# IHI Realize your dreams

**IHI Sustainability Report 2015** 

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### **About Sustainability Report 2015**



### **Editorial Policy**

IHI Sustainability Report 2015 serves as a timely platform for providing the most up-to-date information on IHI's sustainability activities in society.

IHI Sustainability Report 2015 communicates IHI's commitment to addressing societal issues through business and CSR activities, both of which are supported by *monozukuri* technology that the company has nurtured for over 160 years.

The separate IHI Integrated Report 2015 summarizes both financial and CSR information. In addition, the CSR Report was renamed the Sustainability Report to emphasize IHI's sustainable CSR activities in the company's medium- and long-term plans for creating value for customers and society.

Related links: Financial and performance information

#### Communication channels



<u>News</u>

### Scope of Report

IHI Corporation and its major group companies.

("IHI" refers to IHI Corporation and "IHI Group" refers to IHI Corporation, including all group companies.)

#### Period

This report covers activities carried out in FY2014 (April 1<sup>st</sup>, 2014 to March 31<sup>st</sup>, 2015), but may also include information prior to or after this period.

Note: Job titles are valid as of April 1, 2015.

### **Publication Date**

August 2015

(The previous CSR Report was published in June 2014 and the next issue will be published in August 2016.)

### **Guidelines Referenced**

Environmental Reporting Guidelines (2012 version), Ministry of the Environment Sustainability Reporting Guidelines version G4 (version 4), Global Reporting Initiative

### Disclaimer

This report contains facts, both past and present, as well as forward looking plans and projections based on our management plans and policies in effect as of the date of this report. These forward looking plans and projections are based on assumptions and decisions made as of the date of this report; thus, they are subject to change and may be materially different as a result of actual business operations and changes in company terms, conditions and policies.

### Message from the President

("IHI Integrated Report 2015" Top Message)



### Pursuing growth to realize people's dreams

### Accelerating Growth with the Three Links (*Tsunagu*)

In FY2014, our focus was accelerating growth through targeted strategies based on the Three Links (*Tsunagu*), an integral part of the IHI Group Management Policy 2013, which resulted in a strong year with sales of 1,455.8 billion yen and operating income of 63.2 billion yen. However, we were unable to fully meet market expectations due to the worsening business performance of some major projects and extraordinary losses on investments in a Brazilian shipbuilding firm. In FY2015, we will redouble our efforts to enhance risk management and improve performance.

FY2015 is the final year of IHI Group Management Policies 2013, which focuses on creating customer value and achieving business growth. IHI will continue working to achieve the targets it lays out. First, I would like to explain why we formulated this business plan.

Our previous midterm plan, Group Management Policies 2010, required three paradigm shifts: moving toward a business model focused on product lifecycles, advancing a product strategy focused on market requirements and laying the groundwork for a global management approach. These strategies enabled us to stabilize our business foundations.

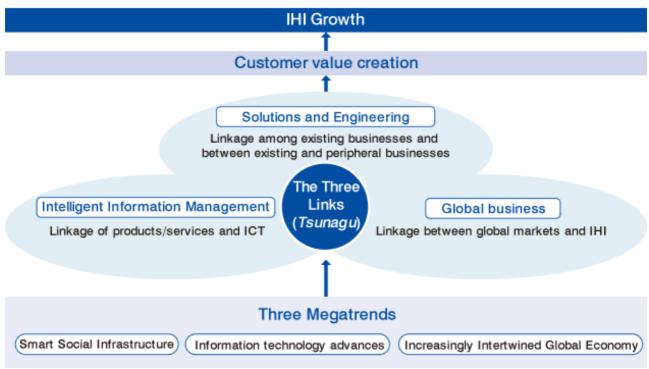
However, when we look at global economic growth, particularly in emerging nations, it is clear that we are not expanding at the same speed. We have analyzed today's socioeconomic climate and identified three megatrends: Smart social infrastructure, Information technology advances, and Increasingly intertwined global economy (chart 1). After extensive discussion, we have concluded that to be globally competitive, IHI must implement structural reforms in response to these trends, shifting existing technologies and business models away from the framework of business units and toward a more integrated approach.

Therefore, we have positioned the Three Links (*Tsunagu*), namely linkage among existing businesses and between existing and peripheral businesses, linkage of products and services and ICT and linkage between global markets and IHI, as shared group functions and established the Solution & Engineering Headquarters, Intelligent Information Management Headquarters and Global Marketing Headquarters in April 2013 to implement them.

As the final year of the current plan, FY2015 will be the year we comprehensively integrate the strategies. We have achieved consistent growth over the past two years, and I am confident that these policies are steadily moving us in the right direction.



#### ■ Chart 1



In FY2014, we pursued five priority measures to accelerate growth. The results are set out below.

### 1. Strengthen and deploy shared Group functions

In Solutions & Engineering, we increased projects and improved function-sharing for a rising number of projects in our Solutions business. Meanwhile, in Intelligent Information Management, we expanded adoption of our common control system and remote maintenance platforms, which led to wider use of sensing solutions and ICT in manufacturing and service operations. In Global Marketing, we built multilayered networks with customers, particularly in priority countries, and expanded functions at regional headquarters.

### 2. Secure orders stably

In FY2014, new measures resulted in 1,664.3 billion yen in orders, with for more than 50% coming from overseas. In FY2015, we will again secure a stable flow of orders by improving estimate accuracy and other measures.

#### 3. Enhance profit structure

Last year, we began transforming our business models, for example by expanding overseas power plant maintenance. In FY2015, we will further accelerate our efforts and distinguish ourselves from the competition by offering products and services that utilize shared group functions.

### 4. Allocate resources strategically

Based on our growth strategy, we have begun allocating 70% of total investment to business units with growth potential and undertaking activities to improve cash flow. The benchmark for these decisions is the cash conversion cycle, or how long it takes to convert resource inputs into cash flows. We are also advancing initiatives to generate resources, such as reforms that further strengthen and enhance the strategic functions of head office divisions.

### 5. Improve manufacturing capabilities

Over the last two years, we have pushed ahead with I-Project, a Group-wide initiative to enhance operational quality and productivity. It promotes an ongoing positive cycle of improvement efforts, since there is always room for improvement. Also, in October 2014, we opened the IHI *Tsunagu* Lab at our Yokohama facility to link "*Monozukuri*" technology within IHI and outside.

### ■ Chart 2 Group Management Policies 2013 Results

(Unit: billions of yen)

		FY2013	FY2014	
Sales		13,040	14,558	
Operating income		532	632	
(Assumed exchange rate)		(¥ 99.05/\$)	(¥ 110.31/\$)	
То	tal investment	1,081	1,148	
	Investment in plant and equipment	546	639	
	R&D investment	335	370	
	Investments and loans	200	139	
D/E ratio <sup>1</sup>		0.99	1.14	
ROIC <sup>2</sup>		5.3%	5.8%	
ROE <sup>3</sup>		10.5%	2.6%	
Dividends		¥6/share	¥6/share	

FY2015 Targets (initial)			
14,000			
700			
(¥ 80/\$)			
400.0 (Total for FY2013 - 15)			
1,900			
1,100			
1,000			
1.2 or lower			
6.5%			
-			
¥6/share			

Achieve sales of 1,600 billion yen and operating income of 100 billion yen as quickly as possible

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<sup>1</sup> Debt/Equity ratio: interest-bearing debt  $\div$  net assets

<sup>2</sup> Return on Invested Capital: (operating income + interest and dividend income) after-tax ÷ (owner's equity + interest-bearing debt)

<sup>3</sup> Return on Equity: net income ÷ (average of owner's equity at end of previous term and end of current term)

### Toward the Realization of Steady Growth

In FY2014, we focused on business units with growth potential and our orders steadily increased, making it increasingly likely that we will reach the 1,600 billion yen sales target set forth in Group Management Policies 2013. However, new business risks are emerging, and we are implementing measures to minimize their impact while maintaining steady growth. Among them, the three outlined below are particularly crucial.

### 1. Materialize growth through Three Links (*Tsunagu*)

We are working to reinforce and accelerate our four business areas and shared group functions at our three new headquarters. We are also utilizing these shared functions to transform business models and differentiate our products and services from the competition. Turning new ideas into business units with concrete, specific results is not always easy, but we will step up our efforts to do so.

### 2. Manage risk of large investments and orders

To capture more of the global market and achieve growth, it is vital that we strengthen risk management. We must calibrate our response to risks associated with national or regional circumstances. With regard to orders and investments above a certain amount, we will thoroughly investigate the specifics and determine if it would be an appropriate move.

### 3. Reinforce portfolio management

While improving the risk management that underpins growth, we will also enhance portfolio management to ensure that growth is sound. One strategy is to focus investment on core business segments, such as aero engines and vehicular turbochargers and the 15 business units we have identified as growth and core businesses. To achieve this, we will formulate a mission for each business unit that sets numerical targets based on the difference between current status and future objectives and strengthen the support functions of corporate units. Also, to enhance capital efficiency, we will calculate ROIC for each business unit and factor it into our evaluation.

We intend to incorporate portfolio management strategies into the next midterm business plan.

### ■ Chart 3 Priority Measures for FY2015: Toward the Realization of Steady Growth

- Produce results through shared Group functions collaboration
- Stably secure orders that help enhance customer value
- Accelerate reforms to create highly profitable structure through business model innovations
- Generate growth through allocation of management resources
- Reform business processes to generate value



Materialize growth through the Three Links (*Tsunagu*)

Manage risk of large investments and orders

> Reinforce portfolio management

### Realizing the dreams of society

Today, our society is changing at a dizzying pace. Considering the universal trend toward diversification, the future of manufacturing is likely to lie in transitioning from the mass production of a few things to the variable production of many. Assuming this global trend continues, people and enterprises will have to change the way they do business.

In the midst of this maelstrom, we continue to adhere to our management philosophy of contributing to the development of society through technology and valuing human resources as our single most valuable asset. IHI has formulated the IHI Group Vision to show what we aspire to be. First and foremost, we believe that keeping the long-term picture in view generates diverse value for society and leads to our own growth.

In order to realize people's dreams and our mission as a Group, we must respond swiftly and effectively not only to existing needs but also to needs that are not yet apparent. This is what we had in mind when formulating the corporate message "Realize your dreams."



### Pursuing the value-creating technologies on of the future

Investment with a long-term perspective is necessary in order to identify and meet latent needs. Carbon fiber reinforced polymer (CFRP), which we jointly developed with materials manufacturers to reduce aero engine weight, is a perfect example. It took approximately 20 years from R&D to commercial application. The product lifecycle of jet engines is around 30 years, so when approaching a project like this one, we have to imagine what society will be like decades in the future. This is true not only for aero engines, but for all fields. Delivering value requires swift identification of customer requirements ahead of the competition and tireless pursuit of R&D and commercial implementation.

For IHI to be delivering new value several decades from now, it is crucial that we work with an open innovation paradigm, drawing on resources within the Group and outside of it. To find new resources, we need opportunities to encounter and interact with diverse people. With this in mind, we established the IHI *Tsunagu* Lab at our Yokohama facility in October 2014, an initiative I personally spearheaded. There have already been more than 1,500 visitors to the lab and it is growing into a forum for idea creation and interaction between IHI, our customers and people we were not able to connect with before.

### Human resources, the most valuable asset

Part of our management philosophy is that we should prioritize human resources as our single most valuable asset. Based on this credo, we are formulating the Group Human Resource Management Policy with the key phrase "Group Global Diversity."

In a fluidly changing era like ours, we are frequently faced with unpredictable situations and rely above all on human resources. Whatever challenges, paradigm shifts or adversity we may encounter, we can handle them effectively if we find and cultivate outstanding, versatile personnel who can respond appropriately. As someone who learned the business through practical experience, I continue to strongly advocate the Three Actuals (going to the actual place, seeing the actual things, and knowing the actual situation). While there is no substitute for real, hands-on experience, it must be supplemented with knowledge from history and other sources. So, in April 2015, we opened the IHI Human Resources Development & Communication Center, nicknamed I-STEP Shonan, in Yokosuka, Kanagawa.

### Always with our stakeholders

IHI never ceases improving our corporate governance, aiming to earn and keep the trust and patronage of shareholders and other stakeholders over the long term.

To create value for our customers and society as a whole and to achieve further growth, it is vital that we engage in proactive dialogue with all our stakeholders. In order to more effectively communicate with them, we will be releasing an Integrated Report that fuses the missions of our Annual Report and CSR Report from this fiscal year on.

We also ask all IHI employees to use it deepen their understanding and renew their awareness of how Group activities contribute to society.

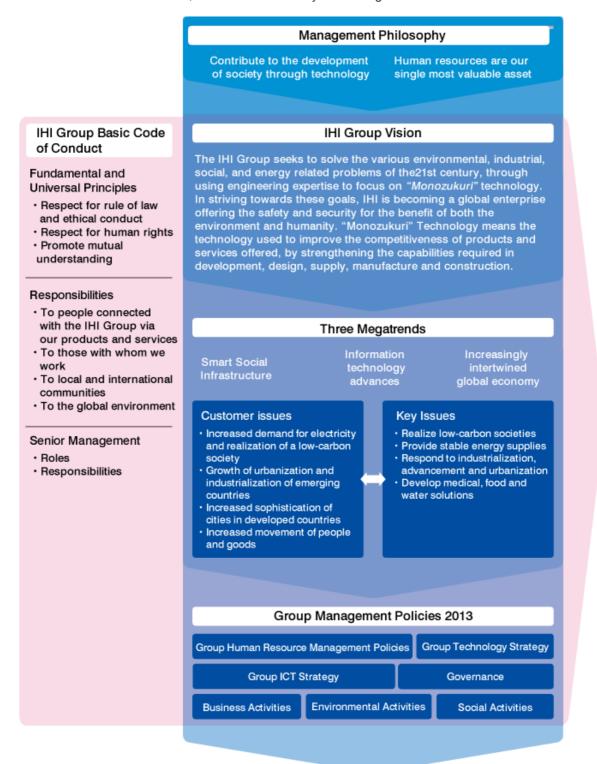
To all stakeholders, we would appreciate you kindly looking through this report and then giving us your opinions and feedback.



Toyosu IHI Building vicinity

### IHI Group's Management Practices and CSR

At IHI, we are committed to meeting the expectations and gaining the trust of not only customers, business partners, shareholders and colleagues but also the local and global communities that support our operations. As we work to enhance our value, we remain constantly aware of global issues as we move forward.



### Realize your dreams

**Customer Value Creation** 

Creation of Value for Society

Growth of IHI Group

### **Group Management Policies 2013**

As part of establishing our Group Management Policies for 2013 in FY2012, we reorganized the Group's products and services into four business areas and established three headquarters to link these business areas.

### IHI Group's CSR

IHI believes that it is absolutely essential to meet the expectations of its customers and society, as well as to create and offer value at all times and earn the trust of its stakeholders.

IHI established a CSR Committee in FY2013 to discuss and promote CSR-related matters, including IHI's basic policies and measures. The committee is made up of senior management including the president, directors and the heads of each business operation division. The president serves as chairman and the director responsible for CSR serves as its vice-chairman. The committee enables managers at most senior levels to become actively involved in the promotion of CSR activities.

### **CSR Committee**

The CSR Committee members include the chairman (IHI president), vice-chairman (officer in charge of CSR activities), board directors and heads of each business division. Under this structure, top managers are proactively involved in IHI's CSR activities. By combining CSR and sales, IHI aims to create added momentum for business growth.

### ■ First CSR Committee Meeting (August, FY 2013)

The committee confirmed IHI's current situation, challenges, and goals regarding "promoting CSR activities in businesses" and "promoting social activities"

### 1. CSR in business

#### ■ Priority issues

- •Realize low-carbon societies and reduced environmental impacts
- Provide stable supplies of energy
- ·Respond to industrialization and urbanization
- · Measures for medical care, food and water
- Confirm current CSR status, tasks and goals in business

### 2. CSR in socially minded activities

#### **■** Priority issues

- Nurturing future generations
- Promoting precision manufacturing and scientific technologies
- Supporting environmental sustainability
- ·Providing access to medical care, food and water
- Resolving problems in local communities
- IHI Group's socially minded activities, targets and plans

### ■ Second CSR Committee Meeting (April 2014)

Following its first meeting, the committee reported on CSR activities conducted in FY2013 and confirmed related challenges and future directions. An external expert presented a lecture on the significance of publishing an integrated (financial and CSR) report among other current trends in CSR reporting.

### ■ Third CSR Committee Meeting (May 2015)

Following its second meeting, the committee reported on CSR activities in FY2014, confirmed the direction of CSR activities in FY2015 and discussed publishing the IHI Integrated Report 2015, including its editorial policy and main contents.



Third CSR Committee Meeting (May 2015)

### **CSR** in Business Activities

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- 18 Key Issues Addressed by Business Area
- 19 Businesses helping to solve problems in society

CSR in Business Activities

### Key Issues Addressed by IHI Group

IHI Group is committed to helping resolve global issues with *monozukuri* technology for meticulous manufacturing. More specifically, we are addressing the following four issues through our business activities.

### Key Issues

Realize low-carbon societies



IHI is contributing to sustainable societies by reducing environmental impact, addressing environmental issues and providing eco-friendly products and services.

Provide stable energy supplies



IHI provides products and technologies that transform diverse energy sources into electricity to meet increasing electric power demands and changing conditions in society.

Respond to industrialization, advancement and urbanization



IHI provides products and technologies that enhance urban functions, alleviate risks associated with dense populations, elevate standards of living and contribute to a safer society. In addition, our innovative manufacturing processes increase productivity, contributing to affluent lifestyles and social stability.

Develop medical, food and water solutions



IHI provides new products and services that address issues relating to medical care, food and water.

### **Priority Activities**

### Energy conservation

- Increase energy efficiency
- Control and reduce use of natural resources (fuels)

### **GHG** reduction

 Control and reduce greenhouse gas emissions, including CO<sub>2</sub>

### Resource conservation (excluding fuels)

Control and reduce consumption of natural resources

### Environmental risk reduction

- Expand anti-pollution measures (seven types of pollution)
- Prevent chemicals in products from being released into the atmosphere

### Biodiversity protection

 Protect native species

### Respond to increasing electric power demand (power generation)

Improve efficiency of existing energygenerating technologies

## New energy development (LNG and renewable energy)

- New energy development
- Resources & energy
- Develop energygenerating technologies

### <u>Develop</u> <u>infrastructure</u> for urbanization

Land conservation and create new urban functions

### Upgrade existing infrastructure to increase lifespan

- Improve disaster prevention measures, land conservation and accessibility
- Reduce public expenses

# Respond to increased movement of people and goods Develop and enhance transportation systems

- Expand mobility

# Respond to evolution of industrialization and changes in industrial structure

Further develop industrial and chemical technologies

Improve manufacturing process, develop new technologies and labor-saving innovations, conduct research into advanced technologies

### Medical care

Expand delivery of medical care

### Food supply

Increase food production efficiency in agricultural and fishery sectors

### Water supply

 Increase water-use efficiency

17

 Develop water resources



### Key Issues Addressed by Business Area

IHI Group is committed to helping resolve global issues through our businesses.

### Global Issues Addressed by Business Areas of IHI Group

	Business Area					
Key Issues Addressed by IHI Group	Resources, Energy and Environment	Social Infrastructure and Offshore Facilities	Industrial Systems and General- Purpose Machinery	Aero Engine, Space and Defense ▶	New Business Development	
	Global Marketing Headquarters ▶ Solution & Engineering Headquarters ▶ Intelligent Information Management Headquarters ▶					
Realize low-carbon societies	0	0	0	0	0	
Provide stable energy supplies	0	0			0	
Respond to industrialization, advancement and urbanization		0	0	0	0	
Develop medical, food and water solutions					0	

CSR in Business Activities

## Businesses helping to solve problems in society

### Achievements in FY2014

### Production of fertilizer feedstock from lignite coal: Commencement of demonstration operation for Twin IHI Gasifier (TIGAR™)

Lignite coal utilization has been limited because of its low calorific value and high moisture, and its high spontaneous combustion. However, amid pressing needs to prevent natural resource depletion, the world eagerly awaits the development of effective measures to utilize lignite coal, which is available in abundant reserves and for low prices.

TIGAR<sup>TM</sup> is a gasifier developed by IHI that incorporates circulating fluidized bed boiler technology to produce syngas for fertilizer feedstock from lignite coal. After launching



Twin IHI Gasifier TIGAR<sup>TM</sup>

research and development in 2004, we held an inauguration ceremony in February 2015 for a demonstration plant at an Indonesian staterun fertilizer factory. We will carry out continuous operation tests to verify the operability and endurance from now on. Once technical demonstrations are finished, we will proceed to commercial deployment.

### Nhat Tan Bridge (Vietnam-Japan Friendship Bridge) opens

In October 2014, IHI Infrastructure Systems Co., Ltd.

Completed the Nhat Tan Bridge (Vietnam-Japan Friendship Bridge, total length 3,080m) over the Red River in central Hanoi, Vietnam. The Red River flows through Hanoi but is only spanned by a few bridges. As the economy has grown, an increasing number of freight vehicles have been forced to pass directly through the downtown area, worsening traffic congestion.



Nhat Tan Bridge

The completion of the Nhat Tan Bridge has alleviated traffic congestion downtown and improved the efficiency of logistics, making a significant contribution to Vietnamese economic development. And, as the alternate name Vietnam-Japan Friendship Bridge

indicates, it is expected to stand as an important symbol of positive relations between the two nations.

### Organic Rankine Cycle Power Generator produces electricity from hot water

Our Heat Recovery HR Series generates up to 20kW of electricity from water at 70 to 95°C, achieving high-efficiency power generation at a compact size by utilizing turbomachinery technology developed by IHI over many years. HR Series generators can be connected to existing electrical power transmission networks of electric power companies, so they help customers not only to save energy, but also to generate locally produced and consumed energy. They are especially suitable for use at factories that



Heat Recovery HR Series: Organic Rankine Cycle Power Generator

emit hot wastewater and for hot spring areas. Our first unit was delivered to the Shichimi Onsen Hotel Keizantei in a hot spring district of Nagano Prefecture. It went into operation in March 2014, meeting the customer's wish to make its hotel more environmentally friendly.

### Participation in development of next-generation GE9X engine

In 2014, IHI decided to participate in the GE9X program for this next-generation engine being developed by General Electric (USA). The GE9X, the successor to the GE90 powering Boeing 777, will power the Boeing 777X aircraft scheduled to enter service in 2020. IHI will be responsible mainly for the design and manufacture of low-pressure turbine with over 10% of the program share. The GE9X is the 100,000-pound thrust class large commercial aero engine and

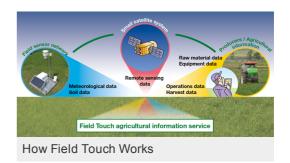


Next-generation GE9X engine

it is targeted to achieve 10 percent better fuel burn than the current GE90.

### Agricultural information services

IHI is developing IHI Agricultural Information Services with technologies developed in the space, weather observation and agricultural equipment fields. This service uses agricultural ICT, particularly crop and environmental sensing applications, to collect, process and deliver information on crop growth, on-site work progress and local weather and environmental conditions.



As of FY2014, we are supplying information on a trial basis to nearly 300 producers interested in remote monitoring in the Tokachi Obihiro area. In the future, we aim to offer this system so food and logistics companies can remotely monitor production sites to boost the quality of crops, reduce costs and accurately predict harvest times. This not only will offer agricultural producers support for business planning, implementation and improvement, it also will contribute to sustainable agriculture and food safety and security.

### **Governance**

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Governance

## Corporate Governance and Internal Control



### **Basic Views on Corporate Governance**

IHI Corporation defines corporate governance as a system that assures sustainable growth and maximization of corporate value by enhancing management efficiency

so that IHI Corporation can leverage its innate capabilities to the fullest extent possible.

To achieve this, IHI Corporation targets efficient and appropriate internal decision-making by clearly separating management monitoring and supervisory functions from functions related to their execution of duties. Furthermore, by establishing the relevant internal rules and building a system to administer them, IHI ensures appropriate operations across the entire Group.

IHI Corporation promotes constant improvement of its corporate governance, aiming to earn the trust and support of its shareholders and other stakeholders over the long term.

### **Basic Policies on Enhancing Corporate Governance**

IHI Corporation will work to enhance its corporate governance in line with the following basic policies.

- ① Respect shareholders' rights and ensure equal treatment
- ② Strive to cooperate appropriately with shareholders and other stakeholders
- ③ Fulfill our responsibility to be accountable to stakeholders and ensure transparency by appropriately and proactively disclosing information relating to the Company
- ④ Clarify the roles and responsibilities of the Board of Directors, the corporate auditors and the Board of Corporate Auditors to enable them to adequately fulfill their management monitoring and supervisory functions
- ⑤ Conduct constructive dialogue with shareholders who have investment policies according with the medium- to long-term interests of shareholders

### **Corporate Governance Measures**

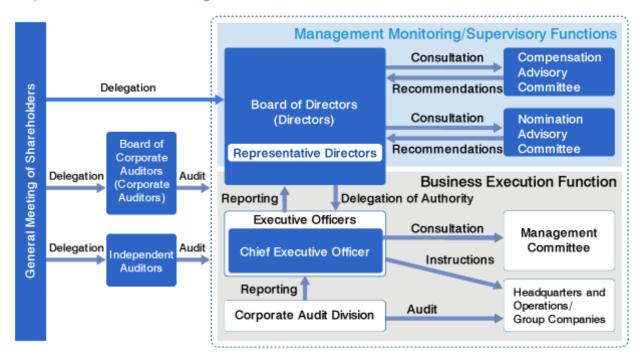
### (1) Establishment of the Appointment Advisory Committee

On June 25, 2015, we established the Appointment Advisory Committee consisting of volunteers from the Board of Directors. It aims to improve corporate governance by strengthening the independence, objectivity and accountability of the Board of Directors when choosing top management, executive officers and candidates for director and auditor positions.

### (2) Number of outside directors increased

The number of outside directors was increased from two to three as of June 25, 2015, to further reinforce corporate governance.

### ■Corporate Governance Management Structure



As of June 25, 2015

### Corporate Governance System

### (1) Board of Directors

The Board of Directors consists of 15 directors, including three outside directors. It makes decisions related to all important matters concerning the management of the Group and oversees directors in the execution of their duties.

### (2) Board of Corporate Auditors

IHI, which is classified in Japan as a company with audit and supervisory boards elects five corporate auditors, three of whom are outside corporate auditors, to monitor the work of the directors.

### (3) Business execution framework

IHI Corporation introduced the executive officer system to facilitate and strengthen the decision-making and supervisory functions of the Board of Directors and improve the efficiency of business operations. Executive officers are appointed by the board and execute the duties delegated to them under the CEO's guidance and supervision. IHI Corporation currently has 25 executive officers, five of whom are also on the Board of Directors.

### (4) Compensation Advisory Committee

To ensure propriety in director remuneration, IHI Corporation established the Compensation Advisory Committee, which consists of six members: three outside directors (one of whom acts as the committee chairman), an outside corporate auditor, a board member responsible for human resources and a board member responsible for finance.

### (5) Appointment Advisory Committee

To supervise and advise on the appointment of executives, IHI Corporation established the Appointment Advisory Committee, composed of four members: the president, who serves as chairman of the committee, and three outside directors.

### Policies relating to appointment of officers

The Board of Directors decides on ideal attributes for officers and draws up independence standards for outside directors and outside corporate auditors. These standards are based on the requirements for independent directors/auditors stipulated by the Tokyo Stock Exchange. The emphasis is to assure that outside directors and outside corporate auditors are genuinely independent.

The Board of Directors sets the basic policy of appointing the most appropriate officers according to the ideal attributes and the independence standards for outside directors and outside corporate auditors with the aim of ensuring sustainable growth and increased corporate value for IHI over the medium to long term.

### **Ideal Attributes for Officers**

IHI Corporation appoints directors and corporate auditors who are healthy in mind and body and have all the following attributes:

- Deep understanding of and sympathy with IHI's management principles and vision
- The ability to contribute to sustainable growth and medium- to long-term increase in corporate value at IHI by addressing societal issues in accordance with IHI Group's Vision
- Outstanding foresight, penetrating discernment and ability to make appropriate decisions with regard to the management of IHI
- Good character with a strong sense of ethics
- Ample experience as a corporate manager, or a high degree of specialist knowledge, combined with a broad, global perspective and insight

### Independence Standards and Qualification for Independent Outside Directors

In addition to the requirements for independent directors/auditors stipulated by the Tokyo Stock Exchange, the Company uses the standards below to determine independence.

#### 1. Major shareholders

The director should not be a major shareholder with 10% or more of the voting rights in the Company, or serve as a director, corporate auditor or executive officer at a company with committees, executive officer or employee of a corporation that is a major shareholder.

2. Major clients, suppliers, etc.

The director should not currently serve as a director, corporate auditor, executive officer at a company with committees, executive officer or employee of any of the Company's major clients, suppliers, etc. detailed below, nor have served as an executive director, executive officer at a company with committees, or executive officer of a major client, supplier, etc. in the past.

- Major clients of IHI (with transactions valued at 2% or more of the Company's consolidated net sales in the most recent fiscal year)
- Major suppliers to IHI (with transactions valued at 2% or more of the supplier's consolidated net sales in the most recent fiscal year)
- Major lenders to the Company (as listed in the business report for the most recent fiscal year)
- 3. Providers of specialist services (attorneys at law, certified public accountants, or consultants, etc.)

The director should not be an attorney at law, certified public accountant, or consultant, etc. who receives \10 million or more of monetary consideration or other property from the Company annually besides compensation as a director/corporate auditor.

### 4. Accounting auditor

The director should not be a representative partner or partner of the Company's accounting auditor.

5. Mutual exchange of officers, etc. with the Company

The director should not be assigned to a corporation with which the Company mutually exchanges directors or corporate auditors.

#### 6. Close relatives

The director should not be the spouse or first- to second-degree relative of a director, corporate auditor, executive officer or equivalent executive-level employee of IHI.

In addition, the director should not be the spouse or first- to second-degree relative of any person\* referred to in (1) through (4) above.

\* If a major shareholder or a major client, supplier, etc. is a corporation, this applies only to directors, corporate auditors, executive officers at companies with committees, executive officers, or equivalent executive-level employees of the corporation in question.

In addition to the above, the Company also considers age, concurrent positions, period in office, and related matters when nominating candidates as outside directors.

### Policy on determination of remuneration

### (1) Basic stance

Maximum total remuneration of directors and corporate auditors is resolved at the an Ordinary General Meeting of Shareholders. Directors' remuneration is a reward system that considers the standard necessary to secure superior human resources, more strongly aspires towards improvements of the Group's business results and corporate value, and

emphasizes sharing the risk and return of stock price fluctuations with shareholders. Remuneration details are finalized at a meeting of the Board of Directors following consultation and recommendations to the Compensation Advisory Committee (the "Committee"), which was created to ensure that remuneration is appropriate and that the process is transparent.

### (2) Types of compensation

Directors' remuneration consists of a base amount, stock compensation-type stock options and performance-based bonuses.

For performance-based bonuses, the amount paid is determined so as to provide an incentive for achieving the operating income targets in the medium-term management plan. The amount paid is calculated based on the degree to which operating-income targets in the medium-term management plan and for each termare achieved, and finalized after consultation and recommendations to the Committee.

In addition, outside directors receive only a base amount.

Remuneration for corporate auditors comprises basic remuneration only as compensation for their responsibilities for auditing the execution of business throughout the Group. The amount is determined through discussions among corporate auditors.

(millions of yen)

	Number of recipients		Total		
Position		Base amount	Stock-based compensation	Performancebased bonuses	Amount Paid
Director	18	617	78	211	907
Corporate auditor	5	102	_	_	102
Total (of which, outside officers))	23 (5)	720 (56)	78 (—)	211 (—)	1,010 (56)

#### Notes:

- 1. Remuneration of directors does not include salaries of those who are also company employees.
- 2. Total annual remuneration for a director is 1,090 million yen or less (excluding employee salaries), as resolved at the 190th Ordinary General Meeting of Shareholders on June 27, 2007. Total annual remuneration for corporate auditors is 120 million yen or less, as resolved at the 197th Ordinary General Meeting of Shareholders on June 27, 2014.
- 3. During the fiscal year under review, 13 directors (excluding outside directors) were paid a total of 132 million yen in performance-based bonuses for the fiscal year that ended on March 31, 2014.
- 4. The numbers of directors and corporate auditors as of March 31, 2015 are respectively 15 (including 2 outside directors) and 5 (including 3 outside corporate auditors). The reason for the discrepancy from the above is that figures in the chart include 3 directors who retired at the conclusion of the 197th Ordinary General Meeting of Shareholders on June 27, 2014.

### Attendance to directors/corporate auditors' meetings and activities during this fiscal year

	Name	Attendance of meetings		
Position		Directors' meetings	Auditors' meetings	Main activities
Director	Tomokazu Hamaguchi	18/19 meetings (95%)	I	Provided advice and suggestions accordingly, from the viewpoint of an experienced businessmanager of a leading-edge IT/telecommunication business in order to ensure appropriate and correct decisions were taken at the meetings.
Director	Tadashi Okamura	18/19 meetings (95%)	ı	Provided advice and suggestions accordingly, from the viewpoint of an experienced business manager of a manufacturing business, in order to ensure that appropriate and correct decisions were taken at the meetings.
Corporate Auditor	Takeo Inokuchi	13/19 meetings (68%)	9/13 meetings (69%)	Addressed questions and expressed opinions accordingly from the viewpoint of an experienced business manager of financial institutions.
Corporate Auditor	Nobuo Gohara	18/19 meetings (95%)	13/13 meetings (100%)	Addressed questions and expressed opinions accordingly from the viewpoint of a leading expert on corporate compliance.
Corporate Auditor	Toshiharu Watanabe	19/19 meetings (100%)	13/13 meetings (100%)	Addressed questions and expressed opinions accordingly from the viewpoint of a business manager with global experience of manufacturing industries.

### From the Outside Directors

### In full agreement with the prioritization of human resources

Tomokazu Hamaguchi Outside Director

As President and Director & Senior Advisor at NTT Data Corporation, Mr. Hamaguchi developed a track record of reform. He is currently a fellow at the Meiji Institute for Global Affairs.



After assuming the post of Outside Director in 2008, I was initially struck by the wide variety of fields IHI is engaged in, from bridges to agricultural equipment. It later dawned on me that virtually all of these had grown in some way out of the original shipbuilding business, launched so long ago, and that these technologies continue to propel IHI to success.

IHI resembles NTT Data in that projects entail contracts for enormous sums and often involve crucial national infrastructure. In general, the larger a project is, the more difficult it is to manage, but despite the breadth of their business and the complexity of projects, IHI deserves

praise for the speed, transparency and accountability with which it responds to any difficulties. For example, IHI wasted no time in announcing losses from a FY2014 investment in a Brazilian shipbuilding firm.

Corporate executives often speak of maximizing company value, but profits cannot be the only goal. It is important to decide how to prioritize stakeholders, but in my opinion, employees ought to come first. When employee satisfaction is high, work is carried out in an open way and governance goes smoothly. This leads to more satisfied customers, which in turn leads to higher profits and greater corporate value.

In R&D, IHI is maximizing corporate value by making significant initial investments of both financial and human resources to expand the company's range of technologies and positive capital.

As an outside director, I am tasked with asking, "Is the IHI way of doing things out of step with the rest of the world?" I think, however, that the Three Links (*Tsunagu*) set forth in Group Management Policies 2013 serve to connect various divisions horizontally and prevents them from adopting too narrow a focus.

I believe that as IHI moves forward, stronger links should be forged among the various in-house functions, increasing the number of new products and services. I also look forward to seeing resources invested in PR to communicate with society and publicize technologies that consumers find both innovative and intuitive. Most of all, I look forward to seeing IHI make an increasingly positive impact on the world.

### From the Outside Auditors

More readily responding to changes in society

### Nobuo Gohara

Outside Auditor

Mr. Gohara has served as a public prosecutor, Meijo University professor, head of the Compliance Research Center and advisor to the Ministry of Internal Affairs and Communications and head of Office of Compliance. Currently, he is Chief Attorney at Gohara Complian



I assumed the post of auditor in 2008, the year after there were major losses in the energy plant business unit that required the previous fiscal year's results to be revised. Since then, I have helped to institute reforms and improvements, such as enhancing order management and optimizing the use of percentage-of-completion methods. I have also tried approaches not conventionally used by outside auditors, for example exchanging opinions and information with employees online. I am pleased to say that compared with several years ago, it seems that these endeavors have been producing results. Business performance has been steadily improving and executives have been regaining confidence in the company.

One thing that characterizes IHI is its dedication to both technology and people. This can manifest itself in both positive and negative ways, however. It is important to maintain an organizational climate that values the intrepid acceptance of new technological challenges, but this can also make it unclear where responsibility lies when problems arise or when difficult choices have to be made. When approaching long-term growth strategies, including global projects, M&As, and so forth, in a dynamically changing business environment, it is sometimes necessary to take risks. In these cases, it is crucial for management to take responsibility and provide strong leadership so that the IHI policy of cherishing people and technology leads to good results. I am happy to say that President Saito and the rest of the current management team look capable of doing this.

What I hope to see from IHI in the future is continued contribution to society as an organization of talented technological professionals. In particular, I believe the energy field is ripe for innovation. To fulfill this potential, it is necessary to decide what society needs most and how IHI technologies and human resources can meet that need. The "your" in "Realize your dreams" means the Group is here to fulfill society's dreams by creating new value. I look forward to seeing IHI continue fulfilling this role.

### **Internal Control System**

The basic policy for the internal control system is designed to boost the effectiveness of corporate governance and increase the corporate value of the Group. IHI believes that establishing a robust internal control system is key to expanding business globally, and we are making continuous efforts to achieve a sound compliance structure and enhance risk-management systems, as well as to develop and implement a shared management framework throughout IHI.

### **Project Auditing System**

The Project Audit Division is under the headquarters and reviews large projects with high contract values, including construction projects subject to the percentage of completion method\*, to ensure that they are being executed properly. Matters for review include project management, risk assessment criteria and the transparency of calculating estimated profitability.

As of the end of fiscal 2014, 83 projects worth about 17% of consolidated sales were being audited in the IHI Group. Large projects undertaken either in Japan or overseas are audited with consideration for the following:

- · Adequacy of the project's execution system and execution plan after the order is received
- · Appropriateness of the final cost estimated in view of current progress
- Transparency, appropriateness and timeliness of the project's estimated profitability

For projects that either are worth large amounts or are turning unprofitable, the Project Audit Division goes on-site to verify the state of progress and holds discussions with personnel in charge. The division works to identify factors leading to declines in estimated profitability of projects and to improve the accuracy of profitability estimates for future projects.

When preparing estimates for large projects, IHI implements a screening process related to project execution risk to verify execution systems, the validity of the execution plan and the profitability of the project.

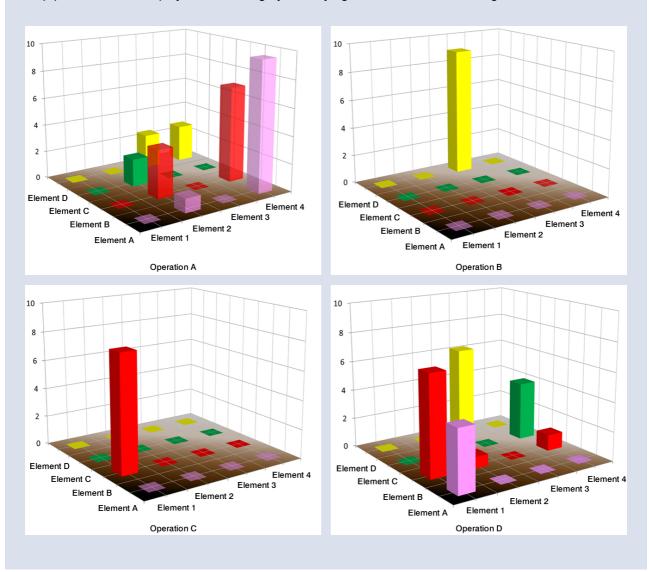
To ensure both adequacy and timely rectification, we will continue to conduct audits and risk assessments of construction projects, including local assessments, as well as strive to further enhance our auditing quality. Each department's activities will be independently audited and evaluated, and the results will be communicated. The department will be notified prior to the audit regarding the items to be reviewed, and upon completion of the audit the results will be communicated throughout the Group. The results may be used as case studies for training purposes.

#### Note:

For large construction projects that span more than one accounting period, revenue is recognized not after construction is completed, but instead is recorded as a per-year amount in line with the progress of work.

### Activities in FY2014

IHI began analyzing cases of declining profitability by facility type, including the configuration of equipment facilities or units where such declines occur. Going forward, this analysis is expected to help prevent losses in projects, including by identifying causes at an earlier stage.



### Objectives in FY2015

Before preparing an estimate for a project, the unit responsible for the project will identify risk factors that can reduce profitability of the project. Such factors include compliance with the laws and regulations of countries where the constructions have never taken place before. IHI has a check sheet that helps project managers to identify risk factors.

Governance

### Compliance



### **Basic Policies**

Compliance provides a company with the foundation for operating within society. IHI defines, compliance as:

- Observing strictly all laws, company rules, and other regulations
- Acting in a fair and responsible manner as business people

In addition to compliance with laws and regulations, it also requires meeting the demands of society. In FY2014, IHI strengthened its assessments of possible business risks related to changes in both the general business climate and specific fields. The company also reviewed its internal operations to assess compliance with existing rules and develop new rules required for new operations

Related link: Basic Code of Conduct for the IHI Group

### **Compliance System**

### **Compliance Committee**

In accordance with the Basic Code of Conduct for the IHI Group, a compliance committee was established to review, plan and implement important policies. The chief Compliance Officer serves as the chairman of the committee. The committee meets four times annually with the participation of divisional Compliance Officers who serve as compliance managers responsible for implementing policies.

According to the annual action plan and other decisions made by the committee, each Compliance Officer undertakes activities based on the PDCA model and in accordance with their division's particular structure. Each division implements activities among the Group companies for which it is responsible. Information on these activities is shared at the Compliance Committee to ensure steady progress throughout IHI.

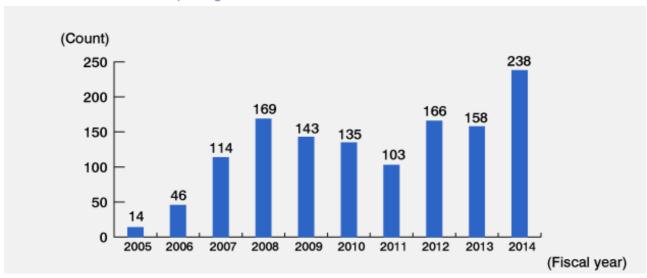


As of March 31, 2015

### Compliance Hotline

IHI established a Compliance Hotline to facilitate reporting of possible illegal, unethical or improper conduct and to prompt corporate responses to remedy such actions. IHI employees are welcome to seek advice from the Hotline, which is run by the Corporate Ethics Hotline, an independent, third-party organization. Hotline Cards explaining the Hotline mechanism and method of use are distributed to all employees, from senior managers and temporary staffers. The Hotline reported 238 incidents in FY2014. Many calls were related to interpersonal relations in the workplace, prompting initiatives to manage and resolve these incidents quickly.

### ■ The number of hotline reporting



As of March 31, 2015

# **Promoting Compliance Awareness**

### **Compliance Education**

Compliance awareness is reinforced through compliance education, which is provided on a continuous basis at Group companies and affiliates in the form of level-specific training, e-learning programs and small group dialogue.

In FY2014, e-learning programs were conducted twice on the topic of Fraud Triangle, or factors that can trigger fraud, and the difference between power harassment and guidance. In each e-learning program, participants completed anonymous questionnaires to help the company recognize potential issues in the workplace, which are fed back to each division to facilitate necessary improvements.

Also, based on the assumption that misconduct is less likely to occur in workplaces where employees work enthusiastically, employees were encouraged to initiate dialogue at their workplaces to share concerns and requests with colleagues. This helped employees to learn the importance of building trust based on mutual respect and understanding each other's values and points of view.

### Corporate Ethics Month

In response to a request made by the Japan Business Federation to member corporations, the president sent a message to employees in October, which is IHI's Corporate Ethics Month. He wrote: "To create a free-spirited corporate culture, IHI is determined to eradicate harassment, which we regard as a critical risk. Based on management philosophy "Human resources are our single most valuable asset," all employees are encouraged to use this month as an opportune time to reflect on their work environments and help strengthen our corporate values over the long term."

### **Compliance Poetry Contest**

To encourage employees to reflect on actions in their workplace, including one's own actions, we invited them to submit *senryu*, a satirical style of Japanese poetry, on the topics of compliance and CSR. More than 260*senryus* were submitted, the best of which were showcased in internal publications.

### Compliance Training

Training for line managers helped them better understand the need for compliance risk management, as well as methods of implementation. In FY2014, 78 line managers received training, bringing the cumulative figure to more than 590.

For Group company executives, a guest speaker discussed current topics in governance that are crucial for global companies in a lecture entitled "Creating a fair business environment: implementing internal controls to prevent the global risk of foreign corrupt practices."

### ■ Compliance Training

Position	Participants
IHI Corporation executives	29
IHI group executives	18
Managers at IHI Corporation and group companies	48
Line managers	78

# Activities in FY2014

In FY2013, the Construction Industry Act Liaison Conference was established under the Compliance Committee to reexamine compliance with respect to Japan's Construction Industry Act, including rules regarding order placements and payments. Necessary guidance and actions for improvement had been implemented. Group companies were reexamined in FY2013, and in FY2014 the focused was placed on reexamining IHI's operations, including order-placement documents and division-specific regulations.

# Challenges in FY2014

In FY2014, as part of reexamining IHI's rules and operations, responsible persons thoroughly examined business operations for unnecessary centralization of authority. Moving forward, IHI recognizes the need to ensure greater transparency in its business operations.

### Goals in FY2015

Based on the challenges addressed in FY2014, compliance activities in FY2015 are focusing on identifying actual operational conditions and reexamining related rules. To respond to IHI's expanding global business, concerned departments in of overseas companies are being asked to develop more sophisticated compliance structures. The Construction Industry Act Liaison Conference will continue to develop measures that address Group-wide issues, as well as provide various guidance and provide/share information.

# Compliance Initiatives

With increasing globalization and borderless implications of corporate actions, fair international competition in terms of price and quality has become increasing necessary to secure commercial opportunities. There is a growing international awareness that corrupt acts such as illegal payoffs must be stamped out. Against a backdrop of regional conflicts and terrorist attacks around the globe, security trade controls have never been more important. In response to this environment, IHI has focused on compliance with the Competition Law, the Anti-Corruption Law and the IHI's own compliance measures for security trade control.

### **Competition Law Compliance**

In addition to training employees on Japan's Antimonopoly Act, the U.S. Sherman Antitrust Act and the EU Competition Law, IHI is working to make its bidding process for public works projects more transparent. No fair trade law violation occurred during FY2014.

## **Anti-Corruption Law Compliance**

IHI regularly trains its employees regarding of the U.S.Foreign Corrupt Practices Act (FCPA), the U.K2010 Bribery Act and Japan's Unfair Competition Prevention Act. In addition, risk is monitored at both domestic and overseas sales offices throughout the IHI. Currently, IHI implements two sets of internal regulations concerning anti-corruption: a Basic Policy that reflects IHI's commitment to prevent corruption, and Operational Guidelines that set out specific procedures and concrete examples. No anti-corruption law violation occurred during FY2014.

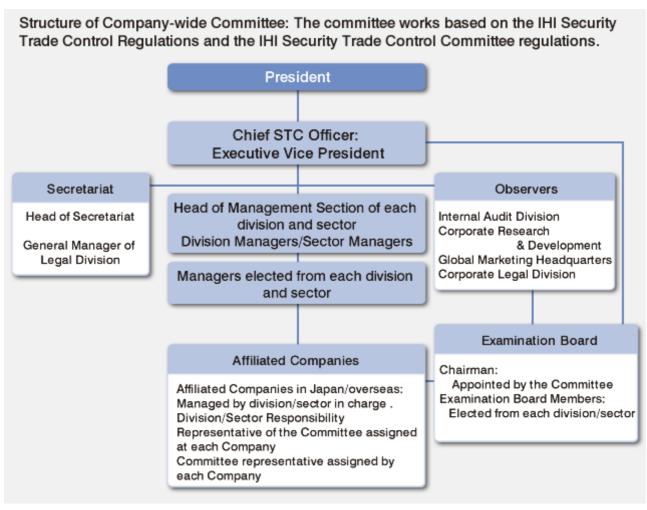
### **Legal Compliance Training**

Continuing from FY2013, legal compliance training was conducted to ensure compliance with competition laws, including Japan's Antimonopoly Act and laws in other countries, and to prevent cases of bribery in FY2014.

### Security Trade Control Compliance

IHI has enacted the internal regulations security trade control regulations and established Security Trade Control Committee to ensure compliance with Foreign Exchange and Foreign Trade Act and related risk-management requirements.

The committee is comprised of a chairman (representative director), secretariat (Legal Division), members from each division and sector, and examination board members. In the case of international transactions, it is responsible for internal screening, self-audits, monitoring, information sharing and raising awareness of related regulations. Going forward, IHI will continue to improve its quality management by addressing needs and challenges identified through self-auditing.



As of March 31, 2015

### Activities in FY2014

For IHI executives and other personnel in charge of sales, training on competition laws and the prevention of bribery was conducted on May 30, 2014. Recent cases of bribery and competition law violations were shared, and Attorney Nobuo Gohara, an outside corporate auditor of IHI Corpration, spoke about adapting to environmental changes and the Antimonopoly Act.

#### Goals in FY2015

To strengthen thorough compliance with competition laws, IHI is working to ensure Group-wide observance of regulations related to contacting and sharing information with competitors.

Governance

# Risk Management



# **Basic Policies**

The basic approach to risk management entails making business continuity plans, ensuring the safety of employees and their families, conserving management resources and retaining the trust of society. IHI manages risk based on our Basic Code of Conduct, adhering to the following principles:

- 1. Ensure business continuity
- 2. Improve society's perception of IHI
- 3. Conserve management resources
- 4. Avoid actions detrimental to the interests of stakeholders
- 5. When trouble occurs, work toward a speedy recovery
- 6. When difficult situations arise, address them in a responsible fashion
- 7. Respond to society's expectations with regard to risks

# Risk Management System

The chief executive officer (CEO) of IHI is responsible for implementing the company's risk-management system. The Risk Management Committee chaired by the CEO discusses important matters related to risk management and makes related decisions.

The Risk Management Committee sets out the IHI Group Risk Management Priority Policy to identify risks that the Group needs to focus on. Based on this policy, divisions within IHI and Group companies worldwide prepare their own risk-management action plans and then assess achievements reached under these plans once every year. Risks to the IHI Group are reported to the Risk Management Committee, and required corrections and improvements are reflected in the next year's risk-management action plans.

For Group-wide risks, the Group Risk Management Unit provides advice and training to help each unit and Group company eliminate such risks. The division also monitors risk-management activities to ensure uniformity and effectiveness across IHI. The Internal Audit Division audits every division according to its respective risk-management action plan. This PDCA cycle improves risk management continuously.

### ■Risk Management System



### Group Risk Management Unit

The Group Risk Management Unit consists of head office divisions, such as Human Resources, Finance, Legal Affairs and Procurement. For risks common to the IHI Group, the unit helps each division develop and maintain regulations, provides information and training, and monitors risk management.

As of March 31, 2015

### Activities in FY2014

The main activities carried out in FY2014 were as below:

#### 1. Competition Environment

IHI analyzed its competition environment, including reorganizations and business plans carried out by competitors, and shared the results with related divisions.

### 2. Business Integrations and M&As

The performance of a Brazilian shipbuilding affiliate, had the possibility of materially impacting IHI's performance, so IHI monitored the company's financial status regularly and reported to IHI's board of directors.

3. Preparedness for Country Risks, Business Interruptions Caused by Disasters, Crimes and Accidents

Terrorism overseas and Brazil's deteriorating economy exemplify the increasing risks associated with IHI's global expansion. IHI increased its preparedness for crisis by collecting information from governments and sharing information among offices.

## Challenges in FY2014

1. Design and production

Some large construction projects saw their profitability fall short of estimates due to causes related to design, such as inaccurate estimates, failure to check specifications properly, lack of sufficient design capability or failure to implement budgets soon after the contracts were awarded. IHI will determine the exact causes and provide feedback for future projects.

2. Measures to ensure information security

As IHI expands globally, employees are increasingly using tablets and smartphones, which is increasing the risk of such devices being stolen or lost. If IHI were targeted with frequent cyber-attacks, the impact could be significant, so the company is taking increasingly strict measures to prevent information leaks.

- 3. Precise recording of working hours
- In 2014, the Overwork-related Death Prevention Act came into force amid growing concerns over health problems caused by overwork. IHI is intensifying its management of employee work hours.
- 4. Preventing leakage of trade secrets, personal information or important technical information

  Leakage of trade secrets, personal information or important technical information can undermine the trust of
  customers and society, as well as impact IHI's competitiveness. This is why IHI is strengthening its
  measures to prevent information leaks.

# Objectives in FY2015

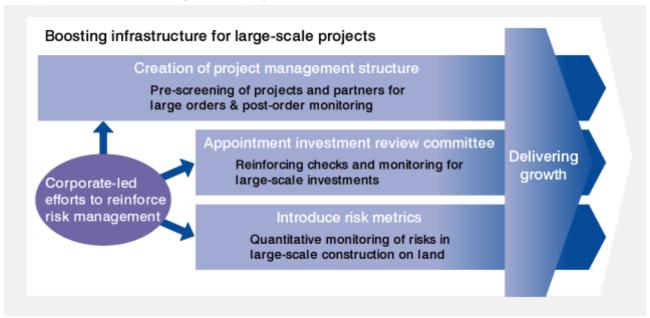
IHI is focusing on the measures listed below to eliminate risks at an early stage by adapting promptly to changes in society and business environments. These measures will also help to minimize any damage from risks that materialize as actual problems.

- 1. Adapt to rapidly changing competitive landscape
- 2. Ensure appropriateness of large-scale investments
- 3. Address risks associated with implementation of IHI's global strategies.
- 4. Upgrade measures to address foreign exchange risks
- 5. Eliminate products with inferior quality of performance
- 6. Enhance compliance
- 7. Ensure appropriateness of processes for accepting large-scale orders and implementing projects
- 8. Ensure information security
- 9. Pursue safety and maintain employee's mental health
- 10. Operate the company in an environment-conscious manner
- 11. React effectively to disasters and accidents
- 12. Undertake PR activities to raise, or prevent a decline in, corporate value.
- Refuse to associate with organized crime
- 14. Prevent harassment
- 15. Promote human-rights education
- Prevent leakage of trade secrets, personal information or important technological information

# Manage risk of large investments and orders

Based on a mechanism established in 2007, ongoing monitoring and reinforcement is necessary to manage risks that arise and introduce responses in a timely manner, such as improvements to the estimate process or the introduction of pre-order reviews. In response to the declining profitability of large-scale offshore structures, we continued our work this year to reinforce our risk management framework in that area.

### ■Support framework for large-scale projects



# Business Continuity Plans (BCP)

IHI has internal regulations requiring each office and division to prepare for serious disasters. May of each year is designated as BCP Review Month. Each division reviews its own BCP to ensure that all employees are registered in the safety-confirmation system, distribute pocket-sized disaster-prevention information cards, update the telephone-contact chain and verify the number of emergency kits. Regular training enables IHI to check and more widely promote its BCP plan.



Sample of pocked-sized disaster prevention card distributed to all employees

IHI GROUP

IHI GROUP

# Maintaining and Improving Information Security

## Information Security Policy

IHI, under its <u>information security policies</u>, strives to effectively manage information while maintaining and improving information security to protect the confidentiality of its customers and business partners, as well as Company information and technical data.

## Information Security Measures

IHI addresses information security risks from three perspectives: rules, tools and education. Internal rules include the <u>Information Security Policy</u>, Information Security Standards and Information System User Regulations. Various security tools, including frequently updated antivirus software, are deployed. E-learning sessions designed to maintain and raise security awareness are held annually. In FY2014, 96% of all employees participated in an e-learning program.

Computer virus infections caused by targeted e-mail attacks made headlines in 2011. Since even before then, however, IHI has been working with government agencies and specialists to institute countermeasures against attacks. As of March 2015, IHI has not reported any leaked information or related damage.

### Organized and Planned Security Measures and Improvements

The Information Security Committee consisting of representatives from IHI's major divisions and Group companies meets quarterly to coordinate planning, operations and inspections on a yearly basis. Every year since FY2005, IHI has conducted an internal audit of its information security measures and provided guidance on improvements. A written survey of all 53 Group companies was conducted in FY2014, followed by interviews of two selected companies. The audit found no major flaw in security measures.

### International Certification (ISO27001)

Divisions and Group companies of IHI engaged in sensitive projects for the national government are subject to annual certification reviews under the international standard for information security management systems (ISO27001), conducted by an external organization, to maintain a high level of information security.

# Activities in FY2014

IHI adopted and began using tools to provide employees with advanced technologies to ensure the security of cloud services and smartphones they use.

# **Ongoing Challenges**

IHI will continue to adopt security measures for new information and communication technologies deployed in its business.

## Targets in FY2015

IHI will enhance measures to counter targeted cyberattacks, and it will consult on such matters with government agencies and security firms.

# Protecting Intellectual Property

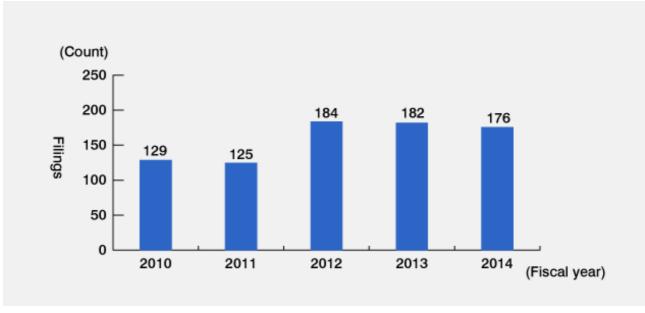
### **Basic Policies**

IHI is enhancing its intellectual property (IP) activities to support business and R&D. It also manages a Group-wide IP management system. The basic principle is to rigorously protect Group IP while respecting the rights of third parties. An internal IP registration scheme is being put into practice on a pilot basis for core-technology rights acquisition and confidential internal IP information, helping to ensure that strategic knowledge and expertise are not divulged.

## IP Protection and IP Rights of Third Parties

IHI views both foreign and domestic patent applications as being equally important. In recent years, patent applications filed by IHI outside Japan increased to approximately 180 per year. To reduce related business risks, a team specializing in patent searches in the Intellectual Property Department looks for patents owned by other companies to ensure respect for third-party IP rights.

### ■Foreign Patent Applications Filed



Note: Patent applications filed in multiple countries for the same invention are counted as one filing.

### **IP** Education

A five-step IP e-learning program is conducted for employees in their first to fifth years at IHI. The program offers training on IP and a range of other topics, including patents, copyrights, brands and trade secrets. During FY2014, 1,261 employees participated in e-learning, of which 86%, or 1,089 participants, completed the course. In December 2014, Mr. Yuji Toda, deputy general manager of the intellectual property division of Hitachi, Ltd., lectured on IP for more than 200 people from IHI. The lecture provided insights into IP through case studies of other companies.

# Activities in FY2014

To support its global business expansion, IHI introduced a patent survey tool for Group-wide use in March 2014, and then began providing divisions and Group companies with related training. The tool allows Group employees to search global patent information and receive the latest information automatically.

Efficient patent surveys and dissemination of the latest information are enabling IHI to enhance its intellectual property activities.

## Challenges in FY2014

IHI reviewed its guidelines to clarify rules related to the know-how registration system. The guidelines are expected to help keep know-how secret and prevent it from being leaking.

### Goals in FY2015

To prevent IHI from infringing IHI's copyrights of third parties, IHI plans to develop a list of dos and don'ts for preparing presentation materials. Related training also will be provided. In FY2015, the company will launch a regular training course for Group employees.

# **Social Report**

48	Customer-oriented Approach
53	Investor Relations
56	Supply Chain Management
60	Our Employees

# Social Report Customer-oriented Approach



# **Fundamental Policy**

IHI aims to satisfy customers and gain their trust by developing and supplying safe, useful products and services that leverage technology to help meet needs in society.

# **Quality Assurance**

## Group-wide Efforts to Improve Quality

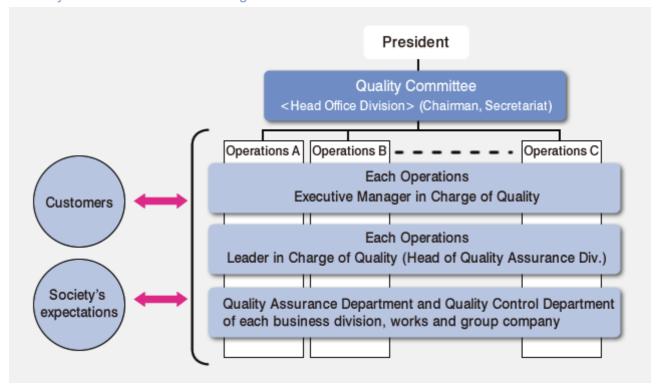
As part of a company-wide effort to improve quality, the Quality Committee, which includes representatives from Group companies, meets regularly to discuss quality issues. In FY2014, the committee focused on measures to prevent non-conforming products and service from being shipped, to foster human resources who can identify risks and to strengthen onsite inspections.

To ensure that non-conforming products or services are not shipped, we worked closely with divisions to analyze the causes of problems identified in major projects and examine what preventive measures should be taken. In particular, we focused our attention and efforts on reducing quality-related problems identified after goods or services are delivered.

To foster human resources, we allocated young engineers to design sections and construction sites to help them learn how experienced workers find quality-related problems.

To strengthen onsite inspections, we introduced new measures to reduce risks. For example, when we prepared estimates, we searched for risks by conducting onsite inspections and by studying potential risks encountered in similar projects. This enabled us to focus on reducing risks in the designing phase. We also focused on assessing risks related to safety and quality immediately before the start of construction. Each division is responsible for its specific quality-assurance and quality-control activities. The Quality Committee reviews the results of priority measures taken by each division, as well as any related problems, and ensures that know-how is properly acquired and shared throughout IHI. The committee employs the PDCA cycle to strengthen working relationships between Group companies and to make certain that best practices for quality assurance and quality control are implemented throughout the Group.

### Quality Assurance Promotion Diagram



As of March 31, 2015

# **Quality Management Systems**

Divisions conduct their work in accordance with quality management systems including ISO9001. Certification bodies conduct annual monitoring to determine if the quality systems are working and if there are opportunities for improvement. The Group's 34 affiliated companies and divisions in Japan and 39 affiliates overseas engaged in design, manufacturing or service operations have obtained quality certifications including ISO9001. In FY2014, there was no case of a product or service being in serious violation or non-conformity with quality rules or regulations.

### **Customer Satisfaction**

# Training to Enhance Customer Satisfaction

IHI conducts training to enhance product-quality management, customer satisfaction and product safety. In addition to position-specific training, divisions carry out their own general training programs.

New-employee training includes etiquette and product-quality courses, covering both theoretical and practical elements that instill a customer-oriented mindset in new employees. Also, engineers in their third year are trained in the importance of product-quality assurance, engineering ethics, intellectual property and product safety, as well as listen to a comprehensive range of lectures and take part in class discussions to consider practical examples provided by experienced engineers.

In FY2013, a new course for engineers at Group companies was offered for the first time. In FY2014, 48 employees participated in the course to receive training, including lectures, regarding quality issues. In addition, each division conducted its own training, as well as e-learning, on product-quality assurance and management.

Four courses related to product quality and product safety were offered seven times in FY2014, with approximately 120 employees participating.

# **Ensuring the Safety of Products**

### Safety Assessments

IHI is constantly working to enhance the safety of its products. During product development, we conduct risk assessments by considering each product's usage and life cycle, as well as by designing measures to reduce risk and providing customers with information on any residual risk. When designs are altered, we conduct risk assessments of the changes, including the extent of the impact on products.

For existing products, we check how they are used, how environments surrounding them have changed and whether technological advances have been reflected in them. For example, we reviewed our risk assessment of products that are often used by individual customers such as agricultural machinery. The reviewing parties included not only design and development divisions but also sales divisions that cotact customers frequently, as well as procurement, manufacturing or quality-assurance. Based on the results in FY2014, we began taking measures to improve quality. We are always thinking about customer safety and working to ensure that our products are used safely.

These efforts were shared with the Group's Quality Committee to facilitate application to other products and models as required.

In FY2014, there was no serious accident involving any product.

# Activities in FY2014

#### ■Omaha Public Power District Commends IHI

In January 2015, IHI's Energy & Plant Operations unit was awarded a plaque by Omaha Public Power District (OPPD), a U.S. electric utility, in recognition of the high performance of IHI's boilers installed in the Nebraska City Station Unit 2 (NC2), a plant that achieved 344 days of consecutive operation. These are the first coal-fired boilers that IHI provided to a U.S. customer. OPPD highly appreciated that the boilers have been operating without serious trouble since 2009.



OPPD officials visiting IHI

The Energy & Plant Operations unit will continue to provide solutions that address quality, performance and environmental impact, striving as a boilermaker to satisfy increasing power demands in Japan and overseas.

## Activities in FY2014

### ■Dongfeng Nissan Passenger Vehicle Company Commends IHI

IHI's Machinery and Logistics Systems Operations was presented with a letter of appreciation from Dongfeng Nissan Passenger Vehicle Company in December 2014 for the 54000KN high-speed tandem press line it built for the company's Dalian plant.

The project was carefully planned by reviewing feedback from past projects, in addition to thoroughly discussing options with the customer. Professional management techniques helped to secure a strong balance of quality, cost and delivery, as well as safety, throughout the project. Dongfeng Nissan is now using the line for the stable production of body panels.

Machinery and Logistics Systems Operations will continue to enhance customer satisfaction through close communication with clients and professional project management backed by years of experience.



#### 东风汽车有限公司东风日产乘用车公司 一



DONGFENG NISSAN PASSENGER VEHICLE COMPANY DONGFENG MOTOR CO., LTD. 感謝状

## [H] 株式会社殿:

今までの弊社への協力と御支持に対して感謝いたします。

御社が受注された弊社大連工場 54000KN 高速プレスラインのプロジェクト のスタートから、御社の役員様の御協力及び寺門部長様を中心とするチームの ご尽力のもと、XY/ZZプロジェクトからFBされた問題点に対して効果のある対策 と改善、すなわち念入りな企画、正確な準備、厳格な工事管理実施のおかげで、 本プロジェクトが7月に計画通り安全検収を完了できることができました。故障 強度率も低い状態で初流段階を迎え、現在既に3が月経過しましたが、安定し た状態が続き、各生産指標の項目全部を予定通り達成しており、DL 工場の SOP に力強く貢献して頂きました。

設備設置中では御社の現場設置チームが建て屋の建設、構内通路、設備 トライ電気等交差作業の難類を克服し、XY/ZZ プロジェクトで発生した問題点を 現場で可視化管理し、各作業は納期と品質の要求通りに完了し、設置期間の 問題点も大幅に低下でき、安全、そして見事な現場設置施工を完遂していただ

DL 高速ラインは両社が連携してから三番目の大型高速プレスラインのブ ロジェクトでありました。御社の高速ラインチームの努力と高い品質及び優れた サービスに感謝致します。DL高速ラインプロジェクトの良い結果から両社のお互 いの効果が初めて生まれました。今後の鄭州二期及び次期プロジェクトに対し て御社が一層に努力を重ねていただき、現在より更なる会社資源を追加して頂 き、より高い目標品質を確保できるように期待しております。

再び感謝の意を表します。



54000KN high-speed press line

東風日產樂用車有限会社

2014年12月

Letter of Appreciation

# Activities in FY2014

### ■Bhutanese Ministry of Agriculture & Forests Commends IHI

In November 2014, the agriculture minister of the Kingdom of Bhutan presented a certificate of appreciation to IHI Shibaura Machinery Corporation for providing tractor-driving training to 17 employees at the ministry's agriculture machinery center. IHI aims to offer additional products and services that satisfy the needs of this customer.



Trainees of Bhutan's agriculture machinery center

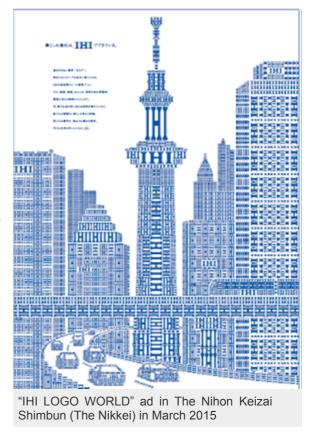


Certificate of Appreciation

# Disclosure of Information about Products and Services

We are carrying out a series of media campaigns, including TV commercials, newspaper advertisements and the Internet, to introduce our corporate vision to the public, raise their awareness of IHI and bring IHI closer to their everyday lives. In the media campaigns, we work closely with relevant divisions to provide accurate information to customers and other stakeholders. In addition, we work to ensure compliance with laws and regulations, such as the Copyright Act and the Trademark Act, and other related industry rules and regulations. Moreover, we regularly monitor the effect of our advertising campaigns to determine opportunities for improvement.

In FY2014, no violation of any law or regulation applicable to advertising or publicity public relations was reported.



Social Report

# **Investor Relations**



# Message from the General Manager, Administration Division

## Communicating with Shareholders

IHI believes that meeting the expectations of society and bringing benefit to communities are its main responsibility as a company that seeks the long-lasting trust and favor of its shareholders.

The Administration Division is dedicated to communicating effectively with over 80,000 shareholders by providing them with information in a timely manner.

In FY2015, we introduced an information delivery service to mail the IHI Integrated Report to shareholders upon request to deepen their understanding of the company.

Associate Director General

Associate Director General

Manager, Administration Division

Kazuki Awai

At shareholders' meetings and other opportunities to interact with shareholders, IHI answers questions about Group activities, corporate governance, etc., and in turn tries to understand the expectations of shareholders.

Moving forward, we will continue to nurture communication with our shareholders.

# Policy for Constructive Dialogue with Shareholders

### (1) Basic stance

IHI Corporation is well aware that timely, appropriate disclosure of corporate information to investors forms the foundation of a sound financial instruments market. Based on the basic principle of promoting highly transparent management throughout the Company, its basic policy with regard to disclosure of information is to disclose important information relating to the Company's management or operations to participants in capital markets promptly, accurately, continuously, and fairly, always from the investor's perspective. The basic policy also calls on the Company to show good faith in being accountable for its management course and key business operations.

## (2) Dialogue with shareholders

Guided by this basic policy, IHI pursues investor relations (IR) and shareholder relations (SR) activities, working to enhance its range of disclosure documents and holding financial results presentation meetings, as well as presentations by business division. Through such means as making these available online, the Company strives to provide proactive and fair disclosure.

IHI Corporation also engages in debate on important management policies, corporate governance, and other topics with major shareholders who have investment policies according with the medium- to long-term interests of shareholders. Dialogues with investors are handled by the Public Relations Division, while dialogues with shareholders are handled by the Administration Division, and depending on who has applied to attend, and the purpose and content of the dialogue, directors or executive officers in charge may also attend. Important dialogue content is reported to the Board of Directors.

## (3) System for promoting dialogue

The director responsible for the Public Relations Division oversees IR activities, while the director responsible for the Administration Division oversees SR activities. In addition, the Company shares information about every aspect of IR activities, including the collection, sharing, disclosure and storage of material information, by holding meetings led by the director responsible for public relations and investor relations, attended by the Public Relations Division, the Administration Division, the Corporate Planning Division, and the Finance & Accounting Division.

# **IR** Information

To communicate timely and appropriately with stakeholders and investors, IHI publishes the IHI Integrated Report, which discloses precise financial and non-financial related information. Briefings for financial analysts and institutional investors are held when the financial results for each second quarter and full year are announced. IHI also organizes telephone conferences after announcing its financial results every first and third quarter. At each briefing, which approximately 100 people attend, we give an overview of the financial results for the current term and our progress in implementing ongoing business plans.



# **Communication with Overseas Investors**

IHI is providing more diverse communication channels for its increasing number of foreign shareholders.

These include meetings with foreign investors, opportunities to participate in investor conferences and oneon-one interviews.

In FY2014, similar to the prior year, IHI managers travelled to North America, Europe and Asia to forge and renew relationships with local institutional investors.

We were told by investors that face-to-face communications helped them to confirm the direction of the company and that detailed briefings on IHI's business environment and structure helped to deepen their understanding of IHI.

In FY2014, we provided numerous opportunities for communicating with about 250 foreign institutional investors, including investor conferences and one-on-one interviews.

# Activities in FY2014

In FY2014, for more balanced information disclosure in multiple languages, we simultaneously published Japanese and English information materials. Also, we released a Japanese/English video of the briefing session on our second-quarter financial results a day after the session. In addition, we released Japanese/English audio recordings of telephone conferences on the day after they were held.

For analysts and institutional investors, we held the first briefing session on our vehicular turbocharger and aero-engine businesses. The head of each division explained how their division will impact IHI's growth. A video recording of the session was distributed in Japanese and English on the following day.

▶ <u>Video</u>

Social Report

# Supply Chain Management



# Message from General Manager of Procurement Strategy Planning

## Building Beneficial Relationships with Business Partners

The <u>IHI Group's Basic Procurement Policy</u>, established in FY2012, focuses on three principles: (1) fair and impartial procurement, (2) mutually beneficial partnerships with our business partners and (3) compliance with laws and the fulfillment of social requirements."

To raise awareness of our procurement policies, we surveyed our major suppliers in Japan in FY2013 and verified the status of compliance at 1,332 companies. In FY 2014, we followed up various issues raised in the survey to help our suppliers find solutions, which we will continue to do in the future.

With respect to markets outside Japan, our key task for FY2014 was to achieve a better understanding of the laws and regulations, tax systems



Managing Executive Officer
General Manager, Procurement
Strategy Planning
Naruhito Takata

and social conditions of countries where we have operations. As our business grows globally, our overseas procurement of materials is on the rise. For this reason, we plan to increase the number of procurement personnel we have overseas and train them in local laws and regulations. We hope that these initiatives will contribute to development of communities worldwide.

To address procurement-related issues regarding, for example, the environment or conflict minerals, our procurement personnel must understand the issues correctly and thoroughly, and be able to communicate effectively with all parties concerned. We work tirelessly to ensure that these needs are communicated to employees and shared with business partners, helping thereby to strengthen relationships with our partners.

# **Fundamental Procurement Policies**

IHI regards suppliers of goods and services, both in Japan and overseas, as key partners sharing similar goals.

We ensure that our procurement teams comply with domestic and foreign laws and regulations, and meet other social requirements as part of their basic code of conduct. Our suppliers are selected through a fair and impartial evaluation process, and our procurement activities help to enhance the competitiveness and prosperity of these partners, as well as IHI.

Related link: The IHI Group's Basic Procurement Policy,

# Corporate Social Responsibility in Procurement

The Group's Basic Procurement Policy is communicated internally and externally to promote fair trading and socially responsible practices in all procurement activities. The policy helps to ensure fair, impartial procurement, beneficial partnerships and sensitivity to compliance and social needs. We also seek the cooperation of partners regarding (1) compliance, (2) respect for human rights, labor conditions and occupational safety and health, (3) quality, price and delivery conditions, (4) improvement of competitiveness, (5) environmental awareness and (6) information disclosure.

Business partners receive copies of the official policy and attend briefings and seminars to increase their understanding. We also requested major business partners to participate in a survey to examine how the procurement policy was being implemented, which generated encouraging feedback.

# **IHI Group Policy on Conflict Minerals**

We have established the IHI Group Policy on Conflict Minerals as part of the IHI Group's Basic Procurement Policy. As a company policy, IHI will not procure raw materials, parts, or products that contain conflict minerals produced in the Democratic Republic of the Congo or its adjoining countries.

We have also conveyed this policy to our major business partners to ask for their cooperation in disclosing related procurement information if requested by our clients.

# Fair and Appropriate Trade

IHI contributes to society by conducting fair and appropriate trade. To provide products and services that respond to societal needs, we advise business partners on technical and managerial issues, if requested, after evaluating the technology, quality and price considerations. Global procurement activities are carried out at procurement bases in each region, so to ensure adherence to local standards and compliance with import/export regulations, awareness training is conducted throughout the Group. Training also is provided on meeting requirements related to the environment, human rights, labor, health and safety.

# Training and Inspection Regarding Procurement-related Legislation

IHI conducts internal training on procurement-related laws, such as the Act Against Delay in Payment of Subcontract Proceeds, etc. to Subcontractors (Subcontractors Act) and the Construction Business Act. We conduct internal training courses to ensure compliance with procurement-related laws and have opened these courses to all divisions that require knowledge and understanding of such legislation. These efforts have increased understanding and raised awareness of appropriate work procedures throughout IHI. In FY2014, 454 employees attended the Subcontractors Act course and 71 took part in the Construction Business Act course.

To comply with foreign procurement legislation, we support voluntary post clearance inspections for all relevant IHI divisions.

We also offer training in procurement laws and tax systems of key emerging countries and provide local personnel with training on our procurement policy to ensure global compliance.

IHI internally audits procurement divisions to determine if they are in compliance with the Subcontractors Act, offering guidance as required. Since FY2012, we have been encouraging voluntary inspections and improvements.

# **Organized Crime Countermeasures**

IHI rejects any involvement with organized crime in its procurement activities. We clearly stipulate to our business partners that no relationship with such groups is permissible, especially in the case of partners from industries that are sometimes alleged to have links with organized crime. By so doing, we strive to eliminate any involvement with organized crime.

# **Building Relationships with Business Partners**

IHI is constantly striving to enhance its procurement activities by sharing information and policies with business partners. Through initiatives such as value engineering\*, we work with partners to strengthen our relationships and mutual prosperity.

<sup>\*</sup> This is a professional, function-oriented, systematic team approach to analyzing and improving value in a product, facility design, system or service. Shown to increase customer satisfaction and add value to an investment, it can be applied to any business and has been proven to be successful long-term business strategy.

# Comment from Vietnamese supplier ANH THY Co., Ltd.

We, at ANH THY Co., Ltd. have a plant in Binh Durong Province in southern Vietnam, and supply IHI with distribution boards, control panels, cable support systems, etc.

Based on our close partnership, personnel from IHI and our company regularly visit each other. We have received much guidance and positive feedback from IHI, which gives us encouragement and enables us to improve our quality and technology even more. We sincerely wish for a long and mutually beneficial relationship.



Supplier ANH THY Co., Ltd. receives award from IHI.

# Objectives in FY2015

In 2015, IHI will strengthen its internal audit capacity regarding compliance with the Subcontract Act to prevent business misconduct. Also, in response to expanding procurement overseas, IHI will carefully study procurement-related laws and tax systems in key emerging countries, provide local personnel with hands-on training to ensure global compliance, and increase the number of procurement personnel overseas. The aim is to produce positive outcomes through Group-wide collaboration in information sharing and other internal systems.

# Social Report Our Employees



# Message from General Manager, Human Resources Division

## Commitment to Human Resource Management

IHI formulated a new Group Human Resource Management Policy in FY2013 based on the conviction that human resources are IHI's single most valuable asset. If employees don't grow, neither will the company. To strengthen human resource management from this perspective, the Group Human Resource Management Policy is closely linked to IHI's overall medium-term business plan, Group Management Policies 2013. The policy provides group employees with opportunities to develop as members of a professional, global group of companies. It also provides a working environment in which to implement the Group's philosophy and vision, helping each employee to reach their potential.



**Executive Officer General** Manager, Human Resources Division

Masafumi Nagano

IHI has defined "ideal human resource" in terms of five basic characteristics: Integrity and Trust, For Customers and Society,

Innovation and Creation, Team Work and World-class Professional. These characteristics are a guideline for IHI's human resource management process encompassing recruitment, personnel development and performance evaluation.

Our human resource management focuses on educating and training employees who will be future management candidates. Human resources are allocated and developed strategically in areas critical to IHI's future growth, with added consideration for expanding our workforce diversity. We will determine what our objectives are for next three years, formulate a road map for achieving these objectives, and executing the plan for achieving them.

IHI promotes women, the disabled, seniors and non-Japanese. The company is presently planning a strong focus on encouraging female employees to play a more active role in the workplace. As of April 2015, the number of female employees in managerial positions had increased to 2.1%, and we aim to further raise that number to 3% or higher by FY2018.

In addition to the prerequisite administration of human resource management, including health and safety, risk management, mental health and labor relations, we are steadily implementing other initiatives proactively, including to provide a working environment in which all IHI employees can reach their full potential.

# **Group Human Resource Management Policy**

In line with IHI's management principles and Group vision, IHI creates customer value by leveraging engineering expertise centered on "Monozukuri" technology.

- 1. In order to become an enterprise with distinguished global professionals who strive to excel in "Monozukuri" Technology and engineering technologies with world-renowned high quality products, ideal human resources shall be enhanced and shall serve as a shared value of Employees within the group.
- **2**. Ideal human resources shall serve as the foundation for establishment of HR management policies in order to provide Employees with opportunities for development.
- **3**. Providing a work environment where people of diverse backgrounds can demonstrate their abilities and are in tune with the management principles and Group vision of IHI.



### **Fundamental Policies**

IHI strives to create safe, pleasant work environments that emphasize mutual respect, thereby helping employees to enjoy comfortable and affluent lives. Based on the concept of workforce diversity, IHI actively recruits and promotes talent in all regions, regardless of gender, academic qualifications, age or nationality. The Group fully recognizes-and makes every effort to respect-the importance of human rights in the course of its activities. Overall, such efforts enhance Group unity and the morale of individual employees, as well as encourage a free and open corporate culture.

### ■IHI Employees, by Region

Region	Employees
Japan	22,504
Asia Pacific	3,231
North America	1,074
EMEA	1,724
Total	28,533

As of March 31, 2015

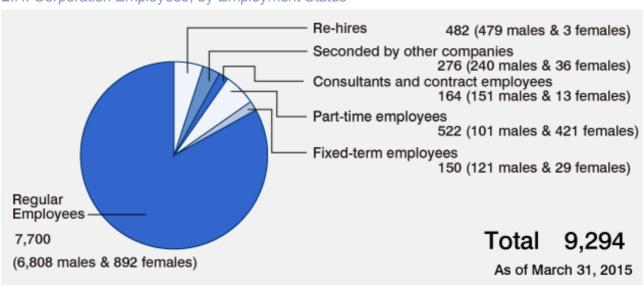
### ■IHI Corporation Employees (nonconsolidated), by Age and Gender

Age	Male	Female	Total
Under 30s	1,816	274	2,090
30 to 39	1,796	267	2,063
40 to 49	1,882	307	2,189
50 to 59	1,171	44	1,215
From 60	622	3	625
Total	7,287	895	8,182

As of March 31, 2015

Note: Data covers regular or rehired employees only

### ■IHI Corporation Employees, by Employment Status



### ■Employee Retention by gender or years of service

#### Job turnover rate

	Male	Female	Sum
Total	4.6%	8.0%	5.1%

Job turnover rate is based on those entered the company in 2012 but left within the first 3 years.

### Average years of service

	Male	Female	Sum
Total	14.3years	12.1years	14.6years

As of March 31, 2015

# Respect for Human Rights

### Awareness-raising Activities

Human rights are addressed based on the philosophy that human resources are IHI's single most valuable asset. Awareness activities began in 1981 with the establishment of the company-wide Dowa Promotion Committee. Recognizing our corporate social responsibility, we formulated a basic policy for actively seeking to resolve social discrimination issues in support of a fair, non-discriminatory society, which has become a key aspect of our business.

Based on plans and policies drawn up by the company-wide committee, each worksite has since established a local Dowa Promotion Committee. In light of domestic and international human rights trends and changes in the social environment, these committees have undertaken specific human rights education and awareness activities addressing a wide range of human rights issues relevant to each workplace, including treatment of social outcasts.

Outside Japan, other key human rights issues include child labor and forced labor. We thus believe it is also important to address such issues from a global perspective. In this context, we amended the Basic Code of Conduct for the IHI Group in 2010 to list respect for human rights as a fundamental principle of the company, based on which we are implementing various initiatives on an ongoing basis.

In FY2014, 5,119 employees took part in internal training programs and external seminars. These awareness-raising activities are reported to senior management as part of ensuring their importance to the entire company. No human rights violation, including the use of child/forced labor, occurred during the year.

### **Human Rights Training**

In FY2014, 5,119 employees participated in human-rights programs, which included rank-specific training, training at IHI offices and plants, and training conducted by third parties. Results are reported to senior management, helping to ensure group-wide respect for human rights.

### **Equal Wages for International Recruits**

IHI practices fair and impartial wage setting both in Japan and in international locations. Employees are treated equally-regardless of gender-and basic wages are set in the same manner.

# **Respect for Diversity**

## **Enhanced Systems for New Graduate Recruitment**

To ensure a diverse workforce, IHI recruits regardless of nationality, gender or age. We also recruit graduates up to three years after graduation. To attract global talent, we provide a wide range of recruitment opportunities, including recruitment seminars in the U.S., U.K., South Korea and Singapore.

Recruitment of non-Japanese employees over the past five years includes 8 in 2011, 15 in 2012, 13 in 2013, 11 in 2014 and 7 in 2015.

### ■Recruitment (IHI Corporation)

Engineers	196 (including 23 females)
Administrative workers	51 (including 20 females)
Japanese graduates of overseas universities	3 (no female)
Non-Japanese	7 (including 2 females)
Total	257

## Active Recruitment of Mid-career Employees

IHI actively recruits mid-career employees, with 65 such people joining the company in FY2014. We conduct an annual symposium to inform mid-career recruits about career opportunities at IHI and to build networks. Also, we offer fixed-term employment contracts as a mechanism for shifting temporary staffers to regular employment. Under this system, six-month contracts can be renewed up to a maximum of three years and personnel who meet certain standards can be subsequently hired as regular employees.

## **Employment of Physically-challenged Persons**

To create workplaces where anyone can work with ease, IHI encourages the employment of persons who are physically challenged. As of June 1, 2015, 2.13% of IHI employees had disabilities. We will continue to cooperate with public employment agencies to actively provide employment opportunities for workers with disabilities.

### ■Employment of Disabled People

	Employment rate at IHI	Statutory employment rate
FY2011	1.73%	1.8%
FY2012	1.79%	1.8%
FY2013	1.87%	2.0%
FY2014	2.04%	2.0%
FY2015	2.13%	2.0%

## Employment of Persons Aged 60 and Over

In April 2013, IHI replaced its previous re-employment system with a new system that allows employees at the age of 59 to decide their retirement age, ranging from 60 to 65. This new system creates an environment where people can continue working actively beyond the age of 60.

### Recruitment and Promotion of Female Workers

IHI actively employs women in accordance with a new plan, IHI's Initiative and Aim to Encourage Female Employees to Play More Active Roles in the Workplace, announced in October 2013. The Recruitment Seminar for Women Technical Students was held twice in 2015, on March 27 and 30, to provide female university students in technical fields with an idea of what it would be like to work for a heavy-industry manufacturer such as IHI.



Recruitment Seminar for Women Technical Students

Following IHI's first certification under Japan's Act on Advancement of Measures to Support Raising Next-generation Children, or "Kurumin," in 2007, the company again received certification in 2011 and 2015.



Mark for childcare support program

### ■Recruitment of Female University Graduates

FY2011	31 (15 technical and 16 administrative)
FY2012	36 (16 technical and 20 administrative)
FY2013	33 (13 technical and 20 administrative)
FY2014	31 (11 technical and 20 administrative)
FY2015	45 (23 technical and 22 administrative)

### ■Recruitment Targets for Female University Graduates

	Current*	Target
Administrative	38%	35% or above
Engineers	9%	10% or above
University graduates	16%	15% or above

<sup>\*</sup>Average of last three years

## **Encouraging More Female Managers**

IHI strives to create a working environment based on a philosophy of workforce diversity and helping individuals to reach their potential. In FY2012, a Training Course for Women Section Managers was held to raise the awareness of women in managerial positions and provide them with networking opportunities. In FY2014, the Leadership Training for Women in Managerial Positions was held to strengthen leadership capabilities and provide networking opportunities for young women in managerial positions.

The Network Leadership program was launched in FY2013 to support diverse female employees in each business area. In FY2015, it welcomed 12 new members, who joined existing members in the Network Leader Training Course.

To develop female candidates for managerial positions, the Human Resource Division interviewed the candidates' superiors to learn about plans to develop and promote female managers. The findings were then analyzed to identify specific areas that need to be strengthened.

Based on the findings from FY2014, an educational system for female managers was set up in FY2015. Also, based on the outcomes and challenges identified in past activities, five major topics for promoting female employees were identified. Among them, work-life balance is being especially emphasized to help cut back work hours and create work environments that promote work-life balance for both male and female employees.



New and existing network leaders at the FY2015 Network Leaders Kick-off Training

### ■Ratio of female managers (non-consolidated)

	April 2013	April 2014	April 2015
Total managers	2,769	2,847	2,847
	44 (1.6%)	51 (1.8%)	60 (2.1%)
Female managers	Division managers: 7	Division managers: 8	Division managers: 14
	Section managers: 37	Section managers: 43	Section managers: 46

Note: Figures in parentheses show female percentages

Note: Figures do not include a female executive officer who served in FY2014 and FY2015, and a female associate directorwho served in FY2013

### ■Target ratio of female managers

	FY2015 target	FY2018 target
Total	Over 55	Over 75
Share of total (among all manager)	Over 2%	Over 3%

Note: 60 (2.1%) female managers exceeded the FY2015 target

#### ■Female board member

	FY2018 target
Number	More than 1

Note: One female executive officer was appointed in April 2014

### Initiatives to promote local hiring

Based on the Group Human Resource Management Policy stipulated in Group Management Policies 2013, IHI actively seeks and hires capable individuals regardless of gender, educational background, age, or nationality to promote the diversity and abilities of its global human resources. Based on the ideal makeup of human resources as identified in the Group Human Resource Management Policy, each overseas base recruits necessary candidates relative to the respective country's labor market and customs. IHI also conducts trainings to develop managers at overseas base. In FY2014, trainings for managers were conducted in Asia Pacific region.

### ■Locally hired managers

Company	Number
ICL	1
IHIAP*	11
IHI INC.	10

Note: IHIAP includes IHIAPT

# **Creating Better Workplaces**

IHI, which believes that the growth of its Group is grounded in the safety and well-being of each employee, is committed to eradicating accidents and thereby realize more vibrant work environments.

## Employee Health Management and Mental Health Care

IHI emphasizes health management because it believes that a satisfying and fulfilling work environment improves productivity. Currently, 10 full-time industrial doctors and about 40 full-time health nurses are supporting the management of IHI employees' physical health and mental healthcare.

Mental health education includes both remedial aftercare for people with mental illnesses and preventative measures promoting mental toughness. Everyone from senior managers to new employees is targeted as part of nurturing a robust workforce and pleasant work environment through various programs for mental health. Additional measures address health issues such as metabolic syndrome, smoking and other unhealthy lifestyles.

In FY2014, about 57% of employees who underwent health checks received negative diagnoses in more than one category of IHI's health checklist. Also, 20% of employees were identified as needing special healthcare guidance, including for metabolic syndrome, and 27% were active smokers. Among those eligible for cancer screening, 80% took advantage of this benefit.

### ■Health management data (non-consolidated)

	FY2012	FY2013	FY2014
Employees with negative diagnosis in one or more categories	57%	63%	64%
Need special healthcare guidance (metabolic syndrome)	20%	20%	20%
Active smokers	25%	27%	27%

## **Employee Attitude Surveys**

An employee attitude survey has been conducted annually since 2004 to assess employee opinions and the company's organizational culture. The results, which are fed back to the entire company, create a better picture of workplace conditions, identify issues in specific divisions and provide data for developing divisional policies and improving the workplace.

## Health and Safety Management and Accident Prevention

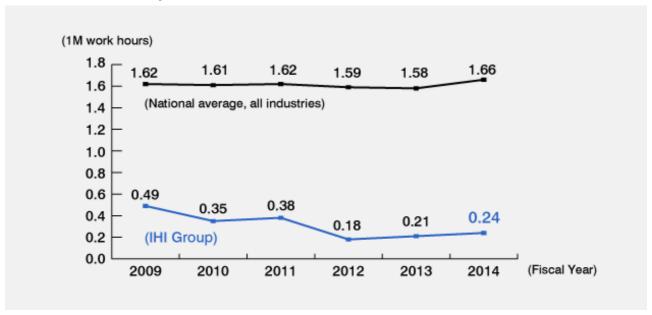
Based on the five Group-wide safety principles, IHI is working to eradicate work-related accidents.

To prevent accidents at factories and construction sites, we implement risk assessments to identify potential hazards and then implement strict safety countermeasures. We also conduct regular safety training for employees, including supervisors, leaders and site managers, to achieve accident-free workplaces. Health and safety initiatives are based on the Occupational Health and Safety Management System.

## **5 Safety Principles**

- Give first priority to safety over everything.
- Don't do or make others do dangerous work.
- Take measures to prevent accidents in advance.
- Observe safety regulations.
- Our own efforts prevent accidents.

### ■Work Hours Lost to Injuries



#### ■Fatal Accidents

FY2010	FY2011	FY2012	FY2013	FY2014
0	0	1	1	0

## Promoting Healthy Work-Life Balance

IHI is enhancing its systems for work-life balance to offer environments where all employees can work with ease while achieving a good balance between their professional and personal lives.

For example, IHI has introduced a system that allows employees to take 10 days leave per year to tend to sick children and the same amount to provide nursing care to elderly family members. Fixed-term and part-time employees are eligible for these extended paid-leave programs.

Employees are allowed to work reduced hours to care for elementary school or younger children. Twenty days of leave per child for employees with preschool children has also been introduced. Starting in FY2015, child-care leave was increased to 25 days per year.

### ■Employees with reduced work hours

FY2010	FY2011	FY2012	FY2013	FY2014
103	127	130	137	151

### ■Employees who utilized child-care leave

FY2010	FY2011	FY2012	FY2013	FY2014
304	344	406	420	400

### ■Employees who utilized nursing-care leave

FY2010	FY2011	FY2012	FY2013	FY2014
2	1	5	3	2

### ■Employees Who Took Childcare Leave and Returned to Work

FY2010	FY2011	FY2012	FY2013	FY2014
73	81	101	95	92
(94% returned)	(100% returned)	(95% returned)	(100% returned)	(100% returned)

### Labor Relations Partnership

IHI concludes labor agreements with IHI labor unions based on mutual understanding and trust.

Various labor-relations councils are organized in accordance with labor agreements, including workers' councils to promptly resolve day-to-day issues, management councils to discuss management initiatives and financial results, and production councils to maintain and improve productivity in works divisions.

### ■ Labor Union Membership (IHI employees in Japan)

Region	Members	Region	Members
Musashi	1,662	Tomioka	676
Tokyo	1,449	Aioi	537
Yokohama	1,429	Kure	520
Soma	869	Nagoya	468
		Total	7,610

As of March 31, 2015

## Dialogue between Management and Employees

Dialogues between management and employees are provided as part of the I-Project, which is an initiative implemented throughout the Group. In FY2014, management/employee meetings were held at nine IHI offices and eight group companies to exchange views and ideas.

Management and labor union representatives participate in the management council meetings where management explains company policies and receives feedback from the union representatives. The IHI president joins the meeting twice a year to exchange opinions.

## Health and Safety in Formal Agreements with Labor Union

The Central Health and Safety Committee and the Health and Safety Promotion Committee meet each year to enable management and the labor union to discuss health and safety issues. Management and employees jointly organize safety patrols at IHI works and construction sites to ensure safety and better health/safety management.



Safety patrol at Aichi Headquarters Representative's Office

# Addressing labor-related complaints

Based on labor agreements, IHI operates a committee to promptly respond to labor-related complaints from employees in a fair manner, ultimately to realize harmonious work environments.

No complaint was raised in FY2014.

## Benefits package for employees

IHI aims to create work environments where employees and their families are at ease about working at the company. To that end, IHI works hard to enhance its corporate benefits package to support employees' life planning.

### Leisurely Holidays Initiative

IHI has introduced a program called Annual Leisurely Holiday Promotion to encourage employees to take annual leave. This program, which is designed to facilitate consecutive days off, has been well received and used by many employees. We will continue to promote this initiative to encourage employees to take more than 16 days of annual leave.

#### ■Average leisure holidays acquired

FY2010	FY2011	FY2012	FY2013	FY2014
15.54days	15.51days	16.14days	16.27days	16.02days

#### Pension Plan

IHI offers employees a savings-type pension plan that includes corporate contributions. It is designed to encourage employees to accumulate assets and earn income for retirement by paying voluntary contributions on a regular basis.

### Reduction of Overtime Work

Each year, IHI formulates a working-hours policy to promote a healthy work-life balance, aiming to limit non-essential overtime by promoting efficient work practices during regular hours and distributing tasks evenly among employees. PC log-on/log-off times are monitored, and if these records diverge from reported start and finish times the situation is investigated and appropriate guidance is offered. To reduce overtime work, one day each week is designated as a no-overtime day.

### ■Average monthly overtime

FY2010	FY2011	FY2012	FY2013	FY2014
18.7hours	23.8hours	21.8hours	22.7hours	23.3hours

### **Human Resource Development**

### **Human Resource Development Initiatives**

IHI's Group Human Resource Management Policies define procedures for human resource management and values that must be shared within the Group. A subcategory on Group Human Resource Development provides guidelines for training.

Our educational and training programs include Group-wide, level-specific training for employees ranging from new recruits to newly appointed managers. In addition, there are special courses for future management candidates, global human resource development and female managers. Optional open lectures provide additional opportunities to brush up technical skills.

Appraisal systems serve as a development tool by providing employees with evaluation feedback. The feedback enables employees to learn about their strengths and needs for improvement, contributing to development of individual skills.

### Global Human Resource Development

As part of global human resource development, IHI continues to offer English language training in India, as well as programs for executive managers and employees to be dispatched to overseas bases.

In FY2013, a language laboratory was built in the Toyosu head office to provide employees with one-on-one English conversation lessons. Similar facilities were made available near Yokohama and the Musashi area of Tokyo in FY2014. IHI has put effort into global human resources development by providing study-abroad programs and practical business training.

### Passing Skills Along to Others

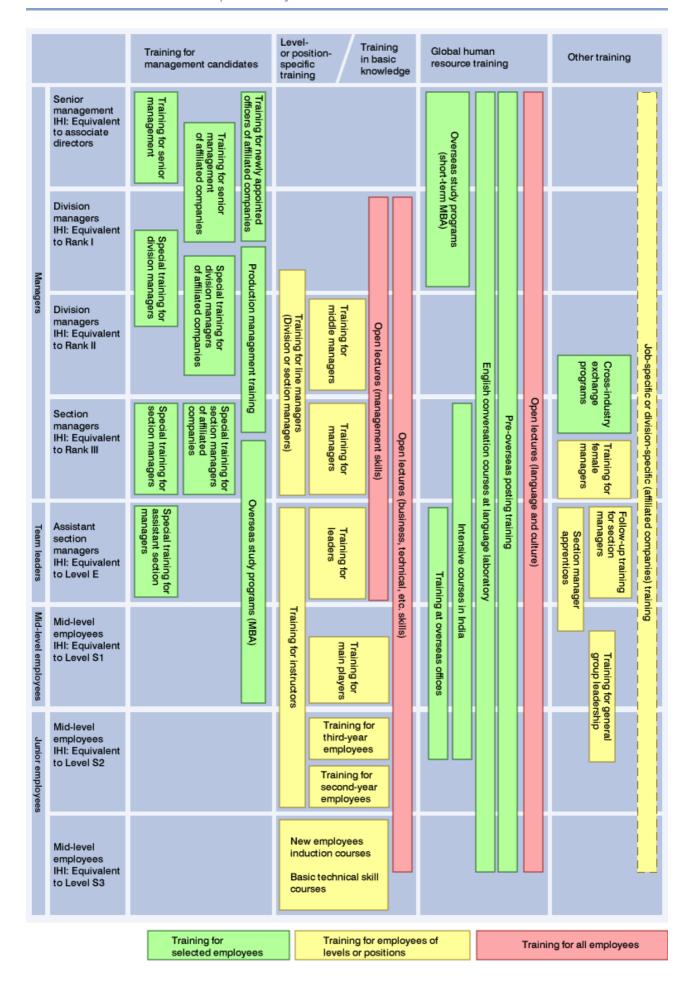
Each IHI production facility is in charge of specific manufacturing skills, such as welding and machine work, that must be passed along to the next generation. Employees with specialized skills are designated as *takumi* (master artisans) and are assigned to train younger workers. Based on a certification system introduced in FY2007, 47 employees were certified as new *takumi* in FY2015.



Highly Skilled Casting

#### ■Employees Certified as *Takumi* in FY2015

Welding	8
Assembly	7
Machine work	13
Testing/Inspection	9
Maintenance	3
Other	7
Total	47



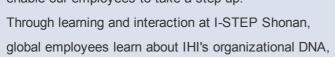
#### ■Participants in Main Training Courses and Total Training Hours

Participants		Hours of training
Position-specific	1,700	88,000
Open lectures	6,900	64,000

### Activities in FY2014

#### ■Human Resource Development

The IHI Group Human Resource Management Policy explains that IHI cannot grow unless its people grow. Based on this philosophy, we have enhanced our human resource-development initiatives by building a training facility and organizing various seminars. In March 2015, we completed the IHI Human Resources Development & Communication Center, or I-STEP Shonan, a core facility for human resources training in Yokosuka, south of Yokohama. The "I" in I-STEP refers to the growth of both the individual and IHI. STEP is an acronym for Sympathy, Training, Exchange and Practice, which together will enable our employees to take a step up.







I-STEP Shonanhas one underground and five aboveground floors and contains training rooms, an international meeting facility, a dining hall and a communal bathing area, as well as accommodations for overnight stays.

including our management philosophy, history, vision and Ideal Human Resources, also cultivate the mentality and skills expected as an IHI person.

### Activities in FY2014

#### ■Nadeshiko Brand 2014

IHI was selected as a "Nadeshiko Brand" company by the Ministry of Economy, Trade, and Industry (METI) and the Tokyo Stock Exchange (TSE) on March 3, 2014. METI and TSE award listed companies that actively promote female employees. Out of 26 brands selected in FY2013, IHI was selected in the machinery category.



Nadeshiko Brand Announcement ceremony



Nadeshiko Brand

#### ■Distinguished service award for female technician development

Ms. Mizumoto, an executive officer in the IHI Group Business Process Platform Division, received The First Distinguished Service Award for Developing Female Technicians from the Association of Technicians on August 8, 2014. This award is given managers who make distinguished contribution to developing female technicians.



Award ceremony

### Activities in FY2014

#### ■Lectures for female managers of affiliated companies

In December 2014, IHI held its first lecture on the topic of promoting female employees at affiliated companies. Participants included 69 female managers and human resource personnel from 27 affiliated companies.

The meeting started with a greeting from the IHI president, followed by an introduction of IHI's initiatives to promote female managers and then a



Lecture for female managers

lecture by Executive Officer Mizumoto. In addition, a panel discussion, the first of its kind for IHI, was held to directly answer concerns expressed by the participants. IHI plans to continue this Groupwide initiative in FY2015.

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# Message from General Manager, Corporate Social Responsibility Division



### Increasing Emphasis on Environmental Business

The impact of climate change is becoming more evident and environmental issues are becoming more pressing. It is clear that there is no time to waste to improve the situation.

IHI's business activities, which span infrastructure, energy and industrial systems, often affect the global environment, so we have an opportunity to reduce the impact of such activities. At the same time, our business partners can contribute to this effort by utilizing eco-friendly IHI products. Tackling and resolving environmental problems is not only a serious responsibility, it also creates growth opportunities that have great significance for our Group.



General Manager, Corporate Social Responsibility Division Chikako Oshima

Based on a company decision to adopt a more environmentally friendly

approach in FY2013, we formulated IHI Environmental Vision 2013, which is tied directly to our business plans. The vision spells out the environmental actions we will follow up to FY2018, centering on the themes of reducing environmental burdens through products/services, reducing environmental burdens through business operations and promoting group environmental management.

In FY2014, IHI began implementing an evaluation system to designate environmentally friendly products and services based on internal guidelines. Also, the not-for-profit organization CDP (Carbon Disclosure Project), which evaluates corporate initiatives to counter climate change, named IHI a high-performing company in its Climate Disclosure Leadership Index (CDLI) and Climate Performance Leadership Index (CPLI). Such recognition further demonstrated IHI's strong performance in combatting environmental issues.

In environment-related activities, it is especially important to develop an organizational culture in which each employee thinks independently about how their work affects the environment and what they can do, and then takes action. We will further enhance such employee awareness so that we can meet society's expectations by doing whatever it takes to ensure we are solutions oriented.

## **Activities in FY2014**



### Activities in FY2014

### Launched system to designate environmentally friendly products

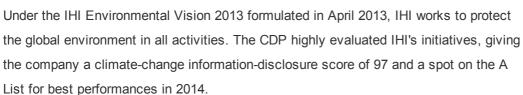
IHI introduced an in-house evaluation system to designate its most environmentally friendly products and services. This system evaluates environmental performance based on internal guidelines and designates superior performers as being environmentally friendly.

IHI manufactures products in four main business areas, which are officially known in-house as Resources, Energy and Environment; Social Infrastructure and Offshore Facility; Industrial System and General-Purpose Machinery; and Aero Engine, Space and Defense. All of these fields impact the environment in some way. Moving forward, IHI intends to further reduce the environmental burdens of its product lifecycles by applying cutting-edge technologies and using its evaluation system to promote environmental-information disclosure.

## IHI performance cited in Climate Disclosure Leadership and Climate Performance Leadership Index

The CDP (Carbon Disclosure Project), a London-based non-profit organization that evaluates corporate initiatives to counter climate change, name IHI a high-performing company in the Climate Disclosure Leadership Index (CDLI) and Climate Performance Leadership Index (CPLI) in 2014.







The CDP provides responsible-investment information to a global list of 767 institutional investors managing total assets of 90 trillion USD. The CDP sends out a questionnaire to major companies worldwide to ask them to disclose their environmental strategies and CO2 emissions levels, which are then evaluated by the CDP.

In Japan, some 500 companies received the questionnaire. The top 10 percent (28 companies) of the respondents were selected as high-performing companies in the Climate Disclosure Leadership Index (CDLI) and 24 companies were named to the A List of the Climate Performance Leadership Index (CPLI).

IHI engages in businesses related to infrastructure development, energy and industrial systems, all of which are deeply related to the global environment. IHI makes every effort to take advantage of opportunities to lessen its environmental burden on society and thereby meet one of its important social responsibilities. Under the IHI Environmental Vision 2013, which is linked to the company's management policy, IHI is addressing environmental challenges centered on the themes of reducing environmental burdens through its products/services and business operations, and promoting Group environmental management.

Going forward, IHI will continue to tackle challenges as a global corporation that works to protect the global environment through collaboration with customers and business partners.

## IHI Group Basic Environmental Policy 💸



Global warming is becoming a pressing issue due to increasing greenhouse gas emissions. At the same time, worsening air quality has seen in readings of as high as PM2.5 in some locations, while waste caused by mass production or mass consumption continues to increase, showing that humankind's impact on the environment is getting worse.

Part of IHI's mission is to reduce the environmental burden of its operations and protect the environment in whatever way possible. The IHI Group Basic Environmental Policy was written to accord with IHI Group Basic Code of Conduct, Article 7: Responsibilities toward the Global Environment. This is one of IHI's many tireless, proactive approaches to mitigate its impact on the global environment.

### **IHI Group Basic Environmental Policy**

#### Article 1. Establishment of Environmental Management System

To ensure continuous improvement of environmental management, the IHI Group establishes an environmental management system, sets specific objectives and executes an action and a performance evaluation.

#### Article 2. Compliance with Environmental Laws and Regulations

The IHI Group complies with environment-related laws and regulations/agreements, policies/plans in related industries, and strives to stipulate and apply independent management standards to enhance environment management.

#### Article 3. Provision of Environmentally-Friendly Products

The IHI Group provides the society with the products/services that contribute to reduce environmental burdens.

#### Article 4. Reduction in Environmental Burdens in Business Activities

The IHI Group strives to preserve environment and reduce environmental burdens in its all business activities.

#### **Article 5. Environmental Education**

The IHI Group, through environmental education, raises awareness of all people engaging in operations, including officers, employees, and temporary staff of IHI Group companies, thereby they are able to act having concern with environmental problems on their own.

#### Article 6. Disclosure of Information

The IHI Group actively participates in the society, disclose information, and develop communications to commune with local communities and preserve regional environment.

Revised October 2015

## IHI Group Environmental Vision 💲



### **Basic Policy and Code of Conduct**

At IHI, we work to protect the environment, especially in communities where we have production bases. It is also our mission to reduce the environmental burden of our products and services, as well as contribute to sustainable development.

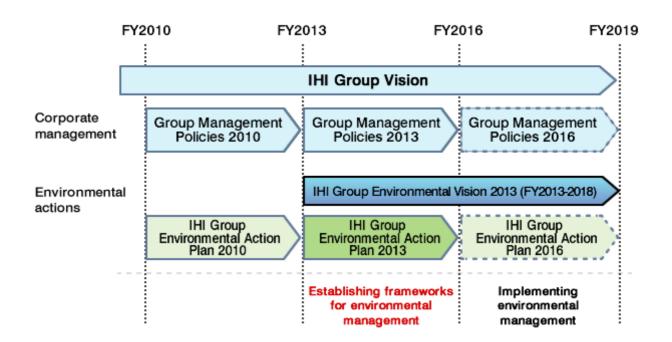
To implement our IHI Environmental Vision 2013, environmental action plan through FY2018, we currently are implementing a three-year plan based on IHI Group Management Policies 2013, our overall business plan.

FY2014 was the second year of our IHI Group Environmental Action Plan 2013. We now are developing a foundation for managing IHI in a more environmentally friendly manner by the end of FY2015. In the three years beginning in FY2016, IHI will ensure that environment-conscious operations prevail throughout the Group.

### IHI Environmental Vision 2013 (FY2013 - 2018)

IHI, as a responsible global group, strives to help preserve the global environment on a continuous basis through cooperation with customers and business partners around the world.

#### **Environmental Action Plan**



### **Environmental Vision**

What are the goals under the IHI Group Environmental Vision 2013 ending in FY2018? Described below are the goals IHI hopes to accomplish by lowering the environmental burdens of its products/services and business operations and by conducting other environmental-management activities.

### Reduce environmental burdens of products/services

- Limit CO2 emissions from IHI operations to approximately 300,000 tons/year. Cut emissions from products/services worldwide by 10 million tons/year.
- Specific targets for reducing CO2 emissions from products/services are stipulated in the goals for each business division or sector.
- Increase Group-wide sales ratio of eco-friendly products to over 70%.
- Foster recognition among customers and employees that using IHI products/services promotes environmental protection.
- Win awards with IHI products for contributing to global environmental preservation.

### Reduce environmental burdens of business operations

- Publicize and achieve the CO2 emissions-reduction target for Group-wide business.
- Implement energy-saving activities at production sites and offices to avoid wasting electricity or fuel.
- Promote green procurements to prioritize eco-conscious suppliers.
- Stringently manage chemical substances in products to further gain customer trust.
- Make biodiversity protection a larger part of IHI's business.

### Implement other environmental-management activities

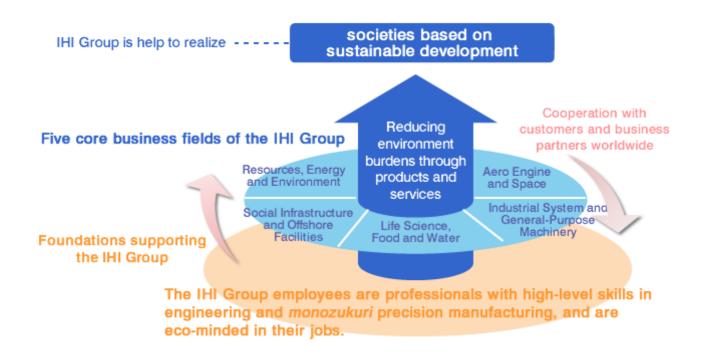
- Share targets for reducing environmental burdens among production sites in Japan and overseas.
- Leverage environmental management systems in main production sites worldwide to support IHI's consistent environment-friendly operations.
- Globally share information on how to comply with increasingly strict environment-related laws and regulations.
- Implement internal environmental audits to ensure that problems are quickly identified and addressed with countermeasures.
- Inform the Group about the status of environmental activities via in-house journals, intranet, etc.

### **Environmental Vision**

IHI, aiming to build sustainable societies to protect the global environment, is helping to reduce environmental burdens in five business areas, which were newly defined when IHI introduced its new Environmental Vision: Aero Engines and Space; Industrial Systems and General-purpose Machinery; Life Science, Food and Water; Social Infrastructure and Offshore Facilities; and Resources, Energy and Environment.

Since IHI cannot achieve such goals alone, it is working closely with customers and business partners worldwide.

IHI also is taking measures to ensure that everyone in the Group acts with environmental awareness in their respective operations, leveraging their high technological capabilities and *monozukuri* precision-manufacturing skills as professionals.



### Actions to Achieve Environmental Vision

IHI has identified three major categories of activities under its Environmental Vision:

- 1. Measures to save energy and mitigate climate change
- 2. Measures to establish recycling-oriented societies
- 3. Measures to protect the environment
- Chemical substances and environmental risks
- Biodiversity

IHI's business activities can be classified into nine basic categories: management, sales, R&D, design, procurement, manufacturing, transportation, construction and testing. The products and services resulting from these activities are classified into three stages: usage, maintenance and disposal. The following table describes the specific actions needed in these various categories to raise the environmental awareness of IHI employees.

		Action for each process				
Oper	ational	Energy souing		Environmental protection		
process		Energy saving to combat climate change	Creation of resource-recycling societies	Chemical substance reduction Environmental risk reduction	Biodiversity protection	
	Management	Group-wide env	<ul> <li>Balancing biodiversity and business needs</li> <li>Establishing basic policies</li> </ul>			
	Sales	Proposing envir	friendly productss ronmental-preservatio ts to reduce CO2 emissio	•		
Redu	R&D	<ul><li>Developing and</li><li>Expanding eco-</li></ul>	Separang occ monary producto			
iced im	Design	<ul> <li>Expanding eco-conservation products</li> <li>Publishing CO<sub>2</sub> emissions reduction results</li> <li>Design and develop • Control chemical</li> <li>products based on 3 Rs substances in products</li> </ul>				
Reduced impact of operations	Procurement	⊚Green procuren	Control chemical substances in products	Survey and identify use of scarce resources     Address conflict minerals		
tions	Manufacturing	Conserve energy at production sites and in	Reduce waste at production sites and in transport	Reduce use of substances covered by PRTR	Protect     biodiversity at     production sites	
	Transportation	transport		Reduce environmental risks		
	Construction	Conserve     Measure and     Tightly manage substated to construction sites construction sites     Reduce environment rices				
	Testing					
Reduced environmental burdens of products/serv	Usage	<ul> <li>Provide eco-friendly products</li> <li>Provide eco-conservation products</li> </ul>				
Reduced environmental burdens of products/services	Maintenance		icts to reduce CO2 ( improve environmer			
es	Disposal					

## **Environmental Management**



### Companies Covered in Environmental Data

The scope of IHI's environmental-management activities was expanded to include consolidated Group companies, including ex-Japan affiliates, in FY2014, the second year of the three-year IHI Environmental Action Plan 2013. FY2014 data provided in this chapter were still under review as of July 15, 2015 and may vary by up to 10% according to changes based future calculations and scope.

The conversion factor of 0.418 kilograms of CO<sub>2</sub> per kilowatt is used to calculate CO<sub>2</sub> equivalents as electricity.

### Performance in FY2014

IHI formulates a new environmental action plan every three years. The IHI Environmental Action Plan 2013, launched in FY2013, is centered around the following three core strategies:

- Strengthen Group environmental management
- Reduce environmental burdens through products and services
- Reduce environmental burdens through business activities

Initiatives were focused on five key challenges, as shown in the table. Internal audits conducted throughout the year graded our efforts on a scale of 1 to 4. In terms of strengthening of environmental management, we achieved our targets for reduced environmental impact and better environmental communication, but failed to make satisfactory achievements in the creation of a Group-wide environmental-management system due to the many challenges of creating a system to gather environmental-burden data. As for reducing the environmental impact of products and services, we launched a certification system to identify environmentally friendly products, but did not disclose quantified contributions to CO2 reductions. As for reducing the environmental impact of our business activities, energy consumption per basic unit was reduced by more than 1%, but we failed to complete our review of internal rules for waste management. Given that some of these unachieved goals are essential to our becoming a truly environmentally aware business, we intend to speed up efforts to achieve these targets within FY2015.

### Environmental Action Plan 2014: Performance in FY2014

	Challenges (boldface indicates top priority)				
1. Str	Strengthen environmental management				
	1-1	Establish Group-wide environmental management system	Δ		
	1-2	Utilize Environmental management systems	Δ		
	1-3	Reduce Environmental risks	©		
	1-4	Environmental communication	©		
	1-5	Provide environmental-information at supply chain	0		
2. Re	2. Reduce environmental burdens through products/services				
	2-1	Further Quantitative reduction of CO2 emissions	0		
	2-2	Expand Eco-friendly and eco-protection products	0		
3. Re	duce env	ironmental burdens through business operations			
;	3-1	Promote Energy conservation and climate-change prevention	©		
;	3-2	Promote Creation of resource-recycling societies	Δ		
;	3-3	Management of information about chemical substances in products	©		
;	3-4	Management of chemical substances at worksites	0		
;	3-5	Promote green procurements	Δ		
;	3-6	Measure the impact of business activities on biodiversity	0		

### **Top-priority Agenda**

Described below are the steps taken in FY2014 to tackle our top-priority agenda and measures planned for future implementation.

#### 1. Established Group-wide environmental management system

We expanded the scope of our environmental data to include consolidated Group companies. Data on major categories of environmental burden were collected and compiled in the database. We discussed impact-reduction targets were discussed and we began managing data on a more consistent basis for environmentally friendly business.

Major ex-Japan businesses were assessed for their progress with environmental initiatives, based on which we began strengthening communications with their environmental personnel, as required.

#### 2. Quantitative reduction of CO2 emissions

To further reduce CO<sub>2</sub> emissions and other greenhouse gases, we calculated the amounts of CO<sub>2</sub> emissions associated with major IHI products. Based on these calculations, we began expanding our range of products capable of contributing to CO<sub>2</sub> emissions reduction.

#### 3. More eco-friendly and eco-protection products

We use a system of five icons to indicate the environmental performance of our products in various categories. In FY2014, we displayed many of our top performers at the Eco Products Exhibition to demonstrate our commitment to providing society with eco-friendly and eco-protection products. Going forward, we will continue to leverage our in-house certification scheme to accurately identify and publicize products that are highly green-oriented.

#### 4. Energy-conservation and anti-climate-change measures

IHI makes every effort to reduce energy consumption in its operations. To reduce CO2 emissions, company worksites and offices use equipment efficiently and upgrade to more energy-efficient equipment as required. In FY2015, we will set new CO2 emissions reduction targets according to the new scope of companies covered in environmental data.

#### 5. Management of information about chemical substances in products

In FY2014, we assisted IHI companies in developing and strengthening their systems for managing chemical substances. In FY2015, we will continue to strengthen IHI's management of chemical substances.

### External Recognition of IHI Group Environmental Efforts

IHI actively participates in environmental action surveys. In FY2013, we took part in the Nikkei Environmental Management Survey and the CDP (formerly known as Carbon Disclosure Project). A number of IHI activities were recognized for their beneficial impact.





### Nikkei Environmental Management Survey

Nikkei Inc. conducts an annual survey of Japan's leading companies to evaluate their environmental initiatives and business efficiency. Evaluations cover five categories: environmentally friendly business, pollution and biodiversity, resource recycling, products, and global warming. The respondents are scored in each category using a 100-point scale for a maximum of 500 points.

In FY2014, IHI scored strongly in environmentally friendly business, raising its overall score from the previous year.

#### **■**Survey Results

FY2013: 403 (123rd out of 438 manufacturers)
FY2014: 411 (129th out of 419 manufacturers)

#### **CDP**

Formerly known as the Carbon Disclosure Project, the CDP is a non-profit organization established by responsible investors worldwide. Every year it discloses the results of questionnaires sent to corporations and local governments to urge more action in tackling climate change. The CDP index measuring such action is relied upon by institutional investors worldwide.

In FY2014, in accordance with our new IHI Group Environmental Vision, we decided to make our environmental action data available to the public, which resulted in our receiving a higher disclosure score than before and moved our overall performance rating up to "A."

#### ■Survey Results

FY2013 disclosure: 91 out of 100 Overall performance: B FY2014 disclosure: 97 out of 100 Overall performance: A

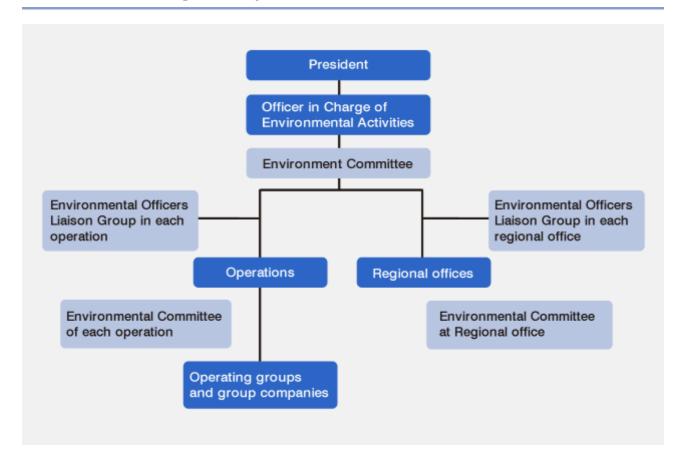
### **Environmental Management Systems**

IHI's Environmental Committee, chaired by the officer in charge of environmental activities, formulates Group-wide policies for environmental activities and then evaluates and follows up on these activities. The policies and related decisions are shared with principal domestic and ex-Japan affiliates through the Business Division and Sectors Environmental Officers Liaison Group.

In addition, Environmental Officers Liaison Groups help to facilitate environmental activities at each regional office and worksite.

Also, each business division and sector formulates its own environmental activity plan every fiscal year. Typical themes include investment in environmental facilities, legal and regulatory compliance, and activities to reduce environmental burden, such as energy-saving and waste-reduction measures. Each unit follows up on its own progress by implementing the PDCA cycle.

### **Environmental Management Systems: Chart**



### ■ IHI Regions and Worksites

Regions/Worksites	Acquisition	Certifying Body
Yokohama	July 1998	JQA
Musashi and Soma	December 1999	BVJ
Aichi	May 2000	NK
Aioi	June 2000	JQA
Kure	June 2000	JQA
SBU Energy & Plant Operations Gas Process SBU	March 1999	LRQA

### ■ Group Companies in Japan

Sector	Company	Acquisition	Certification Body
	INC Engineering Co., Ltd.	March 2000	BSK
Aero-Engine & Space Operations	IHI AEROSPACE Co., Ltd.	May 2002	BVJ
Space Operations	IHI Aero Manufacturing Co., Ltd.	September 2000	DNV
Infrastructure	IHI Infrastructure Systems Co., Ltd.	June 2012	JQA
Operations	IHI Construction Service Co., Ltd.	March 2011	MSA
Rotating Machinery Operations	IHI Compressor and Machinery Co., Ltd.	September 2000	DNV
Vehicular Turbocharger Operations	IHI Turbo Co., Ltd.	April 2002	DNV
	IHI Enviro Corporation	November 2003	JQA
	IHI Plant Engineering Corporation	March 2007	LRQA
Energy & Plant Operations	Diesel United, Ltd.	June 2004	JQA
	NIIGATA POWER SYSTEMS Co., Ltd.	May 2004	LRQA
	NICO Precision Co., Inc.	September 2001	LRQA
Intelligent Information	IHI Inspection & Instrumentation Co., Ltd.	March 2000	JAPEIC
Management Headquarters	MEISEI ELECTRIC Co., Ltd.	November 2001	JQA

### ■ Ex-Japan Group Companies

Sector	Company Acquisition		Certification Body
Machinery & Logistics Systems Operations	IHI lonbond AG July 2004		Swiss Association for Quality and Management Systems
	Changchun FAWER-IHI Turbo Co., Ltd.	February 2014	Société Générale de Surveillance
	IHI Charging Systems International GmbH	March 2013	Kiwa International Cert GmbH
Vehicular	IHI Charging Systems International Germany GmbH	May 2013	Kiwa International Cert GmbH
Turbocharger Operations	IHI Charging Systems International S.p.A.	April 2014	TUV Italia Srl
	IHI TURBO (THAILAND) CO., LTD.	November 2004	BV
	Wuxi IHI Turbo Co., Ltd.	April 2014	Xing Yuan Certification Centre Co. Ltd.
	Jurong Engineering Limited	November 2002	LRQA
Global Marketing Headquarters	IHI ENGINEERING AUSTRALIA PTY. LTD.	August 2013	SAI GLOBAL

Abbreviation

BSK : Defense Structure Improvement Foundation

BV: Bureau Veritas

BV(J): Bureau Veritas Japan DNV: Det Norske Veritas

JAPEIC: Japan Power Engineering and Inspection Corporation

JQA : Japan Quality Assurance Organization LRQA : Lloyd's Register Quality Assurance MSA : Management System Assessment Center

NK : Nippon Kaiji Kyokai

### Issues Identified in Third-party Reviews

As the result of external reviews conducted by third-party organizations in FY2014, it was determined that more could be done in the following areas:

- Themes, objectives and targets
- Records of environmental action
- Emergency preparedness
- Identification and assessment of environmental matters

#### Issues Identified in Internal Audits

Internal audits in FY2014 identified problems related to:

- Themes, objectives and targets
- Records of environmental action
- Operation and management of environmental equipment
- Environmental training

## Compliance with Environmental Laws and Regulations

Incidents relating to environmental accidents, complaints or administrative guidance that occurred in FY2014 are enumerated in the table below. Appropriate action was, or is being, taken to address problems related to facilities and human factors. The facilities in question have been upgraded and their management practices are being modified accordingly. Also, resources have been committed to train personnel about preventative action that can lower potential risk and lead to zero occurrence.

### Violations and Other Incidents over Past 5 Years in Japan

	FY2010	FY2011	FY2012	FY2013	FY2014
Accidents	1	1	2	2	3
Administrative Guidance	0	4	2	0	5
Complaints	3	1	2	1	5

#### **Enviromental Accident**

Incident: Cold weather froze waste water in a pipe, causing the pipe to burst.

Response: Emergency repairs were carried out. To reduce future risk, IHI plans to remove the waste-water pipe by setting up a waste water processor next to the facility.

#### **Administrative Guidance**

Incident: A local government ordered IHI to modify its plan to lay water pipe, take measures to prevent backflow, inspect for microscopic parasites more frequently and move water-intake location.

Response: IHI followed the guidance.

#### **Complaints from Local Communities**

Incident 1: A neighboring company complained about sprayed paint emitted by an IHI facility.

Response: IHI provided the company with covers to shield automobiles from paint mist and gave a prior notice of plans to use painting sprays.

Incident 2: People complained about noise made by thermally expanded ENG containers, dump trucks parking around an IHI building under construction and litter scattered around a parking lot for IHI employees. Responses: IHI eliminated the causes of these incidents and intensified monitoring.

### **Environmental Training and Awareness**

Environmental training at IHI comprises level-specific training provided through Group-wide educational programs and other training carried out in each location.

Level-specific training helps to familiarize participants with their duties to protect the environment and to reduce impact in accordance with IHI's environmental action policies and targets.

Location-specific environmental training is conducted by internal and external experts to improve the skills of specialized personnel in specific regions, worksites and major group companies. This training also includes ISO14001 skills for internal auditors and know-how for ensuring the effectiveness of environment-related activities.

In FY2014, training included briefings and discussions on IHI Environmental Vision and IHI Environmental Action Plan for senior managers from two ex-Japan companies.

## Reducing the Environmental Burden of Products / Services



### **Environmental Friendly Product Certification**

IHI has introduced an in-house certification scheme to identify products and services that offer outstanding environmental performance.

IHI works to enhance the eco-friendliness of products spanning resources, energy and environment; social infrastructure and offshore facilities; industrial systems and general-purpose machinery; and aero engines, space and defense. To help reduce environmental burden throughout product lifecycles, the certification scheme facilitates adoption of the latest environmental technologies and the appropriate disclosure of environmental information.

### Certification process

The Environment Committee, a Group-wide organization, evaluates and certifies environmentally friendly products based on criteria set by IHI. Certifications are issued in the following categories:



### Energy efficiency

Improves energy efficiency, recovers exhaust energy and/or stabilizes energy consumption



### Reduced greenhouse gas emissions

Reduces, absorbs, captures, stores and decomposes greenhouse gas emissions; produces renewable energy; and/or reduces fluorocarbons



### Resource saving

Reduces natural-resource consumption during the manufacture, usage or maintenance stages, and/or reduces fluorocarbons



### Reduced environmental risks

Reduces waste/pollution in terms of air, water, soil, noise, vibration, ground sinking and smell, and/or promotes environmental-data monitoring



### Biodiversity protection

Helps to protect ecological habitats and/or locate facilities from an ecological viewpoint

### Certified products

IHI certified four products (see below) as environmentally friendly in FY2014. Going forward, the range of product examinations will be expanded with the aim of identifying more products that are certifiable.

#### ■Vehicular turbocharger

IHI's most recent vehicular turbocharger features downsized engine displacement and reduced fuel consumption, which were realized by improving output power and torque. It also offers less noise and vibration than the previous model.







Energy F efficiency

Resource saving

Reduced environmental risks



#### ■EvaCryo® vacuum vapor degreaser

EvaCryo halves both the power consumption and solvent consumption compared with its predecessor. It also offers improved cleaning power yet requires just one-tenth the amount of time to degrease components.





Energy efficiency

Resource saving



## ■Heat Recovery (HR) Series 20kW small-scale binary electric power generator

The Heat Recovery Series generates electricity using lowtemperature water, which had been a challenging technological process.





Reduced greenhouse gas emissions

Resource saving



### ■Toyosu Foresia Eco-friendly Building

Toyosu Foresia, a building designed to save energy, uses sunlight concentrators to light indoor spaces and generate electricity. It also reuses wastewater. The highly quakeresistant building is well equipped for natural disasters.







Reduced greenhouse gas emissions



Resource saving



Reduced environmental risks



### Activities in FY2014

#### ■IHI Exhibits at Eco-Products 2014

IHI exhibited at Japan's foremost environmental fair, Eco-Products 2014, which took place at Tokyo Big Sight from December 11 to 13, 2014. The booth presented IHI's ongoing environmental initiatives and gathered visitor feedback that IHI hopes to reflect in its future activities. The booth was visited by more than 5,000 people, including high school and elementary school students.



IHI booth

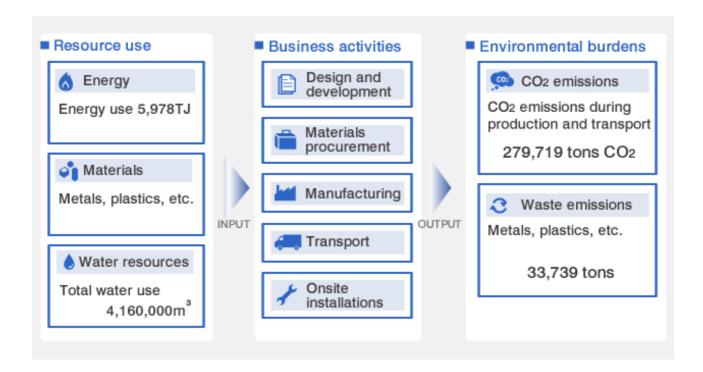
A questionnaire distributed to people of age 18 or older revealed that the booth helped most visitors to better grasp IHI's environmental products and programs. The survey also showed that people have high expectations for IHI's environmental products, services and technologies. In response, IHI will continue to strengthen its environmental initiatives to meet the expectations of its diverse stakeholders.

# Reducing the Environmental Burden of Business Activities



### **Materials**

IHI is working to lower its environmental burdens by reducing the amounts of materials used and generated by its business activities. The "material balance" in IHI business in FY2014 is shown below.



### Efforts to Cut CO<sub>2</sub> Emissions from Production

Extreme weather and rising sea levels seen around the world in recent years are reportedly caused by global warming. In recent years, Japan experienced a record number of days when the temperature was at least 35°C in the summer, and the country was hit with many torrential rains and tornados, phenomena that once were uncommon in Japan.

IHI is taking action to reduce its CO<sub>2</sub> emissions, one of the prime suspects behind global warming. We achieved our goal of cutting CO<sub>2</sub> emissions by more than 20% in FY2012 compared with FY2006, a success that was repeated in FY2013 and FY2014. For factories, we aim to reduce CO<sub>2</sub> emissions per basic unit by at least 1%.

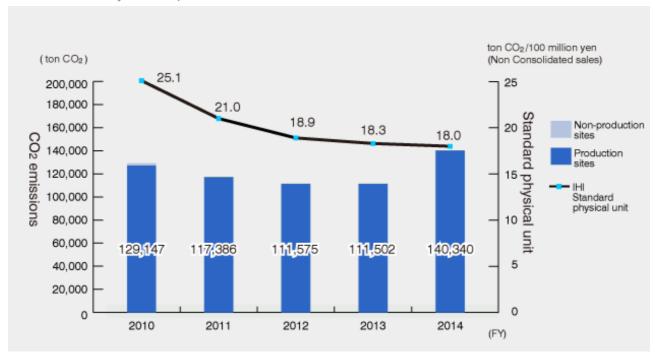
IHI's CO2 emissions began decreasing in FY2010, but in FY2014 they increased 29,000 tons, or 26%. IHI's standard physical unit, which is calculated by dividing CO2 emissions by net revenue, is shown in the line graph below.

CO2 emissions per basic unit decreased from FY2010 to FY2013, but then increased 11% in FY2014, although the figure was still 19% below the most recent five-year peak in FY2010.

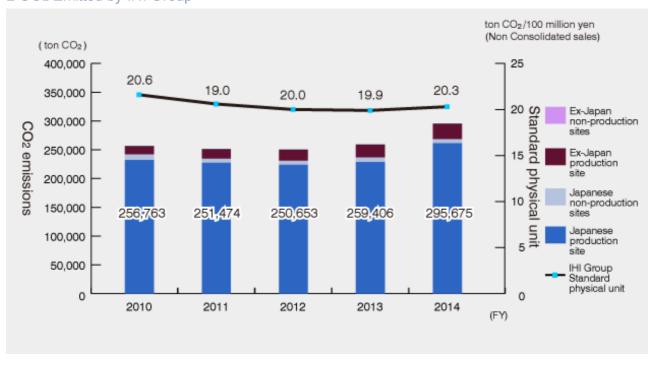
IHI's CO2 emissions were in the range of 250,000 tons to 260,000 tons between FY2010 and FY2013. But FY2014 saw a 14% increase, which was attributed to a 26% increase in the number of IHI nonconsolidated factories and a 21% increase among ex-Japan affiliates.

IHI's CO2 emissions per basic unit increased 2%, although this was 6% below the five-year peak in FY2010. A new reduction target has been set for FY2015. IHI will strive to achieve further reductions in CO2 emissions from activities by facilitating energy savings and facility renewals.

### ■ CO<sub>2</sub> Emitted by IHI Corporation



#### ■ CO<sub>2</sub> Emitted by IHI Group



### **Reduction of Energy Consumption**

Energy-saving training by external experts has been organized at major business sites since FY2009. In FY2014, training tailored to the requirements of specific business units was provided eight times at IHI offices and eight times at other Group companies. Post-training results were closely monitored to ensure successful implementation.

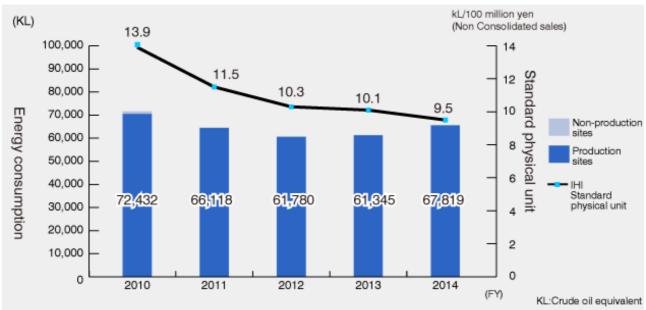
Energy consumption by IHI Corporation has been decreasing since 2009 thanks to energy-saving measures. The graph below indicates the standard physical unit calculated by dividing the amount of energy consumption by consolidated sales. Compared to the standard physical unit peaked in 2010, IHI succeeded in a reduction of 32% in FY2014.

Energy consumed annually by the Group decreased from FY2010 to FY2013, falling below 140,000 kiloliters (crude oil equivalent), but rose in FY2013. In FY2014, an increase of 7% was recorded.

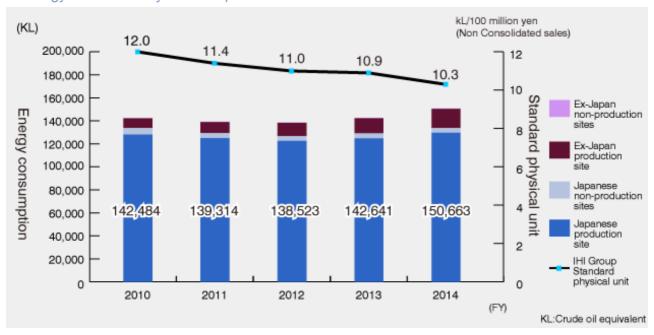
The IHI Group's energy consumption per basic unit has been decreasing since the FY2010 peak. FY2014 saw a 6% decrease, 14% below FY2010.

We continue to reduce energy consumption in production activities by ensuring the efficient use of equipment, or upgrading equipment as required.

#### ■ Energy Consumed by IHI Corporation



#### ■ Energy Consumed by IHI Group



### Reduction of Energy Consumption in Distribution

IHI is saving energy in its distribution operations with the aim of reducing consumption by at least 1% annually over the medium to long term.

Large products and made-to-order products account for a major portion of IHI's products. Transportation of these products is subject to many restrictions related to weight and size. Factory workers who are responsible for product transportation look for the best transportation means to ensure not only safe delivery, but also high efficiency for reduced energy consumption.

IHI has set reduction targets for each factory and has introduced a mechanism for monitoring and assessing the results.

For each product shipped, we record weight, transportation distance, transportation means, energy consumption, energy consumption rates and CO2emissions to visualize energy consumption by individual factories and IHI overall on a monthly basis. The data are reported to IHI's Environment Committee on a quarterly basis and used to improve energy efficiency.

IHI also interviews factory workers responsible for product transportation to check product transportation means, possible restrictions on transportation, efforts to switch transportation to trains and vessels, and efforts to improve loading efficiency of trucks. Know-how obtained through these interviews is shared across the Group.

### Helping to Build Recycling-oriented Societies

### Improving waste management

IHI's regional offices pursue reduction, reuse and recyclingThe 3 Rs-as well as appropriate disposals of industrial waste.
In FY2014, we commissioned Amita Corporation to analyze
and review our contracts with waste-disposal companies to
ensure that waste emitted by IHI is collected, transported and
disposed properly. As a result, some contracts were awarded
to new disposal companies and more strict waste
management was requested for certain existing contracts.



An inspection of how industrial waste is stored

IHI sends representatives to factories of selected affiliated companies overseas to share waste-reduction best practices. In FY2014, IHI representatives visited a turbocharger maker in the United States and a steel structure manufacturer in Vietnam, both of which are making efforts to reduce waste. Among the initiatives recommended are using returnable containers to reduce packing materials and recycling more wastes by segregating them strictly. Such measures are help to increase resource recycling in society.



Returnable containers at IHI Turbo (Thailand) Co., Ltd.



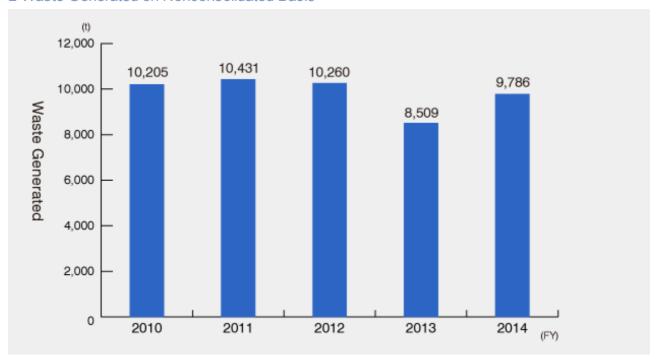
Returnable containers at IHI Charging Systems International Germany GmbH (Germany)

### Reduction of Waste and Water Consumption

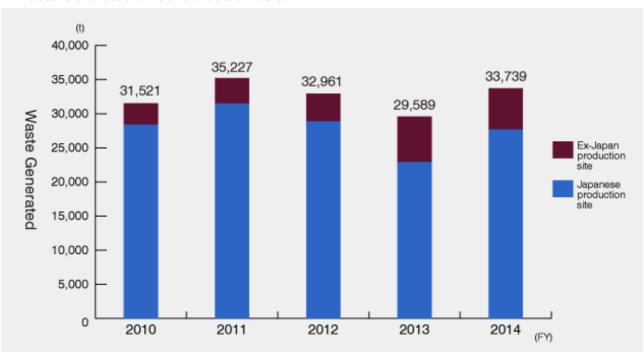
IHI works to reduce, reuse and recycle waste and to cut consumption of water, including clean water, industrial water and ground water. In FY2014, the amounts of waste emitted by IHI increased in Japan and decreased overseas, leading to a 14% reduction across the Group.

The amounts of water consumed by IHI on a nonconsolidated basis increased both in Japan and overseas, leading to a 3% increase across the Group.

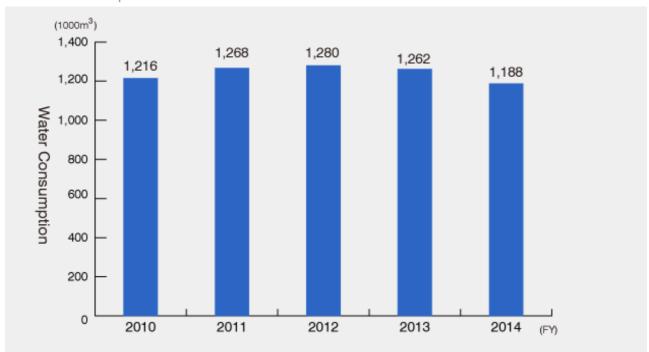
### ■ Waste Generated on Nonconsolidated Basis



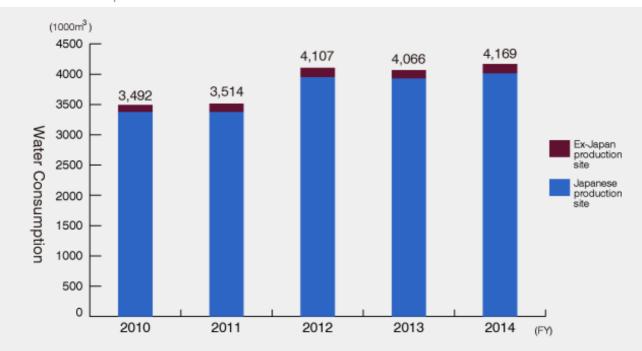
### ■ Waste Generated on Consolidated Basis



### ■ Water Consumption on Nonconsolidated Basis



### ■ Water Consumption on Consolidated Basis



### Management and Disposal of Electric Equipment Containing PCBs

In FY2009, IHI began detoxifying electric equipment it produced that contained polychlorinated biphenyl (PCB). So far, 42% of such equipment has been detoxified.

### Addressing Soil Contamination

IHI launched a three-year project in 2011 to examine data concerning officially designated hazardous substances\*, oils and fats used on land (mainly production sites) owned by the Group. We completed our survey of 68 former and current production facilities in March 2013.

If contamination is discovered on land where building construction, expansion or renovation is planned, the land must be thoroughly examined and treated, and the authorities must be notified. In some cases, this can raise costs in terms of time or money, and even lead to termination of a project in certain instances. By proactively conducting preliminary studies of possible contamination, we can act sooner to forecast expected costs and take steps to minimize delays. This is why we are continually updating such data every year.

We also use the findings from such studies to help minimize risks due to possible changes in the characteristics of contaminated soil.

\* 25 substances, such as lead, hexavalent chromium and mercury, listed in Article 2 of Japan's Soil Contamination Countermeasures Act,

### Management of Information on Chemical Substances in Products

## Actions to Chemical Substances and Pollutant Release and Transfer Registers (PRTR)

IHI is developing a system to manage chemical substances used in its supply chain. Under the guidance of an external consultant from Mizuho Information & Research Institute, Inc., we are working with IHI Star Machinery Corporation, which manufactures agricultural equipment.

We specifically request suppliers in our upstream supply chain not to use or add substances that are prohibited in products supplied to us. We have also set up Review Groups, with the Quality Assurance Division serving as the Executive Office, to help monitor this process and ensure that information is shared between various departments, including Research & Development, Production, Manufacturing, Sales Planning and Logistics. Activities are monitored and managed on a monthly basis, and the results are reported to customers in our downstream supply chain.

Data obtained from initiatives carried out with IHI Star Machinery Corporation are disseminated horizontally throughout IHI. Our tireless management of information on Group-wide use of chemical substances is important not only for compliance with laws and regulations but also to ensure that we meet customer requirements.

IHI also monitors each worksite's release of designated chemical substances into the atmosphere, public waters, soil, etc., or transfer to off-premises locations. This is done in accordance with the Pollutant Release and Transfer Register (PRTR), and the government is notified accordingly.

### ■ IHI: PRTR Act Class I Chemical Substances

Cabinet Order No.	Substance	Released	Transferred
37	Bisphenol A	0.0	5.1
53	Ethylbenzene	39.1	7.4
69	Zinc chromate	0.0	0.0
80	Xylene	75.5	14.3
87	Chromium and chromium (III) compounds	0.0	44.9
88	Chromium (VI) compounds	0.0	0.6
230	Lead and lead compounds	0.0	0.0
296	1,2,4-trimethylbenzene	0.6	0.0
297	1,3,5-trimethylbenzene	0.1	0.0
300	Toluene	7.9	1.3
308	Nickel	0.0	1.1
341	Piperazine	0.0	0.2
374	Hydrogen fluoride and its water-soluble salts	3.2	0.6
392	Normal hexane	0.3	0.0
400	Benzene	0.3	0.0
410	Poly(oxyethylene) nonylphenyl ether	0.1	0.9

### ■ IHI Group: PRTR Act Class I Chemical Substances

Cabinet Order No.	Substance	Released	Transferred
37	Bisphenol A	0.0	5.1
53	Ethylbenzene	91.9	12.5
69	Zinc chromate	0.0	0.0
80	Xylene	175.6	24.3
83	Cumene	0.0	0.0
87	Chromium and chromium (III) compounds	0.0	56.7
88	Chromium (VI) compounds	0.0	0.6
186	Dichloromethane; methylene dichloride	1.6	0.0
240	Styrene	1.0	0.0
286	Lead chromate	0.0	
296	1,2,4-trimethylbenzene	3.7	0.6
297	1,3,5-trimethylbenzene	0.4	0.0
300	Toluene	83.3	8.7
305	Lead and lead compounds	0.0	0.0
308	Nickel	0.0	1.1
341	Piperazine	0.0	0.2
374	Hydrogen fluoride and its water-soluble salts	3.3	5.8
384	1-bromopropane	5.9	0.5
392	Normal hexane	1.2	0.0
400	Benzene	0.3	0.0
410	Poly(oxyethylene) nonylphenyl ether	0.1	0.9
411	Formaldehyde	0.0	0.0
412	Manganese and its compounds	0.0	0.1
438	Methylnaphthalene	0.1	0.0
448	Methylenebis(4,1-phenylene) diisocyanate	0.0	0.2

# **Biodiversity Protection**

### Global Effort

The Convention on Biological Diversity was signed at the United Nations Conference on Environment and Development (Earth Summit) in 1992 for the main purpose of protecting biodiversity. In 1995, the Japanese government introduced its National Biodiversity Strategy, followed by the enactment of the Basic Act on Biodiversity in 2008, which urge businesses to partake in biodiversity protection. In 2010, the International Year of Biodiversity, the 10th Conference of Parties (COP 10) was held in Aichi Prefecture, Japan. The Strategic Plan of the Convention of the Biological Diversity, or the Aichi Target, adopted at COP 10 describes a course of action for interested parties at all levels, including corporations, to practice sustainable production and consumption, and presents the rationale for putting concrete measures into practice.

### **Group-wide Biodiversity Initiatives**

In keeping with the heightened interest in biodiversity protection, both in Japan and overseas, IHI has been conducting a variety of initiatives, as shown below.

#### ■ Aichi Worksites

In Chita, Aichi Prefecture, where IHI's Aichi worksite is located, 54% of the city is covered with woodland, lush greenery in an industrial zone, and parks. The IHI Aichi worksite has its own green preserve measuring nearly 70,000 m2, which studies have shown helps to protect biodiversity in the area. The Aichi worksite is conducting a variety of activities related to biodiversity protection, including nature watches for local residents and the planting of native plants by university students, which are presented herein.

#### Activities in FY2014

On September 20, 2014, the LOVE GREEN DAY 2014 event took place at IHI's Aichi Works, participated by 25 local residents. Hosted by the Japan Ecologist Support Society and supported by 11 neighboring companies, the event enabled participants to learn about the ecosystem of the forest located in the industrial area. They also enjoyed hunting for grasshoppers in IHI's sports ground and observing



Japanese trident gobies (fish), dragonfly larvae, diving beetles and other insects living in the water. The event helped people to understand that diverse creatures live on the IHI site and aroused their interest in forest creatures.

#### ■ Life Relay Project Receives Two Environment Ministry Awards

The Life Relay Project, a public support project sponsored by the Aichi worksite, received the Good Life Award Judging Committee's Special Award from a program - the Special Global Environment Protection Awards - organized by the Ministry of Environment. In addition, the Life Relay Project's Student Executive Committee received an Environment Minister Commendation for Green Day Distinguished Services to the Natural Environment. The Life Relay Project works to protect the local area's ecosystem in collaboration



Students planting native species

with the nonprofit Japan Ecologist Support Association, combining the efforts of students, companies and public agencies. The award is a testament to the Aichi worksite's commitment to promoting awareness of the natural environment for the benefit of future generations.

### ■ Chita City Nature Watch Group Invited to Aichi Worksite's Greenbelt

IHI's Aichi worksite invited the Chita City Nature Watch Group to observe its green preserve on September 28, 2013. Forty parents and children were selected to take part in activities such as badge making, nature quizzes and catching insects. The participants also enjoyed becoming more familiar with the insects and plants living in the worksite's greenbelt. The media covered the event and carried reports on local TV.



Participants enjoying a nature watch

#### ■ Planting Native Trees

IHI's Aichi worksite has a special garden for growing native plants in an effort to replace non-native trees with indigenous species for biodiversity protection. The seeds of native species were cultivated in the garden for eventual replanting in the green preserve. On February 21, 2014, members of the Life Relay Project's Student Executive Committee replanted the saplings after being briefed about native and non-native species and the importance of biodiversity.



Students replanting the saplings of native trees

#### ■ Aichi Environmental Excellence Award

IHI's Aichi worksite received the Outstanding Performance Award at the Aichi Environment Awards for FY2012. The awards program, created in conjunction with Expo 2005 held in Aichi Prefecture, recognizes local businesses and residents for outstanding efforts to conserve resources, save energy and recycle. The program has demonstrated to the rest of Japan that Aichi is one of the most environmentally friendly prefectures in the country. The IHI worksite's Life Relay Project, which was recognized as a pioneering model for protecting local ecosystems, is now having a ripple effect in other regions of the country.

#### ■ Nature Watch Organized by Chita City

An event entitled "Nature Watch? Let's Look for Autumn Insects" was organized by Chita City in September 2012 to provide local residents with a closer look at the insects and plants living in the Aichi worksite's green preserve. The nature watch, which was attended by 48 local residents, allowed participants to experience ecosystems and even catch insects to observe them up close.



Participants observing insects and plants

#### ■ Corporate Green Preserves Opened to Public

"Love Green Day 2012," an event organized by the nonprofit Japan Ecologist Support Association, which is associated with the Life Relay Project, was held in December 2012. Green preserves owned by businesses in the Chita Peninsula area were opened to the public for the event. The IHI Aichi worksite organized a project to plant seeds of native tree species, enoki and keyaki, in pots made of recycled cardboard.



Love Green Day 2012 participants

#### ■ Workshop Organized by Life Relay Project

In December 2011, the Life Relay Project organized a workshop for university students in the green preserve of IHI's Aichi worksite. A total of 23 university students from Aichi and Mie prefectures attended the workshop conducted under the guidance of the nonprofit Japan Ecologist Support Association, which is associated with the Life Relay Project. The students observed wild birds in the worksite's green preserve and learned about maintaining such eco-assets. They also discussed the findings of a survey about preserves that businesses are holding to help protect ecosystems on the Chita Peninsula. Another project was to compile a free guide and ecosystem map featuring corporate green preserves.



Workshop organized by the Life Relay Project

#### ■ Environmental Activity for IHI Employees and Children

IHI organized an environmental activity-Fun with the Environment - Let's Play and Learn in the Woodland Created by the Sea-for company employees and their children in September 2011. The event provided opportunities for the participants to observe about wildlife living in the IHI Aichi worksite green preserve and learn the importance of nature. The children enjoyed playing games, looking for wildlife and building cricket houses in IHI's natural preserve.



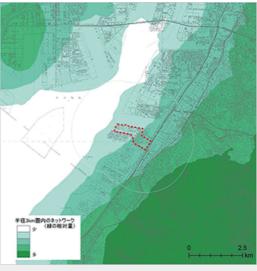
Building dwellings for crickets

Building dwellings for Japanese grass lizards

Building dwellings for Japanese grass lizards

#### Activities in FY2010

In FY2010, the IHI Aichi worksite began examining how to put its green preserve to practical use in terms of protecting biodiversity. It conducted an analysis of the surrounding ecosystem, of which the green preserve is one part, aiming to ascertain what roles the preserve serves now and what would be possible in the future from the perspective of biodiversity. Satellite imagery was used to evaluate the preserve and create a map to visualize how it connects with the surrounding area. It was learned that it is part of a larger ecosystem that links woodland on one side and the sea on the other, with the preserve forming the center of this natural network.



Map of preserve and the 3-km area around the Aichi worksite (Courtesy of Eco-Asset Consortium)

Also, a study of the worksite and neighboring area conducted in October revealed a range of animal species living in the preserve, including tanuki raccoons, kingfisher and pygmy woodpeckers, stag beetles, colias butterflies and much more. The findings were identical to those of surveys conducted in the surrounding area.



(Courtesy of Eco-Asset Consortium)

Stag beetle

Copper butterfly

As a result of the studies, it was determined that the green preserve of the Aichi worksite is helping to preserve biodiversity. Based on this conclusion, the company devised a plan for environmental preservation and enhancement to support the surrounding ecosystem, including to provide animals with sustainable natural habitats.



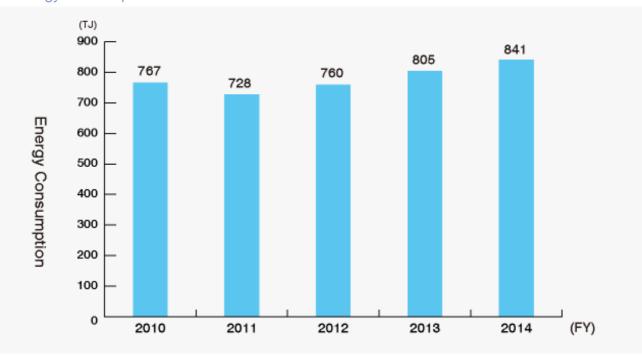
Green preserve utilization and improvement scheme (Courtesy of Eco-Asset Consortium)

# Site Data

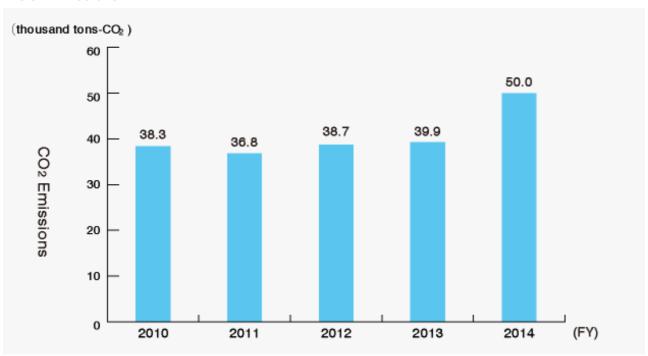


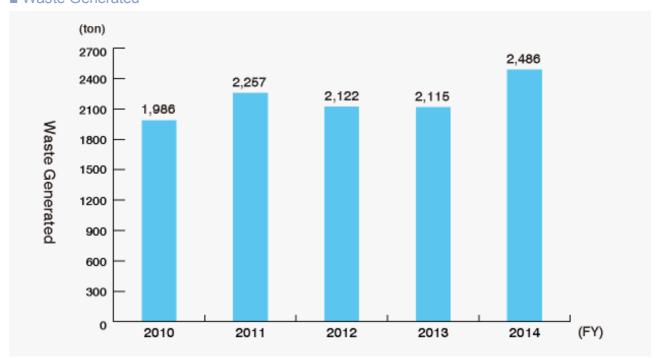
# Musashi / Soma Works

### ■ Energy Consumption

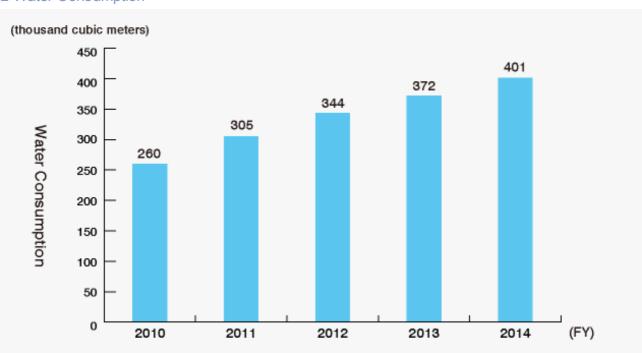


### ■ CO<sub>2</sub> Emissions



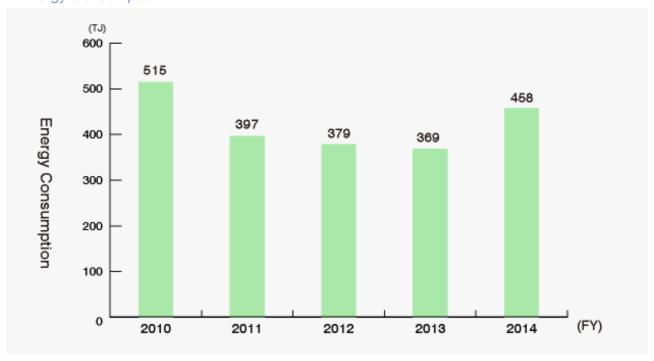


### ■ Water Consumption

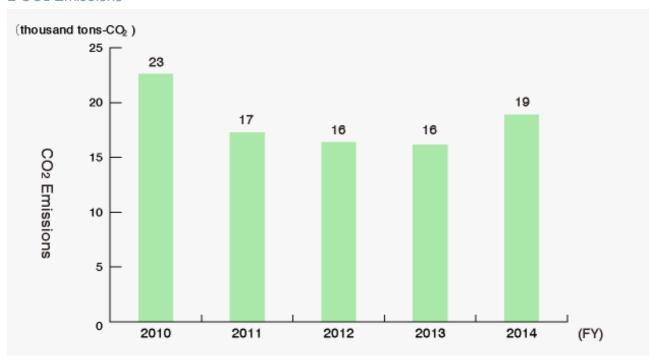


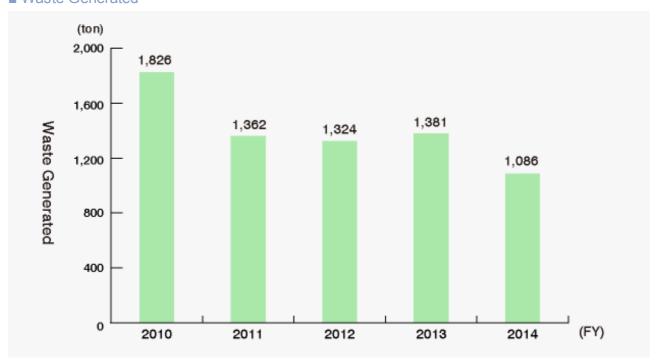
# Yokohama Works

## ■ Energy Consumption

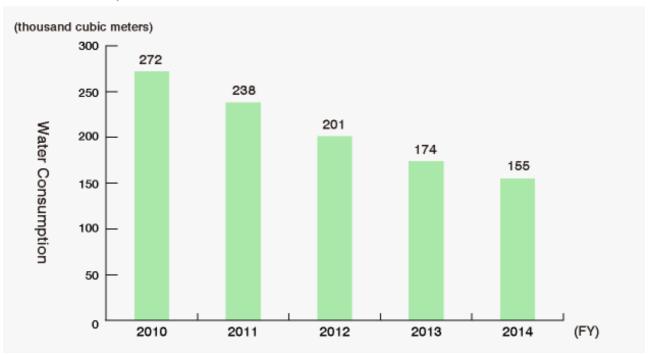


### ■ CO<sub>2</sub> Emissions



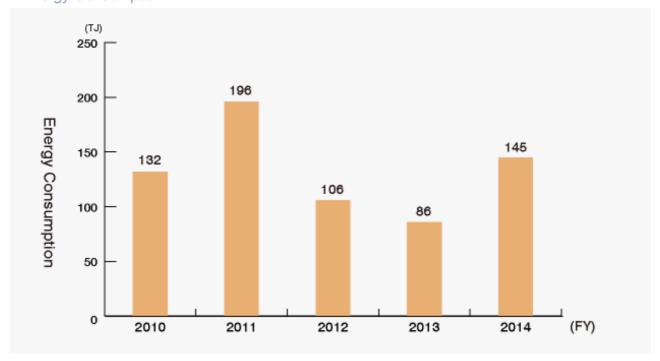


## ■ Water Consumption

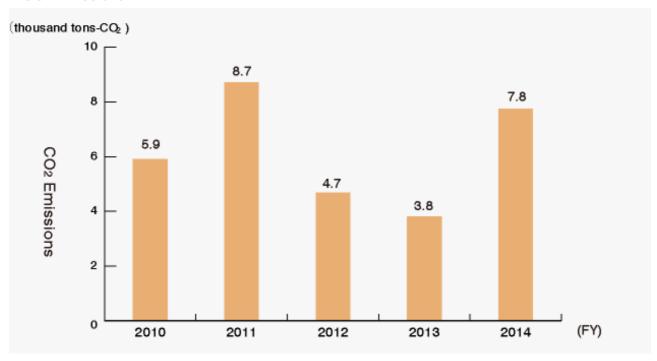


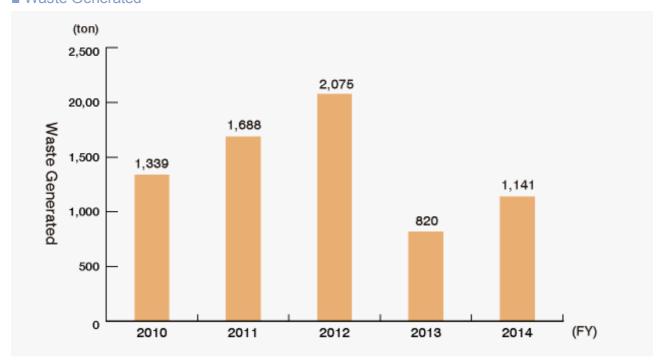
# Aichi Works

## ■ Energy Consumption

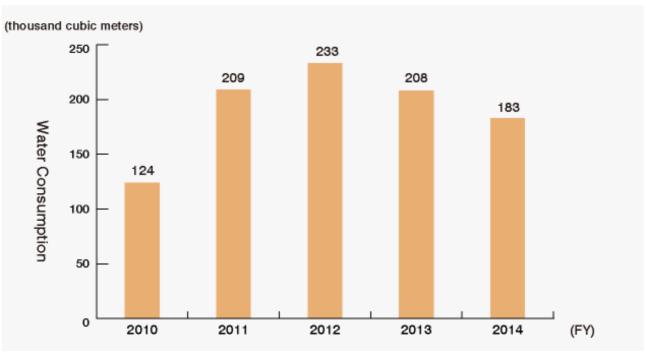


### ■ CO<sub>2</sub> Emissions



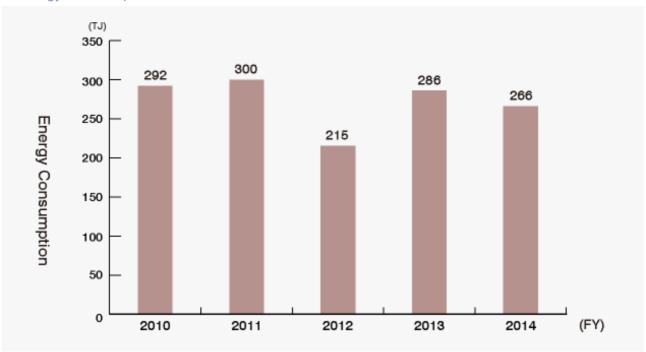


### ■ Water Consumption

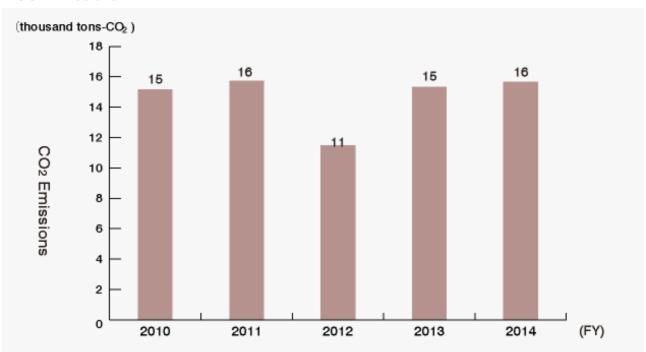


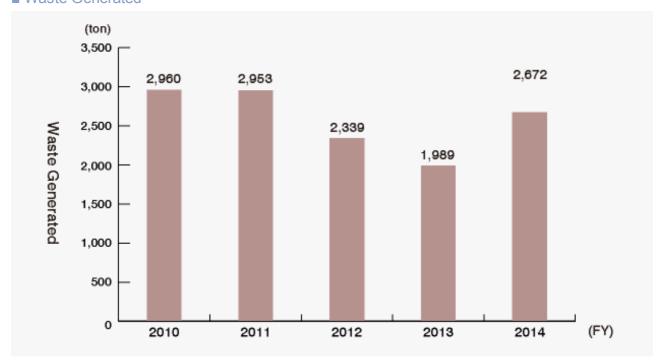
# Aioi Works

### ■ Energy Consumption

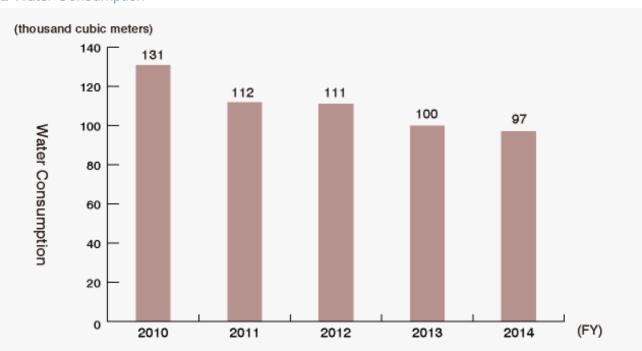


### ■ CO<sub>2</sub> Emissions



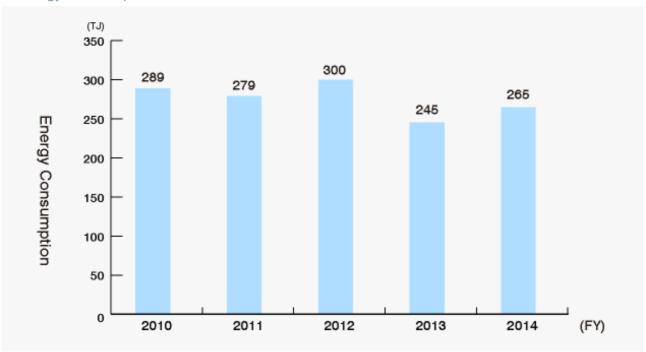


### ■ Water Consumption

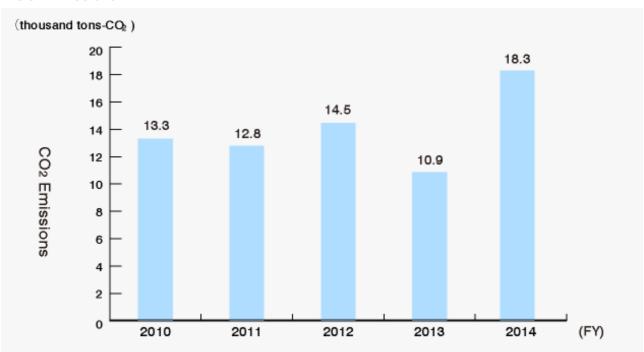


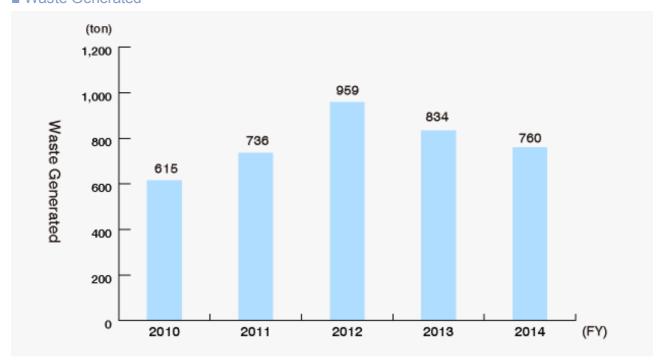
# Kure Works

## ■ Energy Consumption

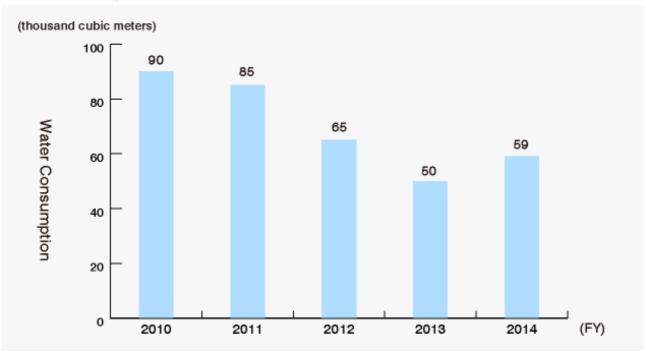


### ■ CO<sub>2</sub> Emissions



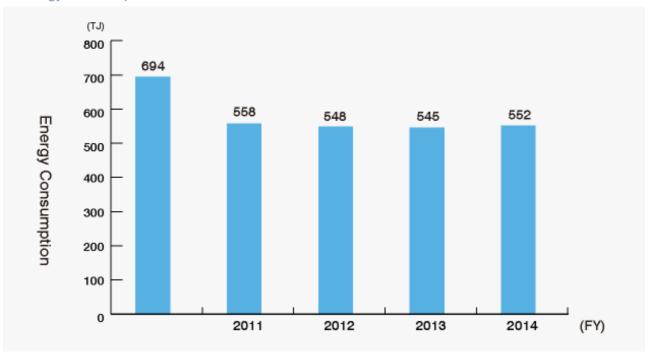


## ■ Water Consumption

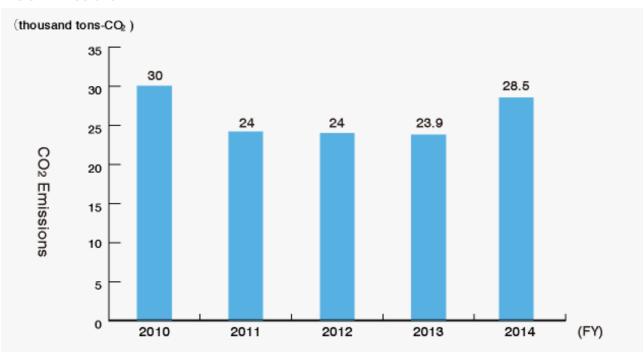


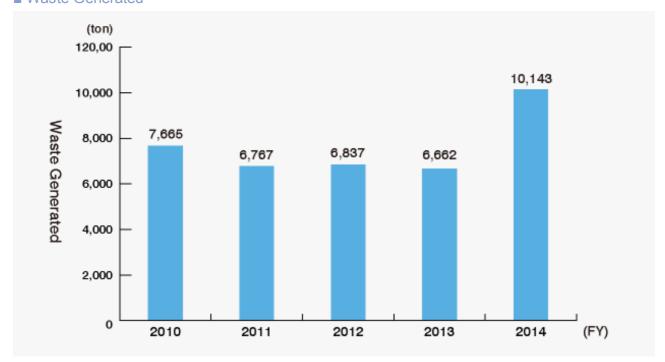
# Headquarters

## ■ Energy Consumption

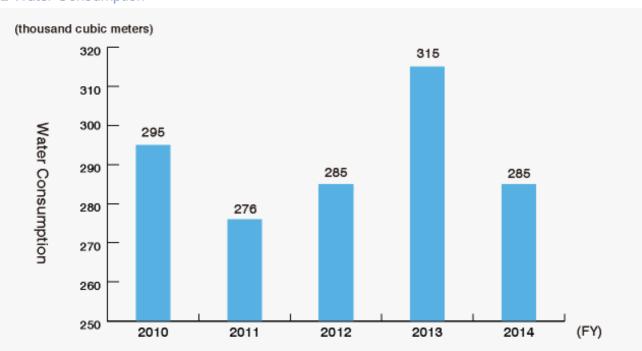


### ■ CO<sub>2</sub> Emissions





### ■ Water Consumption



# **Community Service**



# Message from General Manager, Administration Division

### Communicating with Host Communities

IHI believes that company offices and facilities have the responsibility to communicate with residents in their host communities to solve local issues together. IHI is committed to nurturing close relationships with all of its host communities.



Associate Director General Manager, Administration Division

Kazuki Awai

### ■Community Service in FY2014



May: Aioi Pe-ron Festival

The Pe-ron Festival's history traces back to IHI's roots as a shipbuilder, when it held aquatic sports events. Although the festival is now organized by Aioi city, it is still conducted in front of an IHI waterfront factory. To date, some 110,000 people have participated in the races and IHI has sponsored six boats.



July: Aioi Wild Horse Chase (Souma-no-maoi)

In a parade associated with a festival held every year to celebrate horse culture in ancient Japan, young IHI employees shoulder a portable shrine of Aioi Nakamura Shrine and the head of the local IHI office rides a horse.

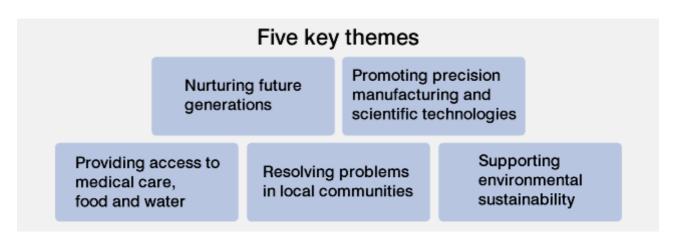


October: Toyosu Atrium Concert

A concert by the Swedish male choir Orphei Drangar was organized at the Toyosu IHI building. Approximate 1,000 people, including IHI employees and local residents, enjoyed the muscial event.

# **Basic Policies**

IHI recognizes the importance of each individual in society and respects the unique characteristics of each local community. By leveraging its experience and collective expertise, IHI contributes to the resolution of societal issues, even those outside of the company's specific business areas. IHI supports efforts to improve host communities, focusing on five key themes, as part of its commitment to social responsibility.



# **Community Service**



# Activities in FY2014

### Yokohama Facility turns 50

In 2014, the IHI Yokohama Facility marked the 50th anniversary of its establishment, and a ceremony was held on December 5. There were around 150 attendees from IHI and many guests, including the mayor of Yokohama's Isogo Ward and other representatives from the community. We expressed our gratitude to everyone who has supported the facility over the years and pledged to continue contributing to local development.

Moving forward, IHI will continue making positive contributions to the communities where we do business.



50th anniversary ceremony

### Charity walk for water and food solutions

The United Nations World Food Programme (WFP) works to eradicate hunger and poverty. Since 2010, IHI has been a council member of a non-profit support organization called Japan Association for the World Food Programme (JAWFP). Aiming to strengthen food security, IHI is working with JAWFP as part of its CSR initiatives.

In FY2014, we again sponsored WFP's Walk the World, a charity walk along the Yokohama waterfront to raise



awareness of food supply issues. This year, over 300 IHI employees and their families took part.

# **Performance Objectives**



Area		FY2013	FY2014	Targets set in Group Management Policies 2013	
Financial targets					
Relevant data	Consolidated net sales	¥1.304 trillion	¥1.4558 trillion	¥1.4 trillion (FY2015) (¥80 = \$1)	
	Consolidated operating income	¥53.2 billion	¥63.2 billion	¥70.0 billion (FY2015) (¥80 = \$1)	
	ROIC	5.3%	5.8%	6.5% (FY2015)	
	Debt to equity ratio	0.99	1.14	1.2 or below (FY2015)	
	ROE	10.5%	2.6%	-	
	Total investment	¥108.1 billion	¥114.8 billion	¥400 billion (Cumulative total from FY2013 to FY2015)	

Area		FY2013	FY2014	FY2015 Plan	Future objectives	
CSR						
Measures	Employee awareness	Raised awareness of issues via e-learning programs	Ongoing	Ongoing	Raise awareness of global CSR issues and show steps each individual should take to meet stakeholder expectations, earn trust and raise company value long-term	
Relevant data	Level of employee awareness	86%	89%	90% or greater	-	
Governance						
Measures	Risk management	Set 12 priority policies	•Set 14 priority policies	- Set 16 priority policies	-	
Relevant data	Outside director meeting attendance rate	88%	95%	-	-	

Area		FY2013	FY2014	FY2015 Plan	Future objectives		
Complianc	Compliance						
Measures	Compliance training	Conducted compliance and risk management programs	Ongoing	Ongoing	Act ethically with priority on sincerity and fairness, so as to comply with internal, national and international rules, laws, regulations, prescribed practices, internal policies and procedures		
	Globalization of compliance systems	Reviewed IHI and Regional Headquarters for the Americas compliance systems	Improved IHI and Regional Headquarters for the Americas compliance systems	Reviewed global compliance systems	Establish Group- wide global compliance system		
Relevant data	Hotline reports	158	238	-	-		
Supply cha	ain						
	Procurement policy awareness	Conducted survey of 1,332 companies     Established IHI Group Policy on Conflict Minerals	Reviewed survey findings Established environmental control guidelines	Review survey findings (emphasis on suppliers with compliance difficulties)	Ensure all major suppliers are in compliance with IHI Group Basic Procurement Policy		
Measures	Procurement personnel training	Started training courses for local procurement personnel     Introduced training courses on procurement-related laws, regulations and tax systems of priority emerging countries	• Ensured procurement compliance, including in management of chemical substances	Ongoing	Ensure global procurement compliance for priority countries		
Health and safety							
Measures	Health and safety	• Established IHI Group Safety and Health Committee • Introduced mental resilience training for office staff • Introduced new health management system	Introduced OHD (Occupational Health Dynamics) assessments Introduced standards for responding to medical checkup results	• Establish IHI Group Central Safety and Health Committee • Introduce IHI Health and Safety Management Assessments	Work to ensure workplace environments are healthy and safe for all people working for or with IHI		
Relevant data	Rate of occurrence of work -related accidents requiring time off from work	0.21	0.24	0.00	-		
	Number of annual leave days taken	16.27 days	16.02 days	16.0 days or more	-		

Area		FY2013	FY2014	FY2015 Plan	Future objectives		
Diversity	Diversity						
Measures	Gender diversity	Promoted awareness of gender diversity Established networks for female personnel Supported women's career ambitions and increased motivation Heightened awareness of gender diversity among male employees, especially those in managerial and supervisory positions Identified obstacles to gender diversity		Promote of work-life balance Expand gender diversity initiative throughout the Group Improve male employees'			
		Announced     numerical targets     related to gender     diversity     Introduced support     system for employees     returning to work	Selected as a     Nadeshiko Brand     Prepared diversity     page for official     website, released     messages from top     executives	awareness of gender diversity Provide ongoing support for networking among female personnel	Foster inclusive workplace that shares Management Philosophy and IHI Group Vision. Provide greater opportunities for employees to develop and grow.		
	Employment opportunities for persons with disabilities	Joined ACE (Accessibility Consortium of Enterprises)	Posted listing on employment site for persons with disabilities	Participate in joint briefing session hosted by company supporting persons with disabilities			
	Employment opportunities for seniors	Introduced optional retirement age system where employees have option to work until their 65th birthdays	·Reviewed life planning seminars	Continue and further review life planning seminars			
	Employment opportunities for non- Japanese persons	Recruited candidates from priority areas (Asia)	Ongoing	Ongoing			
Relevant data (IHI)	Female recruitment	33 (15%)	31 (14%)	45 (18%)	Incoming university graduates: engineering 10% or greater, administrative 35% or greater, total 15% or greater		
	Number of female managers	44 (1.6%)	51 (1.9%)	60 (2.1%)	75 (3%) or greater (FY2018)		
	Number of female officers	0	1	1	1 or more (FY2018)		
	Percentage of employees returning to work after childcare leave	100%	100%	100%	100%(FY2015)		
	Employment rate of persons with disabilities	2.02%	2.04%	2.0%or greater	2.3% (FY2018, April)		
	Recruitment of new non- Japanese graduates	13	11	9	-		

Area		FY2013	FY2014	FY2015 Plan	Future objectives	
Environment						
Measures	Environmental management	• Established IHI Group Environmental Action Plan 2013	• Established energy consumption, CO2 emissions and waste reduction targets and monthly monitoring program	Created environmental data collection system	[ IHI Group Environmental Vision 2013 ] Goals through FY2018 IHI's vision is to make environmental sustainability an integral part of all Group companies by working together with our customers and business partners around the world.	
Relevant data	CO2 emissions from business activities	249,000 tons	Less than 300,000 tons	Less than 300,000 tons	300,000 tons (FY2018)	
	Reduction of CO2 emissions from products and services	Estimated 12 products/ services contributing	Estimated 11 products/ service contributing	Will continue to estimate reductions in CO2 emissions from products and services	10 million tons (FY2018)	
	Sales of environmentally friendly products	-	Four products received internal certification for environmental friendliness	Will check more products for internal certification for environmental friendliness	70% or greater (FY2018)	
	CDP climate disclosure scores	91	97	90 or greater	-	
	CDP performance band	В	А	В	-	
	Nikkei Environmental Management Survey	403	411	400 or higher	-	

# **IHI** Corporation

Corporate Social Responsibility Division

Toyosu IHI Building, 1-1, Toyosu 3-chome, Koto-ku, Tokyo 135-8710 Japan TEL +81-3-6204-7046 FAX +81-3-6204-8618 URL: http://www.ihi.co.jp/en/index.html