

# IHI

Realize your dreams

IHI Integrated Report 2016





## Editorial Policy

Effective FY2015, IHI combined its annual report and CSR report into this single integrated report outlining our objectives for sustainable growth over the long term.

This report presents important information on IHI's policies and strategies, and the foundations that support them, through focusing on the Group Management Policies 2016 in particular. We will use this report as a tool for communicating with all of our stakeholders and increasing our corporate value.

Please view the IHI website for more detailed financial and non-financial information.

## Communication channels

	Financial information	Non-financial information
Printed publication	<b>IHI Integrated Report 2016</b> The main focus of this report is on sharing information on our business activities.	
Websites (Detailed / Up-to-date information)	 <p>Discloses detailed financial results and information on IHI stock and shareholders for out investors.  <a href="https://www.ihi.co.jp/en/ir/">https://www.ihi.co.jp/en/ir/</a></p> <div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>IHI Report (for shareholders)</b>  <a href="https://www.ihi.co.jp/en/ir/ir_library/report/">https://www.ihi.co.jp/en/ir/ir_library/report/</a> </div> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Securities Report</b>  <a href="http://www.ihi.co.jp/en/ir/ir_library/securities/">http://www.ihi.co.jp/en/ir/ir_library/securities/</a> </div> </div>	 <p><b>Sustainability Report</b>                      Provides our stakeholders with detailed information on our sustainability initiatives.  <a href="https://www.ihi.co.jp/csr/english/">https://www.ihi.co.jp/csr/english/</a></p> <div style="border: 1px solid black; padding: 5px; text-align: center;"> <b>Corporate Governance Report</b>  <a href="https://www.ihi.co.jp/en/policy/governance/">https://www.ihi.co.jp/en/policy/governance/</a> </div>

## IHI value creation process

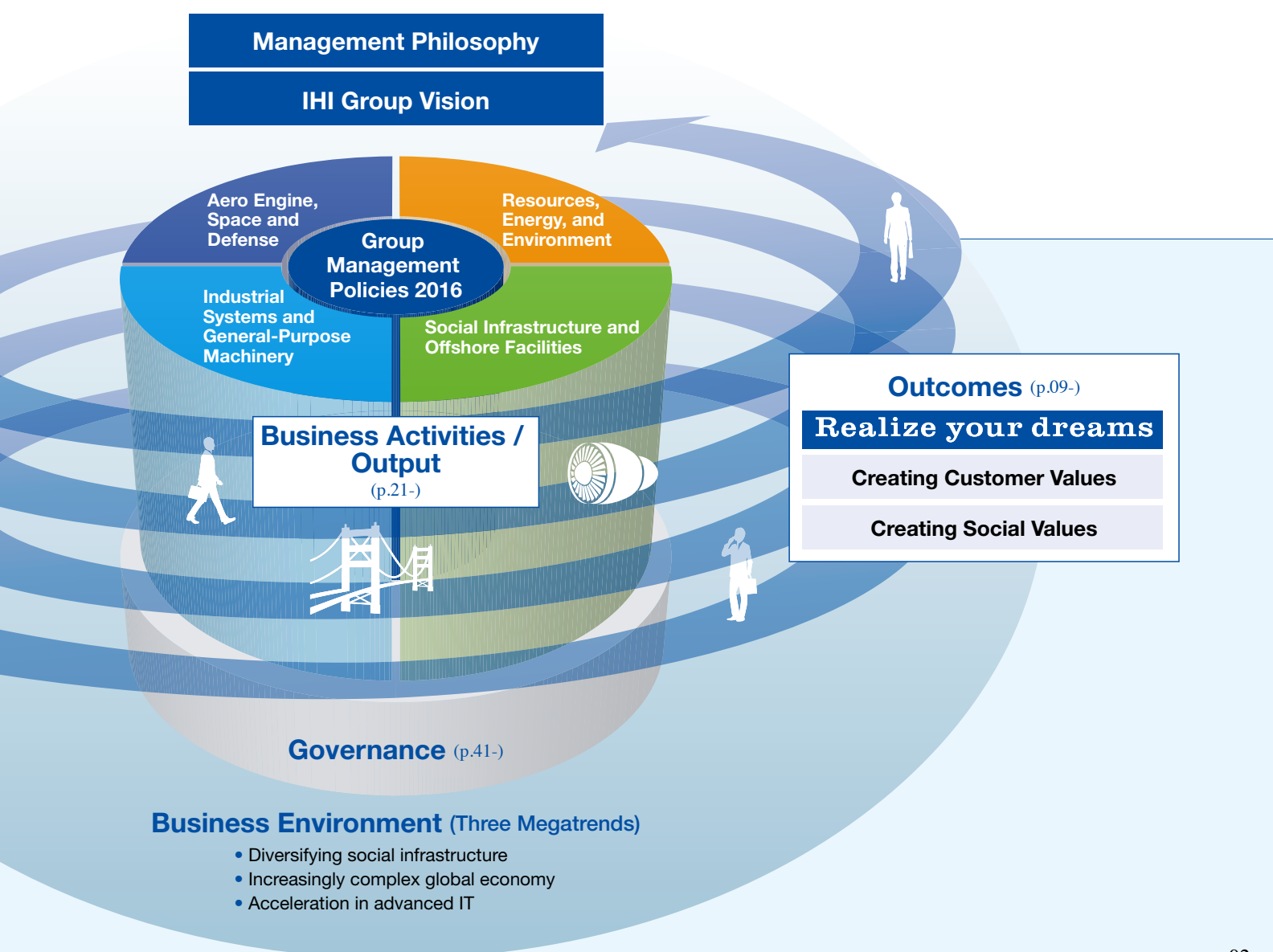
IHI has issued this report as part of its value creation process shown in the chart on the right.

The IHI Group Vision, which is based on our management philosophy, lays out how we aim to operate in the long term. We believe that our human resources and engineering expertise centered on “*Monozukuri*” technology are important capital (input) for conducting business over the long term. In this global business environment, we will implement the business strategies set by the Group Management Policies 2016 in four business areas to provide products and services (output). As a result, we will continue to create value for customers and society (outcomes), and achieve our corporate message of “Realizing your dreams.” We will also aim to improve and sustain growth by making use of our accumulated experiences and the social value we created to develop new and better capital (input).

Input (p.33-)		
Human resources	Engineering expertise centered on “ <i>Monozukuri</i> ” technology	
Financial capital	Manufactured capital	Intellectual capital
Human capital	Social and relationship capital	Natural capital

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# IHI will strengthen its earnings foundations to become a secure and trusted corporate group



**Tamotsu Saito**

Chairman of the Board and  
Chief Executive Officer  
IHI Corporation

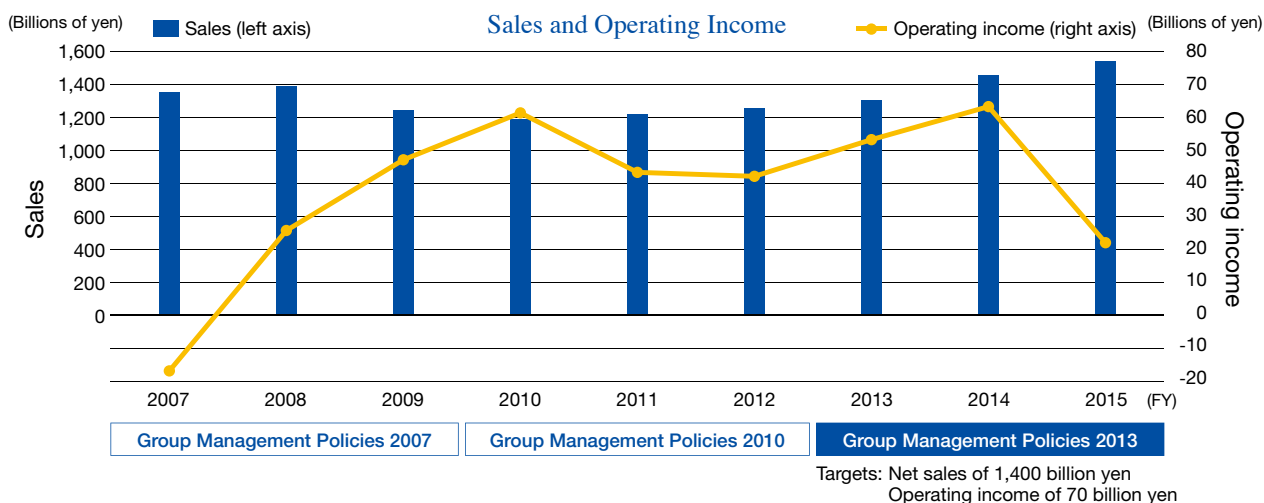
On April 1, 2016, I was appointed Chairman of the Board and Chief Executive Officer (CEO), and Tsugio Mitsuoka was appointed President and Chief Operating Officer (COO). Under this new leadership, IHI aims to earn the trust of all our stakeholders.

### Review of Group Management Policies 2013

FY2015 was the final year of the Group Management Policies 2013, a three-year business plan built on the key concept of “Materializing Growth.” Under these policies, net sales exceeded the target for FY2015 but operating income fell significantly short, so we did not

meet the expectations of stakeholders. The main causes of this were repair costs from inappropriate welding in multiple boiler construction projects, a decline in profitability of our offshore structure business and a loss caused by a scaffolding collapse in a bridge construction project in Turkey. Underpinning these issues was a lack of resources for business operations and a failure to recognize risks in certain projects that involved conditions we had never encountered before. We are deeply aware that these are all problems rooted in our manufacturing technology, the basis of IHI’s business. We pledge to strengthen our manufacturing capabilities accordingly.

## Group Management Policies 2013 – Achievement Status

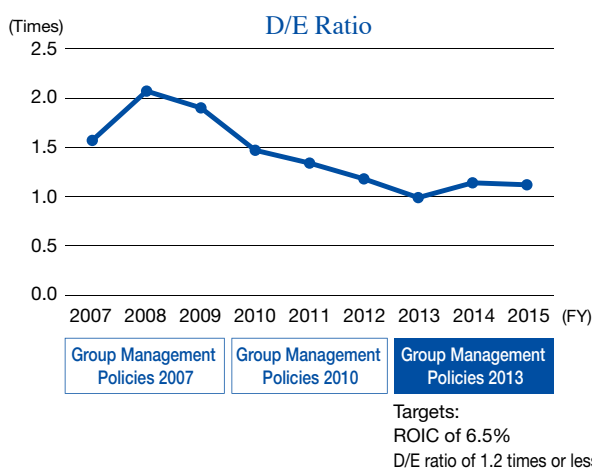
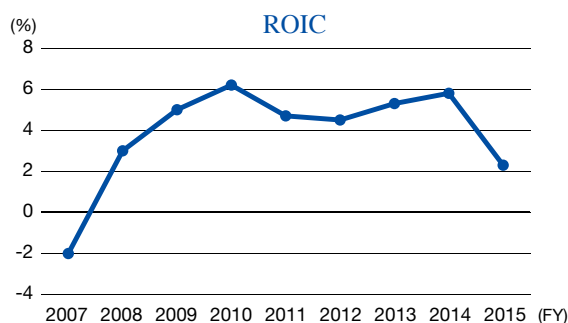
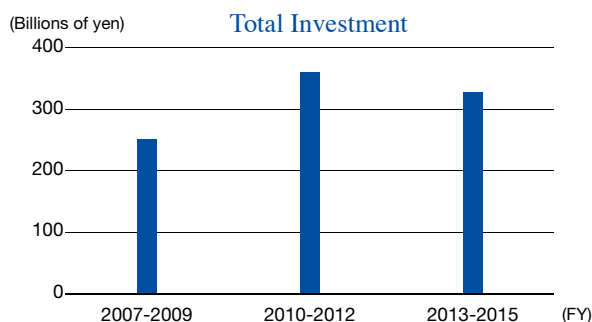


### Group Management Policies 2016 starts

In April 2016, we launched our Group Management Policies 2016 under the key concept of “strengthening our earnings foundations”. As part of this latest business plan, we will strengthen the ability to implement our business strategies and will create a structure that can secure profitability in construction projects. The aim of these policies is to strengthen our earnings foundations by heightening the sophistication of our products and services, and providing solutions that discover and create customer value. Under our new President, we will work wholeheartedly toward achieving our targets in order to realize sustainable growth and improve corporate value at the IHI Group.

### Realizing the dreams of society

IHI’s management philosophy is to contribute to the development of society through technology and to recognize human resources as our single most valuable asset. In order to further grow and expand our business, now is the time to return to our origins: striving to advance technologies and to improve productivity and improving our manufacturing capabilities. Moving forward, IHI will continue to act as one to provide broad, far-reaching values to achieve our corporate mission of “realizing the dreams of society.”





Strengthening our earnings  
foundations to enhance  
our corporate value

Tsugio Mitsuoka

President and Chief Operating Officer  
IHI Corporation



## Toward regaining trust and strengthening our revenue foundation

FY2015 was the final year of our Group Management Policies 2013, a three-year midterm business plan. Under the theme of “Materializing Growth,” we attained our initial sales target, but operating income fell far short of target.

In FY2015, IHI cut its earnings forecasts several times due to the declining profitability of large projects and inappropriate welding in boiler construction projects. That prevented us from meeting the expectations of stakeholders. In the midst of this, I was appointed President and Chief Operating Officer in April 2016. I recognize that my greatest mission is to regain stakeholder trust, and I am humbled by this great responsibility.

Under the Group Management Policies 2013, IHI expanded the scale of its business but failed to maintain profitability. In the light of this failure, IHI launched the Group Management Policies 2016 in April 2016, which attach weight to strengthening its earnings foundations. The new policies pursue improved profitability and have declared the following targets: operating margin of 7%, ROIC of 10% and D/E ratio of 0.7 times or lower. We will steadily implement the policies proclaimed in our Group Management Policies 2016 and strengthen our profit foundations in order to achieve sustainable growth and improve our corporate value.

## Four initiatives to achieve goals under Group Management Policies 2016

We will advance the following four initiatives under our Group Management Policies 2016.

The first initiative is to “reform quality and business systems to reinforce our manufacturing capabilities”. In FY2015, a quality issue occurred because of inappropriate welding during boiler construction. This problem shook our manufacturing technology, the foundation of IHI, to the core. We recognize that we should give top priority to reforming these systems. So in April 2016 we set up the Monozukuri System Strategy Planning Headquarters. Through this initiative, we will reform our corporate structure and strengthen our manufacturing capabilities.

The second initiative is to “Bolster profitability by strengthening our project implementation structure”. Reflecting on the major downward revision of performance forecasts due to under-performance in large-scale projects in FY2015, we are reshaping our large-scale project implementation structure. We will enhance our overall review process by utilizing key individuals within and outside the company in project reviews, and implementing operational framework reviews at the project consideration stage, and tollgate administration and monitoring at the time of receipt of order.

The third initiative is “Pursue concentration

### Targets Set by Group Management Policies 2016

	FY2015 Results	Targets for FY2018	Targets for FY2020
Operating Margin	1.4%	7%	8%
ROIC*	2.3%	10%	—
D/E Ratio	1.12	0.7 or lower	—
(Assumed exchange rate)	¥118.27/\$	¥115/\$	¥115/\$

\*Return on invested capital (ROIC) = (operating income + interest and dividend income) after tax ÷ (owner's equity + interest-bearing debt)

and selection through new portfolio management approaches". In this regard, we restructured our Strategic Business Units (SBUs) to make business strategies easier to plan and propose. We will designate priority SBUs for investments. If there are SBUs that need to be restructured or revitalized, business operation divisions and head office divisions will work together to restructure such SBUs in two years.

The last initiative is to "transform our business model by employing our shared Group functions". Under our Group Management Policies 2013, based on the Three *Tsunagu* (Links) strategy, we strived to grow by connecting technologies and business models accumulated in each business unit. To further accelerate this initiative, we will provide new value to customers by transforming our business model. This will be achieved by leveraging our three shared Group functions— solutions (linkage among businesses), intelligent information management (linkage of products/services and ICT) and global business (linkage between global markets and IHI).

### Gaining understanding from each employee to ensure achievement of targets

When formulating the Group Management Policies 2016, executives from business operation divisions and head office divisions thoroughly discussed our mid- and long-term vision and the roadmap to get there, including specific measures. After considering every element and totaling the results, we reached the target numbers— operating margin of 7% and ROIC of 10%.

It is essential that each division turn these policies into concrete actions to swiftly implement measures and that they prepare recovery plans in the event of something unexpected happening. To increase our chances of achieving our targets, we must secure each and every employee's understanding of, and agreement with, the plan. We will be sure to realize our targets through a PDCA cycle of planning, implementation,, collecting feedback from each individual and taking additional actions as necessary.

The value chain is the basis for reforming our

corporate structure and strengthening our revenue foundation. We need to communicate thoroughly in each situation and process from sales to contracting, design, procurement, manufacturing, construction, and customer support. If there is a problem in even just one part of the value chain, it can become a problem for the whole chain, so coordinating follow-up on weak areas is essential. We will utilize the entire value chain to transform our business model and create new value for customers. Our customers seek value in functionality and solutions that go far beyond hardware. To fulfill this, we will strengthen our three shared Group functions.

These initiatives have steadily borne fruit. In June 2016, we were selected as a Competitive IT Strategy Company\*. In order to bear this mark proudly, we will further leverage the Three *Tsunagu* (Links) to stay competitive.

\*The Ministry of Economy, Trade, and Industry and the Tokyo Stock Exchange jointly select companies from those listed on the Tokyo Stock Exchange (33 industries in total) who are proactively using IT to reform management and enhance competitiveness, and recognize them as "Competitive IT Strategy Companies".

### Making the maximum use of our business resources

IHI's management philosophy states that we must contribute to the development of society through technology and that human resources are our single most valuable asset.

People and technology are our essential business resources. In terms of human resources, we have formulated a Group Human Resource Management Policy, in line with which we are focusing on fully utilizing our human resources and creating opportunities for people to grow. Today, our market spans the world and our customers' needs are diversifying. To promote innovation, diversity is essential in our business strategies. As for technology, we have formulated the Group Technology Strategy 2016 and are concentrating the capabilities of the entire IHI Group on taking appropriate action. We will enhance our manufacturing technology, differentiate and improve the values of our products and services, and develop technologies that will spur innovation, in order to contribute to the development of society.



## Becoming a corporate group that realizes dreams

IHI's corporate message of "Realizing Your Dreams" means that we will realize the dreams of our customers and society in general, so that each and every IHI Group employee feels that they are contributing to society and can realize their own dreams. When considering the character of our products and services, the dreams we imagine cannot be contained in a short time-span of one or two years. It is IHI's identity to set big goals with a 10- or 20-year long-term perspective and move steadily toward them. It is essential to not simply complete the work in front of us, but always remain conscious of the goals we must aim for beyond that.

Meanwhile, the business environment continues to change rapidly. While remaining conscious of our long-term aspirations and goals, we must also adapt to prevailing tides and use our unique manufacturing technologies to change flexibly. However, these changes take a great deal of work, and we humans tend to prefer to continue doing the same things we did yesterday. We fear attempting new things unless we are confident we can achieve them. In order to achieve big goals while continuing to change with our environment, we have to believe that we can succeed. The process of sharing our future is essential; we must discuss our vision and the path we must take, until we earn the agreement of each and every person involved in our business activities.

That's exactly why we emphasize propagating the Group Management Policies 2016 among all our employees. The policies are a roadmap for "Realizing Your Dreams" that we have distilled into a three-year plan with specific business strategies. Having every IHI Group employee understand and subscribe to the belief that "if each one of us changes the way we work, we can achieve our targets" provides a major driving force for us to take on any challenge.

## Creating value together with our stakeholders

In today's global society, expectations for



corporations to create a sustainable future are growing steadily. In FY2015, the United Nations adopted its Sustainable Development Goals (SDGs), which call on us to contribute to the resolution of the various sustainability issues we all face. At IHI, we believe this represents not just the chance to contribute to the development of a sustainable society; it is additionally a business opportunity for us.

In Japan, the Corporate Governance Code, prepared by the Tokyo Stock Exchange, came into effect in FY2015. At IHI, we will ceaselessly strengthen corporate governance in order to become a corporate group trusted by all stakeholders, especially by our shareholders, over the long term. We will further emphasize constructive dialogue with stakeholders and communicate our management philosophy more thoroughly.

Starting in FY2015, we combined our annual report and CSR report into an integrated report. The new report is an important tool for us to communicate with stakeholders. This integrated report covers the background and detailed processes of a wide range of efforts that IHI is making. We would be glad to hear your frank opinions.



## Our History of Value Creation

# Realizing New Dreams as a Comprehensive Heavy Industry Group

For more than 160 years, IHI has been striving to evolve by realizing the dreams of people around the world.

Our countless number of products, which we have changed and which have evolved in line with the societal needs of each era, is proof that we stand by our management philosophy of “contributing to the development of society through technology.”

### Management Philosophy

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

### Vision

The IHI Group seeks to solve the various environmental, industrial, social, and energy related problems of the 21st century, through using engineering expertise to focus on “*Monozukuri*” technology. In striving towards these goals, IHI is becoming a global enterprise offering the safety and security for the benefit of both the environment and humanity.

“*Monozukuri*” Technology means the technology used to improve the competitiveness of products and services offered, by strengthening the capabilities required in development, design, supply, manufacture and construction.



## Our History of Value Creation

### Supported Japan in tumultuous times and laid a cornerstone for modernization



Tokyo Station

The Ishikawajima Shipyard, the origin of IHI, was established in 1853 to help protect Japan's interests in the face of the industrialization of Western nations and the arrival of the "black ships" demanding the opening up of the country to overseas trade. Our shipbuilding technologies started there and over time we expanded into the heavy machinery and aerospace sectors. We created countless first-in-Japan technologies and helped support Japan's society during its period of rapid change, from the Edo period to the end of the Second World War.

- 1853 **Ishikawajima Shipyard established.**
- 1887 Completed the Azuma Bridge, spanning the Sumida River in Tokyo, Japan's largest iron bridge at the time.
- 1911 Completed construction of Tokyo Central Station (now Tokyo Station). First steel frame architecture using cranes.
- 1945 Completed Japan's first domestic jet engine, the Ne-20.

### Supported the period of high economic growth.



Idemitsu Maru

To contribute to the securement and stable supply of energy needed to support Japan's economic growth, we embarked on building the world's largest-class crude oil tanker vessels and gas storage tanks. In 1960, Ishikawajima Heavy Industries and Harima Shipbuilding & Engineering merged, combining their respective strengths in heavy machinery and large-scale shipbuilding. The merged company, Ishikawajima-Harima Heavy Industries, played a major role during Japan's period of high economic growth.

- 1960 **Ishikawajima-Harima Heavy Industries created.**
- 1966 Constructed the world's first 200,000-ton tanker, the Idemitsu Maru.
- 1969 Completed the first LNG tank in Japan.

### Facing new challenges in energy and the environment



Akashi-Kaikyo Bridge

We responded to the needs of a changing society using technology, to squarely face newly evident energy and environmental problems caused by Japan's rapid economic growth. We developed our ultra-low temperature compressor to make it possible to stably store and supply LNG as an alternative energy resource to oil. Built with a unique wind-resistant design and high-precision engineering, the bridge across the Seto Inland Sea realized a long-held dream.

- 1983 Participated in the project to develop the V2500 civil aero-engine, a five-nation joint development project by Japan, the US, the UK, Germany, and Italy.
- 1988 Completed the Second Bosphorus Bridge in Turkey.
- 1998 Completed the Akashi-Kaikyo Bridge, the longest suspension bridge in the world.

### Continuing to venture into new fields to realize people's dreams



Epsilon Launch Vehicle  
(By courtesy of JAXA)

In 2007, we changed our name to IHI to signal that we are a comprehensive engineering corporation that stays at the cutting-edge of the modern era. As such, we will develop and provide products and services of exemplary environmental performance in order to help resolve wide-ranging and complex issues faced by humankind. We will also venture into new areas such as the biomass fuel business, to help realize the dreams of people around the world.

- 2001 Successfully launched the first H-IIA rocket.
- 2002 Began commercial operation of Japan's first tower boiler.
- 2013 **160<sup>th</sup> anniversary of IHI's founding**
- 2013 Successfully launched the Epsilon Launch Vehicle test model.
- 2014 Manufactured the 50 millionth vehicular turbocharger.

Our History of Value Creation

# Leveraging “*Monozukuri*” technology to create value for society

## Realize your dreams

IHI's mission is to use our engineering and human resources cultivated over the years to provide products and services that solve customers' problems and contribute to the resolution of societal issues. IHI will continue to create value for customers and society by growing its business sustainably.



# Engineering expertise centered on “*Monozukuri*” technology and human resources

	<b>Business Areas</b>			
	Resources, Energy and Environment	Social Infrastructure and Offshore Facilities	Industrial Systems and General- purpose Machinery	Aero Engine, Space and Defense
<b>Business Activities</b>	<b>Main Products</b>			
	<b>NGT3B-T Emergency Gas Turbine</b>  In the Emergency Gas Turbine market for major metropolitan facilities such as hospitals or data centers, we manufacture the highest output Emergency Gas Turbine in the world (6,500kVA) for this market.  	<b>Nhat Tan Bridge (Vietnam-Japan Friendship Bridge)</b>  Constructed the world's largest class of cable-stayed bridge with a total length of 3,080 m over the Red River in Hanoi, Vietnam as a yen-loan financed ODA project by the Japanese government.  	<b>Vehicular turbocharger</b>  Deploying a turbocharger enables greater engine output. We will exceed a cumulative total production of 60 million units in FY2016.  	<b>PW1100G-JM Civil Aero-Engine</b>  Participated in the international joint venture project of the new model PW1100G-JM engine for the Airbus A320neo. We were responsible for developing and manufacturing the low-pressure compressor module and fan case module.  
<b>Value Creation – Realize your dreams</b>	<b>Customer Values</b>			
	<b>Downsizing high-capacity power supplies and provide safety and peace of mind</b>  Enhanced added-value by reducing the size of high-capacity power generation equipment that provides safety and peace of mind as a backup power supply.	<b>Improving logistics efficiency and solving traffic congestion</b>  Formed a new logistics network that connected the city to the airport and reduced travel time from 60 minutes to 30 minutes during peak hours.	<b>Improving fuel efficiency by downsizing of engines</b>  Downsizing of engines to improve fuel efficiency, provide cleaner emissions and improve performance.	<b>Improving aircraft fuel efficiency and reducing flight operation costs</b>  Applied IHI's original advanced composite material technology and latest component technology to components we were responsible for. Achieved approximately 16% better overall fuel consumption than the current V2500.
	<b>Social Values</b>			
	<b>Helping communities to function during emergencies by ensuring energy supplies</b>  Realized the means to stably supply large-capacity electricity during blackouts so that hospitals, corporations and transportation & communication infrastructure can continue functioning.	<b>Create an economic/industrial bases and convenient transportation network</b>  Established a transportation network that is essential to Vietnam's economic growth and contributed to traffic safety and to the convenience of the citizens.	<b>Contributing to resolving global environmental issues</b>  During the worldwide rise in automobile demand, we are helping to resolve global environmental problems by providing turbochargers, environmentally-friendly devices.	<b>Realizing low emission air transport</b>  Contributing to reduce CO <sub>2</sub> emissions caused by the increased demand for air transport in emerging nations resulting from economic and population growth.

# Group Management Policies 2016: Strengthening Our Earnings Foundations

## Group Management Policies 2013: Achievements and Issues

### Achievements

#### ■ Business scale growth

- Reached 1,400 billion yen in consolidated net sales

#### ■ Foundations based on Three *Tsunagu* (Links)

- Created common platform through ICT usage
- Achieved 50% of net sales from overseas operations

### Pressing issues

#### ■ Preventing reoccurrences of quality nonconformance

Strengthen manufacturing capabilities including quality

### Issues

#### ■ Profitability

- Operating income and ROIC significantly underperformed targets
- Bolster profitability at strategic business units
- Deploy exhaustive measures to prevent more project shortfalls

#### ■ Employ Three *Tsunagu* (Links)

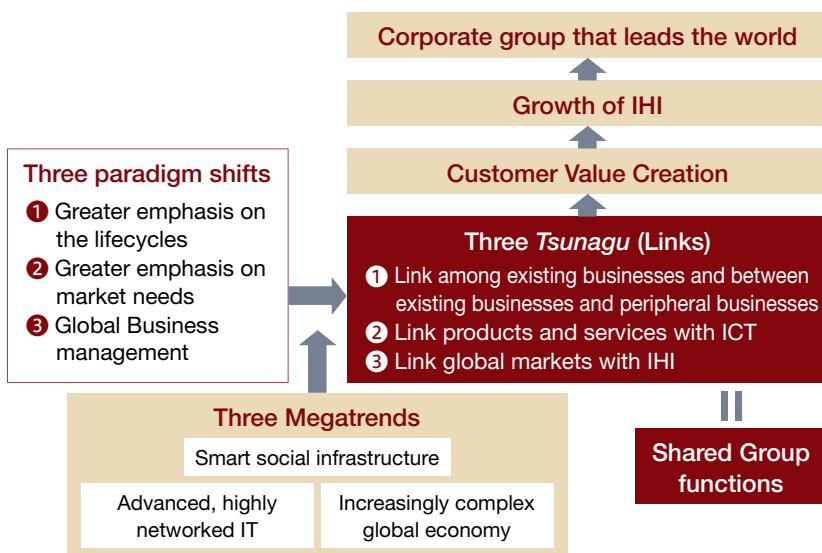
- Accelerate business model reforms

Reinforce strategic implementation

Secure stable project earnings

Identify and deliver customer value

## Concepts of the Group Management Policies 2013



## Business environment

### Diversifying social infrastructure

- [Emerging nations] Diversification in the advancement of urbanization and industrialization
- [Developed nations] Population decline, depopulation, financial issues, infrastructure deterioration
- [Japan] Becoming more resilient to disasters, through more robust disaster prevention and reduction initiatives

# Realizing sustainable growth and improved corporate value

Based on achievements and issues from the Group Management Policies 2013 and the business environment surrounding IHI, we have declared “strengthening our earnings foundations” as the main theme of our Group Management Policies 2016. By developing measures that are more focused on profit growth, we will realize sustainable growth and improve our corporate value.

Reflecting on issues that emerged in FY2015, we will renew our focus on reinforcing manufacturing capabilities, including in terms of quality and work to recover the trust of our stakeholders.

## Direction of the Group Management Policies 2016

### Reform corporate culture

Reform quality and business systems to reinforce manufacturing capabilities

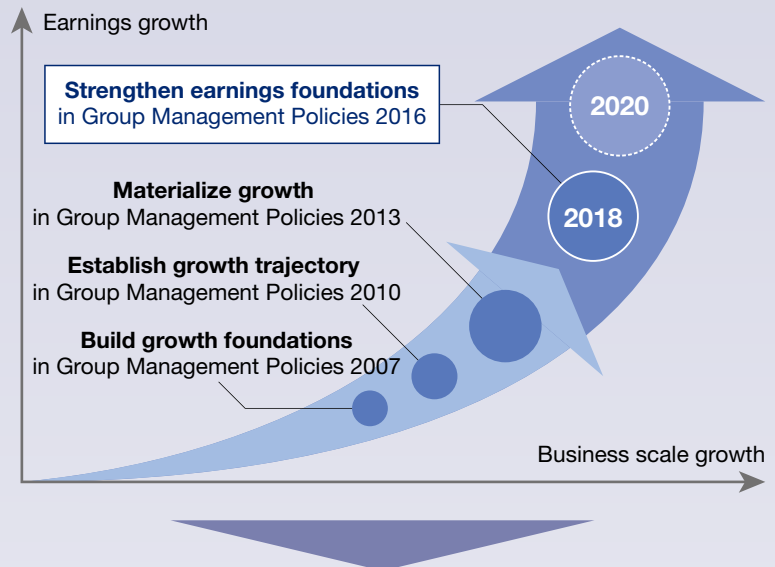
### Group Management Policies 2016

Pursue concentration and selection through new portfolio management approaches

Bolster profitability by strengthening project implementation structure

Transform business model by employing shared Group functions

### Grow sustainably and enhance corporate value



## (Three Megatrends)

### Increasingly complex global economy

- Diversifying economic climates in emerging nations (growth in their working populations, industrial, progress, fluctuating resources prices, and reliance on the Chinese economy, etc.)
- Progress in economic partnerships and changes in industrial structures

### Acceleration in advanced IT

- The Internet of Things, Big Data, and other advances are driving the exponential growth of information technology.
- Increasingly more important to enhance the sophistication of our products, services and manufacturing through ICT

## Management targets

Benchmarks	Targets (FY2018)	Attainment Targets (FY2020)
Operating margin	7%	8%
ROIC*	10%	—
D/E ratio	0.7 times or less	—

\*ROIC (Return on Invested Capital) = (operating income + interest and dividend income) after-tax ÷ (owner's equity + interest-bearing debt)

\*Assumed exchange rate: ¥115/\$

## Capital efficiency

By reaching our management targets and strengthening our earnings foundations, we will consistently maintain a return on equity 10% or more.

## Our History of Value Creation

# Group Management Policies 2016:

## Strengthening Our Earnings Foundations

### Reform quality and business systems to reinforce manufacturing capabilities

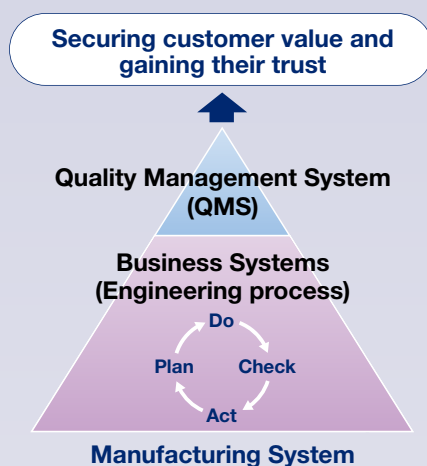
To help prevent a reoccurrence of the FY2015 downturn, we will return to our “*Monozukuri*” origins, endeavor to reform our quality and business systems, reinforce manufacturing capabilities, including in terms of quality, and thoroughly enforce measures to prevent relapses into quality nonconformance.

#### ■ Priority policies

- Reconstruct quality assurance system
- Reform engineering processes, including design and production systems
- Drive efficiencies through business process improvements at worksites

#### ■ Set up the Monozukuri System Strategy Planning Headquarters

We set up this organization to build stable earnings foundations by reinforcing manufacturing capabilities, including in terms of quality.



### Pursue concentration and selection through new portfolio management approaches

We are introducing a new way of managing our business portfolio in order to reinforce business strategy implementation and accelerate business concentration and selection. We will speed up reforms by making our business strategy more visible and sharing strategies between Business Operation Divisions and corporate headquarters. We will also clarify the positions of our businesses and move forward with business concentration and selection based on profitability and investment efficiency.

#### ■ Reinforce business strategy implementation

- Reorganize strategic business units (SBUs) so it is easier to formulate business strategies (reduce from 36 units to 27)
- Clarifying a mission combining strategic direction and quantitative goals for each SBU, and achieving agreement between the Business Operation Divisions and corporate headquarters
- Craft plans and accelerate PDCA cycles to fulfill business strategies and quantitative targets

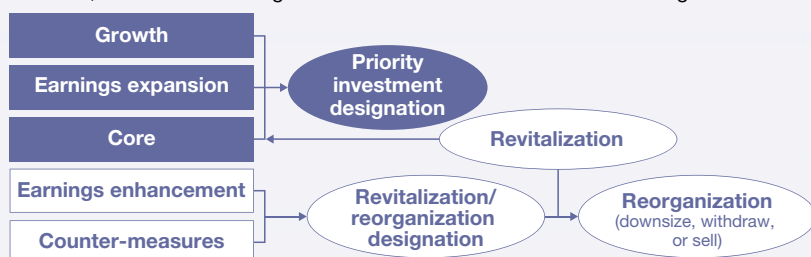
#### ■ Clarifying the mission of each business

##### Mission (path from the present to future growth)

<b>Thought process</b>	<ul style="list-style-type: none"> <li>• Setting the direction of business strategies based on marketability and benchmarking against other companies</li> <li>• Setting goals to be achieved 3 years from now (2018) and mid-term goals 5 years down the road (2020)</li> </ul>	<b>Quantitative goals</b>	Profitability: <b>Operating margin</b> Investment efficiency: <b>ROIC</b>
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#### ■ Our thinking on business consolidation and selection & allocation of management resources

1. Separate the SBU missions into 5 categories based on operating margin and ROIC, and allocate management resources.
2. Designate SBUs for priority investment and SBUs for revitalization or reorganization.



#### ● Priority investment designation

- Prioritize the allocation of management resources to businesses that lead group growth
- Of SBUs needing to improve earnings, those designated because investments could enable them to capitalize on growth potential

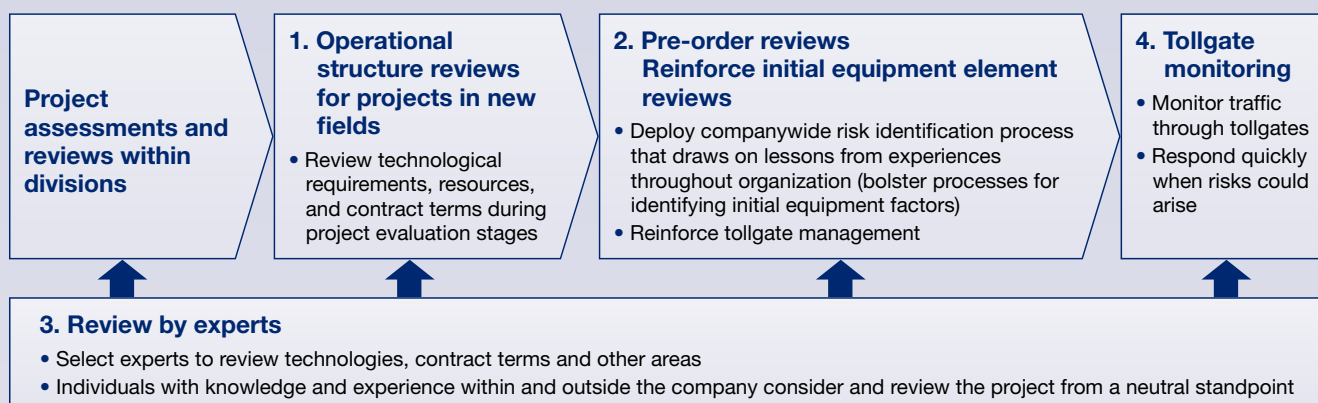
#### ● Revitalization/reorganization designation

- With corporate input, we will formulate a restructuring plan for businesses where there are concerns about future business viability, and complete revitalization or reorganization by the end of FY2017



## Bolster profitability by strengthening project implementation structure

We will thoroughly examine and assess risks when taking up projects in new fields and reinforce our project implementation structure to improve earning power.



## Transform business model by employing shared Group functions

We will proactively use our shared Group functions (Solutions, Intelligent Information Management and Global Businesses) in our business areas to implement initiatives that create customer value, by establishing and laterally expanding competitive business models.

### Measures for transforming our business model and strengthening shared Group functions

		Business Areas			
		Resources, Energy, and Environment	Social Infrastructure and Offshore Facilities	Industrial Systems and General-Purpose Machinery	Aero Engine, Space and Defense
Shared Group Functions	<b>Solutions</b> Linkage between businesses	<ul style="list-style-type: none"> <li>Cultivate life cycle businesses through operation and maintenance businesses</li> <li>Create business schemes that incorporate finance</li> <li>Set up various solutions businesses</li> </ul>			
	<b>Intelligent Information Management</b> Linkage between products/services and ICT	<ul style="list-style-type: none"> <li>Leverage ICT to create an advanced operational support and preventive maintenance structure</li> <li>Harness big data to launch a failure prediction and prevention system</li> <li>Draw on ICT to pursue advanced manufacturing management</li> </ul>			
	<b>Global Businesses</b> Linkage between global markets and IHI	<ul style="list-style-type: none"> <li>Reinforce handling of projects targeted at five priority nations and neighboring countries  <small>*Indonesia, Thailand, Vietnam, Malaysia, Turkey</small></li> <li>Localize businesses so they have powerful presences where they operate</li> <li>Built strategic partnerships</li> </ul>			

## Our History of Value Creation

# Directors and Corporate Auditors

As of July 2016

### a Tamotsu Saito

Chairman of the Board

Chief Executive Officer

*Monozukuri* System Strategy Planning General Manager

Member of Nomination Advisory Committee

### c Toshinori Sekido

Executive Vice President

Assistant to the President

In charge of Priority New Business Areas

In charge of Business Relating to Human Resources

In charge of Business Relating to Information Systems

In charge of Business Relating to Procurement

In charge of Business Relating to Corporate Business Development

Member of Compensation Advisory Committee

### f Hiroyuki Otani

Director

In charge of Industrial Systems & General-Purpose Machinery Business Areas

### g Hiroshi Asakura

Director

In charge of Group Engineering

In charge of Social Infrastructure & Offshore Facilities Business Areas

### h Mikio Mochizuki

Director

Managing Executive Officer

In charge of Group Finance & Accounting

Finance & Accounting Div. General Manager

Member of Compensation Advisory Committee

### i Tomoharu Shikina

Director

Managing Executive Officer

In charge of Aero Engine, Space and Defense Business Areas

In charge of Business Relating to Defense

President of Aero-Engine & Space Operations

### j Atsushi Kuwata

Director

Executive Officer

In charge of Group Operations

Sales Headquarters General Manager

### n Makoto Serizawa

Corporate Auditor

### o Shigeru Uesugi

Corporate Auditor



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a

**b Tsugio Mitsuoka**

**President**

Chief Operating Officer

In charge of Resources, Energy and Environment Business Areas

In charge of Business Relating to Project Audits

Chair of Nomination Advisory Committee

**d Ichiro Terai**

**Executive Vice President**

Assistant to the President

In charge of Corporate Planning

In charge of Portfolio Management

**e Joji Sakamoto**

**Executive Vice President**

Assistant to the President

In charge of Business Relating to Internal Audits

In charge of Business Relating to Public Relations and Investor Relations, Legal, CSR and Administration

In charge of Group Compliance and Risk Management

In charge of Group Business Process Platform

**k Tomokazu Hamaguchi**

**Outside Director**

Chair of Compensation Advisory Committee

Member of Nomination Advisory Committee

**l Taketsugu Fujiwara**

**Outside Director**

Member of Compensation Advisory Committee

Member of Nomination Advisory Committee

**m Hiroshi Kimura**

**Outside Director**

Member of Compensation Advisory Committee

Member of Nomination Advisory Committee

**p Toshiharu Watanabe**

**Outside Corporate Auditor**

**q Takayuki Hashimoto**

**Outside Corporate Auditor**

Member of Compensation Advisory Committee

**r Yoko Hatta**

**Outside Corporate Auditor**



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# Financial and CSR Highlights

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015
<b>[Financial information]</b> (billions of yen)						
Net sales	1,187.2	1,221.8	1,256.0	1,304.0	1,455.8	1,539.3
Operating income	61.3	43.3	42.1	53.2	63.2	22.0
Profit attributable to owners of parent	29.7	23.8	33.3	33.1	9.0	1.5
R&D expenses	29.2	30.0	30.2	33.5	37.0	41.6
Investment in plant and equipment	86.3	53.5	55.0	54.5	63.9	50.8
Depreciation and amortization	38.2	41.1	41.7	40.4	43.2	46.7
Overseas net sales	512.0	521.0	486.3	618.5	758.0	796.9
Percentage of overseas sales	43%	43%	39%	47%	52%	52%
Total assets	1,361.4	1,338.1	1,364.2	1,496.3	1,690.8	1,715.0
Interest-bearing debt	373.3	345.2	353.8	357.8	410.6	374.5
Net assets	253.6	258.4	299.2	362.5	359.5	333.3
Cash flows from operating activities	95.5	24.7	74.3	39.2	63.5	95.3
Cash flows from investing activities	-77.7	-37.7	-61.0	-62.2	-74.6	-35.5
Free cash flow	17.7	-12.9	13.3	-23.0	-11.0	59.8
Cash flows from financing activities	-25.9	-38.5	-3.1	11.3	33.4	-47.5
EPS (Earnings per share) <sup>1</sup>	20.29 yen	16.26 yen	22.81 yen	22.51 yen	5.88 yen	0.99 yen
BPS (Book value per share) <sup>2</sup>	162.33 yen	170.84 yen	197.08 yen	223.68 yen	224.03 yen	206.16 yen
Cash dividend per share	3 yen	4 yen	5 yen	6 yen	6 yen	3 yen
Operating margin	5.2%	3.5%	3.4%	4.1%	4.3%	1.4%
ROIC (Return on invested capital) <sup>3</sup>	6.2%	4.6%	4.5%	5.3 %	5.8 %	2.3%
ROA (Return on assets) <sup>4</sup>	2.1%	1.8%	2.5%	2.3%	0.6%	0.1%
ROE (Return on equity) <sup>5</sup>	13.2%	9.8%	12.4%	10.5%	2.6%	0.5%
D/E ratio <sup>6</sup>	1.47 times	1.34 times	1.18 times	0.99 times	1.14 times	1.12 times
<b>[CSR Information]</b>						
Number of employees	26,035	26,915	26,618	27,562	28,533	29,494
Percentage of female managers (IHI Corporation)	1.4%	1.5%	1.5%	1.6%	1.8%	2.1%
Number of female managers (IHI Corporation)	34	39	41	44	51	60
Number of certified environmentally friendly products <sup>7</sup>	-	-	-	-	4	10

All financial figures are on a consolidated basis, unless IHI Corporation is specified.

See pp. 49-50 for more detailed information on CSR.

<sup>1</sup> Profit attributable to owners of parent ÷ Total number of shares issued

<sup>2</sup> Net assets ÷ Total number of share issued


<sup>3</sup> (Operating income + interest and dividend income) after-tax ÷ (owner's equity + interest-bearing debt)

<sup>4</sup> Profit attributable to owners of parent ÷ (average of total assets at end of previous term and end of current term)

<sup>5</sup> Profit attributable to owners of parent ÷ (average of owner's equity at end of previous term and end of current term)

<sup>6</sup> Interest-bearing debt ÷ net assets

<sup>7</sup> For further details, please see p. 38.

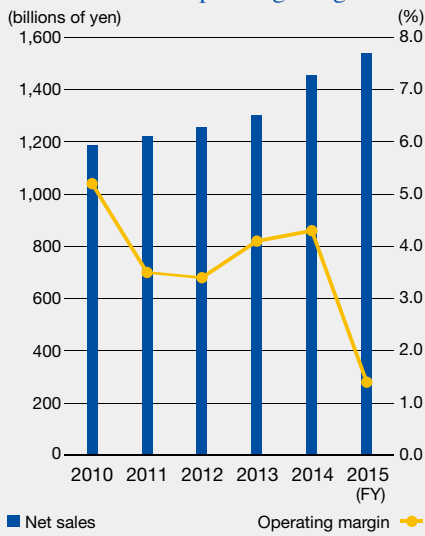
 For more detailed information, please refer to the website below.

Financial: <https://www.ihl.co.jp/en/ir/>

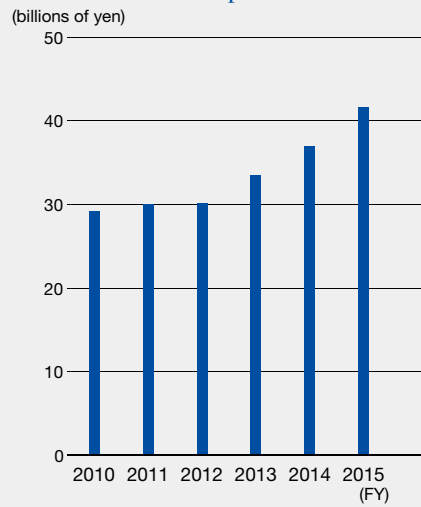
CSR: <https://www.ihl.co.jp/csr/english/>



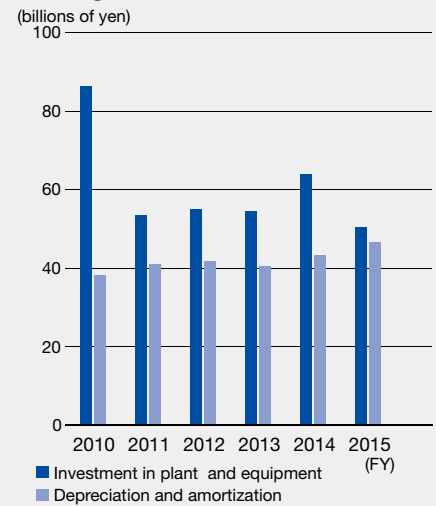
### Net sales / Operating margin



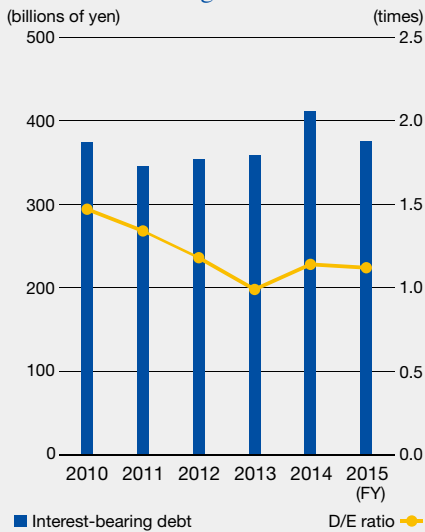
### R&D expenses



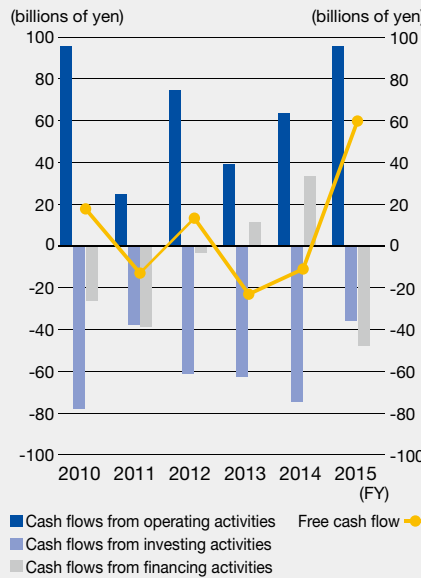
### Investment in plant and equipment / Depreciation and amortization



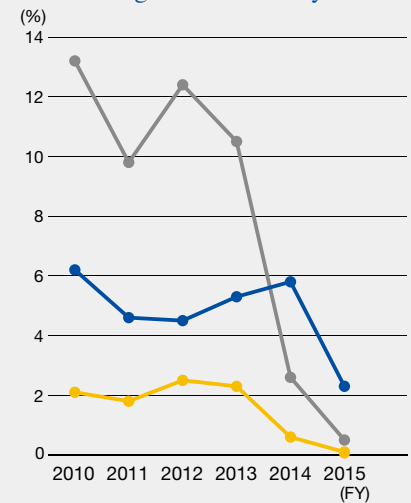
### Interest-bearing debt / D/E ratio



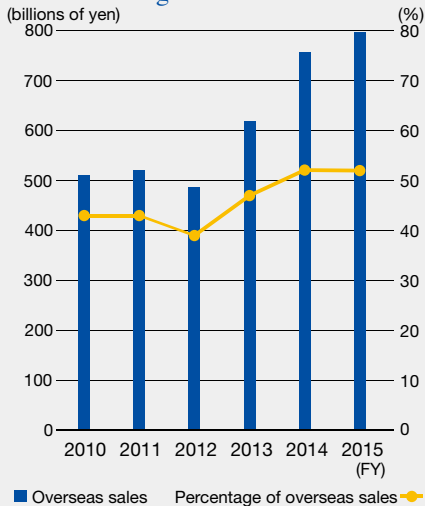
### Cash flow



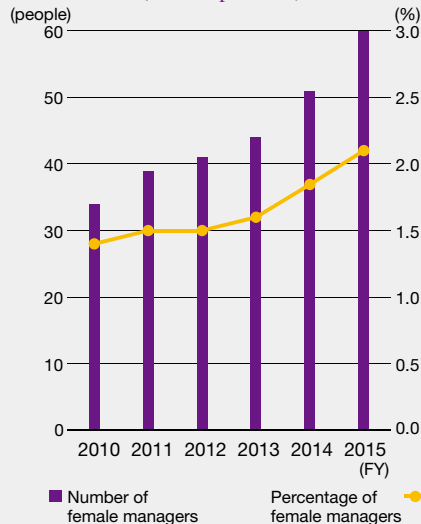
### Management efficiency



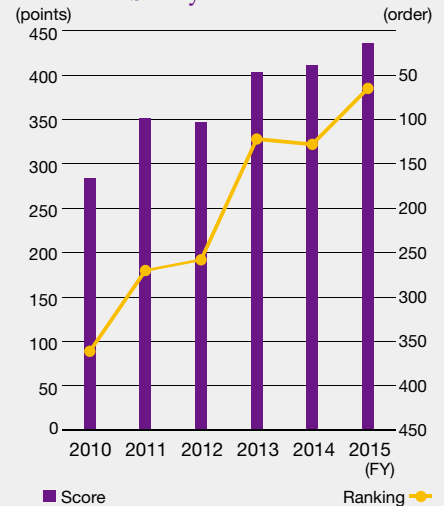
### Overseas sales / Percentage of overseas sales



### Number / Percentage of female managers (IHI Corporation)



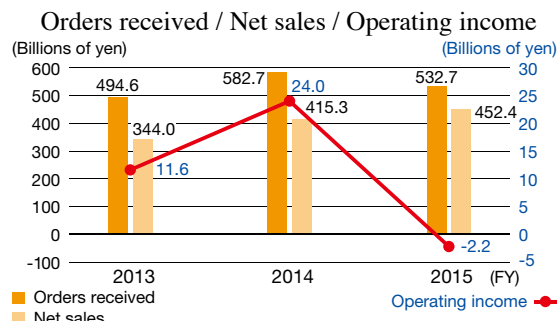
### Nikkei Environmental Management Survey assessment



## Business Overview

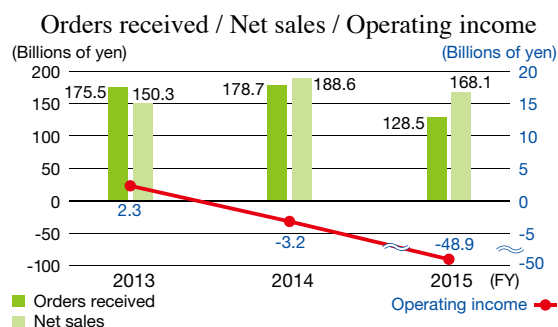
### Resources, Energy and Environment

Orders received declined from the previous fiscal year, despite an order for a natural gas liquefaction facility for Elba Island in the U.S., reflecting a pullback from the Cove Point natural gas liquefaction facility in the U.S. secured in the previous fiscal year for Gas processes Business. Sales increased from the previous fiscal year mainly reflecting increases in Gas processes Business due to progress at Cove Point natural gas liquefaction facility construction project in the U.S. The segment reported an operating loss due to a significant deterioration in profitability in Boiler Business related to repairs required for noncompliant welding in boiler projects, and a projected increase in costs in Gas process Business.



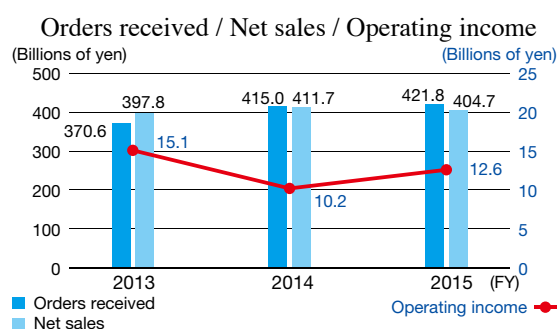
### Social Infrastructure and Offshore Facilities

Orders received declined from the previous fiscal year, reflecting a pullback from large orders secured in the previous fiscal year for F-LNG/Offshore structure Business, for which order procurement activities have currently been effectively suspended, partially offset by orders for new rail freight bridge construction work in India and new bridge construction and existing bridge repair work in Bangladesh. Sales decreased from the previous fiscal year owing mainly to the impact of decreased sales from the Izmit Bay Crossing Bridge construction project in Turkey. The recording of additional costs in relation to production turmoil and a review of construction processes and methods at Aichi Works for F-LNG/Offshore structure Business as well as the recording of construction schedule catch-up expenses related to the Izmit Bay Crossing Bridge construction project in Turkey resulted in a significant operating deficit.



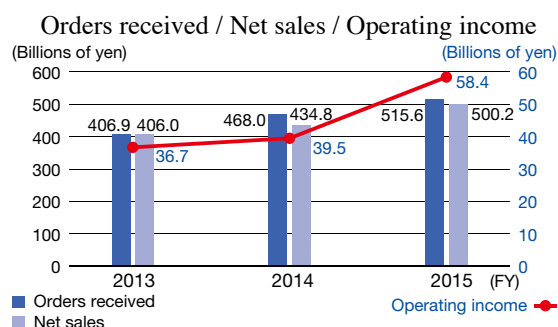
### Industrial Systems and General-Purpose Machinery

Orders received increased from the previous fiscal year owing to increases in Transport machinery Business, Compressor Business and Small power systems Business. Sales declined from the previous fiscal year. Although sales increased in Thermal and surface treatment Business and Compressor Business, that was offset by decreases in Paper-making machinery Business and Vehicular turbocharger Business. Operating income increased compared with the previous fiscal year, despite an increase in selling, general and administrative expenses such as expenses in taking orders received, mainly reflecting an improvement in profitability in the Thermal and surface treatment Business, Compressor Business and Vehicular turbocharger Business.

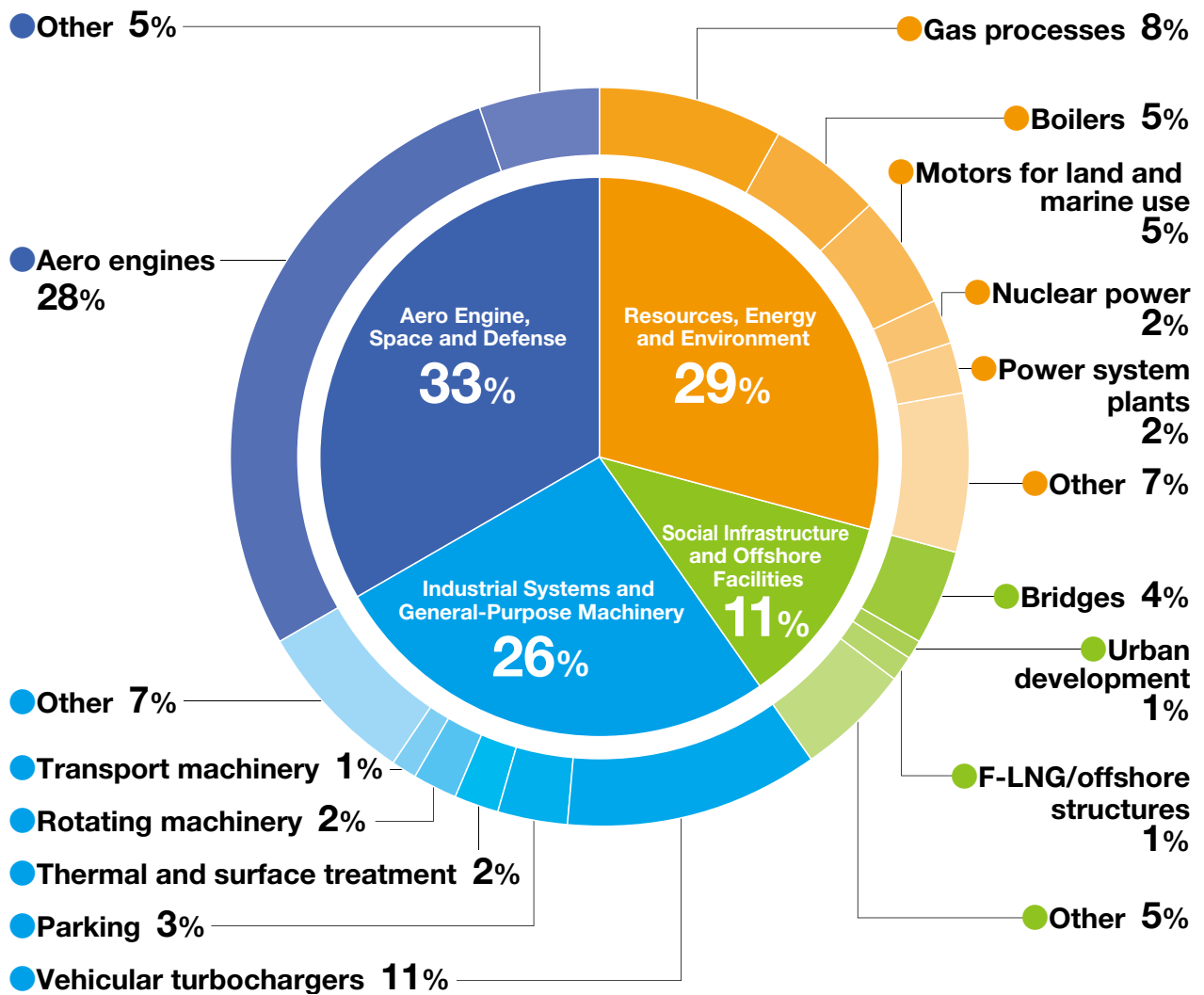


### Aero Engine, Space, and Defense

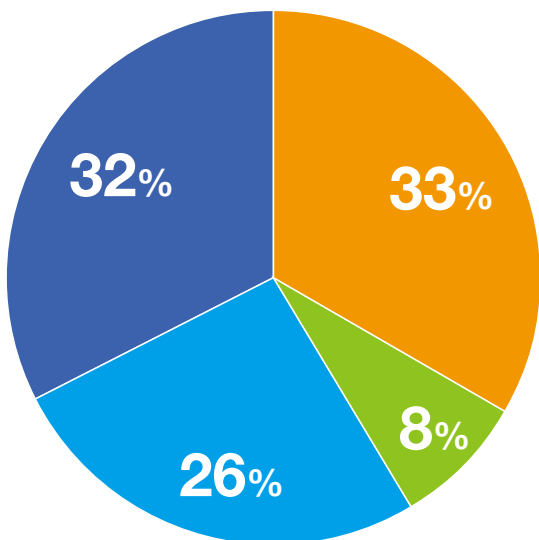
Orders received increased from the previous fiscal year owing to increases in projects for Japan Ministry of Defense in Aero engines Business. Sales increased from the previous fiscal year, owing mainly to increases in civil aero engines as a result of the effect of yen depreciation in foreign exchange, and a delivery of gas turbines for naval vessels in Defense systems Business. Operating income increased significantly from the previous fiscal year owing to the above-mentioned effect from sales increases and improved profitability for civil aero engines, partially offset by increases in expenses such as R&D expenses for the "GE9X" aero engine for the next-generation wide-body jet.



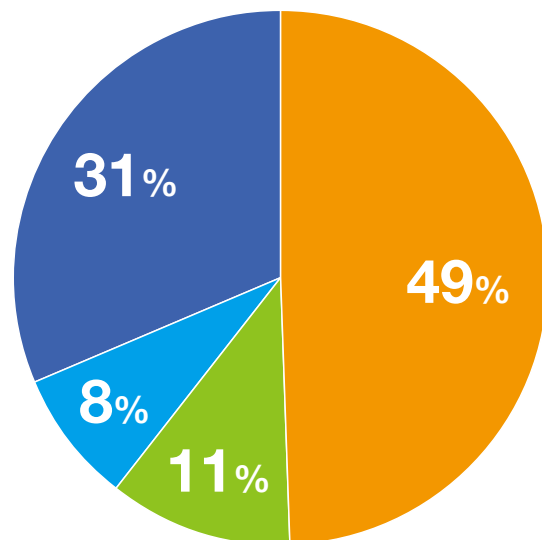
### Sales ratio (FY2015)



### Order breakdown (FY2015)



### Unfilled order breakdown (FY2015)



Note: Figures may not add up to 100% due to rounding



## Resources, Energy and Environment

Goods and services we provide

Boilers, power system plants, motors for land and marine use, large marine motors, gas processing (storage facilities and process plants), nuclear power (components for nuclear power plants), environmental response systems, pharmaceuticals (pharmaceutical plants), etc.

### Business area direction

#### Reinforce ability to deliver diverse infrastructure solutions

- Expand and enhance energy resource usage technologies
- Strengthen system supply capabilities for diversifying power source needs (decentralization and stabilization)
- Create and swiftly commercialize advanced technologies to lower environmental impact
- Enhance value of life cycle service technologies harnessing ICT

#### Create value for society

We provide environmentally conscious power generation systems to deliver a stable energy supply.



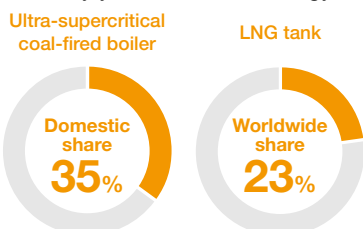
Realize low-carbon societies and reduce environmental burdens



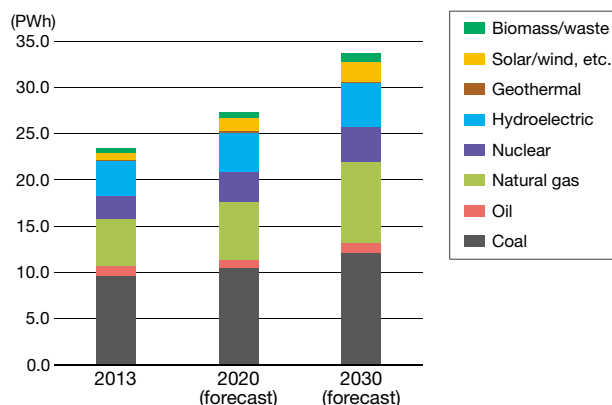
Provide stable energy supplies

### Business environment and strengths

In Japan, increasing mid-term demand for coal-fired power and deregulation of electricity markets is allowing new entrants to plan the construction of additional thermal power plants. Overseas, new electricity markets are being realized in developing nations including distributed power networks. We use the exclusive technologies and deep know-how that we have cultivated over many years in various energy fields, including coal, natural gas, nuclear and renewable energy, to provide products and services throughout the whole lifecycle of our plants.



### World power generation composition



Source: "Asia/World Energy Outlook 2015", The Institute of Energy Economics, Japan

### Priority SBUs for investment

SBU	Key initiatives
Boiler Division	Enhance and rebuild quality control framework Expand overseas to developing nations
Power System and Plant Divisions	Expand our maintenance business utilizing preventative maintenance and remote monitoring
Motors for land and marine use	Increase orders in the overseas land-based power generation market

### Major projects and completion dates

Projects	Completion dates
Gas-fired combined cycle power plant facility (Mozambique)	FY2018
Ultra-supercritical coal-fired power plant boiler (Indonesia)	FY2019
Ultra-supercritical coal-fired power plant boiler (Japan)	FY2021
Ultra-supercritical coal-fired power plant boiler (Japan)	FY2022





## Respond to the need to diversify resource and energy infrastructure by using our problem solving skills

**Tsugio Mitsuoka**

Board Director for Resources, Energy and Environment Business Areas

### Achievements and challenges from our Group Management Policies 2013

## Push forward on enhancing and rebuilding our quality control framework

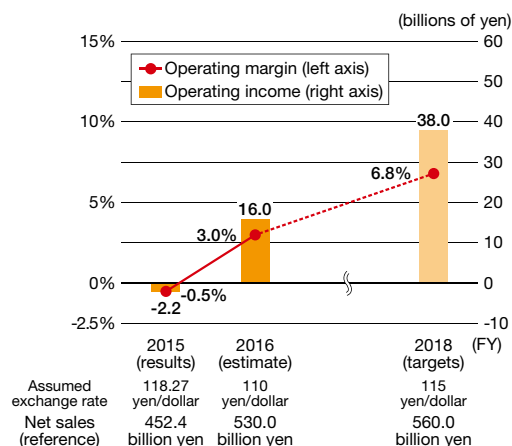
We received more orders of boilers for new projects mainly in Japan and Southeast Asia, as well as more orders related to the nuclear industry in Japan, than the previous year. However, there is much room for improvement in orders of other machinery and in operating income. Furthermore, as quality issues at an overseas subsidiary resulted in a major negative effect on our performance, we are enhancing and rebuilding our quality control systems. We are beginning to see the results from our initiatives of the past three years in enhancing competitive strength, expanding global business, and improving work processes, and we will continue these efforts.

### Measures in Group Management Policies 2016

## Efforts to reinforce earnings foundations

We will embark on the following four focused initiatives to improve overall operational quality and enhance our revenue foundation.

- ① Reinforcing project implementation structure to secure targeted profit margins
- ② Boosting added value and profitability with lignite boilers offering high steam condition and efficiency
- ③ Procuring overseas as part of cost-cutting efforts
- ④ Leveraging information and communication technologies to reinforce systems provision and enhancing lifecycle service value to increase profitability



### Mid-term outlook

## Towards realizing a low-carbon society

Power source needs are forecast to diversify and to increase further, mainly in developing nations. We will continue to enhance the technologies we have cultivated in the resource and energy field, and combine these to provide highly efficient and low environmental impact power generating systems.

## Focus

### IHI wins order to construct ultra-supercritical coal-fired boilers for reduced impact

IHI received an engineering, procurement and construction (EPC) orders from Kobe Steel, Ltd. for large-scale ultra-supercritical coal-fired boilers (650 MW x 2 units) that will achieve world-leading levels of generating efficiency. The order was for a project to build a thermal power plant at a Kobe Steel facility. The first and second boilers are slated to start operating in FY2021 and FY2022, respectively. Coal-fired power generation is expected to continue to play a role as a major power supply source from an economic and energy source diversification point of view. The newly ordered boilers will become equipment capable of boosting generating efficiency while constraining fuel consumption and CO<sub>2</sub> emissions by heating steam to ultra-high temperatures of 593°C and higher while realizing ultra-high pressures of 24.1 Mpa and higher (ultra-supercritical pressure). IHI will continue to contribute to clean power provision through cutting-edge boiler technology.



IHI delivered boilers to the No. 2 Thermal Power Plant in Kobe Steel's Kobe Works in 2004



## Social Infrastructure and Offshore Facilities

Goods and services we provide

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

### Business area direction

#### Measures to upgrade and strengthen infrastructure and prevent disasters

- Build a market position by supplying solutions
- Expand into Southeast Asian and emerging markets
- Contribute to security field

#### Marine resources and energy development efforts

- Operate business centered on aluminum SPB tanks

#### Create value for society

We endeavor to provide technology to expand, maintain, and improve infrastructure functions in harmony with society.



Realize low-carbon societies and reduce environmental burdens



Provide stable energy supplies



Respond to industrialization, advancement and urbanization

### Business environment and strengths

In Japan, aging infrastructure is a growing concern and we expect growing demand for repairs and renewals of bridges, tunnels and roads. Overseas, we expect expansion in the market thanks to ODA business, centering on Southeast Asia. Furthermore, in the offshore facility area we will expand our business focusing on aluminum SPB tanks, where we have differentiated knowhow. Social infrastructure and offshore facilities are a business area where we can help tackle challenges, thereby directly contributing to the development of society through technology by resolving infrastructure problems.

Suspension bridges

Longest in the world at  
**3,911m**  
(Akashi-Kaikyo Bridge)



### National Infrastructure Investment Needs in Asia, 2010-2020

(billions of yen)

	New constructions	Renewal projects	Total
Airports	840	600	1,320
Ports	6,000	3,000	9,120
Rails	360	4,320	4,680
Roads	204,240	76,560	280,920
Transportation total	211,440	84,480	296,040

Source: Asian Development Bank

### Priority SBUs for investment

SBU	Key initiatives
Bridges and water gates	Expand orders by strengthening our integration ability and our ability to propose technology for domestic bridges, and construct a foundation for our 4-base framework (Europe, Americas, Asia, Japan)

### Major projects and completion dates

Projects	Completion dates
LNG ship SPB tanks for TLT Co.	FY2017
Water gate steel pipe construction for Nam Ngiep 1 Hydropower Plant	FY2018
Steel bridge package for India DFCC's Western Dedicated Freight Corridor	FY2019



## Fully enforce risk management and establish a business structure to raise revenue globally

**Hiroshi Asakura**

Board Director for Social Infrastructure and Offshore Facility Business Areas

### Achievements and challenges from our Group Management Policies 2013

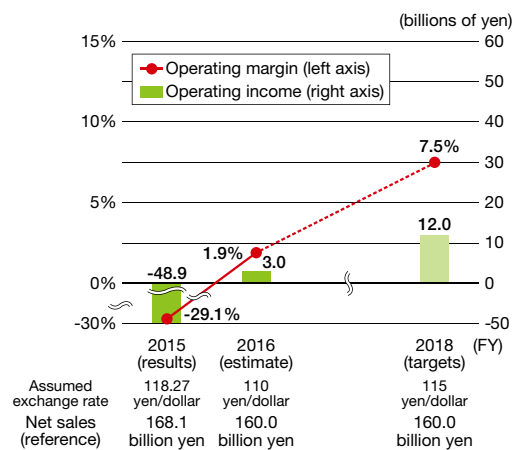
## Reinforce project implementation structure

We received orders from overseas, such as a construction of a bridge dedicated to freight railway use in India, and bridge construction and repair projects for Bangladesh. However, issues like costs to catch up the delay caused by catwalk fall incident on Izmit Bay Crossing Project and the F-LNG/offshore structure production disturbance led to a significant operating deficit. We will investigate the causes of these issues and enforce prevention measures, as well as enhancing our project execution framework to establish financially viable business structure.

### Measures in Group Management Policies 2016

## Efforts to reinforce profit foundation

- 1 Improving profitability by pursuing major bridge upgrade and repair projects in Japan while offering highly competitive solutions for new bridge construction in overseas
- 2 Steadily lowering SPB tank costs to establish a business structure that boosts earnings
- 3 Generate stable profits and cash flows through real estate business in Toyosu and Sunamachi in Tokyo



### Mid-term outlook

## Responding to the global demand for social infrastructure

We will get more orders by upgrading our technical proposal skill for domestic and overseas infrastructure projects. We aim to systematize our products and improve productivity by utilizing ICT and by advancing cost reduction activities. We further expand our highly value-added maintenance business, and accelerate commercialization of new products. We will also move forward to a establishment of solid framework for our bases in Europe, the Americas, Asia and Japan, to expand our business globally. Last but certainly not least, we will contribute to the safety and security of society.

## Focus

### Contributing to various nations by developing social infrastructure

IHI Infrastructure Systems Co., Ltd., a joint venture with Larsen & Toubro, India's largest general contractor, received an order from the Dedicated Freight Corridor Corp., whose parent is India's Ministry of Railways, for bridges along a freight route linking Delhi and Mumbai. The initiative is part of the Delhi-Mumbai Industrial Corridor project that both the Japanese and Indian governments are promoting as a centerpiece of economic collaboration initiatives between the two nations, and is slated for completion in October 2019.

The route will slash shipment times, streamlining India's logistics network and contributing to economic development. IHI will continue contributing to progress in nations around the world by developing social infrastructure.



Planned Western Dedicated Freight Corridor



## Industrial Systems and General-Purpose Machinery

Goods and services we provide

Machinery for ships, logistics systems, transport machinery, parking, steel manufacturing equipment, industrial machinery, heat treatment and surface engineering, papermaking machinery, vehicular turbochargers, compressors, separation systems, turbochargers for ships, construction machinery, agricultural machinery, small power systems, etc.

### Business area direction

- Expand global network centered on automotive industry
- Increase value in life cycle business
- Create advanced products and services harnessing ICT and robotics

### Create value for society

We provide technology to support sustainable business and production activities that help preserve natural resources and energy, and which protect the global environment and people.



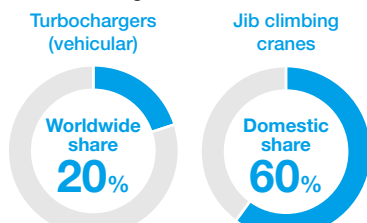
Realize low-carbon societies and reduce environmental burdens



Respond to industrialization, advancement and urbanization

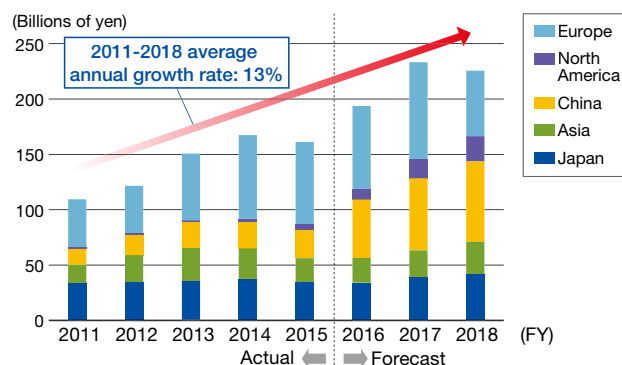
### Business environment and strengths

In the automotive field, growing demand for more environmentally-friendly engines and downsized engines leads to continued expansion in the vehicular turbocharger market. Demand for thermal and surface processing, and various types of industrial machinery, especially transportation systems, is on the increase as well. In terms of market share, we are one of the largest manufacturers of vehicular turbochargers and jib climbing cranes, thanks to the welding and rotating machinery technology we cultivated over many years.



Source: Third-party organization survey

### Forecasts for consolidated net sales of vehicular turbochargers



Note: Figures for FY2016 and FY2017 include net sales from ex-Japan subsidiaries using 15-month financial statements.

### Priority SBUs for investment

SBU	Key initiatives
Vehicular turbochargers	Sophisticated global business framework to secure orders and improve profitability
Rotating machinery	Improve profitability by expanding global alliances and by reducing cost through reform of business structure
Parking	Reduce cost of new facilities, increase the stock for maintenance business and develop overseas markets
Heat treatment and surface engineering	Improve profitability by strengthening the factory of job service and promoting synergy

### Major project wins

Projects	Start of mass production
Received an order from a Chinese firm for turbochargers for downsized gasoline engines	FY2016
Received an order from another Chinese firm for turbochargers for downsized gasoline engines	FY2016





## Leveraging our diverse businesses and enhance competitiveness

**Hiroyuki Otani**

Board Director for Industrial Systems and General-Purpose Machinery Business Units

### Achievements and challenges from our Group Management Policies 2013

## Vehicular turbocharger business leads our growth

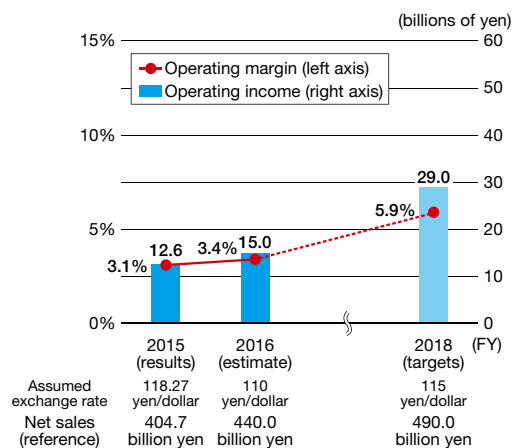
In our business area, we provide a wide variety of goods and services essential for the industrial workplace. Among these, the vehicular turbocharger business, whose market is growing, achieved strong results for the past three years, and led growth in the Industrial Systems and General-purpose Machinery business area. Conversely, challenges remain in improving the earning power of some businesses. By linking our diverse businesses, a factor that characterizes this business area, we have been implementing various initiatives intended to further improve competitiveness. But we still need to take one more step to let these initiatives result in improvements in financial performance. We must drive further synergies among our businesses.

### Measures in Group Management Policies 2016

## Efforts to reinforce earnings foundations

We will focus our approach on 4 themes to strengthen our revenue foundation.

- ① Improving profitability through groupwide capability reforms in vehicular turbochargers
- ② In rotating machinery, expanding global alliances and overhauling business structure to lower costs and enhance profitability
- ③ Employing a global network for thermal and surface treatment equipment and contract operations to accommodate customer needs and increase profitability
- ④ Leveraging ICT to create more sophisticated products and services and expanding life cycle businesses to boost profitability



### Mid-term outlook

## Exercise synergy to respond to the expectations of society

Meeting new needs not with individual products, but with systems combining products and services, is becoming increasingly important. We will leverage the synergy of our products and services to provide value to customers and contribute to the development of society.

## Focus

### German heat treatment job service provider VTN becomes IHI subsidiary

IHI acquired and converted into a subsidiary VTN, a German leading group that has been providing general heat treatment job services for over 60 years.

Heat treatment is a technology to strengthen metal and non-metal component materials by heating and then cooling them in such a way as to change their internal structures. Use of heat treatment technology is expected to increase owing to demand for higher diversification and sophistication for materials such as metals and non-metals, especially those used to make industrial machinery, automotive, and aerospace components. IHI Machinery and Furnace Co., Ltd (hereinafter "IMS") is a group company that manufactures and sells vacuum heat treatment units such as vacuum furnaces and vacuum carburizing furnaces. In our recent full-scale entry into the European heat treatment job services market, we will bring together VTN's process engineering and service network and IMS's unit design engineering excellence to provide customers with an even more attractive lineup of units and heat treatment services.







## Aero Engine, Space, and Defense

Goods and services we provide Aero engines, rocket systems, space utilization systems (equipment related to space exploration), defense systems, etc.

### Business area direction

- Enhance technological and manufacturing capabilities and expand life cycle businesses
- Expand rocket propulsion systems business and cultivate space usage field
- Develop new businesses that leverage technological and manufacturing capabilities

### Create value for society

We provide environmentally friendly, safe, and convenient aero systems. We also contribute to the promotion of space exploration and utilization for sustained development of society.



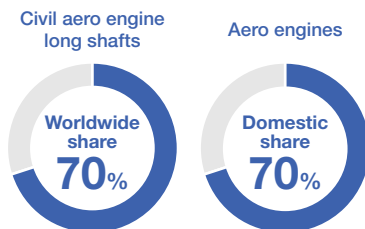
Realize low-carbon societies and reduce environmental burdens



Respond to industrialization, advancement and urbanization

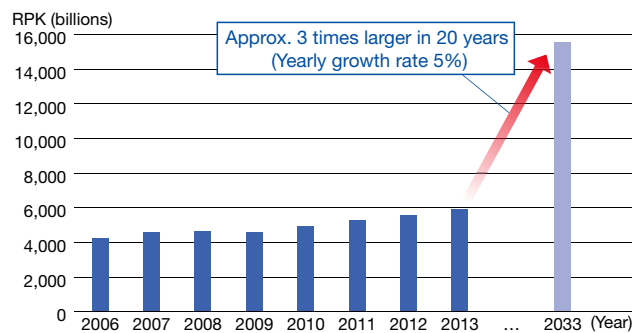
### Business environment and strengths

The civil aero engine market is expected to grow steadily at a yearly rate of 5% for the next 20 years. Meanwhile, our defense aero engines hold more than 70% share of the domestic market, and play an important role in Japan's security. IHI will expand its aero engine, space-related equipment and defense system business with our original world-class technology and manufacturing competence.



### Passenger volume continues to increase

Global revenue passenger kilometers (RPK): 2006-2033



Robust growth is projected in the number of air passengers due to economic development and population growth in emerging economies.

Source: Boeing

### Priority SBUs for investment

SBU	Key initiatives
Aero engines	<ul style="list-style-type: none"> <li>• Create production framework and reduce costs for new mass-production engines</li> <li>• Promote development of future fighter and civil aircraft engines</li> <li>• Strengthen original technology in fields such as new materials and innovative production technology</li> </ul>
Rocket systems and space utilization	<ul style="list-style-type: none"> <li>• Develop new models, such as the H3 and Epsilon rockets</li> <li>• Promote solutions business leveraging our space utilization technology</li> </ul>

### Date airplanes using new engine types go into service

Aero engines (models)	Airplanes	Dates airplanes using IHI engines go into service
PW1100G-JM	A320neo	FY2015
GE Passport20	Global7000 / 8000	FY2018
GE9X	B777X	FY2020



## Refine original technology and manufacturing competence to challenge ourselves to achieve world-class competitive strength

**Tomoharu Shikina**

Board Director for Aero Engine, Space and Defense Business Areas

### Achievements and challenges from our Group Management Policies 2013

## Utilize our advanced technologies to expand products and services over the whole life cycle

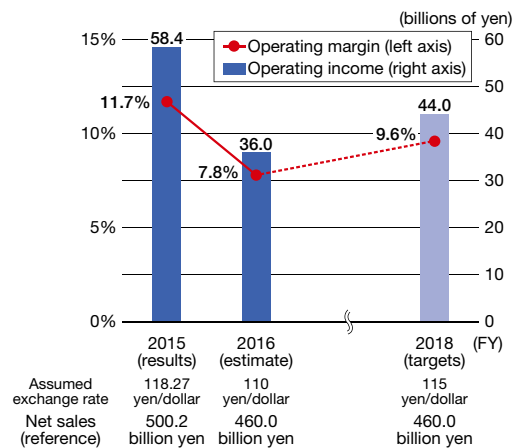
The launch of new model mass production and development construction has generally proceeded according to plan. We have firmly visualized production processes through the use of ICT, and we have extended various actions to group companies and our supply chain, contributing to cost reductions. Going forward, we will further advance and accelerate ICT utilization to implement optimization over the whole value chain. With these efforts, we aim to strengthen cash creation power and improve revenue over the whole life cycle.

### Measures in Group Management Policies 2016

## Efforts to reinforce earnings foundations

We prioritized the following four policies.

- ① Solidly launching mass production for new PW1100G-JM engine and progressing with plans for GE9X engine development
- ② Cultivating proprietary manufacturing technologies, including in new materials and advanced production technologies
- ③ Expanding our rocket propulsion and space usage businesses
- ④ Cultivating new businesses drawing on our technological and manufacturing capabilities



### Mid-term outlook

## Aiming to deploy new business utilizing manufacturing competence.

For the next three years, our profits are forecast to level off temporarily due to both initial costs of mass-producing the new model and growth-directed investments, but we will cut costs further and shorten our cash conversion cycle to ensure stable revenue and cash flow.

Demand for air transport is predicted to continue growing steadily over the medium- and long-term, and we expect continued expansion in our civil aero engine business. In defense engines, we are also pushing forward on introducing new models and developing future fighter aircraft engines, and we will continue to focus on this area. A variety of business possibilities are also expected from the space utilization field. IHI will refine our manufacturing technologies, contribute to resolving problems in the aero, space and defense sectors, and aim to expand our business.

## Focus

### Aircraft Fitted with PW1100G-JM Civil Aero Engine Begin Commercial Flights

The first Airbus A320neo was delivered to Lufthansa by Airbus in January, 2016 and began commercial flights. The Airbus A320neo is fitted with the PW1100G-JM engine, jointly developed by U.S. company Pratt & Whitney, German company MTU Aero Engines AG and IHI, working under the Japanese Aero Engines Corporation.

Participating with 15% stake in the PW1100G-JM program, IHI is in charge of the development, design, and production of key components such as fan modules and part of low-pressure compressors utilizing proprietary material and manufacturing technologies centered on composite materials. Already, orders for more than 2,500 units of PW1100G-JM have been received, and IHI expects it to serve as a stable pillar of business.

IHI will continue to provide a wide range of advanced manufacturing technologies, and contribute not only to the development of the aviation industry but also to the operation of safe and comfortable aircraft.



PW1100G-JM  
Source: Japanese Aero Engines Corporation

# Shared Group Functions

IHI will push forward with transformation of our business model using shared Group functions and create new value for our customers.

## Key results and future policy

Shared Group Functions	Achievements in Group Management Policies 2013	Measures in Group Management Policies 2016
<b>Solution &amp; engineering</b>	<ul style="list-style-type: none"> <li>Materialized specific projects (complete assembly of Nanatsujima biomass power generation project)</li> </ul>	<ul style="list-style-type: none"> <li>Strengthened materialization of projects through business area cross-collaboration</li> </ul>
<b>Intelligent information management</b>	<ul style="list-style-type: none"> <li>Applied sensing, ICT and data analysis methods based on the control system and remote maintenance shared platform widely throughout Group SBUs.</li> <li>Applied advanced manufacturing technology and services using the shared platform for Group production and maintenance work, to begin an initiative toward creating a new business model.</li> </ul>	<ul style="list-style-type: none"> <li>Expanded application of the new business model utilizing sensing, ICT and data analysis methods based on our control system and remote maintenance shared platform.</li> <li>Use more shared platforms to improve profitability by creating new business models and turning existing plants into smart factories.</li> </ul>
<b>Global business</b>	<p>Globalized business and prioritized the construction of a personal network in Global Priority Areas and Countries, contributing to the expansion of business (achieve overseas net sale ratio of over 50%).</p> <ul style="list-style-type: none"> <li>Established offices in Thailand (local corporation), Turkey (expatriate office), and Myanmar (Singapore local corporation branch) as part of the above.</li> <li>Held the IHI Forum in Indonesia and Vietnam and the IHI Space Forum in Malaysia to promote the IHI brand.</li> </ul> <p>*Global Priority Areas: the Americas, Southeast Asia, China *Priority Countries: Indonesia, Thailand, Malaysia, Vietnam</p>	<p>Implement the following strategies to improve profit ratio and expand business opportunities to strengthen our revenue foundation.</p> <ul style="list-style-type: none"> <li>Enhance marketing and regional management functions</li> <li>Develop new business by strengthening collaboration with Business Operation Divisions</li> <li>Extend locally-embedded maintenance foundation and review supply chain</li> <li>Build and strengthen relationships with local government officials, customers, and partners</li> <li>Add Turkey to the global priority countries (expected to show infrastructure demand and act as a business base for neighboring regions)</li> </ul>

### Group ICT Strategy

IHI's Group ICT Strategy 2016 is a sub-strategy of the Group Management Policies 2016. By analyzing and utilizing various information related to customer value, we can improve the sophistication of our products, services and manufacturing technology, as well as enhancing the information security that supports these, and standardizing foundational tasks. With these initiatives, IHI aims to strengthen our revenue foundation through ICT utilization.



2016  
攻めのIT経営銘柄  
Competitive IT Strategy Company

We were selected as a "Competitive IT Strategy Company" by the Ministry of Economy, Trade, and Industry and the Tokyo Stock Exchange.

## Focus

### Nanatsujima biomass power generation project

Along with other sponsors, IHI will undertake a wood biomass power generation project (output scale 49MW) in Nanatsujima, Kagoshima City, Kagoshima Prefecture. The electricity generated in this project will be sold to Kyushu Electric Power Co., Inc. based on the Act on Special Measures Concerning Procurement of Renewable Energy Sourced Electricity by Electric Utilities. The power plant will be completed in the second half of 2018, and it is planned to sell electricity for 20 years. Through this power generation project, we will promote the adoption of environment-friendly energy and contribute to revitalization of the region.

### Value creation of IHI products and services

IHI is utilizing ICT (information and communications technology) to develop services that generate new value and benefit customers. We have created our Group remote maintenance shared platform and are obtaining and accumulating information on the usage of products and plants provided to customers. By analyzing this big data with our advanced in-house analysis algorithm, we detect malfunction warning signs, perform lifespan prediction and support efficient operation, developing our new maintenance and service business. As of the end of March 2016, we have connected to and are obtaining information from more than 400 devices. We will continue to increase this number and move forward with developing and proposing services that are even more beneficial to customers.

# Development of New Business

IHI, centering on its Corporate Business Development Division, is enhancing and accelerating the creation of new businesses that have the potential to become growth/core businesses in the future. We are incubating these new businesses in a wide range of fields with the aim of contributing to sustainable societies.

## Key results and future policy

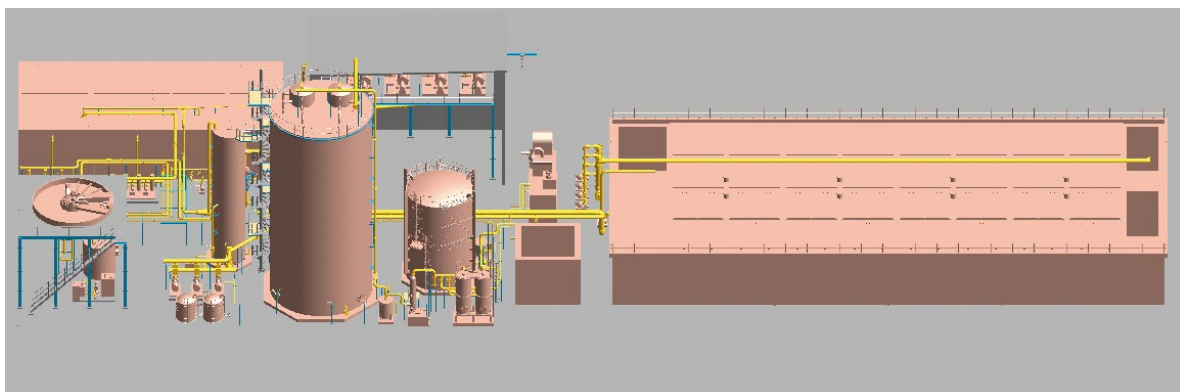
Area	Achievements in Group Management Policies 2013	Measures in Group Management Policies 2016
Exploring new business fields	We invested in a Silicon Valley venture capital firm to explore new business seeds, not only in our existing businesses, but also particularly in life sciences, food and water, as stipulated in Group Management Policies 2013. We have developed a framework for business development by collecting information on promising startup companies.	In Group Management Policies 2016, we will use the framework developed in Group Management Policies 2013 not only in our existing businesses, but also in identifying and developing promising seeds in the life sciences, food and water fields, as well as accelerating the earning power of resulting businesses.
Biofuel from algae	While pursuing development of microalgae cultivation technology, we have also improved processes for fast-growing <i>Botryococcus braunii</i> algae. In 2015, with newly received support of the New Energy and Industrial Technology Development Organization, we succeeded in stable cultivation in our test facility's 1,500m <sup>2</sup> open cultivation pond, the largest in the nation, in Nanatsujima, Kagoshima city, Kagoshima Prefecture.	We are selecting business locations and refining processes to improve productivity, achieve stable large-scale cultivation and reduce production costs. Commercialization initiatives, such as optimizing technology to convert algae oil into fuel, are being pursued.
Wastewater treatment for palm oil mills in Southeast Asia	To address the issue of palm oil mill effluent, we constructed a pilot plant utilizing IHI Enviro Corporation's IC reactor anaerobic wastewater treatment technology. Thereafter, the plant was confirmed to perform well.	Based on these good results, we will promote this technology to the Southeast Asian palm industry, aiming at securing EPC projects. Separately, we also intend to expand into the business of producing biomass fuel from agricultural and food processing wastes.

## Focus

### Wastewater treatment for palm oil mills in Southeast Asia

IHI is intending to apply IHI's wastewater treatment technology for environmental protection in Southeast Asia, where wastewater has become a problem due to the increased output of food-processing factories. Countries in the region are working to strengthen their environmental regulations, but costly treatment plants using sophisticated technology are not readily accepted in local areas. The challenge is to ensure regulatory compliance using methods that are as inexpensive as possible.

IHI Enviro Corporation's IC reactor is an anaerobic wastewater treatment system that enables palm oil mills not only to clean their wastewater but also operate their facilities using energy produced with methane gas recovered from the wastewater.



Rendering of IHI-IC reactor for wastewater treatment at a palm oil mill



# Engineering expertise centered on “*Monozukuri*” technology

## Group Technology Strategy 2016

### ■ Overview and implementation of the Group Technology Strategy

To respond to three megatrends—diversifying social infrastructure, accelerating advances of information technology and an increasingly intertwined global economy — IHI prepared the Group Technology Strategy 2016, a mid- and long-term policy for group-wide technological development.

We share this strategy throughout the entire group to unite the capabilities of the whole group to develop technologies. The technologies that IHI needs can be categorized into two groups—fundamental technology and applied technology. The former supports our products and services, and the latter, which is brought about by combining various technologies, can be commonly used for multiple products and services and contribute to differentiation and value improvement. We will then improve our engineering expertise centered on “*Monozukuri*” technology, through continued technological development. We will also push forward with technological development in new fields to realize the business model transformation outlined in the IHI Group Management Policies.

### ■ Technologies IHI focuses groupwide resources on

In the Group Technology Strategy 2016, we have declared that we will place a particular focus on the following technological fields.

#### (1) Hydrogen utilization technology to respond to the demand for a low-carbon society

We will bring IHI’s proprietary technologies together to develop ways to utilize hydrogen, a clean energy source of the future, and contribute to the reduction of greenhouse gas emissions.

We will propose and conduct commercial validity tests on a system designed to prevent CO<sub>2</sub> from being emitted into the atmosphere (CCS\*). The system combines the proprietary TIGAR® (Twin IHI Gasifier) technologies that we have accumulated as a boiler manufacturer, with technologies for inexpensively producing hydrogen from lignite coal.

#### (2) ICT and IoT technologies to create customer value

We will accelerate development of information and communication technology (ICT) and internet of things (IoT) technology to create new value for customers and transform our business model.

Our IHI Lifecycle Partner System (ILIPS®), a proven common remote maintenance platform, will be combined with robot technology to develop not only preventative maintenance systems but also more sophisticated services. We will also strengthen our manufacturing capabilities by leveraging data and smart factories.

### ■ Toward realizing the Group Technology Strategy goals

IHI will select and prioritize key businesses and accelerate our technological development mainly in the technological areas designated by the Group Technology Strategy 2016. We will also push forward on securing world-class intellectual properties and improve our international competitiveness. Through these initiatives, we will carry out the mission set out by our management philosophy of “contributing to the development of society through technology.”



TIGAR® Twin IHI Gasifier

\* CCS: Carbon dioxide Capture and Storage



## R&D Expenses

FY	R&D Expenses
2011	30 billion yen
2012	30.2 billion yen
2013	33.5 billion yen
2014	37 billion yen
2015	41.6 billion yen



IHI Tsunagu Lab facilitates open innovation  
Total visitors: 4,272 (as of March 31, 2016)

## IHI aims to strengthen “Monozukuri”

### ■ Set up the Monozukuri System Strategy Planning Headquarters

We set up the Monozukuri System Strategy Planning Headquarters to build a stable revenue foundation for IHI by providing products and services that continue to meet customers’ expectations. We will accomplish this by collaborating with Business Operation Divisions

to propose, organize and deploy strategies that will strengthen IHI’s manufacturing capabilities, including quality. We aim to build firm foundations for our quality management and internationally competitive design and production systems. The Strategy Planning Headquarters will work together with business operation divisions to create an environment that supports that transformation.

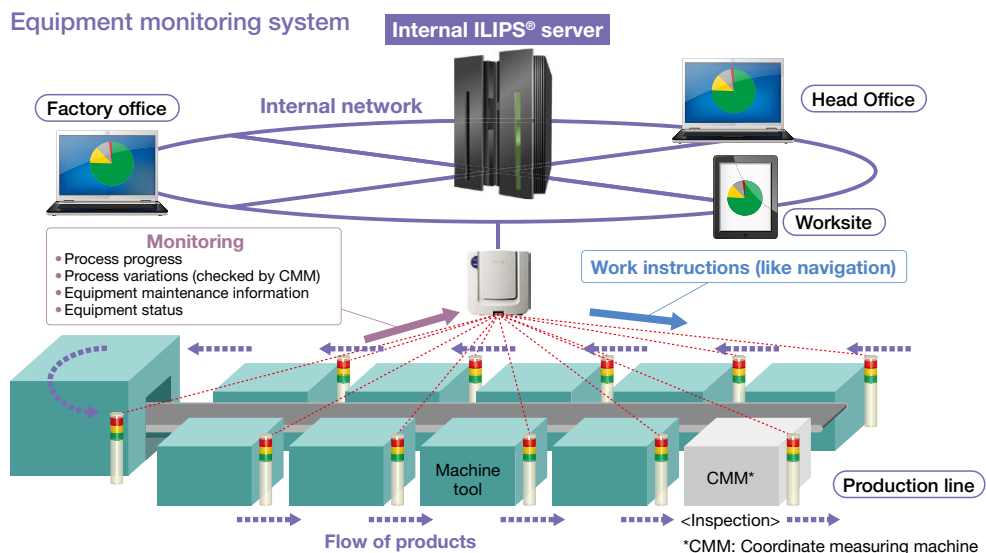
## PICK UP

### Cutting-edge technologies that support the manufacturing in IHI

Aero-Engine & Space Operations started its operation in 1957 at the Tanashi Works in Tokyo (closed 2006, moved to Soma, Fukushima prefecture). Along with expanding its business, Mizuho Aero-Engine Works (1970), Kure Aero-Engine & Turbo Machinery Works (1980), Soma No.1 Aero-Engine Works (1998), and Soma No.2 Aero-Engine Works (2006) were newly established to increase its production scale. In 1993, IHI introduced Toyota production system to transition from the skill based production system to more rational production system to improve its constitution increasing more civilian-sector demand business rather than public-sector demand business. Moreover, IHI established its own manufacturing system called the IHI Production System (IPS) to enhance “continuous flow process” and “visualization” in each factory. IHI has been continuously and autonomously conducting “Kaizen” activities to respond properly to various environmental changes.

Through further reform, IHI is working

on introducing smart factories by incorporating ICT and IoT into the IPS. In FY2015, IHI created a framework for efficient production by installing sensors on equipment in order to visualize the activities in factory floors. In FY2016, IHI will expand this initiative and incorporate wearable devices and robots to build the production system which can accomplish reliable equipment management, executions of exact work instructions, stable production quality by process control based on statistics analysis of inspection data and an ability to trace various data. IHI will continue to lead the jet engine industry in Japan with expanding this system to its supply chain.





## FY2015 results

### Human resources

Region	Number of people
Japan	22,751
Asia and Oceania	3,664
Americas	1,127
Europe, Middle East and Africa	1,952
Total	29,494

As of March 31, 2016

## Group Human Resource Management Policy

The IHI management principles clearly state that human resources are our single most valuable asset. We firmly believe it is necessary to develop supportive systems, workplace environment and corporate culture that help each employee realize his or her full potential with common values. From this perspective, in 2013 we formulated the IHI Group Human Resource Management Policy to be shared by group employees, in which five ideal traits of human resources and guidelines based on the keywords of “group,” “global” and “diversity” are provided.

The Group Management Policies 2016 also state that we should thoroughly permeate ideal traits and promote diversity more to foster a corporate culture that spurs further creation and innovation. We will also develop human resources to support our business strategies and sustainably grow our business, and introduce human resource management system for global business operations.

## Developing group global human resources

Under the principle that there is no growth of IHI if there is no growth of its human resources, we established the IHI Group Human Resources Development Policy and are developing our human resources by enhancing training programs and facilities.

In April 2015, we started the operation of the IHI Human Resources Development & Communication Center, called I-STEP Shonan, a core facility for human resource training located in Yokosuka, Kanagawa Prefecture. More than 10,000 group employees from Japan and overseas have used the facility as of March 2016. This will be more than just a training facility – we will use it as a place for members of IHI Group from around the world to gather, share our corporate philosophy and values, actively communicate, and learn and grow together.

## Group Human Resource Management Policy

In line with IHI's management principles and Group vision, IHI creates values for customers by wielding our engineering expertise that has “*Monozukuri*” technology at its core.

- 1 In order to become an enterprise of distinguished global professionals who strive to excel in “*Monozukuri*” and engineering technologies via world-renowned high quality products, the ideal traits determined here for human resources shall be permeated throughout the group and shall serve as shared values for group employees.
- 2 The ideal traits of human resources shall serve as a foundation for establishing HR management policies in order to provide group employees with opportunities to develop.
- 3 We shall provide a work environment where people of diverse backgrounds can demonstrate their abilities and are in tune with the management principles and Group vision of IHI.

### ► Ideal Traits of Human Resources

Integrity and Trust

For Customers and Society

Innovation and Creation

Teamwork

World-Class Professional

### ► Keywords

Group

Global

Diversity





### Recruitment (IHI Corporation)

	FY2014	FY2015	FY2016
Engineering personnel	171 (11)	204 (24)	227 (19)
Administrative personnel	55 (20)	57 (23)	56 (18)
Total	226 (31)	261 (47)	283 (37)
Non-Japanese employees	11 ( 4)	9 ( 4)	7 ( 2)*

Number of female employees are in ( )

\*The 7 non-Japanese employees do not include those planned to be hired in October.

### Number of female managers (IHI Corporation)

	Number of people	Percentage of total
FY2013	44	1.6%
FY2014	51	1.8%
FY2015	60	2.1%
FY2016	66	2.5%
FY2018 target	—	3.0% or higher
FY2020 target	—	3.5% or higher

## Diversity promotion

IHI believes that diversity is crucial to foster a corporate culture of creativity and innovation. The company's diversity promotion initiatives are focused on women, non-Japanese, persons with disabilities, and seniors.

### ■ Support for women in the workplace

It is important to actively recruit outstanding female employees, foster their professional development, and cultivate an environment in which they can thrive for IHI to grow sustainably.

Therefore, IHI aims to have women in at least 3.5% of manager positions (section manager or higher) by FY2020, as well as setting other quantitative targets to encourage the advancement of women. We are implementing a variety of initiatives to reach this goal.

We are also committed to making male employees change their mind to support women in the workplace, and are working with group companies on this initiative through lectures and workshops for female managers in group companies.

## Developing people-friendly work environments

IHI proactively fosters people-friendly workplaces where all employees can maximize their abilities. Specific areas of focus include health and safety, risk management, mental health support, harassment prevention, and developing relationships of mutual trust with the labor union.



Safety patrol (Aichi Works)

### PICK UP

## Selected as a Nadeshiko Brand

IHI was selected as a Nadeshiko Brand for FY2015 by the Tokyo Stock Exchange and the Ministry of Economy, Trade, and Industry. Nadeshiko Brands have been chosen each year since FY2012 from listed companies in each industry that show excellence in promoting women and helping them achieve their full potential. This was our second time to be selected, following FY2013. We especially focus on developing female managers, promoting network leader activities, and enhancing policies to support for an appropriate work and family-life balance. We will continue to develop an environment where women can thrive.



### PICK UP

## Selected a Health and Productivity Brand

IHI was designated a Health & Productivity Stock Selection for 2016 by the Tokyo Stock Exchange and the Ministry of Economy, Trade, and Industry. At IHI, our management philosophy is to recognize human resources as our single most valuable asset. We view human resources as our single most valuable business resource, and we endeavor to ensure the health of all our employees and create a comfortable working environment.

We have implemented a variety of policies, including mental health care, family medical checkups and health guidance in collaboration with IHI Health Insurance Society, and encouraged employees to take annual leave.



# Environment

**FY2015 results**

**CO<sub>2</sub> emissions from business activities**

**297,000 tons**

## Environmental management policy

The IHI Group Environmental Vision 2013 set various targets to be achieved by FY2018. In the three-year period up to FY2015, the task of laying a foundation to carry out IHI business in an environment-friendly manner was largely completed.

The newly adopted IHI Group Environmental Action Plan 2016 focuses on compliance with environmental laws and regulations, enhanced efforts to combat climate change and proactive disclosure of ESG (environment, social, and governance) information to investors. The key themes of the plan are reducing the environmental burdens of products/

services and business activities and strengthening IHI's environmental management.

### IHI Group Environmental Vision 2013

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

## IHI Group Environmental Action Plan 2016 (FY2016-2018)

### Strengthen environmental management

- Zero occurrence of serious environmental violations or accidents
- Establish a system for accurately aggregating environmental-impact information
- Complete migration to ISO 14001: 2015
- Facilitate environmental education and disclosure (environmental e-learning course for all employees)

### Reducing the environmental burdens through products and services

- CO<sub>2</sub> emissions reduction from products and services of more than 10 million tons annually
- Generate over 70% of total product sales with certified environmentally friendly products
- Publicize environmentally friendly products more proactively
- Strengthen sharing of information about chemical substances in products internally and with business partners
- Promote green procurement

### Reducing the environmental burdens through business activities

- Cut energy consumption and CO<sub>2</sub> emissions per standard physical unit by more than 3% compared to FY2015
- Cut waste per standard physical unit by more than 3% compared to FY2015
- Cut water consumption per standard physical unit by 3% compared to FY2015
- Promote management of waste, including PCB
- Promote management of chemicals (VOC, PRTR, Freon, mercury, etc.)
- Address biodiversity





CDP Climate Change 2015 Program scores

Number of certified environmentally friendly products

Disclosure score

Performance score

99

B

10

PICK UP

Environmentally Friendly Product Certification

As part of our effort to reduce the environmental burdens of products and services, IHI began an environmentally friendly product certification program in FY2014. This program certifies products and services with particularly excellent environmental performance (environmental conservation and impact reduction) based on IHI-original guidelines.

In addition to the 4 products certified in FY2014, we certified 6 products in FY2015: the IHI-IC Reactor, the 100kW binary electric power generator "Heat Innovator<sup>®</sup>," the LNG Smart Satellite, the industrial solar power system, NitroJet<sup>®</sup>, and the Community Cycle System. This brings our environmentally-certified products to a total of 10.

Certification process



IHI-IC Reactor

The IHI-IC Reactor efficiently processes organic wastewater, including that from breweries. Methane gas generated by the reactor can be used as fuel for electricity generators and boilers.



NitroJet<sup>®</sup>

NitroJet is a technology for creating an ultra-high pressure jet of liquid nitrogen to clean, chip and cut surfaces. The technology efficiently decontaminates objects without using water, eliminating the necessity to process wastewater.



Community Cycle System

This is a system for sharing bicycles parked at bike stations in designated areas. The system encourages the use of bikes instead of cars to help reduce CO<sub>2</sub> emissions.

PICK UP

IHI Exhibits at Eco-Products 2015

The IHI exhibited at Eco Products 2015, the largest environmental exhibition in Japan, in December 2015.

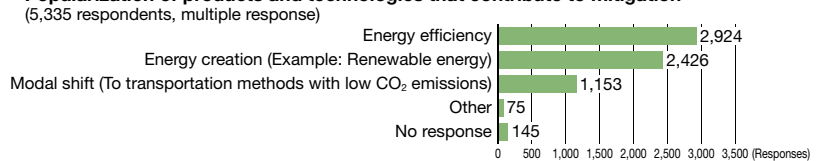
We presented IHI products and services that contribute to mitigation<sup>\*1</sup> and adaptation<sup>\*2</sup> under a theme of "climate change preparedness."

\*1: Mitigation: Suppressing the increase of greenhouse gases (CO<sub>2</sub>, etc.) in the atmosphere.

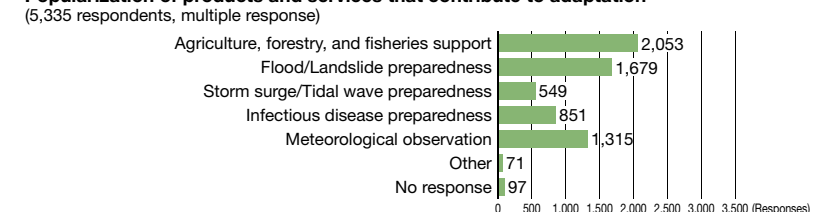
\*2: Adaptation: Preparation for the effects of climate change (changes in ecosystems and natural disasters)

Q. What kind of initiatives do you hope to see from IHI products and services?

• Popularization of products and technologies that contribute to mitigation



• Popularization of products and services that contribute to adaptation





FY2015 results

Number of IHI Group procurement personnel who have taken our e-learning course on enforcing CSR in procurement

4,700 employees

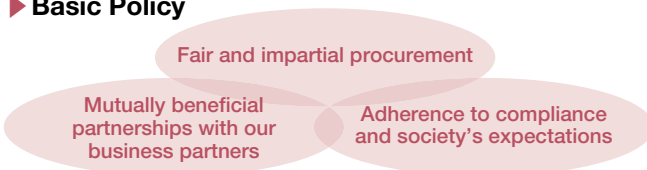
Basic Procurement Policy

The IHI Group Basic Procurement Policy focuses on three principles: fair and impartial procurement, mutually beneficial partnerships with our business partners, and strict adherence to compliance and society's expectations.

To address procurement-related issues such as environmental concerns or conflict minerals, our personnel must thoroughly understand the issues and be able to communicate effectively with all parties. We ensure that they have accurate information they need and are sharing it with our partners.

IHI Group Basic Procurement Policy

Basic Policy



Requests to business partners

- Compliance
- Attention to human rights, labor conditions and occupational safety and health
- Ensuring optimal quality, cost and delivery conditions
- Enhancement of competitiveness
- Respect for the environment
- Information disclosure

PICK UP

CSR in procurement

We published our IHI Group Basic Procurement Policy in FY2012 and surveyed our major suppliers. Based on the results, we have been following up and supporting improvements at our suppliers since FY2014, and we intend to continue these activities.

We reinforced our procurement compliance by providing an e-learning course on CSR to 4,700 employees within IHI Group who are involved with procurement. The course covers topics such as the Japanese Subcontract Act, proper subcontracting, and information security. We also held

procurement seminars for global procurement personnel with the main objective of expanding knowledge of each country's laws, tax codes, and social conditions. In FY2016, we plan to further reinforce CSR in procurement at affiliated companies within Japan and overseas to strengthen our global procurement practices.

We will enhance mutual benefits and competitiveness by getting our business partners to approve of our response to society's expectation and making this basic knowledge for our procurement personnel.

Comment

Supplier Award

We are from Jiangsu Chang Bao Steel Tube Co., Ltd., a top-class high-pressure boiler tube manufacturer in China. We specialize in R&D in high-pressure rifled boiler tubes. Since the beginning of our partnership in 2010, we have continuously improved our product quality and created a service framework for flexible deliveries with the guidance of IHI. As a result, we have earned IHI's trust and achieved growth as well.

In 2016, we were presented with a letter of gratitude for swift delivery, and we have grown close to IHI. We will continue our management philosophy of "quality is #1" and create a bright future where both companies can achieve a win-win relationship.



Supplier Award for Jiangsu Chang Bao Steel Tube Co., Ltd.



# Community Service



## FY2015 results

Total spending on social contributions

# 230 million yen

## CSR Policies

IHI does not just contribute to the resolution of social issues with our business activities. We are running a variety of CSR activities revolving around five key themes.

### Five key themes

Nurturing future generations

Promoting precision-manufacturing and scientific technologies

Providing access to medical care, food, and water

Resolving problems in local communities

Supporting environmental sustainability

### PICK UP

#### Charity walk in support of resolving food issues

IHI participates in the activities of the United Nations World Food Program (WFP), in order to contribute to solving world food problems. Every year, we sponsor the WFP's Walk the World. In FY2015, over 350 employees and their families took part in this charity walk along the Yokohama waterfront (450 in 2016). Participants enjoyed walking with their IHI logo sports towels and raised their own and others' awareness of poverty and starvation in Africa and Asia.

IHI will continue to contribute to the resolution of food problems and nurturing the next generation.



Walk the World participants

### PICK UP

#### Contributing to nurturing the next generation of scientists

As a Japanese "Monozukuri" (precision manufacturing) company, IHI is participating in social activities that help to nurture the next generation of scientists. As part of our activities, we developed a science class aligned with the elementary school curriculum with the theme of "Aero Engines" in collaboration with the Ochanomizu University Science & Education Center. After learning about the history of aero engines and their structure using models, students perform an experiment to deepen their understanding. We held this class in elementary schools near our offices in FY2015. These elementary school students are our future, and we hope they will become interested in "Monozukuri" by encountering this cutting-edge technology. IHI will expand these activities to cultivate the next generation of engineers.



Jet engine small-size model



# Corporate Governance

## Basic Views on Corporate Governance

IHI Corporation defines corporate governance as a system that assures sustainable growth and maximization of corporate value by enhancing management efficiency so that IHI Corporation can leverage its innate capabilities to the fullest extent possible.

To achieve this, IHI Corporation targets efficient and appropriate internal decision-making by clearly separating management monitoring and supervisory functions from

functions related to their execution of duties. Furthermore, by establishing the relevant internal rules and building a system to administer them, IHI ensures appropriate operations across the entire Group.

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

### Basic Policies on Enhancing Corporate Governance

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

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

## Focus

### Evaluating the Board of Directors

IHI Corporation started evaluating the Board of Directors from FY 2015 in an effort to enhance the Board of Directors' effectiveness. The evaluation was performed as follows:

- An external consulting company administered an anonymous questionnaire to all directors and corporate auditors. Items covered by the questionnaire included the composition and operation of the Board of Directors, risk management, and culture of the Board of Directors.
- The external consulting company collected and analyzed the questionnaire responses.
- All relevant directors and corporate auditors were interviewed regarding the questionnaire and the analyzed responses. Furthermore, a panel comprising mainly outside directors and outside corporate auditors exchanged views.
- The results of the above process were brought together in the form of a self-evaluation by the Board of Directors, and issues requiring improvement were identified.

#### ■ Board of Directors Evaluation Results and Future Initiatives

The evaluation confirmed that the effectiveness of IHI Corporation's Board of Directors is satisfactory, and that the company's particular strengths include transparency in the way the Board of Directors is operated and in its discussions, as well as adherence to compliance-related requirements.

On the other hand, in order to further enhance effectiveness, the evaluation also confirmed issues including the need to discuss risk more thoroughly and to increase the time available for deliberating key agenda items at Board of Directors meetings.

IHI Corporation will continue its efforts to further enhance its own effectiveness by implementing measures to resolve these issues. The company intends to evaluate its Board of Directors again in the same way in FY 2016, and thereafter.



## Corporate Governance System

### ■ Corporate Governance System

#### (1) Board of Directors

The Board of Directors, which consists of 13 directors (3 from outside), makes decisions related to all important matters concerning the management of the IHI Corporation and the Group, in addition to supervising directors in their business execution.

#### (2) Board of Corporate Auditors

IHI Corporation has a Board of Corporate Auditors, which comprises 5 corporate auditors (3 from outside) who audit the duties executed by directors.

#### (3) Business execution framework

IHI Corporation has an 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 resolution of the Board of Directors, there are 25 executive officers, 5 of whom concurrently serve as directors.

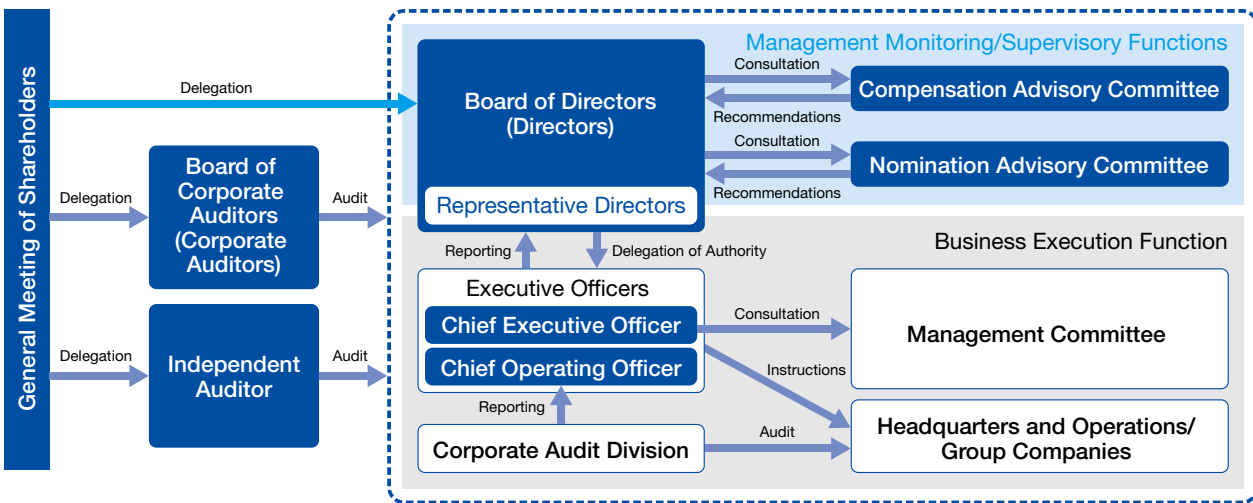
#### (4) Compensation Advisory Committee

To ensure that directors and corporate auditors are remunerated appropriately, IHI Corporation established the Compensation Advisory Committee as a voluntary committee, consisting of 6 members: 3 outside directors, 1 outside corporate auditor, a director responsible for human resources, and a director responsible for finance and accounting. The chair of the Committee is an outside director.

#### (5) Nomination Advisory Committee

Additionally, IHI Corporation established a Nomination Advisory Committee, to supervise the nomination of candidates for directors and corporate auditors by the representative director, checking that such appointments are conducted appropriately, and to offer related advice, among other purposes. The Committee consists of 5 members: the President and Representative Director, the Chief Executive Officer and 3 outside directors. , and the President and Representative Director serves as chair

### Corporate Governance Management Structure As of July 1, 2016



### ■ Policies relating to Appointment of Officers

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

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

#### Ideal Attributes for Officers

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

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

## Policy on Determination of Remuneration

### 1 Basic stance

The maximum total remuneration of directors and corporate auditors is resolved at the Ordinary General Meeting of Shareholders. Directors' and executive officers' remuneration is based on a reward system that considers the standard necessary to secure superior human resources, more strongly aspires towards improvements of the Group's consolidated business results and corporate value, and emphasizes sharing the risk and return of stock price fluctuations with shareholders. Remuneration details are finalized at a meeting of the Board of Directors, following consultation with and recommendations from the Compensation Advisory Committee which was created to ensure that remuneration is appropriate and that the process is transparent.

### 2 Types of compensation

Directors' and executive officers' remuneration consists of a base amount, share-based compensation and performance-based bonuses.

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

Compensation Advisory Committee.

In addition, outside directors receive only a base amount. Remuneration for corporate auditors comprises basic remuneration only as compensation for their responsibilities for auditing the execution of duties throughout the Group. The amount is determined through discussions among corporate auditors.

### 3 FY2015 breakdown

(millions of yen)

Position	Number of recipients	Breakdown			Total amount paid
		Base amount	Stock-based compensation	Performance-based bonuses	
Director	18	581	52	0	634
Corporate Auditor	6	108	—	—	108
Total (Outside officers)	24 (7)	689 (69)	52 (—)	0 (—)	742 (69)

Notes:

1. Remuneration for directors does not include salaries of those who are also company employees.
2. Total annual remuneration for a director is 1,090 million yen or less (excluding employee salaries), as resolved at the 190th Ordinary General Meeting of Shareholders on June 27, 2007. Total annual remuneration for corporate auditors is 120 million yen or less, as resolved at the 197th Ordinary General Meeting of Shareholders on June 27, 2014.
3. During the fiscal year under review, 13 directors (excluding outside directors) were paid a total of 140 million yen in performance-based bonuses for the 2014 fiscal year.
4. The numbers of directors and corporate auditors as of March 31, 2016 are respectively 15 (including 3 outside directors) and 5 (including 3 outside corporate auditors). The reason for the discrepancy from the above is that figures in the chart include 3 directors and 1 corporate auditor who retired at the end of the 198th Ordinary General Meeting of Shareholders on June 25, 2015.

## Outside Officers

### Outside directors

#### Tomokazu Hamaguchi

Fellow, Meiji Institute for Global Affairs Advisor, Ubiquitous Corporation

##### Reasons for appointment

Mr. Tomokazu Hamaguchi reflects in the management of IHI Corporation his broad insight from his track record in transforming his own organization and supporting transformations at customers while at the helm of a state-of-the-art IT and telecommunications company.

#### Taketsugu Fujiwara

Standing Counselor, Asahi Kasei Corporation

##### Reasons for appointment

Mr. Taketsugu Fujiwara reflects in the management of IHI Corporation his extensive experience and broad insight gained at the helm of a general chemicals manufacturer, where he has implemented diversified management.

#### Hiroshi Kimura

Executive Corporate Advisor, Japan Tobacco Inc.

##### Reasons for appointment

Hiroshi Kimura is expected to reflect in the management of IHI Corporation his extensive experience and broad insight gained at the helm of business manager who has led aggressive globalization in response to changes in business environment.

### Outside corporate auditors

#### Toshiharu Watanabe

Advisor (Former), Toshiba Corporation

##### Reasons for appointment

Mr. Toshiharu Watanabe reflects in the auditing of the management of IHI Corporation his experience and insight, which he cultivated as an executive in the field of social infrastructure at a general electric goods manufacturer from an independent perspective.

#### Takayuki Hashimoto

Vice Chairman, IBM Japan ,Ltd.

##### Reasons for appointment

Mr. Takayuki Hashimoto reflects his extensive experience and knowledge of global companies gained at the helm of a state-of-the-art IT company in the auditing of IHI Corporation's management from an independent perspective.

#### Yoko Hatta

Auditor, International Christian University

##### Reasons for appointment

Yoko Hatta is expected to reflect her extensive experience and insight in global business operations, notably international taxation in the auditing of IHI Corporation's management from an independent perspective.



## From the Outside Directors

# Harnessing strengths for the next phase

**Taketsugu Fujiwara**, Outside Director

As CEO and then Vice Chairman of Asahi Kasei Corporation, Mr. Fujiwara developed extensive experience and broad insight promoting diversified business management. He now serves as a Senior Advisor there.



IHI has always been at the core of Japan's modernization process, and its strong precision manufacturing foundations have driven the safety and credibility that Japan prides itself on. However, FY2015 saw an incident that shook these foundations deeply. It seems to me that IHI is now immersed in a struggle to "shed its skin" and transform itself for the next phase.

The world is changing faster than we can possibly imagine. To react to these changes, IHI must follow an upward trajectory where it not only selects and focuses its business, but also digests what it has learned.

IHI has strong operational capabilities on the manufacturing floor, combined with consistent organizational strengths from planning to completion. These are supported by its steady accumulation of experience and its technical

background.

I want IHI to create new fields in which it can use its strengths to globally dominate markets and discover business areas where it can become a major player. This will put its business on an upward trajectory.

IHI must smoothly fuse its factory floor strengths with its management skills, and its businesses with social changes. In which fields should IHI take the initiative to accomplish this in an ideal future society? I hope that IHI will create opportunities to discuss these aspirations on a daily basis and cultivate individuals with the intuition to respond to rapidly-changing societal values and engineers who can create innovation.

I fully expect that IHI will become a global champion in its next phase.



## From the Outside Corporate Auditors

# Creating innovation with new ideas

**Takayuki Hashimoto**, Outside Corporate Auditor

Mr. Hashimoto was CEO and then Chairman of IBM Japan, Ltd. He developed wide-ranging insight and abundant experience from these top management roles he played at this cutting-edge global IT company. He now serves as Vice Chairman there.

I believe that IHI is a truly "good" company – one that contributes to society with its "*Monozukuri*" technology and earns the trust of its employees. On the other hand, from events this past year, I feel that IHI is not a "strong" company – one that has the ability to honor its commitments to its customers, to complete projects within budget and to respond to crises. I believe these issues were most apparent during the transition from "defensive" to "offensive" management. In this disjointed situation, which differs from its past successes, IHI must change its thinking on organizational structure, management and risk assessment.

To achieve this, IHI needs systems and ideas that allow it to think and do new things. Bringing diversity

into the company, such as by hiring expert human resources from outside the company, making full use of women, non-Japanese, disabled and LGBT individuals, and adapting work styles using ICT, will become the engine for creating new innovation.

CSR is like vitamins for a corporation – without it, a company cannot thrive. IHI needs to create shared value by adhering to its core business and contributing to society through it.

IHI has history, potential and an excellent management philosophy. It must now present a clear business vision with the next 5 to 10 years in view, and prove that it can execute and achieve that vision.

# Internal Control System

The basic policy for the internal control system is designed to boost the effectiveness of corporate governance and increase the corporate value of the Group. IHI believes that establishing a robust internal control system is key to

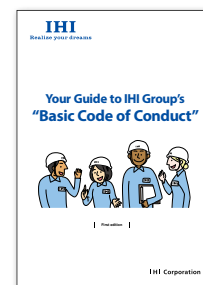
expanding business globally, and we are making continuous efforts to achieve a sound compliance structure and enhance risk-management systems, as well as to develop and implement a shared management framework throughout IHI.

## Compliance

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

- Observing strictly all laws, company rules, and other regulations.
- Acting in a fair and responsible manner as business people.  
In addition to compliance with laws and regulations, our policies must also meet the demands of society.

In FY2015, IHI revamped guidelines for the Basic Code of Conduct and provided it to group employees. We are also working on creating multilingual versions of the guidelines so that all Group employees can understand the Basic Code of Conduct and reflect it in their work.



### Basic Code of Conduct for the IHI Group

We at the IHI Group are committed to implementing what is necessary to meet the expectations and gain the trust of not only our customers, business partners, shareholders and colleagues, but also the local and international communities, while keeping an awareness of global issues. By doing so, we aim to enhance our existential value as we move forward into the future and realize our Group's management principles of "Contribute to the development of society through technology" and "Human resources are our single most valuable asset."

#### Fundamental and Universal Principles of the Entire IHI Group

- **Respect for the rule of law and ethical conduct**  
We strictly observe laws and ordinances based on a clear understanding of their meaning. We also act sincerely and fairly and in accordance with high ethical standards so that we do not violate social rules or international norms.
- **Respect human rights.**  
We fully recognize the importance of, and always strive to respect, human rights during our business activities.

- **Promotion of mutual understanding**  
In order to promote mutual understanding with those around us, we strive to disseminate information on our business activities, explain the effects of these activities on the surrounding environment, and engage in an exchange of opinions with our broader communities on a daily basis.

#### Responsibilities toward People, Society, and the Environment

- **Responsibilities toward people connected with the IHI Group via our products and services**
  - 1 We establish relationships of mutual trust with the people with whom we are involved in the course of our business, help solve social issues in a variety of fields by using our abilities to the utmost, and develop and provide products and services to assure more comfortable lives for people around the world.
  - 2 We pay full attention to the safety of the products and services we develop and provide and constantly strive to raise the quality level of our products and services by confirming whether they satisfy customers and users.
  - 3 We deal appropriately with other parties in our business transactions and seek profit fairly, while at the same time we strive to establish fair and mutually-productive relationships with our customers and business partners
- **Responsibilities towards those with whom we work**  
We strive to respect mutually the character and individuality of all people with whom we work and maintain a safe, supportive, and comfortable environment in which we can work easily

- **Responsibilities toward local and international communities**
  - 1 With an awareness that each one of us is a member of society, we actively take part in initiatives to solve the problems faced by society.
  - 2 No matter the region of the world where we conduct our business, we understand the value of the culture unique to each region and strive to meet the expectations of people living there.
  - 3 We take a resolute attitude against organizations and forces that threaten social order and safety.
- **Responsibilities toward the global environment**  
Based on our recognition that the global environment provides the foundation for the existence of all societies and cultures, we take care so as not harm that which also will be needed by future generations and strive to protect, and reduce the burdens on, the global environment, not only in the course of our provision of products and services but also in all other aspects of our business activities.

#### Roles and responsibilities of Senior Management

- **Roles of Senior Management**
  - 1 Senior Management recognizes that their role is to ensure the realization of this Code of Conduct and takes the initiative to demonstrate leadership in order to put the purposes of this Code of Conduct into practice.
  - 2 Senior Management ensures that this Code of Conduct is known to all people with whom they work and constantly strives to establish, maintain, and improve effective internal systems and to enhance our corporate value.

- **Responsibilities of Senior Management**  
If a violation of this Code of Conduct occurs, Senior Management will strive to take the initiative to solve the problem, discover its cause, and prevent the recurrence of similar violations. They also will promptly disclose accurate information to society, clarify the responsibilities and scope of the authority of the persons involved, and impartially take disciplinary action even upon themselves.

## Risk Management

### Basic risk management policy

The basic approach to risk management entails making business continuity plans, ensuring the safety of employees and their families, conserving management resources, and retaining the trust of society. Risk management is our top business priority, and IHI identifies, analyzes, and evaluates predicted risk each year.

### FY2016 Risk Management Priority Action Policy

In FY2015, risks emerged in the implementation framework and quality control of multiple large-scale construction projects, causing profits to fall and repeated downward adjustments in performance projections. To prevent these risks from reoccurring, we will take the following priority actions in FY2016.

1. Rebuilding the quality assurance systems
2. Ensuring the appropriateness of the order process in large projects
3. Sound pursuit of large-scale projects and increased accuracy of intermediate cost control

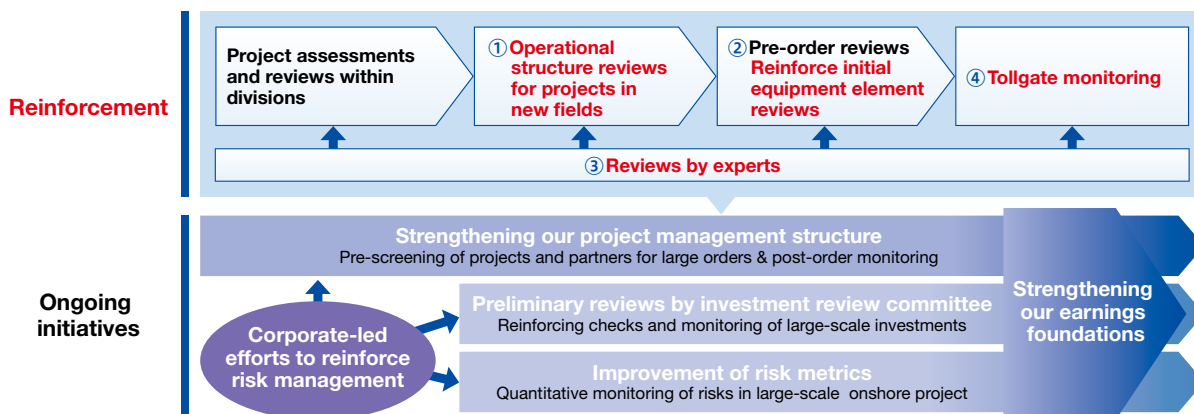
We will also continue the following actions to prevent other risks from occurring.

1. Response to changing business and competitive environment
2. Ensuring the appropriateness of large-scale investments
3. Appropriate response to risks associated with the execution of a global strategy
4. Increased sophistication in dealing with exchange rate risk
5. Strengthening compliance
6. Leaking of trade secrets/personal information/key technological information
7. Ensuring information security
8. Thorough commitment to safety and sound mental health
9. Thorough observance of environmental laws and regulations
10. Appropriate measures in the event of disasters and accidents
11. Public relations and public consultation activities conscious of the responsibility to explain, in order to recover trust
12. Cutting off all ties to anti-social forces
13. Further promotion of diversity improvement
14. Dealing with harassment
15. Promoting human rights education and awareness-raising activities

### Strengthening our review process for large-scale projects

Considering the continual and significant losses in large-scale projects in FY2014 and FY2015, we will strengthen our project review process in FY2016. These losses were caused by insufficient analysis of new field-projects and insufficient identification of risks in projects that involve conditions we had never encountered before. Going forward, we will

reinforce these processes by performing our reviews more thoroughly and rigorously. We will also continue to improve the precision of our estimates and strengthen our monitoring structure. Visualization of project progress and review by key experts at each stage will ensure steady implementation of large-scale projects and prevent drops in project profit.



**What is tollgate monitoring?** A system in which stages are set in individual projects for each major milestone from estimate to delivery, and major deliverables created by the project manager or proposal manager, etc (estimate creator) are reviewed by executive management and other relevant individuals in each stage. In tollgate monitoring, you must clear and solve the conditions set at each stage before proceeding to the next stage.



# CSR Management

## CSR Committee

IHI believes that for us to sustainably increase corporate value, we must meet the expectations of our customers and society and earn the trust of our stakeholders. And, the proactive involvement of top executives is essential to accomplishing this. We established the CSR Committee in FY2013 to allow top executives to consider the expectations of society and debate IHI's basic CSR policy and individual measures. The company-wide committee meets once a year.

To continuously engage with our stakeholders, IHI will further develop the activities of the CSR Committee.

At the 4<sup>th</sup> CSR Committee held in May 2016, an outside expert gave a lecture on recent societal trends, and we discussed the FY2015 CSR activity report and future policies. The editorial policies and key content of the Integrated Report 2016 were also discussed.



The Chair of the Committee is the President, and the Vice Chair is the officer in charge of CSR. The committee members are board directors, general managers of operations, general managers of the headquarters, and general managers of head office divisions (Procurement Strategy Planning, Corporate Planning, Public Relations, Finance & Accounting, Administration).

### Executive seminar on compliance

We must consider compliance not just from the conventional perspective of adhering to regulations, but also in responding to the demands of a global society (Sustainable Development Goals, ESG information disclosure, and others). An external expert gave a lecture to top management on recent world trends, and this seminar was also an effective opportunity for dialogue with external stakeholders.



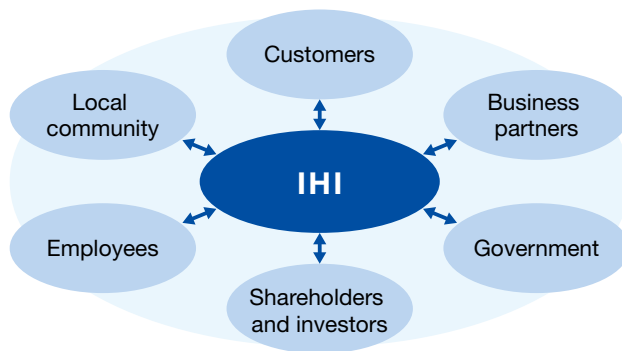
Executive seminar

## Dialogue with Stakeholders

To respond to the expectations of society, we must discuss issues with our stakeholders and incorporate these expectations into our business activities.

We are proactively opening the dialogue with stakeholders through the Integrated Report and other communications tools, exhibitions, questionnaires, and more.

### IHI Stakeholders



### ■ Dialogue with the local community

In order for our stakeholders to feel connected to IHI, we held the IHI Forum 2015 at the Toyosu IHI Building on November 17-21, 2015 under the theme of “Wishes that only *Monozukuri* can grant: Realize your dreams.” We not only displayed IHI products and technology, but also introduced specialties from regions associated with IHI, and held the “i-muse Children’s Research Lab” for children to experience the workings of our products and technology through science experiments.

Many of our neighbors also visited the Forum, and a wide range of stakeholders became more familiar with IHI.



IHI Forum



## ■ Dialogue with overseas investors

Our ratio of non-Japanese shareholders is increasing, and we are proactively carrying out investor relations activities so that our overseas investors can learn more about IHI's business activities. We are expanding opportunities for conversation through individual visits to overseas investors, participation in conferences and responding to interviews. In FY2015, as in the previous year, top management traveled to North America, Europe, and Asia to talk directly with institutional investors. The investors we visited gave us feedback such as "I'm satisfied with your detailed explanation of your immediate business environment" and "It was helpful that you thoroughly explained your concerns, not just your forward-looking business plan".

In FY2015, we enjoyed speaking with overseas investors from approximately 250 companies, through individual visits, participation in conferences and responses to interviews.

## ■ Dialogue with employees

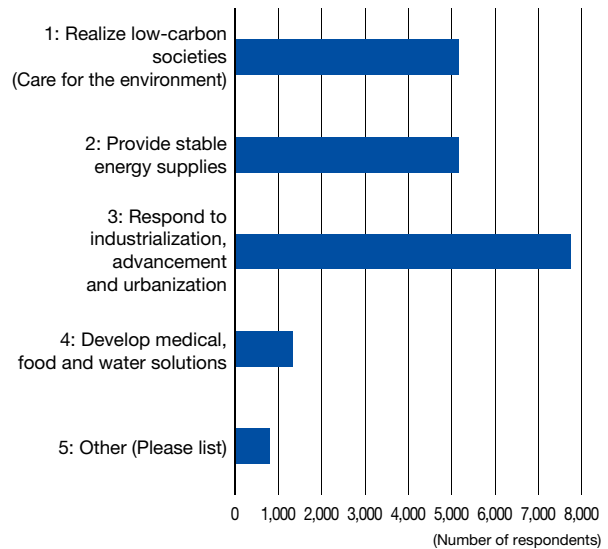
After publishing our Integrated Report, we held an e-learning course for all group employees and conducted a survey to raise understanding and awareness of our business and CSR activities.

In FY2015, we received responses from 15,361

employees, including those at Group companies. We found that most employees understand how their own work connects to society.

We also obtained valuable news in that employees particularly emphasized "human resources," "technology and R&D," and "trust from our customers" as drivers of IHI's long-term growth.

### Q: Which of the following social issues do you think your work (or your department) contributes to solving?



## Dialogue with external experts

In February 2016, we held a dialogue with Mr. Masao Seki, Chief CSR Officer at Sampo Japan Nipponkoa Insurance Inc., and Mr. Yoichi Mori, Certified Public Accountant and Member of the Subcommittee on Technology of the International Integrated Reporting Council (IIRC), who participated in the development of the International Integrated Reporting Framework. The officer in charge of CSR and 4 CSR Division employees participated in this discussion, and we received objective feedback on our activities thus far, as well as learning about internal and external communications.

We received valuable feedback from the wide-ranging insight of these speakers. Their feedback included points such as "you need to maintain a long-term vision and proactively participate in rule-making to transform society," "it is essential to accurately grasp how much your business is contributing to the resolution of social issues," "communication with stakeholders such as customers, employees,



community and government must actually be happening on a daily basis – are the issues and suggestions gleaned from these micro-level discussions effectively being reflected throughout your business management?" We will continue internal discussions to reflect this feedback in our future business.

We will continue to proactively create opportunities for communication with our stakeholders and promote CSR activities to incorporate societal expectations into our business activities.

## Key CSR performance data

Areas		FY2013	FY2014	FY2015	FY2016 Plan	Future objectives
<b>CSR</b>						
Measures	Employee awareness	•Raised awareness of issues via e-learning programs	•Ongoing	•Ongoing	•Expanding reach of education	•Raise awareness of global CSR issues and show steps each individual should take to meet stakeholder expectations, earn trust and raise company value over the long-term
Relevant data	Level of employee awareness	86%	89%	90%	90% or greater	
<b>Governance</b>						
Measures	Risk management	•Set 12 priority policies	•Set 14 priority policies	•Set 16 priority policies	•Set 18 priority policies	—
Relevant data	Outside director meeting attendance rate	88%	95%	94%	•Outside director meeting attendance rate: 75% or greater	•Outside director meeting attendance rate: 75% or greater
<b>Compliance</b>						
Measures	Compliance training	•Conducted compliance and risk management programs	•Ongoing	•Developed self-esteem program	•Ongoing	•Act ethically with a priority on sincerity and fairness, so as to comply with internal, national and international rules, laws, regulations, prescribed practices, internal policies and procedures
	Globalization of compliance system	•Reviewed IHI's and Regional Headquarters for the Americas' compliance system	•Improved IHI's and Regional Headquarters for the Americas' compliance system	•Clarified compliance system for overseas subsidiaries	•Ongoing	•Establish Group-wide global compliance system
Relevant data	Hotline reports	158	238	333	—	—
<b>Supply chain</b>						
Measures	Procurement policy awareness	•Surveyed 1,332 major domestic business partners •Established IHI Group Policy on Conflict Minerals	•Reviewed survey findings •Established environmental control guidelines	•Deployed throughout IHI Group domestically and overseas	•Reinforce publicity throughout IHI Group domestically and overseas	•Expand the IHI Group Basic Procurement Policy to major suppliers in order to create trust relationships, mutual benefit and competitiveness
	Procurement personnel training	•Started training courses for local procurement personnel •Introduced training courses on procurement-related laws, regulations and tax systems of priority emerging countries	•Ensured procurement compliance, including in the management of chemical substances •Held procurement seminars for global procurement personnel	•Imparted e-learning to procurement personnel •Held procurement seminars for global procurement personnel	•Impart e-learning to procurement personnel •Hold procurement compliance seminars for overseas affiliates	•Ensure global procurement compliance
<b>Health and safety</b>						
Measures	Reinforcing health and safety management	•Established IHI Group Safety and Health Committee •Introduced mental resilience training •Introduced new health management system	•Introduced OHD (Occupational Health Dynamics) assessments •Introduced standards for responding to medical checkup results	•Established IHI Group Central Safety and Health Committee •Direction and support for major IHI Group affiliates •Enhanced health and safety management overseas •Enhanced health management for employees dispatched overseas •Selected as a Health and Productivity Brand	•Direction and support for major IHI Group affiliates •Expand Health and Safety Management Assessment method to affiliates •Enhance health and safety management overseas •Communicate the Healthy Management Declaration	•Work to ensure workplace environments are healthy and safe for all people working for or with IHI
Relevant data	Rate of occurrence of work-related accidents requiring time off work	0.21	0.24	0.22	0.00	—
	Number of annual leave days taken	16.27 days	16.02 days	15.92 days	16.0 days or more	—



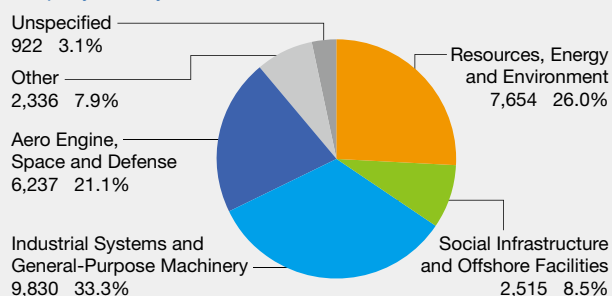
Areas	FY2013	FY2014	FY2015	FY2016 Plan	Future objectives	
<b>Diversity</b>						
Measures	Gender diversity	<ul style="list-style-type: none"> <li>Promoted awareness of gender diversity</li> <li>Established networks for female personnel</li> <li>Supported women's career ambitions and increased motivation</li> <li>Heightened awareness of gender diversity among male employees, especially those in managerial and supervisory positions</li> <li>Identified obstacles to gender diversity</li> </ul>	<ul style="list-style-type: none"> <li>Promoted work-life balance</li> <li>Expanded gender diversity initiatives throughout the Group</li> <li>Improved male employee awareness of gender diversity</li> <li>Provided ongoing support for networking among female personnel</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>Foster inclusive workplaces that share our Management Philosophy and the IHI Group Vision. Provide greater opportunities for employees to develop and grow</li> </ul>	
		<ul style="list-style-type: none"> <li>Announced numerical targets related to gender diversity</li> <li>Introduced support system for employees returning to work</li> <li>Selected as a Nadeshiko Brand</li> </ul>	<ul style="list-style-type: none"> <li>Executive Officer Mizumoto received the Award for Cultivating Women Engineers</li> <li>Prepared diversity page for official website, released messages from top executives</li> </ul>	<ul style="list-style-type: none"> <li>Diversity Promotion Month (November)</li> <li>Followed up on Group company initiatives</li> <li>Formulated an action plan on the Women's Advancement Promotion Law</li> <li>Selected as a Nadeshiko Brand</li> </ul>		
	Employment opportunities for persons with disabilities	<ul style="list-style-type: none"> <li>Received internship participants</li> <li>Joined ACE (Accessibility Consortium of Enterprises)</li> </ul>	<ul style="list-style-type: none"> <li>Ensured appropriate workplaces and workload for persons with disabilities</li> <li>Posted job openings on an employment site for people with disabilities</li> </ul>	<ul style="list-style-type: none"> <li>Participated in joint briefing session hosted by a company supporting persons with disabilities</li> </ul>		<ul style="list-style-type: none"> <li>Ongoing</li> </ul>
	Employment opportunities for seniors	<ul style="list-style-type: none"> <li>Introduced optional retirement age system where employees have the option to work until their 65th birthdays</li> </ul>	<ul style="list-style-type: none"> <li>Reviewed life planning seminars</li> </ul>	<ul style="list-style-type: none"> <li>Held new life planning seminars (for regular employees 58 years of age and 50 years of age)</li> </ul>		<ul style="list-style-type: none"> <li>Raise base wages for those 60 years and older (Selective retirement scheme individuals)</li> </ul>
Employment opportunities for non-Japanese persons	<ul style="list-style-type: none"> <li>Recruited candidates from priority areas (Asia)</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>	<ul style="list-style-type: none"> <li>Ongoing</li> </ul>		
Relevant data	Female recruitment	College graduate: 33 (15%) Technical: 6	College graduate: 32 (14%) Technical: 3	College graduate: 47 (17%) Technical: 3	College graduate: 40 (14%) Technical: 6 (Those hired in April and planned for October)	<ul style="list-style-type: none"> <li>College graduate: 15% or greater of total (Goals: Technical: 10% or greater, Administrative: 35% or greater)</li> <li>Technical: 15 or more in FY2016-2018</li> </ul>
	Number of female managers	44 (1.6%)	51 (1.8%)	60 (2.1%)	66 (2.5%) (As of April 1, 2016)	<ul style="list-style-type: none"> <li>3% or greater (FY2018)</li> <li>3.5% or greater (FY2020)</li> </ul>
	Number of female officers	0	1	1	2 (1 is an outside auditor)	<ul style="list-style-type: none"> <li>1 or more (FY2018)</li> <li>1 or more (FY2020)</li> </ul>
	Percentage of employees returning to work after childcare leave	100%	100%	100%	100%	100%
	Employment rate of person with disabilities	2.02%	2.04%	2.15%	2.0% or greater	2.3% (FY2018, April)
	Recruitment of new non-Japanese graduates	14	11	9	7 (Not including planned October hires)	—
<b>Environment</b>						
Measures	Environmental management	<ul style="list-style-type: none"> <li>Began the IHI Group Environmental Action Plan 2013 (FY2013-2015)</li> </ul>	<ul style="list-style-type: none"> <li>Established energy consumption, CO<sub>2</sub> emissions and waste reduction targets and monthly monitoring program</li> </ul>	<ul style="list-style-type: none"> <li>Finished creation of environmental impact collection system</li> </ul>	<ul style="list-style-type: none"> <li>Initiate the IHI Group Environmental Action Plan 2016 (FY2016-2018)</li> </ul>	<ul style="list-style-type: none"> <li>IHI Group Environmental Vision 2013 Goals through FY2018</li> <li>IHI's vision is to make environmental sustainability an integral part of all Group communities by working together with our customers and business partners around the world</li> </ul>
Relevant data	CO <sub>2</sub> emissions from business activities	259,000 tons	296,000 tons	297,000 tons	Less than 300,000 tons	Less than 300,000 tons (FY2018)
	Reduction in CO <sub>2</sub> emissions from products and services	<ul style="list-style-type: none"> <li>Estimated 12 products/services contributing</li> </ul>	<ul style="list-style-type: none"> <li>Estimated 11 products/services contributing</li> </ul>	<ul style="list-style-type: none"> <li>Organized calculation and publication methods</li> </ul>	2.5 million tons or greater	10 million tons (FY2018)
	Number of environmentally friendly products certified	—	Number certified: 4	Number certified: 10	Sales ratio 10% or greater	Sales ratio 70% or greater (FY2018)
	CDP climate disclosure scores	91	97	99	Management level (Same level as previous year)	—
	CDP climate performance bands	B	A	B		—
Nikkei Environmental Management Survey (Out of 500 points)	403	411	436	400 or higher	400 or higher	

# Corporate Data As of March 31, 2016

## Company and stock information

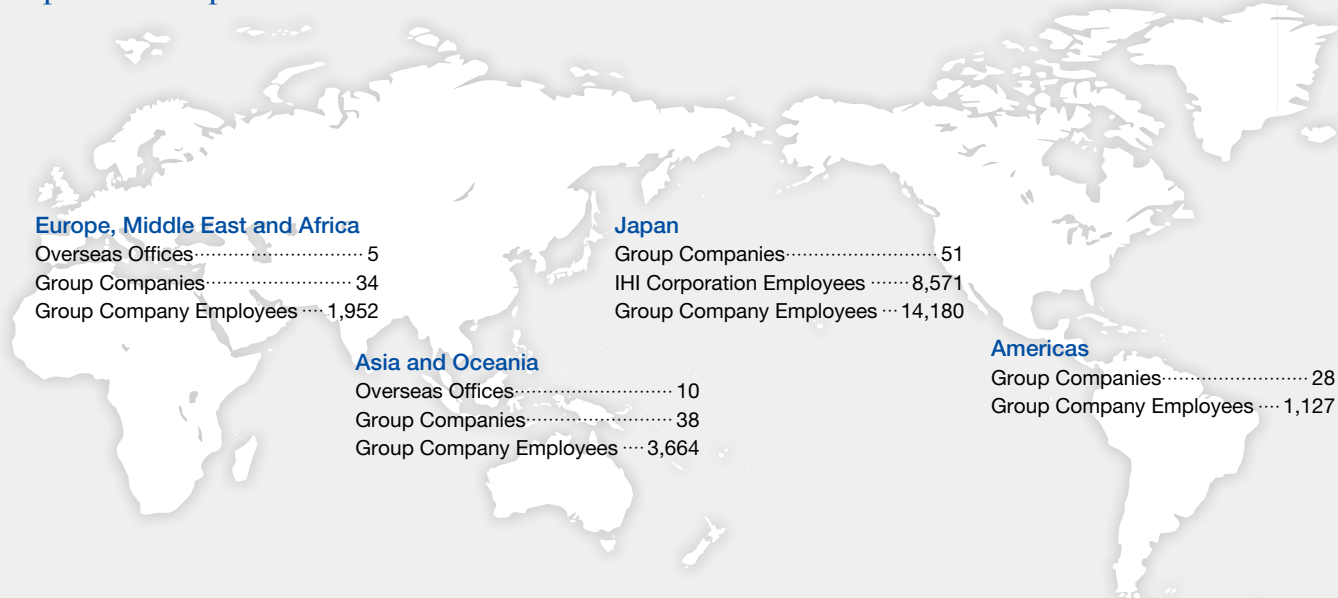
<b>Name</b>	IHI Corporation
<b>Head office</b>	Toyosu IHI Building, 1-1, Toyosu 3-chome, Koto-ku, Tokyo 135-8710, Japan Tel: +81-3-6204-7800
<b>President and COO</b>	Tsugio Mitsuoka
<b>Founded</b>	December 5, 1853
<b>Incorporated</b>	January 17, 1889
<b>Capital</b>	107.1 billion yen
<b>Employees (Consolidated)</b>	29,494
<b>Works</b>	8
<b>Branches and sales offices in Japan</b>	16
<b>Overseas offices</b>	15
<b>Group companies</b>	In Japan: 73 (52 subsidiaries, 21 affiliates) Overseas: 158 (125 subsidiaries, 33 affiliates)
<b>Securities code</b>	7013
<b>Stock exchange listings</b>	Tokyo, Nagoya, Sapporo, Fukuoka
<b>Share unit number</b>	1,000
<b>Total number of authorized shares</b>	3,300,000,000
<b>Outstanding shares</b>	1,543,973,936 (not including 2,825,606 treasury shares)
<b>Shareholders</b>	101,270
<b>Fiscal year</b>	April 1 to March 31 of the following year
<b>General shareholders' meeting</b>	June of each year
<b>Record date for year-end dividend</b>	March 31 annually
<b>Record date for interim dividend</b>	September 30 annually
<b>Shareholder registry administrator / Special account managing institution*</b>	4-1 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8233, Japan Sumitomo Mitsui Trust Bank, Limited Stock transfer Agency Business Planning Department 8-4 Izumi 2-chome, Suginami-ku, Tokyo 168-0063, Japan 0120-782-031 (toll-free in Japan)

### Employees by business unit



(Note) Data is the number of officially employed workers, which includes employees on loan to IHI, but not Group employees on loan to other companies. The number of temporary workers is not listed, as these make up less than 10 percent of workers.

## Operation Map (consolidated subsidiaries)



## Major Shareholders

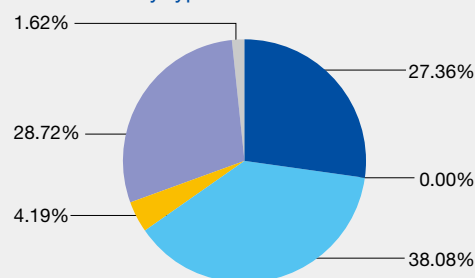
Name	Number of shares held (Thousand)	Shareholding ratio (%)
Japan Trustee Services Bank, Ltd. (Holder in Trust)	62,356	4.03%
Japan Trustee Services Bank, Ltd. (TOSHIBA CORPORATION Retirement Benefit Trust Account re-entrusted by Sumitomo Mitsui Trust Bank)	55,422	3.58%
The Dai-ichi Life Insurance Company, Limited	54,060	3.50%
The Master Trust Bank of Japan, Ltd. (Holder in Trust)	47,974	3.10%
Trust & Custody Services Bank, Ltd. as trustee for Mizuho Bank Retirement Benefit Trust Account re-entrusted by Mizuho Trust & Banking Co., Ltd.	45,979	2.97%
State Street Bank And Trust Company 505223	35,252	2.28%
Japan Trustee Services Bank, Ltd. (Holder in Trust 9)	29,262	1.89%
State Street Bank And Trust Company 505001	27,328	1.77%
IHI Customer Stock Ownership Association	25,285	1.63%
Nippon Life Insurance Company	24,897	1.61%

(Notes)

1. The number of shares and shareholder ratios less than a single unit are rounded down.
2. Shareholding ratios are calculated without including the total number of treasury shares.

## Shareholder Composition

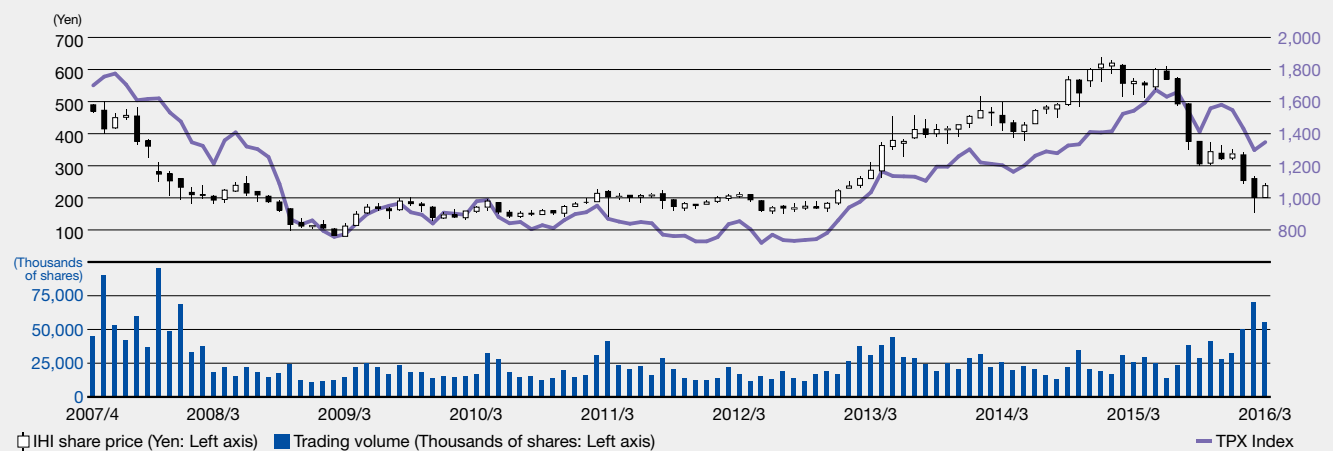
Distribution by type of shareholder



- Individuals / Others  
99,506 shareholders / 422,437,279 shares
- National and local governments  
1 shareholder / 9 shares
- Financial institutions  
77 shareholders / 588,065,736 shares
- Other Japanese corporations  
1,053 shareholders / 64,755,422 shares
- Foreign individuals and corporations  
548 shareholders / 443,559,823 shares
- Financial instrument brokers  
84 shareholders / 25,155,667 shares

(Note) Due to rounding, the total percentage may not add up to 100.

## IHI Stock Performance and Average Trading Volume Per Day



Source: Bloomberg

## About IHI Integrated Report 2016

### ■ Scope

IHI Corporation and its major group companies

### ■ Period

This report covers FY2015 beginning April 1, 2015 and ending March 31, 2016. However, information prior to and after this period may also be included.

### ■ Guidelines

- International Integrated Reporting Framework, International Integrated Reporting Council
- Sustainability Reporting Guidelines (Version 4/G4), Global Reporting Initiative
- Environmental Reporting Guidelines (2012 version), Ministry of the Environment

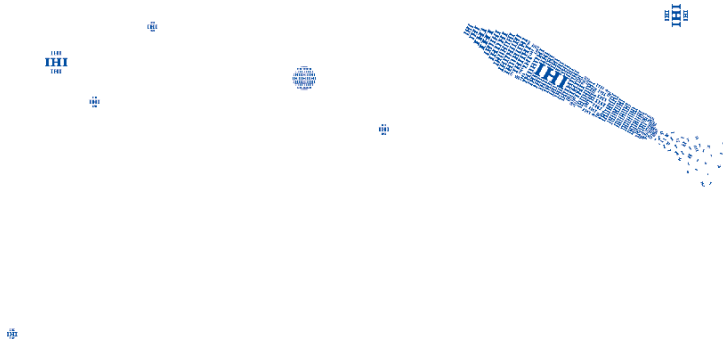
### ■ Inquiries

Please contact us via the inquiry form on IHI website.  
[https://contact.ihi.co.jp/index.php/ihi\\_eng/IHI/form\\_10707](https://contact.ihi.co.jp/index.php/ihi_eng/IHI/form_10707)

### ■ Disclaimer

This report contains facts, both past and present, about the IHI Group, as well as forward-looking projections based on our current management plans and policies. These forward-looking projections are made with the information available at the time and are based on numerous assumptions; thus, they are subject to changes in the business environment and operations. Actual results may be materially different from those forecasts.





# IHI Corporation

## Corporate Social Responsibility Division

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URL: [www.ihi.co.jp/en/index.html](http://www.ihi.co.jp/en/index.html)