



# Realize your dreams

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#### **Editorial Policies**

The IHI CSR Report 2014 communicates to our readers the IHI Group's commitment to addressing social issues with its business and CSR-related activities, both of which are supported by the Group's monozukuri technology for meticulous manufacturing. The 2014 report highlights the Group's medium and long term plans, key issues and performance targets whereby striving to create values for our customers and society.

The condensed version of the original report, a pamphlet, outlines our management policies and includes performance highlights. Additionally, messages from senior management on the Group's approach to issues have also been reproduced. Please refer to the full report, which is on our website, for further details of our CSR activities.

#### 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 for FY2013, the period beginning April 1, 2013 and ending March 31, 2014.; however, information prior and after this period may also be included. \* Job titles are valid as of April 1, 2014.

# Publication Date

June 2014

(The previous CSR Report was published in June 2013, and the next issue will be published in June 2015,)

#### **Guidelines Referenced**

Environmental Reporting Guidelines (2012 version), Ministry of the Environment

Sustainability Reporting Guidelines version G3.1 (version 3.1), 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.

All the data on this page are as of March 31,2014.

#### **Company Profile**

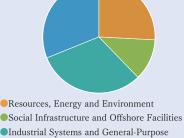
- Company Name **IHI** Corporation
- Head Office

Address TOYOSU IHI BUILDING., 1-1, Toyosu3-chome, Koto-ku, Tokyo 135-8710, Japan

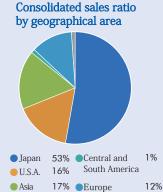


- Year of establishment December 5,1853
- Capital 107.1 billion yen
- Number of Group Companies Consolidated subsidiaries 148

# Consolidated sales ratio by reportable segment



Machinery



1%

Others 31% Aero Engine, Space and Defense

26%

12%

31%

#### Main Products and Services Belonging to Each Segment

#### Resources, Energy and Environment

Boilers, power systems, motors for land and marine use, large marine motors, gas processes (storage facilities and process plants), nuclear power (components for nuclear power plants), environmental systems,

pharmaceuticals (pharmaceutical plants)

#### Social Infrastructure and Offshore Facilities

Bridges, water gates, shield tunneling machines, transportation systems, urban development (real estate sales and rental), F-LNG (floating LNG storage facilities), offshore structures

5

31

#### Industrial Systems and General-Purpose Machinery

Marine machinery, logistics systems, materials handling equipment, parking systems, steel manufacturing equipment, industrial machinery, heat/surface treatment machinery, papermaking machinery, vehicular turbochargers, compressors, separation equipment, marine turbochargers, construction machinery, agricultural machinery, small motors

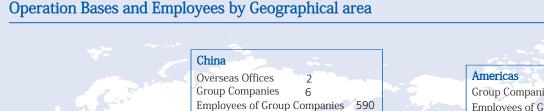
#### Aero Engine, Space and Defense

8.331

48

13,929

Aero engines, rocket systems/space utilization systems (space-related equipment), defense systems



#### **Group Companies** 37 Employees of Group Companies 915



## Asia and Oceania **Overseas Offices**

Group Companies 26 Employees of Group Companies 2,287

7

**Overseas Offices** 

Group Companies

# **Message from IHI**

# Leveraging technological excellence to meet key global challenges and support sustainable societies

As part of celebrating our 160th anniversary in 2013, we implemented a thorough review of our accomplishments to see what lessons we could learn. Perhaps the biggest revelation was the extent to which IHI has played a significant role by offering innovative products, including many that were either the first of their kind in Japan or the largest of their kind in the world. Clearly, IHI has contributed tirelessly to progress through technology, which remains our business philosophy to this day.

Over the years, IHI has grown in close harmony with society. And now, together with society, we are faced with serious challenges to humankind and the environment, including resource depletion, urbanization, climate change, natural disasters and more.



Tamotsu Saito President and Chief Executive Officer

In response, IHI is leveraging its signature precision-manufacturing (monozukuri) technological expertise not only to enhance corporate value but also to meet the expectations of society. In particular, through our businesses, IHI Group is addressing vital needs to reduce environmental damage, provide stable supplies of energy, lower

the risks associated with industrialization and urbanization, and improve access to medical care, food and water.

Our current business plan emphasizes what we call the "Three Links," each of which has strong CSR overtones: 1) linkage among existing businesses, 2) linkage between products/services, and between information and communication technologies and 3) linkage among IHI businesses, customers and partners worldwide. These strategic links enable us to apply significant resources and capacities not only seamlessly, but also in unique and innovate ways to help solve global challenges.

The CSR mindset-an essential element of our company-is integrated with all IHI business activities. By linking regions, information and products as systems, we are using diverse sources from throughout our value chain to create more value for customers, investors and employees, and ultimately for society as a whole. At the same time, we are strengthening our base for stable long-term growth.

CSR begins with employees, our single largest asset. All employees, regardless of position, are encouraged to go to actual sites, grasp what's actually going on and determine what actually needs to be done, both for the customer and for society. Also, the company is striving to expand its diversity and create working environments that allow everyone to achieve their full potential. Great trust is placed in our employees worldwide. We actively delegate authority to senior managers and help them to develop IHI's businesses in a way that best fits the local context. While global partners are afforded appropriate flexibility, they also are requested to follow IHI's lead in exercising proper governance at all times.

Heavy industry will continue to form the core of IHI's business, given the ceaseless global demand for infrastructure development and renewal. But in response to evolving needs, IHI also is focusing on three game-changing megatrends: smart infrastructure, highly networked IT and economic diversity. Going forward, IHI will continue to leverage its diverse business strengths to capitalize on these opportunities to build more sustainable societies.

As you read through our CSR Report 2014, we hope you will appreciate how we are responsibly upgrading our business in step with global trends to support the realization of truly sustainable societies.

Tamotsu Saito

President and Chief Executive Officer

June 2014

# 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.

#### Management Philosophy

Contribute to the development of society through technology Human resources are our single most valuable asset

#### IHI Group Basic Code of Conduct

#### Fundamental and Universal Principles

- Respect for rule of law and ethical conduct
- Respect for human rights
   Promote mutual
- understanding

#### Responsibilities

- To people connected with the IHI Group via our products and services
- To those with whom we work
- To local and international communities
- To the global environment

#### Senior Management

- · Roles
- Responsibilities

#### IHI Group Vision

The IHI Group is using its engineering capabilities, including core *monozukuri* technologies, to find solutions for the environmental, energy, industrial and infrastructure challenges of the 21st century, and to operate as a global group of companies that upholds the safety, security and richness of the earth and humanity.

# Smart Social Advance

## Infrastructure

Customer issues

society

countries

and goods

Increased demand for electricity

and realization of a low-carbon

Growth of urbanization and

Increased sophistication of

industrialization of emerging

cities in developed countries

Increased movement of people

#### Advanced, Highly Networked IT

Group Management Policies 2013

Three Mega Trends

Increasingly Complex Global Economy

# Key Issues

 Realize low-carbon societies and reduced environmental impacts

- Provide stable supplies of energy
- Respond to industrialization and urbanization

Group Technology Strategy

 Measures for medical care, food, and water

# Group ICT Strategy Governance Business Activities Environmental Activities Social Activities

Group Human Resource Management Policies

# **Realize your dreams**

**Customer Value Creation** 

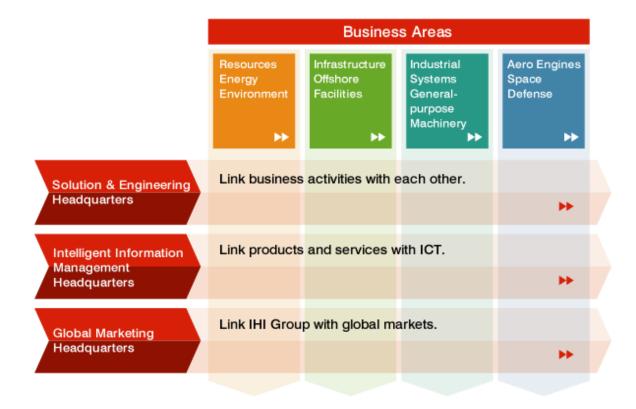
Creation of Value for Society

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. From a medium- to long-term perspective, linking the business areas horizontally allows the Group to focus its resources on

society's needs. In addition, by linking products, business activities and global markets, the IHI Group aims to realize continued growth by generating value for customers and society.



# IHI Group's CSR

The IHI Group 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.

The IHI Group established a CSR Committee in FY2013 to discuss and promote CSR-related matters, including the IHI Group'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 first meeting of the CSR Committee was held in August 2013. During this session, it formulated the IHI Group's CSRrelated status, tasks and goals in promoting business and socially minded 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
- Develop human resources for future generations
- Promote monozukuri and scientific technologies
- Offer solutions to environmental problems
- · Support provision of medical care, food and water
- Offer solutions for urban revitalization and other problems in our host communities
- IHI Group's socially minded activities, targets and plans

In addition to decisions made at the first meeting in August 2013, the CSR Committee, at its second meeting in April 2014, confirmed its objectives

for FY2014. The Committee continues to promote CSR activities as it

further integrates CSR into the activities of the IHI Group.



August 2013 CSR Committee meeting

# CSR in Business Activities

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# Resources, Energy and Environment

In the all-important fields of resources and energy, we are responding to key needs and trends by offering systems for development, manufacturing, storage and transport. We also sell systems for fossil fuels and other new energies to reduce environmental impacts and conserve energy. In addition, we supply key hardware for nuclear power generation. All such systems and hardware are developed using IHI's proprietary technologies.

In FY2013, resources, energy and environment business achieved an operating profit of ¥11.617 billion.

	2012	2013
Sales	321,529	344,093
Orders received	300,346	494,635

## MESSAGE

Earnings

We believe that a stable supply of environmentally friendly energy is what society expects from the IHI Group's Resources, Energy, and Environment Business. To meet these expectations, we offer an optimum combination of power-generation technologies applied to a diverse range of fuels. For example, we provide distributed power systems, such as eco-friendly gas turbines and gas engines, to emerging countries where the capacity of power transmission lines is limited to some extent. When we build a large power station, we will provide and export not only the plant itself but also operational services including well-established, maintenance technology. We will contribute to the energy supply in a way suitable to the actual needs of the region.



Hiromitsu Hamamura Board Director for Resources, Energy, and Environment Business



Spark plug ignition-type medium-speed gas engine

At the same time, we also continue to develop technologies for reducing environmental impacts. Carbon capture and storage (CCS) is a process to capture and store carbon dioxide (CO<sub>2</sub>) generated by power stations. The IHI Group has developed oxyfuel combustion technology, a revolutionary process for capturing CO<sub>2</sub>, and has started demonstration tests in Australia. A demonstration plant is under construction in Indonesia of a Twin IHI Gasifier (TIGAR®) which uses lignite, a low-grade coal that has not been effectively utilized to date, as a raw material. When these technologies reach commercialization, they will help to reduce the impact that power generation has on climate change, as well as to greatly reform energy and/or power portfolio.

(Millions of yen; adjusted)

By integrating our diverse proprietary technologies and products, we aim to achieve what only the IHI Group can do. However, it is equally important to acquire and introduce external technologies to serve as engines for growth. In FY2012, we acquired a division of a major U.S. engineering firm. As a result of the synergy between our two companies' technologies, we are now in a better position to make appropriately develop value chains related to the natural gas industry. In fact, IHI may become an energy business developer in several decades.





Inside of a LNG tank

IHI, which has a corporate culture of accepting a diversity of views, offers customers the Japanese

Callide-A Power Station in Australia : Callide Oxyfuel Project

tradition of selfless hospitality, omotenashi in Japanese, which is considered one of our greatest strengths. We are confident that we can differentiate ourselves from our competitors by offering not only products but also overall product packages, including maintenance services, that meet the customer's every need.

By pursuing the needs and requirements of our customers, we are expanding our business from simply supplying products to providing comprehensive services across

product life cycles and in upstream stages, which will help us to reach our full potential in terms of contributing to society through our tradition of monozukuri state-of-the-art engineering and manufacturing.

## Our Objective

We provide environmentally friendly power-generation systems to ensure stable supplies of energy.

## Solutions for Key Issues

# Realize low-carbon societies

We provide environmentally friendly power generation systems that contribute to low-carbon societies.

#### Provide stable supplies of energy

We provide diverse power-generation systems and develop new energy resources.

# FY2013 Activities

#### Eco-friendly Coal-fired Power Station (Lünen) begins Operating

The IHI Group supplied a large boiler system to the Lünen Power Station, a German-based facility owned by Trianel Kohlkraftwerk Lünen GmbH und Co. KG. It began commercial operation in December 2013 and has the highest net efficiency of any station in Europe, consuming 20% less coal than the average power station, resulting in a reduction of CO2 emissions by one millions ton per year. This is just another example of the IHI Group's state-ofthe-art boiler technology and the Group's contributions to meeting Europe's energy needs.



Lünen Power Station in Germany

# Activities in Progress

#### Expanded Involvement with Fast-growing Liquefied Natural Gas Industry

The IHI Group is expanding its business to liquefied natural gas (LNG), which has a relatively smaller impact on the environment and is increasingly in demand around the world. With global interest in LNG rising, IHI E&C International Corporation established a joint venture with Kiewit Energy Company to develop a liquefaction facility in the U.S., where shale gas is booming. This project, currently in the design stage, is led by IHI's Houston Office and supported by global engineering teams from Toyosu (Tokyo), the Philippines and India.



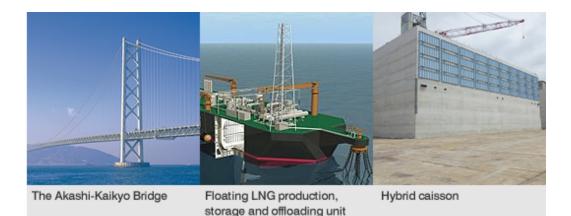
The Cove Point Liquefaction Expansion Terminal

# Social Infrastructure and Offshore Facilities

We are making significant contributions to the ongoing development of Japan and other countries, while also paying close attention to environmental preservation for the benefit of society. To accomplish this goal we offer highly competitive and comprehensive products and systems, handling everything from their design to aftercare.

In FY 2013, social infrastructure and offshore facilities business achieved an operating profit of ¥2.369 billion.

Earnings		(Millions of yen; adjusted)
	2012	2013
Sales	117,859	150,313
Orders received	112,632	175,573



# Our Objective

We supply technologies that increase, maintain and improve the functions of infrastructure.

# Solutions for Key Issues

# Realize low-carbon societies

We upgrade infrastructure to help improve urban functions and thereby contribute to the realization of low-carbon societies.

#### Provide stable supplies of energy

We develop marine resources to help stabilize energy supplies.

#### Respond to industrialization and urbanization

We construct and maintain infrastructure to help improve urban functions related to everyday life, industry and accident/ disaster prevention.

# FY2013 Activities

#### Tokyo Expressway Bridge Replaced with Minimum Disruption to Traffic

One of the challenges that Japan must address is to maintain and repair infrastructure built many years ago. In March 2014, IHI Infrastructure Systems Co., Ltd. completed repairs on Tokyo's Metropolitan Expressway. This involved replacing an existing bridge, including its piers and foundations, blocking a new tunnel. The work was conducted in the center of Tokyo, so to minimize disruption to traffic, all work, including removal and installations, had to be done overnight.



Work site (courtesy of Metropolitan Expressway Company Limited)

## Activities in Progress

#### Tunnel Boring Machines for Metro Transit Construction in Jakarta

Traffic congestion is a serious problem in the Indonesian capital of Jakarta. To alleviate this problem, the city made a decision to build metro transit lines to reduce travel times and lower air pollution levels. Japan Tunnel Systems Corporation, a member of the IHI Group, received orders for four tunnel-boring machines, including the one shown in the photo with an external diameter of 6.69 m. This same type of equipment will be used to excavate a 2,600 m tunnel between Senayan and Setiabudi stations beginning in



Tunnel boring machine for use in Jakarta

FY2015. The IHI Group looks forward to handling a wide variety of infrastructure projects due to growing global urbanization.

#### Focus Response to Great East Japan Earthquake and Other /disaster-prevention Activities

The IHI Group is committed to restoring and rebuilding the disaster-stricken areas in the aftermath of the Great East Japan Earthquake. Immediately after the disaster, we supported the rebuilding of infrastructure such as power boilers, bridges and breakwaters. In FY2013, Niigata Transys Co., Ltd., an IHI Group company, delivered new trains to Sanriku Railway's Minami Riasu Line, which had been forced to suspend all of its services following the disaster. With the subsequent delivery of eight trains, Sanriku Railway resumed full services in April 2014. The IHI Group is proud to have been part of the effort to rebuild transportation infrastructure urgently needed by the local residents.

Furthermore, we are currently developing and commercializing tsunami lifeboats that can be used in the event of another major earthquake. Tsunami lifeboats are vessels that allow people to survive tsunami and all the floating debris that they create. The lifeboats also can serve as tsunami shelters for people in areas with no high ground, tall buildings or towers. Residents can flee to the lifeboats once a tsunami warning is issued. They are especially useful for people who are unable to run quickly to safety, including young children and elderly people. The enclosed vessels are designed to right themselves if they capsize, as well as withstand head-on collisions at up to 10 m/s. IHI was commissioned by the Shikoku Transport and Tourism Bureau of the Ministry of Land, Infrastructure, Transport and Tourism to develop and manufacture a prototype in FY2012, after which we received orders for three lifeboats in FY2013.



Seismic reinforcement work on Arakawa Wangan Bridge



New train for Sanriku Railway



Tsunami lifeboat

The IHI Group continues to support urban infrastructure by optimizing its extensive monozukuri precision-manufacturing technology to meet society's needs and expectations.

# Industrial Systems and General-Purpose Machinery

We provide industrial systems that support our customer's entire or core production processes. In particular, we serve industrial sectors that do not yet have production process models or processes requiring constant improvements.

In FY2013, we achieved an operating income of ¥15.13 billion.

■ <u>Earnings</u> (Millions of yen; adj		
	2012	2013
Sales	382,568	397,820
Orders received	358,171	370,691



Unloader



Diesel engine



Automobile turbocharger

# Our Objective

We provide technologies that support environmentally sustainable businesses and manufacturing activities.

# Solutions for Key Issues

#### Realize low-carbon societies

We provide energy-efficient, environmentally friendly industrial machinery and systems that contribute to the reduction of greenhouse gas emissions.

#### Respond to industrialization and urbanization

We apply advanced technology toward the development of manufacturing and distribution systems that realize significant savings of resources.

# FY2013 Activities

## Launched EvaCryo® Vacuum Vapor Degreaser

As part of the increasing demand for environmentally friendly, high-performance machinery in recent years, IHI launched the EvaCryo®, a vacuum vapor-cleaning machine that removes grease from metal parts using small amounts of cleaning solvent. Cleaning is achieved within a very short time and is extremely safe to use.

In recognition of the cleaner's beyond-50% cut in energy consumption, the EvaCryo® won the Minister of Economy, Trade and Industry Award, the highest prize presented by the Japan Machinery Federation's 2013 Fiscal Year (34th) Excellent Energy-Saving Machinery Awards. This is one of many examples of how



EvaCryo® vacuum vapor degreaser

IHI support sustainable societies with reduced-cost manufacturing knowhow and eco-friendly products and service.

# Activities in Progress

#### Expand Sales of Small-scale Binary Electric Power Generator

Binary electric power generators make it possible to generate power from excess heat discharged from factories (hot water or excess vapor) or heat energy from hot springs.

Developed by the IHI Group and launched in FY2013, the Heat Recovery HR Series model effectively generates power even with a small amount of hot water, using low-grade heat (70° C to 95° C) to generate up to 20 kW of power. We aim to effectively generate power from energy once considered difficult to recycle, thus making a further contribution to sustainable industrial growth. \*Binary means Organic Rankine Cycle (ORC).



Heat Recovery HR Series small-scale binary electric power generator

# Aero Engine, Space and Defense

We are advancing our precision-manufacturing technology to secure a dominant position in the aircraft engine market, and we are also industrializing our aerospace technologies, particularly for propulsion systems.

(Millions of your adjusted)

In FY2013, aero engine, space and defense business achieved an operating profit of ¥36.723 billion.

<u>Larnings</u> (Millions of yen; adjus		
	2012	2013
Sales	338,481	406,098
Orders received	344,822	406,968

## MESSAGE

Earning

The IHI Group has played an active role in the aviation industry since the mid-1950s, building a reputation for supplying environmentally friendly aircraft engines with "safety first" in mind. Thanks to the evolution of engine technology, we have reduced fuel consumption by as much as 70% over the last 40 years.

Passenger air travel is expected to increase at an average annual rate of about 5%, and, at the same time, the demand for increasingly green aircraft engines will rise. To meet this demand and thereby reduce CO2 emissions, we are working to improve fuel efficiency by developing new engines and algae biofuel, a possible substitute for jet fuel.



Toshinori Sekido Executive Vice President

In space-related activities, in addition to collaborating with other countries in space exploration, we are also trying to expand the fields in which artificial satellites may be used to help preserve the global environment and promote human activities.

For instance, by launching satellites with various sensors into space to monitor how much CO<sub>2</sub> is being released into the atmosphere, the status of forests and the flood-risk potential of rivers, such information could contribute immeasurably to our global environmental infrastructure, or it could be used to monitor specific areas of earth to help prevent accidents and disasters. IHI is planning to utilize the Epsilon Launch Vehicle (see FY2013 Activities) for such space-related activities in the near future.

Our Aero Engine, Space and Defense Business is unique in that these fields require exceptionally long periods of time for research, development and commercialization. For example, in a joint project with a materials manufacturer, it took us nearly 20 years to develop a form of carbon fiber as an advanced composite material for lightweight engines. The product life cycle of a jet engine is even longer-roughly 30 years. In other words, we must always look ahead several decades.

The issues affecting us, our society, and the global community are constantly changing, so it is critical for us to continuously address and manage changes in our business. The two most valuable assets of the IHI Group are its monozukuri practice, namely technology with high productivity and quality, and its human resources, both of which form the foundation of our capability to deal with change. We are confident that we will achieve growth by drawing upon these strengths.



GEnx turbofan engines



Test plant for cultivating algae biofuel



Epsilon Launch Vehicle (courtesy of JAXA)

# Our Objective

We provide safe, convenient and environmentally friendly air transportation systems, and also develop and use space technology for sustainable development.

# Solutions for Key Issues

#### Realize low-carbon societies

We provide environmentally friendly air transport systems to support the development of low-carbon societies.

#### Respond to industrialization and urbanization

We create innovative technologies for rockets and other aerospace equipment that contribute to the advancement of industries and societies.

# FY2013 Activities

#### Epsilon Launch Vehicle Successfully Launched

In September 2013, the Japan Aerospace Exploration Agency (JAXA) successfully launched the Epsilon Launch Vehicle developed and manufactured by IHI Aerospace Co., Ltd. The Epsilon solid propellant launch vehicle is extremely compact compared to other major launch vehicle currently in use. In addition, its simplified control and launch system should help to create increased opportunities to put technology into space, where it can contribute to improved understanding and management of the global environment. The successful launch is the next step by IHI to bring space exploration closer to people's lives.



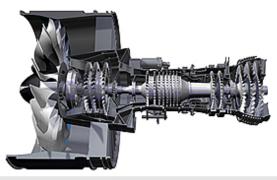
Epsilon launch vehicle (courtesy of JAXA)

## Activities in Progress

#### Development of Next-generation Jet Engine

The IHI Group is participating in an international collaboration to develop PW1100G–JM aircraft engine for Airbus A320neo. We hope to obtain approval and certification for this engine in the second half of FY2014. Preparations for mass production are well underway. Using a proprietary advanced composite material that is both lightweight and strong, the engine is expected to offer 15% better fuel efficiency compared to that of regular jet engines. Going forward, we will continue to develop environmentally friendly, next-generation jet engines for air transportation that is increasingly

convenient and fully compliant with strict environmental requirements.



PW1100-JM (courtesy of JAEC)

# New Business Development

The IHI Group is focusing on a variety of new businesses related to the realization of sustainable societies.

#### Algae Biofuel

Biofuel is expected to play an important part in controlling CO<sub>2</sub> emissions in the future. The IHI Group has established IHI NeoG Algae LLC in partnership with a biotech venture company to undertake biofuel research and development by cultivating Enomoto algae.

In FY2013, the company tested the cultivation of Enomoto algae using only sunlight while preventing contamination by other algae and bacteria. The test was conducted at an outdoor plant established on the premises of IHI's Yokohama Office. The method was proven to successfully cultivate the algae at highly concentrated levels.



Outdoor cultivation test plant

#### Influenza Vaccine API Production

Supplying new vaccines in a short period is critical to the safety and security of global society. In partnership with UMN Pharma Inc., the IHI Group established a joint venture, UNIGEN Inc., to develop cell cultivation technology for the production of influenza vaccine Active Pharmaceutical Ingredients (API). UNIGEN has built one of the world's largest biopharmaceutical manufacturing plants in Gifu Prefecture, Japan, and has applied to market the ingredients in preparation for commercial sale in FY2015.



One of the world's largest cell culture tanks

# Three Tsunagu (Links) for Shared Group Functions

#### Linking IHI Group with Global Markets Global Marketing Headquarters

The Global Marketing Headquarters is working to connect the IHI Group to global markets for accelerated globalization of Group business. The effort has three basic goals, the first being to expand community-based business by building stronger relationships with global customers and markets. The second goal is to expand business within communities by establishing structures for rapid operations underpinned by strong governance. The third goal is to support these efforts by developing more globally aware human resources. The initiatives are being led by regional headquarters located in the Americas, Asia Pacific and China.

#### IHI Forum 2013 Held in Indonesia

Our Indonesian office collaborated with the Ministry of Industry and the Indonesian Chamber of Commerce and Industry to host the IHI Forum 2013 in Jakarta in November 2013. Indonesia is a promising market that presents IHI with many growth opportunities, so the forum was organized to demonstrate our technologies and desire to help the country develop by building strong relationships with Indonesian stakeholders. Over 300 people from Indonesian companies, government agencies and the media attended to hear about our business activities and commitment to the Indonesian market.



Forum in Indonesia

## Linking Group Business Activities Solution & Engineering Headquarters

Now that IHI has broken free from the conventional practice of offering products or services via individual departments or member companies, the Solution & Engineering Headquarters contributes to offering enhanced value to customers by combining products, services and technologies from across the Group. It selects suitable products and services, shares Group-wide resources and packages solutions that sometimes even include non-Group products. This is how the IHI Group works as a team to satisfy customer needs by offering them added value.

#### Management of Parking Facility at Toyama University Hospital

IHI and IHI Transport Machinery Co., Ltd. (IUK) entered into an agreement with Toyama University Hospital in Toyama, Japan to construct, operate and manage a multilevel parking facility. IUK, which has experience operating multilevel parking facilities, is handing operations (vehicle storage, fee collection and cash management) on behalf of the facility owner. The Solution & Engineering Headquarters acted as a liaison between Group companies to support development of this new business model.



Management of parking facility at Toyama University Hospital

## Linking Products and Services with ICT Intelligent Information Management Headquarters

The Intelligent Information Management Headquarters was established to link products and services with information and communication technology (ICT), one of the Three Tsunagu (Links) for new growth specified in Group Management Policies 2013.

IHI Group accumulates and analyzes data on products used by customers, including operating status, maintenance and usage conditions. The data are used for preventive maintenance diagnosis and to optimize product applications for more effective integration with other products and services. The ultimate goal is to offer products and services that are ideally suited to the business models of customers. Services were expanded to 100 remote monitoring systems in operation in FY2013.

## Remote Monitoring and Maintenance Platform

A common remote monitoring and maintenance platform was developed to allow the entire IHI Group to remotely monitor the status of equipment used by customers. The platform alerts users to any abnormality to facilitate a prompt response. It also analyzes operating data and performs preventive-maintenance diagnosis to avoid potential problems due sudden failure.



Common remote monitoring and maintenance platform

#### Focus POTEKA Compact Weather Sensor Helps Forecast Dangerous Wind Gusts

Climate change has led to increased incidents of localized torrential rain and wind, sometimes causing significant damage, which has given rise to the need for more detailed weather data on localized areas. Meisei Electric Co., Ltd., an IHI Group company, developed and worked with local governments, junior high schools and companies in Isesaki, Gunma prefecture to install sensor devices in 54 key locations, including schools, parks and convenience stores, to monitor and analyze weather patterns. Data also are being collected to alert local citizens about heat stroke-related weather conduction and other educational purposes.

The device is the POTEKA compact weather sensor, which costs significantly less than conventional weather sensors. POTEKA is an acronym for Point, Tenki (weather) Kansoku (observation). In August 2013, the POTEKA sensors observed sudden changes in temperature and air pressure for the successful forecast of potentially destructive wind. Such advance forecasting, revolutionary by world standards, is expected to be useful for both research and disaster prevention.



POTEKA on the roof of a convenience store

# Governance

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# Corporate Governance

# **Basic** Policies

IHI defines corporate governance as a system designed to maximize corporate value by increasing management efficiency and leveraging the company's capabilities to the fullest extent possible. To attain this, IHI introduced the executive officer system to clearly separate management oversight functions from functions related to the day-to-day operations of the business, thus enabling effective and appropriate decision-making. By building a corporate governance system that administers and monitors all related rules and regulations, the Group is able to ensure that strategies, directions and instructions from management are carried out systematically and effectively across the entire Group.

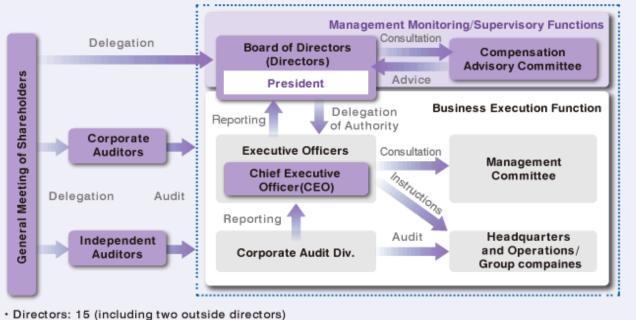
## Corporate Governance System

IHI, which is classified in Japan as a "company with Audit & Supervisory Board," elects five corporate auditors, three of whom are outside corporate auditors. The board of directors, which consists of fifteen directors, two of whom are outside directors, makes decisions related to all important matters concerning the management of the Group, in addition to overseeing directors in the execution of their duties.

Drawing on the wealth of experience and perspectives gained from their many years as senior managers, the outside directors participate in the board of directors' decision-making process. They offer advice and make recommendations independently of the managers whom are delegated the authority to handle day-to-day operations.

IHI introduced the executive officer system to facilitate and strengthen the decision-making and supervisory functions of the board of directors as well as to improve the efficiency of business operations. Appointed by board of directors resolution, executive officers execute the duties delegated to them under the CEO's guidance and supervision.

To ensure propriety in director remuneration, the IHI Group established the Compensation Advisory Committee, that consists of four members: an outside director who acts as committee chairman, an outside corporate auditor, a board member responsible for human resources, and a board member responsible for finance.



- Corporate auditors: 5 (including three outside auditors)
- Executive officers in senior management: 23 (including seven who simultaneously serve as directors)
- Female executive officers: 0 (1 officer since 2014)
- · Average age of directors: 62.8

As of March 31, 2014

## Compensation for Directors and Corporate Auditors

Remuneration paid to directors and corporate auditors is indicated in the table below.

(Millions of yen)

		Remuneration Breakdown			
Classification	People	Basic Remuneration	Stock Options	Performance- related Bonus	Total Remuneration
Directors	16	594	79	167	842
Corporate Auditors	7	87	-	-	87
Total (Outside Officers)	23 (6)	682 (45)	79 (—)	167 (—)	929(45)

As of March 31, 2014, IHI has 15 directors, two of whom are outside directors, and five corporate auditors, three of whom are outside corporate auditors. The number of directors and corporate auditors does not match the number given in the above table because one director and two corporate auditors resigned at the end of the 196th ordinary general meeting of shareholders held on June 27, 2013, but they are included above.

## Conflict of interest

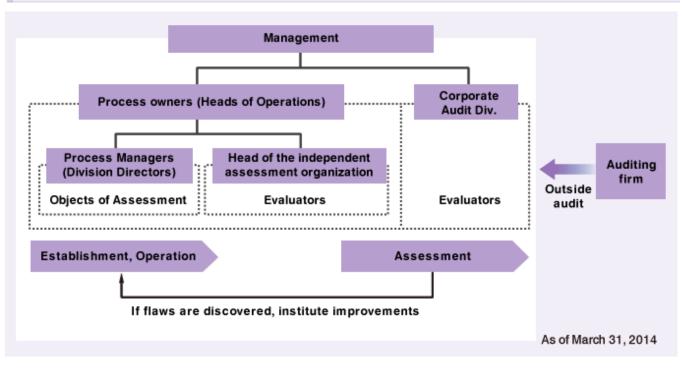
If a conflict of interest arises between a business transaction and a director or executive officer, we require the board of directors to pass a resolution or take other action as stipulated by law to avoid said conflict.

# Internal Control System

Basic policy for Establishment of Internal Control System is designed to raise the effectiveness of corporate governance and increase the corporate value of the Group. These policies provide a framework for achieving a sound compliance structure and enhanced risk-management systems. IHI believes that establishing a robust internal control system is key to expanding business globally, as well as maintaining and operating management systems that are shared throughout the Group.

In response to cases of accounting improprieties, Japan instituted an internal control reporting system (J–SOX) based on the Financial Instruments and Exchange Act. J–SOX mandates the implementation and operation of internal controls in the preparation and disclosure of financial statements, as well as the submission of a report evaluating the effectiveness of such controls. An evaluation of the Group's internal controls for FY2013 found no material weaknesses.

The Corporate Audit Division is responsible for strengthening and optimizing the internal management systems of executive divisions. From a monitoring perspective, the Corporate Audit Division raises the competitiveness of Group companies and establishes a foundation for improving corporate value.



## IHI Group Internal Control System

#### Project Control System

We established a Project Audit Division to ensure that large projects, such as construction projects subject to the percentage of completion method\*, are properly evaluated during implementation. Specific subjects include projectmanagement status and risk-assessment criteria, and the proper and transparent calculation of a project's estimated profitability.

During FY2013 (ended March 31, 2014), 66 group construction projects were audited. Sales of audited projects accounted for about 13% of consolidated sales. 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 total construction cost (estimated final cost at completion of the project) relative to the project's progress
- Transparency, appropriateness and timeliness of the project's estimated profitability

When generating estimates for large projects, IHI implements a screening process related to project execution risk to verify project 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.

#### TOPIC

In the previous fiscal year, the Project Audit Division began auditing projects according to their levels, e.g., characteristics or execution conditions. In FY2013, the contents and highlights of audits, which are published within the IHI Group, were further subdivided according to their levels and were enhanced with more detailed descriptions.

Case studies written and developed from audit results, which were communicated horizontally across the IHI Group, were updated to reflect survey responses from relevant divisions and to make the objectives of the case studies easier to grasp.

When generating estimates for large projects, evaluation items and criteria that improved the comprehensiveness and objectivity of screening were adopted.

Through these efforts, we are maintaining audit quality while working to streamline the project audit process and ensure that an understanding of project management is shared within the Group. Such efforts will ensure that audit quality is maintained as the audit process is streamlined and that project management methodology is shared throughout the Group.

# Compliance

# **Basic** Policies

Compliance provides a company with the foundation for operating within society. In the IHI Group, compliance policies are based on the following:

- Adherence to rules, including civil laws and internal regulations
- Taking fair and responsible action as a corporate entity

In addition to compliance with laws and regulations, the policies also require meeting the demands of society.

In FY2013, IHI focused on reviewing its corporate business mechanisms and rules as set forth in the Group Management Policy 2013 to ensure that they meet global business standards. We also reviewed any deviations from our rules or inadequacies in our business models.

# Compliance System

#### Compliance Committee

In accordance with the Basic Code of Conduct of the IHI Group, IHI established a compliance committee to review, plan and promote important policies. The committee, which consists of divisional officers responsible for compliance, meets four times a year.

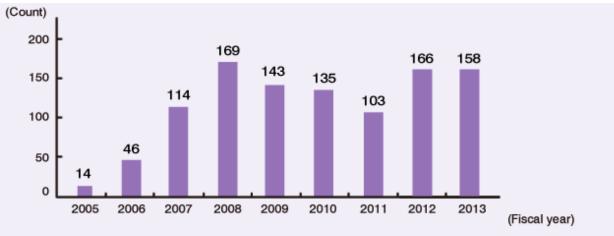
Each division appoints a compliance manager and, in accordance with its particular divisional structure and the committee's current action plan, undertakes compliance activities based on the reiterative PDCA model. Activities are applied to Group companies for which each division is responsible. The Compliance Committee has made steady progress in sharing information on these activities and related challenges.

#### Compliance Organizational Chart



#### Compliance Hotline

The IHI Group established a Compliance Hotline to facilitate reporting of possible illegal, unethical or improper conduct and to prompt corporate responses to remedy such actions. IHI Group 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 158 incidents in FY2013, about the same level as in the previous year. Many calls were related to interpersonal relations in the workplace, prompting initiatives to manage and resolve these incidents quickly.



#### The number of hotline reporting

## Promoting Compliance Awareness

#### Compliance Education

Compliance awareness is maintained and improved through compliance education. Such training is provided on a continuous basis at Group companies and affiliates through level-specific training, e-learning programs and small group dialogue. As part of the FY2013 e-learning program to prevent power harassment, participants completed anonymous questionnaires to help the company recognize potential issues in the workplace and devise improvements where needed. E-learning programs also

enabled employees to understand how using smartphones or tablets to transmit sensitive information or communication could cause irreparable damage to themselves or their organizations. In business divisions, compliance managers continue to be primarily responsible for training about corporate law.

## Corporate Ethics Month

Upon a request from the Japan Business Federation to Japanese corporations, the President sent a message to Group employees in October-Corporate Ethics Month-to reaffirm the importance of corporate ethics/compliance as set forth in the IHI Group's Basic Code of Conduct. The message also emphasized the significance of earning the trust and confidence of communities as a means of improving corporate value.

## 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 270 senryus were submitted, the best of which were showcased in internal publications.

# Compliance Training

For line manager training, participants were taught their compliance responsibilities, including the importance of recognizing compliance-related matters. In addition, line managers were trained in the importance of compliance and risk management from the organization's overall perspective and how polices should be implemented. In FY2013, 82 line managers attended training, bringing the cumulative figure to more than 500.

In training provided to IHI and Group company executives, a guest speaker delivered a lecture entitled the "Establishment of a Global Compliance System," to discuss governance and compliance structures needed by global companies.

#### Compliance Training

Position	Participants
New Employees (just joined)	230
New Employees (after one year)	222
Mid-level Employees	197
Newly Appointed Assistant Managers	158
Newly Appointed Managers	127
Newly Appointed Divisional Heads	85
New Employee Supervisors	118
Line Managers	82
IHI Corporate Officers	23
Officers of Group Companies	51
Managers of Group Companies	97

In FY2013, the Compliance Committee established the Construction Business Act Liaison Group as part of its newly implemented Review of Business Mechanisms and Rules. Group Companies' activities, including placement of orders and receipt of payments, were reviewed for compliance with the Construction Business Act, and guidance was provided on any steps needed for improvements.

Additionally, in light of the increasing number of Japanese companies being charged with non-compliance in overseas locations, IHI Head Office took the extra step of reviewing and verifying the activities of the Regional Headquarters for the Americas' to confirm full compliance with local regulatory standards.

# Compliance Initiatives

In today's increasingly global and borderless business environment, it is essential for businesses to compete fairly in terms of price and quality to capture and maintain business opportunities. Eradicating bribery and corruption is a fundamental principle of the international code of conduct. 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 Fair Trade Law, the Anti-Corruption Law and the Group's own compliance measures for Security Trade Control.

#### Fair Trade Law Compliance

In addition to training employees on Japan's Antimonopoly Act, the U.S. Sherman Antitrust Act and EU competition law, the IHI Group is working to make its bidding process for public works projects more transparent. No fair trade law violation occurred during FY2013.

## Anti-Corruption Law Compliance

Activities are conducted to raise employee awareness of the U.S. Foreign Corrupt Practices Act (FCPA), the U.K. 2010 Bribery Act and Japan's Unfair Competition Prevention Act. Additionally, the Group carries out monitoring activities to detect potential non-compliance both at home and abroad. Currently, the IHI Group has two internal regulations in place, namely the Basic Policy, which reflects the Group's commitment to anti-bribery implementation of preventive measures, and the Operation Guidelines, which set forth the specific procedures to be taken to prevent bribery. No anti-corruption law violation occurred during FY2013.

#### Raising Awareness of Fair Trade Law and Anti-Corruption Law

Legal compliance training program was expanded in FY2013 to ensure compliance with the Antimonopoly Act and the Anti-Corruption Law. E-learning programs on bribery prevention provided to IHI employees in the previous year were offered to employees at 49 subsidiaries this year.

#### Security Trade Control Compliance

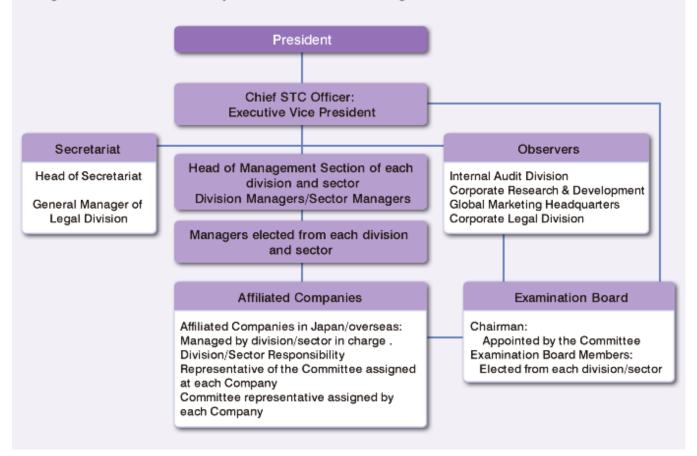
As a global business, the IHI Group considers international security to be a potential risk affecting all divisions. In addition to Group-wide Security Trade Control regulations, a Security Trade Control Committee ensures compliance with the Foreign Exchange and Foreign Trade Act and implements related risk management mechanisms. The committee is comprised of a chairman (IHI Vice President), secretariat (Legal Division), committee members (from each division and sector) and

examination board members. In the case of security controls for export projects, it is responsible for screening, self-audits and monitoring, promoting information sharing and raising awareness of security control issues. The quality of Group-wide security trade controls is being enhanced with the PDCA cycle.

In FY2013, we analyzed and evaluated issues identified in self-audits of divisions and provided advice on improvements. We also established new control targets for the next three years. No violation, including illegal or unauthorized exports, occurred during the year.

## IHI Security Trade Control System

Structure of Company-wide Committee: The committee works based on the IHI Security Trade Control Regulations and the IHI Security Trade Control Committee regulations.



# Risk Management

# **Basic** Policies

The IHI Group manages risk in accordance with its Basic Code of Conduct. The CEO is responsible for implementing and operating risk management systems, and holds a Risk Management Conference annually. The committee identifies and analyzes risks integral to the entire IHI Group and identifies those risks that should be managed as priorities in the Risk Management Activity Priority Policies for the next fiscal year. In line with these policies, business division and affiliated companies, including those located overseas, determine their risk management plans in conjunction with their respective annual business plans.

The FY2013 Risk Management Activity Priority Policies expanded the scope and diversity of risks due to globalization and risks due to heightened competition within the industry or events such as natural disasters.

# Risk Management System

The Group Risk Management Unit, which consists mainly of IHI head office divisions, leverages its expertise to provide information and training for risks affecting the entire group. This unit also assists in risk management activities of divisions and affiliated companies, monitors the status of activities and advances the risk management activities of the entire Group in a uniform and effective manner. Moreover, the Internal Audit Division performs internal audits of every division and affiliated company concerning their respective management plans. Risk management is improved each year by reviewing the above policies and plans.



#### 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.

# Business Continuity Plans (BCP)

Internal regulations set forth basic measures for crisis management, accident prevention and catastrophic disasters. Each business office and division has its own BCP.

Each year, May 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 disasterprevention information cards, update the telephone-contact chain and verify the number of emergency kits. The Group also reviews BCP on a continuous basis through regular training to raise employee awareness.



Training during a disaster prevention seminar

HIグループ 従業員防災心得	<sup>Ⅲグループ</sup> 従業員防災心得
💿 iS-Anpi安否確認 🔘	◎ 外出中・道動途中に被災した場合 ◎
🔘 災害伝言ダイヤル 🔘	◎ 在宅時に被災した場合 ◎
💿 関係連絡先リスト 🔘	◎ 社内で被災した場合 ◎
IHI GROUP	IHI GROUP

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

# Maintaining and Improving Information Security

## Information Security Policy

IHI, under its information security policies, 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 Information Security Policy, Information Security Standards and Information System User Regulations. A variety of security tools are deployed, such as frequently updated antivirus software.

E-learning sessions designed to maintain and raise security awareness are held annually. In FY2013, 94% of all employees participated in an e-learning program offered by the Group. Computer virus infections caused by targeted e-mail attacks made headlines in 2011. Even before that period, the IHI Group had cooperated with government agencies and specialists to institute numerous countermeasures against similar attacks. As of March 2014, no report had been received regarding any leaked information or related damage.

## Organized and Planned Security Measures and Improvements

An 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, the IHI Group has conducted an internal audit of its information security measures and provided guidance for improvements. The first written survey of all 53 Group companies was conducted in FY2013, followed by interviews of six selected companies. The audit found no major flaw in security measures.

### International Certification (ISO27001)

Divisions and Group companies of the IHI Group 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.

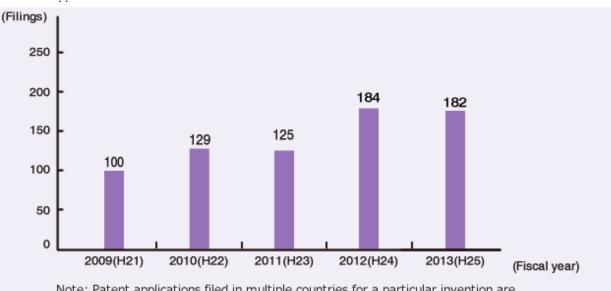
## Protecting Intellectual Property

#### **Basic** Policies

The IHI Group is enhancing its intellectual property (IP) activities to support business and R&D. It also manages a Groupwide 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

The IHI Group views both foreign and domestic patent applications as equally important. In FY2013, patent applications filed by the IHI Group outside Japan increased to approximately 180. To reduce business risk, a patent search specialist team in the Intellectual Property Department searches 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 a particular invention are counted as one patent application.

## IP Education

A five-step IP e-learning program is conducted for employees who have been with IHI between one to five years. The program offers training on IP and a range of educational programs covering patents, copyrights, brands and trade secrets. During FY2013, 1,267 employees participated in e-learning. In December 2013, Mr. Takeshi Sasaki, former IP General Manager of Toyota, gave a lecture on IP for 172 employees, providing them with insight into IP through case studies of other companies.

#### TOPIC

The IHI Group introduced a global business research tool in March 2014 to enable employees to search for patent information of other companies worldwide and gain ready access to the latest information.

# CSR Themes Through Corporate Activities

- **39** Customer-oriented Approach
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- 48 Our Employees

# Customer-oriented Approach

# Fundamental Policy

The IHI Group aims to satisfy customers and gain their trust through its business by developing and supplying safe, useful products and services that contribute to society's needs.

# Quality Assurance

### Group-wide Efforts to Improve Quality

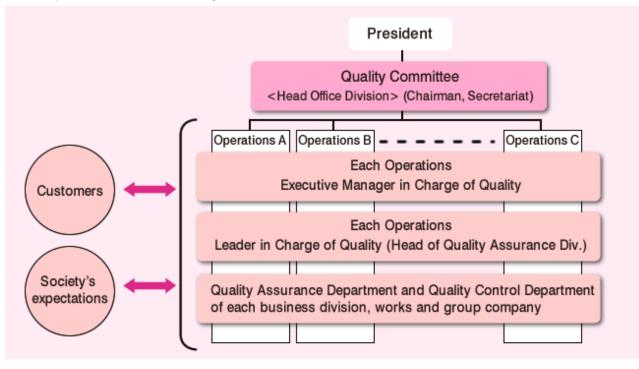
As part of a company-wide effort to improve quality, the Quality Committee, which includes representatives from group companies, meets regularly to discuss quality issues. In FY2013, the committee focused on measures to prevent potential and recurring quality problems, and to ensure product safety.

To address quality issues, we worked closely with business 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 that are identified after goods or services are delivered to customers. For product safety, we conducted risk assessments during the development stage and took the entire product life cycle into consideration. For existing products, we reviewed their actual use and confirmed that environmental changes and technological advances were appropriately reflected.

Each business 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 the IHI Group. 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 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 40 affiliates overseas engaged in design, manufacturing or service operations have obtained quality certifications including ISO9001. In FY2013, there was no serious violation or case of noncompliance with rules and regulations related to our products and services.



## **Customer Satisfaction**

#### Training to Enhance Customer Satisfaction

The IHI Group conducts training to enhance product quality management, customer satisfaction and product safety. In addition to position-specific training, business 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 customeroriented mindset in new employees. Also, engineers in their third and fifth years are trained in the importance of product quality assurance, engineering ethics, intellectual property and product safety, 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, with 65 employees participating. This training included lectures on quality issues. In addition, each division conducted its own training on product quality assurance and management, as well as e-learning programs.

Four courses related to product quality and product safety were offered 11 times in FY2013, with approximately 200 employees participating.

#### Gas Turbine Customer Satisfaction Survey

To improve customer satisfaction, employees engaged either in Energy and Plant Operations communicate regularly with customers using IHI gas turbines.

When the installation of equipment is completed, we invite customers to provide feedback on the work and their comments are reflected in our future projects. We maintain regular contact with customers after products are delivered through annual inspections and engine maintenance performed every three to five years. It is important that we communicate with customers on a regular basis to meet their expectations and maintain good working relationships. For this purpose, we also carry out an after-sales survey upon completion of each annual inspection. We then analyze customer satisfaction levels and follow up on analysis made in internal meetings.

We are committed to increasing customer value and satisfaction through regular communication and interaction.

#### TOPIC IIS Receives President's Award from Metropolitan Expressway

In June 2013, IHI Infrastructure Systems Co., Ltd. (IIS) received the President's Award from Metropolitan Expressway Company Limited in recognition of outstanding performance in the Arakawa Wangan Bridge seismic reinforcement project. Our work has been awarded for its high quality and technical capabilities in a wide range of reinforcement activities over more than four years, during which time all work was conducted



Arakawa Wangan Bridge (on right) before work Arakawa Wangan Bridge after work

without any traffic disruption. While the work was in progress, some parts of the bridge that had not been reinforced were partially damaged by the Great East Japan Earthquake. We managed to rebuild the affected parts of the bridge in 10 days after the earthquake, for which we were awarded a letter of commendation.

As a pioneer in the field of infrastructure rehabilitation and reinforcement work, IIS continues to meet increasing demand for cutting-edge measures to repair and modify aging infrastructure.

## Ensuring the Safety of Products

The IHI Group 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.

Since comprehensive safety verification records do not always exist for products with long histories, we review risk assessments of frequently used products, such as mechanical parking systems, to confirm external trends and technological advances that are reflected in newer versions of such products. The assessments are performed by design and technical teams working with maintenance personnel who are in close contact with the users. We revise and update user manuals and warning labels based on the assessments and users' expectations. We are always thinking about customer safety and working to ensure that our products are used safely.

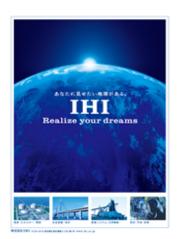
In FY2013, we reviewed multistory parking systems found typically in condominiums and made certain appropriate changes. These efforts were shared with the Group's Quality Committee to facilitate application to other products and models as required.

In FY2013, there was no serious accident involving any product.

# Disclosure of Information about Products and Services

## Advertising and Public Relations

Since launching our new corporate message "Realize your dreams" in FY2012, we have carried out a series of media campaigns using 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 FY2013, no violation of any law or regulation applicable to advertising or publicity public relations was reported.

Newspaper advertisement

# Investor Relations

# Message from the General Manager, Administrative Division

### Communicating with Shareholders

The Administration Division is dedicated to effective communication with shareholders, providing information to over 87,000 shareholders in Japan and other countries in a timely manner.

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. The objective is to respond to queries in an easy-to-understand and respectful manner.

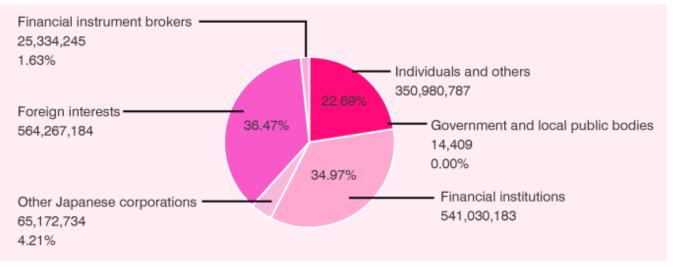
Kazuki Awai Associate Director General Manager, Administration Division

To maintain good partnerships with shareholders, it is absolutely essential that the company fulfill society's expectations and contribute beneficially to society. Communicating such initiatives helps to further strengthen relationships with shareholders.

# Fundamental Policies

To promote understanding with stakeholders, the IHI Group provides information on its activities and their impact, and strives to exchange views with stakeholders on a day-to-day basis. The Group aims not only to provide information on a timely and appropriate basis, but also to respond promptly to inquiries to maintain a good relationship and to build trust with stakeholders. We also share information with the media and other external organizations, and gather data on global trends to support the appropriateness of our responses.

#### Shareholder Breakdown



# IR Information

<u>The IHI Reports</u> (business reports) and the <u>annual reports</u> (in English) disclose information relevant to stakeholders, such as the company's financial position and future direction. Briefings for financial analysts and institutional investors are held when the financial results for each second quarter and full year are announced. At each briefing, which approximately 100 people attend, we give an overview of the financial results for the current term and progress in our implementation of business plans going forward.



# 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 one-on-one interviews. In FY2013, similar to the prior year, IHI managers travelled to North America, Europe and Asia to forge and renew relationships with local institutional investors. In addition to Hong Kong, managers visited Singapore to meet with investors and received encouraging feedback. Some investors described the meetings as meaningful and informative due to discussion of IHI's business and growth forecasts, while others commented that they came away with a better understanding of IHI's strengths. Many expressed appreciation for the frank yet detailed discussions of IHI's business.

In FY2013, we provided numerous opportunities for communicating with over 200 foreign institutional investors, including investor conferences and one-on-one interviews.

# Supply Chain Management

# Message from General Manager of Procurement Strategy Planning

## Building Beneficial Relationships with Business Partners

The IHI Group Basic Procurement Policy, 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." In FY2013, to ensure that this policy has been conveyed properly, we requested major business partners in Japan to participate in a survey about how the policy is being implemented by some 2,000 suppliers. The survey showed that some suppliers were finding it difficult to adhere to the policy, which prompted us to devise measures to help these companies to implement improvements.



Naruhito Takata Managing Executive Officer General Manager, Procurement Strategy Planning

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

where we have operations. As our business grows globally, our overseas procurement of materials is on the rise. We assume that we can procure more than 30% of materials from local suppliers in some projects. For this reason, we plan to increase the number of procurement personnel we have overseas and train them in local laws and regulations. Not only will this strengthen corporate social responsibility in our procurements, it will enable us to contribute more to local development in markets overseas.

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

The IHI Group 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 the IHI Group.

# 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 Basic Procurement Policy. As a company policy, the IHI Group will not procure any raw materials, parts, or products that contain conflict minerals produced in the Democratic Republic of the Congo and its adjoining countries. Based on this policy, the IHI Group is moving forward with its initiative not to be complicit in human rights violations or environmental destruction. We have also written to our major business partners to ask for their cooperation in addressing the issue.

## Fair and Appropriate Trade

The IHI Group 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

The IHI Group 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 the IHI Group. In FY2013, 148 employees attended the Subcontractors Act course and 110 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.

The IHI Group 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

The IHI Group rejects any involvement with organized crime in its procurement activities, and we clearly stipulate to our business partners that no relationship with such groups is permissible in business relationships. Under the Organized Crime Exclusion Ordinance, we are now working even more resolutely in this area.

# Building Relationships with Business Partners

The IHI Group 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.

\* 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.

# Our Employees

## Message from General Manager, Human Resources Division

### Commitment to Human Resource Management

The IHI Group 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. IHI has defined "ideal human resource" in terms of five basic characteristics: Integrity and



Masafumi Nagano Executive Officer General Manager, Human Resources Division

Trust, For Customers and Society, Innovation and Creation, Team Work and World-class Professionalism. 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 2014, the number of female employees in managerial positions had increased to 1.8%, 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 Group employees can reach their full potential.

# Fundamental Policies

The IHI Group 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.

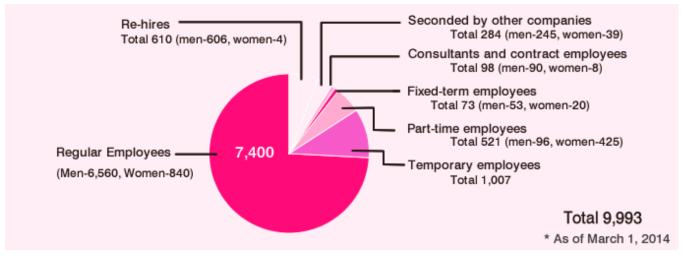
# Key Figures

#### IHI Corporation Employees in Japan (nonconsolidated)

Age group	Men	Women
Under 30	1,649	327
30 to 39	1,897	409
40 to 49	1,958	451
50 to 59	1,265	127
60 and over	875	22

Note: Figures as of March 1, 2014. Temporary workers are excluded.

#### Breakdown of Employees Based on Employment Status



#### Employee Retention

	Employee turnover	Average length of service
Men	5.6%	15.28
Women	12.0%	12.03
Total	6.3%	14.91

Note: As of March 1, 2014. "Turnover" shows percentage who left company after joining in FY 2011.

# 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 FY2013, 3,739 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, such as use of child or forced labor, occurred during the year.

## Equal Wages for International Recruits

The IHI Group 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.

Figures for recruitment of non-Japanese employees over the past five years are: 7 in 2010, 8 in 2011, 15 in 2012, 13 in 2013 and 10 in 2014.

Engineers	165 (including 10 women)
Administrative workers	46 (including 16 women)
Japanese graduates of overseas universities	2 (including one woman)
Non-Japanese	10 (including 4 woman)
Total	223

#### Recruitment of New Graduates in FY2014

## Active Recruitment of Mid-career Employees

IHI actively recruits mid-career employees, with 34 such people joining the company in FY2013. 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 March 1, 2014, 2.02% 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

Fiscal year	Employment rate at IHI	Statutory employment rate
FY2013	2.02%	2.00%

Note: As of March 2014

### 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. In January 2014, the Recruitment Seminar for Women Technical Students was held 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

#### Recruitment of Female University Graduates

FY2010	22 (7 technical and 15 administrative)
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)

#### Recruitment Targets for Female University Graduates

Sector	Current*	Target
Administrative	35%	35% or greater
Engineers	9%	10% or greater
Total	15%	15% or greater

\*Average for last three years

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 was again awarded certification in 2011.



Mark for childcare support program

## Encouraging More Female Managers

The IHI Group 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. To establish a system for supporting diverse female employees, a Network Leader Training Course was held in FY2013 for nine female managers to serve as network leaders. Employment data and targets are available to the public. IHI has been recognized as a "Nadeshiko Brand" supporting female employees for the first time by the Ministry of Economy, Trade, and Industry and the Tokyo Stock Exchange. We also are committed to making male employees more aware and supportive of women in the workplace, and we encourage group companies to do the same.



Network Leader Training



As of April 2013 As of April 2012 As of April 2011 Total managers 2,769 2,716 2,664 44 (1.6%) 41 (1.5%) 39 (1.5%) Female managers Division managers: 7 Division managers: 5 Division managers: 4 Section managers: 37 Section managers: 36 Section managers: 35

Notes: The figures include seconded and temporarily transferred employees. One female employee also was an associate director in FY2013 and FY2012.

#### Female Managers

#### Targets of Female Managers

	Current	FY2015 target	FY2018 target
Total	44	55 or greater	75 or greater
Share of total	1.6%	2% or greater	3% or greater

#### Female Officers

	FY2013	FY2018 target
Number	None	At least 1

Note: One female employee was appointed executive officer on April 1, 2014.

#### TOPIC

IHI was selected as a "Nadeshiko Brand" company that is sensitive to the needs of female employees according to the Ministry of Economy, Trade, and Industry (METI) and the Tokyo Stock Exchange (TSE). Since FY2012, the TSE and METI have selected a TSE Section One-listed company for each of the 26 industrial sectors to recognize outstanding initiatives for promoting women in the workplace. IHI was selected as the company representing the machinery sector in FY2013.



Nadeshiko Brand Announcement Celemony

# Creating Pleasant Workplaces

### Employee Health Management and Mental Health Care

The IHI Group emphasizes health management because it believes that a satisfying and fulfilling work environment improves productivity.

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.

#### 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.

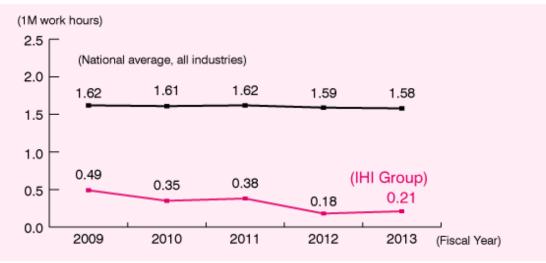
## Health and Safety Management and Accident Prevention

The IHI Group asks all employees to follow five safety principles to eradicate work-related accidents. To prevent accidents at factories and construction sites, we work to identify potential hazards and 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. The Aichi Works was awarded OHSAS18001 certification in January 2014.

#### 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



### 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.

In FY2010, following discussions between workers and management, childcare and elderly care systems were extended. Employees now can take 10 days leave per year to tend to sick children and 10 days per year to provide nursing care to elderly family members.

In FY2013, childcare benefits were well utilized as 95 employees took childcare leave and 140 employees worked reduced hours to care for elementary school or younger children. Twenty days per child for employees with preschool children was introduced in FY2008. In FY2013, 433 employees, including a growing number of males, used the program. For FY2014, childcare leave was extended to employees with elementary-school or younger children.

In FY2013, seven employees used the elderly nursing care leave system.

Employees Who Took Childcare Leave and Returned to Work

FY2009	68 (91% returned)
FY2010	73 (94% returned)
FY2011	81 (100% returned)
FY2012	101 (95% returned)
FY2013	95 (100% returned)

Number of employees who returned during year (excluding resignations immediately after leave)

Post-childcare leave returnees (%):

Number of employees planning to return during year ×100 (rounded to nearest whole number)

## Labor Relations Partnership

Labor and management cooperate to create a comfortable working environment. 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.



Management Council in session

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

Region	Members	Region	Members
Musashi	1,606	Tomioka	639
Tokyo	1,397	Aioi	553
Yokohama	1,378	Kure	496
Soma	844	Nagoya	461
		Total	7,374

Note: As of March 1, 2014

### 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 the previous fiscal year, management/employee meetings were held at seven IHI offices and eight group companies to exchange views and ideas.

## 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 works and construction sites 17 times a year to ensure safety in workplaces and to better manage health and safety.



Safety patrol at Aichi Headquarters Representative's Office

## Leisurely Holidays Initiative

In FY2009, IHI introduced a program called the Annual Leisurely Holiday Promotion to encourage employees to take annual leave. This program, which is designed to facilitate annual leaves and 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.

### 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.

## Human Resource Development

## Human Resource Development Initiatives

The IHI Group'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 new recruits and those newly appointed to management positions. 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 offers language courses, overseas study programs and a wide range of courses to brush up practical skills.

To equip employees with the skills needed for global operations, the IHI Group offered intensive training in India for employees scheduled to be deployed overseas. Similar courses were organized for executive managers, and some employees were also sent abroad for internships in FY2013.

In FY2013, a language laboratory was built in the Toyosu head office to provide employees with one-on-one English conversation lessons.



Intensive course in India for overseas-deployed employees

Similar facilities will be made available in the Yokohama and Musashi areas in FY2014. Training courses at overseas offices were offered to future candidates designated for global operations.

## 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 FY2014.



Highly Skilled Casting

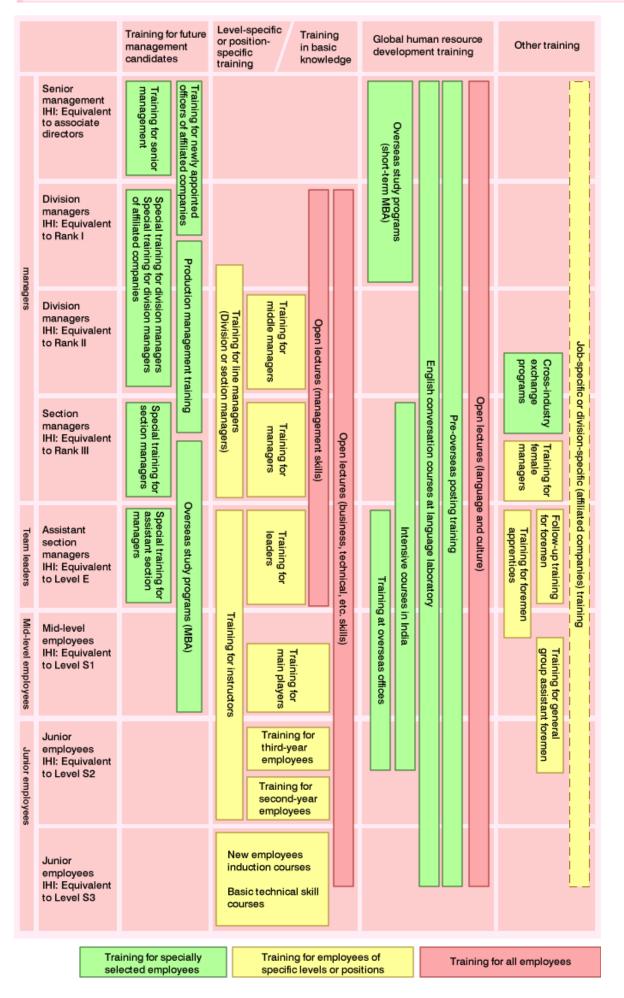
#### Employees Certified as Takumi in FY2014

Welding	7
Assembly	6
Machine work	15
Testing/Inspection	8
Maintenance	3
Other	8
Total	47



Badge issued to certified takumi

## Human Resource Development System



## Participants in Main Training Courses and Total Training Hours

	Approx. Participants	Approx. Training hours
Position-level-specific	1,500	87,000
Open lecture courses	6,700	63,000

# **Environmental Action**

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# Message from General Manager, Corporate Social Responsibility Division

## Ever Improving Our Environmentally Friendly Efforts

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. The IHI Group'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. Based on a company decision to adopt a more environmentally friendly approach in FY2013, we formulated the IHI Group Environmental Vision 2013, which is tied directly to our business



Chikako Oshima General Manager, Corporate Social Responsibility Division

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.

Currently, our focus is on laying the groundwork to achieve our vision. This includes defining our environmentally friendly products and introducing evaluation indicators, namely CO<sub>2</sub> Emissions Reduction Contribution Levels, to raise the visibility of our efforts to reduce environmental burdens. We have identified environmental initiatives for each operational process, including research and development, procurement and manufacturing.

We recognize the vital need to manage the IHI Group in an environmentally friendly manner, so we have started collecting data on our environmental burdens and operations, both domestic and overseas, including consolidated IHI Group companies. In 2013, we visited eight of our overseas business sites to strengthen communications with local environment personnel. What's especially important now is 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 FY2013

## Special Feature 1. Initiatives at Our Soma Works

IHI's Soma works, located in Fukushima Prefecture of the Tohoku region, is a state-of-the-art plant that manufactures jet engine parts for aircraft worldwide. In anticipation of a rise in annual output of engine parts due to increasing global demand for aircraft, we have made a range of improvements to the plant based on lessons learned from the Great East Japan Earthquake.

To accommodate increased power demand in the summer, we installed a 1.1-megawatt solar power system and 25-kilowatthour lithium-ion batteries for enhanced business continuity planning in FY2012. Additionally, we installed a large 2.8megawatt-hour lithium-ion battery storage system in FY2013. The system allows us to store power at night when the plant operates below full capacity and then use that power, together with solar power generated during the day, to cover about 10% of the energy used during peak hours. To raise energy-saving awareness, a monitor is provided to show visitors and employees how much power is generated and used at the plant.



1.1-megawatt solar power system installed in FY2012



Large 2.8-megawatt-hour lithium-ion battery storage system installed in FY2013

Power generated by the solar system is not sold back to the grid, but instead is fully consumed at the Soma works. This power, used in conjunction with the lithium-ion battery storage system, has three major benefits. Firstly, the plant is raising its production output without raising the amount of electricity it purchases. This is because the battery storage system enables "peak shaving," or supplementing power needs at peak hours with battery power, and "peak shifting," or leveraging consumption by charging and discharging batteries at preset hours.

The second benefit is to leverage the highest power consumption during the day as required by the Revised Act on the Rational Use of Energy. Thirdly, even if power supply is disrupted by an emergency or disaster, the plant can still use solar power and the small lithium-ion batteries to power lights, air conditioning, computers and communication equipment at its emergency headquarters.



Large 2.8-megawatt-hour lithium-ion battery storage system



Monitor showing solar power-generation and lithium-ion battery-storage levels.

Our Soma works, which survived the Great East Japan Earthquake, not only aims to become the world's number-one aircraft engine parts manufacturing plant, but it also aims to support the people of Fukushima Prefecture by continuing to reduce its CO2 emissions and implement other environmentally friendly operations.

# Special Feature 2. Visits to Ex-Japan Affiliates

The list of companies included in IHI's environmental data was expanded to encompass consolidated IHI Group companies, including ex-Japan affiliates, in FY2013. Among the many IHI Group affiliates operating worldwide, eight major companies in Europe, Southeast Asia and China were selected for visits by environmental officers from IHI's Corporate Social Responsibility Division. The officers met their overseas counterparts to exchange information and discuss the environmental action being taken locally.

At one such company, a vehicular turbocharger mass-production plant in Europe, automated production lines are operated with picking robots, making this a highly automated and highly efficient production facility. Strict waste control is ensured by displaying widely used European Waste Catalog Codes at waste-disposal sites and on waste-disposal containers. The plant also makes its environmental impact data available online and offers a system for compiling the data in graphs. Overall, the plant fully complies with environmental regulations and monitors its environmental impact data very closely.



IHI Charging Systems International Germany GmbH's automated production line for vehicular turbochargers equipped with picking robots



IHI Charging Systems International S.p.A.'s (Italy) waste-disposal facility clearly displays European Waste Catalog Codes.

Similarly, the affiliates in Southeast Asia and China fully comply with environmental regulations in their respective countries. An Indonesian company that manufactures power-generating boilers and steel products has been certified for compliance with local environmental regulations in its production activities. The affiliate in China has been certified under ISO14001 for its environmental management systems, helping to raise environmental awareness among employees. Both companies demonstrate how IHI adopts environmental approaches appropriate to each region to respond to the needs of its host communities.



PT Cilegon Fabricators (Indonesia) has installed new panel welders.



Environmental training at Wuxi IHI Turbo Co., Ltd. (China)

Also in FY2013, a Chinese affiliate offered training by an environmental officer from IHI's Corporate Social Responsibility Division, who talked about energy-saving methods practiced in Japan. We share environmental best practices of our domestic and ex-Japan affiliates, as well as IHI itself, to incorporate these environmental approaches and technologies in our global operations.

# IHI Basic Environmental Policy

## Basic Policy and Code of Conduct

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 Basic Environmental Policy was written to accord with the IHI Group's 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 Basic Environmental Policy

#### **Basic** Policy

Based on the IHI Group's Basic Code of Conduct, Article 7: Responsibilities toward the Global Environment, IHI Group companies shall observe the following guidelines for voluntary, proactive environmental activities.

#### Guidelines

- Strive to constantly improve environmental management by complying with environmental laws, regulations, ordinances and protocols in Japan and other countries, and taking voluntary action in relevant industries, as well as establish and administer in-house environmental-management standards.
- 2. Provide society with products and technologies that help preserve global and local environments.
- Consider environmental needs throughout product lifecycles, from R&D, design, procurement and production to use, servicing and disposal, aiming to prevent pollution, conserve energy and natural resources, and minimize waste.
- Raise employee awareness of environmental protection through education and training to increase their interest in environmental issues and encourage them to act accordingly.
- 5. Participate in social-contribution activities in communities where IHI operates to strengthen relationships, preserve local environments and promote environmental communication.
- Establish effective environmental management systems with specific objectives and targets, and securely administer, evaluate and constantly improve the system.
- 7. Help preserve local environments by considering the impact of IHI products, and help local communities to reduce environmental burdens by providing them with environmentally minded products and technologies.

Revised June 3, 2013

# IHI Group Environmental Vision

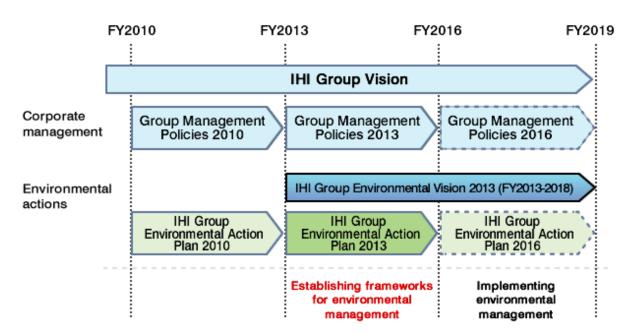
# Environmental Vision and Environmental Action Plan

The IHI Group is focused especially on protecting the environment in areas where it has production bases. It is also our mission to reduce the environmental burden of our products and services and contribute to sustainable development. To achieve the IHI Group Environmental Vision 2013, our environmental action plan through FY2018, we currently are implementing a three-year plan based on IHI Group Management Policies 2013, our overall business plan. FY2013 was the first year of implementing our new IHI Group Environmental Action Plan 2013. We now are developing a foundation for managing the IHI Group in a more environmentally friendly manner by the end of FY2015.

## Environmental Vision

The IHI Group Environmental Vision 2013 (FY2013 - 2018)

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



# Environmental Action Plan

# Our Environmental Vision

Where do we wish to be once our IHI Group Environmental Vision 2013 (lasting through FY2018) has been fully implemented? Described below is what the IHI Group plans to accomplish by lowering the environmental burdens of its products/services and business operations and by carrying out group environmental management.

## Reduction of environmental burdens through products/services

- •Limit CO2 emissions from IHI Group operations up to approximately 300,000 tons per year. Cut back emissions through products/services worldwide down by 10 million tons/year.
- •The amount of reduction of CO<sub>2</sub> emissions through products and services is stipulated in the management targets for business divisions and sectors.
- Maintain sales ratio of eco-friendly products in entire IHI Group at over 70%.
- Customers and employees recognize that using IHI products and services is equivalent to protecting the global environment.
- •IHI products win awards for contributing to global environmental preservation.

### Reduction of environmental burdens through business operations

- •Publicize and achieve the CO2 emissions-reduction target for the entire Group business operations.
- •No waste of electricity and fuels, as energy savings activities are spread across production sites/offices.
- Promote green procurement to prioritize eco-conscious suppliers
- ·Chemical substances in products are stringently managed to further gain customer trust.
- Protecting biodiversity becomes a larger part of our business.

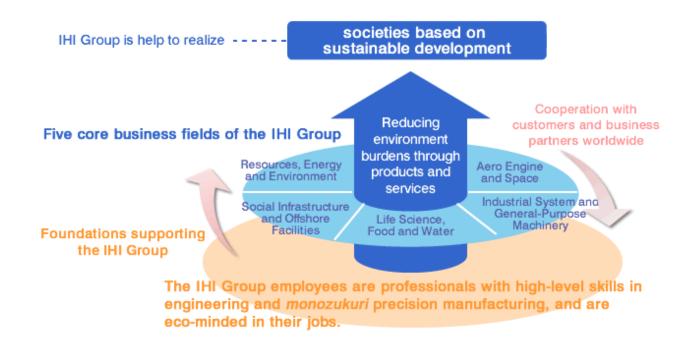
#### Promoting group environmental management

- Domestic and ex-Japan production sites share items on environmental burdens and reduction targets.
- •Main domestic and ex-Japan production sites introduce environmental management systems and improve environmental management continuously.
- •Establish a system for sharing information on tightening environmental laws/regulations from a global perspective.
- •Establish a system of internal environmental audits to monitor issues and take action as soon as any problem occurs.
- Provide information on the status of environmental activities via in-house journals, intranet, etc.

## Image of the Environmental Vision to Be Achieved

The IHI Group, aiming to build sustainable societies to protect our planet, is helping to reduce environmental burdens in five business areas, which were newly defined when the Group's Environmental Vision was introduced: Aero Engine and Space; Industrial System and General-Purpose Machinery; Life Science, Food and Water; Social Infrastructure and Offshore Facilities; and Resources, Energy and Environment. But The IHI Group cannot achieve such goals alone, so it is working closely with its customers and business partners worldwide.

The IHI Group also takes human resources development seriously, wishing for everyone in the Group to be environmentally aware in their respective operations as professionals with high technological capabilities and monozukuri precision-manufacturing skills.



# Action to Achieve Environmental Vision

To achieve our Environmental Vision, we have identified the following environmental challenges aimed at reducing

environmental burdens through our products/services and operations:

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

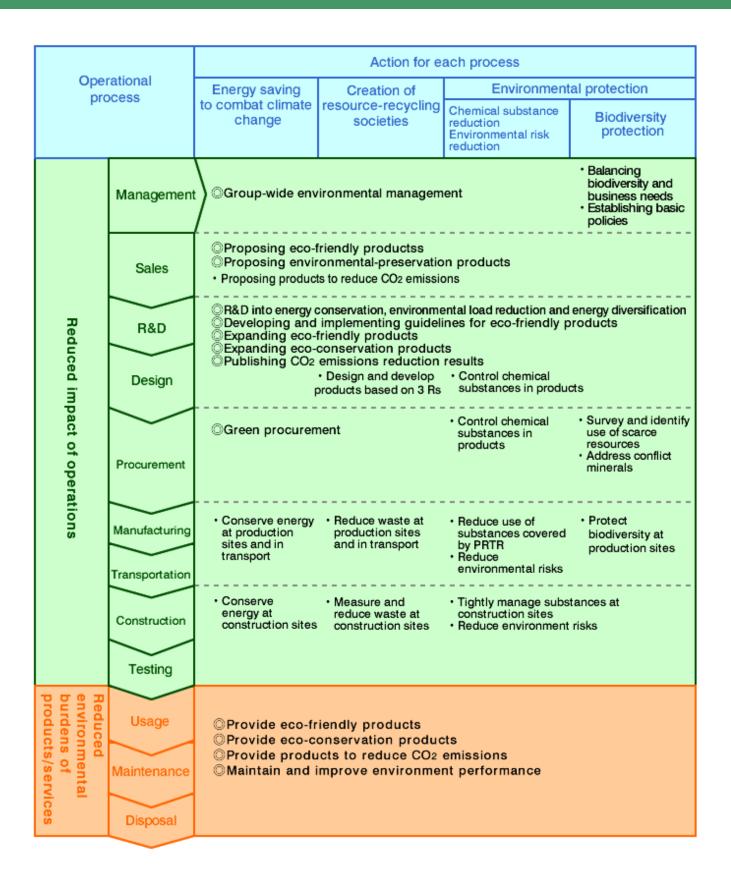
The IHI Group's business activities can be classified into nine basic operational processes: Management, Sales, R&D, Design,

Procurement, Manufacturing, Transportation, Construction and Testing. The resulting products and services are then

classified into three stages: Usage, Maintenance and Disposal.

The following table describes the specific actions needed to take in our respective operational processes and

product/service stages as we work to raise the environmental awareness of our employees.



# Environmental Management

# Companies Included in Our Environmental Data

Based on changes to IHI's organizational structure from FY2013, the scope of companies included in the Group's environmental data was expanded from "IHI regions and work sites and IHI Marine United," which had been effective up to FY2012, to "consolidated IHI Group companies, including ex–Japan affiliates." Japan Marine United Corporation, formerly known as IHI Marine United, is no longer included.

In FY2013, the first year of the IHI Group Environmental Action Plan 2013, our environmental activities reflected this broadened scope.

Please note that the FY2013 data shown in this chapter was still under review as of June 30, 2014 and may vary by up to 10% according to changes based future calculations and scope.

The conversion factor of 0.418 kilograms of CO2 per kilowatt is used to calculate CO2 equivalents as electricity.

## How We Performed in FY2013

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

Strengthen Group environmental management

Reduce environmental burdens through products and services

• Reduce environmental burdens through business operations

Related initiatives were focused on five key challenges, as shown in the table. In internal audits conducted during the year,

we graded our efforts on a scale of 1 to 4 and achieved overall scores of 80 or higher. "Implementation of green

procurements," however, received a score of 2 due to the fact that the green procurement activities of IHI Group suppliers had been examined but IHI had not yet established new rules for green procurements.

Based on our assessments of performance in FY2013, we have made "implementation of green procurements" our newest priority challenge for FY2014. Going forward, we will continue to upgrade our foundation for managing the IHI Group in the most environmentally friendly manner possible.

Environmental Action Plan 2013: Performance in FY2013

Challenges (boldface indicates top priority)		Score	4	
Strengthen environmental management		1	3	
Esta	blish Group-wide environmental management system	4	2	
Utiliz	ze Environmental management systems	3	1	
Redu	uce Environmental risks	4		<ul> <li>Poor</li> </ul>
Envi	ronmental communication	4		
Prov	ride environmental-information at supply chain	4		
Reduce enviro	nmental burdens through products/services			
Furt	her Quantitative reduction of CO2 emissions	3		
Expa	and Eco-friendly and eco-protection products	4		
Reduce enviro	nmental burdens through business operations	·		
Pror	note Energy conservation and climate-change prevention	3		
Pror	note Creation of resource-recycling societies	4		
Man	agement of information about chemical substances in products	4		
Man	agement of chemical substances at worksites	4		
Pror	note green procurements	2		
Mea	sure the impact of business activities on biodiversity	4		

\*Green font indicate the top-priority agenda

# How We Tackled Our Top-priority Agenda

Described below are the measures we took in FY2013 to tackle both our top-priority agenda and measures planned for future implementation.

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

We expanded the companies included in our environmental data to include consolidated IHI Group companies. We collected and compiled past data on major categories of environmental burden and used it to build a database. We have begun our discussion on targets for impact reduction and will manage related data on a consistent basis to make our business more environmentally friendly.

Also, we assessed how well our major ex-Japan business sites are progressing with their environmental initiatives, based on which we have begun to strengthen communications with environmental personnel at ex-Japan offices, as required.

#### 2. Further quantitative reduction of CO2 emissions

As part of our efforts to help reduce CO<sub>2</sub> emissions and other greenhouse gases, we calculated the amounts of CO<sub>2</sub> emissions associated with major IHI group's products. Based on these calculations, we are now expanding our range of products capable of contributing to CO<sub>2</sub> emissions reduction.

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

We use a system of six icons to indicate the environmental performance of our products. In FY2013, we displayed many of our top performers at the Eco Product Exhibition, showcasing our commitment to providing society with eco-friendly and eco-protection products. Going forward, we plan to introduce an in-house certification scheme to accurately identify IHI Group's products that are particularly green-oriented.

#### 4. Promote energy conservation and climate-change prevention

IHI makes every effort to reduce energy consumption in its operations. In addition, to reduce CO<sub>2</sub> emissions, company worksites and offices use equipment efficiently and upgrade to more energy-efficient equipment as required. This year, we will set new CO<sub>2</sub> emissions reduction targets according to the new list of companies covered in environmental data, which was reviewed in the previous fiscal year, to further our effort for reducing CO<sub>2</sub> emissions.

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

During the reporting year, we assisted IHI Group companies in developing and strengthening their systems for managing chemical substances. In FY2014, we will continue with efforts to strengthen the management of chemical substances in the IHI Group.

# External Recognition of IHI Group Environmental Efforts

IHI Group 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 Group activities have been recognized and praised for their environmental benefits.

### Nikkei Environmental Management Survey

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

In FY2013, IHI Group scored strongly in environmentally friendly management, resulting in a big jump in rankings from the previous year.

Survey Results

FY2012: Score: 347 out of 500 (Ranking: 259th out of 429 manufacturers)

↓

FY2013: Score: 403 out of 500 (Ranking: 123th out of 438 manufacturers)

## CDP

Formerly known as the Carbon Disclosure Project, CDP is a non-profit organization that was established by investors worldwide. Every year it discloses the results of questionnaires sent to corporations and local governments to urge more action in fighting climate change. The CDP index measuring such efforts is relied upon by institutional investors worldwide. In FY2013, 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 "B."

#### Survey Results

FY2012: Results undisclosed.

↓

FY2013: Disclosure: 91 out of 100 Overall performance: B

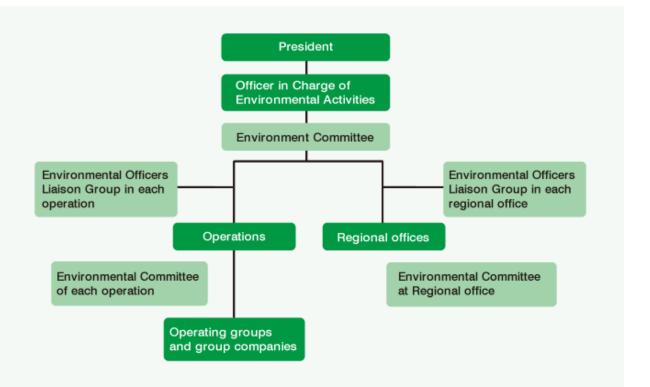
# Environmental Management Systems

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 resulting 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 decides on an environmental activity plan at the beginning of 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



### Status of Environmental Management Systems

IHI is developing and strengthening environmental-management systems throughout its Group. In FY2013, two more ex-Japan group companies received certifications for their environmental management systems.

The effectiveness of such activities is assessed by internal audit at least once a year. For the Group's entire environmental management systems, adequacy and appropriateness are verified by third-party organizations.

Key issues identified through internal audit or external review are shared with the Environmental Officers Liaison Group in each relevant region and worksite to encourage improvement.

# Acquisition of ISO 14001 Certifications in Japan

#### ■ 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

#### Domestic Companies

Sector	Company Acquisition		Certification Body
	INC Engineering Co., Ltd.	March 2000	BSK
Aero-Engine & Space Operations	IHI AEROSPACE Co., Ltd.	May 2002	BVJ
	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			

Management	IHI Inspection & Instrumentation Co., Ltd.	March 2000	JAPEIC
Headquarters	MEISEI ELECTRIC Co., Ltd.	November 2001	JQA

#### ■ Ex-Japan Companies

Sector	Company Acquisiti		Certification Body
Machinery & Logistics Systems Operations	IHI Ionbond 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 Turbocharger Operations	IHI Charging Systems International Germany GmbH	May 2013	Kiwa International Cert GmbH
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.
Energy & Plant Operations	Jurong Engineering Limited November 2		LRQA
Global Marketing Headquarters	IHI ENGINEERING AUSTRALIA PTY. LTD. August 2013		SAI GLOBAL

Full names of certification bodies

BSK: Defense Structure Improvement Foundation

DNV: Det Norske Veritas

JQA: Japan Quality Assurance Organization

MSA: Management System Assessment Center

BV(J): Bureau Veritas Japan JAPEIC: Japan Power Engineering and Inspection Corporation LRQA: Lloyd's Register Quality Assurance NK: Nippon Kaiji Kyokai

### Issues Identified in Third-party Reviews

The following main issues, i.e., areas where it was determined that more could be done, were identified in external reviews

conducted by third-party organizations in FY2013:

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

# Issues Identified in Internal Audits

- •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 FY2013 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

	FY2009	FY2010	FY2011	FY2012	FY2013
Accidents	3	1	1	2	2
Administrative Guidance	2	0	4	2	0
Complaints	3	3	1	2	1

### Accidents and Responses in FY2013

#### **Environmental Accidents**

Blasting dust dispersed into sea from shipbuilding dock

Incident: While blasting the surface of a ship, strong winds blew dust into the sea.

Response: Wet blasting was used to suppress dust, curing was carried out to prevent dust dispersion during blasting, and procedural compliance was ensured.

·Wastewater pH from plant exceeded reference value

Incident: Incident: Variations in the quality and quantity of wastewater from a plant affected the capacity of its wastewater treatment tanks momentarily, but significantly.

Response: The aeration blower timing was readjusted and the pH of treated water was measured and confirmed to be satisfactory.

#### Administrative Guidance

No incident occurred.

#### Complaints from Local Residents

- Spray paint mist discolored vehicles parked nearby a facility
  - Incident: During outdoor painting, spray mist exceeded the expected curing amount.
  - Response: The paint-curing equipment was upgraded to prevent mist dispersal.

# Environmental Training and Awareness

Environmental training at IHI Group 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 the IHI Group'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 IHI regions, worksites and major group companies. This training also includes ISO14001 skills for internal auditors and knowhow for ensuring the effectiveness of environment-related activities.

In FY2013, training included briefings and discussions on the IHI Group Environmental Vision and the IHI Group Environmental Action Plan for senior managers from three domestic companies and eight ex-Japan companies.

# Reducing Environmental Burdens Through Products and Services

# **Basic Policies**

The IHI Group strives to protect the global environment and to reduce environmental burdens by developing eco-friendly products and services, as well as making data on the performance and CO<sub>2</sub> emissions of these products available to the public.

# Desirable Eco-friendly Products

In FY2013, the following six product characteristics were identified as being useful for environmental protection, based on which IHI is now classifying its product lineup:

Energy efficiency : Efficient use of energy to conserve resources

<u>Greenhouse gas reduction</u> : Reducing emissions of CO<sub>2</sub> and other greenhouse gases (GHG) to minimize climate change <u>Recycling and water conservation</u> : Reducing water consumption and promoting recycling for efficient use of natural resources

<u>Harmful chemicals reduction</u> : Reducing the chemical content of products and preventing chemicals from contaminating the environment

Environmental risk reduction : Reducing risks to human health and natural habitats

Biological diversity preservation : Protecting the diversity of ecosystems, species and genetic resources.

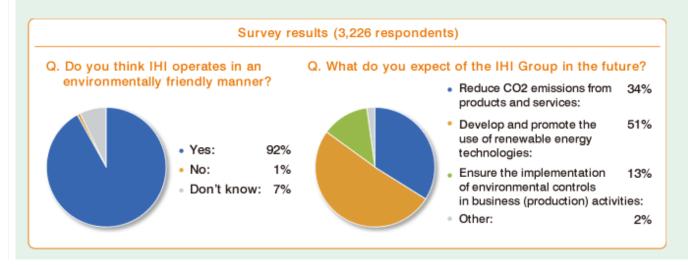
#### TOPIC Survey Conducted at Eco Products 2013

To showcase IHI's environmental initiatives, as well as improve such undertakings through interaction with the public, we took part in Eco Products 2013, Japan's biggest environmental exhibition, which took place at Tokyo Big Sight from December 12 to 14, 2013. Over 4,000 people visited the IHI booth. For elementary, junior high and senior high school students who were learning about environmental issues , we introduced our eco-friendly products and initiatives.For visitors who were university students or older, we invited them to participate in a survey.



IHI booth in Eco Products 2013

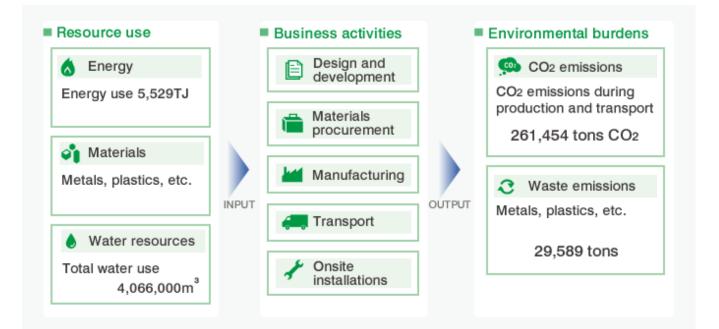
Our poll confirmed that many respondents now have a better understanding of our eco-products and initiatives. It also showed that people expect us to operate in a more environmentally friendly manner and provide products, services and technologies from this perspective. These results were a great encouragement to us and resolved our determination to help protect the environment in line with the expectations of our stakeholders.



# Reducing Environmental Burdens in Business Operations

# Materials Usage

IHI Group is working to lower its environmental burdens by reducing the amount of materials input and output by its businesses. The scope of materials usage in IHI business in FY2013 is described hereafter.



# Reduction of CO<sub>2</sub> Emissions during Production

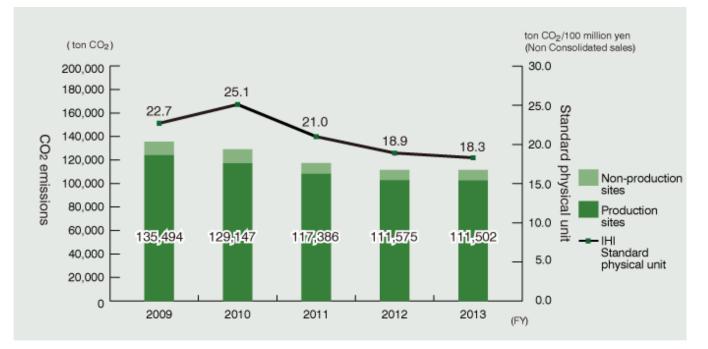
Extreme weather and rising sea levels seen around the world in recent years are thought to be caused by global warming. The IHI Group is taking action to reduce CO<sub>2</sub> emissions, one of the prime suspects behind global warming.

The amount of CO<sub>2</sub> emitted by IHI has been decreasing since 2009 thanks to tireless efforts. The graph below shows the standard unit of measurement, which is calculated by dividing the IHI Group's total CO<sub>2</sub> emissions by consolidated sales. Compared to the peak in 2010, the amount was slashed by about 27% in 2013.

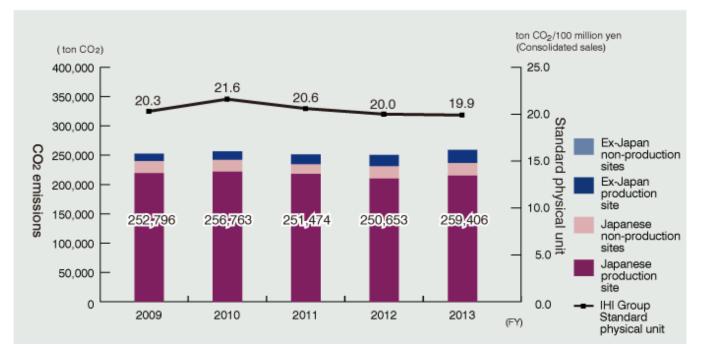
CO2 emitted annually by the IHI Group remained at about 250,000 tons between FY2009 and FY2013. Emissions decreased slightly between FY2010 and FY2012, but rose in FY2013. The breakdown by Group sales is shown the graph. In FY2013, CO2 emissions were about 8% below the FY2010 level, when they peaked during the plotted five-year period.

For FY2014, we have set our new CO<sub>2</sub> emissions-reduction targets in accordance with the expanded list of companies including in our current environmental data. Going forward, we will endeavor to reduce CO<sub>2</sub> emissions in our production activities through energy-saving operations and upgraded equipment.

# CO2 Emitted by IHI

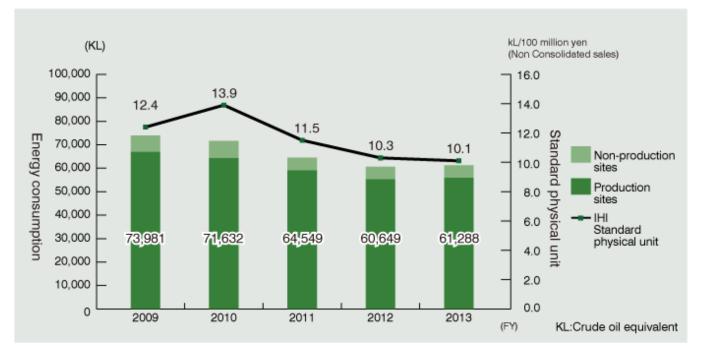


# CO2 Emitted by IHI Group



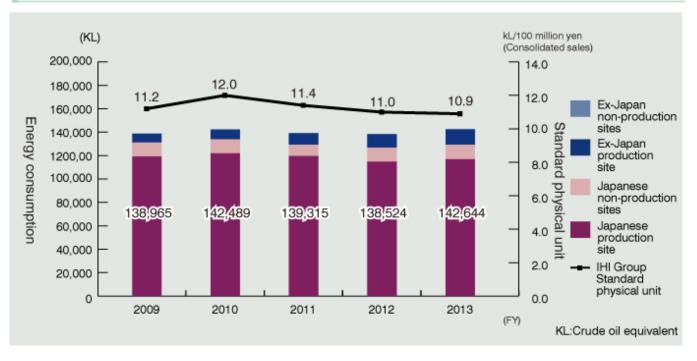
# Reduction of Energy Consumption

The IHI Group reduces energy consumed in its business activities by implementing a wide range of energy-saving measures, including the efficient use of equipment at works and offices and upgrading to energy-efficient equipment. Energy-saving training by external experts has been organized at IHI's major business sites since FY2009. In a typical year, training is tailored to the requirements of each business unit is provided 24 times Group-wide, including 12 times at IHI offices and 12 times at group companies. Post-training results are closely monitored to ensure successful implementation. Energy consumption by IHI has been decreasing since 2009 thanks to energy-saving measures. The graph below indicates the standard physical unit calculated by dividing the amount of IHI's energy consumption by its consolidated sales. Compared to the standard physical unit peaked in 2010, IHI Group succeeded in cutting back the amount by about 27% by 2013. Energy consumed annually by the IHI Group was about 140,000 kiloliters (crude oil equivalent) between FY2009 and FY2013. Consumption decreased slightly between FY2010 and FY2012, but rose in FY2013. Figures are shown in the graph. In FY2013, consumption was about 9% below the FY2010 level, when it peaked during the plotted five-year period. We continue to reduce our energy consumption in production activities by ensuring the efficient use of equipment and upgrading other equipment as required.



### Energy Consumed by IHI

### 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% year to year over the medium to long term.

Products shipped by IHI, such as jet engine parts and commercial boilers, vary so significantly in size, weight and quantity that it is not possible to use a unified energy-consumption rate throughout the Group. Instead, we ensure that each worksite sets its own energy consumption targets and explores the most appropriate modes of transportation for shipments. We also identify worksites that use large amounts of energy for distribution and then provide advice for improvements. For each product, weight, transportation distance and mode, energy consumption and standard physical unit, and CO2 emissions data are compiled on a monthly basis. The data are then presented to the quarterly Environment Committee as reference for providing guidance.

Information also is collected from logistics staff at worksites concerning modes of transportation used or the existence of any transportation restrictions. To facilitate greater efficiency, worksites share best practices regarding modal shifts to rail or ship, truck loading efficiency and freight consolidation.

# Contribution to Building a Recycle-oriented Society

#### Improving waste management

IHI's regional offices pursue reduction, reuse and recycling-The 3 Rsas well as appropriate disposal of industrial waste.

In FY2013, we commissioned Amita Corporation to analyze our waste management risks, including how contracts, management procedures and other documents are retained or disposed. The findings were used to revise operational and management procedures for enhanced waste management.



In addition, a recycling skills-enhancement seminar was provided for managers at the Toyosu Headquarters.

An inspection of how industrial waste is stored

Outside Japan, one representative company-a vehicular turbocharger maker-was found to have been use returnable containers to receive parts from suppliers and deliver products to customers, thereby substantially reducing the company's consumption of packing materials. Minimizing waste for the annual shipment of hundreds of thousands of turbochargers is one of many ways that IHI is helping to realize recycle-oriented societies.



IHI Turbo (Thailand) Co., Ltd. uses returnable containers to deliver products.

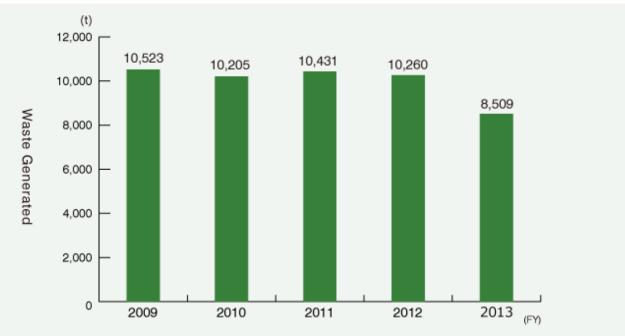


IHI Charging Systems International Germany GmbH also uses returnable containers to deliver products.

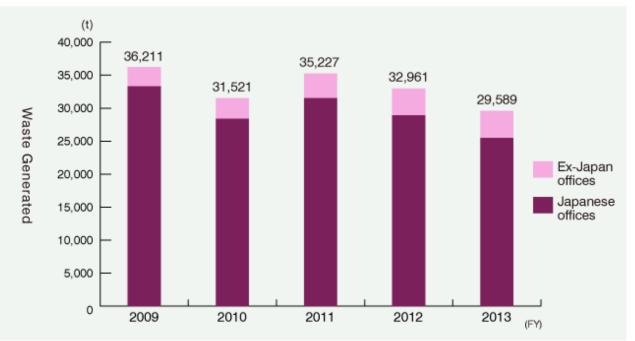
### Reduction of Waste and Water Consumption

As part of our efforts to conserve natural resources, the IHI Group is working to reduce its consumption of water resources and generation of business-related waste. Waste generation has declined but water consumption has trended upward in recent years, as shown in the graphs.



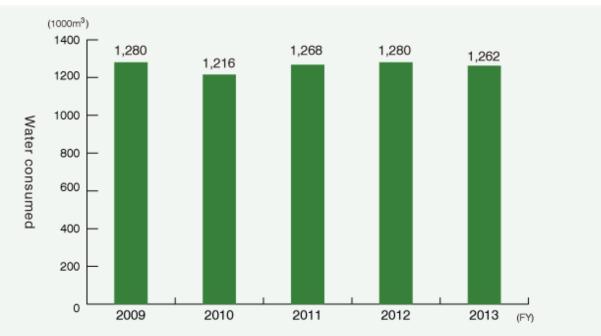


#### ■ Waste Generated on Consolidated Basis

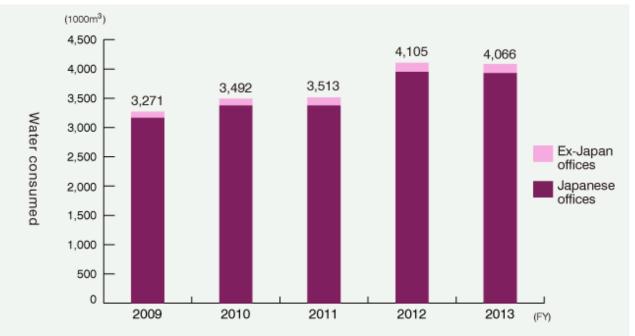


# Water Resources

#### ■ Water Consumption on Nonconsolidated Basis



#### ■ Water Consumption on Consolidated Basis



All IHI Group companies properly manage electric equipment containing polychlorinated biphenyls (PCBs). In FY2009, we started to manage and dispose of equipment containing relatively large amounts of PCBs in a safe, pollution-free manner. To date, we have safely disposed of about 37% of all such equipment.

We have also have completed identification of fluorescent light stabilizers and electric equipment containing smaller amounts of PCBs, which nevertheless will be disposed of, and now are in the process of replacing them.

### Addressing Soil Contamination

The IHI Group launched a three-year project in 2011 to examine data concerning officially designated hazardous substances<sup>\*</sup>, 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 relevant authorities must be notified. In some cases, this can raise costs in terms of time and money, and even lead to termination of the project in some instances.

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

# Management of Information on Chemical Substances in Products

The IHI Group 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 the products they supply 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 our departments for Research & Development, Production, Manufacturing, Sales Planning, and Logistics. Activities are monitored and managed on a monthly basis, and the results of eliminating prohibited substances are reported to customers in our downstream supply chain. Data obtained from initiatives carried out with IHI Star Machinery Corporation are disseminated horizontally throughout the IHI Group. 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.

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

Cabinet Order No.	Substance	Released	Transferred
53	Ethylbenzene	14.7	1.4
80	Xylene	22.2	2.0
87	Chromium and chromium (III) compounds	26.2	3.5
88	Chromium (VI) compounds	0.0	0.5
296	1,2,4-trimethylbenzene	0.5	0.0
297	1,3,5-trimethylbenzene	0.2	0.0
300	Toluene	7.7	0.6
308	Nickel	0.0	2.1
309	Nickel compounds	0.0	0.4
374	Hydrogen fluoride and its water-soluble salts	0.3	3.5
392	Normal hexane	2.2	0.0
400	Benzene	1.5	0.0
410	Poly(oxyethylene) nonylphenyl ether	0.0	1.5
412	Manganese and its compounds	0.0	8.1

(tons)

■ IHI Group: PRTR Act Class I Chemical Substances

Cabinet Order No.	Substance	Released	Transferred
53	Ethylbenzene	64.5	6.2
71	Ferric chloride	0.0	8.0
80	Xylene	126.2	11.1
83	Cumene	0.1	0.0
87	Chromium and chromium (III) compounds	26.2	13.8
88	Chromium(VI) compounds	0.0	0.5
186	Dichloromethane; methylene dichloride	4.3	4.8
296	1,2,4-trimethylbenzene	4.3	0.9
297	1,3,5-trimethylbenzene	0.5	0.0
300	Toluene	83.6	6.8
308	Nickel	0.0	2.2
309	Nickel compounds	0.0	0.4
374	Hydrogen fluoride and its water-soluble salts	0.3	8.3
384	1-bromopropane	5.4	1.1
392	Normal hexane	16.2	0.2
400	Benzene	1.5	0.0
410	Poly(oxyethylene) nonylphenyl ether	0.0	1.6
412	Manganese and its compounds	0.0	8.2
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 conserving biodiversity. In 1995, the Japanese government introduced its National Biodiversity Strategy, followed by the enactment of the Basic Act on Biodiversity in 2008, which urges businesses to partake in biodiversity protection. Then, 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, the IHI Group has been conducting a variety of initiatives.

#### Aichi Worksites

In Chita, Aichi Prefecture, where IHI's Aichi worksite is located, 54% of the city area 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 below.

- Initiatives in FY2013
- Initiatives in FY2012
- Initiatives in FY2011
- Initiatives in FY2010

#### Initiatives in FY2013

#### 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 with the nonprofit Japan Ecologist Support Association, combining the efforts of students, companies and



Students planting native species

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

#### Initiatives in FY2012

#### 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

#### Initiatives in FY2011

#### 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.



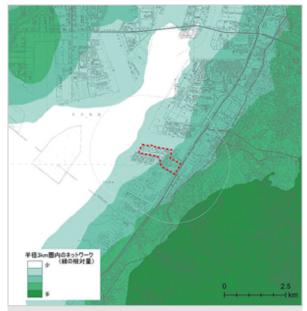
Building dwellings for crickets

Building dwellings for Japanese grass lizards

Building dwellings for Japanese grass lizards

#### ■ Initiatives 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)

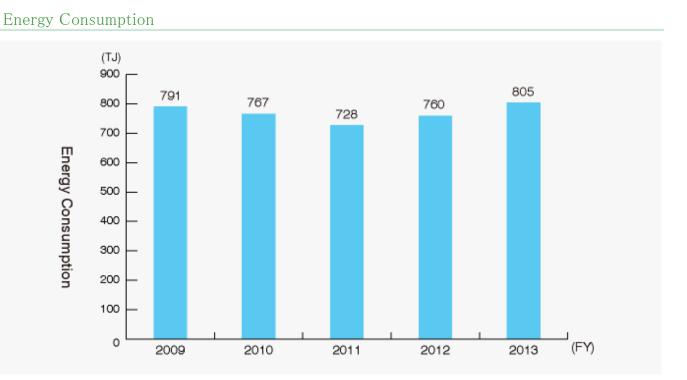
As a result of the studies, it was determined that the green preserve of the Aichi worksite is helping to preserve biodiversity. Based on this conclusion, the company devised a plan for environmental preservation and enhancement to support the surrounding ecosystem, including to provide animals with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



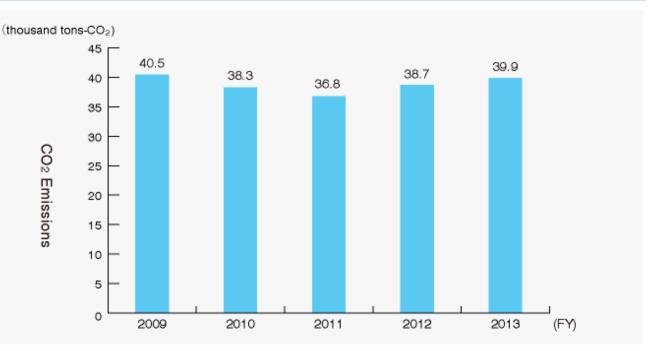
Green preserve utilization and improvement scheme (Courtesy of Eco-Asset Consortium)

# Site Data

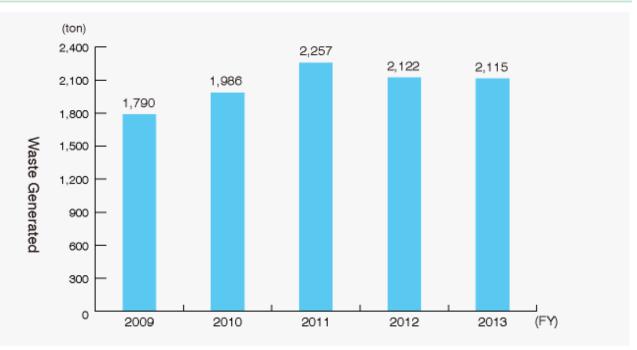
# Musashi / Soma Region



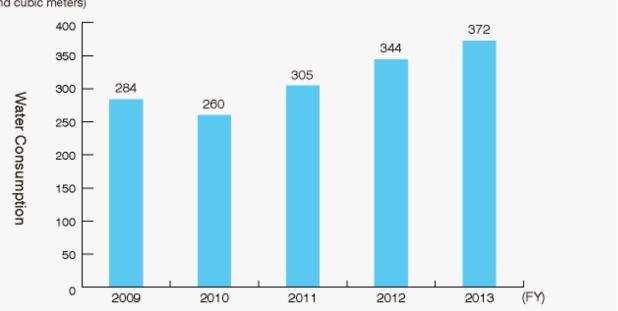
# CO<sub>2</sub> Emissions



# Waste Generated



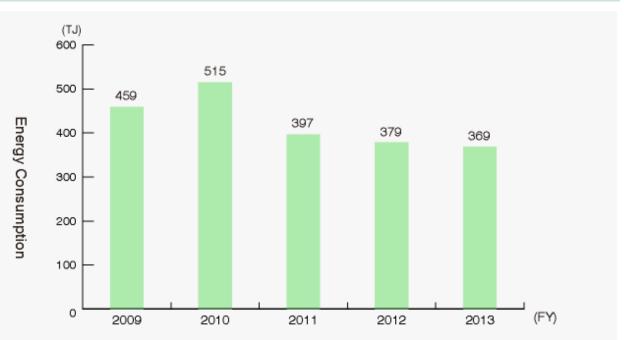
# Water Consumption



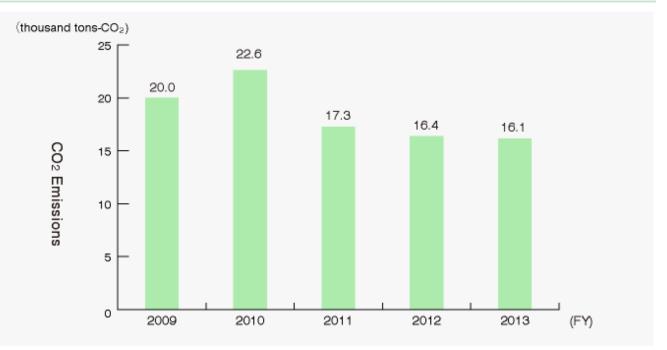
(thousand cubic meters)

# Yokohama Region

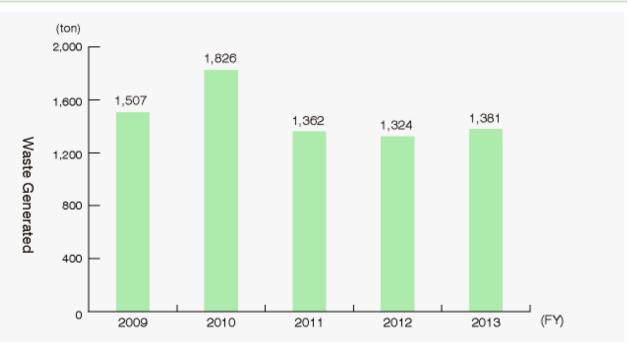
# Energy Consumption



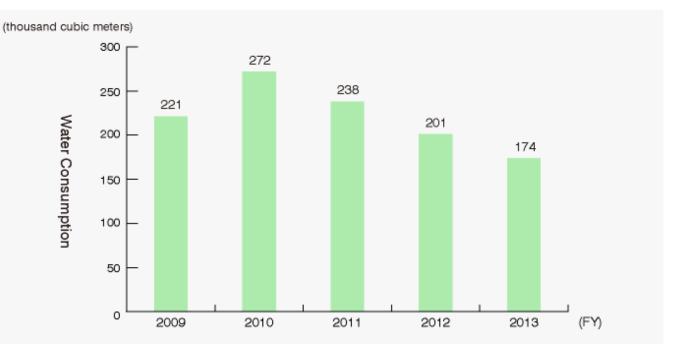
# CO<sub>2</sub> Emissions



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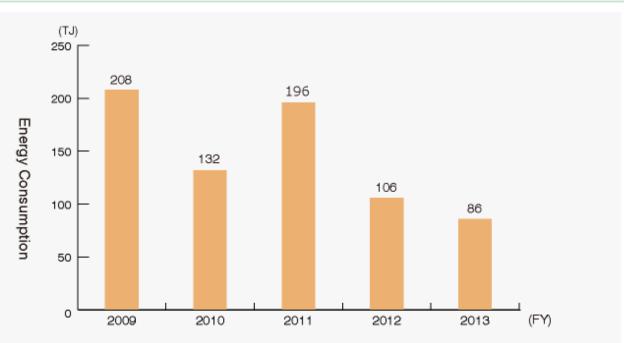
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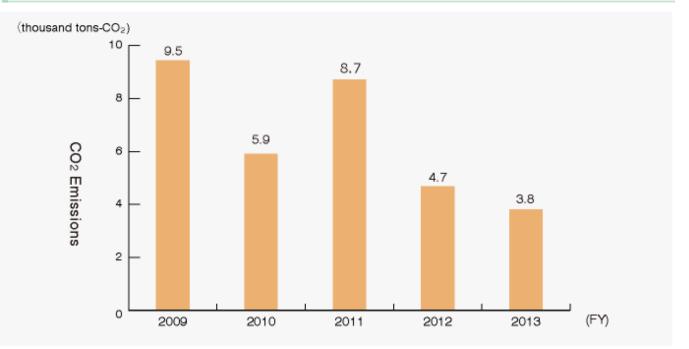
IHI CSR REPORT 2014

# Aichi Region

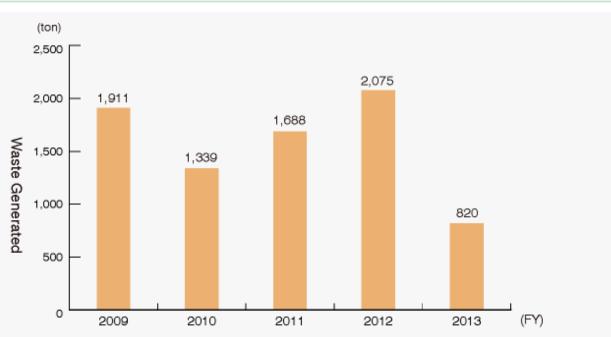
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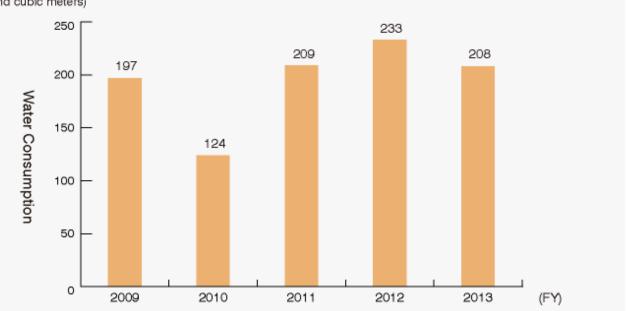
# CO<sub>2</sub> Emissions



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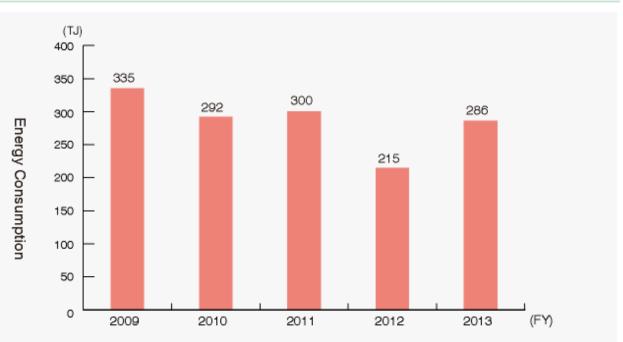
# Water Consumption



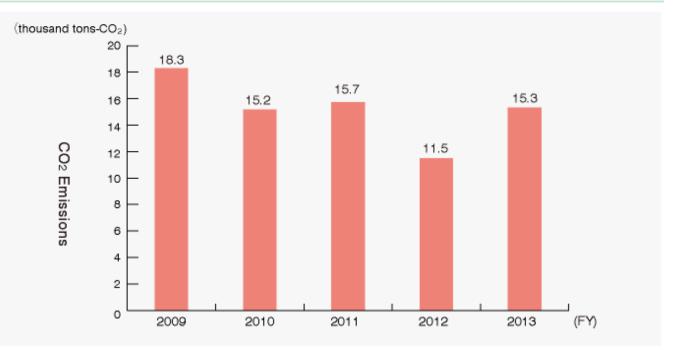
(thousand cubic meters)

# Aioi Region

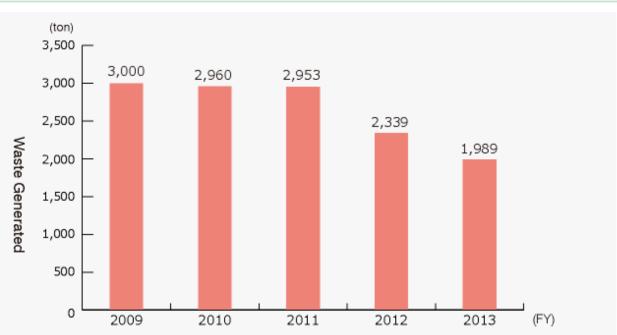
# Energy Consumption



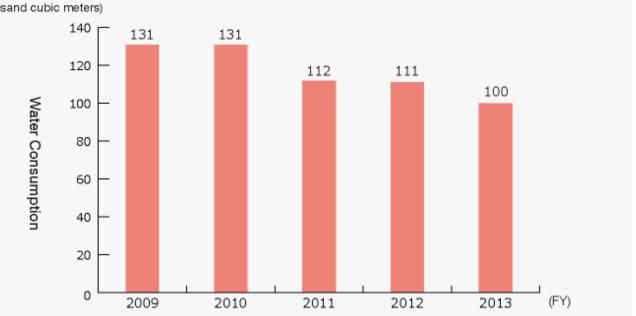
# CO<sub>2</sub> Emissions



# Waste Generated



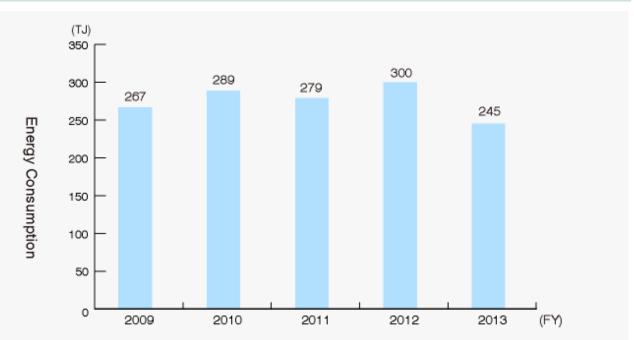
# Water Consumption



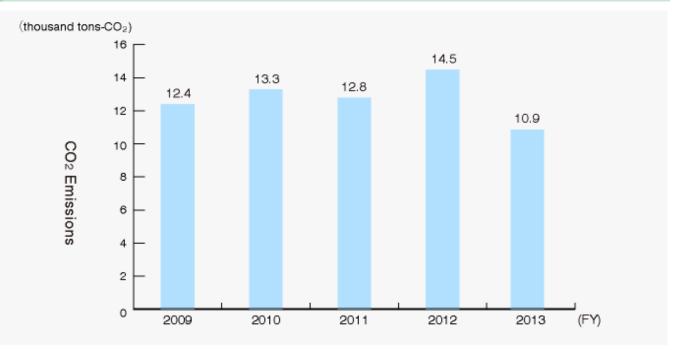
### (thousand cubic meters)

# Kure Region

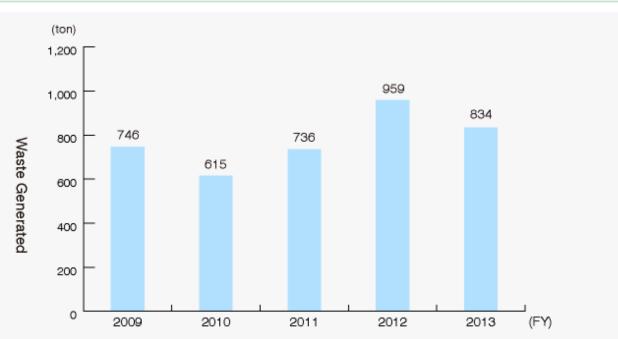
# Energy Consumption



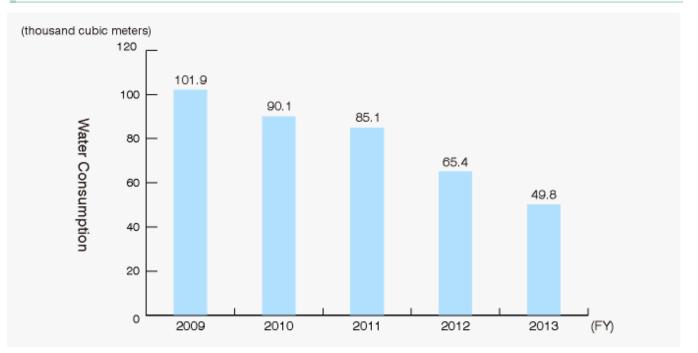
# CO<sub>2</sub> Emissions



# Waste Generated



# Water Consumption



# Community Service

# Message from General Manager, Administration Division

#### Communicating with Host Communities

IHI believes that businesses have the responsibility to communicate with residents in their host communities, including to help them deal with local issues. IHI offices and works across Japan cultivate close relationships with their host communities under the guidance of each representative office.

For instance, the IHI headquarters is located in Toyosu, a booming commercial and residential district of Tokyo. The company has been actively involved in helping to develop Toyosu, making it a better place to live so that local children can happily call it home.

In FY2013, we presented a planetarium show at the Space Ball theater, which was opened temporarily in the first floor atrium of the IHI headquarters. The show, which enabled people

to experience simulated space travel, was attended by over 36,000 visitors and left children in particular with a lasting impression.

Also, based on our commitment to working closely with the Toyosu community, we initiated talks with locally based companies to promote community activities that are helping to make Toyosu area an even better place to live and work.



Kazuki Awai Associate Director General Manager, Administration Division

# **Basic Policies**

IHI supports efforts to improve host communities, focusing on five key areas as part of its commitment to social responsibility.

#### Nurturing Future Generations



We contribute to education of future generations of engineers

Promoting Precision-manufacturing Technologies and Science



We work to spread the message across society that monozukuri precision manufacturing technology and science are fun. Supporting Environmental Sustainability



We are committed to addressing global environmental issues.

Providing Access to Medical Care, Food and Water



We support solutions related to the delivery of medical care, food and water.

Resolving Problems in Local Communities



IHI supports community services in locations where the company operates.

# Activities in FY2013

#### TOPIC Donation to School in Thailand

A donation of 51,000 THB (JPY 160,000) was made by IHI Turbo (Thailand) Co., Ltd. (ITT) to the Khao Lat Temple School in Chonburi, Thailand on January 11, 2014, which is celebrated as National Children's Day in Thailand. ITT organized activities including games, music, a talent show and a picnic, making it a fun-filled day for the children. ITT, which has carried out similar activities annually since 2010, will continue to support its local community in the future.



Support activities for a school in Thailand

#### **TOPIC** Support for United Nations World Food Programme

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

In FY2013, we again sponsored the WFP's Walk the World, a charity walk along the Yokohama waterfront that attracted over 200 IHI



Participants in WFP's Walk the World

Group employees and their families. The participants walked around Yokohama wearing IHI logo T-shirts to raise awareness of serious food shortages and hunger in Africa and Asia. Going forward, the IHI Group will continue to actively support the JAWFP.

#### TOPIC Elementary Students Invited to Toyosu IHI Building

About 170 sixth-grade students from an elementary school in Tokyo's Koto Ward were invited to our Toyosu IHI Building on October 10, 2013 as part of the school's career education program. The students were shown a presentation by the engineers from IHI Aerospace Co., Ltd. who were involved in the development of the Epsilon rocket. In addition, the students enjoyed the Space Ball theater in the atrium and had a tour of i-muse, a museum featuring IHI technology.



The students expressed great interest in the Epsilon rocket and

Engineer presents a technical lecture

asked many questions relating to its development. We hope that by watching Space Ball and visiting i-muse, they developed an appreciation of the wonders of science and have a better understanding of the IHI Group's monozukuri precision-manufacturing technology.

The IHI Group plans to remain active in community service, including by offering the Toyosu IHI Building as a location for stimulating people and exchanging ideas in the local community.

IHI Shibaura Machinery Corporation received a commendation from Osaka Governor Matsui in 2013 for its support of community lawns, including at playgrounds of Osaka Prefecture's public elementary schools. An award was presented to the company at the Osaka Excellent Lawn Award Ceremony on August 28. Osaka Prefecture, which has been actively upgrading the lawns at

its elementary school playgrounds, provided turf for the

playgrounds of 182 schools. The prefecture also has been inviting

businesses to contribute to this community initiative. In FY2014, IHI



Osaka Excellent Lawn Award Ceremony

Shibaura became the first manufacturer to be awarded for participation in the program, recognizing its dedicated support of schools by providing guidance and maintenance equipment. IHI received a similar request from the Secretariat of Osaka City's Board of Education, which the Group has been more than happy to accommodate.

#### TOPIC Participation in Replanting at Mizuho Daisan Elementary School

Employees of IHI Mizuho Aero-Engine Works and 28 family members volunteered to take part in a school-playground lawn maintenance and replanting event at Mizuho Daisan Elementary School on June 22, 2013. Under the guidance of the teachers, the volunteers replanted or repaired the lawn, giving them great joy to see their efforts result in a beautifully restored green space.

IHI looks forward to performing similar voluntary work for its local communities.



Volunteers helping to replant playground lawn

Employees from the Philippines who were undergoing training at IHI's Aioi Works in Japan were invited to meet fifth-grade students of Aioi Chuo Elementary School for international cultural exchange on June 9, 2013.

In a question and answer session, the children asked about commonly used greetings in Filipino and famous places and food in the Philippines. The children and the trainees proceeded to plant flowers in the school's Friendship Flower Bed and enjoyed school meal together. A representative from Aioi Works Workshop's Administrative Division also attended the event and spoke to the



International cultural exchange with elementary school children

children about its history and products. The students were favorably impressed and expressed great interest.

IHI will continue to support opportunities to interact with its local communities and engage in information exchanges.

# Performance Objectives

Please find below mid-term objectives and targets as set forth in the Group Management Policies for 2013.

Topic	FY2012	FY2013	FY2014 Plan	Targets & Objectives
Financial targets				
Consolidated net sales	¥1.256 trillion	¥1.304 trillion	¥1.44 trillion (¥100 = \$)	To achieve target of ¥1.4 trillion by FY 2015 and to further increase earnings to ¥1.6 trillion (¥80 = \$) at an early stage of the next period.
Consolidated operating income	¥42.1 billion	¥53.2 billion	¥65 billion (¥100 = \$)	To achieve ¥70 billion by FY 2015 and to further increase operating income to ¥100 billion (¥80 = \$) in FY 2015.
ROIC	4.5%	5.3%	5.8%	6.5% (FY2015)
Debt to equity ratio	1.18	0.99	1.1	1.2 or below(FY2015)
Total investments	_	¥108 billion	¥153 billion	¥400 billion (Cumulative total from FY2013 to FY2015)
CSR				
Employee awareness	Raised awareness of issues via e−learning programs.	Ongoing	Ongoing	Raise awareness of global CSR issues
Level of Employee Awareness (Based on e-learning survey)	86%	86%	90% or greater	Raise awareness of global CSR issues and meet potential and current stakeholder expectations
Governance	I	I		I
Risk management	Determined 16 priority policies	Determined 12 priority policies	Determined 14 priority policies	Increase management efficiency to maximize our inherent strengths and ensure the corporate value is fully achieved.
Compliance	1	1		
Compliance training	Conducted compliance and risk management programs.	Ongoing	Ongoing	•Ensure full compliance with rules, laws, regulations, prescribed practices, internal policies and procedures or ethical standards.

Construction Industry Act compliance Global compliance process and system	_	Construction Industry Act Liaison Group provided advice to group companies Reviewed compliance systems of IHI and Regional Headquarters for the Americas.	Ongoing Improved compliance systems of IHI and group companies.	<ul> <li>Ensure full compliance with rules, laws, regulations, prescribed practices, internal policies and procedures or ethical standards.</li> <li>Establish compliance system across the Group.</li> </ul>
Hotline incident report	166	158	-	reported incidents promptly. Implement preventive and corrective measures.
Supply chain	·	·		
Procurement policy awareness	Established IHI Group Basic Procurement Policy.	<ul> <li>Conducted survey of</li> <li>1,332 companies.</li> <li>Established IHI Group</li> <li>Policy on Conflict</li> <li>Minerals.</li> </ul>	<ul> <li>Reviewed survey</li> <li>findings.</li> <li>Established</li> <li>environmental control</li> <li>guidelines.</li> </ul>	Ensure major suppliers are in compliance with IHI Group Basic Procurement Policy.
Procurement personnel training	Provided training on procurement-related laws and regulations for Group employees.	<ul> <li>Started training courses for local procurement personnel.</li> <li>Introduced training courses on procurement-related laws, regulations and tax systems of priority emerging countries.</li> </ul>	Ensured procurement compliance including chemical substance control.	Ensure global procurement compliance for priority countries.
Health and Safety				
Health and safety	<ul> <li>Conducted risk</li> <li>assessments to reduce</li> <li>workplace risks.</li> <li>Introduced mental</li> <li>resilience training.</li> </ul>	<ul> <li>Established IHI Group</li> <li>Health and Safety</li> <li>Committee.</li> <li>Introduced mental</li> <li>resilience training</li> <li>throughout the Group.</li> <li>Introduced new health</li> <li>management system.</li> </ul>	Ongoing	<ul> <li>Educate all employees on potential hazards and prevent work-related injuries and illnesses.</li> <li>Encourage involvement in health and safety initiatives.</li> <li>Reinforce Group-wide initiatives to increase occupational safety.</li> </ul>

Rate of occurrence of work-related accidents requiring time off from work	0.18	0.21	0.00	0.00
Number of annual leave days taken (or to be taken)	16.14 days	16.27 days	16 days or more	16 days or more
Diversity	I	I	I	
Gender diversity in the workplace	Conducted training for female section managers.	<ul> <li>Carried out activities</li> <li>led by Network Leaders</li> <li>(female managers who support other female</li> <li>employees working in</li> <li>various areas).</li> <li>Made available</li> <li>employment data and</li> <li>targets related to</li> <li>female employees in the</li> <li>workplace.</li> </ul>	<ul> <li>Expanded initiative</li> <li>throughout the Group.</li> <li>Support</li> <li>employees returning to</li> <li>work after childcare</li> <li>leave.</li> <li>Promoted work/life</li> <li>balance choices by</li> <li>encouraging male</li> <li>supervisors to be more</li> <li>supportive.</li> </ul>	Foster inclusive workplace that shares
Employment opportunities for disabled persons	Introduced internships for persons with disabilities	Ongoing	Increased number of offices offering internships and positions offered to interns.	management philosophy and IHI Group's Vision. Provide greater opportunities for employees to develop and grow.
Employment opportunities for senior employees	Continued with re- employment system.	Introduced optional retirement age system where employees have option to work until their 65th birthdays.	Reviewed life planning seminars.	
Employment opportunities for non- Japanese persons	Improved orientation programs.	Recruited candidates from priority areas (Asia).	Ongoing	
Female recruitment	36 (17%)	33 (15%)	31 (14%)	15% or greater
Number of female managers	41 (1.5%)	44 (1.6%)	51 (1.8%)	55 (2%) or greater (FY2015) 75 (3%) or greater (FY2018)

Number of femaleofficers	0	0	1	1 or more (FY2018)
Percentage of employees returning to work after childcare leave	95%	100%	100%	100%
Employment rate of disabled persons	1.80%	2.02%	2.0% or higher	2.3% or higher (FY2018)
Recruitment of new non-Japanese graduates	15	13	10	_
Environment				
Environmental management	Evaluated the IHI Group Environmental Action Plan 2010.	Established IHI Group Environmental Action Plan 2013.     Expanded list of companies covered by environmental data to include consolidated IHI Group companies.	Established energy consumption, CO2 emissions, and waste reduction targets.	IHI Group Environmental Vision 2013 The IHI Group'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.
CO2 emissions from business activities	254,000 tons	249,000 tons	Less than 250,000 tons	300,000 tons (FY2018) * Tentative target
Reduction of CO2 emissions from products and services	-	Estimated reduction of CO2 emissions from products and services.	Ongoing	10 million tons (FY2018) * Tentative target
Sales ratio of environmentally-friendly products	_	_	Reviewed introduction of internal certification scheme for environmentally friendly products.	70% or higher (FY2018) * Tentative target
CDP disclosure scores	48	91	Maintain FY2012 level	
CDP performance scores	No performance band (< 50)	В	Maintain FY2012 level	Increase recognition of Group's environmental initiatives.