

IHI Integrated Report 2018

IHI Corporation

First Bosphorus Bridge



Realize your dreams

At IHI Group, we design and build progressive engineering solutions for people and planet.

Our heritage is built upon a shared culture of striving for the highest standards in every facet of our business. This approach commits all relationships to our management philosophy, which is to contribute to the development of society through technology.

We work alongside customers, stakeholders and fellow employees to deliver outcomes that positively affect the world and its inhabitants.

This powers our relationships to greater outcomes, and also makes good commercial sense. At our core, we are people who apply forward thinking to find lasting solutions to the toughest problems.

IHI Group. Realize your dreams.

Combined cycle power plant in Thailand



Continuous unloader with hourly capacity of 1,200 metric tons



V2500 turbofan engine



Index

Profile

A History of Progressing with Communities	3
A Manufacturing Heritage that Originated in Shipbuilding	5
Our Value Creation Process	6
Financial Highlights	7
Non-Financial Highlights	8

Strategy - Creating Value for Businesses and Society -

Medium-Term Management Plan	9
Message From the CEO	11
Project Risk Management Report	15
Financial Strategies	17
Business Overview	18
Business Strategies	21
Shared Group Functions	29
Technology Strategy	31

Challenges - Resolving Social Issues through Business -

Special Feature 1: Tackling an Aging Social Infrastructure	33
Special Feature 2: Cutting Carbon Dioxide Emissions	35

ESG Management - The Foundation for Sustainable Growth -

Management Team	37
Messages from Outside Directors	39
Corporate Governance	41
CSR Management	46
Environment	47
Supply Chain Management	49
Human Resources	51

Data Section

Financial Summary	53
Non-Financial Summary	55
Corporate Data	57

An Enduring Legacy from 165 Years Ago



Tomiji Hirano (1846-1892)
An entrepreneur who established the Ishikawa Hirano Shipyard (now IHI).

The arrival of Commodore Matthew Perry's fleet in Japan in 1853 prompted the Tokugawa Shogunate to establish the Ishikawajima Shipyard to counter Western power.

Tomiji Hirano later set up the Ishikawajima Hirano Shipyard with a lease from the Meiji Government as Japan's first private modern shipbuilding site. The construction of warships there propelled the nation's progress through industrialization and technology.

It is from Mr. Hirano that the IHI Group derived the management philosophy of

"Contribute to the development of society through technology" that remains central to its DNA.

A history of progressing with the community



Source: Tokyo Maps over the Years for iPad

The Ishikawajima Hirano Shipyard was established at Ishikawajima island, at the mouth of the Sumida River (the address is now Tsukuda 2-chome, Chuo-ku, Tokyo).

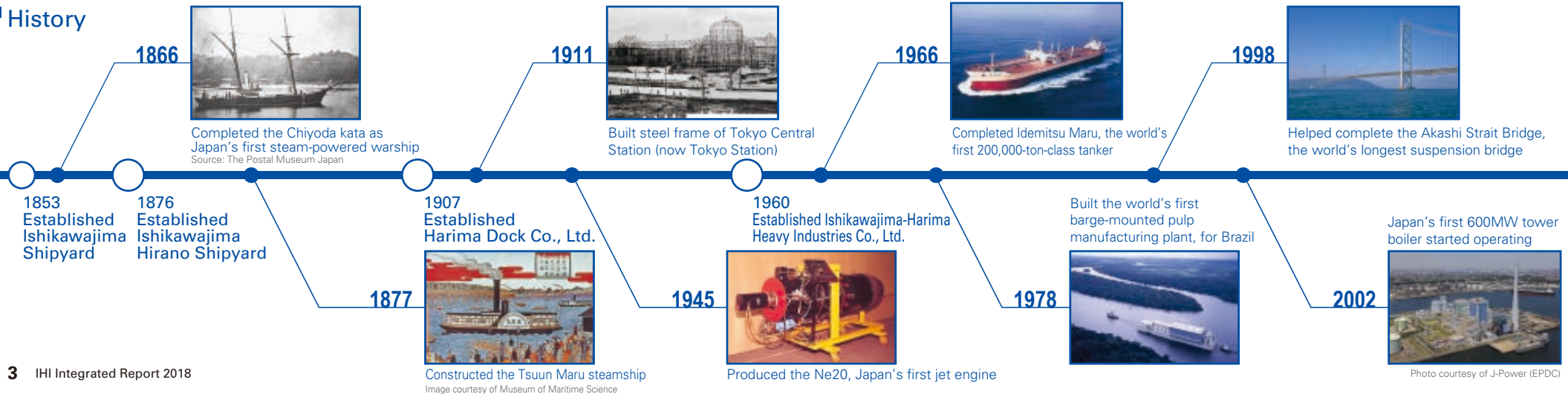


Tsukudajima island becomes an industrial area, and landfill work begins at Toyosu



Shipyard in Toyosu progresses with Japan's postwar reconstruction

History



From the seas and the land to the skies and the stars: Continuing to meet new challenges

Resources, Energy & Environment Business Area

Minimizing Environmental Impact

- Boilers
- Large power systems
- Environmental response systems
- Power systems plants for land use
- Process plants
- Pharmaceutical plants
- Power system for land and marine use
- Nuclear energy

Social Infrastructure & Offshore Facilities Business Area

Underpinning the Essentials of Modern Living

- Bridges and watergates
- Shield systems
- Concrete construction materials
- Transport systems
- Urban development
- F-LNG

Industrial Systems & General-Purpose Machinery Business Area

Transforming the World's Industrial Infrastructure

- Logistics and machinery
- Thermal and surface treatment
- Agricultural machinery and small power systems
- Transport machinery
- Vehicular turbochargers
- Steel manufacturing equipment
- Parking
- Rotating machinery
- Paper machinery

Aero Engine, Space & Defense Business Area

Opening New Horizons

- Aero engines
- Rocket systems and space exploration
- Defense equipment and systems

豊洲本廠

Source: Tokyo Maps over the Years for iPad



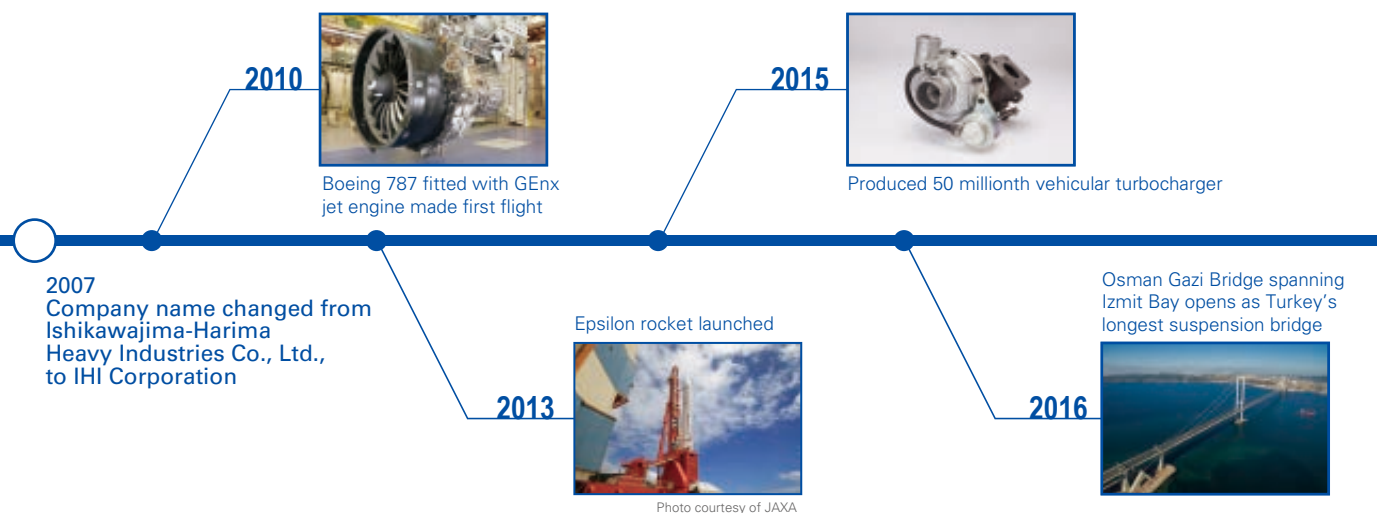
1994

Toyosu begins transforming into a business and residential area



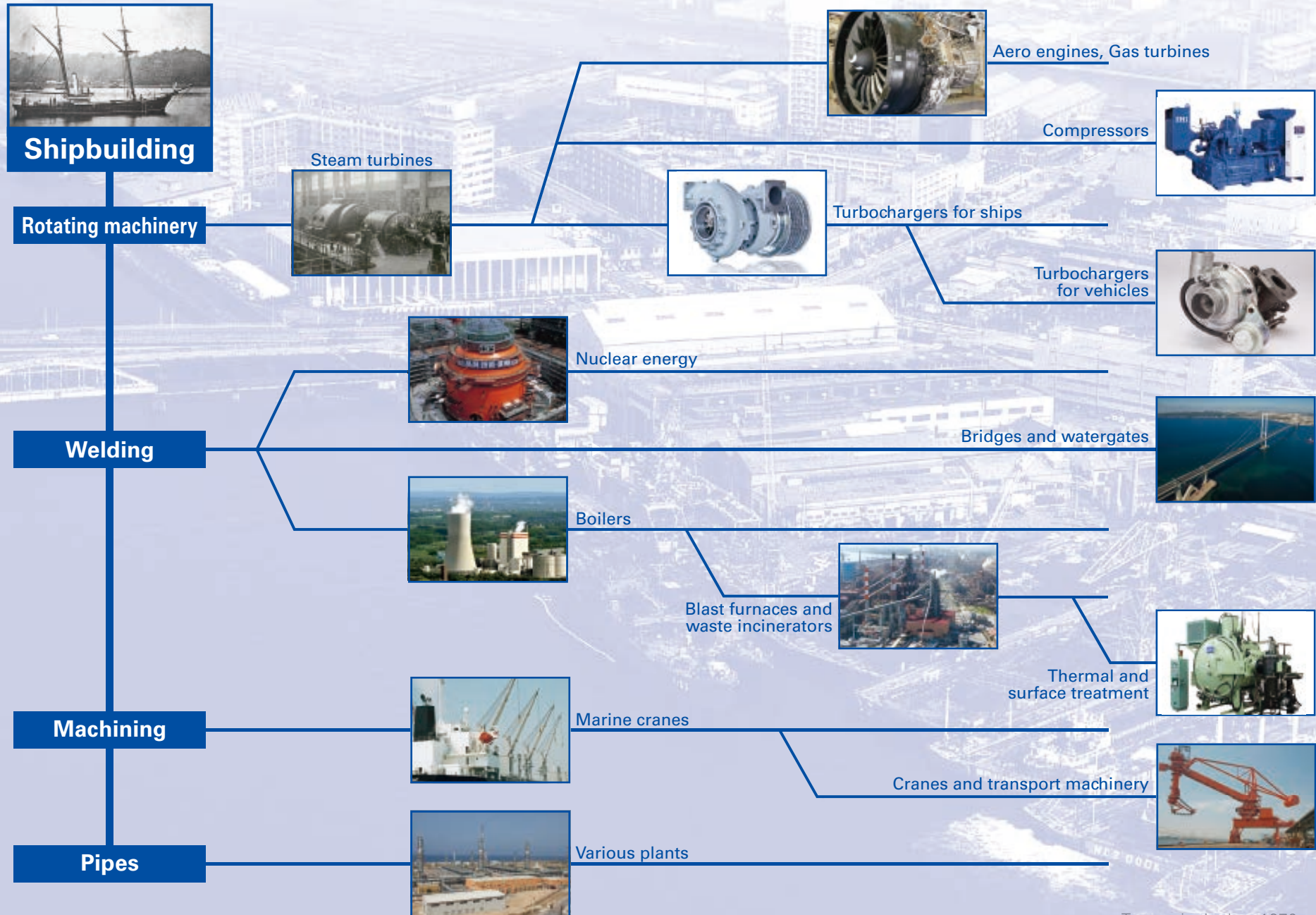
2016

High-rise condominiums house a local population of more than 30,000 people



■ A Manufacturing heritage that Originated in Shipbuilding

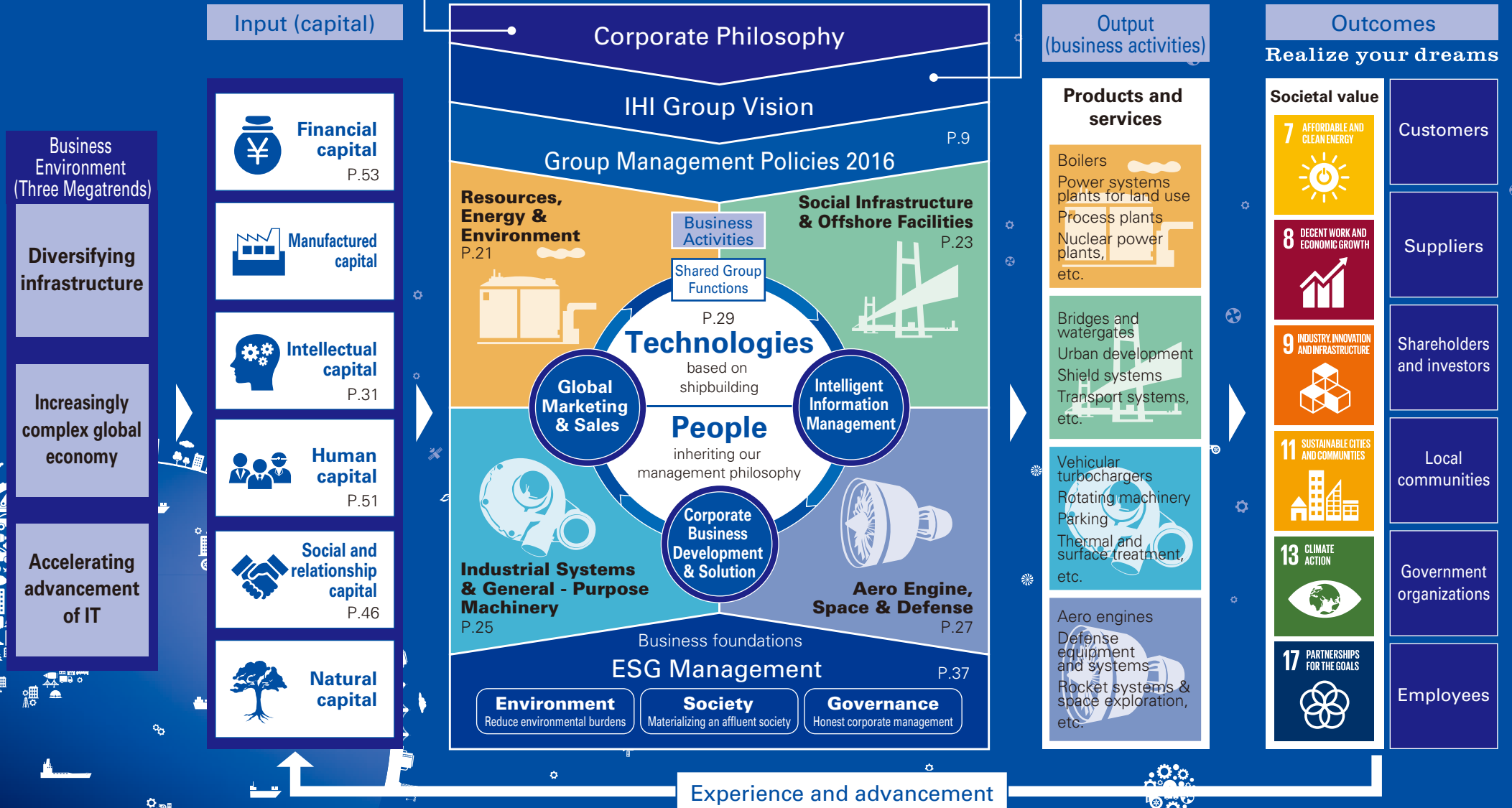
Many of the manufacturing technologies employed in manufacturing IHI's products have their roots in shipbuilding, from rotating machinery and welding to machining and pipe technologies.



Toyosu in the late 1970s

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

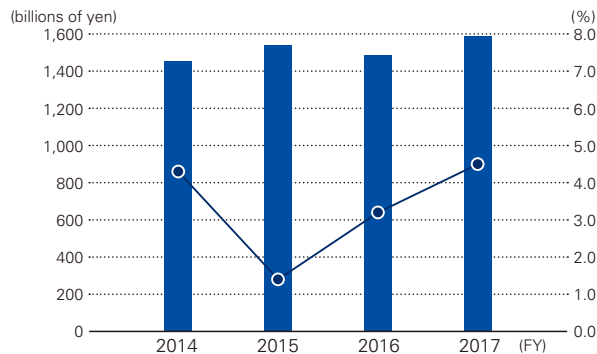
The IHI Group seeks to solve the various environmental, industrial, social, and energy related problems of the 21st century, through using engineering expertise to focus on "Monozukuri" technology. In striving towards these goals, IHI is becoming a global enterprise offering the safety and security for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



Financial Highlights

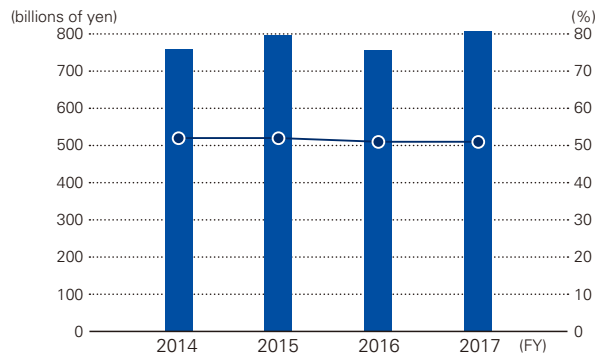
Net sales / Operating margin

■ Net sales ● Operating margin



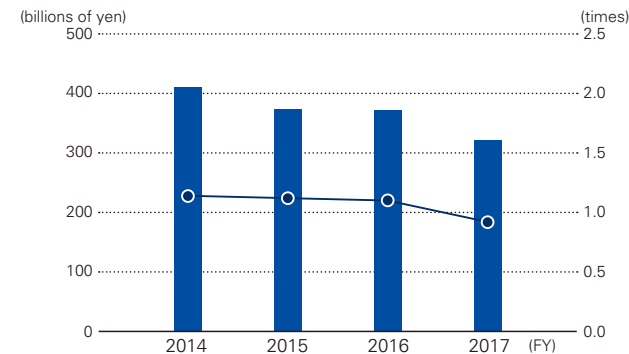
Overseas sales / Percentage of overseas sales

■ Overseas sales ● Percentage of overseas sales



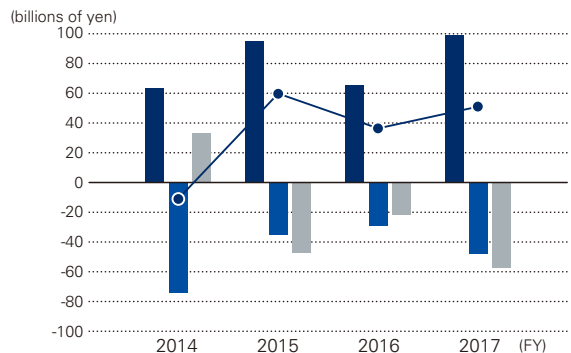
Interest-bearing debt / D/E ratio

■ Interest-bearing debt ● D/E ratio¹



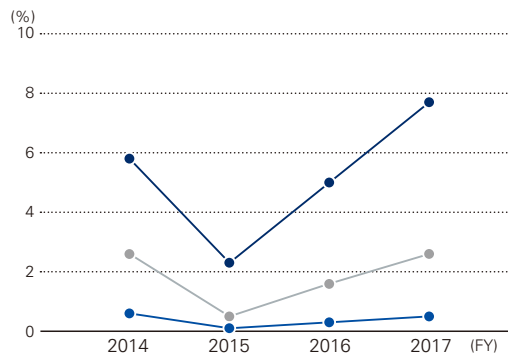
Cash flow

■ Cash flows from operating activities ■ Cash flows from investing activities
■ Cash flows from financing activities ● Free cash flow



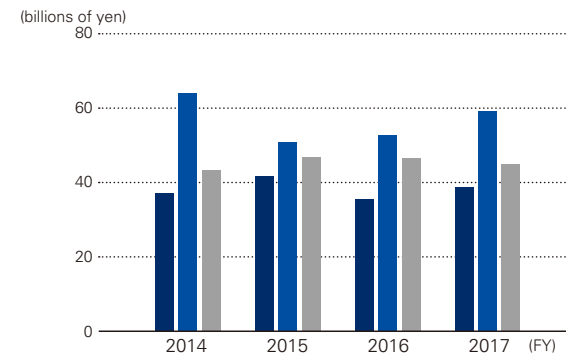
Management efficiency

● ROIC² ● ROA³ ● ROE⁴



R&D expenses / Investment in plant and equipment / Depreciation and amortization

■ R&D expenses ■ Investment in plant and equipment
■ Depreciation and amortization



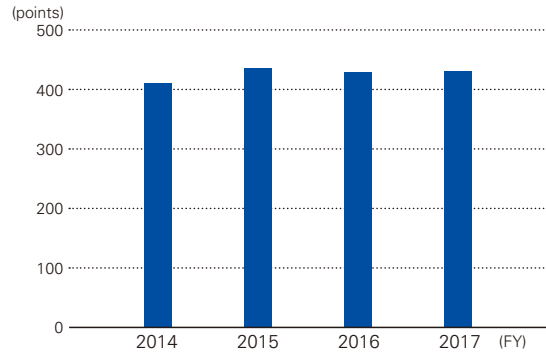
1: Interest-bearing debt ÷ net assets
 2: (Operating income + interest and dividend income) after-tax ÷ (owner's equity + interest-bearing debt)
 3: Profit attributable to owners of parent ÷ (average of total assets at end of previous term and end of current term)
 4: Profit attributable to owners of parent ÷ (average of owner's equity at end of previous term and end of current term)

All financial figures are on a consolidated basis.

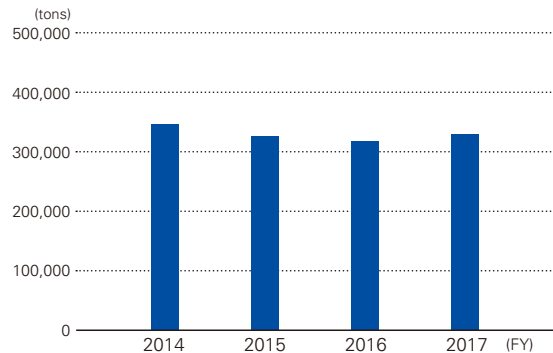
Please view website for more detailed information.
 Financial <https://www.ihico.jp/en/ir/>
 Non-Financial <https://www.ihico.jp/csr/english/index.html>

Non-Financial Highlights

Nikkei Environmental Management Survey

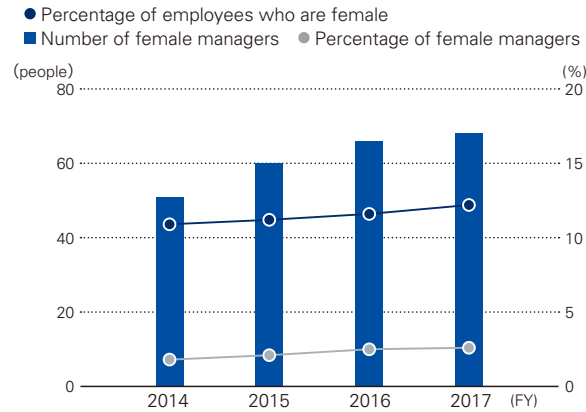


CO₂ emissions from business activities



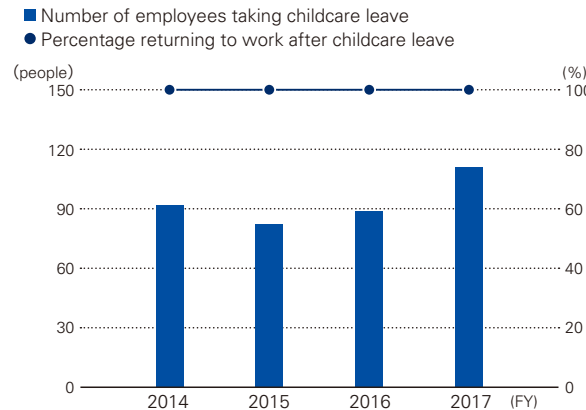
(IHI Corporation)

Percentage of employees who are female / Number of female managers / Percentage of female managers



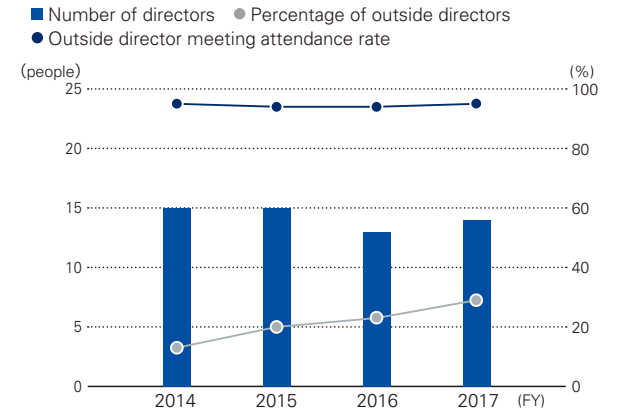
(IHI Corporation)

Number of employees taking childcare leave / Percentage returning to work after childcare leave

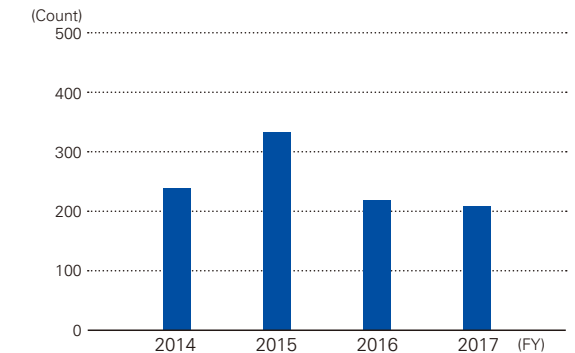


(IHI Corporation)

Number of directors, percentage of outside directors, and attendance rates at board meetings



Compliance Hotline reports



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

Please view website for more detailed information.
 Financial <https://www.ihico.jp/en/ir/>
 Non-Financial <https://www.ihico.jp/csr/english/index.html>

Group Management Policies 2016 - Strengthen earnings foundations -

The IHI Group will endeavor to increase its profitability by contributing to social process by delivering advanced products and services and streamline capital efficiency and enhance shareholder returns in response to capital market demands.

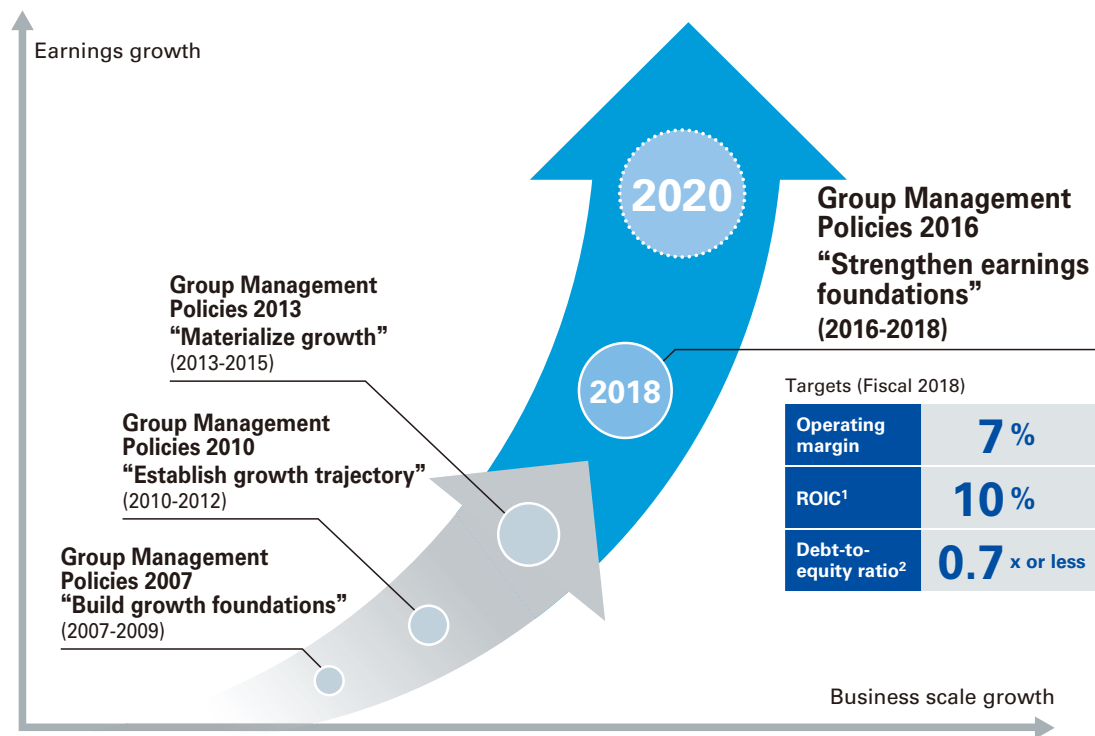
We seek to become a trusted corporate group by pursuing sustainable growth while enhancing corporate value.

The prime focus of Group Management Policies 2016 is to strengthen earnings foundations, driving the following profit growth-centric initiatives.

Direction of Group Management Policies 2016

IHI Group 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 "Monozukun" 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.



Initiatives to strengthen earnings foundations

Reform corporate culture

Reform quality and business systems to reinforce manufacturing capabilities

「Group Management Policies 2016」

Three initiatives

1	<p>Concentration and selection through new portfolio management</p> <ul style="list-style-type: none"> Establish missions combining strategic direction and targets (ROIC (see note3) and operating margin) for each strategic business unit Allocate management resources according to priority investment or revitalization and reorganization designations
2	<p>Boost profitability by reinforcing project implementation structure</p> <ul style="list-style-type: none"> Improve quotation processes and risk reviews Deploy human resources training programs to bolster project management capabilities
3	<p>Employ common Group functions to transform business model</p> <ul style="list-style-type: none"> Strengthen capabilities in solutions and new business, advanced information management, and global operations and sales Co-creation among business units and shared Group functions




Strengthen earnings foundations

Grow sustainably and enhance corporate value

Notes 1. ROIC (return on invested capital) 2. Debt-to-equity ratio 3. Pre-tax ROIC

Review of Second Year of Group Management Policies 2016

Through three initiatives to strengthen management foundations attained steady results by reforming the business structure through concentration and selection, reinforcing project screening and monitoring capabilities to prevent downswings, and set up facilities for the renewable energy business.

Group Management Policies 2016	Initiatives and Issues in Second Year
<p>1  Concentration and selection through new portfolio management</p>	<p>Initiative Progressed in reforming and rebuilding F-LNG, agricultural machinery, and rotating machinery businesses</p> <p>Issue Speedy business concentration and selection beyond divisional boundaries in deploying business area/strategic business unit system</p>
<p>2  Boost profitability by reinforcing project implementation structure</p>	<p>Initiative Concentrate disparate auditing and monitoring functions to focus on eliminating risks in large projects and large investments</p> <p>Issue Downturns in current large projects (North American process plants and LNG carrier construction)</p>
<p>3  Employ common Group functions to transform business model</p>	<p>Initiative Progressed in initiatives to leverage IoT and new business models (including for Soma Smart Community Construction Project and Nanatsujima biomass power generation project)</p> <p>Issue Reforming business models in line with changes in the operating climate and accelerating their global rollouts</p>

Outlook for fiscal 2018

Management looks to make all businesses profitable and eliminate the losses incurred in the previous year in projects in the Resources, Energy and Environment business, thus increasing earnings. After factoring out exchange rate and assumptions from its forecasts, the Company should reach the operating income target of Group Management Policies 2016.

	FY2016 Results	FY2017 Results	FY2017 Outlook	FY2018 Targets
Net Sales	¥1,486.3 billion	¥1,590.3 billion	¥1,500.0 billion	—
Operating margin	3.2%	4.5%	5.7%	7.0%
Operating Income	¥47.3 billion	¥72.2 billion	¥85.0 billion	—
Ordinary Income	¥22.0 billion	¥21.4 billion	¥65.0 billion	—
Profit Attributable to Owners of the Parent Company	¥5.2 billion	¥8.2 billion	¥32.0 billion	—
ROIC¹	5.0%	7.7%	9.0%	10.0%
D/E Ratio²	1.10	0.92	0.89	0.7x or less
Dividends	—	Interim: ¥3 per share Year-end: ¥30 per share (after reverse stock split)	¥60 per share planned (¥30 interim and ¥30 at year-end)	—
Exchange Rate	¥108.27/US\$	¥111.00/US\$	¥105/US\$	¥115/US\$

1: (Operating income + interest and dividend income) after-tax ÷ (owner's equity + interest-bearing debt)

2: Interest-bearing debt ÷ net assets

Message From the CEO

Technology, people, and a commitment to change are in our DNA. We will marshal the IHI Group's comprehensive strengths to bolster corporate value.

Tsugio Mitsuoka

IHI Corporation
President
and Chief Executive Officer

IHI has continued to contribute to social progress and change through manufacturing over its more than 165 years of operations. In 1853, the Tokugawa Shogunate set up our predecessor, the Ishikawajima Shipyard, ahead of the arrival of Commodore Matthew Perry in Uruga, which led to Japan's opening to the West. It is from this origin that we have amassed outstanding technologies, people, and a commitment to change in our DNA.

We have always operated in eras of constant change. What is different now is that the pace of change is accelerating. Key examples are the digitization of information through the Internet of Things, artificial intelligence, and other vehicles, which are transforming the business landscape. There is a growing need to prevent global warming and safeguard the environment by reducing carbon emissions or decarbonizing while embracing diversity and reforming work practices. We must strive to match social expectations and our responsibilities to society.

The IHI Group will help materialize a sustainable economy by changing with the times and generating ongoing growth while resolving social issues.

Fiscal 2017 Review

We recognized a greater need to adopt more robust project implementation and risk management structures and accelerate the pace of change.

Group Management Policies 2016, which the IHI Group rolled out in fiscal 2016, aims to strengthen its earnings foundations. We aim to reach our management goals by pursuing concentration and selection through new portfolio management, boosting profitability by reinforcing our project implementation structure, and employing common Group functions to transform our business model.

[P.9 Group Management Policies 2016](#)

In fiscal 2016, the first year of this initiative, we undertook a range of measures in keeping with the top priority, which was to restore stakeholder trust. Unfortunately, the profitability of large projects declined, and we were unable to reach our initial earnings targets.

In fiscal 2017, our efforts included strengthening project and risk management in keeping with a new slogan, “Recover trust and drive reforms.” To restore stakeholder trust, we need to remain consistently profitable by preventing earnings downturns in projects. We will drive reforms by accelerating business structure reforms to bolster our earnings foundations and reach our management targets.

We helped to recover trust by surpassing our initial operating income target, demonstrating our ability to strengthen our earnings foundations. That said, profitability deteriorated at a North American process plant project and at affiliate Japan Marine United Corporation. We must build more robust project implementation risk management structures to truly recover trust.

We have already addressed the situation at the North American process plant project by putting experts in the right places, including some former IHI Group employees, and undertaking frontline-focused risk management efforts. Our endeavors at Japan Marine United include reinforcing governance and dramatically increasing our cost competitiveness.

To drive reforms in keeping with the business area setup that we adopted in April 2017, we shifted away from the individual management of strategic business units to consolidate business domains and accelerate decision making under selection and concentration, focusing resources on growth areas. Notwithstanding these efforts, the operating climate changed faster than expected, and our business structure and model reforms did not progress swiftly enough.

In fiscal 2018, we rolled out companywide priority policies to tackle these issues.

Priority policies in fiscal 2018

We aim to materialize Group Management Policies 2016 by pushing ahead under a new slogan.

For fiscal 2018, we unveiled a new slogan to guide our endeavors in view of changes in the operating climate that have made it imperative to transform the organization. The slogan is, “First year for change.” The idea is to encourage our people to collaborate with each other beyond business or divisional boundaries. The slogan underscores our commitment to swiftly reforming our business structure and model amid relentlessly dramatic changes in the operating climate.

Priority companywide policies for fiscal 2018

“First year for change”

— Drive change through teamwork beyond divisional boundaries and effective communication —

Switch to robust project implementation and risk management structures

Reform quality and operational systems to bolster manufacturing capabilities

Increase profitability by changing business structure in line with operational strategies

Transform business model to create customer value

Create new workplaces by reforming work practices and cultivate human resources

Adopting a more robust project and risk management structure

A top priority measure is to adopt a more robust project and risk management structure. We will manage risks more attentively under the setup that we put in place in fiscal 2017. We will additionally enhance communications at business sites to tackle risks in a timely manner.

We cannot avoid all risks, of course, and in fact we should be prepared to embrace them where necessary. If we fail to do so, we cannot expect to generate growth or great returns. This is particularly true in deploying new technologies or engaging in new national projects.

Boosting profitability by matching the business structure to business strategies

We will deploy resources in any business area with profitability potential.

In the Civil Aero-Engine business, for example, we have enhanced profitability by supplying high-value-added products based on proprietary technology. We have focused on developing and engineering proprietary materials to greatly increase the lightness and fuel economy required of such engines and building production processes. This effort led to the selection of our composite components for the PW1100G-JM engine, for example, helping us to expand our market share.

On top of that, we will step up our post-sales maintenance and other aftermarket efforts. We have long and outstanding records in the Civil Aero-Engine, boiler, and other businesses in this respect. We will also allocate resources to cultivate our aftermarket capabilities in the Industrial System and General-Purpose Machinery and other businesses to increase groupwide profitability.

Changing our business model to create customer value

It is vital for the IHI Group to serve advanced information society needs to generate growth in the years ahead. We accordingly position digital technology as the engine for changing our business model.

We developed the IHI Group Lifecycle Partner System (ILIPS), for example, a shared remote maintenance platform that we apply to a range of products and services. ILIPS analyzes operational data from equipment delivered to customers to identify potential failures, and we have begun using it to recommend optimal maintenance and operational regimes.

It is through such efforts to bring together digital technology and our manufacturing expertise to provide solutions that help increase customer value and thereby build a new business model.

Improving business processes to reinforce our manufacturing capabilities and reform work practices

Steady and ongoing improvements are essential for us to materialize the goals of our management policies. Since fiscal 2013, we have deployed I-Project activities groupwide. I-Project entails cutting costs, streamlining tasks, and reforming work practices by formulating and rolling out initiatives to improve business processes. We are determined to generate results by implementing PDCA cycles, and our management team exchanges views with employees at business sites to help step up activities.

We will make improvement efforts integral to our corporate culture so we can ensure that our businesses can respond robustly to changes in the operating climate.



Visit to Yokohama Engineering Center as part of I-Project

ESG initiatives

We will resolve social issues and materialize a sustainable economy.

The sustainability of society and businesses has returned to the spotlight among stakeholders, who increasingly demand growth based on long-term perspectives. Many companies maintain strong environmental, social, and governance (ESG) commitments. It is also worth noting that even the United Nations adopted Sustainable Development Goals (SDGs). Such developments illustrate the importance of the public and private sectors partnering to overcome social issues and ensuring that this planet is permanently habitable.

We will strengthen ESG efforts as business underpinnings. We also look to our products and services to contribute to economic sustainability by resolving social issues that are the subject of Sustainable Development Goals.

We will additionally contribute to conserving energy and lowering environmental impact by supplying products and services that increase manufacturing efficiency for customers. The need for products that lead to low-carbon emissions or decarbonization will increase in the years ahead. The Carbon-Free Energy Project unit, which Corporate Research & Development launched, exemplifies our dedication to resolve social issues through intensive technological development.

[P. 47 Environmental Initiatives](#)

We consider it essential to improve corporate value by embracing diversity. We will step up efforts groupwide to enhance our employment systems and corporate culture to enable diverse people to reach their potential regardless of gender, race, nationality, disabilities, age, or sexual orientation.

We also believe that the diverse talents of individuals are important for us to flexibly address changes in the business climate. We will transfer personnel among Group companies so younger employees can become more experienced.

[P. 51 Human Resources Management](#)

We strengthened governance in fiscal 2018 by amending agenda criteria so the Board of Directors can better deliberate on important matters and monitor management. Another key improvement was to require from the end of June 2018 that outside members constitute one-third of the Board of Directors. Having our management incorporate the views of external directors with diverse backgrounds enables us to create a transparent business structure by strengthening domestic and overseas governance and risk management.

[P. 41 Corporate Governance Initiatives](#)

The notion of using SDGs to resolve social issues through business is consistent with our corporate philosophy, which is to contribute to the development of society through technology. We believe that striving to resolve such issues unleashes new innovation and business opportunities, and will pursue progress in that regard.

We have positioned fiscal 2018 as a year for formulating our next medium-term management plan. I look to identify where we will direct corporate activities down the track, starting with resolving social issues.

To Our Stakeholders

This integrated report is an important tool for informing stakeholders about our operations and initiatives. We look forward to your feedback to help us further improve our business.



Project Risk Management Division Report



We will support project implementations through business area collaborations and bolster profitability

General Manager of Project Risk Management Division

Mitsutoyo Yoshida

Mission of Project Risk Management Division

IHI inaugurated the Project Risk Management Division in April 2017 to strengthen the Company's position in view of extensive losses on large projects in fiscal 2014 through 2016.

The division's main task is to analyze these projects and investment risks and support implementation to prevent downturns. Another key role is to report swiftly to relevant departments and management upon becoming aware of risks that could compromise corporate operations.

Project management structure

The division assesses large projects prior to bids, monitors ongoing projects, and audits and monitors investments. It allocates more of its people to monitoring ongoing projects.

In fiscal 2017, the division set up a certified reviewer program, through which IHI retirees and external experts

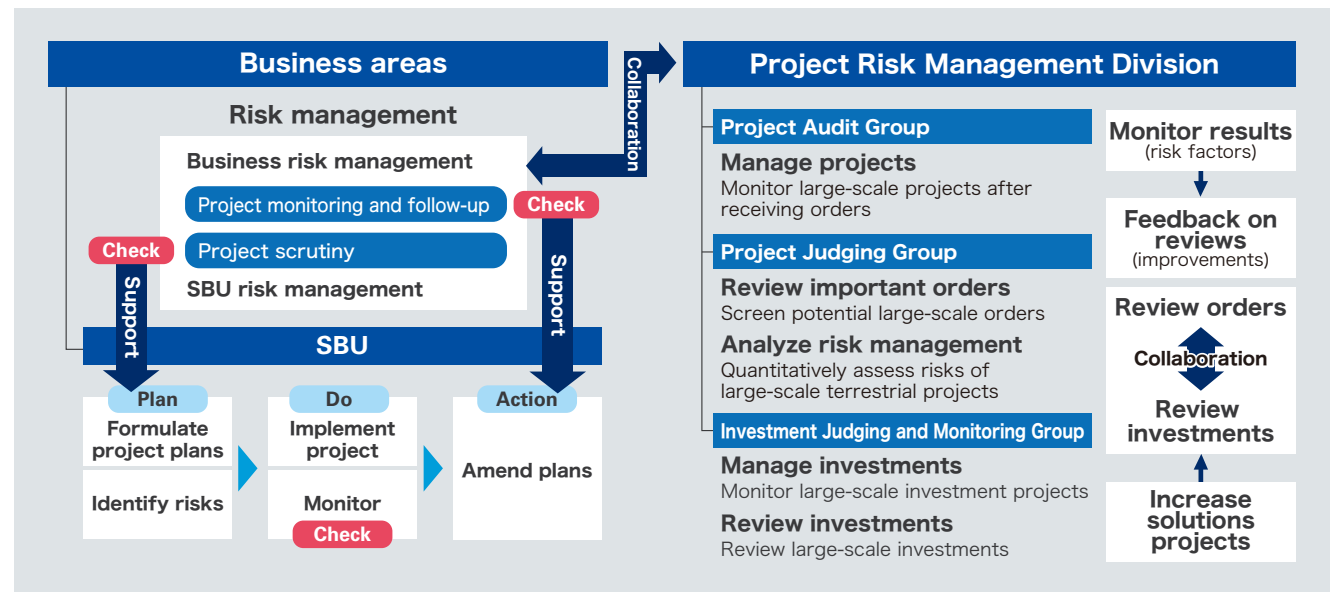
versed in our operations bolster its monitoring setup. Most of those reviewers were formerly division director or executive expert with extensive project management experience. These people overview projects from overall

and frontline worker perspectives to ensure proper execution.

Management targets and auditing and monitoring processes

The division audits prospective projects and monitors ongoing projects and investments. Projects can be as short as two years or extend to four or five years. So, around half of the projects were already under way started before IHI strengthened pre-bid assessment processes in fiscal 2016. Ongoing projects are subject to deliberations at each major milestone so the division can determine whether they have reached targets set at the outset and take proactive measure before risks materialize.

At the pre-investment assessment stage, the division



establishes prerequisites for each milestone and exit strategies to minimize the impacts of financial losses. The division rigorously assesses the consistency of business strategies and policies, competitive positions, and investment frameworks, as well as total and annual investment levels, investment returns, and other factors. After investment initiation, the division liaises with business area Risk Management department to monitor whether things progress as planned.

Collaborating with business areas and overseas bases

At the same time we set up the Project Risk Management Division in fiscal 2017, we established organizations to oversee risk management for each business area. Since projects execution procedure and expertise vary across the SBUs, the division deepens communication with each business area by sharing key risk management points and improving screening and monitoring. For overseas projects, we collaborate with bases in New York for the



United States and Singapore for Southeast Asia that are well versed in situations in their regions.

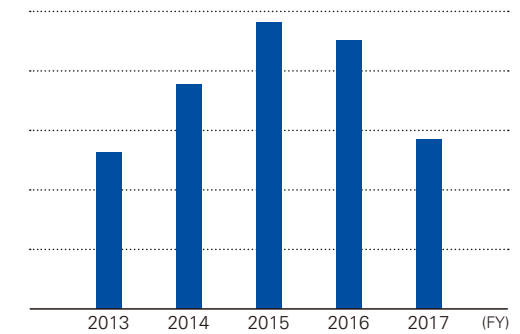
Fiscal 2017 review and outlook

At this juncture, no major downside elements have arisen with projects for which we have received orders since fiscal 2016, so we have concluded that pre-bid assessments have helped to lower risks. Still, our monitoring efforts have focused on detecting risks at early stages. For the year under review, we accordingly booked losses to cover several downside risks, including for a North American process plant project. Most downturns have stemmed from failing to sufficiently identify risks and take countermeasures against them when estimating project expenses in the proposal stage. So, risks materializing during projects have exceeded budgeted amounts. To eliminate downside factors we are focusing on comprehensively estimating risks based on our experience and systematically dispensing with them. We will assist efforts to produce more accurate estimates



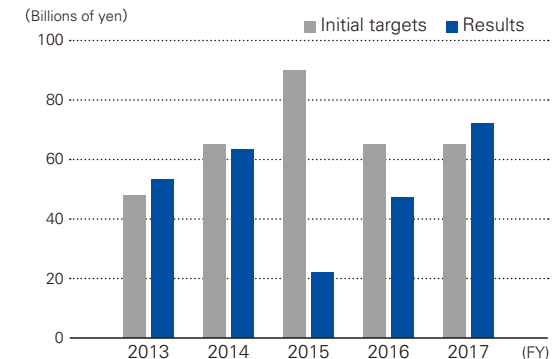
in accordance with specific characteristics. Projects and investments can never be risk-free. In order not recur large scale downturns at all we will therefore do our best to eliminate risk factors by screening more carefully, and will exert ourselves utmost to early identify and minimize risks by communicating closely with frontline sites.

Numbers of downside events on major projects



Note: The chart shows the number of downside events that resulted in significant gaps between estimated and actual costs on large projects subject to monitoring.

Operating income targets and results





We will strengthen our earnings foundations by focusing on enhancing the capital efficiency of all business areas.

Director
Managing Executive Officer
General Manager of Finance & Accounting Division

Takeshi Yamada

Maximizing cash generation by undertaking measures that prioritize ROIC improvements

Under Group Management Policies 2016, our medium-term management plan, for fiscal 2018 we target an operating margin of 7%, a ROIC (see note 1) of 10%, and a debt-to-equity ratio (see note 2) of 0.7 times or less. By strengthening our earnings foundations, we aim to maintain an ROE (see note 3) of 10% or more over the

Key financial indicators

(in bold are management objectives under Group Management Policies 2016)

	FY2016	FY2017	FY2018 (Targets)
Operating margin	3.2%	4.5%	7.0%
Operating profit	¥47.3 billion	¥72.2 billion	—
ROIC (return on invested capital)¹	5.0%	7.7%	10.0%
Debt-to-equity ratio²	1.10	0.92	0.7x or less
ROE ³	1.6%	2.6%	—
Shareholders' equity ratio	18.8%	19.9%	—

Notes: 1. (operating profit + Interest and dividend income) after tax ÷ (shareholders' equity + Interest-bearing debt)
2. Net interest-bearing debt ÷ Net assets
3. Profit attributable to owners of parent ÷ (average of previous fiscal year-end and current fiscal year shareholders' equity)

medium to long terms. The IHI Group's management has traditionally emphasized earnings. Under the current medium-term management plan, we made generating cash another priority as an ultimate business goal while also seeking to increase our return on capital. In other words, we are focusing on such key capital efficiency benchmarks as ROE and ROIC.

Pursuing concentration and selection efforts that are commensurate with the IHI way

Under Group Management Policies 2016, we allocated 25 strategic business units to five future mission classes according to their business positions and established two categories to optimize our business portfolio. One category designates investment priorities for management resources. The other designates rehabilitation or reorganization for businesses posing viability concerns, notably in terms of market attractiveness and assets held. By thus clarifying business-specific missions, we have created a framework for making swift concentration and selection decisions.

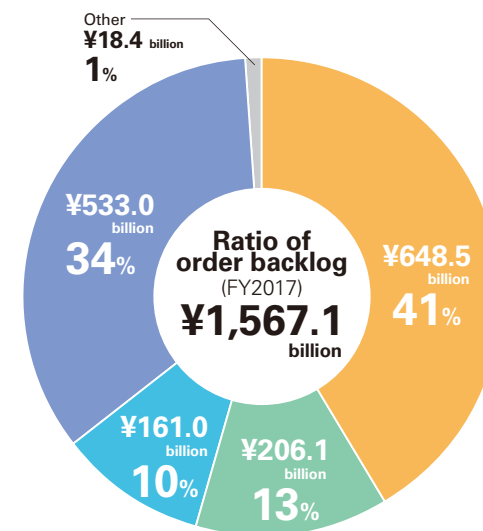
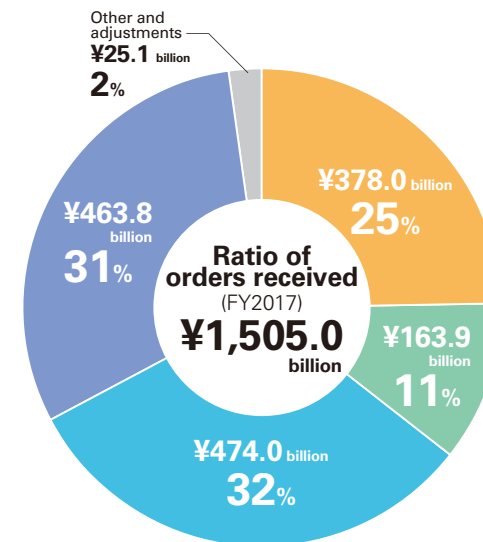
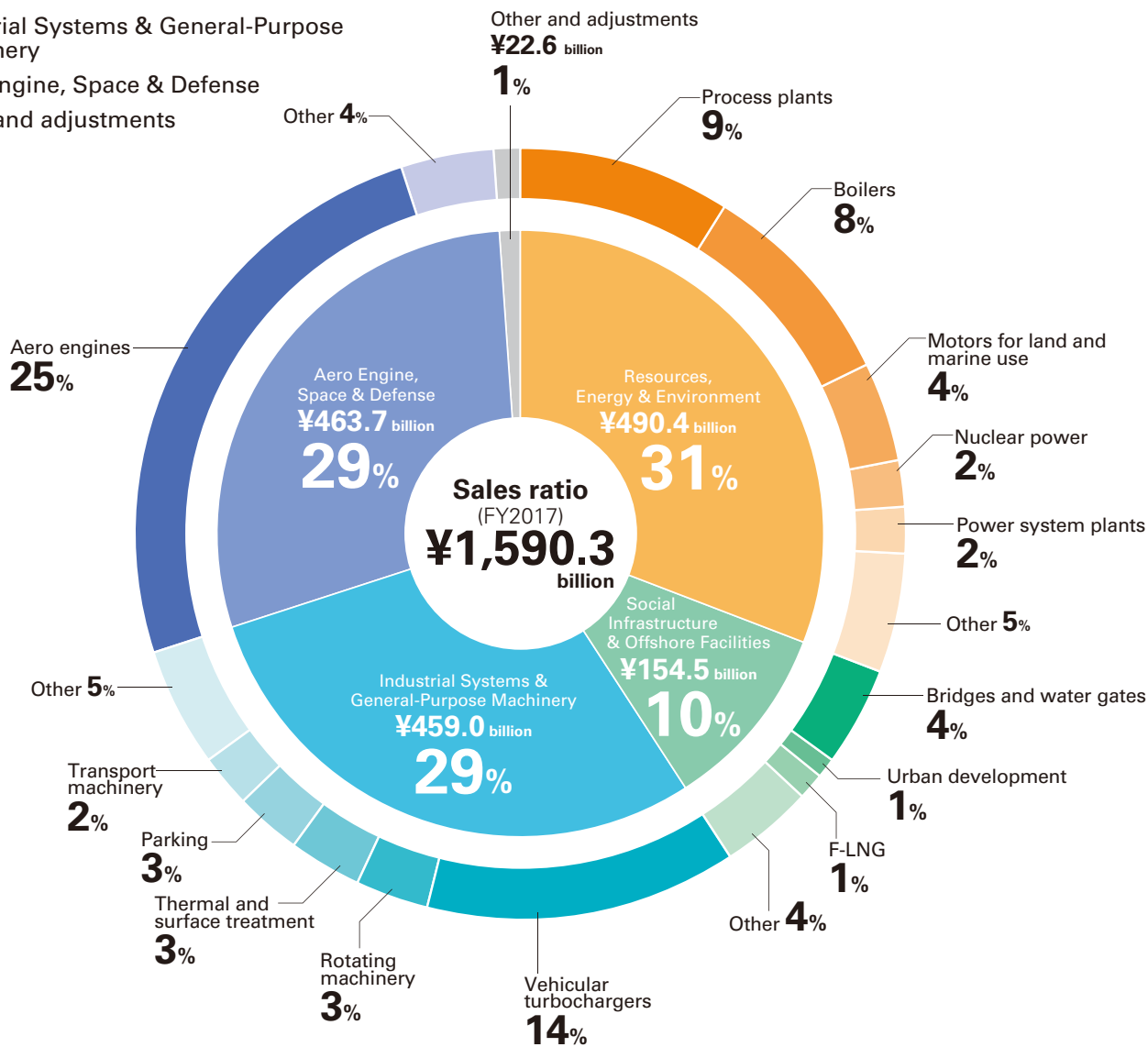
Some investors may point out that having an array of strategic business units might impede optimal management resource allocation. On that note, it is important to note that areas like our core aero engines business inherently take years to become profitable. We can only cultivate our investment strategies by diversifying and investing in a wide range of businesses. So, while 25 strategic business units may be too many, it is vital to diversify investments to an extent to cultivate tomorrow's core businesses.

Focusing on generating cash flows and swiftly enhancing long-term shareholder value

The IHI Group's capital policy prioritizes producing shareholder returns, remunerating employees, and making growth investments rather than simply retaining cash. We fundamentally seek to pay stable shareholder dividends, amounting to ¥60 per share annually. Notwithstanding minor swings in current yearly investment levels in view of business strategies, basically it is our policy to maintain capital expenditure, R&D, and investment and lending at more than ¥100 billion. We seek to swiftly generate more than ¥100 billion in operating profit to further enhance shareholder value. That would be sufficient to repay loans, deliver shareholder dividends, and undertake growth investments. If we thereby reinforce our financial position, we will be able to improve our credit rating and secure higher quality funding that we can use to invest in growth. In entering a virtuous circle like this, we should be able to take steps to improve shareholder value even more, notably by reassessing our shareholder returns policy. We look forward to the ongoing support and encouragement of stakeholders for our efforts.

Business Overview

- Resources, Energy & Environment
- Social Infrastructure & Offshore Facilities
- Industrial Systems & General-Purpose Machinery
- Aero Engine, Space & Defense
- Other and adjustments



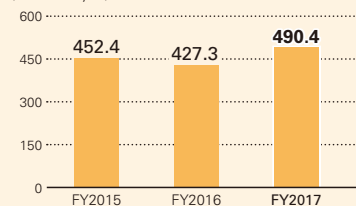
Note: The total of percentages for all segments may not reach 100%, as amounts less than 100 million yen are rounded off.

Business Overview

Resources, Energy & Environment

Net sales

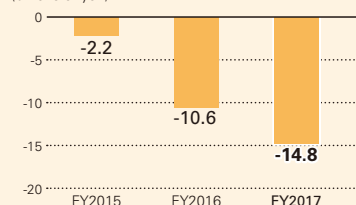
(billions of yen)



Sales rose owing to progress in large process plant projects and higher boiler sales.

Operating income

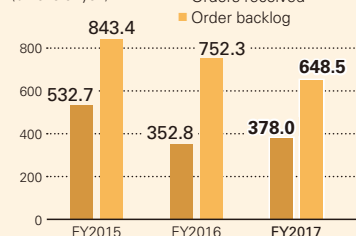
(billions of yen)



Although we eliminated the impact of a deterioration in boiler earnings in the previous term, contributing to higher sales in the year under review, losses increased because of a downturn in process plant profitability.

Orders received / Order backlog

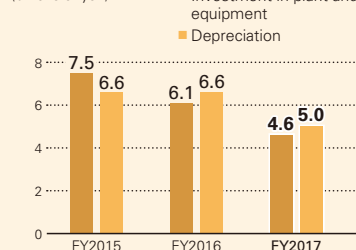
(billions of yen)



Orders received were up despite a downturn for nuclear power and process plants, reflecting such factors as a rise for a boiler project in Bangladesh.

Investment in plant and equipment / Depreciation

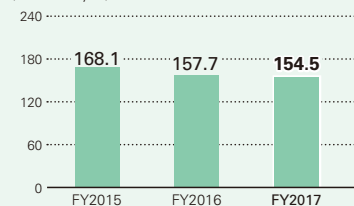
(billions of yen)



Social Infrastructure & Offshore Facilities

Net sales

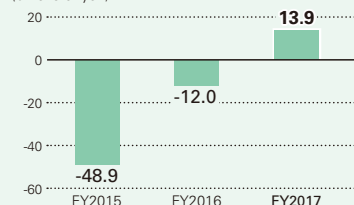
(billions of yen)



Despite gains in shield systems owing to business integration and progress with construction projects, segment sales were down amid lower revenues for the F-LNG/offshore structure business and transport systems.

Operating income

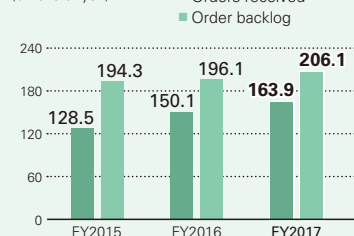
(billions of yen)



The Company returned to the black after eliminating the F-LNG/offshore structure losses of the previous fiscal year.

Orders received / Order backlog

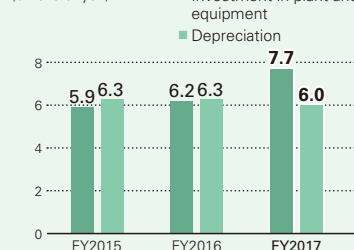
(billions of yen)



Orders received were up on bridge and watertight orders, notably for constructing the Brailia suspension bridge in Romania and a Mumbai Trans Harbor Link road bridge, offsetting a downturn in shield systems.

Investment in plant and equipment / Depreciation

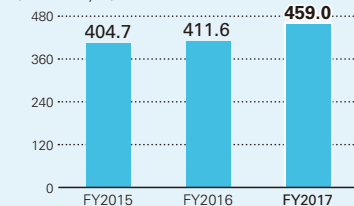
(billions of yen)



Industrial Systems & General-Purpose Machinery

Net sales

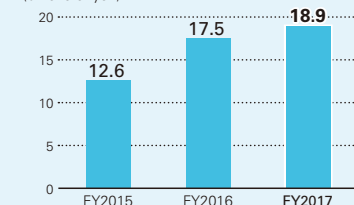
(billions of yen)



Sales rose on higher vehicular turbocharger unit sales in China.

Operating income

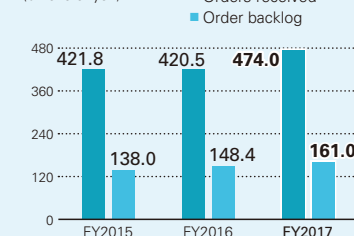
(billions of yen)



Operating income increased from higher vehicular turbocharger unit sales in China.

Orders received / Order backlog

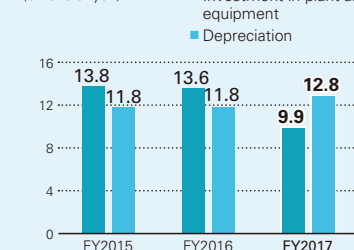
(billions of yen)



Orders received were up on gains for vehicular turbocharger and thermal and surface treatment.

Investment in plant and equipment / Depreciation

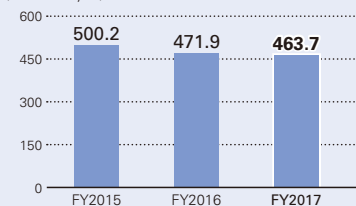
(billions of yen)



Aero Engine, Space & Defense

Net sales

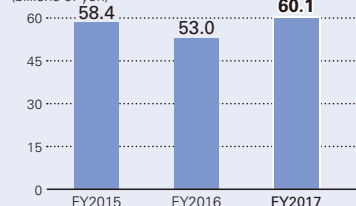
(billions of yen)



Sales declined amid lower unit sales of civil aero engines.

Operating income

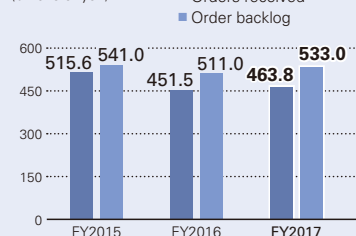
(billions of yen)



Despite the impacts of sales of higher the new PW1100G engine and a rise in selling, general and administrative expenses, operating income rose on gains in spare parts for civil aero engines and favorable exchange rates.

Orders received / Order backlog

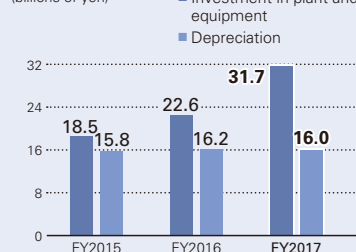
(billions of yen)



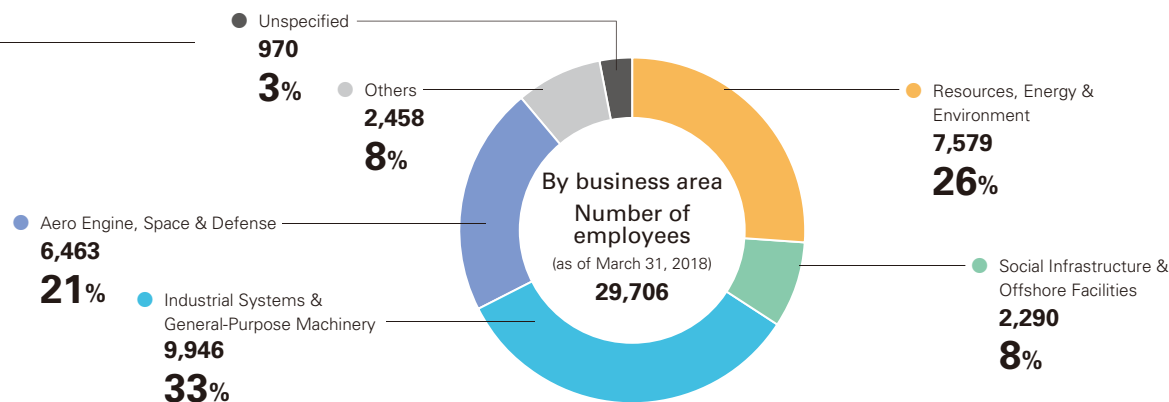
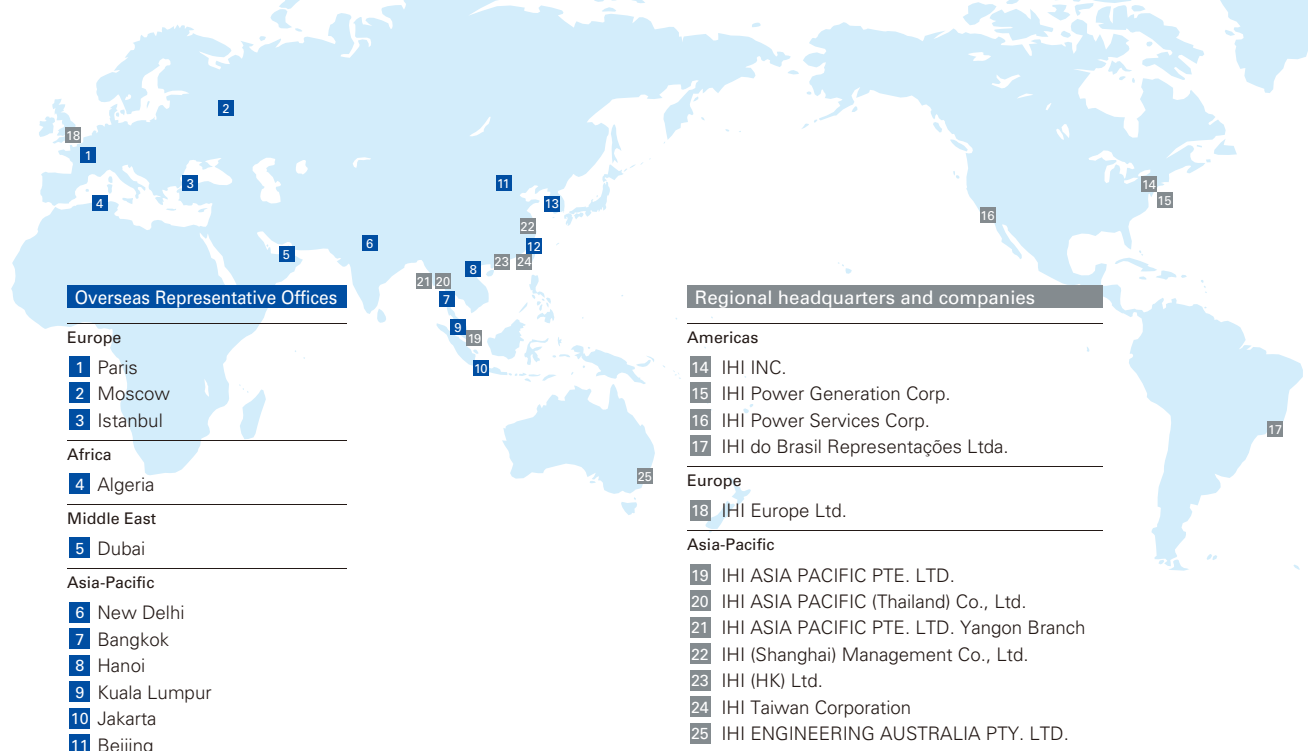
Orders received rose on increases for civil aero engines, which outweighed declines for defense equipment and systems and for aero engines following Japanese Ministry of Defense's lump-sum procurement of such engines in the previous term.

Investment in plant and equipment / Depreciation

(billions of yen)



Our Offices Around the World



Note: The number of employees is the number of officially employed individuals, including those seconded to IHI Group and excluding Group employees seconded to other companies. Temporary workers represent less than 10% percent of employees and are not included.

Resources, Energy & Environment

[Products and Services]

Boilers, Power systems plants for land use,
Power systems for land & marine use,
Large power systems,
Process plants (storage facilities and chemical plants),
Nuclear energy (components for nuclear power plants),
Environmental response systems, Pharmaceutical plants



Executive Vice President
Senior Executive Officer
President of Resources, Energy & Environment Business Area

Hiroyuki Otani

Delivering optimal solutions to customers while catering to diversifying energy demand

Conserving the environment while stabilizing energy supplies

We have a social responsibility to ensure stable supplies of the energy that is vital to people's lives while lowering environmental impact. We provide products and services that are optimal for humankind and the planet throughout their life cycles, drawing on our technological strengths in handling such energy sources as coal, natural gas, nuclear power, and renewables.

Overviewing fiscal 2017 and looking ahead

Orders were far lower than targeted in fiscal 2017, a key factor being a global downturn in plant construction demand. We collaborated with the Project Risk Management Division to more tightly monitor and stem profitability downturns on large projects that have caused concerns. Analyzing the causes of previous drops enabled us to significantly improve business processes and position ourselves more solidly to eliminate such downturns. We were unable to eliminate an operating loss, however, owing to large losses on a project in North America.

We will continue to reduce engineering, procurement, and construction costs in fiscal 2018 to become more cost competitive and secure orders. It is also worth noting that we adopted a structure in which we can flexibly reallocate capital investments, R&D expenses, personnel, and other resources as order volumes change. We seek to return to the black in fiscal 2018 by steadily implementing our measures.

Harnessing the IHI Group's technologies and network to build new ties with customers

In fiscal 2018, we established a business development

department that integrates business development functions and sales supervisory functions directly under business areas. Here, we look at the customer's needs widely from the viewpoint of business areas, promote development to realize customer value, and are accelerating commercialization. At the moment, about 30 projects, mainly renewable energy-related projects, are moving. Recently, we are also increasing the number of customers who are aiming to expand business overseas. We are extremely pleased to make use of customers overseas as partners by utilizing the track records of overseas plant construction and the networks around the world. Of course, throughout the entire life cycle of products such as maintenance and preventive maintenance, we work hard not only to build facilities but also to contribute to efficiency improvement and profit maximization by optimal operation of facilities as a long-term partner of customers.

Utilizing its strengths such as combustion technology, contribute to the realization of a low-carbon society

The global community increasingly demands the creation of a low-carbon economy. Nonetheless, some regions and customers still need affordable fossil fuels to maintain stable power supplies. We are accordingly endeavoring to provide renewables that employ our strengths in technology that optimizes combustion efficiency. A good example is the use of biomass and ammonia with coal in boiler fuel to reduce carbon dioxide emissions.

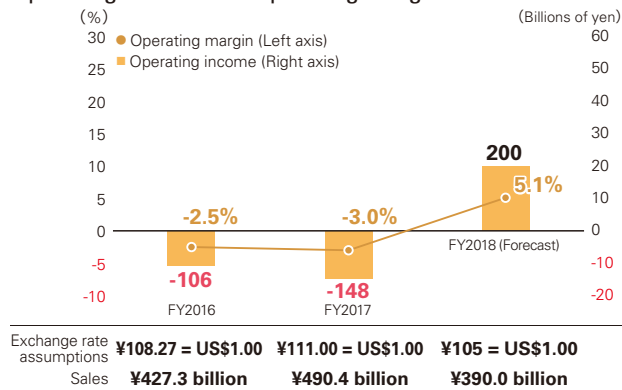
In March 2018, we completed construction at the Nippon Paper Ishinomaki Energy Center. The center can derive up to 30% of its fuel from wood biomass, and is the largest facility

of its type in Japan.

We have started proposing an energy management setup that combines storage batteries and gas turbines with renewable energy facilities, whose output fluctuates according to the weather, to optimize operations in keeping with demand changes. We have made significant progress in research and development into producing hydrogen from brown coal with a view to expanding the use of hydrogen energy.

We will help materialize a sustainable economy by fulfilling our commitment to providing stable energy supplies and lowering environmental impact by drawing on the technologies we have cultivated over the years and the Group's comprehensive strengths.

Operating income and operating margin



Priority investment SBUs

SBU	Key initiatives
Boilers	<ul style="list-style-type: none"> Enhance and rebuild quality control framework Expand business in emerging nations
Power systems for land	<ul style="list-style-type: none"> Expand preventive maintenance and remote monitoring businesses
Power system for land & marine	<ul style="list-style-type: none"> Increase orders in overseas land-based power generation market

Topics

Building energy infrastructures to support the economic growth of emerging nations

— Concluding a contract to construct a gas-fired combined cycle power plant for Mozambique's state-run power company —

Building a 100-megawatt facility

IHI and Sumitomo Corporation entered into an agreement with Electricidade de Moçambique to construct a gas-fired combined cycle power plant in Temane, Inembane Province. Gas-based facilities will likely become the Republic of Mozambique's prime source of electricity in the years ahead. The new facility will be the nation's second such setup after one in Maputo, the capital.



Computer illustration of power station in Mozambique

power infrastructure is inadequate, however, constraining growth.

We seek to help improve the regional power infrastructure and enjoy mutual progress by deploying our world-leading power turbine technology there.

Our IHI Global Monitoring and Technical Service Center assists plants around the clock

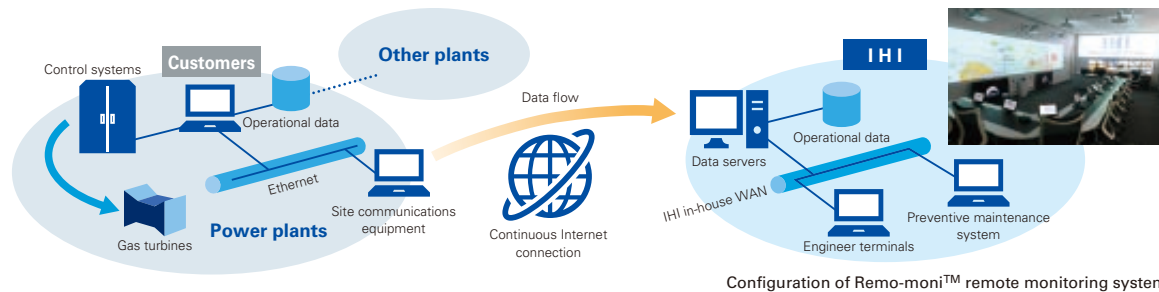
Energy supply infrastructure must operate stably, and it is important for customers that this also be at minimal cost. We monitor plants worldwide around the clock through at our IHI Global Monitoring and Technical Service Center. We work to prevent failures if detecting anomalies and quickly restore operations if problems occur. Together with regular maintenance and day-to-day operation support services, we will continue to provide support throughout the life cycle.

Electric power infrastructure development vital to sustaining Africa's ongoing economic growth

Mozambique is part of sub-Saharan Africa, which is generating economic growth of around 4% annually. The

IHI Global Monitoring and Technical Service Center at IHI headquarters

This unit monitors the operations of plants in Japan and abroad around the clock and is a vehicle for sharing information between headquarters engineers and domestic and overseas maintenance sites promptly responding to issues.



We will help materialize SDGs by providing products and services.



Business Strategies

Social Infrastructure & Offshore Facilities

[Products and Services]

Bridges and Watergates, Shield systems,
Transport systems, Concrete construction materials,
Urban development (real estate sales and rental),
F-LNG (floating LNG storage facilities and offshore structures)



Managing Executive Officer
President of Social Infrastructure &
Offshore Facilities Business Area

Takanori Kunihiro

Grow as a corporate group that develops social infrastructure worldwide with its partners

Our sustainable growth mission and strengths in supporting business strategy implementation

Our Social Infrastructure & Offshore Facilities business encompasses such areas as social infrastructure development, security, and offshore and urban development. We have a particularly strong record in shield tunneling machines for bridges and tunnels. Through these projects, we pursue our mission building social infrastructure that safety and security.

Many projects are large, bespoke, and extend over several years. Engineering has to reflect progress with specific works, customer requirements, and other factors, with installation matching local characteristics. Our integrated manufacturing capabilities empower us to satisfy these needs.

Overviewing fiscal 2017 and looking ahead

We performed better in almost every aspect of operations in the year under review.

Improvements were particularly noteworthy in the floating natural gas facility business, which had hampered operating income. In the year under review, our numbers were much better, as we shortened construction lead times by collaborating more closely with Japan Marine United Corporation and leveraged information and communication technology to boost productivity.

In the mainline bridge and watergates business, the number of large projects has increased to repair facilities constructed during Japan's fast economic growth period. We have also undertaken many new projects in emerging nations, and seek to expand this business area with local partners.

The Linear Chuo Shinkansen project will enable us to

demonstrate the comprehensive capabilities of such offerings as shield tunneling machines and concrete segments¹.

We will endeavor improve the production capacity at each works and generate solid orders for the project.

In urban development, redevelopment of the Toyosu area of Tokyo's Koto Ward will end with the completion of Toyosu Bayside Cross, an office and hotel complex. We will draw on our achievements in Toyosu to redevelop a factory site in Sunamachi, Koto Ward.

Improving customer value and productivity through information and communication technology

Improving customer value will be central to our efforts beyond fiscal 2018. Corporate Research and Development, which we established in fiscal 2017 provides services that employ information and communication and artificial intelligence technologies. One application is the use of remote monitoring devices in locations that are difficult to access to streamline inspections of bridges, watergates, shield tunneling machines, and other facilities. Another service deploys information and communication technologies to enable real-time management of progress at construction sites. This setup could not only enhance productivity but also improve site work practices.

Working with partners to grow as a corporate group that contributes to social infrastructure development

We will need to accelerate global development to grow over the long term. We aim to lift overseas from around 10% of earnings, to 40% or 50% by 2023.

Collaborating with overseas partners will be essential as cultural norms and rules differ from country to country. Outside Japan, we will shift away from solely engaging in bridge construction to engage in the concession business². It will thus become more important to build long-term relationships and optimize supply chains.

We are also proceeding in cooperation with local companies for two projects whose construction started in 2018.

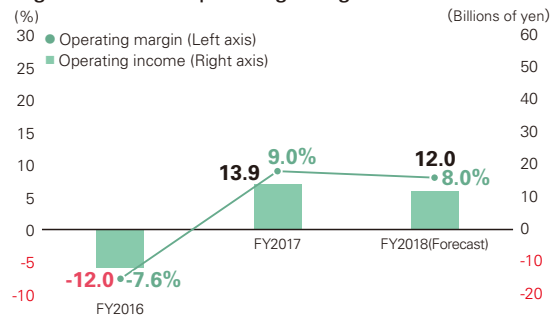
The construction is for the Mumbai Trans Harbour Link in India and for a suspension bridge over the Danube in Braila, Romania.

We aim to grow with our partners by becoming an enterprise that contributes to safety and security by constructing and operating transport infrastructure throughout life cycles.

¹ Concrete segments: Concrete blocks installed on tunnel walls.

² Concession business: This entails contracting to construct and maintain facilities after operations begin and engaging in long-term management.

Operating income and operating margin



Exchange rate assumptions	FY2016	FY2017	FY2018 (Forecast)
Sales	¥108.27 = US\$1.00	¥111.00 = US\$1.00	¥105 = US\$1.00
Sales	¥157.7 billion	¥154.5 billion	¥150.0 billion

Priority investment SBUs

SBU	Key initiatives
Bridges and Watergates	<ul style="list-style-type: none"> Providing solutions for maintenance and projects Exporting overseas infrastructure Using information and communication technology to improve productivity

Topics

Working with partners to deliver Japanese technology to the world

— Construction order for Mumbai Trans Harbour Link —

Demand rising for infrastructure development in fast-growing emerging economies

China, Southeast Asia, India, Africa, and other emerging markets are experiencing swift economic development. Urbanization will likely accelerate in the years ahead, inevitably generating demand for large infrastructural development. To date, we have constructed the Nhat Tan Bridge in Vietnam and the Osman Gazi Bridge in Turkey. We plan to keep participating in infrastructure development in emerging markets.

Forming consortiums that harness our strengths

In emerging markets, we have formed partnerships with firms that are familiar with local business norms, rules, and supply chain conditions. For the road bridge order from the Mumbai Metropolitan Region Development Authority, we teamed up with Larsen & Toubro Limited, India's largest general contractor.

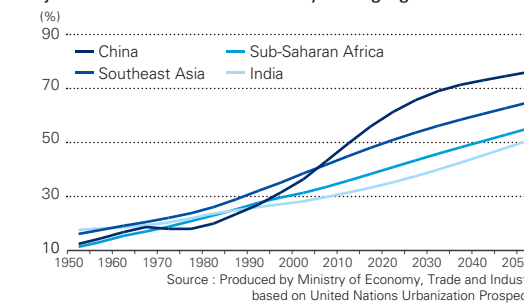
Employing advanced technological capabilities to construct 10-kilometer bridge for Mumbai Trans Harbour Link

IHI Infrastructure Systems Co., Ltd., is part of a consortium that received an order to construct a bridge for the Mumbai Trans Harbour Link, a maritime road that is around 22 kilometers long. Once completed, the road will slash travel times between the Mumbai city center and the suburb of Navi Mumbai. This will alleviate traffic congestion and cut carbon dioxide emissions. The consortium is manufacturing and transporting box girders for the bridge. Since the structure will be constantly exposed to sea breezes, we are applying a heavy corrosion-proof coating on the girders. This coating will be a first in India. Advanced Japanese technology will contribute to the safety and reliability of this infrastructure.



Computer illustration of Mumbai Trans Harbour Link
Source : Mumbai Metropolitan Region Development Authority

Projected urbanization rates of key emerging markets



Emerging markets set for rapid urbanizations

Urbanizations should drive a surge in demand for social infrastructure development.

We will help achieve SDG goals by providing products and services.



Business Strategies

Industrial Systems & General-Purpose Machinery

[Products and Services]

Logistics and machinery (logistics systems and industrial machinery),
Transport machinery, Parking,
Thermal and surface treatment, Vehicular turbochargers,
Rotating machinery (compressors, separation systems, turbochargers for ships),
Agricultural machinery and small power systems,
Steel manufacturing equipment, Papermaking machinery



Director
Managing Executive Officer
President of Industrial Systems & General-Purpose Machinery Business Area

Masafumi Nagano

Changing our business model to sell value rather than products and reinforce customer value

Business area situation and goals

The Industrial Systems & General-Purpose Machinery business has seven strategic business units offering an array of products in key industry fields. They are logistics and machinery, transport machinery, parking, thermal and surface treatment, vehicular turbochargers, rotating machinery, agricultural machinery and small power systems. We seek to eliminate inefficiencies and resolve social issues worldwide in manufacturing, mobility, logistics.

Overviewing fiscal 2017 and looking ahead

Sales and operating income exceeded initial forecasts in fiscal 2017. This reflected higher revenues in vehicular turbochargers and increased thermal and surface treatment orders.

Products accounted for the bulk of sales. After analyzing our earnings structure, we found that it was more profitable to sell value than products. This was particularly so in such areas as maintenance, parts replacements, and contracted processing.

In fiscal 2018, we will accelerate a shift away from selling products in keeping with a companywide focus on changing its business model to create customer value.

Business model transformation initiatives

Around half of the 10,000 people or so in our business area are outside Japan. We have traditionally focused on selling individual products, but to expand after-sales services we

need to strengthen cooperation within and outside that area, partly by setting up service units that can accommodate our product diversity.

In a drive to sell more value, we joined hands with Kansai Electric Power Co., Inc., to research the use of the Internet of Things for advanced coal unloading yard facilities operations services. We are deploying ILIPs®, our proprietary shared remote monitoring platform, at coal unloading facilities that we have delivered to date to oversee facility operations. This setup replaces humans in daily inspections, with these labor savings improving customer value.

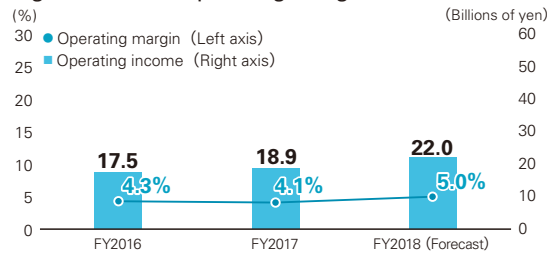
Developing new technologies in response to change

We believe that the vehicular turbocharger market will keep expanding for the foreseeable future as manufacturers downsize engines to lower environmental impact. We are accordingly developing new models to match customer needs and are also working on electromotive turbochargers for hybrid cars. The business development department that we established in fiscal 2017 is developing technologies for electric vehicle contactless power supply systems, and will serve changing customer needs.

With artificial intelligence (AI) evolving rapidly, Corporate Research & Development collaborated with an American venture to develop the IHI Depalletizing System, a robotic setup that unloads cardboard and other items in logistics warehouses. We believe that demand for such unmanned

systems has surged as tools for resolving such social problems as an aging population and labor shortages. One of our key strengths is that we have a diverse product range and networks of customers in an array of industries. We will take advantage of those capabilities to overhaul our profit structure by guiding our business model away from selling products toward selling value. We will strengthen our ability to suggest ways to resolve customer issues by building open and global partnerships.

Operating income and operating margin



Exchange rate assumptions: $\text{¥}108.27 = \text{US}\1.00 $\text{¥}111.00 = \text{US}\1.00 $\text{¥}105 = \text{US}\$1.00$
Sales: $\text{¥}411.6 \text{ billion}$ $\text{¥}459.0 \text{ billion}$ $\text{¥}440.0 \text{ billion}$

Priority investment SBUs

SBU	Key initiatives
Veicular turbochargers	<ul style="list-style-type: none"> Create a sophisticated global business framework
Rotating machinery	<ul style="list-style-type: none"> Expand global value sales and reform business structure
Parking	<ul style="list-style-type: none"> Increase stock to maintain business and develop global markets
Thermal and surface treatment	<ul style="list-style-type: none"> Strengthening treatment services

Topics

Helping resolve logistics personnel shortages with artificial intelligence

— Jointly developing the world's first AI-equipped depalletizing system —

Eliminating increasing labor shortages in logistics sector

The spread of smartphones has boosted the scale of online ordering, exacerbating logistics labor shortages. It will likely become difficult to secure sufficient workers for heavy tasks. Palletizing and depalletizing loads at distribution centers will probably become more difficult, making it vital to deploy robots to overcome labor shortages.

Developed with American startup to dramatically improve processing capacity

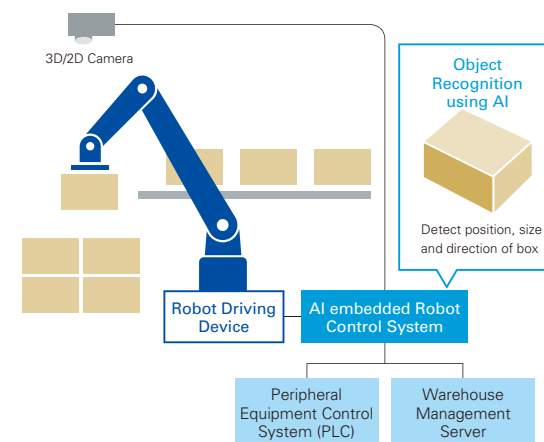
We combined the IHI Group's robotics control technology with the 3D vision and AI technology of Kinema Systems Inc., an American startup, to develop and commercialize the world's first AI-equipped depalletizing system.

This setup employs AI-based object recognition technology



AI-based depalletizing system

System configuration

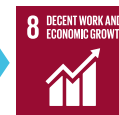


to determine positions, sizes, and orientations of cardboard items. This makes it possible to unloading 450 packages and mixed pallets per hour, representing a 30% capacity improvement.

Helping resolve social problems through partnerships

We will draw on our control and robotics technologies to work with partners that can best apply their strengths to drive logistics system and manufacturing advances and help resolve social problems.

We will help achieve SDG goals by providing products and services.



Business Strategies

Aero Engine, Space & Defense

[Products and Services]

Aircraft engines

Rocket systems and space exploration

Defense equipment and systems



Director
Managing Executive Officer
President of Aero Engine, Space & Defense Business Area

Tomoharu Shikina

Opening new frontiers by collaborating with global partners to cater to growing needs

Roles and business strategies for sustainable growth

In this business area, we supply civil and defense aero engines, rocket systems, space utilization systems, and defense equipment and systems. We are Japan's dominant producer of aero engines. Our operational mission is to contribute to safe, comfortable, and environmentally friendly aviation and to Japan's national security and help realize the dreams of humankind through space development.

What sets us apart from other areas of the IHI Group is that we engage more in mass production. We face a greater challenge in calibrating supply to fluctuating demand levels. We must manage operations based on teamwork that involves customers and the supply chain to streamline production and generate cash flows, and such a capability is one of our key strengths.

Overviewing fiscal 2017 and looking ahead

Sales in fiscal 2017 were down amid lower unit demand because of a shift to new civil aero engine models. In contrast, operating income increased, owing largely to stronger demand for spare parts and favorable exchange rates.

The business model in civil aero engines is to inject forward investments to undertake development, begin mass production, and thereafter recoup investments over long periods, notably through maintenance and spare parts sales. We participate in programs to develop such engines as the Passport20 and GE9X as foundations for sustainable, long-term growth. Earnings may flatten out for several years after fiscal 2018, as we are pushing forward with development. I am confident that such investments will

result in future growth.

Spare parts sales for defense aero engines were solid in the year under review. We are developing a production framework for the F135 turbofan for the Japan Air Self Defense Force's F-35A fifth-generation fighter. As a primary contractor of Japan's Ministry of Defense, we developed and delivered a prototype engine for a future fighter jet in June 2018.

In the rocket systems and space utilization systems, we are developing technologies to improve satellite load capacities to foster private sector demand. January 2018 saw the launch of the Epsilon-3 launch vehicle, which offers additional capacity.

Contributing to society through business by delivering new solutions

Societies place growing expectations on solutions that use satellite data. We accordingly launched a service to provide ship location information around the world, and we are cultivating ways to ensure safe and efficient maritime traffic. We plan to develop satellite data usage services by bringing together resources from the IHI Group's diverse business. Applications include long-term weather forecasting and early forest fire detection.

Responding to market needs and progressing with partners

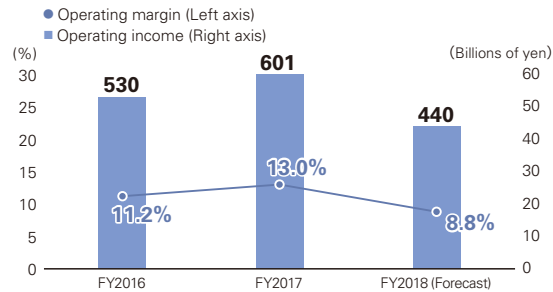
In fiscal 2016, we constructed building employing advanced technology to manufacture composite parts at the Soma No. 1 Works in Fukushima Prefecture to serve rising demand for civil aero engines.

We are concentrating functions by extending the capabilities

of our Akishima office in Tokyo to ensure rapid and efficient technological development and engine design. The Mizuho Works in Tokyo catered to our expanding maintenance business by building a disassembly and assembly facility for the PW1100G-JM engine. We plan to construct a new factory for additional projects.

We seek to double productivity, and are accordingly rolling out Internet of Things technology to create smart factories. We are creating a system that digitally links people, objects, and facilities to enhance efficiency and are endeavoring to improve capacity utilization rates and work efficiency. We seek to progress further with customers and partners by catering to growing market needs.

Operating income and operating margin



Exchange rate assumptions: $\text{¥}108.27 = \text{US}\1.00 $\text{¥}111.00 = \text{US}\1.00 $\text{¥}105 = \text{US}\$1.00$
Sales: $\text{¥}471.9 \text{ billion}$ $\text{¥}463.7 \text{ billion}$ $\text{¥}500.0 \text{ billion}$

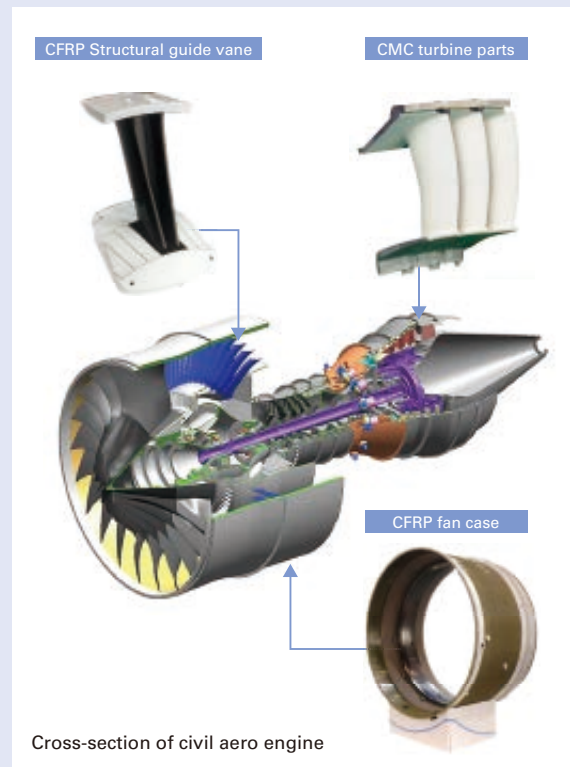
Priority investment SBUs

SBU	Key initiatives
Aircraft engines	<ul style="list-style-type: none"> Develop production framework for new mass-production engines and reduce costs Develop engines for future fighter jets and civil aircraft Strengthen proprietary technology in such areas as new materials and innovative production
Rocket systems and space exploration	<ul style="list-style-type: none"> Develop the H3 and Epsilon rockets and other new models Foster solutions businesses that harness space technology

Topics

Contributing to safer, more comfortable, and affordable air transportation through proprietary advanced technology — Developing new materials and technologies for aero engines —

Air passenger demand should remain strong worldwide in the years ahead. In the next two decades, it is estimated that roughly double the current number of aircraft will be needed. We must cultivate high-value-added manufacturing to capitalize on such market growth. We contribute to safer, more comfortable, and more affordable air transportation, and are thus working on a range of proprietary production technologies.



Cross-section of civil aero engine

Carbon fiber reinforced plastics (CFRP)

We developed techniques to employ light and strong CFRP on large fan parts that create thrust on aero engines. Such parts have been used on the advanced PW1100G-JM engine. The results are considerable weight savings, improved fuel economy, and lower noise.

Ceramic matrix composites (CMC)

As well as lightening engine fans, which is pivotal to improving fuel economy, we are working on CMC, a light and extremely heat-resistant material, for turbine parts. With engine manufacturers worldwide making new breakthroughs, we are accelerating development with materials producers and domestic research organizations to swiftly cultivate practical uses for CMC.

Additive manufacturing (3D printer) technology

We are developing additive manufacturing, or 3D printing, technologies, which have captured considerable attention worldwide in recent years. The advantages of 3D printers include flexible designs, low manufacturing cost for small runs, short production lead times. These printers could revolutionize parts designs and development lead times. We have already demonstrated the benefits of 3D printing for shaping large components of rocket turbo pumps, and are pushing ahead with 3D technology development to drive aerospace manufacturing innovations.



(3D-printed) rocket turbo pump component

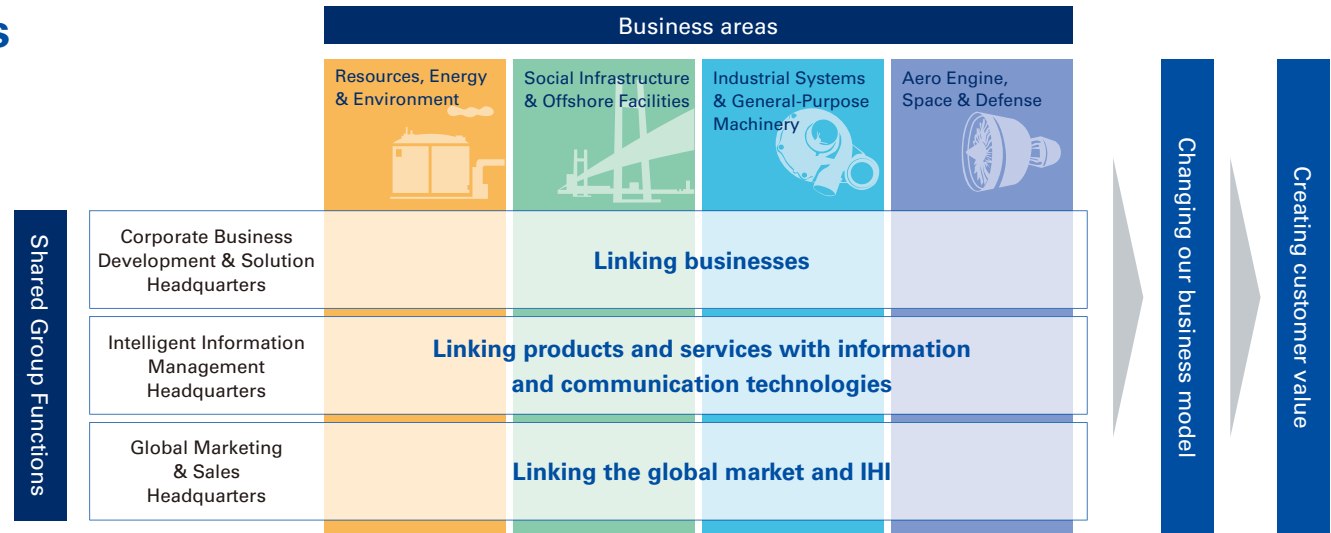
We will help achieve SDG goals by providing products and services.



Shared Group Functions

Driving business model reforms through Three Tsunagu (Links)

The IHI Group identifies diversifying customer needs through the Corporate Business Development & Solution Headquarters, the Intelligent Information Management Headquarters, and the Global Marketing & Sales Headquarters, which it set up in April 2013 to handle shared Group functions and accelerate business model reforms. We will link technologies accumulated in our business areas. We will innovate by combining technologies and business models amassed in our operations and combining shared Group functions to provide new value to customers.



Corporate Business Development & Solution

Corporate Business Development & Solution resolve companywide operational issues and create businesses that address diversifying customer value and social changes.

We accordingly develop businesses by combining products, services, and technologies of within and outside IHI group in light of market needs.



Intelligent Information Management

Intelligent information management draws on IoT, AI and machine learning, and other advanced information and communication technologies to drive IHI's digital transformation with its business areas and strategic business units.

This management setup deploys a common IoT platform within the Group to provide predictive diagnostics and proposals on optimal operations and product designs and supply information related to customer product usage and operations.



Global Marketing & Sales

Global Marketing & Sales accelerates the IHI Group's globalization and business model transformations by integrating domestic and overseas business units. Global Marketing & Sales brings together marketing and comprehensive sales capabilities, forms private-public projects, and localizes operations to create value with customers.

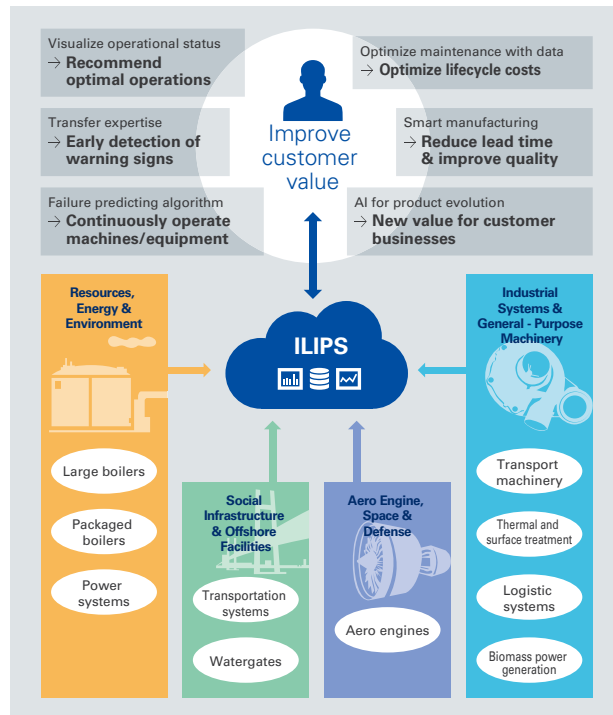


Generating new value with digital technology

The IHI Group's digital transformation

Our digital transformation entails changing our products, services, business models, and other aspects of our operations with IoT, artificial intelligence, and other technologies to create new value.

We collect and analyze operational and other information across product life cycles through ILIPS®, our shared remote maintenance platform. It is through this approach that we will innovate predictive diagnostics, optimal drive assist, and other unique services.



Topics

Advanced coal conveying services leveraging IoT

— Starting joint field tests with customer —

IHI Transport Machinery Co., Ltd., started field tests with Kansai Electric Power Co., Inc., to jointly develop advanced coal conveying facilities services that would be a world first in the electric power sector.

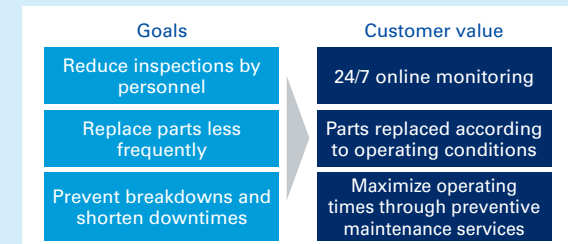
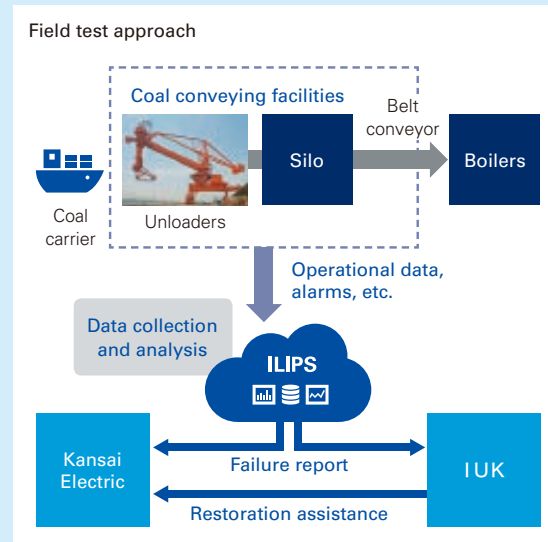
Belt conveyors take coal from ships to power station boilers. Over the years, personnel have had to inspect the conveyors several times daily, regularly replacing or repairing parts, to keep everything up and running around the clock.

The tests with Kansai Electric are at its Maizuru Power Station. The coal unloader is connected through the Internet to ILIPS® to remotely monitor the facilities. An artificial intelligence setup analyzes

running data in real time, predicting and preventing problems to ensure operational stability.

We are developing sensing technology to identify belt damage and roller deterioration on the belt conveyor. Timely parts replacement before deterioration goes too far would minimize costs and labor.

We could apply such remote monitoring and predictive diagnostics to a range of facilities that we supply. We will draw on advanced IoT-based services to help resolving problems, notably by stabilizing the operations of social infrastructure and plant facilities and cutting costs.



With customers at Kansai Electric's Maizuru Power Station

Technology Strategy



Going further and faster in developing technologies that society will need tomorrow

Director
Managing Executive Officer
General Director of Corporate Research & Development

Kouichi Murakami

Driving R&D at unprecedented speed and contributing to social needs

New value in technological development comes from understanding and catering to the customer needs that predate services and products. Corporate Research & Development's mission is essentially to ensure the timely delivery of vital technology.

The world and customer needs are changing as never before. But R&D does not change overnight. So, how can we reduce that gap? One approach is to undertake R&D after anticipating customer needs. Another is to accelerate R&D by harnessing open innovation with partners who can compensate for our shortfalls.

Establishing Works Lab to cultivate new fields with business areas

In fiscal 2017, we established the Works Lab to focus on high priority areas to accelerate the R&D that customers

demand. The Works Lab collaborates with our business areas in renewable energy, electrification, and advanced manufacturing. The focus in the latter areas is to automate manufacturing processes. In aero-engines, for example, IHI has already deployed a process to automatically laminate carbon fiber-reinforced composites, enabling it to handle increased orders. Naturally, customers can also employ our advances.

Strengthening activities of IHI Tsunagu Lab activities and accelerating innovation

We opened the IHI Tsunagu Lab in 2014 as an open innovation hub. It has since welcomed more than 10,000 visitors from enterprises, universities, and research institutions in Japan and abroad.

This facility showcases the seeds of IHI Group innovation and holds seminars on technologies that the Group is exploring to identify matches with external technologies.

It is also a direct engagement vehicle for researchers and customers, and has contributed to ideas to resolve issues and accelerate technological development.

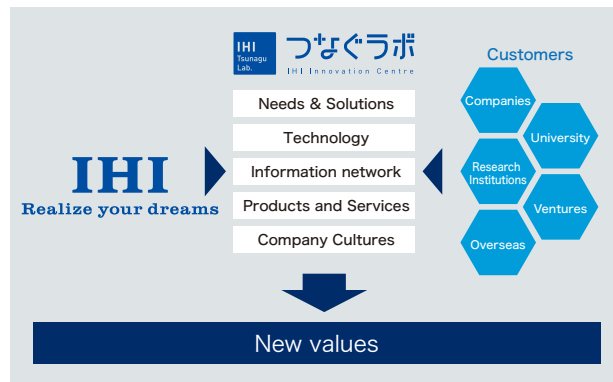
IHI is a manufacturing and engineering enterprise that remains dedicated to the best interests of its customers. That is the IHI way. Companies cannot hope to survive without anticipating and addressing change, but this fundamental commitment should remain perpetual. By staying close to our customers, we will always continue to explore manufacturing the IHI way.

IHI Technology Strategy 2016



IHI Tsunagu Lab a hub for open innovation

We set up the IHI Innovation Lab in 2014 as a hub for fostering open innovation for the IHI Group. We pursue that goal by collaborating with enterprises, universities, and research institutions in Japan and abroad.



Achievements

As well as exhibiting Group products and technologies, the facility holds seminars to match our technologies with customers. It also conducts workshops to brainstorm themes to help create new businesses. Through its activities, the IHI Tsunagu Lab fosters collaborative research with customers, creating new value through these connections.

Number of visitors	Number of technical matching seminars	Number of enterprises participating in workshops
Since 2014 10,500	Number of times in 2017 8	In fiscal 2017 50



Inspiration Area

Collaboration Area

Café Area

Topics

Drawing on our strengths to creatively resolve issues

— Joint workshop initiatives with 3M Japan —

3M Japan Ltd. is a leading manufacturer of an array of industrial materials and daily necessities. IHI Tsunagu Lab conducted workshops, technical exchange sessions, and other gatherings with that company with reference to its "Customer Technical Center, which conducts exhibitions in which people can immerse themselves in its technology.

The workshops consider creating approaches to resolving issues, an example being energy for tomorrow. Engineers engage directly with each other to come up with new ideas and the foundations of innovation.



Workshop

3M Japan Ltd.

Customer Relations Mitsuhiro Ohta



IHI and 3M have long supplied each other's products. IHI encompasses a wide range of social infrastructure areas and is familiar with materials processing technology. We believe that by incorporating 3M's technology platform we can be very confident in creating better products.

A good example is the task of pouring concrete for IHI road bridge repair projects. For this work, we have made the concrete more durable by using a special 3M film.

We look to continue building relationships that enable people to share learning through ongoing interactions that produce new things.

Special Feature Resolving Social Issues through Business (1)



Tackling an aging social infrastructure



Quickly and carefully injecting new life into social infrastructure



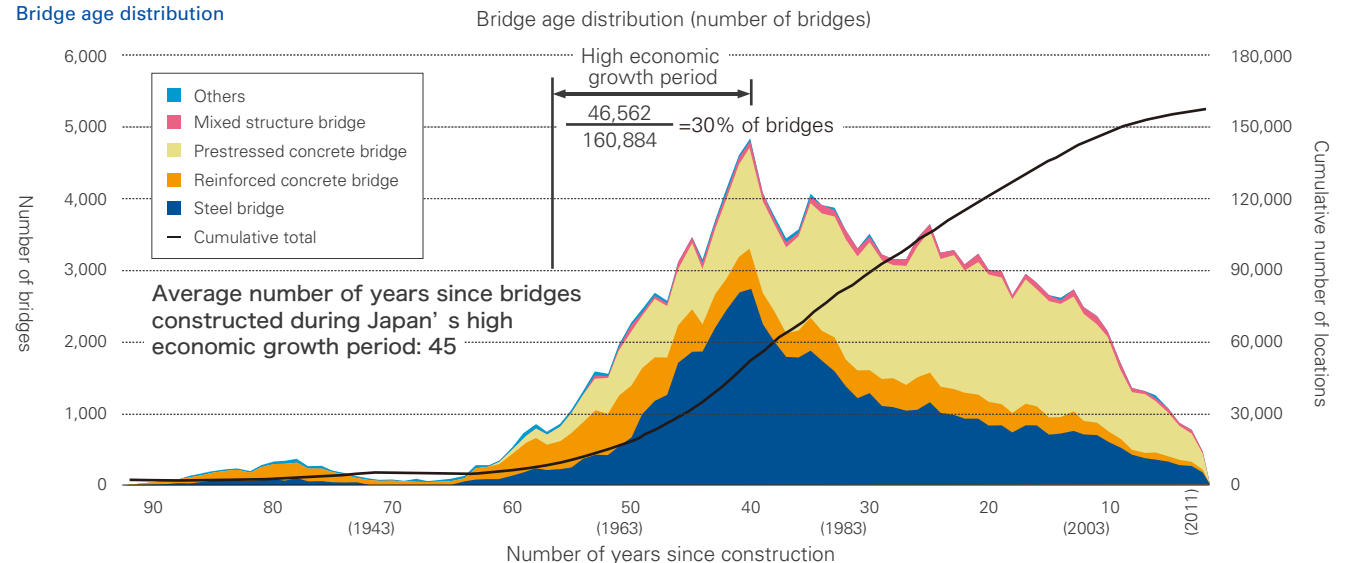
Reconstruction of Shiodome Viaduct on Yaesu route of Tokyo Metropolitan Expressway

Roads are vital to the quality of life and economic activity. Much of Japan's social infrastructure was developed when the nation experienced high economic growth in the 1960s and 1970s. Given that some of this infrastructure exceeds 50-year life planned life spans, such aging poses serious social issues. There have also been maintenance issues with some younger infrastructure. A tragic outcome was the December 2012 collapse of concrete ceiling panels in the Sasago Tunnel that killed nine people. It is increasingly important in Japan and even overseas to upgrade infrastructure to prevent such catastrophes from recurring. In the next decade, around 30% of Tokyo's Metropolitan Expressway will be more than 50 years old. Around a million vehicles a day travel along the network, making construction very challenging. The daily traffic volume of large vehicles is around five times greater than that on general roads in Tokyo's 23 wards. As a result, cracks have increased in decks supporting expressway bridges, and

steel decks and girders are incurring more fatigue damage. Over the next 10 years or so, expressways and bridges around Japan will undergo upgrades and repairs at an estimated cost of ¥4 trillion. Around ¥1.6 trillion has

been earmarked to replace decks. In fiscal 2017, the IHI Group won an order to replace the deck Kawabata Viaduct deck on the Central Nippon Expressway Company's Odawara-Atsugi Road.

Bridge age distribution



Source: Ministry of Land, Infrastructure and Transport and Tourism

Slashing construction periods for large replacement projects

We undertook a major project from 2011 through 2014 to reconstruct the Shiodome Viaduct on the Yaesu route of the Tokyo Metropolitan Expressway. It was a challenge on this congested section of the road to minimize closures without compromising quality and safety. The project involved removing all of the bridge girders in a single overnight operation in view of safety and location considerations. We then installed new ones. We shortened installation and reduced road closures by using the large block batch erection method. This entails assembling bridge girders at the site and lifting sections with modular transporters above intersections.

This process enabled us to complete the project in 17.5 months, 2.5 months faster than planned. We received the Tanaka award from the Japan Society of Civil Engineers in 2014 in recognition of this achievement.

Project handling decks with complex structure

We rebuilt the deck of the Tsunakigawa Bridge on the Tohoku Expressway in 2012 through 2014. The bridge is near the Sendai-Miyagi Interchange, opening in 1975. The reinforced concrete deck had suffered considerable corrosion from aging, increased heavy vehicle traffic, and the application of de-icing salts in winter. Maintenance had entailed adding concrete to the top of the deck and repairing parts of the pavement. We replaced the deck in

view of repairs becoming more frequent recently. The bridge has a complex structure because of a nearby interchange. Deck replacement also necessitated imposing traffic restrictions as the bridge crosses a national highway. Other complications to the project were the engineering challenges and the mandate for replacement work to be only at nights.

We tackled the engineering by replacing the bridge's conventional reinforce concrete deck with a precast prestressed concrete (PCa) one that could work with complex linear shapes. We developed a light PCa deck and lines to connect deck slabs and ensure compactness to quickly undertake construction. We completed the project within the allotted time despite the nocturnal nature of the work.

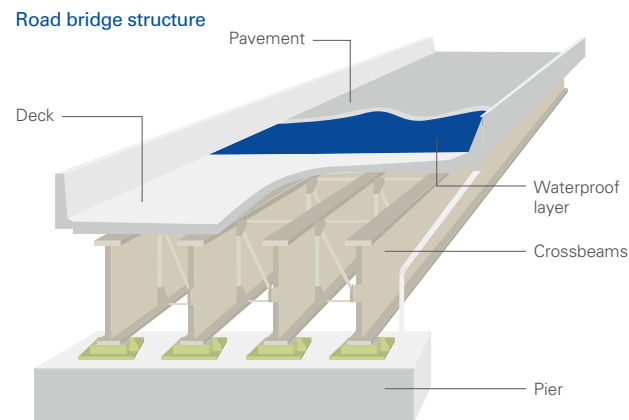


Laying the PCa deck

Leveraging Japanese technology to ensure long service lives

Our outstanding partial bridge replacement and deck repair technologies are designed to deliver long service lives for existing infrastructure. Even for facilities with just a few years of service left if nothing is done, we can extend lifespans for decades through proper repairs and reinforcements. Another benefit is that unlike with new construction, we can more quickly use existing resources, conserving them and energy.

The aging of infrastructure is set to peak in North America, with renovation demand similarly rising in Japan. Asia, Africa, and other emerging markets are pushing ahead with building bridges and other social infrastructure that will ultimately need renovations. We accordingly look to accelerate overseas business development by drawing on the technology and knowhow we have cultivated in Japan. We will quickly undertake top-quality infrastructure innovations to contribute to transport safety and security the world over.



Note: The deck spreads the weight of vehicles crossing the bridge to the girders and piers. (Source: Tohoku Regional Bureau of Ministry of Land, Infrastructure and Transport and Tourism)



Cutting carbon dioxide emissions



Supporting the energy needs of circular societies with low-carbon and decarbonization technologies



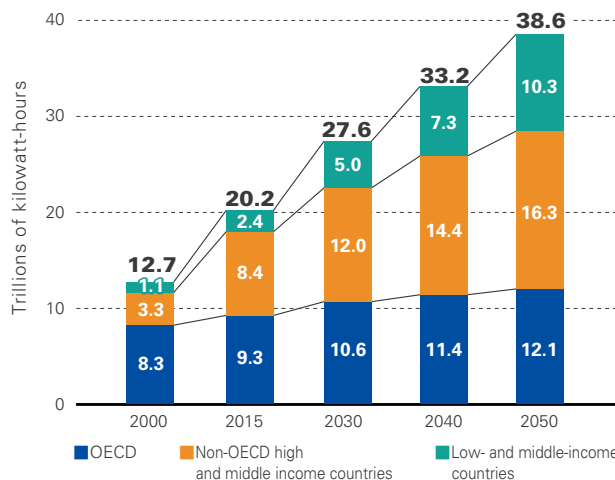
Twin IHI Gasifier demonstration unit in Indonesia

Energy demand should rise in coming years as the global population grows, urbanizes, and industrializes. At the same time, that the Paris Agreement adopted at the 2015 United Nations Climate Change Conference set national reduction targets for carbon dioxide emissions, a factor in climate change. The global community thus faces the challenge of lowering environmental impacts while accommodating greater energy demand.

Fossil fuels play an important role in generating electricity and stabilizing power supplies. Combustion produces carbon dioxide, creating a need for technology to streamline power generation and reduce emissions to tap fossil fuels more effectively.

The IHI Group seeks to help materialize circular societies that do not depend on finite resources by reducing emissions through its low-carbon and decarbonization technologies.

Final electricity consumption



* Low- and middle-income countries had a nominal GDP per capita below \$4,000 as of 2015

Source: The Institute of Energy Economics, Japan, IEEJ Outlook 2018

Developing IHI's low-carbon and decarbonization technologies

Use biomass fuel with existing facilities

Biomass is a carbon neutral energy source because carbon sequestration through plant photosynthesis balances out carbon dioxide emissions from burning biomass. For thermal power plants, you can reduce emissions by co-firing biomass chips from thinned timber and other wood sources with fossil fuels. Conventional setup limit the biomass mixture to 2% or 3% of the heating value in co-firing. We developed a wood biomass high-ratio co-firing system that raises the calorific value of wood biomass in utility power boilers to 50%. Companies can deploy this technology with minimal modifications to existing facilities, for which IHI received a New Energy Award of the Minister of Economy, Trade and Industry Prize in fiscal 2016.

If half of the calorific value of coal-fired boilers of Japan's leading power producers came from wood biomass, the nation's annual carbon dioxide emissions could reduce by almost 100 million metric tons.

Creating biomass fuel from waste

As well as developing biomass combustion technology, we are also producing biomass fuels.

In Southeast Asia, palm trees are grown extensively for palm oil. Empty fruit bunches resulting from production contain a lot of water, ash, and salt, and are often dumped as is. The resulting unpleasant odors and methane are among the resulting environmental problems. IHI created a technique to pelletize empty fruit bunch waste as biomass fuel for thermal power plants. We have constructed a pilot plant in Malaysia with a view to commercializing this process.

Creating biomass fuel from palm tree waste



Using carbon dioxide-free ammonia

Ammonia is a nitrogen and hydrogen compound that

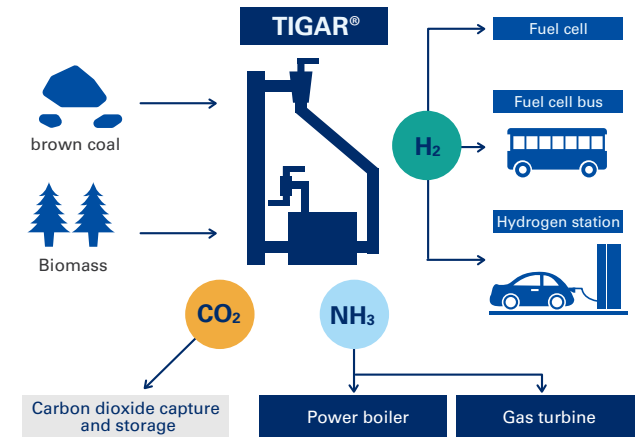
does not generate carbon dioxide when burned, and could be a useful clean fuel in power production if a technique can be developed to stabilize combustion. IHI is participating in the Cross-Ministerial Strategic Innovation Promotion Program of the Japanese Cabinet Office's Council for Science, Technology and Innovation to develop ammonia-fueled combustion technology. We created a technique to co-fire ammonia with conventional fuels in gas turbines and boilers. We were the first in the world to achieve a co-firing ratio representing 20% of the gross heating value for a 2,000 kilowatt-class gas turbine. The nitrogen oxide emissions were lower than the regulatory limit. With boilers, our technique can cut carbon dioxide emissions and lower maintenance by reducing sulfide corrosion and ash volumes. It is also worth noting that we were able to generate power from a one-kilowatt-class direct ammonia solid oxide fuel cell.

Converting untapped low-grade coal into valuable fuel and products

Lignite accounts for half of global coal reserves. While this low-grade coal is inexpensive, it has not been used effectively because of its low heating value and handling challenges. We accordingly developed the Twin IHI Gasifier, also known as TIGAR®, which converts untapped resources into valuable fuel substances by applying circulating fluidized-bed technology. TIGAR can produce syngas, which consists of hydrogen and carbon monoxide.

Syngas is versatile intermediate resource not only for producing such high-value-added offerings as ammonia, methanol, and synthetic natural gas but also for generating heat and power. TIGAR® can be combined with carbon dioxide capture and storage technology to produce hydrogen without carbon dioxide emissions.

Value chain centered on TIGAR®



Materializing circular societies







Beyond the technologies presented in this report, the IHI Group is developing a range of low-carbon and decarbonization technologies. They include ocean current and binary power generation systems and algae biofuels.

We will step up efforts to develop technologies and practical applications to help materialize circular societies.

Management Team

Director

Name Position at the Company	Reasons for nomination	Attendance numbers at Board of Directors meetings in fiscal 2017	Period in office	Appointments to board advisory committees	
				Compensation Advisory Committee	Nomination Advisory Committee
 Tamotsu Saito Chairman of the Board	He has led the IHI Group's management as President and Chief Executive Officer since April 2012, and since April 2016, as Chairman of the Board, he has worked to achieve further improvements in corporate governance. His abundant experience and insight as corporate manager has been utilized in the management of the IHI Group.	18 of 18	10 years and 2 months	—	—
 Tsugio Mitsuoka President	He was appointed President of Aero-Engine & Space Operations in April 2013, driving the growth of the globally developing business before becoming President and Chief Operating Officer in April 2016 and assuming the role of President and Chief Executive Officer in April 2017, in which capacity he has led the IHI Group's management. His abundant experience and insight as corporate manager has been utilized in the management of the IHI Group.	18 of 18	4 years	Member	Chairman
 Hiroyuki Otani Executive Vice President	He has accumulated a great deal of knowledge mainly in the aero-engine production and technology division. He has also been responsible for business divisions including power systems and machinery & logistics, and he has been serving as President of Resources, Energy & Environment Business Area since this April. This wide range of business management experience and insight has been utilized in the management of the IHI Group.	18 of 18	4 years	—	—
 Tomoharu Shikina Director	He has accumulated a great deal of knowledge mainly in the aero-engine technology development field, and then he was appointed President of Aero-Engine & Space Operations in April 2016. His abundant results and experience has been utilized to the growth of the IHI Group particularly in Aero Engine, Space & Defense Business Area.	18 of 18	2 years	—	—
 Takeshi Yamada Director	He has accumulated a great deal of knowledge mainly in the finance & accounting field and corporate planning division. He was appointed Deputy General Manager of Finance & Accounting Division in April 2014 and General Manager of Finance & Accounting Division in April 2017. He has shown a high level of insight into the Group's overall business management, achieving improvement in the financial condition, etc.	14 of 14	1 year	Member	—
 Nobuko Mizumoto Director	After accumulating achievements as a researcher at the IHI's technology research institute, she has served in important posts at headquarters divisions, beginning with the Headquarters relocation project. The wide range of experience and achievements she has accumulated in her career has been utilized for the growth of the IHI Group.	—	Since June 2018	—	—

Name Position at the Company	Reasons for nomination	Attendance numbers at Board of Directors meetings in fiscal 2017	Period in office	Appointments to board advisory committees	
				Compensation Advisory Committee	Nomination Advisory Committee
 Masafumi Nagano Director	He has accumulated a great deal of knowledge mainly in the human resources division. He has also been responsible for the domestic sales headquarters and the human resources division, and subsequently responsible for the corporate planning division. His abundant experience and results has been utilized to the growth of the IHI Group particularly in Industrial Systems & General-Purpose Machinery Business Area.	—	Since June 2018	—	—
 Kouichi Murakami Director	He gained experience in the research & development of materials and overall technological management in corporate research & development division. Following this, he was in charge of the rotating machinery operations division. He was appointed General Manager of Corporate Research & Development in April 2017. This experience and high level of insight into the Group's overall technologies has been utilized to the growth of the IHI Group.	—	Since June 2018	—	—
 Taketsugu Fujiwara Outside Director	He gained extensive experience and broad insight at the Asahi Kasei Corporation, where he has implemented diversified management. These qualities have been reflected in the management of the Company, and acknowledging his proven ability to perform management oversight and monitoring functions from an independent perspective.	18 of 18	3 years	Chairman	Member
 Hiroshi Kimura Outside Director	He gained extensive experience and broad insight as a business manager who has led aggressive globalization in response to changes in business environment at the Japan Tobacco Inc. These qualities have been reflected in the management of the Company, and acknowledging his proven ability to perform management oversight and monitoring functions from an independent perspective.	16 of 18	2 years	Member	Member
 Kazuhiko Ishimura Outside Director	He gained extensive experience and broad insight at the AGC Inc. These qualities have been reflected in the management of the Company, and acknowledging his proven ability to perform management oversight and monitoring functions from an independent perspective.	14 of 14	1 year	Member	Member
 Yayoi Tanaka Outside Director	She has developed a high degree of specialist knowledge and diverse experience through her evaluation and research of non-profit organizations and through her work on various governmental committees. These qualities have been reflected in the management of the Company, and acknowledging her proven ability to perform management oversight and monitoring functions from an independent perspective.	13 of 14	1 year	—	Member

Audit & Supervisory Board Member

Name Position at the Company	Reasons for nomination	Attendance numbers at Audit & Supervisory Board of meetings in fiscal 2017	Period in office	Appointments to board advisory committees	
				Compensation Advisory Committee	Nomination Advisory Committee
 Shigeru Uesugi Standing Audit & Supervisory Board Member	He has accumulated a great deal of knowledge mainly in the accounting and finance field of the aero-engine & space business. After having been in charge of formulating policy for the management of the Company's affiliates, he has extensive knowledge in internal control and compliance. These qualities have been reflected to the management auditing operations of the Company.	18 of 18	2 years	—	—
		17 of 17			
 Taizo Suga Standing Audit & Supervisory Board Member	He has accumulated a great deal of knowledge mainly in the finance & accounting field. He was appointed President and Chief Executive Officer of IHI ASIA PACIFIC PTE. LTD. His high degree of specialist knowledge of financial management and a wide range of business experience in overall business management have been reflected to the management auditing operations of the Company.	14 of 14	1 year	—	—
		13 of 13			
 Takayuki Hashimoto Outside Audit & Supervisory Board Member	His extensive experience and knowledge of global companies gained at the helm of a state-of-the-art at the IBM Japan, Ltd. have been reflected to the management auditing operations of the Company.	17 of 18	3 years	Member	—
		17 of 17			
 Yoko Hatta Outside Audit & Supervisory Board Member	Her extensive experience and insight in global business operations, notably international taxation from an independent perspective have been reflected to the management auditing operations of the Company.	18 of 18	2 years	—	—
		17 of 17			
 Tomomi Yatsu Outside Audit & Supervisory Board Member	She has accumulated extensive experience and insight by responding to various corporate issues as an attorney at law and certified public accountant. These qualities and her independent perspective have been reflected in the management auditing operations of the Company.	13 of 14	1 year	—	—
		13 of 13			

Executive Officer

Tsugio Mitsuoka

Chief Executive Officer

Kouichi Murakami

Managing Executive Officer
 General Manager of Corporate Research & Development
 In charge of Group Engineering
 In charge of Business Relating to New Corporate Businesses

Masato Kawaguchi

Executive Officer
 General Manager of Corporate Research & Development
 (Regional Headquarters in the Americas)

Hiroyuki Otani

Senior Executive Officer
 President of Resources, Energy & Environment Business Area
 In charge of Business Relating to Procurement
 In charge of Safety and Labor

Kazuki Awai

Managing Executive Officer
 General Manager of Administration Division
 In charge of Business Relating to Legal and CSR
 In charge of Group Compliance

Naoshi Matsumoto

Executive Officer
 Vice President of Aero-Engine, Space & Defense Business Area

Takanori Kunihiro

Managing Executive Officer
 President of Social Infrastructure & Offshore Facilities Business Area

Masataka Ikeyama

Executive Officer
 Vice President of Aero-Engine, Space & Defense Business Area

Mitsutoyo Yoshida

Executive Officer
 General Manager of Project Risk Management Division

Tomoharu Shikina

Managing Executive Officer
 President of Aero Engine, Space & Defense Business Area
 In charge of Business Relating to Public Relations and Investor Relations
 In charge of Group Business Process Platform

Yoshinori Kawasaki

Executive Officer
 Vice President of Industrial Systems & General-Purpose Machinery Business Area

Hiroshi Ide

Executive Officer
 Vice President of Resources, Energy & Environment Business Area

Atsushi Kuwata

Managing Executive Officer
 General Manager of Global Marketing & Sales Headquarters
 In charge of Group Operations

Takashi Niimura

Executive Officer
 Vice President of Industrial Systems & General-Purpose Machinery Business Area;
 Deputy General Manager of Global Marketing & Sales Headquarters

Masato Shida

Executive Officer
 General Manager of Human Resources Division

Nobuko Mizumoto

Managing Executive Officer
 General Manager of Intelligent Information Management Headquarters
 In charge of Business Relating to Information Management

Yoshio Yonezawa

Executive Officer
 Vice President of Resources, Energy & Environment Business Area

Hideo Morita

Executive Officer
 Vice President of Aero-Engine, Space & Defense Business Area

Takeshi Yamada

Managing Executive Officer
 General Manager of Finance & Accounting Division
 In charge of Group Finance & Accounting

Yutaka Kunisada

Executive Officer
 General Manager of Solution & Engineering and New Corporate Businesses Headquarters

Takeshi Kawakami

Executive Officer
 Vice President of Social Infrastructure & Offshore Facilities Business Area
 IHI Infrastructure Systems Co., Ltd.
 President and Chief Operating Officer

Masafumi Nagano

Managing Executive Officer
 President of Industrial Systems & General-Purpose Machinery Business Area

Syunichi Takayanagi

Executive Officer
 Vice President of Social Infrastructure & Offshore Facilities Business Area

Yoshinori Komiya

Executive Officer
 Vice President of Resources, Energy & Environment Business Area

Messages from Outside Officers



Outside Director
Kazuhiko Ishimura
 Director and Chairman, AGC Inc.
 Outside Director, TDK Corporation
 Outside Director,
 Nomura Holdings, Inc.



Outside Director
Yayoi Tanaka
 Representative of Social Governance
 Research Institute
 Outside Director,
 SUMITOMO CORPORATION



Outside Audit & Supervisory
 Board Member
Tomomi Yatsu
 Partner, TMI Associates
 Attorney at law
 Certified public accountant
 Outside Audit & Supervisory Board
 Member, Yamaha Motor Co., Ltd.
 Outside Executive Director,
 SMBC Nikko Securities Inc.



The IHI Group should make its working climate even more conducive to fostering the talents of its people, who are its strength

Kazuhiko Ishimura

Outside Director

Message

I believe that it is management's mission to fulfil corporate social responsibilities to stakeholders. I accordingly became involved in business management to thus help enhance corporate value.

Overseas revenues account for 75% of consolidated net sales at AGC Inc., where I am chairman. As an outside director of IHI, I can leverage my international corporate management experience to help the Company globalize and advise on commensurately strengthening management to improve the Company's corporate value.

IHI's greatest strength is its combination of people and technology to pursue the creation of products that resolve social issues. The Company has long prized and invested in human resources, and in stepping up business concentration and selection it will be crucial to better assess the suitability of people and provide assignments in which they can shine. I also think it important to set up a fairer evaluation system.

We are contributing to the environment with our highly efficient technology for coal-fired power plant boilers. I chair the Japan Association of Corporate Executives' Environment, Natural Resources and Energy Committee, which assesses the role of coal in optimizing the energy mix with a range of resources. India and other emerging economies with strong energy demand levels will continue to need coal. So, for the foreseeable future IHI's highly efficient high-efficiency technology should play a significant role in lowering environmental impact in such nations.

IHI is formulating its next medium-term management plan this fiscal year. Management should ideally do more to incorporate concentration and selection into its plans for and beyond fiscal 2019 so it can better deploy human resources. I will extensively present my views from the perspectives of external stakeholders on optimizing IHI's overall business portfolio.

Outside directors take part in the decision making of the Board of Directors and provide independent advice to the Company's management team, which is responsible for business execution. Management audits reflect the outstanding expertise, experience, and independence of outside audit & supervisory board members.

These outside directors and audit & supervisory board members extensively assist and advise the Compensation Advisory Committee and the Nomination Advisory Committee.

The IHI Group's management aims to strengthen corporate governance by drawing on the views of these individuals.

Composition of corporate governance entities

Entity	Inside Officers	Outside Officers
Board of Directors	8	4
Audit & Supervisory Board	2	3
Compensation Advisory Committee	2	4
Nomination Advisory Committee	1	4

Inside Directors Outside Directors
 Inside Audit & Supervisory Board Members Outside Audit & Supervisory Board Members



Increasing social and corporate value through diversity management

Yayoi Tanaka
Outside Director

Message

One of my roles as an outside director for IHI is to draw on my experience in assessing and studying nonprofit organizations to present my independent views on how such entities should function. Corporate performances go beyond financials to encompass elements that are more qualitative than quantitative, examples being measuring social trust and employee motivation levels. Non-financial activities buttressing business efforts are pivotal to sustainable corporate growth. Such activities are increasingly a social demand, which is why the Japan Business Federation, commonly called Keidanren in Japan, reviewed its Charter of Corporate Behavior to encourage members to deliver on SDGs. In my view, we can help boost corporate value by determining whether the Company's organizational governance properly factors in non-financial activities.

Today, the focus of diversity is on fostering the workplace success of women, and the Japanese government has accordingly set targets for the proportion of managerial positions held by women. Female account for around 15% of IHI's workforce, so reaching the targets will be challenging. That said, IHI is very aware of this, and is providing more vehicles for women to study and engage in workplaces. I also want to increase communication opportunities at worksites and contribute to greater diversity.

I believe that IHI's employees are very earnest and proud and passionate about technology. On the downside, I do not think they are always sufficiently aware of the contributions of their products and services to society. I look forward to disseminating internally and externally.

We will actively disseminate to the inside and outside of the company the social commitments that are built into IHI's product and business and how they help resolve social issues.



Minimizing project risks by communicating attentively with business sites

Tomomi Yatsu
Outside Audit & Supervisory Board Member

Message

My role as an outside Audit & Supervisory Board member is to assess implementation by directors from independent perspectives and offer suitable advice from the stances of attorneys and certified public accountants. One recent focus for the IHI Group has been to focus on reinforcing risk management, and I extensively share my risk management views from legal and accounting standpoints through board meetings and other channels. The scale of IHI's operations is massive, and over its long history Company has contributed to the Japanese economy's growth by propelling it forward. The technological clout that IHI has demonstrated in manufacturing is a tremendous strength for the Company. By the same token, IHI undertakes projects entailing large risks that can lead to significant losses. It is paramount for all business units to pay due diligence before starting projects to minimize risks and for the Company to comprehensively manage risks once projects begin. So, close communication between work sites, administrative and management units is essential. Outside Audit & Supervisory Board members engage in frequent discussions with internal auditors to project management units to be able to point out risks and conduct four site audits every year, including overseas.

Bolstering profitability is a key to enhancing IHI's corporate value, and efforts are under way to build a structure to manage risks and produce consistent earnings. IHI will have to expand globally to generate growth in the years ahead. It will accordingly need to step up risk management, including at foreign subsidiaries and affiliates, and reinforce governance. The Group has around 150 subsidiaries and affiliates overseas. I consider it vital to push ahead with business selection and concentration in view of the commensurate administrative costs and importance of allocating resources to growth areas.

IHI's corporation governance is functioning well in my judgment, as management decision-making processes are transparent and sufficiently effective. The current Board of Directors already engages in vigorous debate. Still, we external directors seek to hear worksite views and ask questions that insiders would otherwise find hard to pose to contribute to creating an even more open management structure.

Corporate Governance

Corporate governance initiatives

– Ensuring corporate management integrity –

Basic Views

IHI defines corporate governance as a system that assures sustainable growth and maximization of corporate value by enhancing management efficiency so that the Company can leverage its innate capabilities to the fullest extent possible. To achieve this, the Company 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, the Company ensures appropriate operations across the entire Group. The Company 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 for Enhancing Corporate Governance

The company 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 audit & supervisory board members and the Audit & Supervisory Board to enable them to adequately fulfill their management-monitoring and supervisory functions
- ⑤ Conduct constructive dialogues with shareholders whose investment policies accord with the medium-to long-term interests of shareholders

Overview of Corporate Governance Structure

The Company has an Audit & Supervisory Board, which comprises audit & supervisory board members who audit the duties executed by directors.

The Board of Directors, which consists of directors, makes decisions related to all important matters concerning the management of the Company and the Group, in addition to supervising directors in their business execution. The outside directors, who are elected from among individuals with extensive experience and broad insight gained at the helms of management, or with a high degree of specialist knowledge and diverse experience, participate in the Board of Directors' decision-making process, offer advice and make recommendations independently of managers who have been delegated the authority to handle day-to-day operations.

Business Execution Framework

The Company has an executive officer system to strengthen the decision-making and supervisory functions of the Board of Directors, as well as to improve the efficiency of business operations. The executive officers are appointed by resolution of the Board of Directors.

Compensation Advisory Committee

To ensure that directors and audit & supervisory board members are remunerated appropriately, the Company has the Compensation Advisory Committee, a voluntarily established body consisting of six members: three outside directors, one outside audit & supervisory board member, one director in charge of human resources, and one director in charge of finance and accounting. The chair is an outside director.

Nomination Advisory Committee

The Company established a Nomination Advisory Committee to supervise the representative director's nomination of candidates for directors and audit & supervisory board members, checking that such appointments are conducted appropriately and offering related advice. The committee has five members: President and Representative Director, and four outside directors, with the President and Representative Director serving as chair.

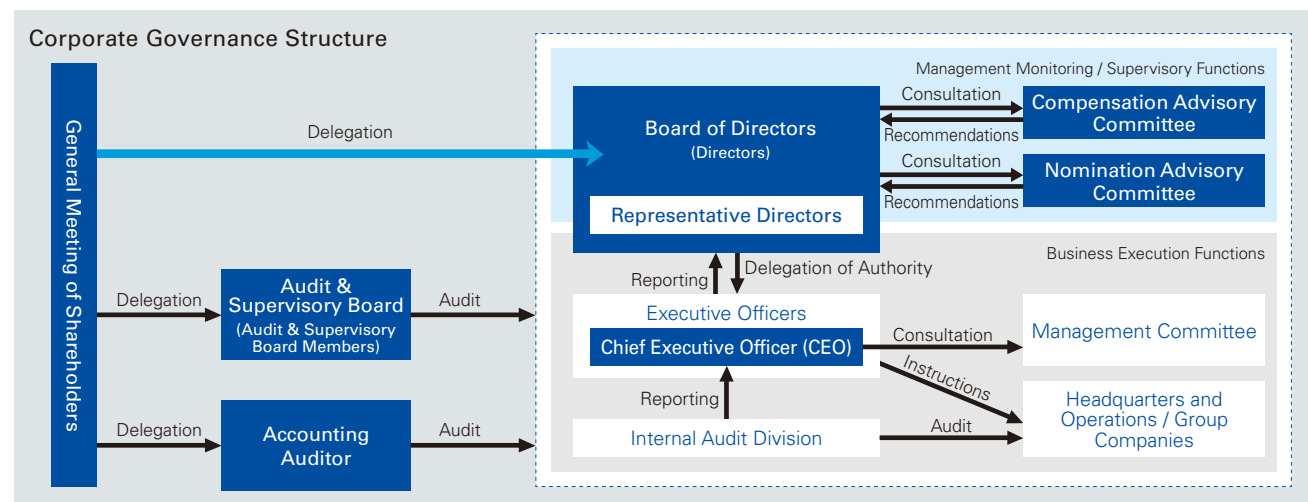
Policies Relating to Appointment of Officers

The Board of Directors decides on ideal attributes for officers and draws up standards of independence for outside directors and outside audit & supervisory board members. These standards are based on the requirements for independent directors/ audit & supervisory board members stipulated by the Tokyo Stock Exchange. The emphasis is to assure that outside directors and outside audit & supervisory board members are genuinely independent. The Board of Directors sets the basic policy of appointing the most appropriate officers according to ideal attributes and independence standards for outside directors and outside audit & supervisory board members*. The aim is to ensure sustainable growth and increased corporate value for the IHI Group over the medium to long term.

* See website for details.

Corporate Governance

<https://www.ihi.co.jp/en/company/policy/governance/>





Evaluating the Board of Directors

IHI has evaluated the Board of Directors since fiscal 2015 to enhance the latter's effectiveness. In fiscal 2017, we reformed the board in light of the assessment for the previous year, and plan to appraise the impact of measures in fiscal 2018.

Board evaluation process

- External consultancy conducts anonymous questionnaire of all directors and audit & supervisory board members. Questionnaire items encompass such areas as the composition and management of the Board of Directors, risk management, and the board culture audit & supervisory board members.
- External consultancy collected and analyzed questionnaire responses.
- All relevant executives interviewed regarding questionnaire and response analysis.
- Members of panel largely comprising outside directors exchanged views.
- Results of above process summarized as board self-evaluation to identify areas for improvement.

Evaluation results Fiscal 2016

- Board summary of areas for improvement in fiscal 2017
- Bolster deliberations about important matters
 - Delegate more authority to business units
 - Streamline board operations

Board reforms Fiscal 2017

Resolved steps for issues identified in board evaluations

- Bolster deliberations about important matters**
 - Deepened discussions about management policies and plans
 - Monitored large construction orders and monitor major investment projects
 - Reviewed approach to executive remuneration and human resources deliberations
 - Employed informal meetings (directors and auditors meeting and outside officer meetings)

Key point

- The board will allocate time saved from delegating authority to business units and streamlining board operations to deliberating more on important matters

- Delegate more authority to business units**
 - Lifted monetary amount criteria for board consultation

Although not covered by monetary criteria, projects incurring great risks are determined through business unit resolutions or board deliberations as reporting matters. Such projects include those for new businesses and other areas not envisaged in initial plans or those with great significance for business strategies.

- Streamline board operations**
 - Dramatically reduced business unit proposals and explanation times

Future initiatives Fiscal 2018

- Started operations from April 2018 under new appointment standards
- Bolster deliberations on important matters to drive improvements
- Will reassess effectiveness in fiscal 2018 to evaluate reform results

Governance improvement milestones

- 2003** Reformed Board of Directors and introduced executive officer system
Increased number of outside audit & supervisory board members from two, to three
- 2007** Established Compensation Advisory committee
- 2008** Doubled number of outside directors to two
- 2008** Halved director terms to one year
- 2013** Notified Tokyo Stock Exchange that all outside directors and outside audit & supervisory board members are independent officers
- May 2015** Revised basic approach to corporate governance and formulated basic policy

June 2015
Increased number of outside directors from two, to three
Strengthened executive appointments (including by establishing Nomination Advisory Committee)

Made outside members a majority on Compensation Advisory Committee

- August 2015** Board determined approach to Japan's Corporate Governance Code

January 2016 Board assessments launched

June 2016
Reduced number of directors from 15, to 13

June 2017
Number of outside directors increased from three, to four
Performance-based bonuses and stock compensation program introduced in keeping with new benchmarks (completed review of executive compensation system)

June 2018
Lowered number of directors from 14, to 12, with outside directors constituting one-third of the board

Corporate Governance

Policies and procedures in determining officer remuneration

Basic Policies

We will ensure the sustainable growth of the parent and Group and enhance corporate value over the medium and long terms by encouraging directors and executive officers to do their best in line with our management philosophy, Group vision, and Group management policies and motivate them to reach specific business targets. We will accordingly augment fixed remuneration with performance-based stock compensation and bonuses.

* See website for details.

Corporate Governance

<https://www.ihl.co.jp/en/company/policy/governance/>

Procedures for determining remuneration

To ensure appropriateness and objectivity in determining the director and executive officer remuneration, the Compensation Advisory Committee shall examine and report on remuneration related to these individuals. The Board of Directors shall make final decisions.

Remuneration of outside directors and audit & supervisory board members

Remuneration for outside directors shall consist only of base amounts reflecting duties. Remuneration for audit & supervisory board members shall consist only of base amounts as compensation for auditing IHI Group operations. Amount shall be determined through discussions among the audit & supervisory board members.

Details of director and audit & supervisory board members remuneration in fiscal 2017

(Millions of yen)

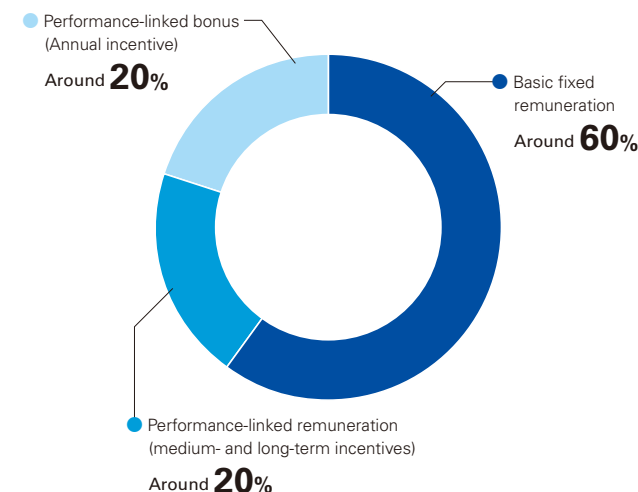
Category	Number of people remunerated	Total remuneration by type			Total remuneration
		Basic remuneration	Performance-linked stock remuneration	Performance-linked bonuses	
Directors	17	523	135	124	784
Audit & Supervisory Board Members	7	108	-	-	108
Total	24 (9)	631 (81)	135 (-)	124 (-)	892 (81)

Note: Annual remuneration for directors is capped at 1,090 million yen, while the maximum corporate auditors is 120 million yen.

Framework of incentive remuneration and remuneration ratios

Remuneration types	Remuneration details	Key performance indicators	Review of key performance indicators	Fixed/variable	Compensation form
Performance-linked stock remuneration (medium- and long-term incentives)	Assuming a performance target of 100, compensation to vary between 0 and 150 in line with performance. Performances to be assessed over three next fiscal years, with targets for the final year being set in the initial year assessed	Consolidated return on invested capital, a key target of Group Management Policies 2016	Consider changing in light of review of Group Management Policies	Variable	Stock and cash
Performance-linked bonus (annual incentives)	Assuming a performance target of 100, compensation to vary between 0 and 200 in line with performance.	<ul style="list-style-type: none"> Consolidated profit attributable to owners of the parent company to ensure shared interests with shareholders Profitability emphasized under Group Management Policies 2016 (consolidated and business area operating margins) Individual assessment indicators for the missions of individuals 	Review according to business climate changes and individual roles	Variable	Cash

Image of remuneration composition of directors (internal) and executive officers



Compliance Initiatives

– Serving as a Good Corporate Citizen –

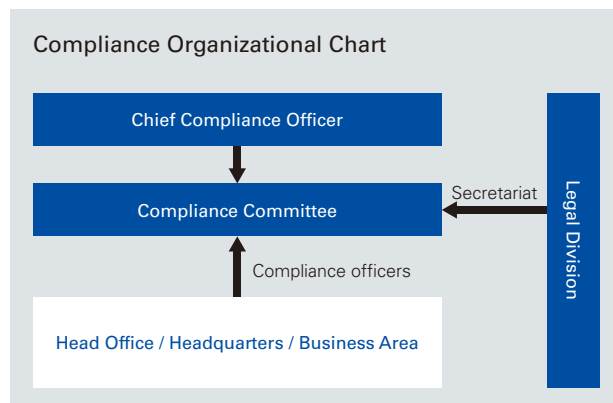
Basic Policies

Compliance helps form the foundation for corporate activities. The following conduct is specified in the Basic Code of Conduct for the IHI Group.

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

System for Implementing Compliance Activities

We established the Compliance Committee as a companywide entity that meets quarterly. The chief compliance officer chairs the committee, which deliberates and formulates important compliance policies and undertakes activities.



Compliance Education

IHI conducts multifaceted training and education to improve compliance awareness. Creative approaches are taken to achieve highly effective activities, such as ensuring that training is carefully tailored to the target audience.

■ Officer Training

All IHI officers participate in collective compliance training. In fiscal 2017, an external lecturer provided training on creating an organizational culture that prevents compliance issues and fosters positive work environments.

■ Training for Line Management

IHI holds training for line managers who instruct their subordinates on a daily basis. In fiscal 2017, we considered keys to preventing compliance violations, the importance of fostering a corporate culture that heightens occupational self-esteem, and future management guidelines.

■ e-Learning

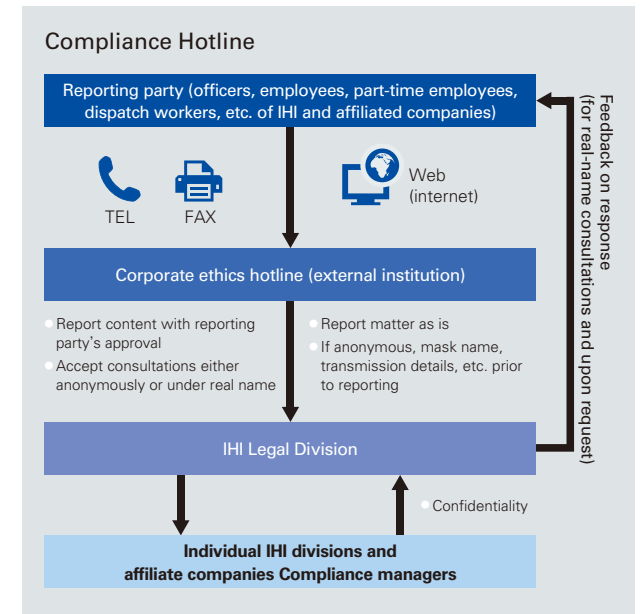
Compliance education is provided to employees in the form of e-learning based on set themes. The fiscal 2017 theme was Lesson learned from bid rigging cases, and education based on this theme was provided to IHI companies worldwide.

Compliance training results (fiscal 2017)

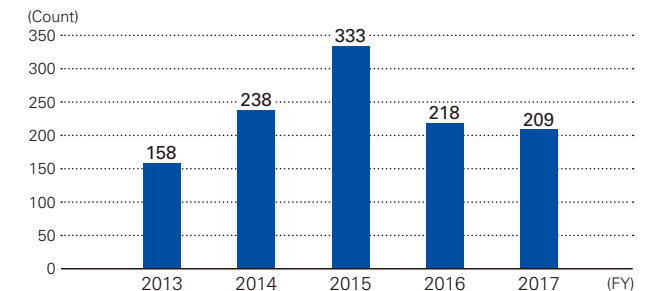
Target	Participants
IHI Corporation executives	50
IHI group line managers	83
e-Learning participants in Japan	18,020
e-learning participants overseas	1,261

Compliance Hotline

IHI's Compliance Hotline facilitates reporting of possible illegal, unethical or improper conduct and to facilitate prompt corporate responses to remedy such actions. The hotline extended beyond Japan to encompass the United States in fiscal 2017. It received 209 calls during the year.



Compliance Hotline reports



Corporate Governance

Approach to Risk Management – For Sustainable Development –

Basic Policies for Risk Management

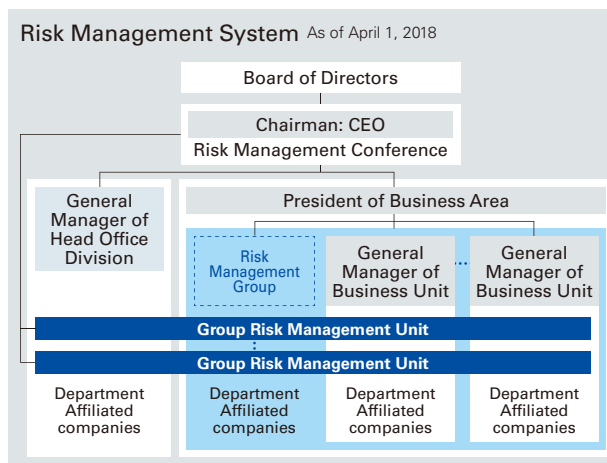
Risk management is a top priority for the IHI Group, which strives to reinforce its overall capabilities in that regard. We constantly identify, analyze, and evaluate risks to ensure business continuity, maintain the safety of executives, employees and their families, protect operational resources, and ensure social credibility.

Risk Management System

We established the Risk Management Conference under the leadership of the CEO. The Conference assesses key general risk management matters, and considers policies, annual plans, corrective measures, and other important matters.

We formulated the IHI Group Key Risk Management Policies. All parent units and Group companies in Japan and abroad independently pursue risk management in keeping with those policies.

Regarding commonly existing risks in the IHI Group, the Group Risk Management Units, which comprise parent divisions, take responsibility for supporting each group units, as well as monitoring the implementation of the rules and developing effective risk management measures. The Internal Audit Division assesses Group risk management structure deployments and progress to ensure their suitability.



Key Policies for Risk Management in FY2018

The earnings forecasts of IHI group were revised downward in fiscal 2017 due to deteriorations of affiliate performances. Furthermore, the Group was unable to achieve zero accident for the year. We will thus prioritize the following initiatives in fiscal 2018.

- 1 Enhance safety management
- 2 Shift to robust project implementation and risk management system
- 3 Reform quality and operational systems
- 4 Improve productivity and eliminate long working hours by reforming work practices
- 5 Respond to changes in business and competitive environment
- 6 Ensure appropriateness of large-scale investments
- 7 Respond to risks in execution of global strategies
- 8 Strengthen compliance
- 9 Prevent leaks in trade secrets, personal information and key technologies
- 10 Ensure information security
- 11 Comply with environmental laws and regulations, and undertake environmental management
- 12 Prevent disasters and accidents
- 13 Maintain and enhance stakeholder trust

- 14 Promote diversity
- 15 Prevent harassment
- 16 Promote human rights education and awareness activities

Topics

Reform quality and operational systems

One priority under Group Management Policies 2016 is to reform our quality and business systems to reinforce our manufacturing capabilities. Our efforts in this respect include reviewing engineering, production, and other business systems while accordingly rebuilding our quality management systems and strengthening our framework for guaranteeing the quality of our products and services.

Initiatives include educating engineers and technicians about quality, and enlightening directors, managers, and employees about compliance. As well as informing about quality, we provide opportunities to better understand customer needs and the importance of complying with relevant legislation and regulations, fostering a corporate culture that is conducive to proper business practices. Internal audits have confirmed that our quality management system is functioning properly. We aim to involve people outside the Audit & Supervisory Board in such checks to enhance monitoring.

In November 2017, we conducted an internal survey about quality, confirming the results of our initiatives in that regard.

We will continue to improve our quality assurance process ensuring close engagement with customers and workplaces.

CSR Management Initiatives

– Creating More Sustainable Societies –

Basic Policies

IHI believes that meeting society's expectations is one of its basic corporate social responsibilities (CSR). In accordance with this belief, the Company's Basic Code of Conduct compiles the necessary practices IHI is obliged to carry out. A guide to the Basic Code of Conduct has been translated into 18 languages other than Japanese to ensure that all IHI employees understand and follow these practices in their work. The United Nations adopted SDGs in 2015. We believe that society expects us to help attain these goals. We will contribute to these SDGs through business and materialize social sustainability.



Identifying key challenges

With social challenges and disclosure demands diversifying, we tasked each business unit to identify key challenges, based on which we determined 14 themes. We will formulate specific action goals, with the Group undertaking concerted environmental, social, and governance management initiatives and disclosure measures.

Pursuing key challenges to underpin operations [Themes]

Environment – Reduce environmental impact –

- Climate change
- Circular economy
- Environmental protection

Society – Materialize an affluent society –

- Customer relationship management
- Supply chain management
- Corporate citizenship
- Diverse human resources
- Labor practices
- Human rights

Governance – Principled corporate management –

- Corporate governance
- Compliance
- Information security
- Timely and proper disclosure
- Risk management

Pick up Social Contributions

We will determine five social activity themes and undertake various initiatives to meet social expectations.

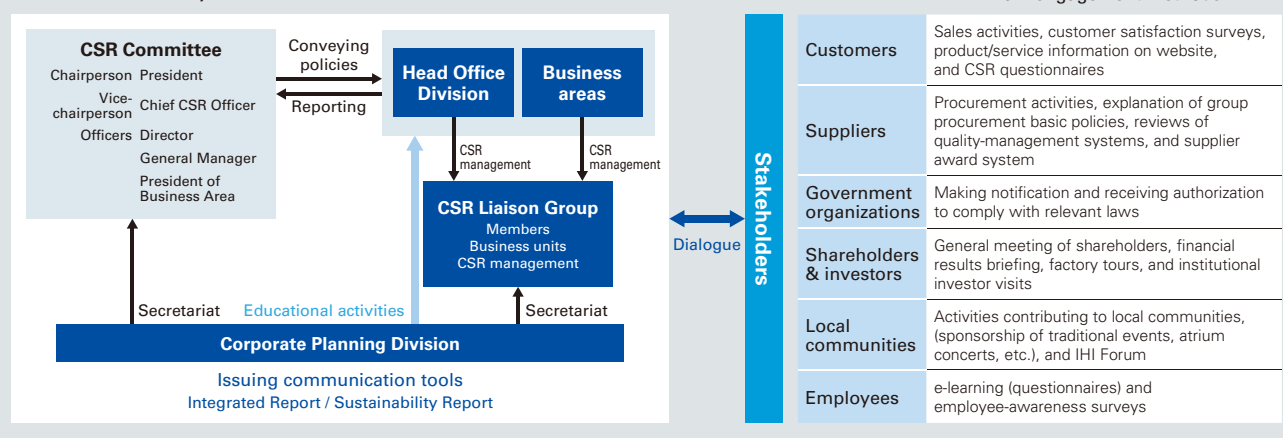
Five key themes

- Nurturing future generations
- Promoting precision-manufacturing and scientific technologies
- Resolving problems in local communities
- Supporting environmental sustainability
- Providing access to medical care, food, and water

Results of FY2017 initiatives

- Total spending on social contributions: 330 million yen
- Major initiatives
 - Sponsorship of activities by the United Nations World Food Program (WFP)
 - Development of training programs for next-generation development
 - Sponsorship of events in business localities

CSR Promotion System



Environment

Environmental initiatives – Creating More Sustainable Societies –

Basic Policies

Our lives and business activities could not function without a diverse environment and natural resources. The IHI Group undertakes environmental initiatives because it recognizes the importance of reducing environmental impact and creating more sustainable societies.

Our business encompasses such social infrastructure as plant facilities and bridges, increasing the social impact of our activities. We will endeavor to lower our overall ecological impact on communities by offering customers products and services that are more environmentally friendly and by streamlining our own operations.

Materializing Environmental Management

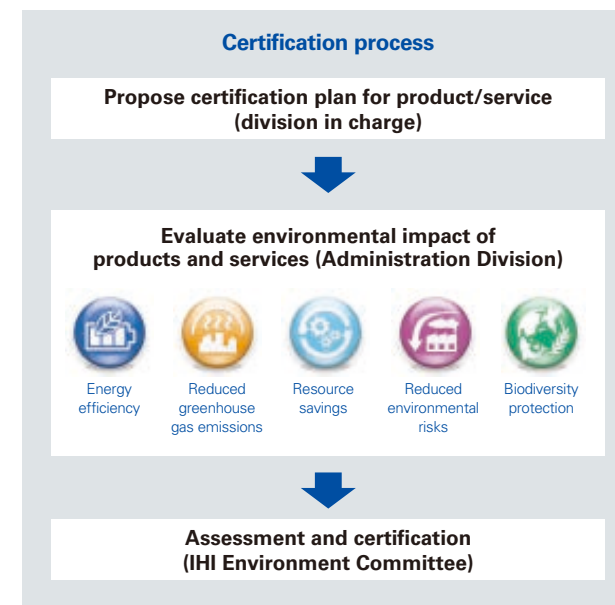
We formulated IHI Group Environmental Vision 2013 in fiscal 2013. The vision established three core eco strategies through fiscal 2018. These are to reduce the environmental impact of our products and services, lower the environmental impact of our operations, and strengthen environmental management. We seek to realize this vision by formulating three-year activity plans through the IHI Environment Committee, which the chief CSR officer chairs. Business areas and regional environmental committees undertake initiatives in keeping with these plans as part of an ongoing environmental management approach.



Noise-suppression equipment certified as environmentally friendly in fiscal 2017

Environmentally Friendly Products Certification Scheme

Since FY2014, we have implemented the Environmentally Friendly Products Designation Scheme to encourage further reductions of the environmental impact of products and services. Under the scheme, the environmental performance of products and services is evaluated against self-established criteria and those exhibiting particularly outstanding performance are designated “environmentally friendly products.”



In fiscal 2017, three noise and vibration reduction products and services at subsidiary INC Engineering Co., Ltd., were certified as environmentally friendly, increasing the number of such offerings to 18. We will endeavor to secure more certifications in the years ahead. See the following website for details about certified products.

Environmentally friendly products website

<https://www.ihico.jp/csr/english/environmental/environmental03.html>

Educating about the environment

The IHI Group maintains tiers of companywide educational programs, educates about the environment at sites acquiring ISO 14000 certification, and undertakes collective training to enhance specialist knowledge among key people in environmental activities.

In August 2017, each business site conducted collective training on energy conservation for 52 energy and environmental managers from IHI and 10 Group companies. The training encompassed lectures from external energy conservation experts and group discussions in which participants shared issues and developed initiatives.

One month later, we conducted waste collection training to ensure proper processing of production byproducts. We instituted practical exercises about sharing information and waste treatment sites with regard to the revised Waste Management and Public Cleansing Act to deepen the practical knowledge of participants. We will continue to enhance environmental efforts through training and other educational activities.



Collective training on energy conservation

Environmental Communication

In December 2017, we took part in EcoPro 2017, an international environmental and energy exhibition that is the largest such event in Japan. For prospective science experts attending this gathering, we used simple explanations to showcase products and services that help stabilize energy supplies. We received considerable encouragement from its roughly 6,000 visitors.

June is Environment Month for the IHI Group. It is during this time that we conduct environmental quizzes and disseminate in-house news to increase employee awareness of environmental issues. In fiscal 2017, 5,072 employees took part in quizzes.

In the years ahead, we will engage extensively with stakeholders and harness such efforts in environmental management.



Explaining the importance of a suitable energy mix to young students

Topics

Toyosu Energy Service retains Tokyo Metropolitan Government certification for office excellence

Subsidiary Toyosu Energy Service Co., Ltd., provides steam and cold water to the Toyosu IHI Building and the Shibaura Institute of Technology campus. It also supplies electricity to the Toyosu IHI Building. A cogeneration system in the basement of that facility is equipped with IHI gas turbines and exhaust heat recovery boilers. This setup generates power efficiently by harnessing surplus steam.

It is in recognition of this setup that the Bureau of Environment Tokyo Metropolitan Government certified Toyosu Energy Service for outstanding efforts as a Near-Top-Level facility to tackle global warming. This was the second time that the subsidiary received such recognition, the first being in 2011. The company will continue tackling global warming by further enhancing operational efficiency to stabilize regional energy supplies.



Toyosu Energy Service energy supply facility and Near-Top-Level facility certification

Supply Chain Management

Supply Chain Management Initiatives – Collaborating with Suppliers –

Basic Policies

IHI's Group Procurement Policy is based on three core principles — fair and impartial procurement, mutually beneficial partnerships with business partners and satisfying compliance and societal needs.

The procurement of materials or equipment involves not only compliance with legal requirements but also consideration of human rights, the environment and conflict minerals¹. In addition to education for employees, IHI also satisfies societal demands by educating suppliers for beneficial coexistence and co-prosperity.

Considering that IHI conducts business on a global scale, strategically sound supply chains are a vital part of the effort to achieve medium-terms goals. Under the current three-year business plan, IHI is focusing on three main activities.

Note 1: Minerals from conflict regions that, if purchased, sometimes result inadvertently in funding armed insurgents or fueling regional disputes.

IHI Group Procurement Policy

1 Fair and impartial procurement

IHI provides business opportunities in an open manner to business partners around the world, aiming to work with creative and competitive partners. Partners are evaluated and selected in a fair and comprehensive manner based on factors such as quality, price, delivery schedule, technology and financial conditions.

2 Mutually beneficial partnerships

IHI regards partners as value creators. To secure optimal quality, prices and deliveries as well as reliable procurements, the company aims to establish relationships of trust with partners for mutual competitiveness and prosperity.

3 Satisfying compliance and societal needs

IHI complies with all laws that govern its local and global businesses. IHI procurements give priority to consideration for the environment, human rights, labor conditions, occupational safety and health, and information management.

Building an optimal procurement network

IHI has established Product-Specific Expert Councils to strengthen groupwide procurement capabilities. Council members endeavor to build optimal procurement

networks for the Group by reviewing product specifications and suppliers in collaboration with business areas. These efforts cover key items common to the entire Group, including steel and electrical products.

In fiscal 2018, we established a council to focus on the transportation of parts between factories and product deliveries to customers. We seek to streamline logistics and reduce environmental impact and transportation expenses, notably in terms of selecting packaging and packaging materials and assessing transportation modes and routes.

Topics

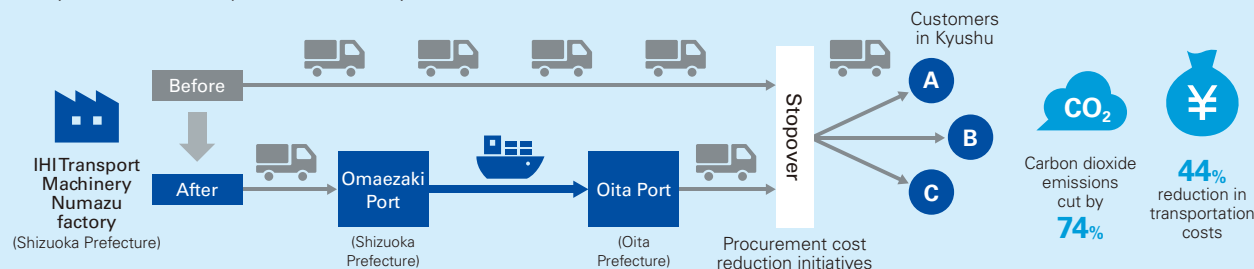
From land to sea: Expanding modal shifts

IHI Transport Machinery Co., Ltd.'s multi-storey parking systems are installed in many commercial buildings and condominium complexes. The systems are shipped by numerous four-metric-ton trucks because installation sites are so narrow. To ship to remote locations, the company has switched to marine transportation in which it is more feasible to reduce carbon dioxide emissions and logistics costs. In fiscal 2017, the company deployed that approach for Kyushu. Compared with transportation modes to date, the company succeeded in reducing carbon dioxide emission by 74% and transportation cost by 44%.



Transport route (Shizuoka to Oita)

Elevator parking at IHI Transport Machinery



Efforts to Reduce Procurement Costs

IHI holds once-annual Procurement Cost-reduction Case Study Presentations for the promotion of Group efforts to reduce procurement costs and share best practices. The presentations introduce outstanding internal examples of improving and standardizing procurement specifications, improving competitiveness by shifting to global multisourcing² and concentrated purchasing. At a presentation held in March 2018, 9 of the 90 case

studies were deemed outstanding and were therefore specially commended and then shared within the Group.

Note 2: Framework for selecting optimal suppliers worldwide

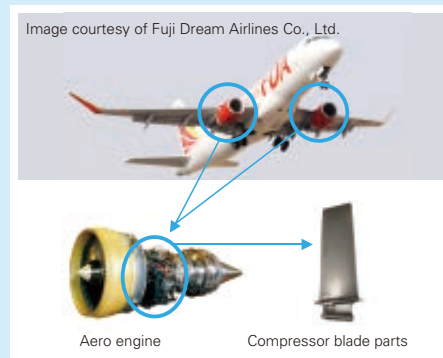
Overseas Procurement Network



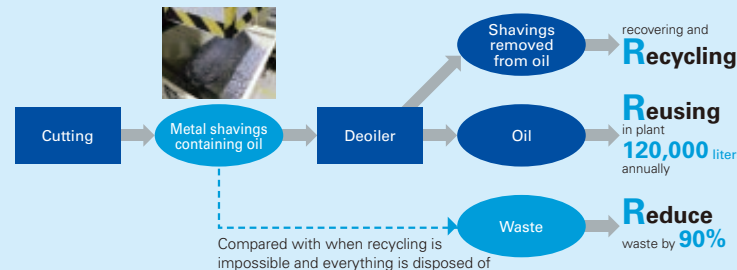
Topics

Materializing 3Rs in aero-engine parts production

IHI Aero Manufacturing Co., Ltd., uses cutting technology to produce a range of parts. The company is endeavoring to reuse cutting oil when processing parts. Metal machining processes employ a lot of oil. Traditionally, the company shipped out oil incorporating metal shavings for recycling. Facilities to perform such separation were installed to enable the repeated use of oil. The company can thus recycle the shavings, reuse oil, and reduce waste. It is expected to save around ¥20 million annually by decreasing oil purchases and waste disposal. The company plans to roll out this approach throughout its plant to further shrink its environmental footprint and procurement costs.



Examples of parts made by IHI Aero Manufacturing



Topics

Recognizing supplier excellence

The IHI Group recognizes excellence among suppliers and endeavors to strengthen collaboration with them. In January 2017, we bestowed an excellence award to OSR Vietnam Joint Stock Company. Since its establishment in 2013, OSR has supplied a range of products to IHI Group companies, centering on steel frames and ducts for generator boilers. Our award expressed gratitude to that partner for maintaining reliable deliveries and high product quality.



Award ceremony at OSR headquarters
OSR Vietnam Joint Stock Company

Human Resources

Human resource management initiatives

- With employees -

Basic Policies

We manage our people in keeping with our corporate philosophy of “human resources are our single most valuable asset.” We endeavor to maximize the potential of our employees and enhance their skills by providing training programs, positive work environments, and reforming the corporate culture.

Our Group Human Resource Management Policy emphasizes such key concepts as group, global, and diversity in hiring, assigning, training, and evaluating employees.

■ Group

Optimally assigning people and providing collective Group training in keeping with our management and business strategies

■ Global

Fostering global human resources by providing language and intercultural communication education and cultivating local managers at overseas sites

■ Diversity

Actively employing women, foreign nationals, people with handicaps, and the elderly, setting up in-house nurseries, and holding diversity seminars

Group Human Resource Management Policy

In line with IHI’s management principles and Group vision, IHI Group aim to create customer value through using engineering expertise to focus on Monozukuri technology by the following:

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

Ideal Human Resources

Integrity and Trust

For Customers and Society

Innovation and Creation

Teamwork

World-class Professional

Keywords

Group

Global

Diversity

IHI Group education and training system

	Managerial training	Training by level and position	Open lectures	Global human resources education	Professional training	Diversity
Executives	Executive managerial training Executive Training				Production management training Education by job category and department (at affiliates)	Female managerial and assistant manager training
Management	Special training for affiliates Special position level-based training	Overseas study (MBAs and liberal arts)	Management skills	Language and cross-cultural skills Training at overseas sites Intensive training in India	Introductory production management training Engineering professional training	Personnel exchanges across industries
Workplace leaders		Training by position and job category	Business and other skills			
Mid-ranked personnel						
Young employees						

■ Selected courses ■ Position and job category education ■ Elective courses

Promoting diversity Creating diverse workplaces

Diversity is integral to our corporate management strategies.

We aim to create workplaces in which individuals with diverse values can reach their potential and foster a corporate culture that brings together diverse ideas and generates opportunities for creativity and innovation.

November is Diversity Month for the IHI Group. In fiscal 2017, we shared best practices and held diversity seminars and workshops. We made wheelchair-accessible restrooms at each business site open to all users based on universal design, and we building work environments that fully accept sexual minorities and are friendlier to people with disabilities.



Universally accessible restroom sign



Diversity seminar workshop

Strengthening support for balancing work and parenting commitments Establishing two in-house nurseries

We have rolled out various programs that exceed legal requirements to help employees balance their professional and provide commitments.

In fiscal 2017, we set up two in-house nurseries for the families of Group employees to ease returns from childcare leave. These facilities at business sites in Soma, Fukushima Prefecture, and our Mizuho Works in Tokyo foster healthy growth for children, and feature many indoor plants to make them feel more comfortable.

Feedback from employees entrusting their young ones to these nurseries has been very positive. Some have noted the safety aspect while others highlight the time savings in dropping children off and picking them up. Such advantages have made it easier for employees to enhance their work-life balance.



☆KIDS Soma nursery in Fukushima Prefecture

Acquiring certifications for excellence in women's workplace participation and occupational health management

In fiscal 2017, we secured recognition in two key respects for our efforts materialize work environments in which employees can reach their full potential.

■ Receiving Eruboshi Certification for Excellence based on the legislation to promote the interests of women in the workplace

In keeping with the Act on Promotion of Women's Participation and Advancement in the Workplace, which was enacted in 2016, the Ministry of Health, Labour and Welfare maintains three categories of corporate excellence in fostering the interests of female employees. IHI obtained recognition in the second Eruboshi certification class for passing four of five assessment criteria, notably for recruitment, work hours, managerial ratios, and career courses.

■ Health & Productivity Companies 2018 (White 500)

The Ministry of Economy, Trade and Industry and the Nippon Kenko Kaigi (Japan Health Council) maintain the White 500 program to recognize excellence in strategic corporate healthcare management. In keeping with the IHI Group Health Management Declaration, we collaborate with health insurance associations foster the wellbeing of employees and their families. In fiscal 2017, five IHI Group companies received White 500 certification. They were the parent, IHI Scube Co., Ltd., IHI Plant Construction Co., Ltd., Niigata Power Systems Co., Ltd., and IHI Jet Service Co., Ltd.



Eruboshi certification mark



Health & Productivity Companies 2018 certification mark

Financial Summary

FY	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Key financial highlights (billions of yen)											
Orders received	1,556.5	1,176.7	970.4	1,200.9	1,269.6	1,225.6	1,458.9	1,664.3	1,605.3	1,389.8	1,505.0
Sales	1,350.5	1,388.0	1,242.7	1,187.2	1,221.8	1,256.0	1,304.0	1,455.8	1,539.3	1,486.3	1,590.3
Operating income	▲ 16.8	25.6	47.1	61.3	43.3	42.1	53.2	63.2	22.0	47.3	72.2
Share of profit of entities accounted for using equity method	0.1	0.7	0.4	0.3	0.6	4.3	5.3	▲ 1.7	1.1	▲ 3.5	▲ 33.0
Net non-operating income	▲ 14.0	▲ 12.1	▲ 14.1	▲ 9.9	▲ 1.6	▲ 5.9	0.0	▲ 6.7	▲ 12.3	▲ 25.3	▲ 50.8
Ordinary income	▲ 30.8	13.5	33.0	51.4	41.7	36.2	53.2	56.5	9.7	22.0	21.4
Profit attributable to owners of parent	25.1	▲ 7.4	17.3	29.7	23.8	33.3	33.1	9.0	1.5	5.2	8.2
Depreciation	31.8	36.1	38.2	38.2	41.1	41.7	40.4	43.2	46.7	46.6	44.8
Investment in plant and equipment	39.1	45.2	37.5	86.3	53.5	55.0	54.5	63.9	50.8	52.7	59.2
R&D expenses	24.1	24.7	25.5	29.2	30.0	30.2	33.5	37.0	41.6	35.5	38.6
Total assets	1,542.2	1,489.3	1,412.4	1,361.4	1,338.1	1,364.2	1,496.3	1,690.8	1,715.0	1,692.8	1,633.6
Interest-bearing debt	367.9	427.1	432.0	373.3	345.2	353.8	357.8	410.6	374.5	371.9	322.2
Net assets	234.4	205.9	227.0	253.6	258.4	299.2	362.5	359.5	333.3	337.6	350.2
Employees	23,722	24,348	24,890	26,035	26,915	26,618	27,562	28,533	29,494	29,659	29,706
Per share data (yen)											
Profit attributable to owners of parent per share ¹	172	▲ 51	119	203	163	228	225	59	10	34	54
Book value per share ²	1,500	1,310	1,447	1,623	1,708	1,971	2,237	2,240	2,062	2,060	2,103
Annual dividends per share	40	0	20	30	40	50	60	60	30	0	60
Sales by region (billions of yen)											
North America	173.1	157.6	139.2	126.1	125.8	147.3	213.0	271.5	336.6	320.2	351.3
Europe	78.4	90.4	70.3	90.8	99.4	93.0	152.2	171.0	139.9	116.1	132.6
Asia and other	325.9	358.6	315.1	295.1	295.8	245.7	253.2	315.3	320.2	320.8	323.9
Japan	773.1	781.4	718.1	675.2	700.8	769.7	685.5	697.8	742.4	728.9	782.3
Sales by business segment (billions of yen)											
Resources, Energy & Environment	-	-	-	306.4	312.3	321.5	344.0	415.3	452.4	427.3	490.4
Social Infrastructure & Offshore Facilities	-	-	-	122.4	114.7	117.8	150.3	188.6	168.1	157.7	154.5
Industrial Systems & General- Purpose Machinery	-	-	-	282.2	318.7	382.5	397.8	411.7	404.7	411.6	459.0
Aero Engine, Space & Defense	-	-	-	273.7	299.4	338.4	406.0	434.8	500.2	471.9	463.7
Financial index (%)											
Percentage of overseas sales	42.8	43.7	42.2	43.1	42.6	38.7	47.4	52.1	51.8	51.0	51.0
Operating margin	▲ 1.2	1.9	3.8	5.2	3.5	3.4	4.1	4.3	1.4	3.2	4.5
ROE (return on equity) ³	11.7	▲ 3.6	8.6	13.2	9.8	12.4	10.5	2.6	0.5	1.6	2.6
ROA (return on assets) ⁴	1.6	▲ 0.5	1.2	2.1	1.8	2.5	2.3	0.6	0.1	0.3	0.5
ROIC (return on invested capital) ⁵	▲ 1.2	3.0	4.8	6.2	4.6	4.5	5.3	5.8	2.3	5.0	7.7
Debt-to-equity ratio (times) ⁶	1.57	2.07	1.90	1.47	1.34	1.18	0.99	1.14	1.12	1.10	0.92
Equity to total assets	14.3	12.9	15.0	17.5	18.7	21.1	23.1	20.5	18.6	18.8	19.9

FY	FY2007	FY2008	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Balance sheet-related information (billions of yen)											
Current assets	1,082.6	1,036.4	941.7	853.4	844.3	814.7	901.2	1,053.7	1,100.5	1,073.8	1,038.1
Non-current assets	459.6	452.9	470.6	508.0	493.7	549.4	595.1	637.1	614.5	618.9	595.4
Total assets	1,542.2	1,489.3	1,412.4	1,361.4	1,338.1	1,364.2	1,496.3	1,690.8	1,715.0	1,692.8	1,633.6
Current liabilities	898.6	898.1	758.1	691.1	689.6	665.4	726.2	795.9	882.7	876.2	811.6
Provision for construction warranties	19.1	20.0	18.7	16.0	15.5	18.9	25.4	36.8	44.3	47.9	53.7
Provision for loss on construction contracts	32.6	29.8	17.0	31.2	29.1	21.5	18.3	28.5	53.2	37.3	27.2
Non-current liabilities	409.2	385.2	427.1	416.6	389.9	399.5	407.5	535.3	498.9	478.9	471.7
Total liabilities	1,307.8	1,283.3	1,185.3	1,107.8	1,079.6	1,064.9	1,133.8	1,331.2	1,381.6	1,355.2	1,283.4
Shareholders' equity	194.6	187.0	204.6	234.6	254.3	282.7	332.2	313.5	305.8	309.9	313.2
Total net assets	234.4	205.9	227.0	253.6	258.4	299.2	362.5	359.5	333.3	337.6	350.2
Total liabilities and net assets	1,542.2	1,489.3	1,412.4	1,361.4	1,338.1	1,364.2	1,496.3	1,690.8	1,715.0	1,692.8	1,633.6
Cash flow statement-related information (billions of yen)											
Cash flows from operating activities	3.3	▲ 17.6	76.7	95.5	24.7	74.3	39.2	63.5	95.3	65.3	99.0
Cash flow from investing activities	46.7	▲ 41.7	▲ 62.7	▲ 77.7	▲ 37.7	▲ 61.0	▲ 62.2	▲ 74.6	▲ 35.5	▲ 28.9	▲ 47.9
Cash flow from financing activities	▲ 48.7	42.8	▲ 1.8	▲ 25.9	▲ 38.5	▲ 3.1	11.3	33.4	▲ 47.5	▲ 21.9	▲ 57.3
Change in interest-bearing debt	▲ 36.6	59.2	4.9	▲ 58.7	▲ 28.1	8.6	4.0	52.8	▲ 36.1	▲ 2.6	▲ 49.7
Free cash flow ⁷	50.1	▲ 59.3	13.9	17.7	▲ 12.9	13.3	▲ 23.0	▲ 11.0	59.8	36.4	51.0

1: Profit attributable to owners of parent ÷ total number of shares outstanding

2: Net assets ÷ total number of shares outstanding


3: Profit attributable to owners of parent ÷ (average of owner's equity at end of previous term and end of current term)

4: Profit attributable to owners of parent ÷ (average of total assets at end of previous term and end of current term)

5: (Operating income + interest and dividend income) after tax ÷ (owner's equity + interest-bearing debt)

6: Interest-bearing debt ÷ net assets

7: Cash flows from operating activities + Cash flow from investing activities

 For more detailed information,
please refer to the website.



Financial <https://www.ihico.jp/en/ir/>
Non-Financial <https://www.ihico.jp/csr/english/>

Non-financial summary

Areas		FY2014	FY2015	FY2016	FY2017	FY2018 Plan	Future objectives
CSR							
Measures	Employee awareness	Raised awareness via e-learning	Ongoing	Ongoing	Deepened understanding of integrated report through e-learning	Improved SDGs awareness through e-learning and other means	Raise awareness of global CSR issues and show individuals how to meet stakeholder expectations, earn trust and raise company value over long-term
Relevant data	Level of employee awareness	89%	90%	92%	90%	Achieve SDG recognition rate exceeding 90%	—
Governance							
Measures	Risk management	Set 14 priority policies	Set 16 priority policies	Set 18 priority policies	Set 16 priority policies	Set 16 priority policies	—
Relevant data	Outside director meeting attendance rate	95%	94%	94%	95.3% (average) (lowest attendance rate was 89%)	85% or greater	85% or greater
	Attendance rates for Board of Directors and Audit & Supervisory Board (added in fiscal 2018)	—	—	—	—	85% or greater	85% or greater
Compliance							
Measures	Compliance training	Conducted compliance and risk management programs	Developed self-esteem program	Ongoing	Ongoing	Ongoing	Act ethically and emphasize sincerity and fairness in compliance with internal, national and international rules, laws, regulations, prescribed practices, internal policies and procedures
	Globalization of compliance systems	Improved compliance systems of IHI and Americas Regional Headquarters Americas	Clarified compliance system for overseas subsidiaries	Conducted e-learning for overseas employees	Began operating hotline in Americas	Began operating hotline in Asia-Pacific	Establish Group-wide global compliance system
Relevant data	Number of legal infringements (guidance)	59	48	60	52	—	—
	Hotline cases	238	333	218	209	—	—
Supply chain							
Measures	Procurement policy awareness	<ul style="list-style-type: none"> Reviewed survey findings Established environmental control guidelines 	Deployed throughout IHI and Group companies worldwide	Reinforced publicity throughout IHI and Group companies worldwide	Ongoing	Ongoing	Expand IHI Group Basic Procurement Policy to major suppliers for enhanced trust, mutual benefit and competitiveness
	Procurement personnel training	<ul style="list-style-type: none"> Ensured procurement compliance, including for management of chemical substances Held procurement seminars for global procurement personnel 	<ul style="list-style-type: none"> Conducted e-learning for procurement personnel Held procurement seminars for global procurement personnel 	<ul style="list-style-type: none"> Conducted e-learning for procurement personnel Held procurement compliance seminars for overseas affiliates 	<ul style="list-style-type: none"> Conduct e-learning for procurement personnel Prepare teaching material for procurement compliance seminars for overseas affiliates and hold seminars (institute in Malaysia) 	<ul style="list-style-type: none"> Conduct e-learning for procurement personnel Conduct procurement compliance courses for overseas procurement sites and affiliates 	Ensure global procurement compliance
Health and safety							
Measures	Reinforcing health and safety management	<ul style="list-style-type: none"> Introduced Occupational Health Dynamics (OHD) assessments Introduced standards for responding to medical checkup results 	<ul style="list-style-type: none"> Established IHI Group Central Safety and Health Committee Provided direction and support for major IHI Group affiliates Enhanced health and safety management overseas Enhanced health management for employees dispatched overseas Selected as Health and Productivity Brand 	<ul style="list-style-type: none"> Provided direction and support to major IHI Group affiliates Expanded Health and Safety Management Assessment to affiliates Enhanced health and safety management overseas Communicated Healthy Management Declaration Chosen for Health & Productivity Stock Selection program 	<ul style="list-style-type: none"> Conduct Group Labor/ Management Patrols, including at affiliates Provide guidance and support for key Group affiliates Adopt systematic disaster analysis techniques within Group Implement health management initiatives Provide support for health treatment and professional life 	<ul style="list-style-type: none"> Strengthen initiatives for priority IHI Group affiliates and plants Development systematic disaster analytical techniques in-house Push ahead with disaster prevention initiatives that uses risk assessments, IT, and other tools Undertake health management and work practice reforms Strengthen collaboration with health insurance association 	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	0.24	0.22	0.27	0.57	Less than 0.2	—
	Number of annual leave days taken	16.02 days	15.92 days	16.5 days	17.63 days	16 days or more	—

Areas	FY2014	FY2015	FY2016	FY2017	FY2018 Plan	Future objectives	
Diversity							
Measures	Gender diversity	<ul style="list-style-type: none"> Promoted awareness of gender diversity Established networks for female personnel Supported women's career ambitions and increased motivation Heightened gender-diversity awareness among males, especially managers and supervisors Identified obstacles to gender diversity 	<ul style="list-style-type: none"> Promoted work-life balance Expanded gender-diversity initiatives throughout Group Improved male awareness of gender diversity Provided ongoing support for networking among females 	Ongoing	Ongoing	Ongoing	
		<ul style="list-style-type: none"> Executive Officer Mizumoto received Award for Cultivating Women Engineers Launched diversity page on website and released messages from top executives 	<ul style="list-style-type: none"> Implemented Diversity Promotion Month (November) Followed up on Group company initiatives Formulated action plan for Women's Advancement Promotion Law Selected as a Nadeshiko Brand 	<ul style="list-style-type: none"> Held group-wide seminar to promote female careers and Diversity Month (November) Prepared daycare centers at company premises (Soma and Musashi) Released numerical targets for FY2020 	<ul style="list-style-type: none"> Held a group-wide seminar to promote participation by women and Diversity Month (November) Open daycare centers on company premises and launch child-raising advisory service Create telecommute system and spouse-relocation-leave system Obtained Eruboshi certification 	<ul style="list-style-type: none"> Held collective lectures on promoting interests of women in workplaces and held Diversity Month initiatives in November Prepared to set up nursery school at Yokohama site and launched babysitting service Instituted measures to encourage male workers to take childcare leave 	Foster inclusive workplaces based on our Corporate Philosophy and IHI Group Vision. Provide greater opportunities for employees to develop and grow.
	Employment opportunities for persons with disabilities	<ul style="list-style-type: none"> Ensured appropriate workplaces and workloads Posted job openings on an employment site 	Participated in joint briefing session hosted by disability-support provider	Established consultation desk	Some business sites set up business support teams to consolidate and outsource work to cater to a wider range of disabilities	Further expand business support teams to consolidate and outsource work within business sites	
	Employment opportunities for seniors	Revised life-planning seminars	Added life-planning seminars at age 50 (existing seminars at age 58)	Raised base wages from age 60 (for selective retirement scheme)	Ongoing	Ongoing	
	Employment opportunities for non-Japanese	Recruited candidates from priority areas (Asia)	Ongoing	Ongoing	<ul style="list-style-type: none"> Ongoing Strengthen acceptance system (enhance instructor training and hold intercultural events) 	<ul style="list-style-type: none"> Ongoing Strengthen acceptance system (enhance training of foreign employees) 	
Female recruitment	College graduates : 32 (14%) Technical: 3	College graduates : 47 (18%) Technical: 3	College graduates : 40 (14%) Technical: 6	College graduates : 35 (14%) Technical: 4	College graduates : 20 (12.7%) Technical: 6	College graduates: 15% or greater of total (Targets: Technical: 10% or greater, Administrative: 35% or greater) Technical: 15 or more in FY2016-2018	
Relevant data	Number of female managers and percentage of employees	51 (1.8%)	60 (2.1%)	66 (2.5%) (as of April 1, 2016)	68 (2.6%) (as of April 1, 2017)	74 (2.8%) (as of April 1, 2018)	3.0% (FY2018) 3.5% (FY2020)
	Female officers	1	1	2 (1 is an outside audit & supervisory board member)	4 (3 are outside officers)	4 (3 are outside officers)	1 or more (FY2018)
	Percentage returning to work after childcare leave	100%	100%	100%	100%	100%	100%
	Employees with disabilities	2.02%	2.17%	2.14%	2.03%	More than 2.2% (FY2019, April)	2.3% (FY2021, March)
	Non-Japanese graduates	11	9	7	8	3 (attained)	—
Environment							
Measures	Environmental management	Established targets for energy consumption, CO ₂ emissions and waste reduction, and monthly monitoring program	Finalized environmental impact collection system	Established Group Environmental Action Plan 2016	Study mid-to-long-term environmental issues	Ongoing	IHI's vision is to make environmental sustainability an integral part of all Group companies by working together with customers and business partners worldwide.
Relevant data	CO ₂ emissions from business activities ¹	346,000 tons	326,000 tons	317,000 tons	330,000 tons	Less than 300,000 tons	Less than 300,000 tons (FY2018)
	Reduced CO ₂ emissions	From 11 products/services	Addressed calculation-method issues	2.5 million tons or greater	2.5 million tons or greater	10 million tons or greater	10 million tons or greater (FY2018)
	Sales ratio of eco-friendly products	Certified: 4	Certified: 10	Certified: 15	Certified: 18	Improve the sales ratio	70% or greater (FY2018)
	CDP climate change	97 A	99 B	Leadership level A-	Management level B	Management level or higher	Management level or higher
	Nikkei Environmental Management Survey (max. 500 points)	411	436	429	431	400 points or higher	400 points or higher

1: Emissions coefficients by electrical power provider were used for calculation of CO₂ emissions from electrical power consumption.

Corporate Data (As of March 31, 2018)

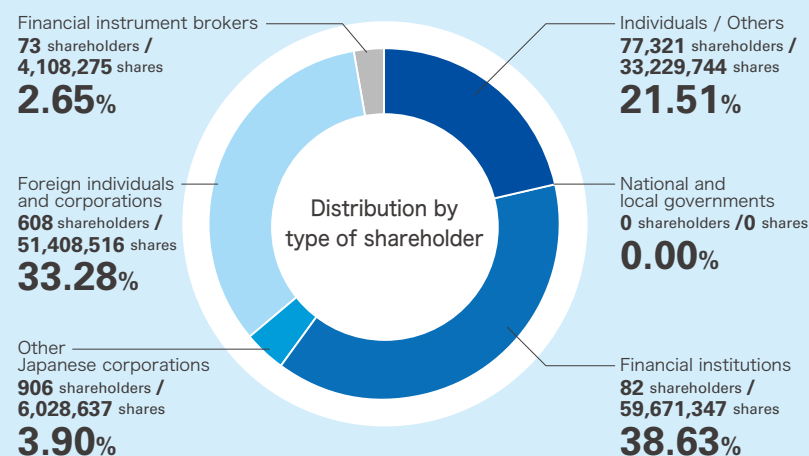
Name	IHI Corporation
Head office	Toyosu IHI Building, 3-1-1 Toyosu, Koto-ku, Tokyo 135-8710, Japan Tel: +81-3-6204-7800
President and CEO	Tsugio Mitsuoka
Founded	December 5, 1853
Incorporated	January 17, 1889
Capital	107.1 billion yen
Employees (consolidated)	29,706
Works	7
Branches in Japan	8
Overseas offices	13
Group companies	In Japan: 70 (52 subsidiaries, 18 affiliates) Overseas: 147 (120 subsidiaries, 27 affiliates)
Securities code	7013
Stock exchange listings	Tokyo, Nagoya, Sapporo, Fukuoka
Share unit	100
Total number of authorized shares	300,000,000
Outstanding shares	154,446,519 (not including 233,435 treasury shares)
Shareholders	78,991
Fiscal year	April 1 to March 31 of following year
General shareholders' meeting	June of each year
Record date for year-end dividend	March 31 of each year
Record date for interim dividend	September 30 of each year
Shareholder registry administrator / Special account managing institution	1-4-1 Marunouchi, Chiyoda-ku, Tokyo 100-8233, Japan Sumitomo Mitsui Trust Bank, Limited Stock transfer Agency Business Planning Department 2-8-4 Izumi, Suginami-ku, Tokyo 168-0063, Japan 0120-782-031 (toll-free in Japan)

Major Shareholders

Name	Number of shares held (thousand shares)	Shareholding ratio (%)
The Master Trust Bank of Japan, Ltd. (holder in Trust)	8,425	5.45
Japan Trustee Services Bank, Ltd. (holder in Trust)	6,938	4.49
Japan Trustee Services Bank, Ltd. (TOSHIBA CORPORATION Retirement Benefit Trust Account re-entrusted by Sumitomo Mitsui Trust Bank, Limited)	5,542	3.58
The Dai-ichi Life Insurance Company, Limited	5,406	3.50
State Street Bank And Trust Company 505001	4,756	3.07
Trust & Custody Services Bank, Ltd. as trustee for Mizuho Bank Retirement Benefit Trust Account re-entrusted by Mizuho Trust and Banking Co., Ltd.	4,597	2.97
State Street Bank And Trust Company 505223	2,993	1.93
Japan Trustee Services Bank, Ltd. (holder in Trust 5)	2,936	1.90
Japan Trustee Services Bank, Ltd. (holder in Trust 9)	2,930	1.89
State Street Bank West Client - Treaty 505234	2,642	1.71

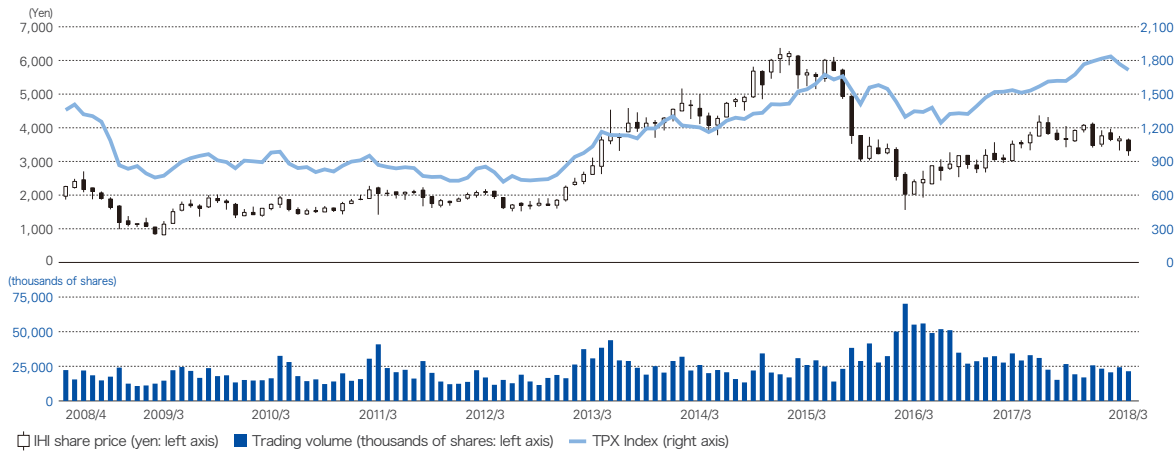
Notes: 1. The number of shares and shareholder ratios less than a single unit are rounded down.
2. Shareholding ratios are calculated without including the total number of treasury shares.

Shareholder Composition



Notes: Due to rounding, the total percentage may not add up to 100.

IHI Stock Performance and Average Trading Volume Per Day



□ IHI share price (yen: left axis) ■ Trading volume (thousands of shares: left axis) — TPX Index (right axis)
The Company conducted a consolidation of common stock on a 10 for 1 basis on October 1, 2017. The above figures have been applied retroactively.

About IHI Integrated Report 2018

This report presents important information on IHI's policies and strategies, and the foundations that support them, with a special focus on the Group Management Policies 2016 business plan. We use this report as a tool for communicating with stakeholders, aiming to increase our corporate value.

■ Scope

IHI Corporation and its major group companies

■ Period

This report covers FY2017, which began on April 1, 2017 and ended on March 31, 2018.

However, information prior to and after this period may also be included.

■ Guidelines

- International Integrated Reporting Framework, International Integrated Reporting Council
- Global Reporting Initiative (GRI) Sustainability Reporting Guidelines (GRI Standards)

■ Inquiries

Please contact us via the inquiry form on IHI website.

<Inquiries about CSR activities>

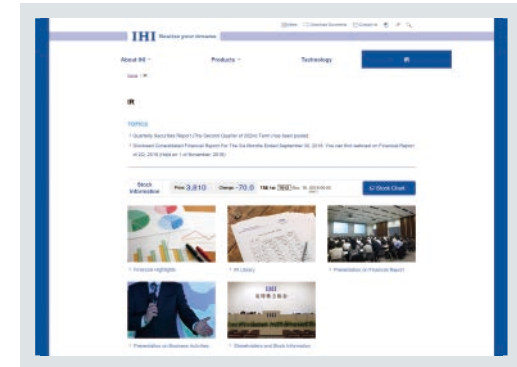
https://contact.ihico.jp/index.php/ihico_eng/IHI/form_10707

■ 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, and are subject to changes in the business environment and operations. Actual results may differ materially from the forecasts.

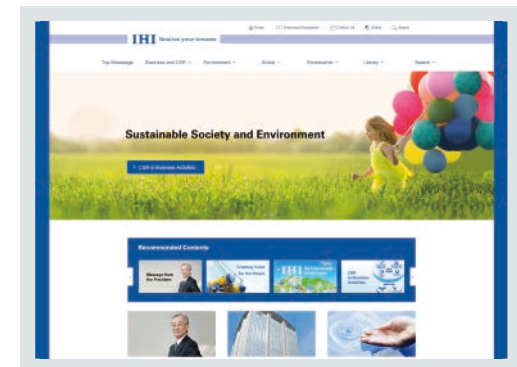
Websites

See our websites for other details.



Investor relations information

<https://www.ihico.jp/en/ir/>



CSR information

<https://www.ihico.jp/csr/english/index.html>



IHI Corporation

Corporate Planning Division CSR Planning Group

Toyosu IHI Building, 1-1, Toyosu 3-chome, Koto-ku, Tokyo 135-8710, Japan
TEL : +81-3-6204-7046 FAX : +81-3-6204-8608
URL : www.ihico.jp/en/