained in MHI Group Portal distributed to all employees and in bulletins published in-house. This was followed by the sequential establishment of Harassment Contact Hotlines inside and outside of the company starting in January 2012 as a measure to respond to harassment, which is becoming an increasingly serious social issue.</p> <p>With the operation of the hotline, protection of the rights afforded to informants were set out in the 2007 company regulations, entitled "Compliance Promotion Regulations." These regulations state that the informant's name will not be released without his/her consent, and that the informant will not be placed at any disadvantage because of the information she/he has reported.</p> <p>Employees have been advised of protection of the rights given to in-house informants and have been told of the existence of the hotline.</p>	

Compliance situation

Training	number of attendance	2012	2013	2014	2015	2016	coverage
		34,972	75,871	82,292	75,303	93,353	group

Number of whistle-blowing	2012	2013	2014	2015	2016	coverage
		240	185	131	118	group

Compliance awareness survey

Since fiscal 2004, every year MHI conducts a compliance awareness survey. MHI considered expanding the survey scope to all MHI employees from the current 30 percent of employees (based on random sampling), and decided to conduct an expanded survey of all employees since fiscal 2013 as part of e-learning compliance sessions. In fiscal 2015, we checked status of compliance, including the level of awareness of the MHI Group Global Code of Conduct, which was formulated that year. This awareness survey is helping to enhance employees' compliance awareness and the success of overall compliance activities.

Reporting on breaches

There was no significant breach last year.

Anti-corruption

Anti-corruption Policy

MHI strives for fairness in its global commercial transactions by strictly observing the anti-bribery laws of all countries, including Japan's Unfair Competition Prevention Act, which prohibits the giving of illicit benefits to foreign public officials. MHI established the Guidelines for the Prevention of Bribery Involving Foreign Civil Servants in 2005 to define rules of conduct based on the Unfair Competition Prevention Act. In addition, the Anti-Bribery Rules and Anti-Bribery Procedural Guidelines based on these guidelines were created in February 2012 in order to respond to the enactment of British Bribery Act 2010 of July 2011 and strengthened regulations in various countries. MHI also set forth screening procedures for engaging with trading companies and distributors.

Furthermore, through the MHI Group Global Code of Conduct established in May 2015, we are thoroughly engaged in preventing bribery toward all Group directors and employees. In September 2016, we also issued the Guidance for the Prevention of Bribery of Foreign Public Officials, an interpretation of related legislation and internal rules, and we strive to comply with the rules and the Global Code of Conduct. A global policy, which was formulated in September 2017, calls for the specification at MHI Group companies as to whether measures to prevent bribery are being appropriately managed and monitored and if incidents are dealt with if needed.

Moreover, to evaluate and improve the MHI Group's organization for preventing bribery, in 2017 we appointed an expert and carried out a bribery risk assessment.

Coverage

MHI Group

(Reference) MHI Group Global Code of Conduct
<http://www.mhi.com/company/aboutmhi/policy/conduct.html>

Employee training

Since fiscal 2014, we have promoted the anti-bribery education across MHI and Group companies in Japan and overseas. And since fiscal 2015, we have conducted training to make every employee in MHI Group worldwide aware of the MHI Group Global Code of Conduct, which including prohibition of bribery. Since fiscal 2014, MHI and its Group companies worldwide have steadily conducted e-learning education to prevent bribery, mainly for manager-level employees. Approximately 12,000 employees in total have taken these courses so far. In 2017, we conducted face-to-face training on bribery prevention in eight locations nationwide, and around 800 people have so far taken this training.

Fair competition

Fair competition policy

MHI has worked to prevent the violation of anti-competition laws through messages from top management and rules and manuals such as the “code of conduct pertaining to communication/contact with competitors.” In May 2015, we published the “MHI Group Global Code of Conduct” and thoroughly ensured that all executive officers and employees throughout MHI Group are aware that anti-competitive conduct is strictly forbidden.

Coverage

(Reference)

MHI Group
MHI Group Global Code of Conduct
<http://www.mhi.com/company/aboutmhi/policy/conduct.html>

Employee training

MHI entered into a plea agreement with the U.S. Department of Justice concerning the U.S. antitrust laws in 2013, in connection with the sales of compressors and condensers for automotive air conditioning systems. In response to this, we have continued every effort to raise compliance awareness and to prevent its recurrence. Specifically, in order to ensure thorough compliance in the whole MHI Group, we have reinforced compliance training by various means including educational videos, lectures by lawyers, and e-learning programs.

In addition, since fiscal 2015 we have conducted training to make every employee in the MHI Group worldwide aware of the MHI Group Global Code of Conduct, which includes compliance with competition laws.

Since fiscal 2014, MHI and its Group companies worldwide have steadily conducted e-learning education to comply with anti-trust laws, mainly for manager-level employees. Approximately 12,000 employees in total have taken these e-learning courses so far. In 2017, we conducted face-to-face training on compliance with anti-trust law in eight locations nationwide, and around 800 people have so far taken this training.

Security Export Control

Export Control Policy

From the perspective of maintaining international peace and safety, the export and transfer of a product, service, technology or piece of information that could be used in the development or manufacture of weapons of mass destruction or conventional weapons are managed under an international security trade control framework.

The MHI Group also strives to conduct thorough monitoring by performing assessments and transaction screenings (confirming the country or region of destination, use, and customer) when exporting commodities or providing technologies overseas and acquiring the necessary export licenses and permissions prior to export.

Through the “MHI Group Global Code of Conduct” established in May 2015, we have conducted awareness training of export control to all MHI Group executives and employees. Furthermore, through the Global Policy on “Export-Related Laws and Regulations Compliance” released in October 2017, we have set fundamental standards and rules in connection with the proper implementation of Export Controls that each Group company is expected to follow.

Coverage

(Reference)

MHI Group
MHI Group Global Code of Conduct
<http://www.mhi.com/company/aboutmhi/policy/conduct.html>

Employee training

We are making steady progress in providing education (face-to-face education and e-learning) focused on export controls in the whole MHI Group. We have conducted e-learning on export control for MHI and Group companies in Japan since fiscal 2007, and a total of 30,000 people have taken these courses to date. Since fiscal 2016, we have been conducting e-learning on export control to people at overseas Group companies at the management level, and 3,000 people have completed these classes so far.

Furthermore, since fiscal 2015 we have made steady progress in providing education for all employees of MHI and its Group companies in Japan and overseas to further familiarize them with the MHI Group Global Code of Conduct, including export control.

► Product Stewardship

It goes without saying that, as a global and highly diversified manufacturer, the MHI Group's top priority is to ensure the safety and quality of its products. We have formulated a quality management system (QMS) for individual businesses and products based on ISO 9001* and other official standards and obtain third-party assurance on an individual basis. As awareness efforts related to safety and quality, we work to educate employees about safety and quality to prevent product accidents. One example of this is the establishment of the Accident Exhibit and Materials Room based on past accidents.

(Note) Includes JISQ9100 and other product-specific quality systems

Total number of product safety and quality trainees

2016

Total
Approximately **14,000**

Pick Up

Quality and safety programs for key products

Nuclear Safety Steering Committee continues to establish nuclear safety

In December 2004, we established the Managing Board for Innovation in the Nuclear Business in light of a secondary piping damage accident in August 2004 at the Mihama Nuclear Power Plant Unit 3, which was built by MHI and operated by Kansai Electric Power. In January 2013, the name of the board was changed to Nuclear Safety Steering Committee to share and decide the issues and courses of action related to MHI's nuclear business, as well as to internally reform and expand the nuclear quality assurance management system. The committee has been conducting these activities under the guidance of a steering committee whose mission is to manage activities that help ensure nuclear safety.

In fiscal 2016, the Nuclear Safety Steering Committee reported and deliberated on the status of efforts to promote safety culture and maintain or enhance the level of nuclear power safety. These efforts include passing on technologies, cultivating human resources, and strengthening cooperation with business partners. Also, the committee confirmed that Mitsubishi Hitachi Power Systems, Ltd. hold nuclear safety promotion committee and communicating with top management, personnel responsible for nuclear power at the head office and individual plants deliberated across the company on initiatives related to nuclear power safety.

Measures for enhancing PWR power plant safety

MHI set up an emergency task force immediately after the Great East Japan Earthquake. After the Advanced Plant Safety Department was established in August 2011, the task force was transferred to this department and developed countermeasures against blackout that occurred at the Fukushima Daiichi Nuclear Power Plant. The task force has been reflecting these countermeasures at PWR power plants built by MHI in Japan. Furthermore, the new safety criteria that was developed by the Nuclear Regulation Authority (NRA: established in September 2012) went into effect in July 2013, and in August 2015, PWR power plants that have satisfied the new safety criteria resumed operations. Currently, safety inspections are underway at other PWR power plants geared toward restarting their operations and sequentially these plants have been restarting, MHI is providing technical support to power companies to restart operations at these domestic PWR power plants at the soonest date possible. MHI has been supporting power companies to implement mid- and long-term countermeasures, such as filtered containment vents and secondary back-up generators. MHI continues to contribute to the improvement of the safety and reliability of nuclear power plants and to the establishment of a stable power supply.

Shipbuilding: enhancing QMS activities to prevent product accidents

Mitsubishi Shipbuilding Co., Ltd. (MHIMSB), and Mitsubishi Heavy Industries Marine Structure Co., Ltd. (MHIMST), which are involved in the Shipbuilding & Ocean business, build and repair a wide range of ships and marine products in the Nagasaki and Shimonoseki regions. Although each region accommodates different types of ships according to its unique capabilities, the companies strive to adopt the same quality indicators, non-conformity management systems, safety and quality education programs, and internal audits in all regions, and are working with each region to improve work processes and quality management capacity to realize a more advanced QMS and cultivate an attitude focused on safety and quality. In our Shipbuilding & Ocean business, MHIMSB and MHIMST work to deliver products and services that meet customers' expectations through ISO 9001 external audits for QMS activities.

Aircraft: Raising awareness for aircraft safety through education and training, and promotion of QMS-related activities

In the aircraft manufacture business, based on the Aircraft Safety Policy, assurance of aircraft safety is our top priority. All employees engaged in the aircraft manufacture operation and management understand the gravity of aviation accidents. Accordingly, as part of our educational activities aimed at ensuring thorough awareness of aircraft safety, we are implementing various training programs for relevant employees, primarily in management positions. These include training where employees learn through educational tours of the Japan Airlines Safety Promotion Center and climbing the Osutaka Ridge to pay respects to those that died in the Japan Airlines Flight 123 accident in 1985; workshops that communicate the lessons learned from an emergency landing accident involving an MH2000 helicopter and an accident where a F-2 jet fighter crashed and burst into flames (instructions on new work procedures / application of independent verification programs) in 2000 and 2007 respectively; initiatives to prevent leftover foreign objects; and training where employees learn through active discussions with pilots. In addition, we are working to improve quality on an ongoing basis through QMS-related activities based on JIS Q 9100.

Transportation systems: ensuring the safety of transportation systems based on quality management systems

Mitsubishi Heavy Industries Engineering, Ltd. (MHIENG) is working on the development of various transportation systems with a high potential for use in public settings, such as Automated People Mover (APM) for use in airports and other facilities in cities and Light Rail Vehicle. To ensure that such transportation systems function with high degree of safety, MHIENG operates a quality management system based on ISO 9001 and our own quality policies in all processes from design, procurement, and manufacturing to installation and test operation. Every year, top managers review these activities, evaluate the effectiveness of the quality management system and propose new actions for improvement. Workshops are also held so that relevant personnel can share information, for example, information on revisions made to laws, regulations and standards pertaining to railways. Mechanisms are also being developed to incorporate safety standards and customer requirements in various countries into the initial design stage of projects developed in and outside Japan.

In addition to these efforts, MHIENG has introduced the system tool for sharing of lessons learned of past projects. Employees involved in past projects disclose and record their experiences and lessons learned so that current project members can acquire and share useful skills and knowledge, and find a stronger awareness of product safety.

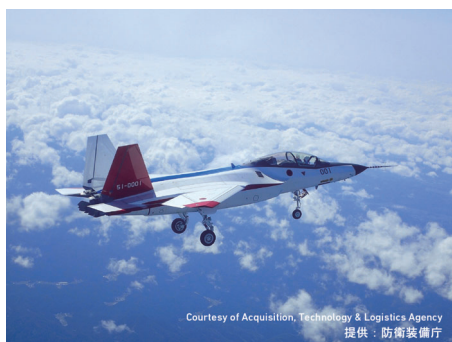
Air-conditioners: implementing safety verifications in every stage-development, usage, and disposal, based on design management standards

The air-conditioning and refrigeration business (Note) established design management standards in 1994 to ensure the safety of air-conditioners. To that end, when developing a product, quality check sheets and other measures are used to verify that products, when properly used, will not cause harm to people or property due to reasons such as harmful materials or possible fire or explosion at any point from development through to usage and disposal. In fiscal 2010, the related department participated in the company-wide Product Safety Taskforce, and received instruction from key MHI experts on product safety risk assessment procedures for centrifugal chillers and transportation refrigeration units. This information was used to create a risk assessment template for complying with the EU machinery directive, which has been used to verify the safety and quality of MHI products sold in the EU since May 2011.

(Note) MHI's air-conditioning and refrigeration business has been taken over by Mitsubishi Heavy Industries Thermal Systems, Ltd. who commenced operations in October 2016.

Maintaining and strengthening defense production and technological bases contributing to the peace and safety of Japan through technology

MHI is dedicated to the core vision of supplying cutting-edge technology for national safety and security. As a leading supplier in the Japanese defense industry, MHI endeavors to maintain and strengthen defense production and technological bases. MHI develops and manufactures a vast array of defense equipment based on the requirement of government of Japan, including fighter planes, helicopters, missiles, defense vessels and tanks, and also provides operational support. The environment surrounding the defense of Japan has been changing dramatically over the last few years. In light of the current financial difficulty of Japan and the speed of technological progress, it is increasingly important to maintain and strengthen defense production and technological bases, in order to satisfy the requirements of the government. MHI is focusing on the future security environment and is developing various technologies that meet the needs of the country. This includes research on the Advanced Technology Demonstrator for the purpose of achieving technologies, such as stealth and high maneuver flight control technology to be applied to future jet fighters. Cutting-edge technologies in the defense sector have a broad reach, and ripple effects to the civilian sector are expected, in the fields of materials, components, and processing technology. So we believe defense technologies can also contribute to long-term technological advances in Japan and the defense sector is expected to develop as a national strategic industry.



X-2 (Advanced Technology Demonstrator)

Promoting nuclear power Public Acceptance (PA) activities

Since 1988, MHI has been hosting tours of nuclear power plant factories at Kobe Shipyard & Machinery Works to promote nuclear PA activities so that the attendees can gain a better understanding of the need for and safety of nuclear power generation. MHI encourages attendance, on these tours every year. In addition, although our nuclear power plants are PWRs, which are different from BWRs of TEPCO's Fukushima Daiichi Nuclear Power Plant, MHI has been supporting TEPCO for stabilizing the accidents caused by the Great East Japan Earthquake. MHI has also been deploying emergency safety countermeasures at MHI-built nuclear power plants to increase their safety and reliability. MHI will continue PA activities, such as providing related information and hosting tours, to restore public confidence in nuclear power generation.

(Note) Nuclear Power PA (Public Acceptance) activities: Public outreach programs to provide a better understanding of nuclear energy



Touring the Kobe Shipyard & Machinery Works

Performance Data

Product Stewardship

Safety and quality management

Impact evaluation related to safety and quality

MHI has created a quality management system (QMS) to offer products that are safe and of assured high quality. The markets for the MHI Group's products are diverse, so we have QMSs in place for individual businesses and products to meet the customer and market needs. These QMSs are based on ISO 9001 and other official standards. In April 2013, MHI established a QMS Promotion Group in the Monozukuri Innovation Planning Department (now the Value Chain Innovation Department). The QMS Promotion Group has been working to strengthen quality management, including at Group companies, and improve work processes to meet the needs of globalization by sharing technologies and knowledge horizontally across the Group.

Education and awareness related to safety and quality

It goes without saying that, as a global and highly diversified manufacturer, the MHI Group's top priority is to ensure the safety and quality of its products. To promote product safety, we work to educate employees about safety and quality to prevent product accidents. One example of this is the establishment of the Accident Exhibit and Materials Room based on past accidents. The Accident Exhibit and Materials Room, opened in April 2010 at an MHI training center in Nagoya, introduces examples of serious accidents that have happened involving MHI Group products, such as a large cruise ship that caught fire while under construction. Its mission is to give all employees who handle MHI Group products, whether it be through design, procurement, manufacturing, or after-sale services, to pledge not to allow accidents like these to happen again, to learn from these accidents, and to put the lessons learned from these accidents to use in their respective jobs. The facility was given an extensive overhaul in April 2012, including the addition of new video presentations and artifacts designed to convey a greater sense of realism in regards to the nature of the accidents and the events experienced at the accident site. Approximately 33,000 visitors have passed through the facility since its opening. Meanwhile, since 2010 MHI has also held safety and quality training sessions describing past safety incidents, attended by employees. Increasing the total number of employees who have received this training to around 14,000.

Going forward, MHI will continue to expand its product safety education program to give employees more opportunities to become aware of the importance of safety and quality.

▶ Customer Relationship Management

One statement of the MHI Group creed is: "We strongly believe that the customer comes first and that we are obligated to be an innovative partner to society." Therefore, the company's top priority is to always place itself in the customer's shoes and meet their expectations by providing products and services with high added value.

In fields of business where companies are our customers, such as power generation and engines, we ask customers directly to complete questionnaires. For example, for areas in which general consumers are our customers, such as air conditioning, we have set up a desk to respond to Internet and telephone inquiries. Each year, we receive around 8,000 responses through this channel.

Basic CS Training, introduced in 2002, is used to improve employee awareness and foster the development of a customer-oriented corporate culture at MHI. Through these activities, MHI will continuously work to provide products and services that satisfy customers.

Number of violations related to advertising

2016

0

Pick Up

Implementing technical support as an aspect of preventative maintenance

Since 1999, Mitsubishi Hitachi Power Systems, Ltd. has been maintaining high operating rates of thermal power plants (gas turbine) delivered around the world and providing technical support services to prevent problems. Through these paid services, we observe and support the operations of gas turbine plants 24 hours a day, 7 days a week in real time from remote monitoring centers established in two locations, one in Japan and the other abroad. We also established a remote monitoring center in the Philippines to monitor conventional plants, and are working to expand our services. We have been utilizing more than 10 years of the operational data of the plants to prevent problems. Also, we minimize shutdown of the plants by quickly and automatically detecting plant anomalies, applying quality engineering and immediately implementing troubleshooting procedures.

As of January 2018, the service was used globally on 139 generators at 60 plants whose total output is over 30 million kilowatt, and we have been contributing to stable power generation operations for our customers.



Remote monitoring center

Performance Data

Customer Relationship Management

Customer satisfaction

Customer satisfaction survey

Since customer characteristics and business practices are quite different in each of our business, MHI Group does not conduct a uniform standardized customer satisfaction survey across the board. Each business unit utilizes their own optimized measurement method for Customer Relationship Management.

Thermal power systems:

Mitsubishi Hitachi Power Systems, Ltd., is deploying a web based questionnaire system specifically targeting overseas customers, with whom frequent face to face communication is not possible. The system collects and analyses customers' comments on quality, price, responsiveness of MHPS contact, and the results is applied for product quality and customer service improvement. Also for domestic customers, Voice of Customer (VOC) information is collected through frequent face to face communications. The VOC is classified into 5 categories (Maintainability and Operability, Consideration, Necessary Ability, Price and Response Speed) to identify strength and weakness. We work on areas such as technology development and "Kaizen." The improvement activity based on the result of the analysis is done in daily basis.

Compressor:

Mitsubishi Heavy Industries Compressor Corporation conducts a customer satisfaction survey after each meeting with customers to gather customer feedback.

Air Conditioning & Refrigeration:

Mitsubishi Heavy Industries Thermal Systems, Ltd., which engages B to C business in air conditioners, ensures that customer input is always incorporated through the contact points set up with Internet, telephone, and so on.

Online strategy

Online strategy

Thermal power systems:

Mitsubishi Hitachi Power Systems, Ltd. provides online surveillance of product operation and evaluation of predictors or potential signals of troubles, also operational status reporting for some customers.

Air-Conditioning & Refrigeration:

Mitsubishi Heavy Industries Thermal Systems, Ltd. provides remote monitoring service to centrifugal chillers and heat pump units to prevent the possible trouble. This service includes trouble sign diagnosis and the analysis of the cumulated operational data to make a proposal to the customer for further energy saving.

Engine & Energy:

Engine & Energy division of Mitsubishi Heavy Industries Engine & Turbocharger, Ltd., remotely monitors the status of Engine Power Plant via internet to find warning signs of trouble, and to prevent it.

Advertising activities

Responsible advertising activities

MHI Group promotes advertising activities based on our business plans that target stakeholders in all global regions. As MHI Group moves ahead with its activities, the department confirms facts to ensure that accurate information is provided to customers, and endeavors to abide by all provisions in related laws and industries. After running advertisements, the Department assesses the improvement in recognition level in each form of media and the spreading of the corporate image.

As part of our worldwide advertising strategies for fiscal 2016, we placed advertorials in the Financial Times (UK), Fortune (US), Business Week (US), The Economist (UK), BBC, and CNBC, as well as in leading newspapers in Japan (including the Yomiuri and the Nikkei). The advertorials gave a comprehensive introduction to the MHI Group's operations and endeavored to communicate information with the objective of raising awareness of stakeholders in Japan and overseas.

Number of violations related to advertising, their content, and measures

There were no legal or regulatory violations related to our advertising activities in fiscal 2016.

► Innovation Management

Manufacturing technologies are the source of value creation for the MHI Group, and intellectual property activities and R&D are the bedrock of its business. Supporting our business strategies for growth, we are promoting the construction of a global system, led by the Chief Technology Officer (CTO), who is the head of technology.

In April 2016, MHI launched a new Shared Technology framework consolidating the Company's technologies as well as marketing, procurement, and other functions, overseen by the CTO. We created this framework for maximize the MHI Group's comprehensive technological strength to bolster competitiveness over the medium-to-long term. About Research and Development, in 2015 we established a comprehensive Research & Development Center, consolidating five domestic R&D centers and transitioning to cross-organizational management in our R&D structure. Through this approach, we anticipate new technological synergies, enhanced human resource development, and greater efficiency in work performance and facility utilization. We are globalizing our R&D structure, and as part of these efforts we are dispatching specialist engineers from research centers in Japan to our bases in the United Kingdom, Singapore, the United States, and China. We are making efforts to secure leading global technologies, information, and human resources, while conducting research and providing technological support that is closely aligned with market needs.

R&D expenditure

2016 **160.7** billions of yen

Percent of sales

2016 **4.1** %

Performance Data

Innovation Management

R&D situation

R&D expenditure	unit	2012	2013	2014	2015	2016	coverage
Total	billions of yen	120.0	138.5	145.5	150.6	160.7	group
Breakdown by business domain							
Energy & Environment			50.0	57.5	53.5	51.6	
Commercial Aviation & Transportation Systems			11.7	16.9	26.6	45.0	
Machinery, Equipment & Infrastructure			20.1	21.5	26.0	31.2	
Integrated Defense & Space Systems			47.9	40.0	35.4	21.4	
Corporate			8.8	9.7	9.2	11.5	
% of sales		4.3	4.1	3.6	3.7	4.1	group
employees of R&D position	FTEs	1,300	1,300	1,300	1,300	1,300	group

Open innovation case

Open innovation case 1

■ Case

We conducted a demonstration test of a thermal power plant CO₂ recovery process (KM-CDR) in collaboration with Southern Company, a leading US power producer.

We received an R&D100 award attesting to the results of this demonstration test (November 2015).

■ Benefit

MHI has been involved in R&D into CO₂ recovery technology for more than 25 years. This demonstration test of emissions at a coal-fired power plant owned by Southern Company has shortened the development period substantially. Furthermore, over a period of approximately five years we have succeeded in scaling up the CO₂ recovery by 10 times, from 500 tons per day (demonstration) to 5,000 tons (commercial). We believe this joint development has enabled us to significantly shorten the cycle from development to practical realization.

■ Other Impacts

The CO₂ recovery process we have developed is currently being used at WA Parish Generator No. 8, a coal-fired thermal power plant owned by NRG Energy, Inc., in the US state of Texas. This recovery, which commenced on December 29, 2016, resulted in the world's highest volume of CO₂ recovery (4,776 tons per day). We expect CO₂ recovery technology to grow more popular, contributing to efforts to stop global warming. As a result, we anticipate a 14% reduction in overall CO₂ emissions by 2050.

MHI has invested in Geodesic Capital Fund, an investment fund operated by Geodesic Capital. This company, based in the US state of California, was established by John V. Roos, former US ambassador to Japan.

We believe this fund will serve as a bridge between MHI businesses centered in Silicon Valley and like-minded startup companies.

By participating in Geodesic-sponsored events to introduce venture companies, as well as seminars, we aim to obtain information on leading-edge technologies such as the Internet of Things, artificial intelligence (AI) and security, and consider their application to our products.

MHI's marketing business gathers and analyzes some 2,000 news items per week at approximately 130 sites around the world. This external information provides important pointers for R&D and management decisions. We use Scrapy, an open-source network, to gather news automatically. We use AI to effectively perform primary screening on the news we gather, improving business efficiency. Our AI solution employs FRONTEO's KIBIT technology. We have worked with FRONTEO's engineers to run trials and establish the running process we use.

Introducing FRONTEO's technology enabled us to reach that level, bringing the system into practical application in three months. As a result, we are now able to gather and analyze in three days the amount of news that previously required one week.

By making good use of the time and resources freed up as a result of better efficiency, we are now able to study the news background and related information, enhancing the quality of operations.

Process innovation

Value chain innovation activity: we are continuously working on process streamlining and improvement in all business domains, contributing to shortening work hours and reducing costs. For example, by improving the manufacturing process/increasing the sophistication of production management systems in the renewable energy field, we were able to reduce the manufacturing lead time by half, and reduce energy costs.

Environmental innovation

Environmental innovation

- Case
- Benefit

Air Conditioning & Refrigeration:

The ETI-Z series of next-generation centrifugal chillers, the first in the world to use the new environmentally friendly HFO-1233zd (E) refrigerant has been launched. This new refrigerant produces minimal greenhouse gas emissions. The new design of the ETI-Z series also enables best-in-class energy efficiency through the use of a compressor with a high-speed direct motor drive, reducing motor drive energy loss. Through these innovations, the ETI-Z series is able to achieve significant reductions in emissions without compromising on its compact size.

R&D in emerging markets

R&D in emerging markets

There are totally 6 Global R&D Centers in total, Europe, Asia, the U.S., promoting opportunities for building relationship with overseas customers and research institutions, and creating business opportunities, in order to capture global market needs and discover the seeds of bleeding edge technology.

Product adaptation for emerging markets

Product adaptation case

Small and medium size gas turbine:

In emerging countries where power grid infrastructure is still rather poor, there is a strong demand of small size distributed power sources. H-25 (HP: 28-42MW) (Note), a small to medium size gas turbine, is a compact but highly efficient quality product fitting to the needs of emerging markets, and has been enjoying strong demand. In fiscal 2016, there were order from China and Indonesia etc.

(Note) For reference, normally a large gas turbine for power generation has HP200- 300MW and above, mostly for use in developed markets.

Air Conditioning & Refrigeration:

1.5kW home air conditioner model has been launched into emerging markets in South-East Asia (compared to another model with 2.2kW for developed countries) to meet the needs of "keeping cool only for bedtime comfort" and has been enjoying good sales.

It is expected that this model with small electricity may contribute also to decrease the burden to the infrastructure in the area where the supply of electricity is not stable.

Improving productivity

Conforming global standards

Globally apply various policies and criteria within the MHI Group. More specifically:

- Promotion to acquire ISO 14001, ISO9001 for environment and quality management
- Adoption of the corporate policies and rules for CSR and compliance
- Regular internal audit and guidance accordingly

Technology introduction

By transferring sophisticated manufacturing technology as is, such as machine work and assembly in Japanese factory, we have been achieving both high quality production capability and cost competitiveness. This approach taken in various business and products in which quality is essential.

Also technology of our primary thermal power plant products, such as gas turbine, steam turbines, boilers, Flue Gas Desulfurization (FGD) plants and Selective Catalyst Reduction (SCR), has been introduced by providing license to manufacturers in China, Korea, India, etc.

Improving labor productivity

For maintaining high quality standard of Japan, a small group operation has been implemented; for developing skilled workers, Japanese engineer educators have been dispatched and overseas trainees have been accepted in Japanese sites.

In the Vietnam aircraft manufacturer has established an in-house manufacturing technology school where Japanese instructors instruct and educate the Vietnamese employees for their talent development. On-site OJT is also provided, for facilitating early acquisition of the skills. OJT opportunity in Japan (Ooe Factory) is also provided for the Vietnamese employees, aiming at skill acquisition through mutual exchange of employees.

Reviewing procurement agreements or inventory levels

Air Conditioning & Refrigeration:

To keep its inventory levels low at our distributors in emerging markets, periodical check in their inventory status, and analysis in the demand situation in the country is provided.

► Supply Chain Management

MHI procures a variety of materials and services both domestically and globally, including raw materials, machinery, equipment, components. MHI is open to all motivated and competitive suppliers. Suppliers are fairly and equitably evaluated and selected in accordance with related laws, regulations and social norms, in order to build relationships of trust based on win-win partnerships. In June 2010, MHI established the "MHI Group Supply Chain CSR Promotion Guidelines." We have shared these with our suppliers in order to promote CSR activities throughout the supply chain. Five basic policies are established in the guidelines: compliance; product safety; good quality, cost and delivery (QCD); technical improvement and business with full consideration of human rights; and work environment. Suppliers are expected to embrace the MHI Guidelines, which are introduced at suppliers' conferences and on the Company's website.

(Reference) MHI Group Supply Chain CSR Promotion Guidelines <http://www.mhi.com/company/procurement/csr/>

Number of participants for procurement related training

2016

Total number of participants **21,549**

Performance Data

Supply chain management

Supply chain structure

Spend analysis

We conduct spend analysis, and manage number of the suppliers and purchasing cost according to procurement item category.

Critical suppliers

Definition of critical suppliers

By business unit, MHI nominates critical suppliers: those that supply important parts or equipment or in the event no alternative suppliers are available.

Tier1 suppliers 32,062 (FY2016)

Primary Tier1 suppliers 26,072 (FY2016)

Supply chain monitoring

Supply chain monitoring

MHI monitors and evaluates its critical tier1 suppliers' quality, cost, delivery, technical capability and management (incl. ESG) based on each business unit.

Evaluated suppliers in last 3 years 2,026 companies
ratio 6.3%

Environmental impact from transportation

Reduction of Environmental impact from transportation

MHI, which handles of cargo transportation over 30 million freight ton-km per year, is a "specified consigner" according to the revised Act Concerning the Rational Use of Energy. For that reason, MHI is implementing an action plan towards energy conservation during transportation, such as by promoting modal shifts at works and improving loading ratios. MHI is also working to streamline this plan, energy consumption, and consumption measured in basic units for energy.

The number of primary units in fiscal 2016 was 49.3, a decrease of 1.7 units comparing with fiscal 2011 (51.0 units).

Conflict minerals

Basic Policy Concerning Conflict Minerals

Armed groups engaged in conflicts in the Democratic Republic of the Congo and neighboring countries have committed serious human rights abuses and acts of environmental destruction. This issue has caught the world's attention. Some of the proceeds from the minerals produced in this region (tin, tantalum, tungsten, and gold, hereinafter "conflict minerals") are thought to be a source of funding for these armed groups.

MHI Group has no intention of abetting human rights abuses or environmental destruction by procuring raw materials, parts or products which contain the conflict minerals. We will continue to work with our customers, suppliers, industry groups and others in efforts to avoid benefiting the armed groups.

(Reference)

MHI Group Supply Chain CSR Promotion Guidelines
<http://www.mhi.com/company/procurement/csr/>

Our improvements in the supply chain

Procurement Education and Training

Procurement departments at MHI provide a range of training programs designed to ensure compliance with the applicable laws and regulations. Since fiscal 2014, MHI has focused on providing training to more Group companies. In fiscal 2016, 50 employees from MHI Group companies attended a training session covering procurement-related laws and regulations and important points to be aware of when carrying out procurement work. A total of 136 new employees and employees just transferred to procurement departments attended an introductory course on basic information concerning procurement practices, overseas procurement and the negotiation of commercial conditions. Additionally, 21,363 MHI Group employees took an e-Learning course on the Act Against Delay in Payment of Subcontract Proceeds, Etc. to Subcontractors.

Environment

► Environmental Management

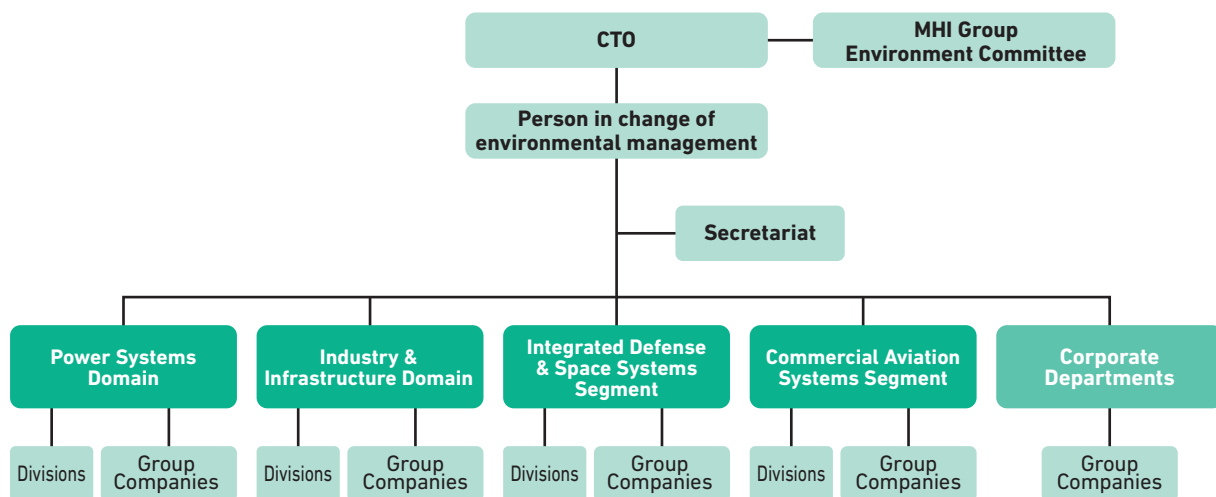
With environmental problems gaining recognition on a global scale, in 1996, the MHI Group established the "Environment Committee" in order to clarify its attitude toward the environment, to express it to people both inside and outside the company and to direct and promote its environmental activities. At its first meeting, the Environment Committee formulated a Basic Policy on Environmental Matters and Action Guidelines (refer below), in line with the MHI Group's principles: "We deliver reliable and innovative solutions that make a lasting difference to customers and communities worldwide." Since that time, the entire Group has worked to promote environmental initiatives in accordance with this basic policy and these guidelines. The MHI Group updated its Basic Policy on Environmental Matters and Action Guidelines in January 2018.

On October 1, 2013, we restructured the Group's Business Headquarters Structure and transitioned to a Business Domain Structure. The former structure was managed according to product groupings and manufacturing locations, whereas the new structure seeks to manifest our total capabilities in the market through the sharing of customers, core technologies, and business strategies, thereby increasing management efficiency. Making this shift in the area of environmental management as well, in January 2017 we transitioned to an environmental management system based on domains, segments, and corporate units in order to invest management resources in a timely manner and boost management efficiency.

As a result of this change, environmental management at the MHI Group transitioned toward the establishment of Domain Environment Committees — in principle for each domain, segment, and corporate unit. These committees formulate measures to environmental issues and promote their implementation to each the regional offices, plants, regions, and Group companies they oversee.

On the other hand, the MHI Group Environment Committee, chaired by a director and chief technology officer (CTO), who takes charge of environmental management, is the committee to promote policies and initiatives shared throughout the Group. The committee, whose members are selected from the domains, segments, and corporate units, drafts plans for deployment across the entire Company and its Group companies via the domains, segments, and corporate units. The MHI Group's organizational chart for environmental management is shown below.

The MHI Group's Environmental Management Organization



The Third MHI Group Environmental Targets, to be achieved by fiscal 2017, were established at a meeting of the Environment Committee held in November 2014.

These targets are four categories in which improvements are being called for around the world. These are (1) Reduction in greenhouse gas emissions, (2) Reduction in waste generation, (3) Reduction in emissions of chemical substances, and (4) More efficient water usage. In addition, in order to promote these activities Group-wide, MHI and the MHI Group have shared the same targets. The entire MHI Group will engage in initiatives to achieve these targets.

As fiscal 2017 is the final year for the Third MHI Group Environmental Targets, we are now formulating our fourth three-year environmental targets. Based on the 2015 Paris Agreement, we plan to establish long-term targets for fiscal 2030, the target date for the Agreement, to drive the MHI Group's further efforts to address the problem of global warming.

Basic Policy on Environmental Matters

Provision 1 of MHI Group's principles reads: "We deliver reliable and innovative solutions that make a lasting difference to customers and communities worldwide." This means that our primary purpose is to contribute to society through R&D, manufacturing and other business activities. The company shall undertake all aspects of its business activities with the understanding that it is an integral member of society and will strive to reduce its burden on the environment, contributing to the development of a sustainable society.

Action Guidelines

1. Prioritize environmental protection within company operations, and take steps across the entire MHI Group to protect and enhance the environment.
2. Clarify roles and responsibilities regarding environmental protection by developing an organizational structure to deal with matters related to environmental protection, and to define environment-related procedures, etc.
3. Strive continuously to improve and enhance environmental protection activities not only by fully complying with environmental laws and regulations but also, when necessary, by establishing, implementing and evaluating independent standards and setting environmental goals and targets.
4. Strive to alleviate burden on the environment in all aspects of company business activities, from product R&D and design to procurement of raw materials, manufacture, transport, usage, servicing and disposal, through pollution prevention, conservation of resources, energy saving, and waste reduction.
5. Strive to develop and market advanced and highly reliable technology and products that contribute to solving environmental and energy challenges.
6. Strive to preserve the environment in partnership with our stakeholders and gain their understanding of this policy.
7. Take steps to raise environmental awareness among all group employees through environmental education, etc., while delivering environment-related information to the public and taking part in CSR activities.

Formulated in 1996 (Revised in January 2018)

Environmental Targets (FY2017)

Unit energy use

-3% Compared with FY2014 (Note 1) (Note 2)

Unit atmospheric emissions of VOCs

-3% Compared with FY2014 (Note 1)

Unit water consumption

-3% Compared with FY2014 (Note 1) (Note 2)

Landfill disposal ratio

Less than **0.6%** (Note 1)

(Note 1) Domestic Group companies
(Note 2) Overseas Group companies

Pick Up

Third MHI Group Environmental Targets (FY2015-FY2017)

Category	Item	Scope of target	Target (FY2015-FY2017)
1. Reduction in greenhouse gas emissions	1.1 Reduction in CO ₂ emissions	1.1.1 Group companies in Japan	Reduce (Note 1) the unit energy consumption in FY2017 by 3% compared to FY2014. The numerator: The sum of crude oil equivalent value of all group companies' energy consumptions in Japan. Unit: kiloliter. The denominator: The total consolidated sales of all group companies in Japan. Unit: Yen. (Note 1) Annually whether 1% reduction of the unit energy consumption is achieved or not will be evaluated.
		1.1.2 Group companies in countries other than Japan	Reduce (Note 1) the unit energy consumption in FY2017 by 3% (Note 2) compared to FY2014. The numerator: The sum of crude oil equivalent value of all group companies' energy consumptions in countries other than Japan. Unit: kiloliter. The denominator: The total consolidated sales of all group companies in countries other than Japan. Unit: Yen. (Note 1) Annually whether 1% reduction of the unit energy consumption is achieved or not will be evaluated. (Note 2) To fit the laws and regulations of each country, each company may be set their own goal.
	1.2 CO ₂ Reductions with MHI Group Product Usage	1.2.1 Entire MHI Group (promoted by Head Office)	Promote the manufacture of environmentally friendly products, and report every year on the contribution to CO ₂ reductions through the use of products sold.
2. Reduction in waste generation	2.1 Reduction in landfill disposal ratio	2.1.1 Group companies in Japan	Ensure that the landfill disposal ratio of the entire group companies in Japan is less than 0.6% in FY2017. (However, the landfill ratio of each works, plants and districts of MHI is less than 0.5% and the other group companies in Japan as a whole is less than 2.5%.) The numerator: The sum of the landfill waste of all group companies in Japan. Unit: ton The denominator: The sum of the total waste of all group companies in Japan. Unit: ton
3.Reduction in emissions of chemical substances	3.1 Reduction in VOC emissions	3.1.1 Group companies in Japan	Reduce (Note 1) the unit atmospheric emission of VOC (xylene, toluene and ethylbenzene) in FY2017 by 3% compared to FY2014. The numerator: The total atmospheric emissions (Note 3) of xylene, toluene and ethylbenzene of all group companies in Japan. Unit: ton (Note 1) Annually whether 1% reduction of the unit atmospheric emission is achieved or not will be evaluated. (Note 3) Except for use in research and testing purposes. The denominator: The total consolidated sales of all group companies in Japan. Unit: Yen.

Category	Item	Scope of target	Target (FY2015-FY2017)
4. More efficient water usage	4.1 Reduction in water usage	4.1.1 Group companies in Japan	Reduce (Note 1) the unit water consumption in FY2017 by 3% compared to FY2014. (water: industrial water, tap water, groundwater, rivers, lakes; excluding seawater). The numerator: The sum of the water consumption of all group companies in Japan. Unit: m ³ . The denominator: The total consolidated sales of all group companies in Japan. Unit: Yen. (Note 1) Annually whether 1% reduction of the unit water consumption is achieved or not will be evaluated.
		4.1.2 Group companies in countries other than Japan	Reduce (Note 1) the unit water consumption in FY2017 by 3% (Note 2) compared to FY2014. (water: industrial water, tap water, groundwater, rivers, lakes; excluding seawater). The numerator: The sum of the water consumption of all group companies in countries other than Japan. Unit: m ³ . The denominator: The total consolidated sales of all group companies in countries other than Japan. Unit: Yen. (Note 1) Annually whether 1% reduction of the unit water consumption is achieved or not will be evaluated. (Note 2) To fit the laws and regulations of each country, each company may be set their own goal.

Performance Data

Environmental management

Responsible person

Chief Technology Officer (Director, Executive Vice President)

Committee

Name	MHI Group Environment Committee
Member	Chairman is Chief Technology Officer and composed of 10 members.
Number of times	Once a year

ISO14001 certification (As of March 31, 2017)

MHI	Integrated companywide certification	
Group company	Domestic	51 companies
Group company	Overseas	29 companies

Other certification (As of March 31, 2017)

EcoAction 21	2 companies
K-EMS (Certification by City of Kobe)	3 companies

Environmental audit

MHI conducts companywide internal environmental audits at works, plants and districts in Japan to ensure compliance with environmental laws and regulations and to conduct physical, on-site verification of operational conditions. Audits are performed by teams composed of auditors from works, plants and districts other than the works, plants and districts being audited. We promote activities in accordance with environmental management regulations, confirm that the environmental management system is undergoing ongoing improvements, and report the results to the companywide Environment Committee.

**Reporting on breaches
(Note 1)**

There was no significant breach last year.

(Note 1) Coverage is group companies of Japan.

Environmental KPIs

Third MHI Group Environmental Targets

KPI(1) Reduction in energy consumption

Target	Reduce the unit energy consumption by 3% compared to FY2014.
Target Year	FY2017

KPI(2) Reduction in water usage

Target	Reduce the unit water consumption by 3% compared to FY2014.
Target Year	FY2017

**KPI(3) Reduction in emissions of
chemical substances (Note 1)**

Target	Reduce the unit atmospheric emission of VOC by 3% compared to FY2014.
Target Year	FY2017

KPI(4) Reduction in waste generation

Target	Ensure that the landfill disposal ratio of the entire group companies in Japan is less than 0.6% in FY2017.
Target Year	FY2017

(Note 1) Three substances are targeted: xylene, toluene, and ethylbenzene.

		2014		2015			2016	
		coverage		coverage	Compared with FY2014	coverage	Compared with FY2014	
KPI(1) Energy consumption / Sales in Japan	Performance	11.01 (Note 2)		10.79 (Note 3)	Down 2%	11.60 (Note 9)	Up 5.4%	
KPI(1) Energy consumption / Sales in Overseas	Performance	6.12 (Note 4)		6.02 (Note 5)	Down 1.6%	8.66 (Note 10)	Up 41.5%	
KPI(2) Water usage / Sales in Japan	Performance	0.29 (Note 2)		0.27 (Note 3)	Down 6.9%	0.28 (Note 13)	Down 3.4%	
KPI(2) Water usage / Sales in Overseas	Performance	0.08 (Note 4)		0.07 (Note 5)	Down 12.5%	0.11 (Note 5)	Up 37.5%	
KPI(3) Emissions of chemical substances / Sales in Japan (Note 1)	Performance	41.09 (Note 6)		54.72 (Note 7)	Up 33%	43.78 (Note 7)	Up 7%	
KPI(4) Landfill waste disposal ratio in the total waste generation in Japan	Performance	0.35% (Note 8)		1.34% (Note 8)	-	0.47% (Note 2)	-	

(Note 1) Three substances are targeted: xylene, toluene, and ethylbenzene.

(Note 2) MHI on a non-consolidated basis and 49 Group companies in Japan

(Note 3) MHI on a non-consolidated basis and 45 Group companies in Japan

(Note 4) Overseas 26 Group companies

(Note 5) Overseas 25 Group companies

(Note 6) Production sites of MHI on a non-consolidated basis. Include the Nagasaki, Takasago, and Yokohama plants of Mitsubishi Hitachi Power Systems, Ltd.

(Note 7) Production sites of MHI on a non-consolidated basis and four Group manufacturing companies in Japan

(Note 8) Production sites of MHI on a non-consolidated basis and 20 Group manufacturing companies in Japan

(Note 9) MHI on a non-consolidated basis and 50 Group companies in Japan

(Note 10) Overseas 87 Group companies

(Note 11) MHI on a non-consolidated basis and 23 Group manufacturing companies in Japan

(Note 12) MHI on a non-consolidated basis and 30 Group companies in Japan

(Note 13) MHI on a non-consolidated basis and 44 Group companies in Japan

Environmental action

Environmental management in each sites (Note 13)

MHI has prepared and uses an ISO-based manual for each works, plants and districts, encompassing such issues as risk identification methods, daily management procedures and contingency plans. At each works, plants and districts, emergency response drills are carried out to confirm the effectiveness of response procedures for emergencies such as oil spills and earthquakes.

In the event of any crisis, the company's in-house crisis management information system is prepared to quickly convey information to the President.

(Note 13) In principle, MHI on a non-consolidated basis

Environmental activities

Fostering environmental awareness (Note 13)

At MHI, each works and plants formulates its own environmental education curriculum based on e-learning and other methods to provide environmental education to employees.

In addition to the internal environmental auditor training program organized by our Head Office, specialized training that deals with daily management procedures and handling emergencies also takes place for employees doing painting tasks and handling dangerous materials.

Activities for environmental Preservation

Supporting conservation survey for loggerhead turtle in danger of extinction
Promoting forest conservation and non-native species removal activities

(Reference)

Biodiversity

Environmental reporting Coverage

Coverage

In principle, scope of the financial and environment-related non-financial information disclosure of MHI Group includes Mitsubishi Heavy Industries Ltd. and consolidated subsidiaries. When some non-financial information applies to either only MHI Ltd. or specific scope of business at our subsidiaries, such specific scope is defined separately.

Referenced guidelines

References guidelines

Global Reporting Initiative "Sustainability reporting guideline G4"
 The International Integrated Reporting Council "Integrated reporting framework"
 The Ministry of Environment "Environmental reporting guidelines FY2012 version"
 ISO26000 Guidance on Social Responsibility

Product Stewardship

Life cycle assessment

Environmental Standard for Product Development

In 2005, we formulated the Basic Guidelines for Environment-Friendly Product Fabrication. This technology standard provides a framework for creating products that contribute to environmental preservation and CO₂ reduction. Under these guidelines, we assess the environmental impact of products across their life cycles and strive to create products that reduce environmental impact (not disclosed).

Life cycle stages included LCA

Every year, we calculate the amount of CO₂ reduction achieved by the use of our representative products. CO₂ reductions from the fiscal 1990 level through the use of MHI's products in fiscal 2016 came to about 62,600 thousand tons.

Environmental impact assessment in products development and design phase

Assessment of environmental impact (Note 13)

MHI formally established "Basic Guidelines for Environment-Friendly Product Fabrication" (not disclosed) in 2005, as one of the standards for producing and manufacturing guidelines common across the company, based on which we have been pursuing efforts to reduce environmental impact across the entire life cycle.

(Note 13) In principle, MHI on a non-consolidated basis

Environmental product declaration

Environmental product declaration

Since majority of our products are industrial products for B to B, we need confirmation with each customer regarding precise details required for product tests, provisions and contracts, by going beyond the general Environmental Product Declaration in order to ensure the environmental standards and performance to be met. As for a product for general public (B to C), we have air conditioner, that is fully compatible with Energy Saving Labelling Program authorized by Ministry of Economy, Trade and Industry (METI) and meeting the energysaving standard 100%.

% of revenue

Less than 5%

Collection and recycling of used products

Collection and recycling of used products

Since majority of our products are industrial products for B to B, general product take back program is not implemented. As for a product for general public (B to C), we have air conditioner which is subject to Japanese Law for Recycling of Specified Kinds of Home Appliances, thereby we collect it in accordance with the law.

% of revenue

Less than 5%

► Climate Change

Regarding the reduction of greenhouse gas emissions, the Third MHI Group Environmental Targets (FY2015 – 2017) establish the target of reducing unit energy consumption in fiscal 2017 by 3% compared with fiscal 2014 levels.

Reducing unit energy consumption in fiscal 2017 by 3% compared with fiscal 2014 levels, the target established by the Third MHI Group Environmental Targets (fiscal 2015 – 2017) to reduce greenhouse gas emissions, involves 2% reduction in fiscal 2016 from fiscal 2014 levels. Group companies in Japan (Note 1) recorded a 5.4% increase, and Group companies overseas (Note 2) recorded a 41.5% increase. The main reason for this rise was the addition of the data of group companies newly joining the Group.

(Note 1) MHI on a non-consolidated basis and 50 Group companies in Japan.

(Note 2) Overseas 87 Group companies.

Greenhouse gas emission volume (Scope 1 & 2)

2016 **874** thousand tons (Note 3)

(Note 3) MHI on a non-consolidated basis and 137 Group companies.

Pick Up

Approx. 45,000 tons in emissions credits from CDM projects were transferred from an MHI account to a government account without compensation.

To ensure MHI's CO₂ emission reduction targets are reliably met, MHI purchased emission rights from four projects undertaken by Kyoto Mechanisms JI (Joint Implementation) (Note 1) and Clean Development Mechanism (CDM) (Note 2).

The Second MHI Group Environmental Targets called for a "reduction in average CO₂ emissions for the five years from fiscal 2008 through fiscal 2012 by 6% compared with fiscal 1990 levels." As the company's CO₂ reduction over this period fell short of the target, approximately 45,000 tons in emissions credits — the shortage as of May 2014 — were transferred from an MHI account to a government account without compensation.

(Note 1) JI: System in which a company invests in greenhouse gas reduction projects in advanced countries and applies the reduced emissions to achieve its own goals.

(Note 2) CDM: System in which a company invests in greenhouse gas reduction projects in developing countries and applies the reduced emissions to achieve its own goals.

Performance Data

Climate Change

Climate change governance

Committee

MHI Group Environment Committee

Risk management measures

At MHI, the Environmental Committee chaired by the company's Environmental Officer, who is a board member, is the committee with chief responsibility for matters concerning climate change. In fiscal 2016, the Environmental Planning Group in MHI Headquarters served as Secretariat. The managers of individual divisions assess climate change risk and other forms of environmental risk using benchmarks for the scale of impact on business operations and society and the urgency of risk countermeasures. Significant risks are relayed through Environmental Planning Group channels to the Environment Committee, which deliberates on countermeasures. Especially serious risks are reported to the Executive Committee headed by the company president. The Executive Committee then explores reported risks and implements company-wide measures against those deemed important.

Incentives toward management activities related to the issue of climate change

We have established an employee commendation program to honor individuals who make contributions to the company in a variety of dimensions, including profit gains, cost reductions, and the development of new technologies. Honored employees are scored on the basis of assessment criteria for their respective levels of contribution, ranked by commendation, and presented with cash awards. Commendations are conferred to employees that contribute to reduced CO₂ emissions through the development of products with improved fuel economy or participation in energy-conserving activities. In fiscal 2016, commendations were conferred for the development of a new type of electric smelting furnace that has achieved significant energy savings through fully automated operation and the full utilization of surplus heat from scrap products.

CDP submission

We have submitted a CDP response from FY2004, and the evaluation of 2016 was B.

Climate change opportunities and risks
Climate change opportunities

Implementation of the Paris Agreement is expected to spur global growth in demand for highly efficient natural gas-fired power generation as a step toward the creation of a low-carbon society. The MHI Group has developed and begun supplying generating plants powered by high-efficiency gas turbines as well as systems for the recovery of CO₂ from power plant exhaust gases, and considers emissions regulations overseas to be a significant business opportunity.

Climate change products
Products and technologies that reduce environmental impact and CO₂ reductions through the use of MHI Group products

MHI Group is working to create a low-carbon society across a broad spectrum of fields, including large-scale power generation technologies such as highly efficient thermal power generation plants and nuclear power plants; power generation systems that utilize wind, geothermal, and other renewable energies; ships and transportation systems for improving the efficiency of the transportation sector; and high energy-saving air-conditioning systems that use heat pump technology. CO₂ reductions from the fiscal 1990 level through the use of MHI's products in fiscal 2016 came to about 63 million tons.

GHG Emissions
GHG Emissions (Scope1)

Direct greenhouse gas emissions (Scope1)		unit	2012 (Note 1)	2013 (Note 2)	2014 (Note 3)	2015 (Note 4)	2016 (Note 5)
Performance	t	155,349	151,200	238,803	185,951	221,316	
Assurance		-	-	domestic only	domestic only	domestic only	
Performance in Japan	✓ t	-	-	-	-	193,303 (Note 6)	

GHG Emissions (Scope2)

Indirect greenhouse gas emissions (Scope2)		unit	2012 (Note 1)	2013 (Note 2)	2014 (Note 3)	2015 (Note 4)	2016 (Note 5)
Performance	t	270,021	557,700	650,965	605,442	653,269	
Assurance		-	-	domestic only	domestic only	domestic only	
Performance in Japan	✓ t	-	-	-	-	469,309 (Note 6)	

(Note 1) Production sites of MHI on a non-consolidated basis.

(Note 2) MHI on a non-consolidated basis and 31 Group companies.

(Note 3) MHI on a non-consolidated basis and 75 Group companies.

(Note 4) MHI on a non-consolidated basis and 70 Group companies.

(Note 5) MHI on a non-consolidated basis and 137 Group companies.

(Note 6) MHI on a non-consolidated basis and 50 Group companies.

Energy Consumption

Energy consumption

Energy consumption	unit	2012 (Note 1)	2013 (Note 2)	2014 (Note 3)	2015 (Note 4)	2016 (Note 5)
Performance	MWh	1,474,095	1,707,017	2,521,425	2,043,219	2,379,827

Electricity purchased

Electricity purchased	unit	2012 (Note 1)	2013 (Note 2)	2014 (Note 3)	2015 (Note 4)	2016 (Note 5)
Performance	MWh	731,045	989,670	1,043,459	1,105,746	1,218,007

Renewable energy

Green power purchased (Note 6)	unit	2012	2013	2014	2015	2016
Performance	MWh	965	985	1,000	1,000	1,100

Energy use in FY2016 (Japan) (Note 7) ✓

	unit	2016
Purchased Electricity	MWh	879,496
Heavy fuel oil A	kL	8,457
Gasoline	kL	473
Diesel/Gas oil	kL	3,787
Kerosene	kL	6,225
Jet fuel	kL	633
Coal for fuel use	t	731
City gas	km ³	53,265
LPG	t	6,223
LNG	t	1,096
Petroleum hydrocarbon gas	km ³	16
Hot water	GJ	49
Chilled water	GJ	38,663
Steam	GJ	25,840

(Note 1) Production sites of MHI on a non-consolidated basis.

(Note 2) MHI on a non-consolidated basis and 31 Group companies.

(Note 3) MHI on a non-consolidated basis and 75 Group companies.

(Note 4) MHI on a non-consolidated basis and 70 Group companies.

(Note 5) MHI on a non-consolidated basis and 137 Group companies.

(Note 6) MHI on a non-consolidated basis.

(Note 7) MHI on a non-consolidated basis and 50 Group companies in Japan.

▶ Water Risk

Regarding the reduction of water use, the Third MHI Group Environmental Targets (FY2015 – 2017) establish the target of reducing unit water use in fiscal 2017 throughout the Group in Japan and throughout Group companies overseas by 3% compared with fiscal 2014 levels.

Regarding the reduction of water use, the Third MHI Group Environmental Targets (FY2015 – 2017) established the target of reducing unit water use in fiscal 2017 by 3% compared with fiscal 2014 levels, calling for a 2% reduction in fiscal 2016 against fiscal 2014 levels. We are making steady progress toward this goal: the overall Group in Japan achieved a 3.4% reduction. However the figure increased 37.5% for Group companies overseas. We are working to use water more efficiently to achieve our final-year target.

Unit water consumption (FY 2016)

Japan

Compared with
FY2014

-3.4% (Note 1)

Overseas

Compared with
FY2014

+37.5% (Note 2)

(Note 1) The scope of data collection includes MHI on a non-consolidated basis and 44 Group companies in Japan.

(Note 2) The scope of data is approximately 87 overseas Group companies.

Pick Up

Two MHI Group factories in Japan are conducting industrial wastewater quality evaluation on a trial basis using the Whole Effluent Toxicity (WET) method (Note), and the results have indicated that no problems exist in the wastewater from these factories. The MHI Group will continue working to evaluate the safety of wastewater at an advanced level.

(Note) Whole Effluent Toxicity (WET) method: A method for determining the impact of wastewater on an ecosystem by using fish, algae, and other aquatic life.

Performance Data

Water Risk

Water risk governance

Committee	Environment committee
Risk management measures related to water risk	In the Third MHI Group Environmental Targets (FY2015–FY2017), MHI also set consistent MHI Groupwide reduction targets in relation to the effective use of water resources, and is undertaking groupwide measures. An IT system is being used for the reporting and accumulation of water-related data for factories in Japan of MHI on a non-consolidated basis and Group companies within and outside Japan.

Water risk management

Management of water quality	Waste water is managed and treated in accordance with relevant laws and regulations.
Management of change of law, regulation, tax, water price	Domestically once information of any regulation change or revision is obtained, we take appropriate action promptly as necessary. To overseas factories belong to Group companies, we are promoting to capture data related to their water use.

Water Used During Products' Life Cycle

Products contribute to reduction of water use

For example, desalination plants for converting sea water into plane water are often built in combination with power plants constructed in Saudi Arabia, where water resource is limited. Combining our products from wide range of areas, MHI has been delivering solution for the issues of water resources.

Relaxation of water quality effects by using products

We are contributing to alleviating the influence of water quality by environment-friendly thermal power generation system such as wastewater treatment of desulfurization equipment.

Water usage / discharge

Reducing water usage

Group companies in Japan		unit	2014	2015	2016	
Water usage	Usage amount	thousand m ³	8,450	7,600	7,756 (Note 1) ✓	
	Breakdown by usage amount					
	Tap water	thousand m ³	—	—	2,755 ✓	
	Industrial water	thousand m ³	—	—	3,289 ✓	
	Groundwater	thousand m ³	—	—	1,712 ✓	
Overseas Group companies		unit	2014	2015	2016	
Water usage	Usage amount	thousand m ³	855	874 (Note 2)	1,288 (Note 3)	

(Note 1) The scope of data collection includes MHI on a non-consolidated basis and 44 Group companies in Japan.

(Note 2) The scope of data is approximately 25 overseas Group companies.

(Note 3) The scope of data is approximately 87 overseas Group companies.

► Biodiversity

The Basic Policy on Environmental Matters and Action Guidelines and the MHI Group CSR Action Guidelines includes the concepts of the Guidelines for Private Sector Engagement in Biodiversity released by the Ministry of the Environment and the Biodiversity Declaration from the Japan Federation of Economic Organizations.

Each district pursues various biological diversity activities in accordance with these principles and guidelines.

Pick Up

Supporting conservation survey for loggerhead turtle in danger of extinction

The MHI Group offered its support for the "Tanegashima Loggerhead Turtle Survey," an event sponsored by the authorized NPO EarthWatch Japan. The loggerhead turtle is in danger of global extinction. Although Tanegashima is the second largest spawning ground for the loggerhead turtle, there have been very few individual identification surveys conducted in the past for the purpose of preservation. Accordingly, we anticipate that the "Tanegashima Loggerhead Turtle Survey" will not only help to clarify the ecology of the loggerhead turtle but also lead to its preservation.

Surveys were conducted four times between May and August 2016, and we tagged individuals for identification purposes under the direction of the Sea Turtle Association of Japan. This project is recognized as a project promoted by the Japan Committee for UNDB.



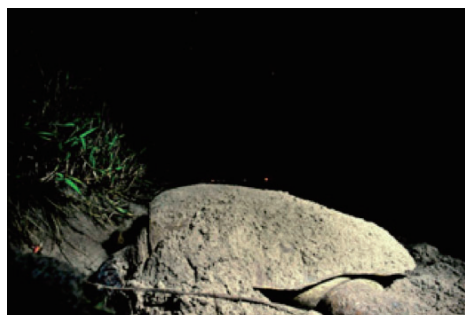
Employee volunteers who receive preliminary lectures before the survey



Group photo shoot at the beach



Employee volunteers to preliminary survey on the beach



Landing of loggerhead turtle

Promoting forest conservation and non-native species removal activities

In recent years, the MHI Group has been an active supporter of corporate forestry programs together with local governments and other organizations.

We are involved in ongoing local government forest care programs. Centering on employees and their families, tree planting and thinning efforts are underway to protect the forests that provide habitats for many different creatures.

Working with NPOs and other organizations, MHI also actively participates in programs to remove non-native species that are impacting Japan's ecosystem.



Field of Initial Activities



After afforestation, the current field

► Waste / Pollution

The Third MHI Group Environmental Targets (FY2015–FY2017) call for a reduction in waste generation and set the target of reducing the landfill waste disposal ratio throughout the Group in Japan to less than 0.6% by fiscal 2017. In fiscal 2016, we achieved 0.47% which meets our target.

In addition, with regard to the reduction in emissions of chemical substances, we have set the target of reducing unit atmospheric emissions of VOCs—focusing on xylene, toluene, and ethylbenzene, which are emitted in large volumes—by 3% of the fiscal 2014 figures by fiscal 2017. Whereas we had targeted a 2% reduction against fiscal 2014 levels in fiscal 2016, we did not meet this goal. Instead, these unit emissions rose by 7%.

Waste (FY2016)

Landfill disposal ratio **0.47%** (Note 1)

Atmospheric Emissions of Xylene, Toluene, and Ethylbenzene (FY2016)

Changing rate of unit emission **+7%** (Note 2)

(Note 1) The scope of data collection includes the MHI on a non-consolidated basis and 49 Group companies in Japan.

(Note 2) The scope of data collection includes the manufacturing plants of MHI on a non-consolidated basis and approximately 10 Group companies in Japan.

Performance Data

Waste / Pollution

Waste generation

Waste generation	unit	2014 (Note 2)	2015 (Note 2)	2016 (Note 3)
Waste generation	t	138,000	139,000	137,114 ✓
Landfill waste disposal amount	t	484	1,868	646
Landfill waste disposal ratio	%	0.35	1.34	0.47

(Note 1) Excluding infectious waste, disposed PCBs, and asbestos as of not reported to the Ministry of Economy, Trade and Industry via affiliated industry associations.

(Note 2) The scope of data collection includes the manufacturing plants of MHI on a non-consolidated basis and approximately 20 Group manufacturing companies in Japan.

(Note 3) The scope of data collection includes the MHI on a non-consolidated basis and 49 Group companies in Japan.

Hazardous waste generation

Hazardous waste generation	unit	2013	2014	2015	2016
	t	2,800	3,651	3,909	5,509

(Note 1) Toxic waste that requires specific control, infectious waste, disposed PCB and asbestos

(Note 2) The scope of data collection includes the manufacturing plants of MHI on a non-consolidated basis.

VOC emissions

VOC emissions	unit	2014 (Note 1)	2015 (Note 1)	2016 (Note 2)
Total	t	1,184	1,546	1,199
Toluene	t	355	336	310
Xylene	t	524	797	596
Ethylbenzene	t	237	396	293

(Note 1) The scope of data collection includes the manufacturing plants of MHI on a non-consolidated basis and approximately 4 Group companies in Japan.

(Note 2) The scope of data collection includes the manufacturing plants of MHI on a non-consolidated basis and approximately 10 Group companies in Japan.

Contributions to Society

► Labor Practice

MHI considers diversity to be essential for human resources, which represent the core of its business activities, from the perspective of accelerating globalization and adapting to various business environments. Focusing on securing and enhancing the readiness of our global business as well as on promoting the active participation of women, we will strengthen diversity management.

In July 2014, MHI set a target to increase the number of female managers (in positions of section manager and higher) in the Company threefold from the current level by 2020. Our current phase of activity addresses four themes: increasing the number of female employees, offering career support for employees raising children or providing nursing care, systematically developing female employees in managerial positions, and fostering a corporate culture that supports diversity management. Moreover, we are considering flexible working styles that facilitate a quick return to work after childbirth or raising children, and creating a framework and an environment to further promote the careers of female employees.

Number of the Company's female managers

2016

80 (MHI)

Performance Data

Labor Practice

Diversity and Equal opportunity

Number of employees (At the end of the fiscal year)		unit	2012	2013	2014	2015	2016	coverage
Total			31,111	22,147	21,117	19,357	16,824	MHI
Male			28,276	20,013	19,069	17,414	15,166	MHI
		%	90.9	90.4	90.3	90.0	90.1	MHI
Female			2,835	2,134	2,048	1,943	1,658	MHI
		%	9.1	9.6	9.7	10.0	9.9	MHI

Executive		unit	2012	2013	2014	2015	2016	coverage
Total			52	51	55	59	54	MHI
Male			52	50	54	58	53	MHI
		%	100.0	98.0	98.2	98.3	98.1	MHI
Female			0	1	1	1	1	MHI
		%	0.0	2.0	1.8	1.7	1.9	MHI

Manager (in positions of section manager and higher)		unit	2012	2013	2014	2015	2016	coverage
Total			5,054	5,170	4,057	4,108	3,478	MHI
Male			4,993	5,094	3,990	4,029	3,398	MHI
		%	98.8	98.5	98.3	98.1	97.7	MHI
Female			61	76	67	79	80	MHI
		%	1.2	1.5	1.7	1.9	2.3	MHI

Differently-abled people	unit	2012	2013	2014	2015	2016	coverage
	%	2.09	2.14	2.17	2.22	2.17	MHI
Number of employees re-hired over retirement age(60yrs)	unit	2012	2013	2014	2015	2016	coverage
Total		2,343	1,922	1,844	1,613	1,284	MHI

Freedom of Association

	unit	2012	2013	2014	2015	2016	coverage
Employees covered by collective bargaining agreements	%	99.9	99.9	99.9	99.9	99.9	MHI
Number of labor-management consultations	times	34	38	36	44	36	MHI

Layoffs

	unit	2012	2013	2014	2015	2016	coverage
Number of employees laid off		0	0	0	0	0	MHI
Number of labor-management consultations about layoffs	times	0	0	0	0	0	MHI

► Occupational Health and Safety

MHI embraces a basic policy for employee health and safety founded on the following three commitments: (1) Safety is the number one priority. We will do everything in our power to protect lives. (2) We devote every effort to safety in creating outstanding products that contribute to the development of society; (3) Our physical and mental wellbeing is fundamental to everything we do at the MHI Group. We must continue to elevate and embrace a culture of health and safety across our workplace. Based on these principles, we operate an occupational health and safety management system throughout the company to create safe, pleasant workplaces.

Industrial accident frequency rate

2016 **0.37** % (MHI)

Manufacturing industry average

2016 **1.15** %

Basic Policy for Employee Safety and Health

The MHI Group Health and Safety Policies

[Our Health and Safety Principle]

At the MHI Group, safety is the number one priority. We will do everything in our power to protect lives.

[Our Health and Safety Policies]

1. Each and every one of us across the MHI Group must join forces as one united team to maintain and heighten our health and safety standards.
2. We hold health and safety as a top priority at each of the MHI Group companies by establishing procedures, defining roles and responsibilities, and engaging in health and safety initiatives.
3. To prevent occupational accidents or illness, we work to continually enhance our health and safety initiatives by setting measureable goals and evaluating results.
4. We minimize risks at the workplace by assessing all potential issues and implementing appropriate measures to ensure a safe and secure work environment.
5. It is a responsibility of each one of us at the MHI Group to learn, understand, and comply with our health and safety policies and procedures, as well as applicable laws and regulations, through education and training programs.
6. Our physical and mental wellbeing is fundamental to everything we do at the MHI Group.
We must continue to elevate and embrace a culture of health and safety across our workplace.

Pick Up

Opening the Safety Transmission Center at Nagasaki Shipyard & Machinery Works

MHI opened an educational facility on work safety in October 2010. Called the Safety Transmission Center in the Nagasaki Shipyard & Machinery Works, the facility is dedicated to the Nagasaki Shipyard & Machinery Works' resolution not to let any fatal accidents occur in its production operations. The facility consists of two zones: the Accident Case Studies Zone, where videos and displays show employees how accidents happen and what to do to prevent them, and the Human Error Study Zone, where employees can learn, in a hands-on format and using real-life examples, the principles that trigger human error and how to identify risks before accidents occur.

The Nagasaki Shipyard & Machinery Works is working to cultivate in its workforce a sensitivity to hazards and a culture of safety, using the Safety Transmission Center as a place where all employees, from managers to operators, can learn nearly firsthand the horror of accidents and the pain they cause, and decide for themselves what they can and should do to prevent them.



Safety Transmission Center

Performance Data

Occupational Health and Safety

Fatalities		2012	2013	2014	2015	2016	coverage
Employees		0	2	0	0	0	MHI
Contractors		1	1	0	0	2	MHI
LTIFR		2012	2013	2014	2015	2016	coverage
Employees	%	0.06	0.16	0.09	0.11	0.31	MHI
Contractors	%	0.21	0.32	0.19	0.45	0.43	MHI
OIFR		2012	2013	2014	2015	2016	coverage
Employees	%	0.01	0.05	0.04	0.02	0.02	MHI
Number of Industrial accidents		2012	2013	2014	2015	2016	coverage
Employees		33	57	29	34	39	MHI
Working hour		2012	2013	2014	2015	2016	coverage
	hours	126,680,360	124,186,184	104,615,169	108,164,976	89,026,326	MHI

Certification of Occupational Health and Safety

Yokohama Dockyard & Machinery Works and chemical/social infrastructure local construction divisions acquired OHSAS18001 certificate and are operating occupational health and safety management system aiming at constantly improving the system.

Training

In order to reduce the risk of occupational accidents, MHI makes improvements based on the results of risk assessments implemented at each works. These assessments are related to tasks and equipment, and are mainly focused on the safety and manufacturing sectors. We are also implementing safety education for entry-level employees and other people. This education utilizes visual learning materials and hands-on equipment that makes it possible to actually experience accident simulations. This hands-on equipment has been installed at each works including the Nagasaki Shipyard & Machinery Works and Kobe Shipyard & Machinery Works.

Health Management

Health promoting program

- Actions are taking place based on the occupational health and safety management plan, including targets such as days of absence from work due to illness.
- Promotion of using health management promotion tool (KEMPO) in collaboration with a health insurance union
- Initiative for improving completion rate of participating in specific health guidance, from initial interview till the end of guidance.
- Measures to prevent lifestyle diseases (implementing health-related guidance targeted at reducing the ratio of employees with a BMI \geq 25)
- Implementing stress checks and encouraging the usage of consultation hotlines.

► Human Resources Development

MHI is working to improve employee capabilities and enhance education with the aim of being a global corporation that is capable of responding to changes in the rapidly transforming market. Based on on-the-job training (OJT) in workplaces, we are implementing various educational programs starting immediately after hiring according to job level and function. The main themes of education according to job level include leadership and management.

As core measures for human resources development, we are concentrating on education to strengthen global responsiveness, development of MHI Group employees development of junior technicians on the forefront of manufacturing, and training activities for Group company employees.

Performance Data

Human Resources Development

Human resources management

Focus area on human resources management

Amid its efforts to accelerate globalization and revise its business model, MHI recognizes that diversity in human resources is core to its business activities. Accordingly, we are reinforcing diversity management, centering on enhancing readiness for global business and promoting the active participation of women.

Human resources development programs

Program (1)

Education to strengthen global responsiveness

To further strengthen global responsiveness, in fiscal 2011 MHI established a system for dispatching young employees overseas (MGT: MHI Global Training).

■ Benefits

The program develops an early awareness of global human resources and enhances global response with certainty throughout the organization.

Attendance

11 employees (FY2016)

Program (2)

Development of MHI Group employees

To accelerate globalization and diversity, it is essential to augment the capabilities and skills of all employees, including those at Group companies overseas. To develop human resources who will take charge of managing Group companies overseas, the MHI Group is expanding its training of MHI Group employee overseas. In fiscal 2017, training programs were renewed and conducted for candidates as future executives in regional or local entities, in collaboration with a local business school in India. This fiscal year, we expanded target companies into all regions, and participants were nominated from across the MHI Group including companies based in Japan. Local staff members recommended by individual regions joined the recommended members from Japan, and both the content of and participants in the programs were very diverse and intercultural. We also enhanced e-learning contents that could be used by Group companies overseas, creating an environment that facilitates the provision of the necessary training at the necessary times.

■ Benefits

To support the management of Group companies overseas, the program aims to provide the knowledge that management personnel require and cultivate leadership and membership of MHI Group awareness.

Attendance

20 employees (FY2017)

Program (3)

Development of junior technicians on the forefront of manufacturing

MHI has prepared textbooks that are standardized for the entire company to ensure the commonality and uniformity of education. We have also made DVDs to create digital versions of Skills of the Master manuals developed by veteran technicians. These and other efforts seek to ensure the steady succession of techniques and the rapid development of junior technicians. In addition, with the aim of improving levels of expertise and energizing our junior technicians, we hold company-wide skills contests in machine assembly, lathing, welding, and other fields. MHI is also working to improve the leadership skills of employees who serve as instructors.

■ Benefits

At MHI Group, the number of junior technicians is increasing as more senior technicians retire. For that reason, there is an urgent need to train technicians who can maintain the front line of manufacturing. This organizational education program aims to ensure that technologies are passed on.

Program (4)

Training activities for Group company employees

To promote human resource development that is unified throughout the MHI Group, we conduct rank-based management training and business skills training as consistent programs across the Group. In fiscal 2017, we began conducting this training for the entire MHI Group and increasing educational opportunities throughout Group. At the same time, we are promoting interaction among participants that goes beyond companies and divisions, as we work to foster a sense of unity throughout the Group.

■ Benefits

This program aims to strengthen, with certainty, the management and business quality of the entire MHI Group.

Attendance

Training held six times for a total of 433 people (FY2016)

► Talent Attraction and Retention

In order to create an environment in which it is easy for employees to work and also have a family, MHI is making efforts to expand its various support systems that give consideration to childcare and family care.

In November 2011, MHI established a child planning leave system, which can be used for infertility treatment, and hourly paid-leave, in which employees can use their leave in increments of one to two hours according to their circumstances for purposes such as childcare and family care. We also expanded the periods for family-care leave and family-care work shifts, so that employees can take up to one year of total family-care leave and take advantage of family-care work shifts for up to three years. In April 2016, in order to create more flexible working style, we introduced a tele-work system.

Furthermore, the periods for family-care leave and family-care work have been expanded; and each can be used for a total of up to one year. In addition, the systems for childcare leave, childcare work, family-care leave, and family-care work all now exceed statutory minimums. Information about the systems and procedures regarding childcare and family care are available on our intranet so that employees can access it easily.

Other initiatives include holding regular discussion panels between individuals on childcare leave and those who have taken such leave in the past in hopes of enabling a smooth transition back to work. We also hold nursing-care seminars in an effort to prevent employees from leaving their jobs to provide this care.

Returning to work after childcare leave

2016

99.1%

Remaining in work after childcare leave

2016

98.1%

Pick Up

Nursery Operated

In April 2010, the Nagasaki Shipyard & Machinery Works opened the first MHI in-house nursery, MHI Kira Kids Nursery. All MHI Group employees in Nagasaki with their pre-school-aged children can use the facility at any time between 7am and 8pm.

Since opening its doors, the nursery has held various events such as parent & child picnics and Christmas parties, as well as English, gymnastics, and art classes.

In January 2014, a childcare facility called "Sun Marina Kids" that is operated by the Nichii Gakkan Company opened within our Yokohama Building. MHI has reserved all spaces at the center, so that MHI Group employees can have their children; up to three years old, cared for from 7a.m. through 8p.m. Sun Marina Kids has introduced its own cleaning service, which reduces the number of items parents need to bring with them to the center. The center has also introduced educational courses including English, gymnastics, and eurhythmic.



[Nagasaki] Cooking class as part of kids' food education



[Yokohama] The center's popular slider

Performance Data

Talent Attraction and Retention

Employee performance appraisal

	unit	2012	2013	2014	2015	2016	coverage
Management by objectives	%	57	58	57	58	63	MHI
Multidimensional performance appraisal	%	43	42	43	42	37	MHI

Employment

	unit	2012	2013	2014	2015	2016	coverage
New hired							
Total		749	529	536	484	589	MHI
Male		673	476	495	441	518	MHI
	%	89.9	90.0	92.4	91.1	87.9	MHI
Female		76	53	41	43	71	MHI
	%	10.1	10.0	7.6	8.9	12.1	MHI
Total turn over rate	%	5.7	4.3	4.0	5.6	3.3	MHI
Voluntary turn over rate	%	0.7	0.5	0.6	0.7	0.7	MHI
Average length of service	years	16.0	16.1	16.3	16.1	16.2	MHI
Male	years					16.2	MHI
Female	years					16.6	MHI

Work-life balance

	unit	2012	2013	2014	2015	2016	coverage
Number of employees using programs that focus on work-life balance							
Childcare leave		265	226	205	219	182	MHI
Male		16	10	17	20	17	MHI
Childcare workshift		502	441	456	465	444	MHI
Male		53	60	61	72	99	MHI
People using child planning leave		8	5	1	3	4	MHI
Family-care leave		4	9	5	5	2	MHI
Family-care work shift		11	8	13	14	13	MHI
Returning to work after childcare leave	%	100.0	98.2	94.3	98.2	99.1	MHI
Remaining in work after childcare leave	%	96.4	99.1	95.5	96.0	98.1	MHI
Percent of employees taking annual paid leave	%	74.5	75.0	75.5	76.8	77.7	MHI

► Respect for Human Rights

The MHI Group is firmly committed to respecting the human rights and workers' rights of employees as per international treaties of human rights.

In May 2015 we established the MHI Group Global Code of Conduct as the common standard for our group. Through this we believe we will cultivate a single and shared corporate culture, one that is rooted in mutual trust and affords dignity and respect to all employees. The MHI Group values the individual contribution of people irrespective of race, colour, religion, political convictions, gender, age, nationality, sexual orientation, marital status, or disability. Discrimination will not be tolerated by the MHI Group.

Each year at the workplace, we conduct training to promote human rights awareness. It covers the fundamentals of human rights and harassment. This training targets new recruits and newly appointed managers, such as deputy managers and section managers. In the fiscal 2016, we rolled this training out across 270 new recruits and 1,230 newly appointed managers and supervisors. Furthermore, in an effort to heighten awareness of and prevent "power harassment" (workplace bullying and harassment) we introduced an e-learning course in fiscal 2010 that continues to be taken to this day.

People undergoing human rights awareness training

2016

Approximately **1,500**

Performance Data

Respect for Human Rights

Management structure related human rights

Chief executive		Hideaki Yanai (Executive Vice President, in charge of HR)
Committee	Name	Committee for Raising Awareness of Human Rights
	Member	Chairman is Executive vice president, in charge of HR, and composed of 23 members.
	Number of times	Anytime, if necessary

Grievance mechanism

Grievance mechanism	<ul style="list-style-type: none"> Internal and external hotline of Corporate Compliance that employees (including contract employees) of MHI and all Group companies, and business clients can use. Internal and external Hotline has been established to report "power harassment" (workplace bullying and harassment) in 2012.
Coverage	Employees (including contract employees) of MHI and all Group companies, and business clients

► Corporate Philanthropy

In accordance with its CSR Action Guidelines, the MHI Group promotes philanthropic activities with such focus areas as local contributions that are highly related to business activities, upbringing of the next generation, and the environment. With regard to local contribution, our basic policy is to live together with local communities where MHI Group business facilities are located, building strong relationships based on mutual trust. With this in mind, we undertake various activities suitable for local cultures and contribute to the local development and activation both in Japan and overseas.

With regard to upbringing of the next generation, our basic policy is to communicate "the heart of Japanese manufacturing" and "the arts of science and technology" to the next generation. MHI has developed and produced many type of products in its long history, cultivating "the heart of Japanese manufacturing" and "the arts of science and technology." To pass its knowledge and skills onto succeeding generations, MHI has a tradition of organizing educational activities such as science classes with experiments for children. We also engage in environmental and ecosystem conservation activities that contribute to the sustainable development of local communities.

Expenditure on social contribution activities

2016 **2,542** million yen

Our Policy on Social Contribution Activities

Local contribution

Live together with communities and contribute to their development

Our basic policy is to live together with local communities of branch offices, overseas offices, and Group companies in foreign countries, building strong relationships based on mutual trust. With this in mind, we undertake various activities suitable for local cultures and contribute to the local development and activation both in Japan and overseas.

Upbringing of the next generation

Transfer "the heart of Japanese manufacturing" as well as "the arts of science and technology" to the next generation

MHI has developed and produced many type of products in its long history, cultivating "the heart of Japanese manufacturing" and "the arts of science and technology." To pass its knowledge and skills onto succeeding generations, MHI has a tradition of organizing educational activities such as science classes with experiments for children.

Pick Up

Results of principal philanthropic activities in fiscal 2016 ✓

Upbringing of the next generation: Inspire the future

Name of activity	Overview	Related SDGs
Science classes	MHI conducts science classes for students at elementary schools located nearby our business facilities using as teaching materials the MHI Group products and technologies found at the Mitsubishi Minatomirai Industrial Museum.	Target 4
MHI Tanegashima Space School	We solicit applications from elementary school students around Japan to visit Tanegashima, a rocket launch site. We conduct science classes and tour rocket launches.	Target 4

Name of activity	Overview	Related SDGs
The Shiki Theatre Company's Kokoro no Gekijo	Through musicals the Company is working to cultivate a richness of spirit among the children of the next generation. Accordingly, from fiscal 2013 we have supported the Shiki Theatre Company's Kokoro no Gekijo ("Theater of the Heart") productions. Group employees and their families have participated as volunteers at performances in locations close to our plants.	Target 4

Local contribution: Create a more harmonious society

Name of activity	Overview	Related SDGs
MHI Miyagi Fukushima Mini-Fund	This support fund backs activities at locations that connect people who moved into temporary housing or public housing for disaster recovery set up in fiscal 2012 following the Great East Japan Earthquake, as well as these people and other local community members.	
Table For Two	Table For Two (TFT) is a social contribution initiative harking from Japan aimed simultaneously at alleviating poverty in developing countries and addressing obesity and lifestyle disease in advanced countries. The MHI Group upholds the initiative's philosophy and has incorporated TFT programs in cafeterias and vending machines within its headquarters building and bases of operation.	Target 1 and 2
Tanegashima Space Art Festival	The island of Tanegashima springs to mind when Japanese people think of "space." Various activities are starting up in preparation for the "Space Art Festival" that is planned for 2017 and intended to expand the field of space art. MHI, which has been involved in space development for some time, took this opportunity to sponsor a children's space art classroom and music festival as pre-events in fiscal 2013.	

Environment: Care for the planet

Name of activity	Overview	Related SDGs
Myanmar Municipal solid Waste Management Forum	The city of Yangon faces waste processing issues amid rapid economic growth and population increases. This forum aims to communicate to Yangon the city of Tokyo's waste management expertise in relation to the waste incineration power plant business, a mainstay of the Industry & Infrastructure Domain.	Target 3 and 11
Tanegashima Loggerhead Turtle Survey	The MHI Group offered its support for the "Tanegashima Loggerhead Turtle Survey," an event sponsored by the authorized NPO EarthWatch Japan. Tanegashima is a key location for our rocket launch business, and the launch market is expected to expand as demand for satellite use grows around the world. In this activity, employee volunteers participate in local surveys. Although Tanegashima, which is home to an important MHI Group business site, is a spawning ground for the loggerhead turtle, few individual identification surveys have been conducted to date. We anticipate that conducting such surveys in Tanegashima beach areas will help to clarify the ecology of this species and lead to its preservation.	Target 14 and 15
Forest conservation programs (forest preservation activities)	MHI Group employees and their families participate in various forest conservation programs led by individual Japanese prefectures to address the many problems affecting forests in locations around Japan and contribute to the development of ecologically diverse forests, in addition to forest preservation activities led by governmental and non-profit organizations.	Target 15

Name of activity	Overview	Related SDGs
Environmental Action Furusato Cleanup	Each year, throughout Japan we conduct the Furusato Cleanup events as a cleanup activity in regions where we are active on a daily basis. For our cleanup activity in Shiga Prefecture, we conduct activities aimed at eliminating invasive fish species in Lake Biwa. Such cleanup activities are aimed at enhancing awareness among individual Group employees and family members of environmental preservation and local conservation. In fiscal 2016, 235 of these activities are conducted, and 10,929 people have participated.	Target 14 and 15

More detailed information about philanthropic activities is available on our website and CSR Facebook.

■ CSR News <http://www.mhi.com/news//kind/csr.html>

■ CSR Facebook <https://www.facebook.com/mhi.csr.en/>

Performance Data

Corporate Philanthropy

Corporate Philanthropy policy and focus areas

Focus area (1)	Upbringing of the next generation
■ Relevance to business	MHI regards scientific technology is a source of growth, therefore children's loss of interests in and capacity of understanding science and reluctance to socialize as major, etc., may become challenges for company's human resource development in the future.
Focus area (2)	Local contribution
■ Relevance to business	MHI executes business all over the world, therefore it is critical aspect for business continuity to live in harmony and establish high confidence with every local communities where we operate.
Focus area (3)	Environment
■ Relevance to business	MHI business is global and encompassing developing/emerging economies, so that environmental consideration in business operation is critical for our business continuity.

Social contribution input

Social contribution input ✓	unit	2012	2013	2014	2015	2016
Total amount	coverage millions of yen	Group 1,480	Group 1,478	Group 1,899	Group 2,053	Group 2,542
Category						
Academic research	millions of yen	177	143	428	452	491
Education	millions of yen	503	494	596	636	1,115
Community	millions of yen	153	125	135	295	108
Sports	millions of yen	173	149	177	100	134
Others	millions of yen	474	566	563	570	693
Ratio of contribution input to ordinary income ✓	%	1.0	0.8	0.7	0.75	2.1
Political contribution			2013	2014	2015	2016
Total amount	coverage millions of yen		MHI 30	MHI 33	MHI 33	MHI 33

Social contribution benefit

KPIs-Focus area (1)		2012	2013	2014	2015	2016
Cumulative total number of the science class participants. ✓	Number of participants		8,936	4,864	9,350	58,578
	coverage		MHI	MHI	Group	Group

KPIs-Focus area (2)		unit	2012	2013	2014	2015	2016
Records of natural disaster affected area assistance programs ✓	Number of assistance		1	2	1	2	6
	Contributed amounts	millions of yen	29	33	10	6	45
	coverage		MHI	MHI	MHI	Group	Group

KPIs-Focus area (3)		2012	2013	2014	2015	2016
Records of know-how transfer programs of managing Municipal solid waste for emerging countries ✓	Number of taking place				4	1
	Number of participants				734	230
	coverage				Group	Group

Benefits on business

- Experience of teaching in the science class facilitates employees to develop their presentation and communication capacity and motivates them.
- Early recovery of HHI Group critical business region through assistance for natural disaster affected area.
- Enhancing opportunity for MHI's environmental products order intake, along with raising an environmental awareness in the emerging economies.

GRI (G4) Guidelines Comparison Tables

► G4 GENERAL STANDARD DISCLOSURES

Strategy and Analysis

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-1	a. Provide a statement from the most senior decision-maker of the organization (such as CEO, chair, or equivalent senior position) about the relevance of sustainability to the organization and the organization's strategy for addressing sustainability.	—	President's Message (p.6-12)
G4-2	a. Provide a description of key impacts, risks, and opportunities.	Materiality (p.8-9)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)

Organizational Profile

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2016	Relevant page(s) in the MHI REPORT 2016
G4-3	a. Report the name of the organization.	—	Corporate Data (p.52)
G4-4	a. Report the primary brands, products, and services.	—	Business Segment Highlights (p.30-31)
G4-5	a. Report the location of the organization's headquarters.	—	Corporate Data (p.52)
G4-6	a. Report the number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report.	—	Overseas Head Offices and Networks / Oversea Offices (p.53)
G4-7	a. Report the nature of ownership and legal form.	—	Corporate Data (p.52)
G4-8	a. Report the markets served (including geographic breakdown, sectors served, and types of customers and beneficiaries).	—	Business Segment Highlights (p.30-31) Overseas Head Offices and Networks / Overseas Offices (p.53)
G4-9	a. Report the scale of the organization, including: - Total number of employees - Total number of operations - Net sales (for private sector organizations) or net revenues (for public sector organizations) - Total capitalization broken down in terms of debt and equity (for private sector organizations) - Quantity of products or services provided	—	Corporate Data (p.52) Financial and Non-Financial Highlights (p.26-27)
G4-10	a. Report the total number of employees by employment contract and gender. b. Report the total number of permanent employees by employment type and gender. c. Report the total workforce by employees and supervised workers and by gender. d. Report the total workforce by region and gender. e. Report whether a substantial portion of the organization's work is performed by workers who are legally recognized as self-employed, or by individuals other than employees or supervised workers, including employees and supervised employees of contractors. f. Report any significant variations in employment numbers (such as seasonal variations in employment in the tourism or agricultural industries).	Diversity and Equal opportunity (p.56-57)	Financial and Non-Financial Highlights (p.26-27)
G4-11	a. Report the percentage of total employees covered by collective bargaining agreements.	Freedom of Association (p.57)	—

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-12	a. Describe the organization's supply chain.	Supply Chain Management (p.37-38)	—
G4-13	a. Report any significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain, including: - Changes in the location of, or changes in, operations, including facility openings, closings, and expansions - Changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations) - Changes in the location of suppliers, the structure of the supply chain, or in relationships with suppliers, including selection and termination	—	—
G4-14	a. Report whether and how the precautionary approach or principle is addressed by the organization.	Conformity to International Code of Conduct (p.3) Risk Management (p.17-20)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)
G4-15	a. List externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses.	Conformity to International Code of Conduct (p.3)	—
G4-16	a. List memberships of associations (such as industry associations) and national or international advocacy organizations in which the organization: - Holds a position on the governance body - Participates in projects or committees - Provides substantive funding beyond routine membership dues - Views membership as strategic	—	—

Identified Material Aspects and Boundaries

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-17	a. List all entities included in the organization's consolidated financial statements or equivalent documents. b. Report whether any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report.	Coverage / Third-party Assurance (p.10)	—
G4-18	a. Explain the process for defining the report content and the Aspect Boundaries. b. Explain how the organization has implemented the Reporting Principles for Defining Report Content.	Structure of Information Disclosure / Coverage / Third-party Assurance / Reference Guidelines (p.10)	Structure of Information Disclosure / Reference Guidelines (p.1)
G4-19	a. List all the material Aspects identified in the process for defining report content.	Materiality (p.8-9)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)
G4-20	a. For each material Aspect, report the Aspect Boundary within the organization, as follows: Report whether the Aspect is material within the organization If the Aspect is not material for all entities within the organization (as described in G4-17), select one of the following two approaches and report either: -The list of entities or groups of entities included in G4-17 for which the Aspect is not material or -The list of entities or groups of entities included in G4-17 for which the Aspects is material Report any specific limitation regarding the Aspect Boundary within the organization	Coverage / Third-party Assurance (p.10)	—

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-21	a. For each material Aspect, report the Aspect Boundary outside the organization, as follows: Report whether the Aspect is material outside of the organization If the Aspect is material outside of the organization, identify the entities, groups of entities or elements for which the Aspect is material. In addition, describe the geographical location where the Aspect is material for the entities identified Report any specific limitation regarding the Aspect Boundary outside the organization	—	—
G4-22	a. Report the effect of any restatements of information provided in previous reports, and the reasons for such restatements.	N/A	N/A
G4-23	a. Report significant changes from previous reporting periods in the Scope and Aspect Boundaries.	N/A	N/A

Stakeholder Engagement

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-24	a. Provide a list of stakeholder groups engaged by the organization.	Stakeholders (p.5-7)	—
G4-25	a. Report the basis for identification and selection of stakeholders with whom to engage.	Stakeholders (p.5-7)	—
G4-26	a. Report the organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process.	Stakeholders (p.5-7)	—
G4-27	a. Report key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded to those key topics and concerns, including through its reporting. Report the stakeholder groups that raised each of the key topics and concerns.	Stakeholders (p.5-7)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)

Report Profile

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-28	a. Reporting period (such as fiscal or calendar year) for information provided.	—	Financial and Non-Financial Highlights (p.26-27)
G4-29	a. Date of most recent previous report (if any).	—	—
G4-30	a. Reporting cycle (such as annual, biennial).	—	—
G4-31	a. Provide the contact point for questions regarding the report or its contents.	Adress all inquiries about this report to: Business Strategy Office Corporate Communication Department 16-5 Konan 2-chome, Minato-ku, Tokyo, 108-8215, Japan Telephone: 81-3-6716-3111 Facsimile: 81-3-6716-5860	Corporate Data (p.52)
G4-32	a. Report the 'in accordance' option the organization has chosen. b. Report the GRI Content Index for the chosen option (see tables below). c. Report the reference to the External Assurance Report, if the report has been externally assured. GRI recommends the use of external assurance but it is not a requirement to be 'in accordance' with the Guidelines.	Reference Guidelines (p.10) GRI (G4) Guidelines Comparison Tables (p.70-83)	Reference Guidelines (p.1)

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-33	<p>a. Report the organization's policy and current practice with regard to seeking external assurance for the report.</p> <p>b. If not included in the assurance report accompanying the sustainability report, report the scope and basis of any external assurance provided.</p> <p>c. Report the relationship between the organization and the assurance providers.</p> <p>d. Report whether the highest governance body or senior executives are involved in seeking assurance for the organization's sustainability report.</p>	Third-party Assurance (p.84-85)	—

Governance

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-34	a. Report the governance structure of the organization, including committees of the highest governance body. Identify any committees responsible for decision-making on economic, environmental and social impacts.	Corporate Governance (p.12-16)	Corporate Governance (p.46-51) Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)
G4-35	a. Report the process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees.	CSR Promotion System (p.3)	Corporate Governance Structure and Roles (Including Internal Control Systems) (p.48)
G4-36	a. Report whether the organization has appointed an executive-level position or positions with responsibility for economic, environmental and social topics, and whether post holders report directly to the highest governance body.	CSR Promotion System (p.3)	—
G4-37	a. Report processes for consultation between stakeholders and the highest governance body on economic, environmental and social topics. If consultation is delegated, describe to whom and any feedback processes to the highest governance body.	("Feedback to Internal Staff and Management" article 18 of the Corporate Governance Guideline of Mitsubishi Heavy Industries, Ltd.) Stakeholder (p.5-7)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)
G4-38	a. Report the composition of the highest governance body and its committees by: <ul style="list-style-type: none"> • Executive or non-executive • Independence • Tenure on the governance body • Number of each individual's other significant positions and commitments, and the nature of the commitments • Gender • Membership of under-represented social groups • Competences relating to economic, environmental and social impacts • Stakeholder representation 	Independence of the Board of Directors (p.12) Corporate governance structure (p.13) Effectiveness of the board of directors (p.14-15)	Corporate Governance (p.46-51)
G4-39	a. Report whether the Chair of the highest governance body is also an executive officer (and, if so, his or her function within the organization's management and the reasons for this arrangement).	("Chairman of Meetings of the Board of Directors" article 25 of the Corporate Governance Guideline of Mitsubishi Heavy Industries, Ltd.) Corporate governance structure (p.13)	Corporate Governance (p.46-51)
G4-40	a. Report the nomination and selection processes for the highest governance body and its committees, and the criteria used for nominating and selecting highest governance body members, including: <ul style="list-style-type: none"> • Whether and how diversity is considered • Whether and how independence is considered • Whether and how expertise and experience relating to economic, environmental and social topics are considered • Whether and how stakeholders (including shareholders) are involved 	("Composition of the Board of Directors" article 20, "Election Procedures for Directors, etc." article 23, and "Independence Criteria for Independent Outside Directors" article 34 of the Corporate Governance Guideline of Mitsubishi Heavy Industries, Ltd.) Independence of the Board of Directors (p.12) Functions and committees (p.13)	Corporate Governance (p.46-51)

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-41	<p>a. Report processes for the highest governance body to ensure conflicts of interest are avoided and managed. Report whether conflicts of interest are disclosed to stakeholders, including, as a minimum:"</p> <ul style="list-style-type: none"> •Cross-board membership •Cross-shareholding with suppliers and other stakeholders •Existence of controlling shareholder •Related party disclosures 	Independence of the Board of Directors (p.12)	Corporate Governance (p.46-51) Corporate Data (p.52)
G4-42	a. Report the highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental and social impacts.	CSR Promotion System (p.3)	Corporate Governance (p.46-51)
G4-43	a. Report the measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental and social topics.	—	—
G4-44	<p>a. Report the processes for evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics. Report whether such evaluation is independent or not, and its frequency. Report whether such evaluation is a self-assessment.</p> <p>b. Report actions taken in response to evaluation of the highest governance body's performance with respect to governance of economic, environmental and social topics, including, as a minimum, changes in membership and organizational practice.</p>	—	—
G4-45	<p>a. Report the highest governance body's role in the identification and management of economic, environmental and social impacts, risks, and opportunities. Include the highest governance body's role in the implementation of due diligence processes.</p> <p>b. Report whether stakeholder consultation is used to support the highest governance body's identification and management of economic, environmental and social impacts, risks, and opportunities.</p>	Materiality (p.8-9)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)
G4-46	a. Report the highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental and social topics.	CSR Promotion System (p.3)	—
G4-47	a. Report the frequency of the highest governance body's review of economic, environmental and social impacts, risks, and opportunities.	CSR Promotion System (p.3)	—
G4-48	a. Report the highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material Aspects are covered.	CSR Promotion System (p.3)	—
G4-49	a. Report the process for communicating critical concerns to the highest governance body.	Organized Business Risk Management (p.17-18) Risk governance (p.18)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)
G4-50	a. Report the nature and total number of critical concerns that were communicated to the highest governance body and the mechanism(s) used to address and resolve them.	Key Performance Indicators for Material Issues (p.8-9) Compliance situation (p.22-23)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-51	<p>a. Report the remuneration policies for the highest governance body and senior executives for the below types of remuneration: Fixed pay and variable pay: –Performance-based pay –Equity-based pay –Bonuses –Deferred or vested shares Sign-on bonuses or recruitment incentive payments Termination payments Clawbacks Retirement benefits, including the difference between benefit schemes and contribution rates for the highest governance body, senior executives, and all other employees</p> <p>b. Report how performance criteria in the remuneration policy relate to the highest governance body's and senior executives' economic, environmental and social objectives.</p>	Remuneration of directors (p.15-16)	Officers' Remuneration Structure (p.50)
G4-52	a. Report the process for determining remuneration. Report whether remuneration consultants are involved in determining remuneration and whether they are independent of management. Report any other relationships which the remuneration consultants have with the organization.	Functions and committees (p.13-14)	Officers' Remuneration Structure (p.50)
G4-53	a. Report how stakeholders' views are sought and taken into account regarding remuneration, including the results of votes on remuneration policies and proposals, if applicable.	—	—
G4-54	a. Report the ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country.	Remuneration of directors (p.15-16)	—
G4-55	a. Report the ratio of percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country.	—	—

Ethics and Integrity

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-56	a. Describe the organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics.	Policy (p.2)	Our Principles / Corporate Identity Statement / MHI Group CSR Action Guidelines / Corporate Aspiration / Tagline (p.1)
G4-57	a. Report the internal and external mechanisms for seeking advice on ethical and lawful behavior, and matters related to organizational integrity, such as helplines or advice lines.	Compliance structure (p.22) Grievance mechanism (p.65)	—
G4-58	a. Report the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and matters related to organizational integrity, such as escalation through line management, whistleblowing mechanisms or hotlines.	Compliance structure (p.22)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)

► SPECIFIC STANDARD DISCLOSURES

Category: Economic

■ Aspect: Economic Performance

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EC1	Direct economic value generated and distributed	—	Financial and Non-Financial Highlights (p.26-27)
G4-EC2	Financial implications and other risks and opportunities for the organization's activities due to climate change	Climate change opportunities and risks (p.48)	—
G4-EC3	Coverage of the organization's defined benefit plan obligations	—	—
G4-EC4	Financial assistance received from government	—	—

■ Aspect: Market Presence

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EC5	Ratios of standard entry level wage by gender compared to local minimum wage at significant locations of operation	—	—
G4-EC6	Proportion of senior management hired from the local community at significant locations of operation	—	—

■ Aspect: Indirect Economic Impacts

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EC7	Development and impact of infrastructure investments and services supported	—	Business Segment Highlights (p.30-31) Business Segment Overview (p.32-43)
G4-EC8	Significant indirect economic impacts, including the extent of impacts	—	Business Segment Highlights (p.32-43)

■ Aspect: Procurement Practices

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EC9	Proportion of spending on local suppliers at significant locations of operation	—	—

Category: Environmental

■ Aspect: Materials

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN1	Materials used by weight or volume	—	—
G4-EN2	Percentage of materials used that are recycled input materials	—	—

■ Aspect: Energy

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN3	Energy consumption within the organization	Energy consumption (p.44, 46)	Financial and Non-Financial Highlights (p.26-27)
G4-EN4	Energy consumption outside of the organization	—	—
G4-EN5	Energy intensity	Reduction in unit energy use (p.46)	—
G4-EN6	Reduction of energy consumption	Energy consumption (p.44, 46)	Financial and Non-Financial Highlights (p.26-27)

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN7	Reductions in energy requirements of products and services	Environmental product declaration (p.45) Climate change products(p.48)	—

■ Aspect: Water

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN8	Total water withdrawal by source	Reducing water usage (p.51)	—
G4-EN9	Water sources significantly affected by withdrawal of water	—	—
G4-EN10	Percentage and total volume of water recycled and reused	—	—

■ Aspect: Biodiversity

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN11	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	Supporting conservation survey for loggerhead turtle in danger of extinction (p.52)	—
G4-EN12	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	Supporting conservation survey for loggerhead turtle in danger of extinction (p.52)	—
G4-EN13	Habitats protected or restored	Supporting conservation survey for loggerhead turtle in danger of extinction (p.52)	—
G4-EN14	Total number of iucn red list species and national conservation list species with habitats in areas affected by operations, by level of extinction risk	—	—

■ Aspect: Emissions

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN15	Direct greenhouse gas (GHG) emissions (scope 1)	GHG Emissions (Scope1) (p.48)	Financial and Non-Financial Highlights (p.26-27)
G4-EN16	Energy indirect greenhouse gas (GHG) emissions (scope 2)	GHG Emissions (Scope2) (p.48)	Financial and Non-Financial Highlights (p.26-27)
G4-EN17	Other indirect greenhouse gas (GHG) emissions (scope 3)	—	—
G4-EN18	Greenhouse gas (GHG) emissions intensity	—	—
G4-EN19	Reduction of greenhouse gas (GHG) emissions	GHG Emissions (Scope1) (p.48) GHG Emissions (Scope2) (p.48)	Financial and Non-Financial Highlights (p.26-27)
G4-EN20	Emissions of ozone-depleting substances (ODS)	—	—
G4-EN21	NOx, SOx, and other significant air emissions	VOC emissions (p.55)	—

■ Aspect: Effluents and Waste

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN22	Total water discharge by quality and destination	—	—
G4-EN23	Total weight of waste by type and disposal method	Waste generation (p.54) Hazardous waste generation (p.54)	—
G4-EN24	Total number and volume of significant spills	Reporting on breaches (p.43)	—
G4-EN25	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	—	—

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN26	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	—	—

■ Aspect: Products and Services

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN27	Extent of impact mitigation of environmental impacts of products and services	Life cycle assessment (p.45) Climate change products (p.48)	—
G4-EN28	Percentage of products sold and their packaging materials that are reclaimed by category	Collection and recycling of used products (p.46)	—

■ Aspect: Compliance

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	Reporting on breaches (p.43)	—

■ Aspect: Transport

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN30	Significant environmental impacts of transporting products and other goods and materials for the organization's operations, and transporting members of the workforce	—	—

■ Aspect: Overall

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN31	Total environmental protection expenditures and investments by type	—	—

■ Aspect: Supplier Environmental Assessment

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN32	Percentage of new suppliers that were screened using environmental criteria	—	—
G4-EN33	Significant actual and potential negative environmental impacts in the supply chain and actions taken	Supply chain monitoring (p.37)	—

■ Aspect: Environmental Grievance Mechanisms

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-EN34	Number of grievances about environmental impacts filed, addressed, and resolved through formal grievance mechanisms	—	—

Category: Social

Labor Practices and Decent Work

■ Aspect: Employment

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	Employment (p.64)	—

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA2	Benefits provided to full-time employees that are not provided to temporary or parttime employees, by significant locations of operation	—	—
G4-LA3	Return to work and retention rates after parental leave, by gender	Work-life balance (p.64)	—

■ Aspect: Labor/Management Relations

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA4	Minimum notice periods regarding operational changes, including whether these are specified in collective agreements	—	—

■ Aspect: Occupational Health and Safety

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA5	Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs	—	—
G4-LA6	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	Occupational Health and Safety (p.58-60)	—
G4-LA7	Workers with high incidence or high risk of diseases related to their occupation	—	—
G4-LA8	Health and safety topics covered in formal agreements with trade unions	—	—

■ Aspect: Training and Education

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA9	Average hours of training per year per employee by gender, and by employee category	—	—
G4-LA10	Programs for skills management and lifelong learning that support the continued employability of employees and assist them in managing career endings	Human resources development programs (p.61-62)	—
G4-LA11	Percentage of employees receiving regular performance and career development reviews, by gender and by employee category	Employee performance appraisal (p.64)	—

■ Aspect: Diversity and Equal Opportunity

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	Corporate governance structure (p.13) Diversity and Equal opportunity (p.56-57)	Board of Directors (p.13)

■ Aspect: Equal Remuneration for Women and Men

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA13	Ratio of basic salary and remuneration of women to men by employee category, by significant locations of operation	—	—

■ Aspect: Supplier Assessment for Labor Practices

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA14	Percentage of new suppliers that were screened using labor practices criteria	—	—
G4-LA15	Significant actual and potential negative impacts for labor practices in the supply chain and actions taken	Supply chain monitoring (p.37)	—

■ Aspect: Labor Practices Grievance Mechanisms

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-LA16	Number of grievances about labor practices filed, addressed, and resolved through formal grievance mechanisms	Key Performance Indicators for Material Issues (p.8-9) Compliance situation (p.22-23)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)

Human Rights

■ Aspect: Investment

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR1	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	—	—
G4-HR2	Total hours of employee training on human rights policies or procedures concerning aspects of human rights that are relevant to operations, including the percentage of employees trained	Respect for Human Rights (p.65)	—

■ Aspect: Non-discrimination

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR3	Total number of incidents of discrimination and corrective actions taken	—	—

■ Aspect: Freedom of Association and Collective Bargaining

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR4	Operations and suppliers identified in which the right to exercise freedom of association and collective bargaining may be violated or at significant risk, and measures taken to support these rights	—	—

■ Aspect: Child Labor

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR5	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor	—	—

■ Aspect: Forced or Compulsory Labor

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR6	Operations and suppliers identified as having significant risk for incidents of forced or compulsory labor, and measures to contribute to the elimination of all forms of forced or compulsory labor	—	—

■ Aspect: Security Practices

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR7	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	—	—

■ Aspect: Indigenous Rights

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR8	Total number of incidents of violations involving rights of indigenous peoples and actions taken	—	—

■ Aspect: Assessment

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR9	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	—	—

■ Aspect: Supplier Human Rights Assessment

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR10	Percentage of new suppliers that were screened using human rights criteria	—	—
G4-HR11	Significant actual and potential negative human rights impacts in the supply chain and actions taken	—	—

■ Aspect: Human Rights Grievance Mechanisms

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-HR12	Number of grievances about human rights impacts filed, addressed, and resolved through formal grievance mechanisms	—	—

Society

■ Aspect: Local Communities

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S01	Percentage of operations with implemented local community engagement, impact assessments, and development programs	—	—
G4-S02	Operations with significant actual and potential negative impacts on local communities	—	—

■ Aspect: Anti-corruption

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S03	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	Anti-corruption (p.23)	—
G4-S04	Communication and training on anti-corruption policies and procedures	Anti-corruption (p.23)	—
G4-S05	Confirmed incidents of corruption and actions taken	Compliance situation (p.22-23)	—

■ Aspect: Public Policy

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S06	Total value of political contributions by country and recipient/beneficiary	Social contribution input (p.68)	—

■ Aspect: Anti-competitive Behavior

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S07	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	Compliance situation (p.22-23)	—

■ Aspect: Compliance

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S08	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	Compliance situation (p.22-23)	—

■ Aspect: Supplier Assessment for Impacts on Society

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S09	Percentage of new suppliers that were screened using criteria for impacts on society	—	—
G4-S010	Significant actual and potential negative impacts on society in the supply chain and actions taken	Supply chain monitoring (p.37)	—

■ Aspect: Grievance Mechanisms for Impacts on Society

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-S011	Number of grievances about impacts on society filed, addressed, and resolved through formal grievance mechanisms	Key Performance Indicators for Material Issues (p.8-9) Compliance situation (p.22-23)	Creating a Management Foundation That Responds to Global Society: ESG Initiatives (p.22-25)

Product Responsibility

■ Aspect: Customer Health and Safety

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-PR1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	Safety and quality management (p.28-29) Quality and safety programs for key products (p.26-28)	—
G4-PR2	Total number of incidents of non-compliance with regulations and voluntary codes concerning the health and safety impacts of products and services during their life cycle, by type of outcomes	—	—

■ Aspect: Product and Service Labeling

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-PR3	Type of product and service information required by the organization's procedures for product and service information and labeling, and percentage of significant product and service categories subject to such information requirements	—	—
G4-PR4	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	—	—
G4-PR5	Results of surveys measuring customer satisfaction	Customer satisfaction (p.31)	—

■ Aspect: Marketing Communications

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-PR6	Sale of banned or disputed products	—	—
G4-PR7	Total number of incidents of non-compliance with regulations and voluntary codes concerning marketing communications, including advertising, promotion, and sponsorship, by type of outcomes	Advertising activities (p.31-32)	—

■ Aspect: Customer Privacy

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-PR8	Total number of substantiated complaints regarding breaches of customer privacy and losses of customer data	—	—

■ Aspect: Compliance

item	Indicator	Relevant page(s) in the CSR DATA BOOK 2017	Relevant page(s) in the MHI REPORT 2017
G4-PR9	Monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	—	—



LRQA Independent Assurance Statement Relating to Mitsubishi Heavy Industries, Ltd.'s Social Indicators within CSR DATA BOOK 2017

This Assurance Statement has been prepared for Mitsubishi Heavy Industries, Ltd. in accordance with our contract but is intended for the readers of this report.

Terms of engagement

Lloyd's Register Quality Assurance (LRQA) was commissioned by Mitsubishi Heavy Industries, Ltd. (MHI) to provide independent assurance on the social data and information in fiscal year 2016 (01/04/2016 – 31/03/2017) of 'CSR DATA BOOK 2017' ("the report") against the assurance criteria below to a "level of assurance and materiality" using "LRQA's verification procedure". LRQA's verification procedure is based on current best practise, is in accordance with ISAE3000.

Our assurance engagement covered MHI's and its subsidiaries' operations and activities and specifically the following requirements:

- Verifying conformance with:
 - MHI's reporting methodologies for social data and information
- Evaluating the accuracy and reliability of the data and information for only the selected indicators listed below:¹
 - Stakeholder dialogues
 - List of support recipients
 - Social contribution input
 - Results of principal philanthropic activities
 - Cumulative total number of the science class participants
 - Records of natural disaster affected area assistance programs
 - Records of know-how transfer programs of managing Municipal solid waste for emerging countries

Note1 LRQA undertook a limited assurance engagement of the social data and information marked with ✓ within the CSR DATA BOOK 2017 and MHI website.

LRQA's responsibility is only to MHI. LRQA disclaims any liability or responsibility to others as explained in the end footnote. MHI's responsibility is for collecting, aggregating, analysing and presenting all the data and information within the report and for maintaining effective internal controls over the systems from which the report is derived. Ultimately, the report has been approved by, and remains the responsibility of MHI.

LRQA's Opinion

Based on LRQA's approach nothing has come to our attention that would cause us to believe MHI has not, in all material respects:

- Met the requirements above
- Disclosed accurate and reliable performance data and information

The opinion expressed is formed on the basis of a limited level of assurance and at the materiality of the professional judgement of the verifier.

Note: The extent of evidence-gathering for a limited assurance engagement is less than for a reasonable assurance engagement. Limited assurance engagements focus on aggregated data rather than physically checking source data at sites. Consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.

LRQA's approach

LRQA's assurance engagements are carried out in accordance with our verification procedure. The following tasks though were undertaken as part of the evidence gathering process for this assurance engagement:



- Auditing MHI's data management systems to confirm that there were no significant errors, omissions or mis-statements in the report. We did this by reviewing the effectiveness of data handling procedures, instructions and systems, including those for internal verification. We also spoke with those key people responsible for compiling the data and drafting the report.

Observations

Further observations and findings, made during the assurance engagement, are:

- The result of social contribution activities of MHI and subsidiary companies are collected by the CSR survey system, and the it is appropriately managed by the person in charge of MHI headquarters. Currently, person who has ID of CSR survey system is only allowed to browse the cases in the system. It is recommended to allow widely for person in charge of CSR in the subsidiary companies to access this information, because it is useful to share best practices among MHI group for CSR related activities.

LRQA's standards, competence and independence

LRQA implements and maintains a comprehensive management system that meets accreditation requirements for ISO 14065 Greenhouse gases – Requirements for greenhouse gas validation and verification bodies for use in accreditation or other forms of recognition and ISO/IEC 17021 Conformity assessment – Requirements for bodies providing audit and certification of management systems that are at least as demanding as the requirements of the International Standard on Quality Control 1 and comply with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants.

LRQA ensures the selection of appropriately qualified individuals based on their qualifications, training and experience. The outcome of all verification and certification assessments is then internally reviewed by senior management to ensure that the approach applied is rigorous and transparent.

LRQA is MHI's certification body for ISO 9001, ISO 14001, OHSAS 18001 and ISO27001. The verification and certification assessments, together with the training, are the only work undertaken by LRQA for MHI and as such does not compromise our independence or impartiality.

Signed

Dated: 26 June 2017

A handwritten signature in black ink, appearing to read 'N. Kinoshita'.

Norihiko Kinoshita
LRQA Lead Verifier
Queen's Tower A, 10th Floor, 2-3-1, Minatomirai, Nishi-ku, Yokohama 220-6010, Japan

LRQA reference: YKA4005601

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GREENHOUSE GAS EMISSIONS VERIFICATION STATEMENT

To: Mitsubishi Heavy Industries, Ltd.



**BUREAU
VERITAS**

July 6, 2018



Bureau Veritas Japan Co., Ltd.
System Certification Services Headquarters

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) was engaged by Mitsubishi Heavy Industries, Ltd. (MHI) to conduct independent verification of the greenhouse gas (GHG) emissions for FY2016.

1. Scope of Verification

MHI requested Bureau Veritas to verify, to a limited level of assurance, the accuracy of the following GHG information:

Scope 1 and Scope 2 emissions:

CO₂ emissions from energy use through business operations of MHI and MHI Group's 50 companies within Japan for the period of April 1, 2016 through March 31, 2017

2. Methodology

Bureau Veritas conducted the verification in accordance with the requirements of the international standard 'ISO 14064-3(2006): Greenhouse gases - Part 3: Specification with guidance for the validation and verification of greenhouse gas assertions'.

As part of Bureau Veritas' assurance, the following activities were undertaken:

- Interviews with relevant personnel of MHI responsible for the identification and calculation of GHG emissions;
- Review of MHI's information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions; and
- Audit of a sample of source data to check accuracy of quantified GHG emissions.

3. Conclusion

Based on the verification work and processes followed, there is no evidence to suggest that the GHG emissions assertions shown below:

- are not materially correct and are not a fair representation of the GHG emissions, as per the scope of work;
- are not prepared in accordance with the methodology for calculating GHG emissions established and implemented by MHI.

Verified greenhouse gas emissions	
Scope 1 193,303 t-CO ₂ e	Scope 2 (market-based) 469,309 t-CO ₂ e

[Statement of independence, impartiality and competence]

Bureau Veritas is an independent professional services company that specializes in Quality, Health, Safety, Social and Environmental management with over 180 years history in providing independent assurance services. No member of the verification team has a business relationship with MHI, its Directors or Managers beyond that required of this assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest. Bureau Veritas has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities. The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes.

Environmental Performance Data Independent Verification Report

To: Mitsubishi Heavy Industries, Ltd.



BUREAU
VERITAS

July 6, 2018



Bureau Veritas Japan Co., Ltd.
System Certification Services Headquarters

Bureau Veritas Japan Co., Ltd. (Bureau Veritas) has been engaged by Mitsubishi Heavy Industries, Ltd. (MHI) to conduct independent verification of its environmental data selected for inclusion in the CSR DATA BOOK 2017 (the DATA BOOK), issued under the responsibility of MHI. The aim of this verification is to consider the reliability and accuracy of environmental data detailed in the DATA BOOK and to provide a verification opinion based on objective evidence.

1. Verification Outline

Environmental Impact data generated through business operations in FY2016 (April 1, 2016 through March 31, 2017)

Scope of Verification	Site Visited	Verification Methodology
Energy consumption and CO ₂ emissions from energy use through business operations of MHI and MHI Group's 50 companies within Japan	- MHI's head office - MHI's Kobe Shipyard & Machinery Works Main Plant - MHI's Nagoya Guidance & Propulsion Systems Works Main Plant	- Review of documentary evidence produced by MHI's head office and the sites visited - Interviews with relevant personnel of MHI's head office and the sites visited
Water usage by source through business operations of MHI and MHI Group's 44 companies within Japan	- Mitsubishi Logisnext Co., Ltd. Head Office and Kyoto Plant	- Site inspection and review of data monitoring procedures - Comparison between the reported data and supporting documentary evidence
Waste generation through business operations of MHI and MHI Group's 49 companies within Japan		

This verification was conducted using Bureau Veritas' standard procedures and guidelines for external verification of non-financial reporting, based on current best practice. Bureau Veritas refers to the International Standard on Assurance Engagements (ISAE) 3000 in providing a limited assurance for the scope of work stated herein.

2. Findings

On the bases of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the reviewed information within the scope of our verification is inaccurate and does not provide a fair representation of the performance for the defined period.
- It is our opinion that MHI has established appropriate systems for the collection, aggregation and analysis of quantitative data within the scope of our verification.

Bureau Veritas has implemented a code of ethics across its business which is intended to ensure that all our staff maintain high standards in their day to day business activities. We are particularly vigilant in the prevention of conflicts of interest. Bureau Veritas activities for MHI are for sustainability reporting verification only and we believe our verification assignment did not raise any conflicts of interest.



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