

**Hitachi Integrated Report 2017**  
Year ended March 31, 2017



# THE FUTURE IS OPEN TO SUGGESTIONS

## Hitachi Social Innovation

Delivering new value to society through collaborative creation with our customers and partners

### Cautionary Statement

Certain statements found in this document may constitute "forward-looking statements" as defined in the U.S. Private Securities Litigation Reform Act of 1995. Such "forward-looking statements" reflect management's current views with respect to certain future events and financial performance and include any statement that does not directly relate to any historical or current fact. Words such as "anticipate," "believe," "expect," "estimate," "forecast," "intend," "plan," "project" and similar expressions which indicate future events and trends may identify "forward-looking statements." Such statements are based on currently available information and are subject to various risks and uncertainties that could cause actual results to differ materially from those projected or implied in the "forward-looking statements" and from historical trends. Certain "forward-looking statements" are based upon current assumptions of future events which may not prove to be accurate. Undue reliance should not be placed on "forward-looking statements," as such statements speak only as of the date of this document.

Factors that could cause actual results to differ materially from those projected or implied in any "forward-looking statement" and from historical trends include, but are not limited to:

- economic conditions, including consumer spending and plant and equipment investment in Hitachi's major markets, particularly Japan, Asia, the United States and Europe, as well as levels of demand in the major industrial sectors Hitachi serves;
- exchange rate fluctuations of the yen against other currencies in which Hitachi makes significant sales or in which Hitachi's assets and liabilities are denominated;
- uncertainty as to Hitachi's ability to access, or access on favorable terms, liquidity or long-term financing;
- uncertainty as to general market price levels for equity securities, declines in which may require Hitachi to write down equity securities that it holds;
- fluctuations in the price of raw materials including, without limitation, petroleum and other materials, such as copper, steel, aluminum, synthetic resins, rare metals and rare-earth minerals, or shortages of materials, parts and components;
- the possibility of cost fluctuations during the lifetime of, or cancellation of, long-term contracts for which Hitachi uses the percentage-of-completion method to recognize revenue from sales;
- credit conditions of Hitachi's customers and suppliers;
- fluctuations in product demand and industry capacity;
- uncertainty as to Hitachi's ability to implement measures to reduce the potential negative impact of fluctuations in product demand, exchange rates and/or price of raw materials or shortages of materials, parts and components;
- uncertainty as to Hitachi's ability to continue to develop and market products that incorporate new technologies on a timely and cost-effective basis and to achieve market acceptance for such products;
- increased commoditization of and intensifying price competition for products;
- uncertainty as to Hitachi's ability to attract and retain skilled personnel;
- uncertainty as to Hitachi's ability to achieve the anticipated benefits of its strategy to strengthen its Social Innovation Business;
- uncertainty as to the success of acquisitions of other companies, joint ventures and strategic alliances and the possibility of incurring related expenses;
- uncertainty as to the success of restructuring efforts to improve management efficiency by divesting or otherwise exiting underperforming businesses and to strengthen competitiveness;
- the potential for significant losses on Hitachi's investments in equity-method associates and joint ventures;
- general socioeconomic and political conditions and the regulatory and trade environment of countries where Hitachi conducts business, particularly Japan, Asia, the United States and Europe, including, without limitation, direct or indirect restrictions by other nations on imports and differences in commercial and business customs including, without limitation, contract terms and conditions and labor relations;
- uncertainty as to the success of cost structure overhaul;
- uncertainty as to Hitachi's access to, or ability to protect, certain intellectual property;
- uncertainty as to the outcome of litigation, regulatory investigations and other legal proceedings of which the Company, its subsidiaries or its equity-method associates and joint ventures have become or may become parties;
- the possibility of incurring expenses resulting from any defects in products or services of Hitachi;
- the possibility of disruption of Hitachi's operations by natural disasters such as earthquakes and tsunamis, the spread of infectious diseases, and geopolitical and social instability such as terrorism and conflict;
- uncertainty as to Hitachi's ability to maintain the integrity of its information systems, as well as Hitachi's ability to protect its confidential information or that of its customers; and
- uncertainty as to the accuracy of key assumptions Hitachi uses to evaluate its employee benefit-related costs.

The factors listed above are not all-inclusive and are in addition to other factors contained in other materials published by Hitachi.

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CASE 01 ▶ Lumada



CASE 02 ▶ Robotics



CASE 03 ▶ Water

# Hitachi's History of Transformation (From Fiscal 2007)

## Before Fiscal 2009

### Financial Crisis Registered Biggest-Ever Annual Loss

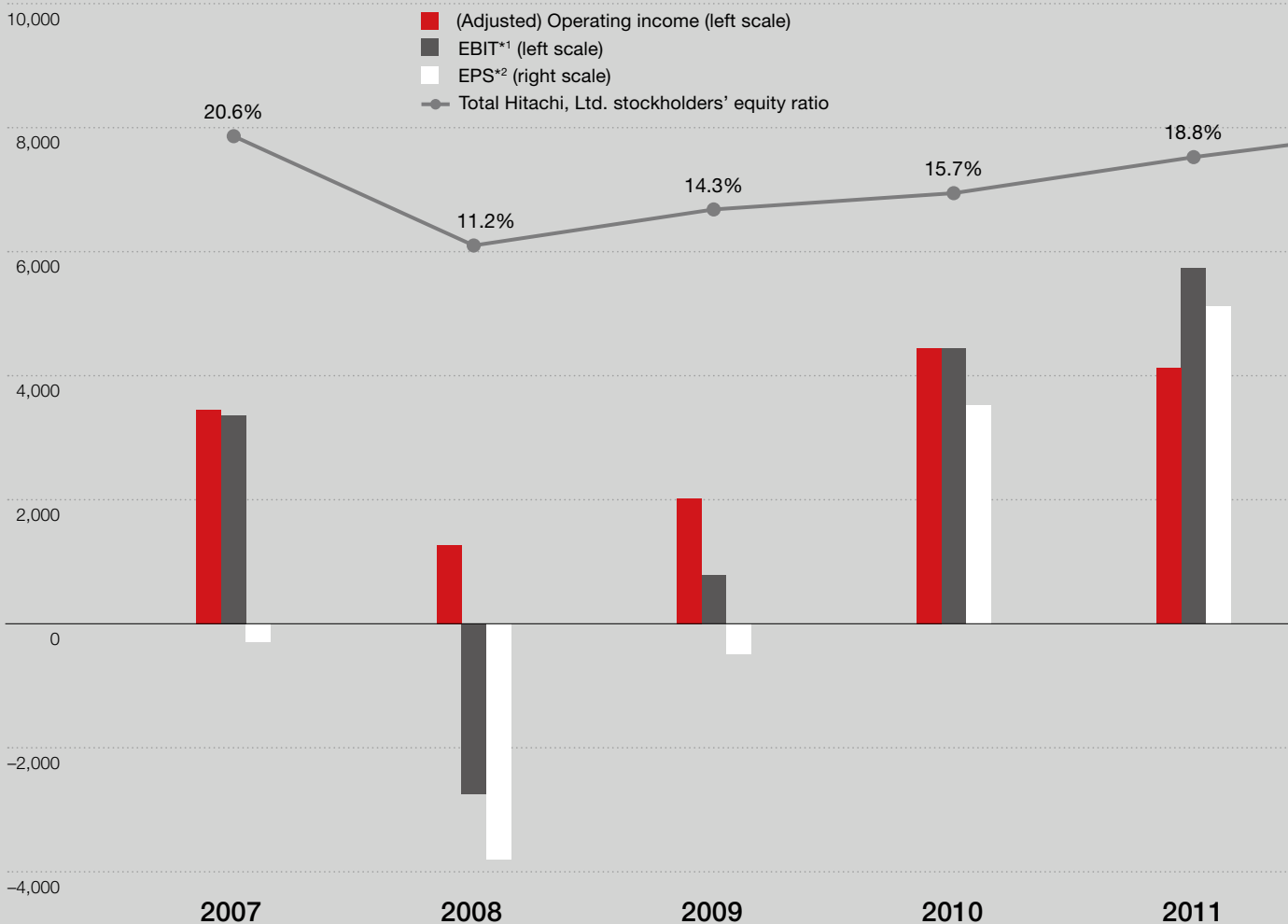
- Made five listed companies\* wholly owned consolidated subsidiaries  
\* Hitachi Information Systems, Hitachi Software Engineering, Hitachi Systems & Services, Hitachi Plant Technologies, and Hitachi Maxell
- Withdrew from consumer PC business
- Raised funds through the issuance of new shares
- Introduced in-house company system

## 2012 Mid-term Management Plan

### Achieved Stable Management Base

- Transferred businesses in LCD panels and hard disk drives
- Stopped in-house production of flat-panel TVs
- Started Hitachi Smart Transformation Project to reform cost structure
- Increased number of non-Japanese directors, independent outside directors became majority

(Billions of yen)



\*1 Earnings before interest and taxes: Income (loss) from continuing operations before income tax, less interest income, plus interest charges.

\*2 Earnings per share.

\*3 Figures are US GAAP through fiscal 2012, with IFRS being introduced in fiscal 2013.

## 2015 Mid-term Management Plan

### Achieved Growth and Reform

- Achieved new record high in adjusted operating income and EBIT
- Achieved new record high in operating cash flow margin (for Manufacturing, Services and Others.)
- Established joint venture with Mitsubishi Heavy Industries, Ltd. in thermal power generation systems business
- Hitachi Data Systems Corporation acquired Pentaho Corporation, a big-data analytics software company in the United States
- Established a joint venture with Johnson Controls Inc. in the air-conditioning systems business
- Acquired the signaling and rolling stock operations of Finmeccanica S.p.A. (now Leonardo S.p.A.)

## 2018 Mid-term Management Plan

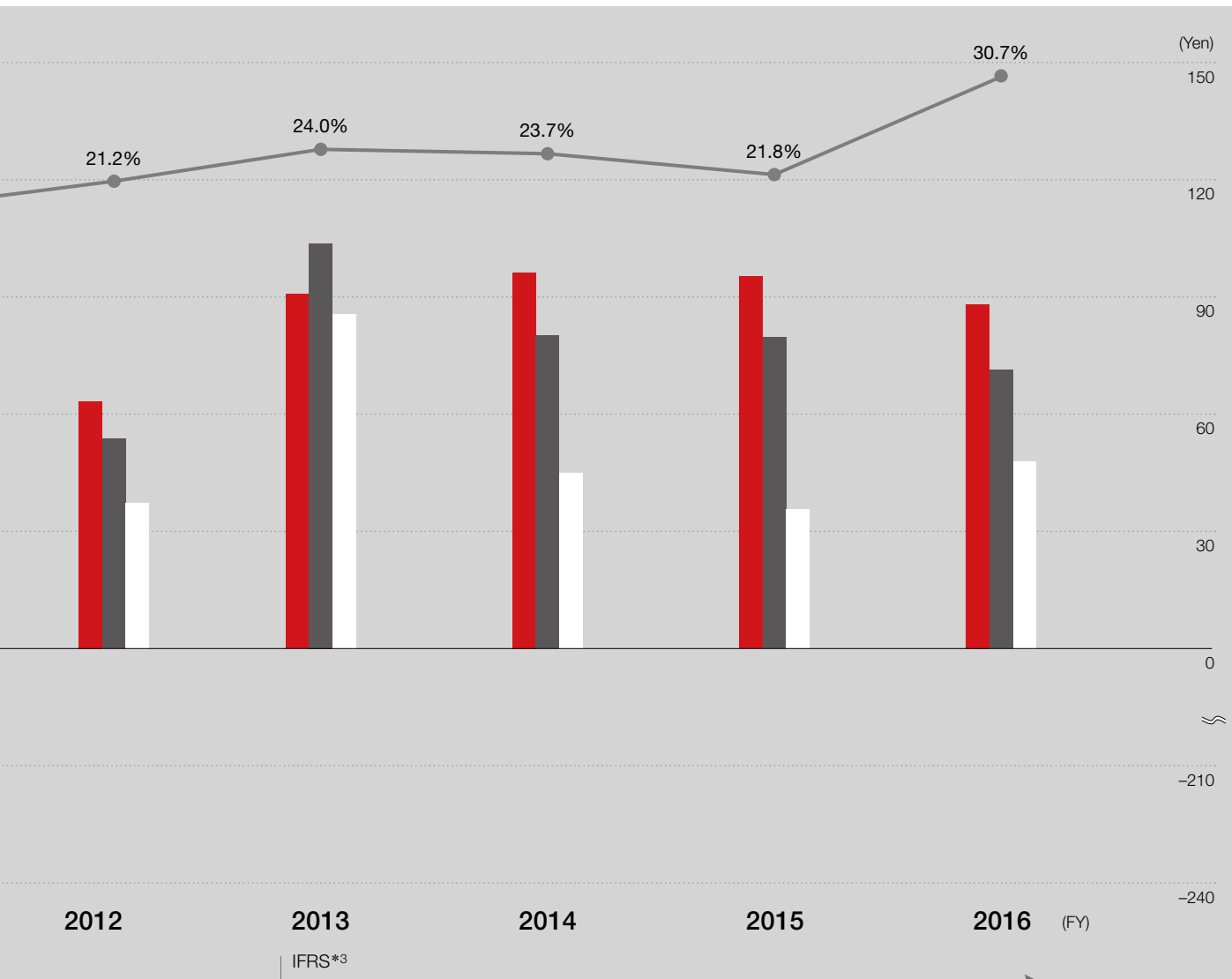
### Becoming an Innovation Partner for the IoT Era

#### ① Accelerating the Social Innovation Business

- Strengthen four focus business domains
- Launch Lumada IoT platform and reinforce in-house implementation structure
- Strengthen Hitachi's Front functions
- Expand product and digital solutions business in North America through customer channels obtained through Sullair acquisition

#### ② Strengthening the Management Base

- Accelerate decision making through the introduction of the business unit (BU) system
- Close or streamline low profitability businesses
- Review the capitalization policies of such Group companies as Hitachi Transport System, Ltd., Hitachi Capital Corporation, and Hitachi Koki Co., Ltd.



# OUR BUSINESS MODEL

## OUR FOUNDATION

Hitachi's business is supported by shared company values that have stood the test of time and by collaborative creation with its stakeholders.

### 46-79 PERFORMANCE

#### Ready to Engage in Collaborative Creation

Revenues* <sup>1</sup>	Net income attributable to Hitachi, Ltd. stockholders* <sup>1</sup>	Total assets* <sup>2</sup>
9,162.2 billion yen	231.2 billion yen	9,663.9 billion yen
R&D expenditures* <sup>1</sup>	Number of patents owned* <sup>3</sup>	Open innovation (research collaboration) partners* <sup>4</sup>
323.9 billion yen	93,992	65 research institutes outside Japan 243 research institutes in Japan
Consolidated number of employees* <sup>2</sup>	Business locations in	Instilling of the Hitachi Group Identity in employees
303,887	68 countries and regions* <sup>5</sup>	78.8%

\*1 Fiscal 2016 figures.

\*2 Numbers as of the end of March 2017.

\*3 Number of patents owned in Japan, the United States, China, Germany, and South Korea as of the end of December 2016.

\*4 "Open innovation" is Hitachi's attempt to go beyond organizational frameworks and create broadly shared bodies of knowledge and technology toward the development of new technologies and products. These figures are for industrial-academic R&D partnerships, as of fiscal 2016.

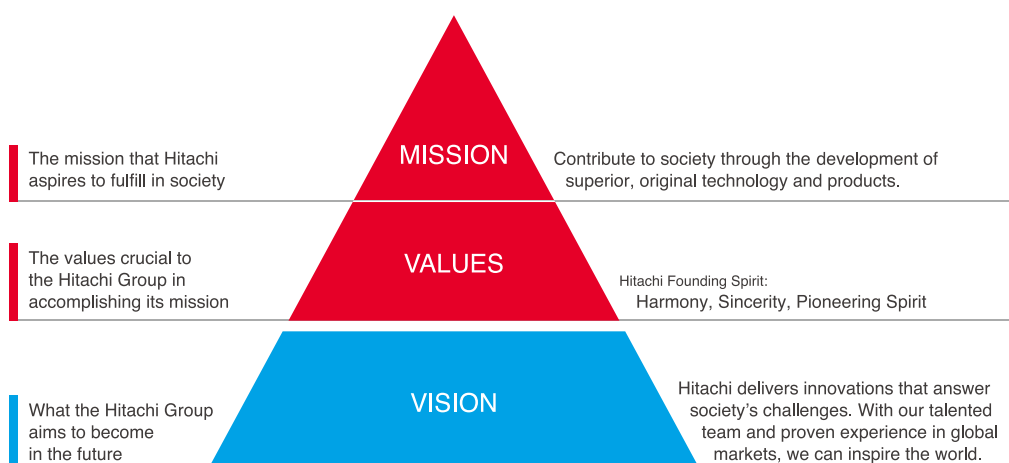
\*5 Hitachi, Ltd. and consolidated subsidiary business locations (as of the end of March 2017).

#### Hitachi Group Identity

Throughout its 100 year history, the Hitachi Group has passed on its Mission and its Values to generations of employees and external stakeholders.

The Vision has been created based on the Mission and the Values.

It is an expression of what the Hitachi Group aims to become in the future.



# OUR STRATEGY

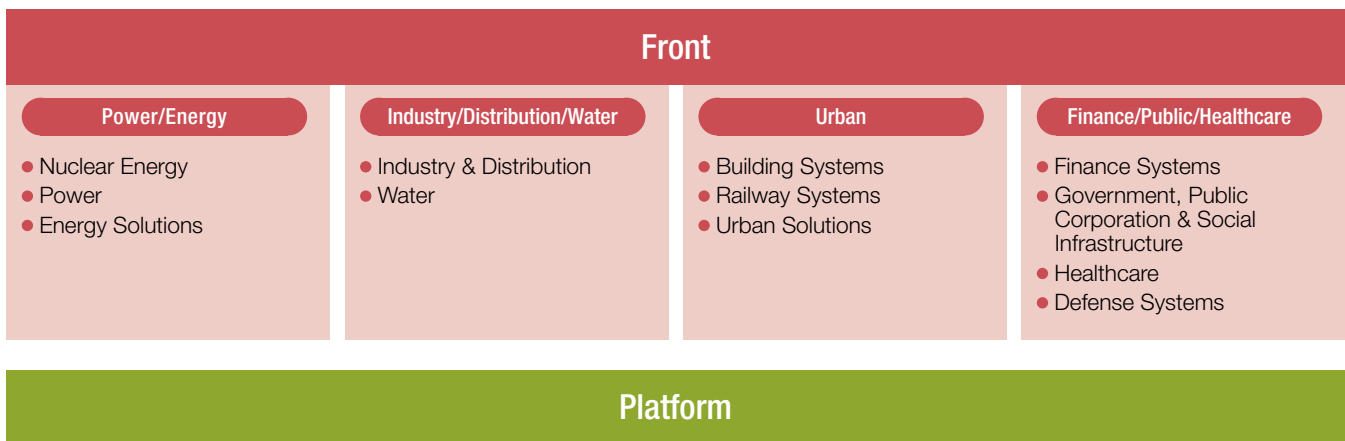
## An Innovation Partner for the IoT Era

Under the 2018 Mid-term Management Plan, Hitachi will accelerate collaborative creation with customers and partners through the advanced Social Innovation Business, with a focus on the trend toward digitalization that is significantly changing society and industry. Leveraging three strengths—the operational technology we have amassed since our founding, IT, and products/systems—we deliver innovations to society and customers.

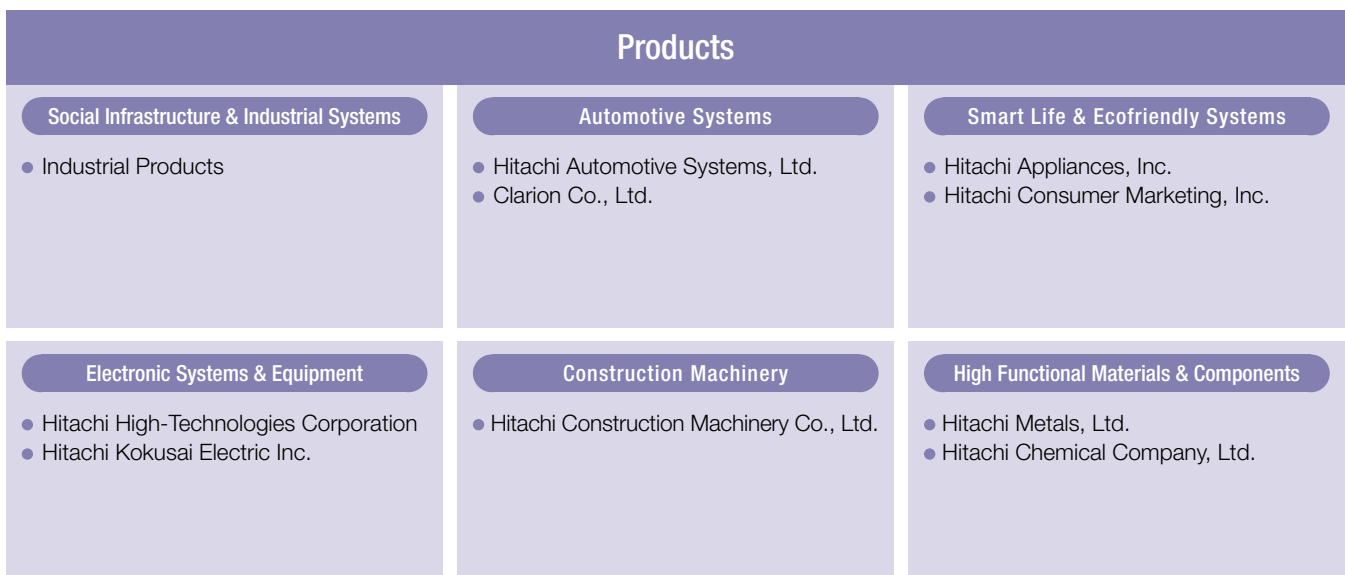
14-17 STRATEGIC FOCUS

### Four Focus Business Domains

#### Growth Strategies and Investments



IoT Platform





# OUR VALUE CREATION

Creating value to fulfill our Mission—contributing to society through the development of superior, original technology and products—has underpinned our business development for more than a century. Hitachi's R&D program focuses on products and services that help to resolve social issues.

## 18-27 VALUE CREATION

### Key Business Segments for Social Contributions

#### Information & Telecommunication Systems



A storage system

Hitachi provides IT services that address customers' diverse needs by combining Hitachi's extensive expertise in a diverse range of business fields, including financial services, with advanced information technology. Our services cover the entire life cycle of systems, ranging from consulting to system integration, operation, maintenance, and other support.

To help resolve issues confronting society and our customers, we provide IT solutions to support data utilization on a global basis.

Locations of our business operations: **Over 100** countries and regions

#### Social Infrastructure & Industrial Systems



A seawater desalination system

Hitachi has a long and proven track record of high reliability in supporting people's daily lives through such products and services as rolling stock and train management systems, power plants and transmission and distribution systems, elevators and escalators, and water solutions. It also offers industrial solutions and equipment to enhance the sophistication of production facilities. Hitachi utilizes digital technologies to provide optimum solutions in addressing the issues and diversifying needs of customers worldwide.

Through our OT (operational technology) and IT, Hitachi offers comprehensive water solutions on a global scale, such as seawater desalination equipment, monitoring and control systems, design and construction of water treatment plants, and operation and maintenance of plants.

Installation of water solutions: **1,800** sites

#### Electronic Systems & Equipment



Hokkaido University Hospital's particle beam cancer therapy system

Drawing on the Hitachi Group's advanced technologies, Hitachi provides systems supporting the information society, including semiconductor manufacturing equipment, measurement and analysis equipment, broadcasting and video systems, and healthcare solutions that support healthy lifestyles.

Particle therapy mitigates the burden on the body and allows patients to maintain their quality of life, and it is expected to make its mark in pediatric oncology, which entails great physical strain. The global share of Hitachi's highly reliable particle therapy system has been rising.

Number of operating particle therapy facilities: **3** in Japan, **4** in the United States (as of June 30, 2017)



## Construction Machinery



Hitachi Construction Machinery's ultralarge hydraulic excavator and mining dump truck

Leveraging decades of technological expertise and know-how, Hitachi offers solutions that address the needs of a broad range of industries, including civil engineering and construction, building and structural demolition, and mining and excavation. Hitachi also handles the sale, servicing, and maintenance of hydraulic excavators and other construction machinery to provide integrated solutions globally.

Hitachi Construction Machinery's hydraulic excavators, wheel loaders, and dump trucks are used at construction sites and mines around the world.

Global share of hydraulic mining excavator market: **Approximately 30%**

## High Functional Materials & Components



Hitachi Chemical's molded plastic rear door module

Hitachi draws on its wealth of technological expertise and know-how to provide a variety of materials and components—such as semiconductor- and display-related materials, synthetic resin products, specialty steels, magnetic materials, casting components, and wires and cables—that enable advanced functions in products for such sectors as autos, IT and consumer electronics, and industrial and social infrastructure. Business operations are focused in Asia, North America, and Europe.

Hitachi Chemical's molded plastic rear door module achieves a substantial reduction in weight compared to conventional steel products. Japan's first plastic rear door module (according to Hitachi Chemical findings) has been made into reality, taking advantage of resin's superior workability to enable designs not possible with steel without sacrificing rigidity and strength.

Weight of molded plastic rear door module: **30% reduction (compared to steel)**

## Automotive Systems



Hitachi Automotive Systems' air flow sensor

To contribute to the realization of an affluent society by creating new value-added systems, products, and services through the harmonization of people, vehicles, and society, Hitachi is accelerating its technological development in the fields of environment and safety. We will further develop our Advanced Vehicle Control System, integrating our safety and information technologies with the Hitachi Group's social infrastructure services to meet society's needs for environmental conservation, accident elimination, and traffic congestion reduction.

Hitachi Automotive Systems' air flow sensor is widely used by automakers around the world and commands the highest global share. It accurately measures the volume and temperature of the air intake and contributes to a more efficient engine.

Global share of air flow sensor market: **Approximately 40%** (as of March 31, 2016)

## Smart Life & Ecofriendly Systems



Hitachi Appliances' robot cleaner "minimaru"

Hitachi's home appliances, lighting and housing equipment, and refrigerating and air-conditioning solutions deliver new value and lifestyle innovations to society and people around the world. Hitachi also helps reduce environmental impact by making an ongoing effort to improve products' energy efficiency.

Hitachi Appliances markets various home appliances products in over 120 countries and regions. By providing home appliances in accordance with each country's and region's needs, we continue to contribute to improving quality of life.

Home appliance products: **Sold in Over 120** countries and regions

Note: We conduct a broad range of business activities from product development to production, sales, and servicing in eight segments in all, including "Others," in addition to the above.

# CEO MESSAGE

Toshiaki Higashihara

President & CEO



**In fiscal 2017, Hitachi shifts into high gear. Our Social Innovation Business will leverage our digital technology to create new value around the world.**

“What kind of company will Hitachi be ten years from now?”

My thoughts on this topic are clear: “Hitachi must be the kind of company whose very name is synonymous with innovation.”

*Hitachi delivers innovations that answer society’s challenges. With our talented team and proven experience in global markets, we can inspire the world. This is our Vision, and it is up to us to make it a reality—to help establish a sustainable global society through our business operations.*

## Shifting into high gear

Hitachi is currently moving forward with its 2018 Mid-term Management Plan, targeting fiscal 2018. In the first year of the plan, fiscal 2016, we enacted a range of reforms to lay a strong foundation for future growth. Strong organic growth in individual businesses drove revenues, adjusted operating income, EBIT, and net income attributable to Hitachi, Ltd. stockholders to levels exceeding the forecasts we announced at the beginning of the fiscal year. The company's ROA\* and free cash flow have improved, and all promises made to the market have been fulfilled.

### Fiscal 2016 Results and Fiscal 2017 Projections

	FY 2016	Billions of yen FY 2017 (plan)
Revenues	9,162.2	<b>9,050.0</b>
Adjusted operating income	587.3	<b>630.0</b>
Ratio to revenues	6.4%	<b>7.0%</b>
EBIT	475.1	<b>580.0</b>
Ratio to revenues	5.2%	<b>6.4%</b>
Net income attributable to Hitachi, Ltd. stockholders	231.2	<b>300.0</b>

Internal reforms included work on the selection and concentration of businesses. We made decisive progress on deconsolidating our three listed subsidiaries (Hitachi Transport System, Ltd., Hitachi Capital Corporation, and Hitachi Koki Co., Ltd.) and enacting structural reforms for less profitable businesses. We also continued our transition from a product-out organizational structure to a market-driven one, and our launch of the Lumada IoT platform will enable us to create enormous new value moving forward.

In fact, we are currently redesigning our entire business model around the axis of Lumada. Many businesses around the world provide consulting, products, or system integration (SI) separately, but we believe that only Hitachi can deliver full, end-to-end solutions, from exploring customer issues to constructing and maintaining actual systems.

Our shareholders tell us that they agree with this assessment of our strengths and our approach to reform. They are voicing their approval of our strategic direction and urging us to move swiftly toward realizing its potential. We are determined to live up to these expectations. In fiscal 2017, we will shift into high gear, accelerating our activities in a range of fields globally in order to leap ahead.

\* ROA (Return on assets) = Net income ÷ Total assets (Average between the end of the current fiscal year and the end of the previous fiscal year) x 100



## Optimizing our business portfolio with a redesigned balance sheet

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In Hitachi's last *Integrated Report*, I wrote of the clear distinction we saw between businesses to be reinforced and those to move away from, and promised that we would focus on leveraging our digital technology in our Social Innovation Business. To keep that promise, in fiscal 2016 we assessed which businesses we would need to move away from, including through divestitures of our listed subsidiaries. As we shift into high gear for fiscal 2017, we will remain focused on the synergies within the Hitachi Group and maintain a medium- to long-term perspective as our ambitious M&A initiatives add to our corporate value.

Our 2018 Mid-term Management Plan includes investment expenses of 1 trillion yen, nearly double the equivalent figure in the previous plan. We are proud of the superior human capital and technology that we already command, but one of our pressing challenges is to further strengthen our resources and develop maintenance businesses as opportunities expand and digitalization progresses in regions where we have not yet established a significant presence. This will be one of the issues informing our strategic M&A activity going forward.

Our acquisition of the US air compressor manufacturer Sullair in July 2017 is an excellent example of intra-Group synergy of this sort. Sullair has a customer base of around 4,000 companies, and we are now well positioned to offer these companies not only existing Hitachi products but also new digital solutions incorporating Lumada. To take another example, Hitachi's purchase of the UK elevator sales, installation, maintenance, and servicing company Temple Lifts Ltd. will allow us to strongly expand our elevator business, previously centered around China and Japan, into the United Kingdom and the rest of Europe—another step toward global growth.

Of course, if each business unit and company within the Group pursues its own profit and engages in its own M&A activity in isolation, this will not necessarily improve the efficiency of the balance sheet of the Group as a whole. Recognizing this, in April 2017 Hitachi established an Investment Strategy Division directly under the CEO to coordinate and optimize asset allocation and efficiency for all Hitachi businesses. This division will examine investment opportunities and set priorities in accordance with companywide strategies.

In this uncertain age, Hitachi will also strive to implement rigorous risk management responsive to global trends—for example, establishing an energy mix sensitive to geopolitical risks and environmental problems. Another high priority will be redesigning our balance sheet alongside continuous review of our portfolio to ensure they continue to meet current requirements.

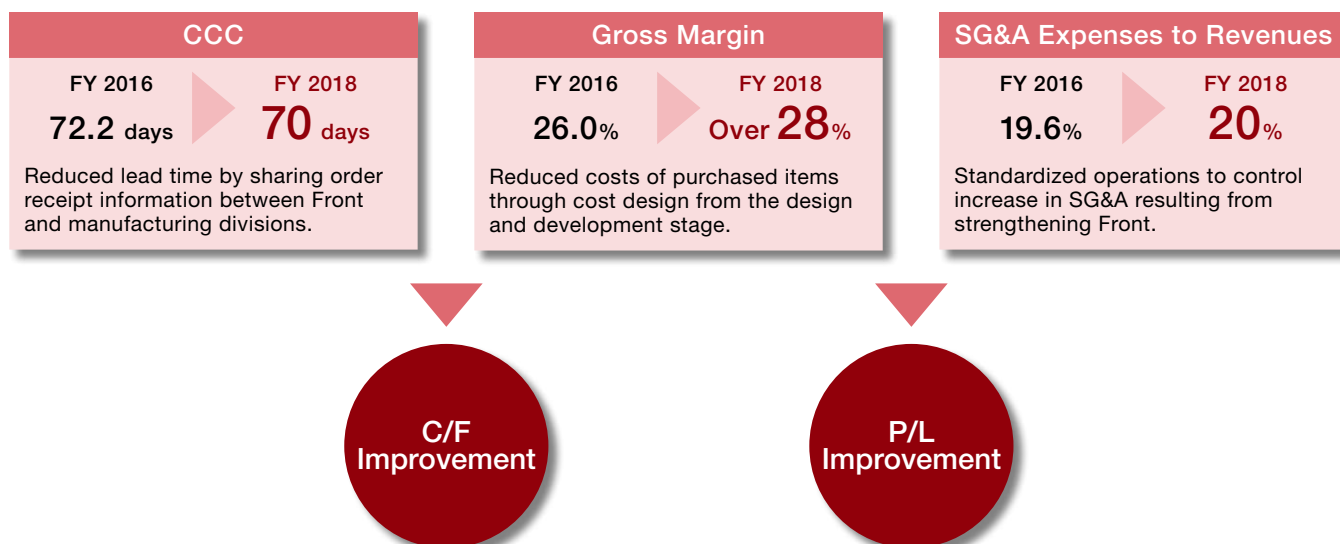
## Uniting the Hitachi Group for stronger cash-generating capability

Alongside these Group-wide efforts to optimize our business portfolio and redesign our balance sheet, I believe that the mindset of our employees regarding costs and cash is also vital to our ongoing development.

Hitachi has historically been steeped in a mindset oriented toward *monozukuri*, meaning awareness of issues such as the need to reduce manufacturing costs at the factory level. As a global company, however, we must earn and generate cash if we are to surpass our competitors. It did not seem to me that sufficient attention was paid to this within the company. To convey my focus in this area, I have been holding town hall meetings for employees at locations around the world. Three years have now passed since I became president, and I feel that my ideas have taken firm root throughout the company. As Hitachi prepares to shift toward its Social Innovation Business leveraging digital technology, it is gratifying to see a significant improvement in employee awareness of costs and cash—not to mention a new determination to pursue improvements in these areas.

Currently, with the Hitachi Smart Transformation Project, we are benchmarking our global competitors' cost structure targets for each business in order to plan ways to maximize our gross margin and optimize selling, general, and administrative (SG&A) expenses, and to improve our cash conversion cycle (CCC) across manufacturing, services, and other areas of our business. Moving forward, by leveraging digital technology through Lumada, we will advance our visualization and optimization of work processes across the entire Group, with the goal of further transforming cost structures and enhancing our cash-generation capabilities.

### Hitachi Smart Transformation Project



## Pursuing shareholder returns with stronger corporate governance

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This increased awareness of cash generation among Hitachi's employees can partly be attributed to the stronger structure of the Board of Directors. Our shareholders have come to take an increasing interest in governance in recent years, from the monitoring and auditing functions of the Board of Directors to its members' effectiveness and management transparency. We are proud of our proactive approach to corporate governance. In 2012, we established our guidelines three years before Japan's national Corporate Governance Code was released, and we continue to pursue meaningful improvement to our governance. For example, dismissal of the CEO and selection of a successor were added to the duties of the directors in 2016. Our independent outside directors come from many different countries and boast front-line experience in a range of fields. Naturally, they also hold Hitachi to global standards in areas such as profitability and strategy execution. Their observations during Board discussions are always stimulating, and they offer clear prescriptions to help Hitachi win globally—for example, executing certain initiatives more rapidly to address conditions at low-performing businesses. It is palpably clear that a positive cycle is being established, in which the Board's objectives are effectively communicated to the executive officers, including myself, who put those objectives into effect in business operations.

Regarding shareholder return, our 2018 Mid-term Management Plan pursues this alongside investment for future growth. The plan sets a hard goal of reaching 400 billion yen in annual net income in fiscal 2018. In addition to that steady expansion, we are pursuing cash-flow reform to achieve stable growth in the dividend per share as the core of our approach to generate shareholder return. In fiscal 2016, we introduced stock options as a part of compensation packages, allowing management to share the benefits and risks of stock-price movements even more closely with shareholders. Taking a medium- to long-term perspective, we aim to realize further sustainable improvements in corporate and shareholder value.

## Hitachi's sustainability management

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The task of a business has traditionally been to increase profits and give back to shareholders and society. On the other hand, businesses today are also expected to achieve symbiosis with society—to manage sustainability. In 2015, the United Nations identified 17 Sustainable Development Goals (SDGs)\* targeting the most pressing issues that face the global community. The following year, the groundbreaking Paris Agreement entered into force, aiming to enhance global efforts to mitigate climate change and its effects. Clearly, companies are being asked to play an ever-greater role in resolving global-scale issues through their business activities.

Hitachi's Social Innovation Business is exactly this—sustainability management through business activities, considering the human experience and the global environment from a long-term perspective and aiming to realize a sustainable society and improved quality of life. We will continue to lead in responding to the issues facing society through our Social Innovation Business as we actively contribute to achieving the SDGs and other global targets.

\* Adopted by the United Nations in September 2015, the SDGs consist of 17 goals and 169 targets.



## THE FUTURE IS OPEN TO SUGGESTIONS

“What is a ‘Social Innovation Business’?”

After we declared that we would focus on our Social Innovation Business, which combines our strengths in OT (operational technology), IT, and products, this became another question I was frequently asked by customers and shareholders. In the seven years since that announcement, our Social Innovation Business has chalked up a sustained and undeniable record of success. As we enter the IoT era, with digital technology and innovation already combining to transform the structure of business and manufacturing, our Social Innovation Business is attracting more attention than ever. OT has been one of Hitachi’s strengths since its founding. Our IT experience, too, has been cultivated for more than 50 years. Our Social Innovation Business fuses these with digital technologies like big data analysis and AI, arousing high expectations in the market. We see this as our past achievements and current initiatives bear fruit globally.

In April 2017, as part of building a medium- to long-term foundation for our Social Innovation Business, we established a Future Investment Division. Questions around how to improve our corporate value or how to develop the human capital to give us the leadership we will need in the future are vital, but they cannot be answered without an understanding of the tides of next-generation technology and social change, or an exploration of which fields Hitachi should strengthen its presence in over the longer term in response to these trends. The Future Investment Division was created to meet this challenge by considering such matters in a unified approach across multiple projects. Within the division, leaders from multiple projects including cutting-edge robotics and AI work alongside project members, creating the innovations and businesses needed to drive the company’s next generation while still upholding the “pioneer spirit” that has been part of Hitachi since the company’s founding.

Hitachi is a gathering of professionals with diverse experience, knowledge, skills, and ideas.

It is also a company with numerous businesses and product lines that make the world better. As CEO of Hitachi, by leveraging those strengths into One Hitachi, I will develop the company into one which always goes one step beyond when creating value.

The slogan of Hitachi’s current global brand campaign is THE FUTURE IS OPEN TO SUGGESTIONS. This represents our determination to contribute to building the future through open innovation arising from collaborative creation with our customers and partners.

I invite you to keep watching Hitachi as we shift into high gear to leap ahead.

August 2017

*T. Higashihara*

Toshiaki Higashihara  
President & CEO  
Hitachi, Ltd.





# STRATEGIC FOCUS

## Moving Forward with the 2018 Mid-term Management Plan

- 1 Major Fiscal 2016 Results
- 2 Making Steady Progress
- 3 Growth Strategies for Fiscal 2018 in Four Focus Business Domains
- 4 Strengthening the Front
- 5 Further Strengthening Lumada
- 6 Global Business Expansion
- 7 Deepening Our Engagement in the Social Innovation Business

In fiscal 2016, Hitachi, Ltd. cleared its targets for revenues, adjusted operating income, EBIT, and net income attributable to Hitachi, Ltd. stockholders.\*1 The foundation is now clearly in place for further growth into the future.

Building on the approaches put in place during fiscal 2016, the company will now pursue further development of its Social Innovation Business, aiming to become an Innovation Partner for the IoT Era.

### 1 Major Fiscal 2016 Results

#### Promoting the Empowerment of Growth Businesses

Launched Lumada IoT platform and reinforced in-house implementation structure.  
Strengthened on a priority basis four focus business domains.

Focus Business Domains	Business		Business Segments
Power/Energy	Power	<ul style="list-style-type: none"> <li>Developed and started trial operation of 5.2 MW offshore wind power generation system.</li> <li>Accelerated the expansion of wind power business in Japan and Asia.</li> </ul>	Social Infrastructure & Industrial Systems
Urban	Railway	<ul style="list-style-type: none"> <li>Made smooth progress in integration of Hitachi Rail Italy S.p.A. and continued collaboration with Ansaldo STS S.p.A.</li> <li>Implemented measures to achieve over 10% annual growth in global railway business.</li> </ul>	Social Infrastructure & Industrial Systems
	Building	<ul style="list-style-type: none"> <li>Completed development of standardized elevators for Asia and the Middle East.</li> <li>Expanded business by strengthening sales and maintenance bases in Asia, the Middle East, and Europe.</li> </ul>	Social Infrastructure & Industrial Systems
Finance/Public/Healthcare	Financial	<ul style="list-style-type: none"> <li>Utilized blockchain and other emerging technologies in Asia market.</li> <li>Achieved steady growth of SI financial sector business in Japan.</li> </ul>	Information & Telecommunication Systems

#### Selection and Concentration of Hitachi Businesses

Reviewed the capitalization policies of such Group companies as Hitachi Transport System, Ltd., Hitachi Capital Corporation, and Hitachi Koki Co., Ltd.

#### Business Structure Reforms

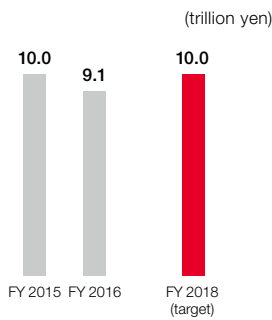
Implemented of business structure reforms, such as closure and streamlining of low profitability businesses (e.g., communication products, overseas plant EPC\*2), resulting in an improvement of approximately 40 billion yen in operating income over fiscal 2015.

\*1 Targets set for the first phase of the 2018 Mid-term Management Plan, with results measured as of May 2016.

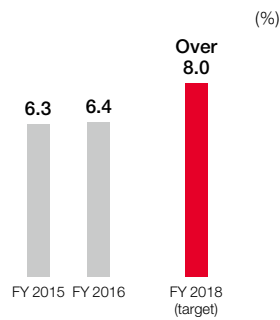
\*2 EPC: Engineering, procurement, and construction.

## 2 Making Steady Progress

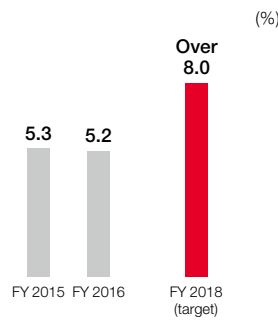
### Revenues



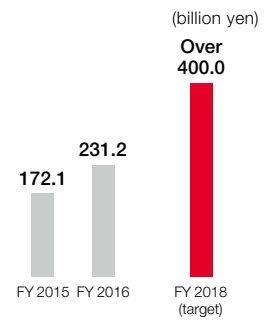
### Adjusted Operating Income Ratio



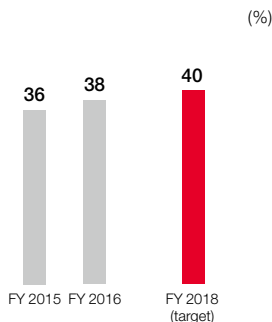
### EBIT Ratio



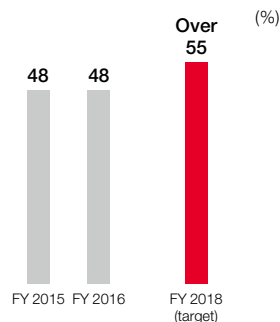
### Net Income Attributable to Hitachi, Ltd. Stockholders



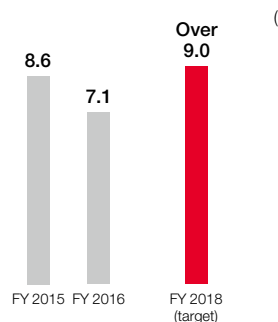
### Our Growing Front Business (Front Revenue Ratio)



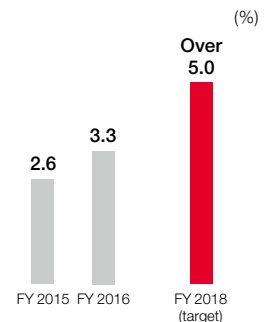
### Global Business Expansion (Overseas Revenue Ratio)



### Stronger Cash Generation (Operating Cash-Flow Margin)\*1



### Asset Profitability Improvement (ROA)\*1 \*2



### Annual Exchange Rates

		FY 2015	FY 2016	FY 2018 (forecast)
Average Annual Rate	JPY/USD	120	108	110
	JPY/EUR	133	119	120

\*1 Figures for Manufacturing, Services and Others.

\*2 Return on assets (ROA) = [Net income] ÷ [Total assets (average from end of previous to end of current fiscal year)] × 100.

## 3 Growth Strategies for Fiscal 2018 in Four Focus Business Domains

### Front

#### Revenues

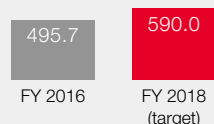
3,521.3 billion yen ▶ 4,000.0 billion yen  
(FY 2016 result) (FY 2018 target)

#### Adjusted operating income ratio

8%  
(FY 2018 target)

### Power/Energy

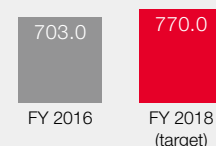
Revenues (billion yen)



We are addressing electric power reforms in Japan, including retail market liberalization and unbundling of power generation and transmission, as well as the distributed power and renewable energy fields.

### Industry/Distribution/Water

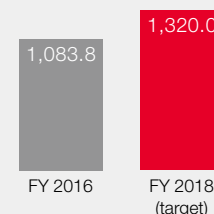
Revenues (billion yen)



We are engaging in plant optimization and rebuilding supply chains using digital technologies.

### Urban

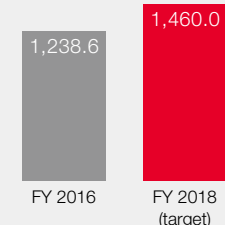
Revenues (billion yen)



We aim to enhance quality of life by putting digital technologies to use to achieve communities with convenient, comfortable, and eco-friendly lifestyles.

### Finance/Public/Healthcare

Revenues (billion yen)



We pursue growth through FinTech and solutions ready for Japan's "My Number" taxpayer ID system.

### Platform/Products

#### Revenues (billion yen)

6,714.5 ▶ 7,160.0  
(FY 2016 result) (FY 2018 target)

#### Adjusted operating income ratio

8%  
(FY 2018 target)

## 4 Strengthening the Front

To accelerate the global expansion of its Social Innovation Business, Hitachi is strengthening the Front functions of its operations, the point where it provides value directly to customers.

- **Establishment of the global front**

Establish “global front” management organization launched in April 2017 to accelerate global expansion of Social Innovation Business.

- **New employment**

Consultants, system engineers, maintenance personnel, other resources newly employed (1,000 in Japan, 1,000 overseas in fiscal 2016).

- **Human resource training**

Global front staffing increased, staff development accelerated through building of global certification system.

- **M&A to strengthen Front functions**

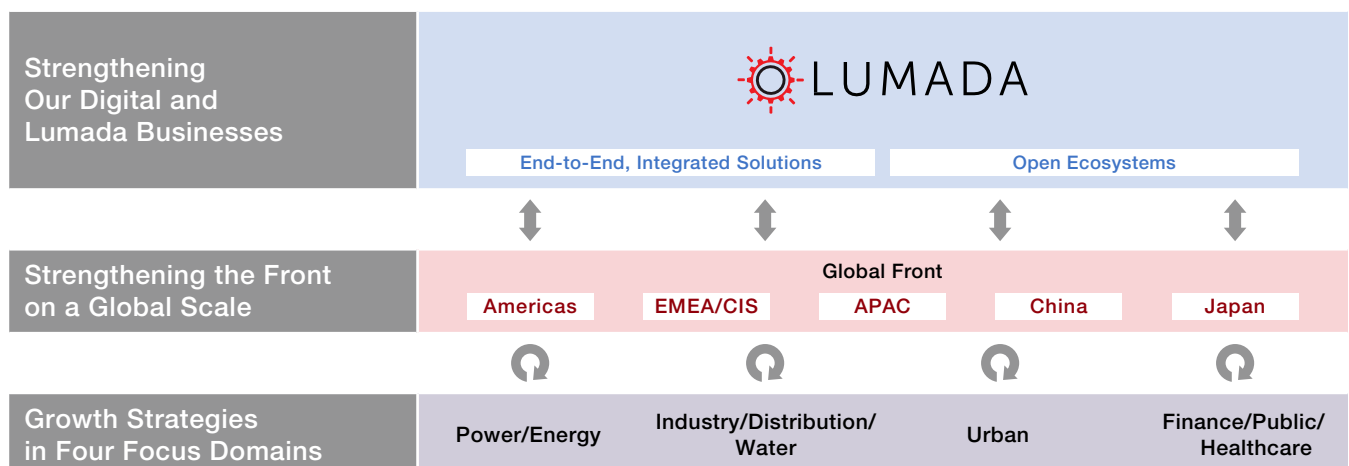
Business growth through M&As to strengthen Front functions, targeting customer channels, maintenance sites, product business, and other areas.

Investments to Strengthen Front			
Italy	Ansaldo STS	November 2015	Turnkey business entry, expansion of global business
Turkey	Kurt & Kurt	April 2017	Medical device sales expansion in Europe, Middle East
USA	Sullair	July 2017	Acquisition of US customer channels and business expansion
UK	Temple Lifts	April 2017	Elevator maintenance business entry in Europe

## 5 Further Strengthening Lumada

Hitachi is making full use of OT (operational technology) and IT as it builds out its Social Innovation Business to provide advanced infrastructural systems on a global scale.

In May 2016, Hitachi began offering Lumada, its IoT platform that helps drive the Social Innovation Business, to customers.

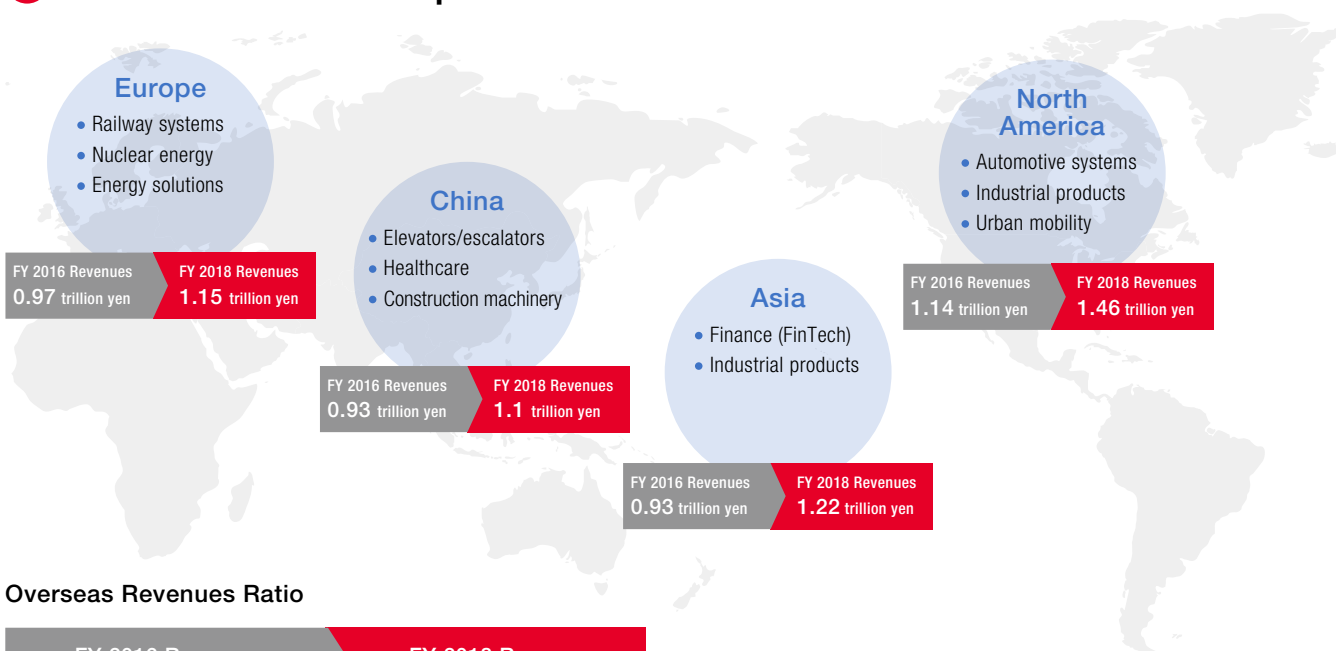


Lumada represents a distillation of the deep OT- and IT-driven solutions that Hitachi has brought to market over many years.

Through collaborative creation with customers, we provide them with end-to-end solutions covering everything from analysis of management issues to buildout planning, value verification, rollout of equipment and systems, and operation and maintenance.

Furthermore, by building a track record of use cases with wide applicability, both from internal company cases and from collaborative creation cases launched with customers and partner companies, we are accelerating our provision of value to customers.

## 6 Global Business Expansion



### Overseas Revenues Ratio



## 7 Deepening Our Engagement in the Social Innovation Business

### Contributing to the Achievement of the SDGs\* Through the Social Innovation Business

Hitachi will contribute to the achievement of the United Nations Sustainable Development Goals (SDGs), which came into force in January 2016, through its Social Innovation Business by broadening our perspective on common global issues and gaining a deeper awareness of those issues.

Initiatives have already begun, as various business units (BUs) have launched workshops aimed at enhancing understanding of the SDGs. [26-27 Value Creation Case 03: Water](#)

As a company engaged in many different businesses, we are in a good position to make a broad contribution to reaching the SDGs, and we plan henceforth to undertake concrete deliberations on specific initiatives.

\* Adopted by the United Nations in September 2015, the SDGs consist of 17 goals and 169 targets.



# VALUE CREATION



## OUR INSIGHT AND STRATEGY

Becoming an Innovation Partner for the IoT Era is a key part of Hitachi's 2018 Mid-term Management Plan. The Lumada IoT platform will help Hitachi pursue new value through collaborative creation with customers.

### New Value Through Collaborative Creation with Customers

Across the world, from North America to Europe and China, the creation of innovation through digital technology is accelerating. In Japan, too, as part of its "Society 5.0" program,<sup>\*1</sup> the government has taken the lead in driving a revolution in services and business and transformation of industry structure through digitalization. Amid these rapid changes, in May 2016 Hitachi launched the Lumada<sup>\*2</sup> IoT platform. Based on the two key ideas of collaborative creation and connections, Lumada is designed to create value through the company's Social Innovation Business by connecting customer value chains and resolving business issues.

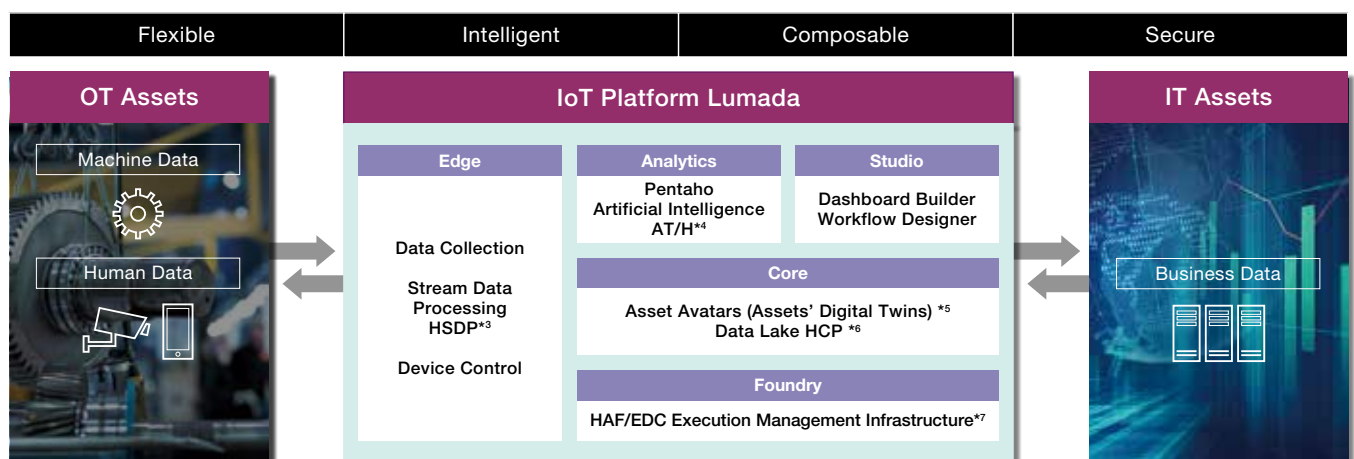
Lumada is a distillation of Hitachi's rich and extensive experience in OT (operational technology) and IT solutions, and as such is Flexible, Intelligent, Composable, and Secure. Recognizing that customers usually prefer to make the best possible use of systems that are already deployed and operational, we have prioritized composability as a particular strength: the ability to flexibly combine Lumada

with existing systems. Lumada is also easy to link with other IoT platforms and systems, allowing it to support a broad range of industries and customer cases. That Lumada is made up of proven, commercialized, and highly trustworthy technology is another advantage. This technology includes Pentaho, an integrated analysis software package that can bring together diverse data stored in a variety of formats and apply analysis from multiple perspectives, and Hitachi AI Technology/H, a multipurpose AI.

<sup>\*1</sup> Society 5.0: An umbrella term for several related initiatives designed to create a "Super Smart Society" that will respond to social needs efficiently and meticulously by merging cyberspace and the physical realm at a high level. The term implies a revolution driven by innovations in science and technology creating a successor to the hunter-gatherer, pastoral-agrarian, industrial, and information-based models of society.

<sup>\*2</sup> Lumada: A name created by combining the words "illuminate" and "data," reflecting the fact that Lumada sheds light on large quantities of data to reveal hidden connections and provide customers with valuable business insights.

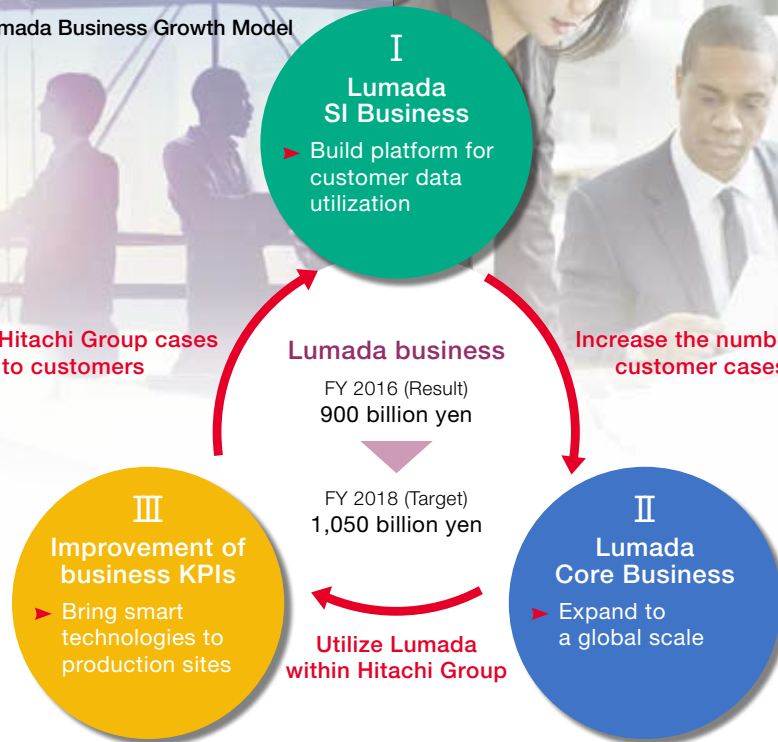
### The Lumada IoT Platform



<sup>\*3</sup> HSDP: Hitachi Streaming Data Platform. <sup>\*4</sup> AT/H: Hitachi AI Technology/H. <sup>\*5</sup> Digital Twin: The concept of using digital information about a product to build its duplicate (twin) in a visual space. The concept has been proposed by NASA for its next-generation aircraft development. <sup>\*6</sup> HCP: Hitachi Content Platform. <sup>\*7</sup> HAF/EDC: Hitachi Application Framework/Event-Driven Computing.



**Lumada Business Growth Model**



**Lumada Business Growth Model**

Hitachi designed Lumada to be the ultimate tool for pursuing new value in collaborative creation with customers, and intends to grow the Lumada business through a combination of three monetization models.

First, Hitachi will provide individual systems to customers through the Lumada SI (Systems Integration) Business. As this business gains experience and knowledge, it will develop new customer cases that can be used to grow the Lumada Core Business, creating “solution cores,” blueprints allowing Hitachi to provide leading-edge digital solutions—the second monetization model. Adoption of these ideas internally will also drive improvement in management indicators across the entire Hitachi Group, allowing monetization in a third way.

In the Lumada SI Business, Hitachi develops and delivers data infrastructure customized to meet individual customer requirements. The Lumada Core Business, meanwhile, is a service business in which Hitachi improves management indicators and resolves customer issues by utilizing artificial intelligence to convert customer data into value. Because the Lumada Core Business allows the nimble, global deployment of solution cores created in the Lumada SI business, customer cases can be optimized for more general application in a variety of industries. The Lumada Core Business is expected to expand rapidly. Meanwhile, applying Lumada within the Hitachi Group and its entire value chain will make production sites smarter, reducing manufacturing costs and optimizing inventory management.

Hitachi expects the combination of these three models to help the Lumada business as a whole exceed 1 trillion yen in revenue for fiscal 2018.

**Lumada Promotion Framework**

The Hitachi Insight Group, an elite team including OT and IT specialists from Hitachi, Ltd., Hitachi Data Systems Corporation, and other Hitachi Group IT businesses, is playing a central role in promoting the Lumada business. Since beginning operations in May 2016 at its headquarters in Santa Clara, California, the Hitachi Insight Group has welcomed hundreds of world-class new hires. Particular emphasis was placed on hiring people with experience in key positions at leading Silicon Valley enterprises.

In April 2017, the research team Insights Laboratory was established. Gathering together researchers, designers, data scientists, and solutions architects from a wide variety of fields, Hitachi is accelerating the pace of innovative collaborative creation by working with customers to develop new ideas, design systems, and demonstrate concepts and value.

Additionally, to promote front-led collaborative creation with customers, in February 2017, Hitachi named a Chief Lumada Officer (CLO), a newly created position, for each business unit. CLOs are responsible for promoting the use of Lumada in such reforms as increasing the efficiency of work processes. The CLOs also share information distilled from the on-site experience of the leading Lumada businesses. Their role is to develop new business models within the Hitachi Group. CLOs will deepen links to the Hitachi Insight Group and promote the expansion of the solutions business and the creation of customer cases within the Hitachi Group.





```

... object to mirror all
mirror_mod.mirror_object = mirror_ob

if operation == "MIRROR_X":
    mirror_mod.use_x = True
    mirror_mod.use_y = False
    mirror_mod.use_z = False
elif operation == "MIRROR_Y":
    mirror_mod.use_x = False
    mirror_mod.use_y = True
    mirror_mod.use_z = False
elif operation == "MIRROR_Z":
    mirror_mod.use_x = False
    mirror_mod.use_y = False
    mirror_mod.use_z = True

Application at the end - add back the de_selected = 0 the modifier object
mirror_ob.select = 1
modifier_ob.select = 1
bpy.context.scene.objects.active = modifier_ob
print("Selected" + str(modifier_ob)) # modifier_ob is the active ob
mirror_ob.select = 0
time = bpy.context.selected_objects[0]
bpy.data.objects[time.name].select = 1
except:
    print("please select exactly two objects, the last one gets the modifier unless its not a mesh")

```

## Lumada Development Case Studies

As of March 2017, Hitachi has collected and published 203 Lumada customer cases, mainly involving the industrial sector, representing successful collaborative creation with customers. We divide the types of value customers typically seek to create into four categories—boosting sales, cost optimization, risk mitigation, and cost visualization—and roughly half of the customer cases published as of fiscal 2016 were for cost visualization (92 of the 203 total cases). Cost visualization is a crucial gateway to the use of Lumada: by letting customers directly experience the value of the platform, it encourages its application in other areas, allowing even greater results to be achieved.

One client of Hitachi Consulting Corporation, a leading beverage maker, had seen its costs mount considerably due to residual odors on some of its products, depending on the quality of water used. The Lumada platform was employed to collect and manage all of the client’s water-related information, from intake to drainage, and to clarify water quality maintenance and its costs, enabling Hitachi to offer a proposal on a new filtration system and approaches to managing its facilities.

Hitachi used the solutions gained from this customer case in proposals made not only to beverage makers but also to other businesses for which water quality management was an issue. We were able to sign contracts with customers in a variety of industries as a result, including water, food, and papermaking.

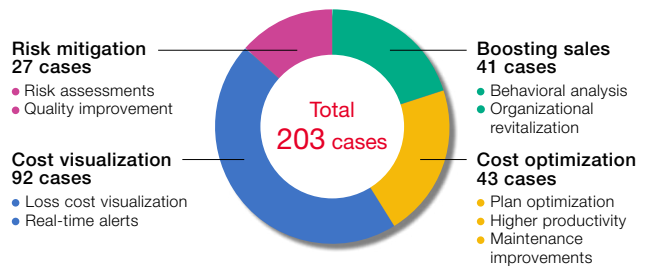
Through Front-led collaborative creation with customers, this project contributed to resolving issues that they faced; it also drove the development of new solutions. Hitachi will continue to expand the Lumada Core Business by leading collaborative creation with customers from the Front and capturing new customer cases.

Proactively advancing the use of Lumada within the Hitachi Group has also allowed us to improve our management indicators and therefore our enterprise value. Lumada has proven useful in the realm of cost structure reform, which has long been a focus for Hitachi. Establishing

a Lumada workplace dedicated to the Hitachi Group and making full use of analytics and artificial intelligence allows work processes to be visualized and optimized and makes supply chains more efficient from end to end.

As of the end of March 2017, there are 23 Group companies participating in this program, including Hitachi, Ltd., Hitachi Chemical Company, Ltd., and Hitachi Metals, Ltd., demonstrating the value of using actual data from production sites.

**Customer Cases** (As of the end of March 2017)



### Typical Customer Cases

<b>Boosting sales</b>	Optimize promotions based on customer attributes and behavioral history	<b>Number of customers increased by more than 10%</b>
Adopted by companies including a professional baseball team		
	Analyze employee work activities and reflect in improvement measures	<b>Order rate improved by 27%</b>
Adopted by call centers and financial institutions		
<b>Cost optimization</b>	Predictive failure diagnostic service for large-scale air compressors	<b>Operational efficiency improved by 20%</b>
Monitoring of 250 domestic and 20 overseas facilities		
	Predictive failure diagnostic service for medical equipment (superconductive MRI)	<b>Downtime reduced by 16%</b>
Introduced by about 90% of customers purchasing superconductive MRI		
<b>Risk mitigation</b>	Analyze the operating condition of manufacturing equipment to detect signs of product defects	<b>Spoilage expenses reduced by 75%</b>
Adopted by electrical equipment manufacturers		



## Giving Birth to New Value with Our Customers

### Keiji Kojima

Senior Vice President and Executive Officer  
CEO of Services & Platforms Business Unit  
Hitachi, Ltd.



### Collaborative Creation with Customers Drives True Competitiveness Overseas

Since unveiling Lumada in May 2016 at the largest IoT event in North America, Informa's Internet of Things World, we have received a great deal of valuable feedback on Hitachi's strategy in discussions with customers around the world.

My impression is that customers outside Japan in particular admire our concept of collaborative creation with customers, calling it "highly unique." Because Lumada is based on Hitachi's long experience in the SI industry, constant and careful attention to customer needs is fundamental to the business. Our goal is not simply to spread an IoT platform—we want to use Lumada alongside customers to resolve their issues. In my view, our customers' understanding that this is our starting position is the reason so many of them have high expectations for Lumada.

In the IoT society, what customers seek is not products but the resolution of business issues. Hitachi is aiming to pivot to a results-based business model, and Lumada is central to that.

### Hitachi's Position in the Rapidly Growing IoT Market

Hitachi's extensive product catalog and long experience with IT solutions puts it in an advantageous position within the IoT market. We are intimately familiar with a wide range of products and equipment, from production facilities and railroads to construction machinery. Our Group is also rich in knowledge and experience regarding the evolutionary stages of OT, such as operational controls for trains. IT-only vendors do not have these strengths.

As long as there are products and equipment in the world, enterprises will grapple with issues like how to manage their assets more efficiently and how to reduce the costs of management. This means that Lumada will be able to contribute to a rapidly expanding range of markets. It is not restricted to the bounds of any particular industry. At the same time, carefully selecting markets where bigger results can be achieved more quickly will be crucial to helping the Lumada business grow.

### World-Class Human Capital Reforming Organizations and Markets

Santa Clara, California, where the Hitachi Insight Group is based, is now home to many accomplished Silicon Valley veterans—people who play a leading role in the world of IT. In the US, this sort of talent is known as "rock star" human capital.

Most of these "rock stars," it seems to me, share our feeling that the IoT solutions offered by pure IT vendors are limited by a lack of knowledge of products and equipment. The Hitachi Insight Group is where they can fully exercise their creativity to make new breakthroughs.

And their dynamism is astounding. As soon as they join the company, they crisscross the world, visiting production sites in Japan or holding in-person discussions with key figures for their work. New ideas and proposals come in a constant stream.

What we wanted from these new members of our organization was speed and the kind of culture and environment that makes speed possible. The work environments they create and the way they do their work has a big impact on existing employees. The power they have to change both organizations and markets is palpable.

### The Next Challenge: Worldwide Expansion

Going forward, I believe that Lumada's challenge will be to strengthen its service delivery globally. Within Japan, the Group's services division is well developed, and Hitachi's ability to provide complete, end-to-end solutions, including ongoing maintenance, is highly valued by customers. We aim to strengthen our delivery channels to allow us to deliver the same level of service elsewhere in the world. Once this framework is in place for Lumada, we expect the rapid expansion witnessed in Japan to be repeated on a global scale.

# OUR ACHIEVEMENTS

Omika Works, Hitachi, Ltd.

The wide-ranging development of Hitachi’s Lumada Core Business, in which accumulated customer cases and internal deployment studies are offered as solutions to customers facing similar issues, is vital for expansion of the Lumada business as a whole. The high-efficiency production model established at Hitachi’s Omika Works is one example of this cycle. Having dramatically reduced production lead times through IoT technology, this model is now attracting significant attention among Lumada’s solution cores.

## High-Efficiency Production Through IoT

Omika Works has supplied systems for social infrastructure like power generation, railways, and water supply for half a century. High reliability is a must for social infrastructure, and Omika Works is unique in addressing customer requirements with exacting care at every stage of the process, from development of hardware and software to maintenance and service. Omika Works is a high-mix, low-volume manufacturer, meaning that its products are custom-made for each individual client.

The common wisdom around mass-production factories is that, with standardized product specifications and manufacturing procedures, efficiency can be increased relatively easily through automation. At a plant like Omika Works, however, specifications differ by order, specifications and delivery dates are subject to frequent change, and production tends to rely on a greater proportion of highly skilled workers. For factories like this, improving efficiency through optimization and automation of manufacturing processes is generally held to be difficult.

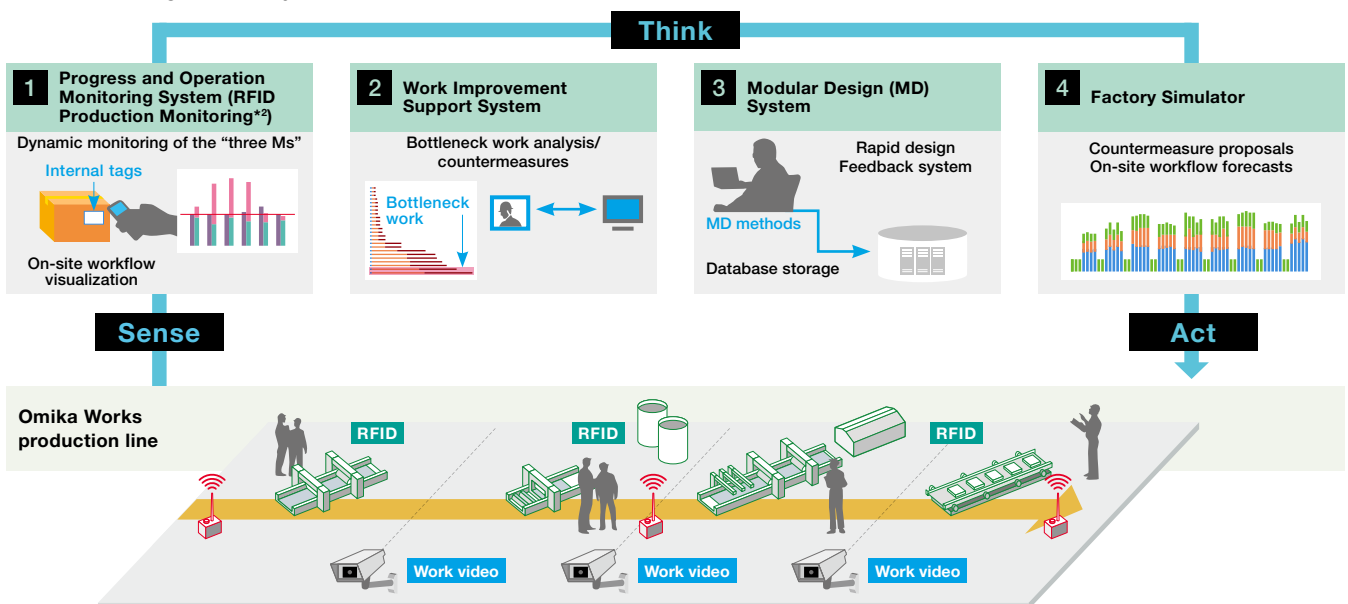
Nevertheless, as part of the Hitachi Smart Transformation Project, which has been reforming Group

cost structures since 2011, Omika Works has embraced the challenge of revolutionizing design and manufacturing by using IoT technology to the best possible effect. To eliminate wasted effort and advance optimization of production planning through visualization of the entire production process, Omika Works not only transitioned to a high-efficiency production model linking four separate systems—the Progress and Operation Monitoring System, the Work Improvement Support System, the Modular Design System, and the Factory Simulator—it also implemented a “Sense, Think, Act” cycle for information about the “three Ms”: man, machine, and material. Together, these measures reduced production lead time for representative products\*1 by 50%.

\*1 These representative products are control devices for power and social industry sectors, accounting for roughly 20% of total production at Omika Works.

<b>Progress and Operation Monitoring System</b>	Performs unified analysis and visualization of production progress and equipment operations to allocate production resources optimally and promote timely improvements when delivery delays are expected
<b>Work Improvement Support System</b>	Facilitates work improvement and shortens the work improvement cycle by automatically extracting processes where actual and expected work times differ and displaying work videos and instructions
<b>Modular Design System</b>	Standardizes shared portions of existing individual product designs as modules, reducing the number of parts that must be designed individually and shortening design lead time
<b>Factory Simulator</b>	Responds to production plan updates such as changes to order quantities or delivery dates by automatically preparing a feasible optimized production plan and adjusting part procurement details

## Omika Works High-Efficiency Production Model



\*2 RFID: Radio Frequency Identification. A noncontact, automatic detection technology that reads information via radio waves from media such as tags and cards containing IC chips and small antennas.



## Accumulated Operational Technology Generates Results

In order to enjoy the benefits of these IT systems to the utmost, hands-on manufacturing knowledge is vital.

Manufacturing involves a chain of connected systems, from order acceptance through engineering (design), procurement, production, quality assurance, and maintenance. Instead of attempting to improve each system individually, adopting the optimal approach for the entire process is crucial. Omika Works' OT allows it to precisely understand the interdependencies between these systems and know how to appropriately address challenges arising in the "three M" areas. Established using OT accumulated over many years, this new production model can now be developed for inclusion among the solution cores Hitachi provides to the manufacturing industry.

## Hitachi's IoT: From Omika to the World

To bring the results achieved using IoT at Omika Works within reach of a broad range of customers pursuing improvements in their business, in July 2017, versions of the Progress and Monitoring Operation System and Work Improvement Support System were made available as Lumada solution cores for the manufacturing field, generalized to ensure applicability to a wider range of production facilities. Many customers have already joined our training program introducing the Omika Works IoT implementation case study, and manufacturing reform through collaborative creation with Hitachi is spreading, particularly among high-mix, low-volume manufacturers.

In May 2017, the machine tool manufacturer Okuma Corporation embarked on a collaborative creation project aiming to build on the results achieved at Omika Works and establish an advanced production model that supports mass customization.\*1 An experimental model was set up at Okuma's new Dream Site 2 factory. Machine tools are a classic example of a high-mix, low-volume manufactured product, created by processing and assembling thousands or even tens of thousands of components according to diverse customer specifications. Recognizing this opportunity, Hitachi and Okuma will continue working on new generations of factory technology through integration of their manufacturing know-how and collaborative creation on the themes "visualization of production" and "a faster factory control cycle."\*\*2

In recent years, the manufacturing industry has seen customer needs diversify due to the rapid development of digital technology. Increasingly, manufacturers are calling for production systems that can respond to these diverse needs quickly and increasing productivity by making the best use of the "three M" resources on hand has become a challenge. Through collaborative creation with customers, Hitachi will continue to identify management challenges and provide customers with solutions that enable them to digitize the supply chain and production activity from an end-to-end perspective and to improve management indicators.

\*1 Mass customization: Realizing mass-production levels of productivity even in high-mix, low-volume manufacturing.

\*\*2 Faster factory control cycle: Deploying a process control system that uses identification tags to grasp the production process more accurately, enabling both reliable identification of bottlenecks and swift remedies.

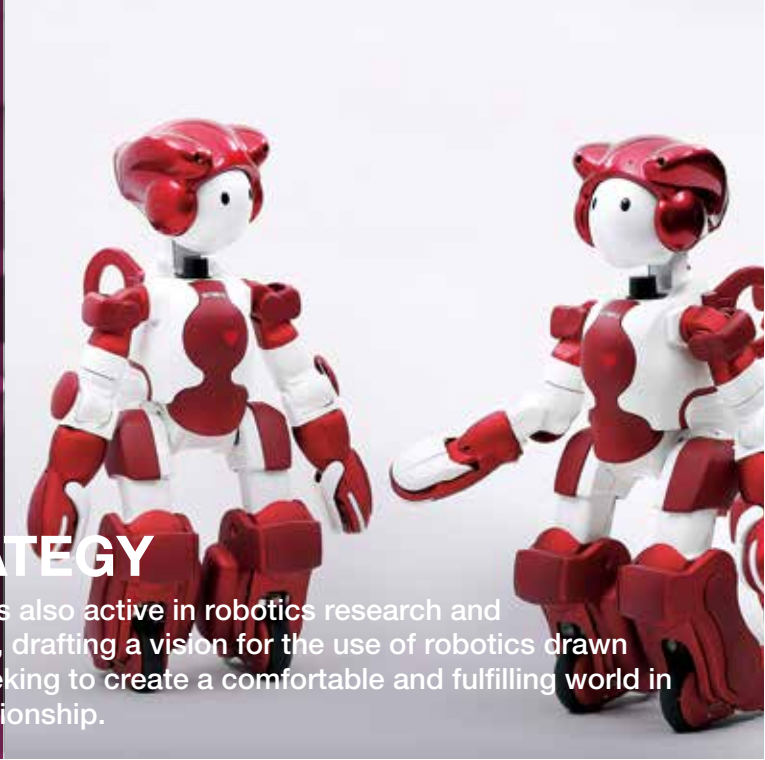




CASE 02 ▶ Robotics

OUR INSIGHT AND STRATEGY

As an Innovation Partner for the IoT Era, Hitachi is also active in robotics research and development—sharing the future with customers, drafting a vision for the use of robotics drawn from projections of ideal future societies, and seeking to create a comfortable and fulfilling world in which humans and robots enjoy a symbiotic relationship.



Robotics Solutions for the IoT Era

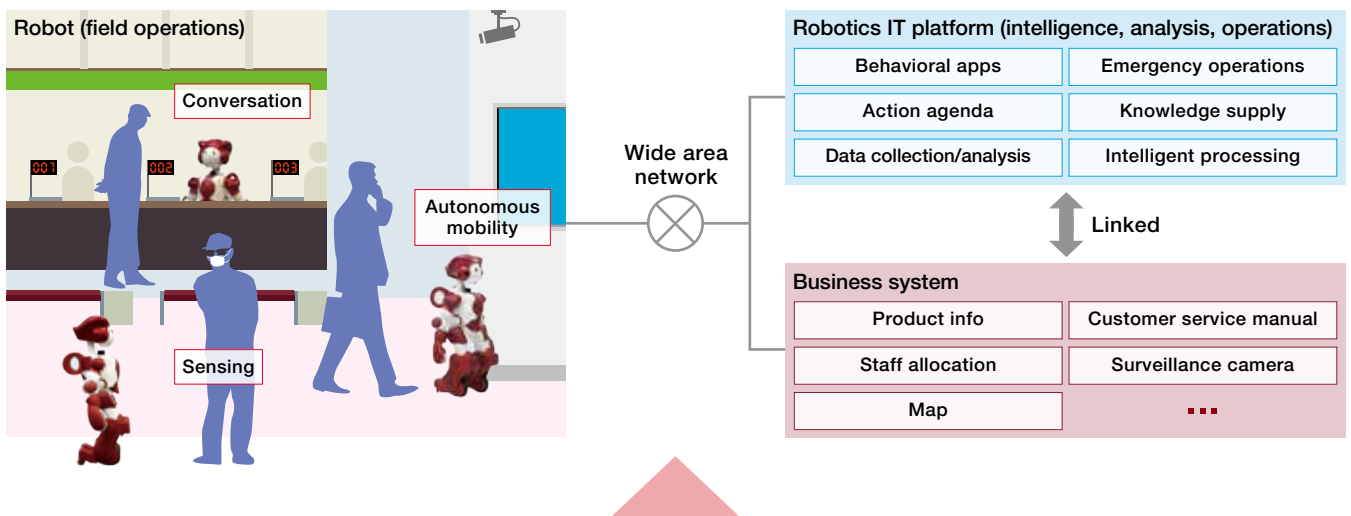
Robots raise quality of life and contribute to efficiency and safety improvements not just in manufacturing but throughout our daily lives by performing tasks that are difficult for humans and compensating for labor shortages. In the future, robots are expected to be able to connect with each other to gather necessary information, learn for themselves, and work in an ever-broadening range of fields.

Since unveiling a computer-controlled, artificially intelligent robot in 1970, Hitachi has integrated the fruits of its ongoing technical research and development in this field into a wide variety of products. In the 1980s, we helped drive adoption of industrial robots, pioneering technical developments as part of a national project. In the 1990s,

our attention turned to the practical applications of robotics, with development focused on how robots could play a role in the community, including the fields of public services, medicine, and welfare. Since the turn of the century, Hitachi has concentrated its efforts on humanoid robots like EMIEW that are specifically designed for symbiotic coexistence with humans.

Going forward, Hitachi will continue to draw on its long-cultivated robotics technology and experience as it puts the Lumada IoT platform to work in a wide variety of fields, collaboratively creating with customers new businesses, societies, and lifestyles in which humans and robots can symbiotically coexist.

Overview of EMIEW3 and Hitachi's robotics IT platform



The left side of the diagram depicts on-site locations, such as public facilities and stores. The right side depicts the computing environment.

The robotics IT platform (top right), responsible for the robot's intelligence processing and operational control, is linked to business systems (bottom right) and controls multiple EMIEW3s installed on-site and connected via the network. Receiving instructions from the robotics IT platform, each EMIEW3 can perform a variety of services, such as interacting with and guiding customers. Information recognized by an EMIEW3 through its various sensors is sent to the robotics IT platform, where it is stored and used to improve the precision of EMIEW3 operations.

# OUR ACHIEVEMENTS

Hitachi's latest robotics technology addresses the needs of today's society and aims at a symbiotic coexistence of humans and robots.

## EMIEW3: The Humanoid Robot

Hitachi has long promoted the development of robots that coexist symbiotically with humans, aiming to create robot services with rich communicative abilities that can safely and symbiotically coexist with humans.

Unveiled in 2016, EMIEW3 agglomerates Hitachi's decades of knowledge and experience into a robot featuring high levels of both information processing and autonomy. The robotics IT platform, responsible for information processing and control of the robot itself, is located in the cloud. It connects to the robot in real time, enabling it to perform advanced support services like interacting with and guiding customers. EMIEW3 can identify customers in need of support and approach them on its own initiative, share information with other EMIEW3 units, and hand off service tasks to other parties when necessary. EMIEW3 is equipped with a function to regain a standing position by itself in the unlikely event that it should fall over.

Hitachi aims to use EMIEW3 for guidance services in airports, train stations, and other situations that may require

multilingual support and autonomous operation, as well as in banks and commercial facilities that handle multiple complex services in a single branch. Through field trials at airports, train stations, and commercial facilities, we will continue collaborating with customers to create new practical applications for EMIEW3.

"EMIEW" stands for "Excellent Mobility and Interactive Existence as Workmate," directly reflecting Hitachi's goal of a robot that can exist in symbiosis with humans, moving fluidly and communicating through speech.

EMIEW2, announced in 2007, was able to move at the pace of a fast-walking human, and combined a number of functions to allow it to interact and guide customers, such as autonomous movement, the ability to detect human voices in noisy environments, functions to recognize objects based on data on the internet, and the ability to search for objects using multiple networked cameras within a facility as "eyes." EMIEW3 inherits the best of EMIEW2's abilities while adding new functionality of its own, and its announcement in 2016 is another milestone in robot evolution toward symbiotic coexistence with their human creators.

## PMORPH2: A Robot to Investigate Fukushima Daiichi



Hitachi-GE Nuclear Energy, Ltd. (Hitachi-GE) is working toward the decommissioning of Tokyo Electric Power Company's Fukushima Daiichi Nuclear Power Station. Since joining the International Research Institute for Nuclear Decommissioning (IRID), founded in 2013 with the aim of developing the necessary technology for this unprecedentedly difficult decommissioning project, Hitachi-GE has advanced its research and development efforts toward this goal.

In March 2017, PMORPH2—a robot to investigate the basement floor inside the Unit 1 Primary Containment Vessel (PCV) developed by Hitachi-GE in its role as a member of

IRID—was sent into the Fukushima Daiichi Nuclear Power Station Unit 1 PCV to investigate the condition of the fuel debris (melted and fallen nuclear fuel) within the vessel.\* Based on technology developed by the Hitachi Group, PMORPH2 is able to pass through a narrow pipe roughly 10 cm in diameter, and has the unique ability to transform from a straight, thin shape like the letter "I" into the shape of the letter "U" in order to maneuver stably inside the PCV.

The investigation was carried out by taking measurements and photographs at five locations 10 times over five days. Due to sediment inside the PCV, it did not succeed in photographing the fuel debris itself, but the range of data it obtained will be used in future explorations of methods for removing the fuel debris.

\* PMORPH2 was developed with the Subsidy Project of Decommissioning and Contaminated Water Management by Ministry of Economy, Trade, and Industry (METI).

## Hitachi-GE Nuclear Energy, Ltd.

**Satoshi Okada, PhD**

Senior Engineer, Nuclear Equipment Design Department, Nuclear Engineering and Product Division

In highly radioactive areas, electronics are of limited use. As a result, when using a robot to investigate the PCV interior, the skill of the operator is also a vital element. The key to a successful probe is harmonious teamwork between human and robot. The road to decommissioning is daunting, but this investigation result has allowed us to take another step toward that goal. At Hitachi-GE, developers do not just improve by sharing and discussing ideas internally—they also collect information from around the world to use when developing new technology.





CASE 03 ▶ Water

OUR INSIGHT AND STRATEGY

Water is one of the focus areas for Hitachi's Social Innovation Business. Hitachi aims to become a comprehensive water service provider, responsive to the needs of the market and its customers. The water business unit seeks to resolve water-related issues by providing end-to-end solutions worldwide, from design and construction of purification, desalination, and sewage treatment plants to the building, operation, and maintenance of monitoring and control systems.

Changing Markets and Sustainable Development Goals

Demand for water resources is increasing rapidly, driven by population growth, economic expansion, and urbanization. The Organization for Economic Cooperation and Development estimates that by 2050 world water demand will have increased on the order of 55% in response to growth in manufacturing, thermal power generation, and home use. The market for seawater desalination plants in particular is expected to double in size by 2020.

Hitachi has supplied water-related products and systems to more than 200 sites in 40 countries and regions around the world. We are currently expanding globally, with focus areas including the ASEAN countries and India, where rising populations are fueling major market growth; the Middle East and Africa, where the need to secure drinking

water is acute; and North America, where increasing attention is paid to drought countermeasures.

Some water-related challenges are global in scope. Two of the United Nations' Sustainable Development Goals (SDGs) deal specifically with water: Goal 6, "Ensure access to water and sanitation for all," and Goal 14, "Conserve and sustainably use the oceans, seas, and marine resources." Hitachi is determined to leverage its technology to supply safe and affordable water to people throughout the world, provide sewage treatment and other sanitary facilities, and construct systems enabling more efficient use of water. Additionally, we will continue striving to reduce marine pollution and help achieve the SDGs.

Business Rollout in Response to Regional Needs

★ Seawater desalination/ advanced water treatment projects (including focus areas)

● ODA projects

■ Engineering bases

Activities

**Expand business in seawater desalination and advanced sewage treatment fields**  
(respond to needs through superior technologies)

**Steadily promote and expand large-scale projects**  
(ODA projects, partnerships using unique technologies)

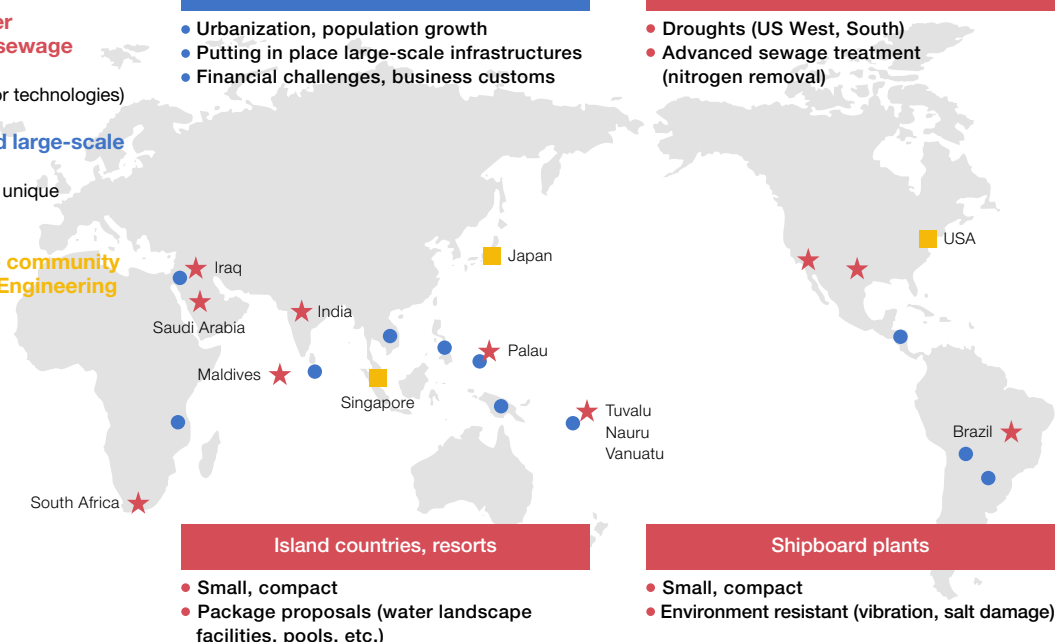
**Roll out business with close community ties by strengthening Front Engineering**  
(Singapore, USA)

Developing countries, emerging countries

- Urbanization, population growth
- Putting in place large-scale infrastructures
- Financial challenges, business customs

North America

- Droughts (US West, South)
- Advanced sewage treatment (nitrogen removal)





# OUR ACHIEVEMENTS

As a comprehensive water service provider rooted in each individual region, Hitachi takes social issues into account when considering market and customer needs and supplying technology. It also promotes a variety of local initiatives, including participation in business planning and human capital development.

## Enhancing Regional Autonomy Through Water Initiatives

### Seawater Desalination Initiatives in South Africa

In 2016, at the request of the New Energy and Industrial Technology Development Organization (NEDO), Hitachi began an integrated seawater desalination and water reuse system demonstration project in eThekweni, formerly known as Durban, South Africa.

eThekweni is on the Indian Ocean coast and has a population of roughly 3.6 million. Its water shortages are due to the concentration of this population in urban areas and its lack of precipitation. Seawater desalination was the first potential solution to be investigated, but conventional systems require high-pressure pumps to force seawater through reverse osmosis (RO) membranes, and these pumps consume a great deal of electricity. With electricity costs rising sharply in South Africa of late, this proved a significant hurdle.

Meanwhile, Hitachi's interest in developing and accumulating operational and administrative knowledge about the water business, with a particular orientation toward international development, had seen the company work with Toray Industries, Inc. and other partners to establish the Global Water Recycling and Reuse Solution Technology Research Association in 2010. Under contract from NEDO, and in collaboration with the municipal government of Kitakyushu and other partners, Hitachi opened Water Plaza Kitakyushu, moving forward with pilot experiments for a new energy-efficient desalination technology Hitachi had developed and dubbed "RemixWater."

Kitakyushu had experience in the water business through public-private partnerships, particularly in Southeast Asia, and took the initiative in inviting researchers and observers from around the world to visit and study at Water Plaza Kitakyushu. Hitachi's RemixWater system was of great interest to the delegation from eThekweni, and the current demonstration project was the eventual result.

By diluting seawater with treated sewage, RemixWater reduces the desalination pump pressure, cutting the energy consumption of the system as a whole by around 30%. The burden on the environment is also reduced, with the water ultimately discharged into the ocean almost exactly as dilute as seawater. For this demonstration project, Hitachi will install a new RemixWater system in eThekweni's existing sewage treatment facilities, sufficient to desalinate 6,250 m<sup>3</sup> of seawater per day—enough for around 25,000 people. The demonstration period is planned to last until November 2020.



A sewage treatment plant in eThekweni is the planned site of the RemixWater demonstration project.

### Nurturing Young Engineers in South Africa

Hitachi believes that to resolve social issues like those identified by the SDGs, it is crucial not only to provide technology but also to nurture human capital rooted in each region. Since 2009, with the support of South Africa's Department of Science and Technology (DST), Hitachi has run the Hitachi-DST Scholarship Program for South African Engineers, which aims to support the development of young engineers in South Africa. Since fiscal 2015, Hitachi has contributed to the development of young human capital in South Africa by inviting around five engineers from the water treatment field to Japan each year, where they spend around two months observing Japan's cutting-edge advanced water treatment technology and participating in technical training at Hitachi's factories and other facilities.

Hope Joseph, a fiscal 2016 training program participant who is based in eThekweni, says, "Water Plaza Kitakyushu was very interesting as it showcased the RemixWater plant, which uses technology with low environmental impact—energy-saving as well as cost-effective. The program also changed my views as an engineer, making me realize that structured institutional mechanisms are required for the success of a project as well as technology." Joseph now holds presentations to share what she learned in Japan with her co-workers back home. There is great interest in South Africa in private initiatives to nurture human capital, and Hitachi's steps in this direction are welcomed warmly.



Workshop participants paying a courtesy visit to the mayor of Kitakyushu (Hope Joseph is fifth from the right).

### The SDG Workshop in the Water Business Unit

To grasp the evolution of market needs from a perspective centered on the UN Sustainable Development Goals, Hitachi held an internal workshop for water business unit engineers, with external experts also invited to participate, on the theme "Expanding business potential by understanding needs from an SDG-centric perspective." One issue explored at the workshop was how the business should recognize regional social issues surrounding products and services, with seawater desalination in South Africa used as an example. Hitachi will continue to both raise awareness of the SDGs and develop its water business in order to help resolve social issues.





# MANAGEMENT &

## Independent Outside Directors\* As of June 30, 2017

### 01 Baba Kalyani

1972 Joined Bharat Forge Limited  
1983 Joint Managing Director, Bharat Forge Limited  
1994 Managing Director, Bharat Forge Limited  
1997 Chairman & Managing Director, Bharat Forge Limited (Currently in office)  
2016 Director, Hitachi, Ltd.

### 02 Cynthia Carroll

1991 General Manager, Foil Products, Alcan Inc.  
1996 Managing Director, Aughinish Alumina Ltd., Alcan Inc.  
1998 President, Bauxite, Alumina and Speciality Chemicals, Alcan Inc.  
2002 President & CEO, Primary Metal Group, Alcan Inc.  
2007 CEO, Anglo American plc. (Retired in April 2013)  
2013 Director, Hitachi, Ltd.

### 03 Sadayuki Sakakibara

2002 President and Representative Member of the Board, Toray Industries, Inc.  
2010 Chairman of the Board and Representative Member of the Board, Toray Industries, Inc.  
2013 Director, Hitachi, Ltd.  
2014 Chairman of the Board, Toray Industries, Inc.  
2015 Chief Senior Advisor and Chief Senior Counselor, Toray Industries, Inc.  
2017 Senior Advisor, Toray Industries, Inc. (Currently in office)

### 04 George Buckley

1993 Chief Technology Officer, Motors, Drives and Appliances, Emerson Electric Company  
1994 President, US Electrical Motors, Emerson Electric Company  
1997 President, Mercury Marine Division and Corporate Vice President, Brunswick Corporation  
2000 President and Chief Operating Officer, Brunswick Corporation, Chairman and Chief Executive Officer, Brunswick Corporation  
2005 Chairman of the Board, President and Chief Executive Officer, 3M Company  
2012 Executive Chairman of the Board, 3M Company (Retired in May 2012)  
Chairman, Arle Capital Partners Limited (Retired in December 2015)  
Director, Hitachi, Ltd.

### 05 Louise Pentland

1997 Admitted as a Solicitor (UK)  
2001 Senior Legal Counsel, Nokia Networks, Nokia Corporation  
2007 Vice President, Acting Chief Legal Officer and Head of IP Legal, Nokia Corporation  
2008 Senior Vice President and Chief Legal Officer, Nokia Corporation  
2009 Admitted to New York State Bar Association  
2011 Executive Vice President and Chief Legal Officer, Nokia Corporation (Retired in May 2014)  
2015 General Counsel, PayPal, eBay Inc. Director, Hitachi, Ltd.  
Senior Vice President and Chief Legal Officer, PayPal Holdings, Inc.  
2016 Executive Vice President, Chief Business Affairs and Legal Officer, PayPal Holdings, Inc. (currently in office)

### 06 Harufumi Mochizuki

Chair of the Nominating Committee  
Chair of the Compensation Committee  
2002 Director-General for Commerce and Distribution Policy, Minister's Secretariat, Ministry of Economy, Trade and Industry of Japan ("METI")  
2003 Director-General, Small and Medium Enterprise Agency, METI  
2006 Director-General, Agency for Natural Resources and Energy, METI  
2008 Vice-Minister of Economy, Trade and Industry of Japan  
2010 Special Advisor to the Cabinet of Japan (Retired in September 2011)  
Senior Advisor to the Board, Nippon Life Insurance Company (Retired in April 2013)  
2012 Director, Hitachi, Ltd.  
2013 President and Representative Director, Tokyo Small and Medium Business Investment & Consultation Co., Ltd. (Currently in office)

### 07 Takatoshi Yamamoto

1995 Managing Director, Morgan Stanley Japan Limited  
1999 Managing Director and Vice Chairman, Tokyo Branch, Morgan Stanley Japan Limited  
2005 Managing Director and Vice Chairman, UBS Securities Japan Co., Ltd.  
2009 Managing Director, CASIO COMPUTER CO., LTD.  
2011 Advisor, CASIO COMPUTER CO., LTD. (Retired in June 2012)  
2016 Director, Hitachi, Ltd.

### 08 Philip Yeo

1970 Joined Ministry of Defense of Singapore  
1979 Permanent Secretary, Ministry of Defense of Singapore  
1986 Chairman, Economic Development Board of Singapore  
2001 Chairman, Agency for Science, Technology and Research of Singapore  
2007 Senior Advisor for Science and Technology to the Ministry of Trade & Industry, Singapore (Retired in September 2008)  
Special Advisor in Economic Development, Prime Minister's Office, Government of Singapore (Retired in August 2011)  
Chairman, SPRING Singapore (Currently in office)  
2012 Director, Hitachi, Ltd.

### 09 Hiroaki Yoshihara

Chair of the Audit Committee  
1978 Joined Peat Marwick Mitchell & Co.  
1996 National Managing Partner, the Pacific Rim Practice, KPMG LLP  
1997 Board Member, KPMG LLP  
2003 Vice Chairman and Global Managing Partner, KPMG International (Retired in April 2007)  
2014 Director, Hitachi, Ltd.

\* As all of outside directors meet the independence criteria defined by the Company and those provided by Japanese stock exchanges where the Company is listed, they are referred to as independent outside directors in this report.



## Directors As of June 30, 2017

### 10 Kazuyuki Tanaka

1977 Joined Hitachi Chemical Company, Ltd.  
 2005 Executive Officer, Hitachi Chemical Company, Ltd.  
 2006 Senior Executive Director, Hitachi Media Electronics Co., Ltd.  
 Representative Director and President,  
 Hitachi Media Electronics Co., Ltd.  
 2008 Vice President and Executive Officer,  
 Hitachi Chemical Company, Ltd.  
 2009 Representative Executive Officer, President & Chief Executive Officer,  
 Hitachi Chemical Company, Ltd.  
 Director, Representative Executive Officer, President & Chief  
 Executive Officer, Hitachi Chemical Company, Ltd.  
 2016 Chairman of the Board, Hitachi Chemical Company, Ltd.  
 (Currently in office)  
 Director, Hitachi, Ltd.

### 11 Hiroaki Nakanishi

1970 Joined Hitachi, Ltd.  
 2003 Vice President and Executive Officer  
 2004 Senior Vice President and Executive Officer  
 2005 Chairman and Chief Executive Officer,  
 Hitachi Global Storage Technologies, Inc.  
 2006 Executive Vice President and Executive Officer, Hitachi, Ltd.  
 (Retired in December 2006)  
 2009 Executive Vice President and Executive Officer, Hitachi, Ltd.  
 2010 President, Hitachi, Ltd., President and Director, Hitachi, Ltd.  
 2014 Chairman & CEO and Director, Hitachi, Ltd.  
 2016 Chairman of the Board and Representative Executive Officer,  
 Hitachi, Ltd.

### 12 Toyoaki Nakamura

1975 Joined Hitachi, Ltd.  
 2006 General Manager, Finance Department  
 2007 Senior Vice President and Executive Officer  
 Senior Vice President, Executive Officer and Director  
 2009 Senior Vice President and Executive Officer  
 2012 Executive Vice President and Executive Officer  
 (Retired in March 2016)  
 2016 Director

### 13 Toshiaki Higashihara

1977 Joined Hitachi, Ltd.  
 2007 Vice President and Executive Officer (Retired in March 2008)  
 2008 President, Hitachi Power Europe GmbH  
 2010 President and Chief Executive Officer,  
 Hitachi Plant Technologies, Ltd.  
 President and Representative Director,  
 Hitachi Plant Technologies, Ltd.  
 2011 Vice President and Executive Officer, Hitachi, Ltd.  
 2013 Senior Vice President and Executive Officer, Hitachi, Ltd.  
 2014 President & COO, Hitachi, Ltd.  
 President & COO and Director, Hitachi, Ltd.  
 2016 President & CEO and Director, Hitachi, Ltd.

- Nominating Committee
- Audit Committee
- ▲ Compensation Committee
- ✦ Representative Executive Officer

Each Committee is composed of the following members (chair names underlined)

Nominating Committee:

Harufumi Mochizuki, Cynthia Carroll, Sadayuki Sakakibara, Hiroaki Nakanishi

Audit Committee:

Hiroaki Yoshihara, Harufumi Mochizuki, Takatoshi Yamamoto, Kazuyuki Tanaka, Toyoaki Nakamura

Compensation Committee:

Harufumi Mochizuki, Sadayuki Sakakibara, Takatoshi Yamamoto, Toshiaki Higashihara

# Executive Officers

As of June 30, 2017

## President & CEO



**Toshiaki Higashihara\***  
Overall management

## Executive Vice Presidents and Executive Officers



**Masakazu Aoki\***  
Assistant to the President and industrial products business



**Ryuichi Kitayama\***  
Assistant to the President, marketing & sales, and social innovation business promotion



**Yutaka Saito\***  
Assistant to the President and IoT business



**Keiichi Shiotsuka\***  
Assistant to the President and systems & services business

## Senior Vice Presidents and Executive Officers



**Koji Tanaka\***  
Assistant to the President and nuclear energy business



**Toshikazu Nishino\***  
Assistant to the President and management strategies



**Shinichiro Omori**  
Cost structure reform, information technology strategies and supply chain management (MONOZUKURI and quality assurance)



**Toshiaki Kuzuoka\***  
Corporate communications and CSR, legal matters, risk management and corporate auditing



**Keiji Kojima**  
Services & platforms business



**Hiroshi Sato**  
Building systems business



**Yasuo Tanabe**  
Governments & external relations



**Yoshitaka Tsuda**  
Marketing & sales and social innovation business promotion



**Alistair Dormer**  
Railway systems business



**Mitsuaki Nishiyama\***  
Finance and corporate pension system

## Vice Presidents and Executive Officers

**Hiroyuki Ugawa**  
Business for industry & distribution sectors

**Kenji Urase**  
Water business

**Ryuichi Otsuki**  
Services & platforms business

**Atsushi Oda**  
Power business

**Yoshihiko Kawamura**  
Investment strategies and strategies for next generation business

**Kenichi Kokubo**  
Regional strategies (China)

**Keizo Kobayashi**  
Urban solutions business

**Setsuo Shibahara**  
Systems & services business

**Akira Shimizu**  
Governments & external relations

**Norihiro Suzuki**  
Research & development

**Katsuya Nagano**  
Business for government, public corporation and social infrastructure systems

**Hidenobu Nakahata**  
Human capital

**Tadashi Namura**  
Marketing & sales (business for financial institutions, government, public corporation and social infrastructure systems, healthcare business and defense systems business)

**Isao Narukawa**  
Marketing & sales (nuclear energy business, power business and energy solutions business)

**Masaaki Nomoto**  
Energy solutions business

**Kentaro Masai**  
Railway systems business

**Yasushi Manabe**  
Marketing & sales (business for industry & distribution sectors, water business, building systems business, railway systems business and urban solutions business)

**Mamoru Morita**  
Management strategies

**Tsugio Yamamoto**  
Business for financial institutions

**Masaya Watanabe**  
Healthcare business

## Representative Executive Officer

**Hiroaki Nakanishi\***  
General

Note: Executive officers are listed by position and in Japanese alphabetical order within each grouping.

\* Denotes executive officers who are representative executive officers.

# Corporate Governance

Hitachi and its listed subsidiaries are “Companies with Nominating Committee, etc.” defined under the Companies Act of Japan. By demarcating responsibilities for management oversight and those for the execution of business operations, Hitachi is working to create a framework for nimble operations, while making management highly transparent.

In addition, Hitachi is executing business strategies formulated to enable the Group to demonstrate its collective strengths. Moreover, some of Hitachi’s directors and executive officers serve concurrently as directors or executive officers at Group companies, thereby strengthening integrated management of the Group and improving management

oversight of Group companies. In these ways, Hitachi is working to increase corporate value.

Starting in June 2015, Japan’s Corporate Governance Code applies to companies listed on stock exchanges in Japan. Hitachi agrees with the basic approach of the Code, which is that the Code’s appropriate implementation will contribute to the development and success of companies, investors and the Japanese economy as a whole through individual companies’ self-motivated actions so as to achieve sustainable growth and increase corporate value over the medium to long term. Moving forward, Hitachi will work to further strengthen corporate governance.

## Initiatives to Strengthen Corporate Governance

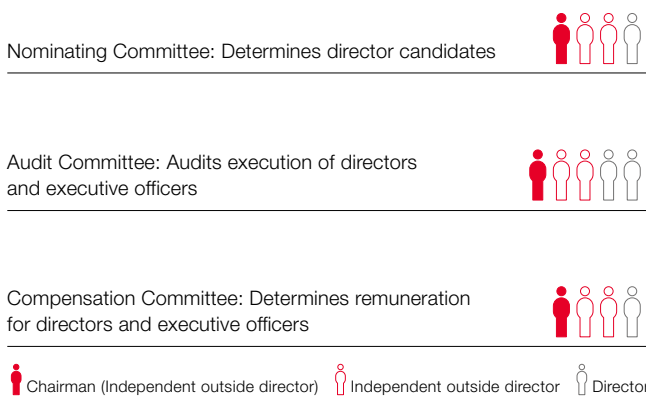
### ① Realizing quick, highly transparent management

Hitachi transitioned to a Company with Committee System (now called a Company with Nominating Committee, etc.) in June 2003.

#### Major Aims

Make management highly transparent by demarcating responsibilities for management oversight and those for the execution of business operations

#### Composition of Each Committee (June 2017)



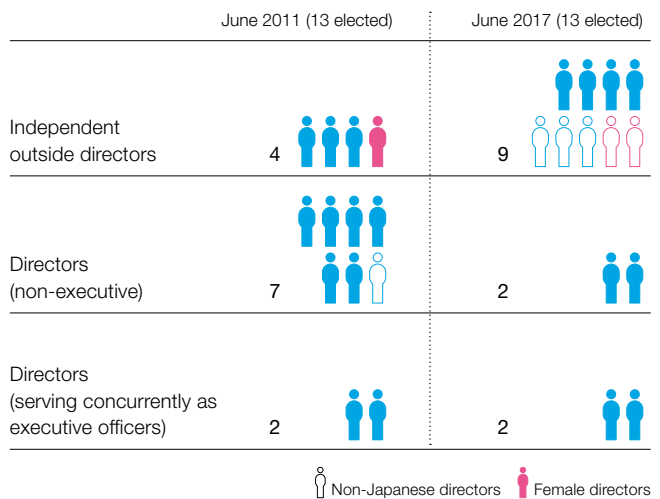
### ② Accelerating global management and strengthening oversight function

Increased number of independent outside directors including non-Japanese directors; independent outside directors became majority in June 2012.

#### Major Aims

Reflect global, diverse viewpoints in management, further strengthen oversight function

#### Composition of Board of Directors



### ③ Appropriate implementation of the Corporate Governance Code

#### Implementing all of the principles of the Corporate Governance Code

##### Analysis and Evaluation of the Effectiveness of the Board of Directors

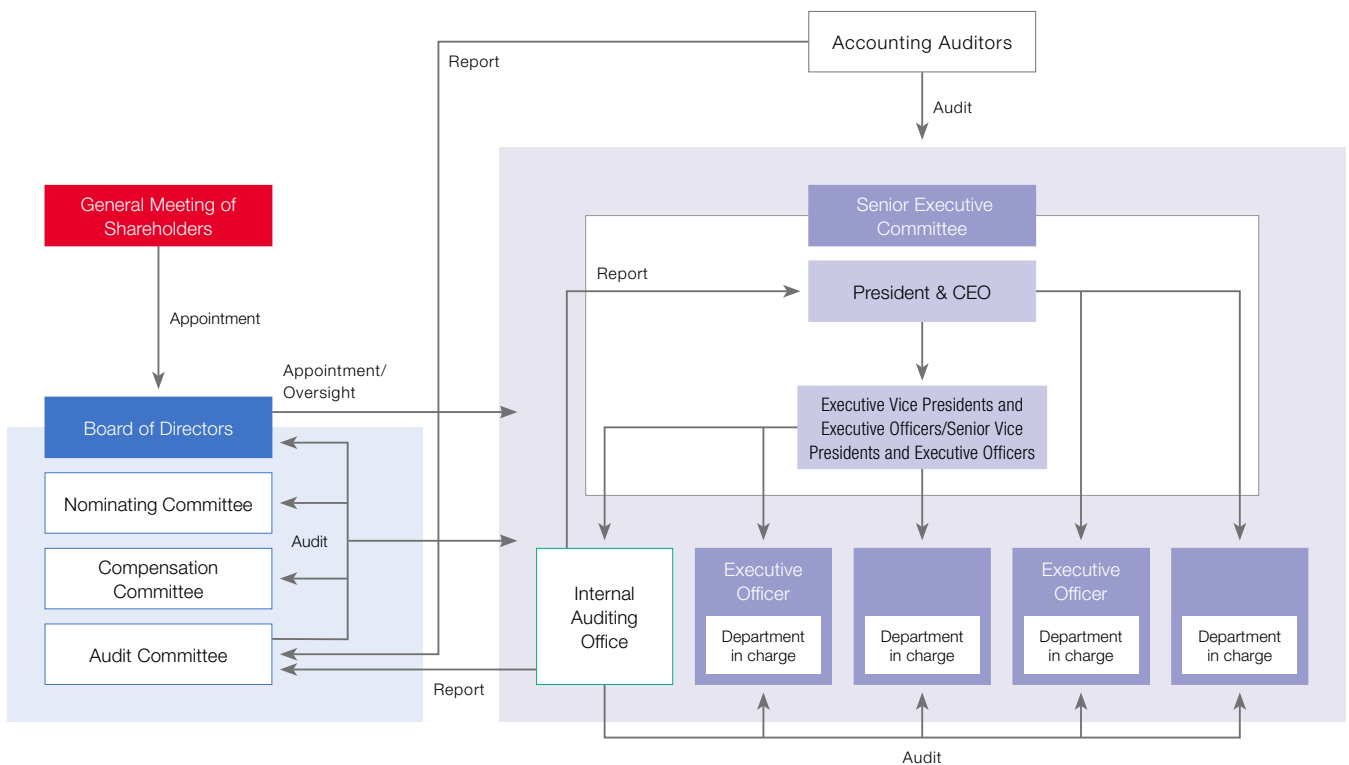
In evaluating the Board's effectiveness for the fiscal year ended March 31, 2017, questionnaires were distributed to all directors, and each of them carried out a self-assessment of the Board regarding its composition, decision-making process, contribution to the company, operational and support systems for the Board, and other aspects. Based on the results of these evaluations, the Board analyzed and evaluated its effectiveness as a whole, considering comparison to the results for the fiscal year ended March 31, 2016.

The Board assessed that the Board members are diverse and make use of their knowledge and expertise to

speak out, having vigorous discussions especially on matters related to business strategies such as the Mid-term Management Plan toward medium/long-term growth of corporate value. The Board, therefore, concluded that the effectiveness of the Board as a whole is being maintained.

Based on the suggestions made by each director with an aim to maintain and improve the functions of the Board, the Company will make Board discussions related to business strategies more effective and improve the method of information provision to help directors further expand their contribution.

#### Corporate Governance Framework





## Board of Directors

The Board of Directors approves basic management policy for the Hitachi Group and supervises the execution of the duties of executive officers and directors in order to sustainably enhance corporate value and shareholders' common interests. The basic management policy includes the Mid-term Management Plan and annual budget compilation. The Board of Directors focuses on strategic issues related to the basic management policy as well as other items to be resolved that are provided in laws, regulations, the Articles of Incorporation, and Board of Directors Regulations. As of June 21, 2017, the Board of Directors was made up of 13 directors, two of whom concurrently serve as executive officers. Hitachi aims to reinforce the oversight function of the Board of Directors, of which nine independent outside directors, including non-Japanese, account for the majority, reflecting their global and diverse viewpoints. The term of office for directors is one year.

Within the Board of Directors, there are three statutory committees—the Nominating Committee, the Audit Committee, and the Compensation Committee—with independent outside directors accounting for the majority of members of each committee. The Board of Directors meetings were held on 8 days during the fiscal year ended March 31, 2017, and the attendance rate of directors at these meetings was 99%. The attendance rates for each independent outside director were as shown in the table below. To assist with the duties of the Board of Directors and each committee, staff who are not subject to orders and instructions from executive officers are assigned.

Attendance at meetings of the Board of Directors by each independent outside director in the fiscal year ended March 31, 2017

Name	Attendance*	Attendance rate
Baba Kalyani	6 out of 7 days	86%
Cynthia Carroll	8 out of 8 days	100%
Sadayuki Sakakibara	8 out of 8 days	100%
George Buckley	8 out of 8 days	100%
Louise Pentland	8 out of 8 days	100%
Harufumi Mochizuki	8 out of 8 days	100%
Takatoshi Yamamoto	7 out of 7 days	100%
Philip Yeo	8 out of 8 days	100%
Hiroaki Yoshihara	8 out of 8 days	100%

\*Based on the number of days Board meetings were held during each independent outside director's term of office.

Furthermore, Hitachi formulated and published Corporate Governance Guidelines outlining the framework of corporate governance, such as the function and composition of the Board of Directors, qualifications for directors, criteria for assessing the independence of independent outside directors, and rules on those serving concurrently as officers at other companies.

Corporate Governance Guidelines of Hitachi, Ltd.

<http://www.hitachi.com/IR-e/corporate/governance/guidelines.html>

## Qualification for Independent Outside Directors and Criteria for Independence

In regard to the election of an independent outside director, Hitachi's Nominating Committee considers the following criteria for independence. In addition, the Committee also considers whether the independent outside director has outstanding character and insight and whether the independent outside director has worked in a leadership position in such fields as business, law, administration, accounting or education, or has experience at policy-making levels.

In regard to the independence of an independent outside director, the Company considers an independent outside director to be independent unless:

- His or her immediate family member is, or has been within the last three years, a director or an executive officer of the Company or any of its subsidiaries;
- He or she is currently an executive director, an executive officer, or an employee of a company that has made payments to, or received payments from, the Company for property or services in an amount which, in any of the last three fiscal years, exceeds 2% of any of the companies' consolidated gross revenues;
- He or she has received during any of the last three fiscal years more than ¥10 million in direct compensation for his or her service as a specialist in law, accounting or tax, or as a consultant from the Company, other than director compensations; or
- He or she serves as an executive officer or director of a not-for-profit organization, and the Company's discretionary charitable contributions to the organization in any of the last three fiscal years are more than ¥10 million and 2% of that organization's annual gross revenues.

## Concurrent Officer Positions at Other Companies

In order for directors to secure the time necessary to understand the Company's business and prepare for and attend Board of Directors meetings, the Company considers it desirable for its directors not to hold concurrent officer positions (director, corporate auditor, or executive officer) in more than four other listed companies.

## Independent outside directors and reasons for appointment

Baba Kalyani	Mr. Kalyani is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective as well as reflecting his global viewpoint to the Company's Board of Directors based on his rich experience and insight as the top executive of a major global company.
Cynthia Carroll	Ms. Carroll is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective as well as reflecting her global viewpoint to the Company's Board of Directors based on her rich experience and insight as the top executive of major global companies.
Sadayuki Sakakibara	Mr. Sakakibara is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective based on his rich experience and insight as the top executive of a major global company.
George Buckley	Mr. Buckley is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective as well as reflecting his global viewpoint to the Company's Board of Directors based on his rich experience and insight as the top executive of major global companies.
Louise Pentland	Ms. Pentland is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective as well as reflecting her global viewpoint to the Company's Board of Directors based on deep insight into corporate legal matters and corporate governance gained through her rich experience as the chief legal officer of major global companies.
Harufumi Mochizuki	Mr. Mochizuki is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective based on his rich experience and insight in the area of public administration, etc.
Takatoshi Yamamoto	Mr. Yamamoto is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective based on a broad range of insight in business and management gained through his experience in the area of corporate analysis and global corporate management.
Philip Yeo	Mr. Yeo is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective as well as reflecting his global viewpoint to the Company's Board of Directors based on his broad experience and insight in such areas as public administration.
Hiroaki Yoshihara	Mr. Yoshihara is expected to reinforce the functional aspects of the Company's Board of Directors by supervising the execution of duties by executive officers and others from an independent perspective as well as reflecting his global viewpoint to the Company's Board of Directors based on his rich experience and insight in the area of global corporate management and accounting.

### (1) Nominating Committee

The Nominating Committee has the authority to determine proposals submitted to the general meeting of shareholders for the election and dismissal of directors. The Nominating Committee consists of four directors, three of whom are independent outside directors.

The Nominating Committee meetings were held on 10 days during the fiscal year ended March 31, 2017.

### (2) Audit Committee

The Audit Committee has the authority to audit the execution of duties of directors and executive officers and to determine on proposals submitted to the general meeting of shareholders for the election and dismissal of accounting auditors. The Audit Committee consists of five directors, including three independent outside directors and one standing Audit Committee member.

The Audit Committee meetings were held on 16 days during the fiscal year ended March 31, 2017.

### (3) Compensation Committee

The Compensation Committee has the authority to determine remuneration policies for directors and executive officers and remuneration for individuals (including amounts of remuneration) based on them. The Compensation Committee consists of four directors, three of whom are independent outside directors.

The Compensation Committee meetings were held on 4 days during the fiscal year ended March 31, 2017.

### Composition of the Board of Directors and each committee (as of June 21, 2017)

	Number of persons	Independent outside directors*	Directors	Chair
Board of Directors	13	9	4	Director
Nominating Committee	4	3	1	Independent outside director
Audit Committee	5	3	2	Independent outside director
Compensation Committee	4	3	1	Independent outside director

\*Hitachi has issued notifications identifying all outside directors as independent outside directors to each of the stock exchanges in Japan where the Company is listed.

	Committee members
Nominating Committee	Harufumi Mochizuki (Chair), Cynthia Carroll, Sadayuki Sakakibara, Hiroaki Nakanishi
Audit Committee	Hiroaki Yoshihara (Chair), Harufumi Mochizuki, Takatoshi Yamamoto, Kazuyuki Tanaka, Toyoaki Nakamura
Compensation Committee	Harufumi Mochizuki (Chair), Sadayuki Sakakibara, Takatoshi Yamamoto, Toshiaki Higashihara



## Executive Officers

Executive officers decide on matters delegated to them by the Board of Directors and execute Hitachi's business affairs within the scope of assignments determined by the Board of Directors. As of June 21, 2017, Hitachi has 36 executive officers.

## Senior Executive Committee

The Senior Executive Committee is a council to ensure that the President deliberately decides on important managerial matters, which may affect the business of Hitachi or the Hitachi Group, through discussion from diverse viewpoints. This committee consists of 10 members as of June 21, 2017: the President & CEO, six executive officers serving as executive vice presidents, and three executive officers serving as senior vice presidents.

## Director and Executive Officer Compensation

The Compensation Committee, of whose members more than half are independent outside directors, sets forth the policy on the determination of compensation details for directors and executive officers and, based on this policy, the amount of compensation, etc., of each director and executive officer, pursuant to applicable provisions of the Companies Act.

### Basic Policy

Compensation for directors and executive officers shall be determined in accordance with the following basic policy.

- Compensation shall be such that it enables the company to attract necessary personnel to achieve an improvement in corporate value through global business growth.
- Compensation shall be commensurate with the roles and responsibilities of directors and executive officers.
- Compensation for directors shall be such that it enables them to exercise functions of supervision of management effectively.
- Compensation for executive officers shall be such that it enables them to contribute to sustained improvement in corporate value through the execution of business, and employs an appropriate balance between short-term performance and medium- and long-term performance.
- The level of compensation shall be determined taking into account compensation levels at other companies, as well as economic and market trends.
- The Compensation Committee utilizes external experts to gain expert advice and an objective viewpoint, if necessary, for considering the details and amounts of compensation.

## Compensation Structure

### (i) Directors

Compensation for directors consists of basic remuneration and a year-end allowance.

- Basic remuneration is decided by adjusting a basic amount to reflect full- or part-time status, committee membership and position, travel from place of residence, etc.
- Year-end allowance is a predetermined amount equivalent to about 20% of the director's annual basic remuneration, but may be reduced depending on financial results.

A director concurrently serving as an executive officer does not receive any compensation as a director.

### (ii) Executive officers

Compensation for executive officers consists of basic remuneration, performance-linked compensation, and medium- and long-term incentive compensation. The higher position the executive officer holds, the higher the proportion of variable pay (the sum of the performance-linked compensation and the medium- and long-term incentive compensation, not including basic remuneration as fixed pay) is as a portion of total annual compensation.

- Basic remuneration is decided by adjusting a basic amount to reflect the results of an assessment. The basic amount is set in accordance with the relevant position.
- The performance-linked compensation is decided within the range of 0%–200% of the basic amount based on financial results and individual performance. The basic amount is set within the range of about 25%–35% of the total annual compensation of each executive officer in accordance with the relevant position.
- Medium- and long-term incentive compensation is stock options as stock-based compensation, with share price conditions (stock acquisition rights with the strike price of ¥1). The number of stock acquisition rights to be granted is determined within the range of about 10%–40% of the total annual compensation of each executive officer in accordance with the relevant position. The number of stock acquisition rights that may be exercised will be determined within the range of 0%–100% of the stock acquisition rights granted in accordance with the conditions. As for expatriates, cash awards based on the value of Hitachi's share price with similar conditions are substituted for the stock options.

### (iii) Miscellaneous

The compensation structure for directors and executive officers was re-examined starting with compensation for the fiscal year ended March 31, 2009, and the retirement allowance was abolished.

The amount of compensation for directors and executive officers for the fiscal year ended March 31, 2017, is as follows:

#### Amount of compensation

Category	Total amount of compensation, etc. (millions of yen)	Total amount of each type (millions of yen)			Number of persons
		Monthly remuneration	Year-end allowance and performance-linked compensation	Medium- and long-term incentive compensation	
Directors (excluding independent outside directors)	75* <sup>1</sup>	69* <sup>1</sup>	6	—	4* <sup>3</sup>
Independent outside directors	308* <sup>2</sup>	290* <sup>2</sup>	17	—	10
Executive officers	2,569	1,386	982	200	33
Total	2,953	1,747	1,005	200	47

\*1 The amount of compensation to directors (excluding independent outside directors) includes the basic remuneration for two directors who retired due to expiration of their term of office at the close of the 147th Annual General Meeting of Shareholders held on June 22, 2016.

\*2 The amount of compensation to independent outside directors includes the basic remuneration for one independent outside director who retired due to expiration of his term of office at the close of the 147th Annual General Meeting of Shareholders held on June 22, 2016.

\*3 The number of directors indicated excludes two directors who concurrently serve as executive officers.

In addition, directors or executive officers whose compensation from Hitachi and its subsidiaries is not less than ¥100 million and the amount of their compensation are as follows:

Name	Company	Category	(Millions of yen)				
			Total amount of compensation, etc.	Total amount of each type			Year-end allowance
				Basic remuneration	Incentive		
				Short-term* <sup>4</sup>	Medium- and long-term* <sup>5</sup>		
Toshiaki Higashihara	Hitachi, Ltd. (The Company)	Executive officer* <sup>6</sup>	209	102	70	37	—
	Hitachi, Ltd. (The Company)	Executive officer		57	40	10	—
Ryuichi Kitayama	Hitachi High-Technologies Corporation (consolidated subsidiary)	Director	110	1	—	—	—
	Hitachi Capital Corporation (consolidated subsidiary)* <sup>7</sup>	Director		1	—	—	—
	Hitachi, Ltd. (The Company)	Executive officer		49	39	10	—
Yutaka Saito	Hitachi Kokusai Electric Inc. (consolidated subsidiary)	Director	113	7	—	—	1
	Hitachi Construction Machinery Co., Ltd. (consolidated subsidiary)	Director		5	—	—	1
	Hitachi, Ltd. (The Company)	Executive officer		57	40	10	—
Koji Tanaka	Hitachi Chemical Company, Ltd. (consolidated subsidiary)	Director	112	3	—	—	0
Toshikazu Nishino	Hitachi, Ltd. (The Company)	Executive officer	113	61	41	10	—
Alistair Dormer* <sup>8</sup>	Hitachi Rail Europe Ltd. (consolidated subsidiary)* <sup>9</sup>	Executive chairman and CEO	146	67	40	38	—
Hiroaki Nakanishi	Hitachi, Ltd. (The Company)	Executive officer* <sup>6</sup>	189	97	67	24	—

\*4 Collective term for compensation from the Company and consolidated subsidiaries paid depending on financial results and individual performance in the short term.

\*5 Medium- and long-term incentive compensation for executive officers of the Company is stock options as stock-based compensation.

\*6 Although they concurrently served as director for the fiscal year ended March 31, 2017, Toshiaki Higashihara and Hiroaki Nakanishi did not receive compensation as director.

\*7 The amount of compensation from Hitachi Capital Corporation is only for the period when it was a consolidated subsidiary of Hitachi, Ltd. during the fiscal year ended March 31, 2017.

\*8 Although he concurrently served as an executive officer of the Company for the fiscal year ended March 31, 2017, Alistair Dormer did not receive compensation as an executive officer of the Company.

\*9 The basic remuneration paid in pounds is converted into yen using the average exchange rate for each quarter of the fiscal year ended March 31, 2017. Incentive compensation paid in pounds is converted into yen using the average exchange rate for the fiscal year ended March 31, 2017.

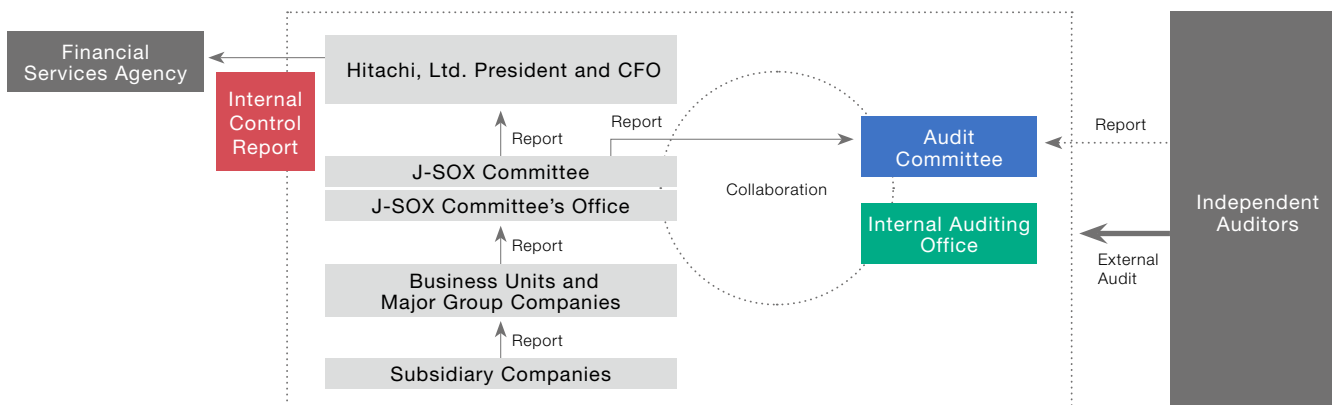
## Internal Control over Financial Reporting

To ensure the reliability of consolidated financial reporting, the Group develops and uses control documents ranging from company-level to business process controls based on the guidelines determined by our J-SOX Committee.

Business units within Hitachi, Ltd. and major Group companies have developed mechanisms to objectively

perform assessments. The J-SOX Committee office collects the results of the assessments performed by each business unit and company, and assesses the effectiveness of internal control across the entire Group.

Hitachi Group Internal Control Assessment Framework (As of April 1, 2017)



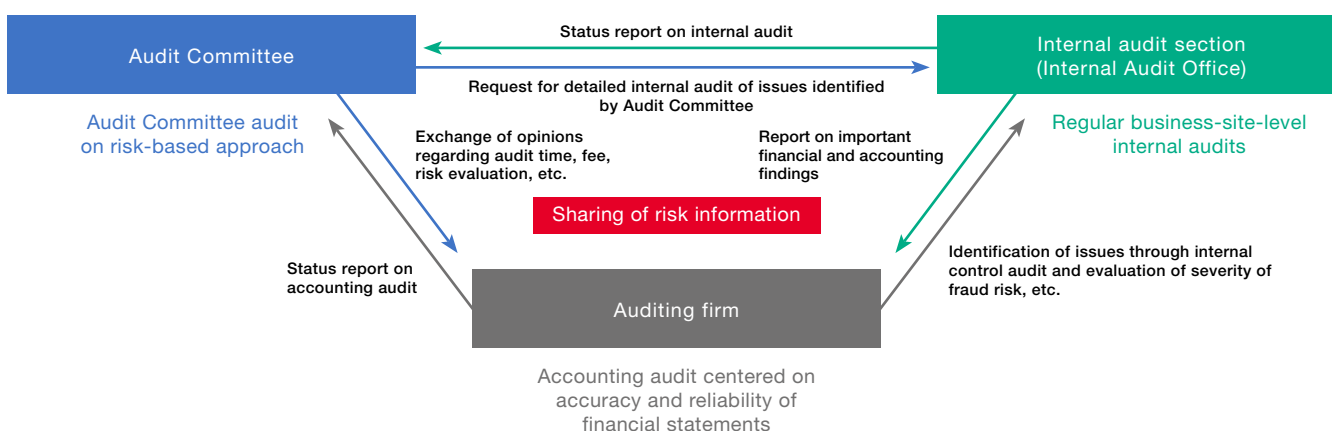
## Toward a More Integrated “Tripartite Audit” Function

We are working to further enhance the effectiveness of the internal control exerted through the integrated work of a “tripartite audit” function comprising the Audit Committee; our internal audit sections, principally, the Internal Audit Office; and external auditing firm. Through close

communication, the three share information about risks and evaluation of risk responses, secure transparency in the audit process, and improve the effectiveness of internal control systems.

### Improving Internal Control through a “Tripartite Audit” Function

- Goals** 1 Leveling of audit methods 2 Improving efficiency and transparency in audit processes with a risk-based approach



## Accountability

In accordance with its disclosure policy, Hitachi is implementing the fair and appropriate disclosure of such information as management strategies and financial information. In addition, Hitachi is aggressively conducting dialogues through such means as meetings with shareholders and investors, investor relations (IR) events, and the general meeting of shareholders.

In fiscal 2016, we held quarterly financial results briefings as well as corporate strategy meetings presenting our new 2018 Mid-term Management Plan. We also hosted the seventh annual **Hitachi IR Day**, where divisional managers from each business unit explained their business strategies and management policies under the plan. Feedback from institutional investors and analysts was positive, with comments including “**Hitachi IR Day** has become a well-established IR event,” and “Direct briefings from CEOs of business units about their business strategies are important opportunities for those of us in the capital market to deepen our understanding of Hitachi’s various businesses, and we very much hope they will continue.”

We also held briefings to explain our newly constructed IoT platform “Lumada,” and members of senior management continued their practice of visiting institutional investors and analysts in North America, Europe, and Asia twice a year to explain corporate management policies and business direction, for a combined total of around 700 meetings. In addition, we hosted numerous company information sessions tailored to individual investors to deepen their understanding of Hitachi. We are doing our best to report to members of senior management and to reflect this in management and operations.

We also post briefing materials and business performance as well as stock price trend charts in a timely manner on our IR website. Aiming to continuously enhance our information disclosure, we introduced a new responsive design on our website for improved browsing convenience from smartphones and tablets.

### Information for shareholders and investors

<http://www.hitachi.com/IR-e/>

### Major information disclosure publications

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Financial results/Quarterly financial results

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Annual securities reports/Quarterly reports

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Business reports/Interim business reports

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Hitachi Group sustainability reports

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# Risk Management

## Reinforcement of Risk Management System

The entire Hitachi Group is reinforcing its risk management system to address increasingly globalized and complex risks.

Under Hitachi, Ltd.'s head of risk management, each business operation assigns an executive as its risk management officer to manage risks mainly concerned with compliance, export control, disasters, and crime, and to respond adequately in coordination among the entire Group. Furthermore, Hitachi is building a comprehensive risk management system that contains standards and procedures to objectively evaluate different risks that may affect business.

## Stable Provision of Products and Services Creating BCPs in Key Operations Worldwide

Given the close relation of our business to social infrastructure, we are enhancing our business continuity plans (BCPs) to ensure that the impact of risks does not disrupt our business and thereby significantly affect society. In December 2006, we issued the *Hitachi Group Guidelines for Developing Business Continuity Plans (Overview)* in Japanese. In fiscal 2010 this was translated into English and Chinese for distribution to all Hitachi Group companies worldwide to ensure our response readiness for large disasters and other risks.

When the Great East Japan Earthquake struck in March 2011, our BCPs enabled quick responses and swift decision making. However, issues emerged, including identification of secondary and other suppliers, cloud storage and multiplexing of production information, and the need to secure alternate transportation and fuel sources. Based on the lessons learned from this disaster, in October 2011 we released and distributed new versions of the *Hitachi Group Guidelines for Developing Business Continuity Plans* for individual departments to further improve our BCPs.

By the end of fiscal 2011, Hitachi Group operations in Japan had completed their preparation and review of BCPs for both large earthquakes and novel strains of influenza as appropriate to their operations.

On top of these efforts, Hitachi, Ltd. has held annual earthquake drills simulating a major seismic event at key operations in Japan since fiscal 1998. In March 2017, Hitachi Chemical held drills under the direction of its head office general manager, with managers at the head office and the Nabari Works striving to improve their risk management skills and identify possible areas for improvement in their BCPs.

Hitachi appointed personnel with responsibility for risk response policies at its main overseas bases in fiscal 2013. By the end of that year, around 300 companies had prepared BCPs with the goal of completing them for key operations. These BCPs are aimed at strengthening our ability to respond to business risks, including large disasters, novel strains of influenza, political instability, and social disruption, as well as acts of terrorism. Moving forward, we intend to further expand the scope of our BCPs.

## Creation of Procurement BCPs

We have a deep involvement in social infrastructures in places where the suppliers who are our business partners can be affected by major earthquakes and other natural disasters.

These disasters can heavily impact not only our business operations and those of our suppliers but also society as a whole. To minimize this impact, the procurement divisions in business units and key Group companies in Japan have created procurement BCPs that (1) standardize and use generic parts to make procurement as flexible as possible; (2) cultivate multiple suppliers; (3) distribute production across several locations; (4) budget inventory strategically; and (5) consider substitute products. To see whether or not procurement BCPs would be effective, we held desktop exercises to discuss in a group what should be done during and after a disaster, making further improvements as a result.

In fiscal 2016, all major Group business sites with production lines (approximately 200 sites in total) took steps to maintain and strengthen the procurement BCPs they had created by the previous fiscal year, thereby contributing to the continuation of Hitachi's global operations.

## Improving Safety for Employees Sent to Dangerous Regions

Responding to the hostage incident in Algeria in January 2013, then President Hiroaki Nakanishi reinforced his policy in February 2013 of ensuring the safety of employees sent to countries and areas at higher risk. Survey missions of in-house and outside experts are now sent beforehand to areas at high risk of war, terrorism, and other threats. Even after employees are dispatched to such areas, we conduct additional local surveys every six months as a means of confirming the effectiveness of our safety policies. In fiscal 2016, with the threat of terrorism expanding around the world, we introduced a range of safety measures, including providing timely alerts to employees. This underscores our commitment to ensuring the safety of our employees working around the globe. Hitachi is also contributing to safety measures at other Japanese corporations operating outside Japan. To help enhance collaboration between the private and public sectors in this area, Hitachi executives participated in the Council for Public-Private Cooperation for Overseas Safety organized by Japan's Ministry of Foreign Affairs. Since 2014 Hitachi has taken part in public-private kidnap incident preparatory training exercises.

## Promoting Information Security

### Implementing Rigorous Information Security

Hitachi's chief information officer (CIO) is appointed by the company's president and has the authority and responsibility to implement and operate an Information Security Management System (ISMS). In fiscal 2016, the role of the CIO was performed by Hitachi's senior vice president and executive officer. The Information Security Committee, chaired by the CIO, determines policies and procedures for information security and personal information protection. The Information Security Promotion Council and other bodies convey decisions internally and to other companies in the Hitachi Group. Information security officers at business sites and companies ensure that these decisions are implemented in the workplace.

The Hitachi Group emphasizes two points in information security and personal information protection:

#### (1) Precautionary measures and prompt security responses

We classify assets to be secured and take safeguarding measures based on vulnerability and risk analyses. We also have an emergency manual for security breaches, based on the assumption that these are inevitable, and not just possible.

#### (2) Promoting stronger ethical and security awareness among data users

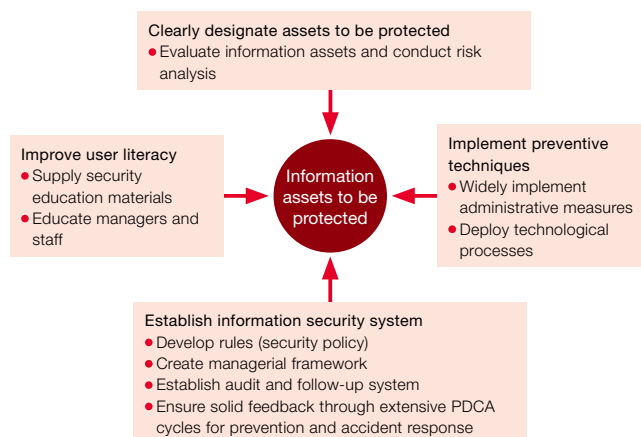
We have prepared a program tailored to Hitachi's various personnel levels and are working to raise the prevailing sense of ethics and security awareness through Group-wide e-learning. We are also conducting audits to identify and address problems early on.

Details, including a message from the CIO and a list of third-party assessments and certifications, are contained in *Information Security Report 2016*.

#### *Information Security Report 2016*

[http://www.hitachi.com/csr/download/pdf/securityreport\\_e.pdf](http://www.hitachi.com/csr/download/pdf/securityreport_e.pdf)

## Basic Approach to Information Security Governance



## Education on Information Security

Consistently maintaining information security requires all parties to continually develop their knowledge of information handling and to remain strongly aware of the issues. For this reason, we hold annual e-learning programs on information security and personal information protection for all directors, employees, and temporary employees.

Nearly all of the roughly 40,000 employees at Hitachi, Ltd. participate in these programs. We offer a variety of courses that have different goals and are tailored to different target audiences, including new employees, new managers, and information system administrators. In 2012, we also began simulation training to educate employees about the increasing trend toward malicious targeted e-mail attacks and other cyberattacks. Employees are sent examples of targeted e-mail to heighten their awareness of security through direct experience.

Our educational programs, available to Hitachi Group companies in Japan and other global regions, provide Group-wide education on information security and personal information protection.

## Preventing Information Leaks

Hitachi, Ltd. has formulated the Three Principles for Preventing Leakage of Confidential Information to ensure the highest level of care for such information and to prevent leaks and other related incidents. Our policies ensure that if an incident does occur, damage is promptly minimized by contacting customers, reporting to government agencies, investigating causes, and acting to prevent any recurrence.

Hitachi Group companies take the following IT steps to prevent information leaks: using encryption software and secure PCs; employing electronic document access control and expiration processing software; maintaining ID management and access control by building an authentication infrastructure; and filtering e-mail and visited websites. In response to the recent spate of targeted e-mail attacks and other cyberattacks, we are participating in an initiative to share information between the private sector and the government. We are also enhancing our IT organization by adding more layers to our leak prevention procedures, including both entry and exit countermeasures.

To ensure the secure exchange of information with our suppliers, we review their information security measures based on Hitachi's own standards before allowing them access to confidential information. We have provided tools to suppliers (procurement partners) for security education and for checking business information on computers. In addition, we require suppliers to check and remove business information from personal computers to prevent leaks. In the May 2017 global cyberattack, ransomware that functions like a network worm affected parts of Hitachi's in-house system, temporarily disabling the sending and receipt of e-mails. No information leaks were detected, however, and there was no damage to customers or other outside parties through e-mail sent from the Hitachi Group.

### Three Principles for Preventing Leakage of Confidential Information

- Principle 1 As a general principle nobody can take Confidential Information out of the Company's premises.
- Principle 2 Any person taking Confidential Information out of the Company's premises due to business necessity shall obtain prior approval from the Information Assets Manager.
- Principle 3 Any person taking Confidential Information out of the Company's premises due to business necessity shall put in place relevant and appropriate measures against information leakage.

### Damage Caused by Ransomware, and Status of Recovery

<http://www.hitachi.com/New/cnews/month/2017/05/170517a.pdf>

## Global Information Security Management

Hitachi Group companies worldwide reinforce their information security in line with our Global Information Security Administration Rules, which conform to the international ISO/IEC 27001 standard. These rules are distributed from the parent company in Japan to Group companies around the world. Other security measures include secure shared services and support from our regional headquarters in the Americas, Europe, Southeast Asia, China, and India.

## Thorough Information Security Audits and Inspections

The Hitachi Group has developed its approach to security based on the "plan-do-check-act" (PDCA) cycle for its information security management system. We conduct annual information security and personal information protection audits at all Group companies and business units.

The president appoints officers to conduct independent audits. These officers are not allowed to audit their own units, underlining our commitment to fairness and objectivity in auditing. There are 222 Hitachi Group companies in Japan that conduct audits in the same way as Hitachi, Ltd., and all results are subject to confirmation. For Hitachi Group companies outside Japan, we use a "common global self-check" approach to ensure Group-wide auditing and inspections. We implement Confirmation of Personal Information Protection and Information Security Management annually for the voluntary inspection of business unit workplaces. We conduct monthly Confirmation of Personal Information Protection and Information Security Management assessments at 654 operations (as of March 2017) that handle important personal information. This regular control mechanism ensures ample safety management and implementation.

## Compliance

**We carry out our business not only in full compliance with legal requirements but also in ways that ensure socially responsible conduct. Spreading understanding of this among all Hitachi employees is a fundamental management issue. As economic activity becomes increasingly borderless, there is a growing need for steps to eradicate bribery, corruption, and other illegal behavior in accordance with conditions in the countries and regions where we have operations. As a global company, we are implementing a consistent compliance structure across the entire Hitachi Group.**

### Enhancing Our Compliance Framework

Based on the Hitachi Group Codes of Conduct, we have expanded the Hitachi Global Compliance Program. To comprehensively implement our compliance framework through this program, we have appointed a senior executive as the head of risk management for the entire Hitachi Group. Every business unit and key Group company also has an executive handling risk management, assisted by a compliance manager. We are also supporting regional Group companies and have appointed compliance heads in 11 regions globally.

Under this system, policies and measures are shared through the Compliance Management Conference, composed of risk management executives from business units and key Group companies. In addition, all compliance managers meet regularly at the Hitachi Group Compliance Conference to provide information on compliance and to confirm implementation of required actions.

The Advisory Committee, consisting of outside experts, convenes regularly to exchange views on the state of compliance initiatives. The insights provided by committee members are utilized to improve policies and actions.

The internal audit section regularly conducts Group-wide reviews to verify that each area of compliance is being appropriately operated. In cases where the reviews identify necessary improvements, corrective measures are swiftly implemented.

### Compliance Reporting System

Hitachi has instituted a Group-wide whistleblowing system to prevent illegal and unethical behavior, to promptly address infractions, and to enhance our ability to self-regulate.

In this system, reports go directly to the Compliance Department at Hitachi or to an outside attorney. This system can be used not only by employees within the Hitachi Group, who are able to report issues through in-house channels, but also by temporary staff and suppliers. In addition, we have implemented the Channel to the Board of Directors system to allow employees to directly report problems anonymously to Hitachi directors.

The facts related to all reports are subject to thorough investigation and checking, and people who have identified themselves in the reports are informed of the investigation results. We make every effort to appropriately deal with situations, including taking remedial action where necessary.

### Thorough Export Controls

For basic export control policies, we have adopted the Hitachi Standards of Corporate Conduct, which state: "We shall help maintain international peace and security through compliance with trade-related laws and regulations." We established the Corporate Regulations Concerning Security Export Control based on this policy in 1987. We carry out strict export control practices in line with relevant laws and regulations, screening all goods and technologies intended for export against such factors as destination countries and regions as well as intended end use and end users. We provide guidance and educational support on the formulation of regulations as well as on the establishment of frameworks to Hitachi Group companies in Japan and around the world to ensure that all Group companies follow the same export control policies.

At present, as part of our educational program for all the Group companies, we host workshops on export control in addition to the annual implementation of an e-learning program in Japanese, English, and Chinese. Moving forward, we will continue to make an effort so that export control is thoroughly enforced throughout the Group.



## Measures to Prevent Bribery and Corrupt Practices

Hitachi makes thoroughgoing efforts to prevent bribery and corrupt practices in accordance with the Hitachi Global Compliance Program.

To deal with global bribery and corruption risks, since fiscal 2013 we have referred to the Resource Guide to the US Foreign Corrupt Practices Act\* and other documents to develop various corruption risk scenarios. These were used as the basis for a survey conducted at almost all Hitachi Group companies outside Japan (roughly 600 companies in total). By analyzing the survey results, we identified companies at risk from corruption due to factors such as high levels of involvement with governmental and related businesses. These risks were identified at approximately 10% of the companies surveyed, and through close monitoring of those companies, along with educational and other initiatives, we are working to reduce corruption worldwide. We will continue to carry out this sort of risk evaluation regularly.

In 2016, we revised our rules regarding the prevention of bribery and corrupt practices, with changes including an explicit ban on facilitation payments and clarification of due diligence procedures for transaction partners.

To ensure awareness of these policies and regulations, we developed a global e-learning program on preventing bribery and corrupt practices, making it available in nine languages—including Japanese, English, and Chinese—for use by Group companies worldwide.

In fiscal 2016, there were no incidents in which Hitachi violated or was penalized under laws or regulations regarding bribery or corrupt practices.

\* The US Foreign Corrupt Practices Act consists of antibribery provisions regarding foreign government officials and transparent accounting provisions within the Securities Exchange Act. Enforced by the Department of Justice, it prohibits bribes to foreign government officials. Transparent accounting, enforced by the Securities and Exchange Commission, requires companies to show transactions fairly and accurately in their accounting records and to maintain effective internal control over accounting.

## Measures to Prevent Unfair Competition

Hitachi engages in business based on the principles of conformance with the law and business ethics and fair and disciplined competition. The Hitachi Global Compliance Program was developed based on these principles to ensure strict compliance with competition laws.

Fiscal 2016 saw two incidents in the United States of plea agreements related to cartel activities, and one in Japan of a cease and desist order related to collusion.

Hitachi takes these incidents very seriously and will continue strengthening its educational and institutional efforts to eliminate violations of competition laws.

## Implementing Thorough Tax Compliance

The global expansion of Hitachi's business activities has made it necessary for the Group as a whole to build a system of tax governance in order to comply with indications made by the tax authorities in each country and respond to risks concerning taxation, such as tax-related legal proceedings. In January 2016, we established a set of tax-related regulations with which the entire Group must comply. Additionally, in connection with the globalization of our business, we are implementing risk management for taxation that focuses in particular on the points listed below:

- (1) Group companies strictly comply with all relevant laws and implement tax management when pursuing their business activities, bearing in mind such international tax-compliance standards as the Transfer Pricing Guidelines for Multinational Enterprises and Tax Administrations of the Organisation for Economic Co-operation and Development (OECD), as well as that body's Action Plan on Base Erosion and Profit Shifting (BEPS).
- (2) Group companies effectively, continually, and proactively manage tax-related issues as socially responsible organizations, while maintaining Hitachi brand value and seeking to maximize shareholder value.
- (3) Group companies build sincere and positive relations of trust with the tax authorities in the regions where the companies do business, and strive to maintain and develop those relations.

Furthermore, following the establishment in April 2017 of rules for Group transfer pricing management, Hitachi manages transfer pricing in accordance with the OECD Transfer Pricing Guidelines as well as laws and regulations on transfer pricing in each country or region where Group companies are located.

Regarding tax compliance, Hitachi acts in accordance with all applicable laws and regulations. Hitachi did not have any significant fines or nonmonetary sanctions for noncompliance with tax laws and regulations in fiscal 2016.

## Messages from Independent Outside Directors

### Contributing to Hitachi

Hitachi is a global company with operations all around the world. My tasks as a member of the Board of Directors are to learn and to give whatever input I can on the issues that we face. Each country, and each company, has a unique DNA. As a businessman and entrepreneur, I am always excited to learn these things. I have long had respect for Japanese companies and how they have grown into international businesses. Hitachi is one example of such a business, making it interesting for me to see firsthand how the company works while providing input from my own perspective on the areas that I know well—India, Europe, and North America.

### Facing Challenges with Multiple Strengths

Every company faces challenges today, and Hitachi is no exception. There is a high level of disruption in technology and the digital space that touches every business. Major sociopolitical change is taking place across the spectrum in every country; these winds of change are affecting business like never before. There are also crises and flashpoints all over what has become a very multipolar world. All of this places tremendous strain on companies as they determine what talent they need to create for the future and how to direct it.

Hitachi faces a particularly broad range of challenges. The company is involved in some fields, such as automotive systems and construction machinery, that could be described as low-risk but feature high volatility related to technology change. In other areas, like the nuclear power and railway businesses, projects can run for decades, involving governments and making it harder to see where costs will be 15 years down the road. All of these different challenges require very different management

approaches. The task, therefore, is to put the right people, the right governance, and the right level of risk analysis and mitigation in place.

I believe that Hitachi has multiple strengths to help it face these varied challenges. First is the bandwidth of its technologies and capabilities in terms of products and processes. For instance, many companies are involved in IoT development now, but what Hitachi is doing with Lumada is ahead of the game.

Second is its strong management team. Hitachi handles corporate governance very well. There is plenty of openness, with board members and executive officers able to express their opinions freely. The company also has outside board members from different countries, as well as female directors, making it a trendsetter of sorts as well as a good corporate governance example.

Third, Hitachi has the ability to recognize how the world is changing and to take actions to stay ahead of those changes, rather than simply reacting to them after the fact. We've had plenty of forward-looking discussion about Brexit and the US presidential election, for example, as something that could impact Hitachi's businesses.

### Finding the Right Way Forward

This tremendous volume of discussion is one of Hitachi's key tools to prepare it to meet the challenges of the times. The Hitachi Board carries out a lot of discussion, taking a systematic approach to risk management and ensuring that there is analysis available on all areas where risk is involved. This analysis generates options for the company, allowing it to get a feel for the business environment, the risks, and the growth opportunities. Of course, Hitachi is involved in hundreds of different businesses, and it would be very difficult for any one person to understand it all, but frequent and detailed discussions let us get a more comprehensive feel of the business environment.

On the level of its local operations around the world, Japanese managers used to run global operations, but Hitachi is now changing to place more operations in local managers' hands. All it takes is some cultural adjustments and an open mindset. Hitachi is certainly headed in the right direction.



Baba Kalyani



Takatoshi Yamamoto

### Hitachi's Challenge, My Mission

Including my time as a financial analyst, I have been an observer of Hitachi's management for more than 30 years. Hitachi's performance has wavered at times, but the company is now entering a new stage, aiming to become a truly major global player and an "Innovation Partner for the IoT Era." Although it is one of Japan's leading enterprises, in terms of profitability Hitachi is not yet excelling. To rank among the competition as a truly global player, Hitachi must realize sustainable growth of enterprise value by strengthening its earnings ability. All executive officers from the CEO down must understand the concept of enterprise value, including from an ESG perspective; management decisions must be based on a clear, ongoing estimation and evaluation of current and future value. As an independent outside director, my mission is to use my long professional experience in corporate analysis in the capital markets to help Hitachi's management develop sustainable enterprise value and improve its corporate governance.

### Further Strengthening Corporate Governance

I regard Hitachi's corporate governance highly. In 2016, Hitachi increased management transparency further by explicitly including dismissal of the CEO and selection of a successor among the responsibilities of the board of directors in its corporate governance guidelines. Nevertheless, in the course of supervising and auditing Hitachi over the past year as an outside director and a member of the Audit Committee, I noted opportunities for further improvement.

The first is audit structure. Hitachi encompasses almost 900 Group companies, including those newly consolidated through mergers and acquisitions, and it makes roughly half of its revenue outside Japan. For the efficient and appropriate auditing of such a large and diverse enterprise, further structural improvements are necessary. Hitachi's "tripartite audit" function, made up of the Audit Committee, the Internal Auditing Office, and an auditing firm, is top-class within Japan, but in 2017 Hitachi began working to establish tripartite audits for each Group company as part of constructing a

unified audit structure for the entire Group, including overseas entities. Hitachi will need to mitigate various risks as it continues to strengthen its audit structure.

The second area is verifying that executive officers reflect board-level discussions in both their actions and the results achieved. By monitoring and verifying how board discussions influence Hitachi's operations, the company's directors will be able to ensure the effectiveness of the board on which they serve. We independent outside directors must construct better means of assurance in this area.

### A Roadmap to Become a Truly Global Player

To make Hitachi a truly global player that satisfies diverse stakeholders, and to develop ways to further increase its enterprise value, the following five points are vital: (1) bold and swift management decision-making and execution, including an ongoing review of the Group's business portfolio; (2) improved capital and asset efficiency; (3) higher profitability to meet global standards; (4) improved coordination and administration for mergers and acquisitions and major projects; and (5) more effective use of Hitachi's diverse and global human capital by management, including development of the next generation of executive officers.

Achieving the goals of the 2018 Mid-term Management Plan will be an important milestone, but when considering the company's long-term development, Hitachi must look beyond this plan. Hitachi is at a significant juncture, and whether it can become a truly major global player depends on which path it now follows. As a director, I will continue to monitor and supervise Hitachi closely, contributing all that I can to the realization of that goal and to the improvement of the company's enterprise value.

# PERFORMANCE

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# Segment Information

■ Revenues — Adjusted operating income ratio — EBIT ratio

## Information & Telecommunication Systems



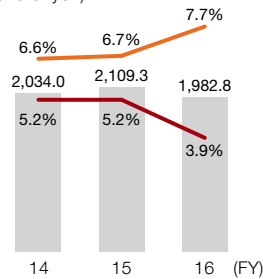
A storage system

### Main Products and Services

Systems integration  
Consulting  
Cloud services  
Servers  
Storage  
Software  
Telecommunications & network  
ATMs

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

20%

### Overseas Revenue Ratio

FY 2016

30%

## Social Infrastructure & Industrial Systems



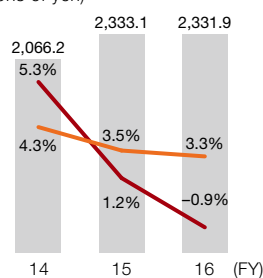
A Class 800 train for the UK Intercity Express Programme (IEP)

### Main Products and Services

Industrial machinery and plants  
Elevators  
Escalators  
Railway systems  
Thermal, nuclear and renewable  
energy power generation  
systems  
Transmission & distribution  
systems

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

23%

### Overseas Revenue Ratio

FY 2016

39%

## Electronic Systems & Equipment



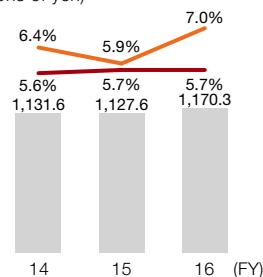
Hokkaido University Hospital's particle beam cancer therapy system

### Main Products and Services

Semiconductor manufacturing  
equipment  
Measurement and analysis  
equipment  
Advanced industrial products  
Medical equipment

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

12%

### Overseas Revenue Ratio

FY 2016

60%

## Construction Machinery



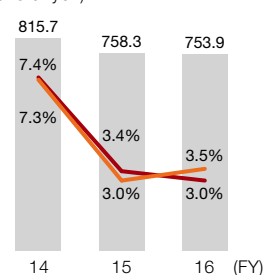
Hitachi Construction Machinery's ultralarge hydraulic excavator and mining dump truck

### Main Products and Services

Hydraulic excavators  
Wheel loaders  
Mining machinery

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

7%

### Overseas Revenue Ratio

FY 2016

70%

■ Revenues — Adjusted operating income ratio — EBIT ratio

### High Functional Materials & Components



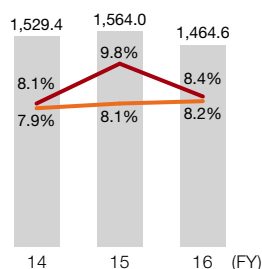
Hitachi Metals' Nd-Fe-B "NEOMAX®" magnets

### Main Products and Services

Semiconductor- and display-related materials  
Printed wiring boards and related materials  
Automotive parts (molded plastic products, etc.)  
Energy storage devices  
Specialty steels  
Magnetic materials and components  
High-grade casting components  
Wires and cables

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

14%

### Overseas Revenue Ratio

FY 2016

57%

### Automotive Systems



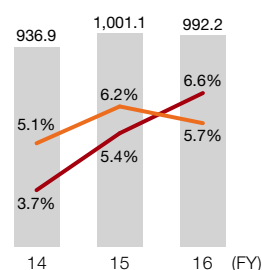
Hitachi Automotive Systems' motor for a hybrid vehicle

### Main Products and Services

Engine management systems  
Electric powertrain systems  
Drive control systems  
Car information systems

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

10%

### Overseas Revenue Ratio

FY 2016

57%

### Smart Life & Ecofriendly Systems



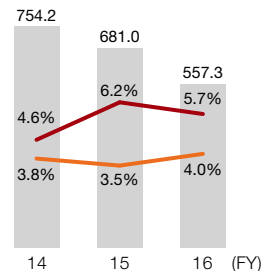
Hitachi Appliances' robot cleaner "minimaru"

### Main Products and Services

Refrigerators  
Washing machines  
Vacuum cleaners  
Room air conditioners  
Air-conditioning equipment

### Revenues and Profit

(Billions of yen)



### Share of Revenues

FY 2016

6%

### Overseas Revenue Ratio

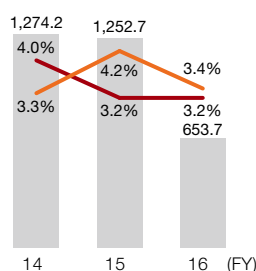
FY 2016

20%

### Others\*1

#### Revenues and Profit

(Billions of yen)



#### Share of Revenues

FY 2016

6%

#### Overseas Revenue Ratio

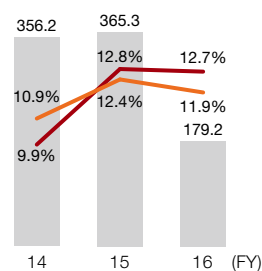
FY 2016

26%

### Financial Services\*2

#### Revenues and Profit

(Billions of yen)



#### Share of Revenues

FY 2016

2%

#### Overseas Revenue Ratio

FY 2016

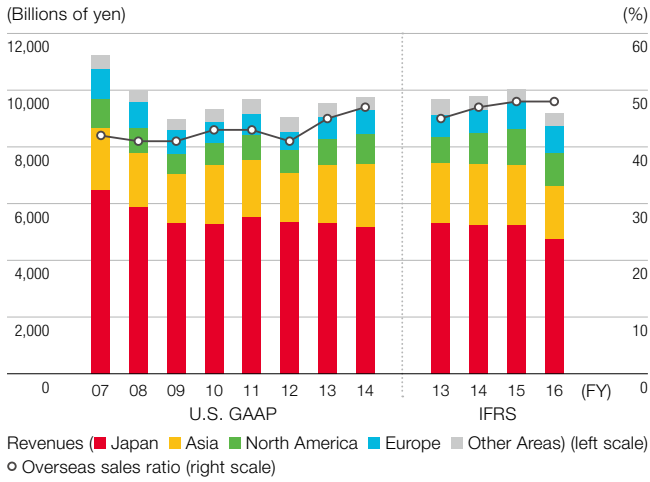
36%

\*1 From fiscal 2016, the "Others (Logistics and Other Services)" has been renamed to the "Others" due to conversion of Hitachi Transport System, Ltd. into an equity-method associate on May 19, 2016.

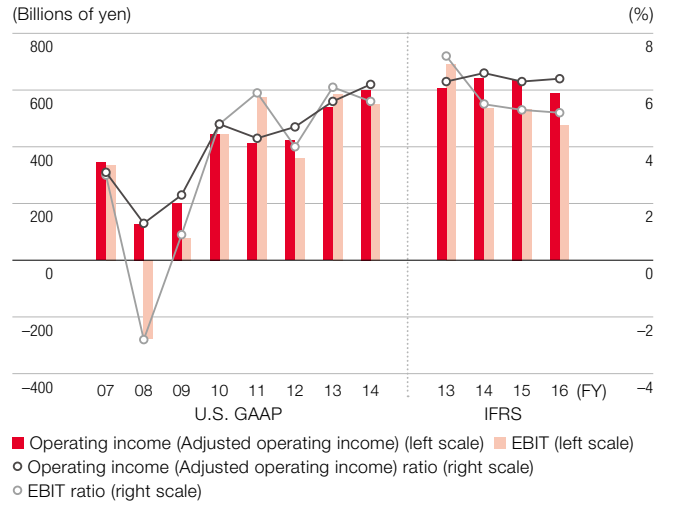
\*2 As Hitachi Capital Corporation was converted into an equity-method associate as of October 3, 2016, there is no company which belongs to the Financial Services Segment. Accordingly, only the result for the first half of fiscal 2016 was recorded in this segment for fiscal 2016.

# Financial and Non-Financial Highlights

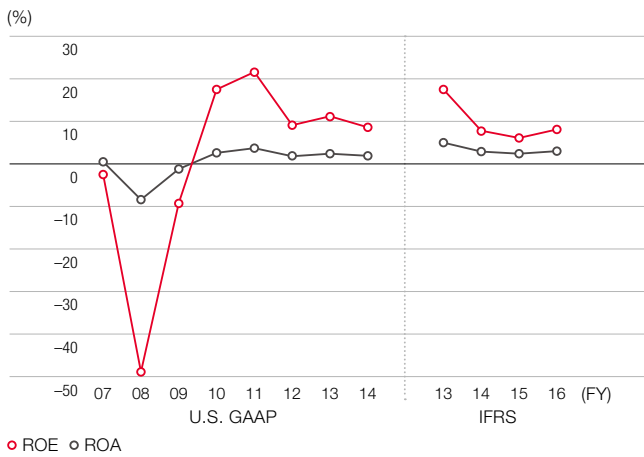
## Revenues / Overseas sales ratio



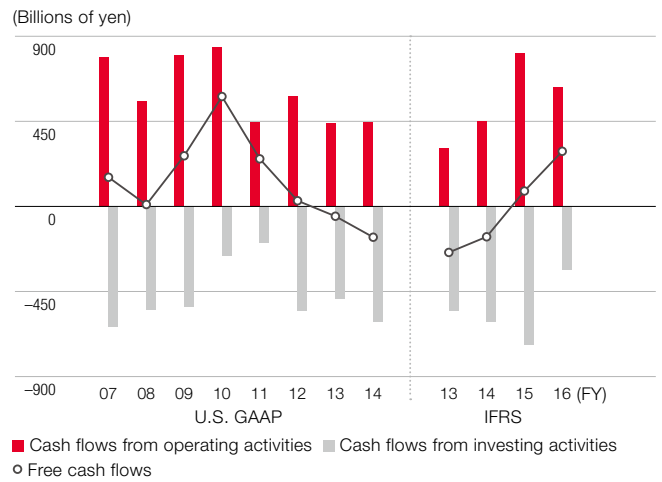
## Operating income (Adjusted operating income) / Operating income (Adjusted operating income) ratio / EBIT / EBIT ratio



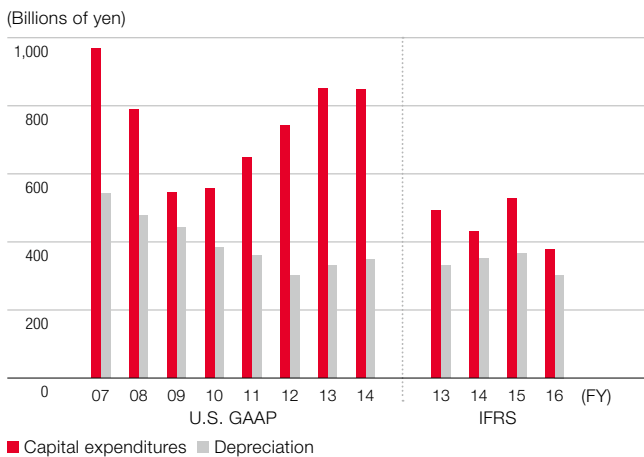
## Return on equity (ROE) / Return on assets (ROA)



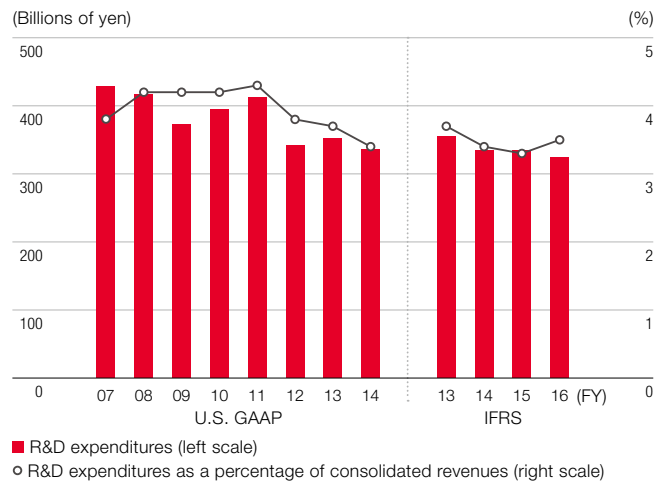
## Cash flows



## Capital expenditures\*1 / Depreciation

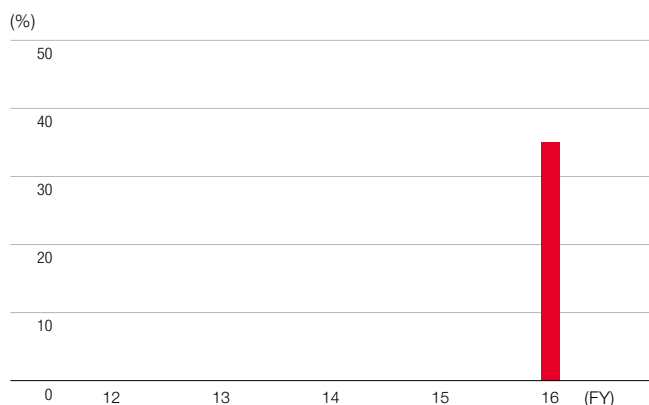


## R&D expenditures / R&D expenditures as a percentage of consolidated revenues

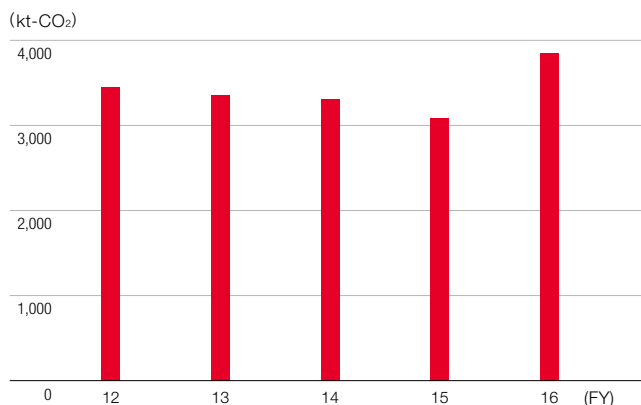




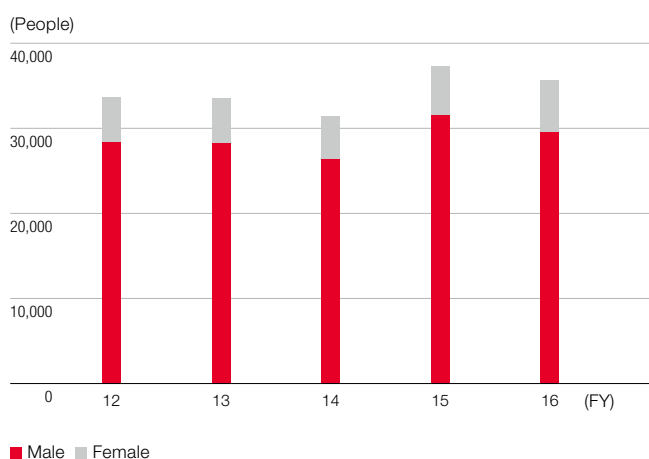
### Rate of reduction in CO<sub>2</sub> emissions from use of products and services\*<sup>2</sup>



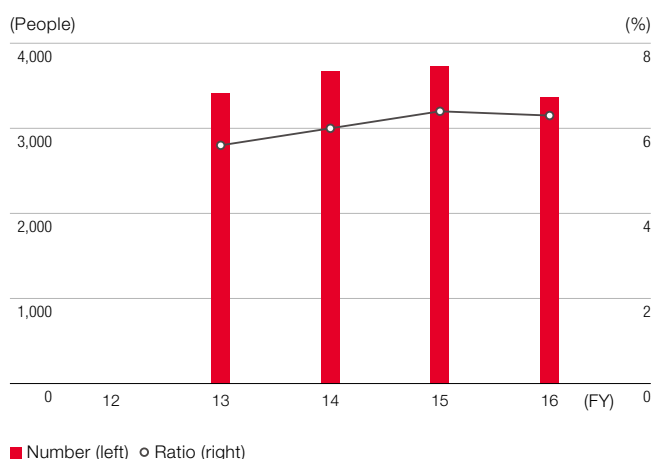
### CO<sub>2</sub> emissions from factories and offices\*<sup>3</sup>



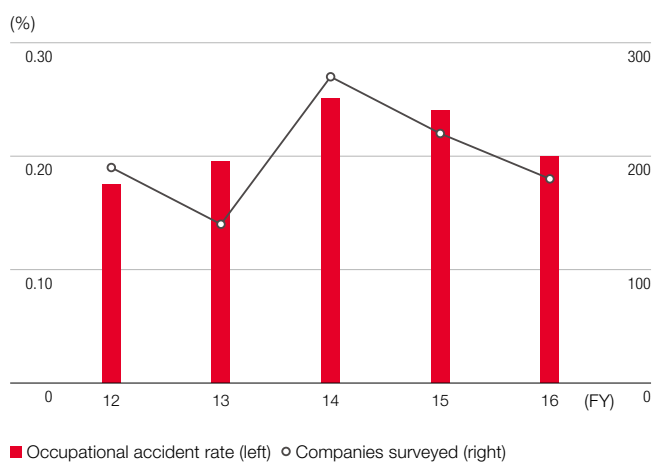
### Number of employees\*<sup>4</sup>\*<sup>5</sup>



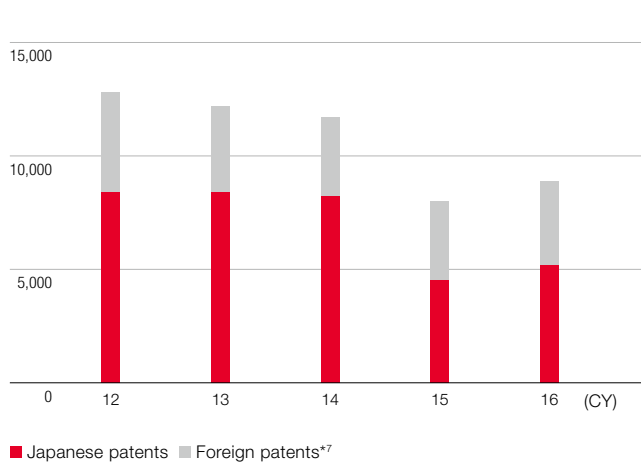
### Global number and ratio of female managers\*<sup>6</sup>



### Occupational accident rate at companies surveyed in Japan



### Number of registered patents



\*1 In line with IFRS standards, capital investment is stated exclusive of investment in lease assets classified as finance leases.

\*2 This new indicator is calculated from fiscal 2016 onward as a percentage of the fiscal 2010 amount.

\*3 Fiscal 2016 figure includes a materials company that became a consolidated member of the Hitachi Group that year. \*4 Number of full-time employees

\*5 Hitachi, Ltd. \*6 No data available for fiscal 2012. \*7 Total number of patents registered in the United States, Europe, and China. The number of patents registered in Europe is based on European patent applications under European Patent Convention (EPC).

# 10-Year Financial Data

## U.S. GAAP

For the year:	FY 2007	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013
Revenues	¥11,226,735	¥10,000,369	¥8,968,546	¥9,315,807	¥9,665,883	¥9,041,071	¥9,563,791
Operating income	345,516	127,146	202,159	444,508	412,280	422,028	538,288
EBIT (Earnings before interest and taxes)	335,729	(275,239)	77,815	443,812	573,218	358,015	585,662
Net income (loss) attributable to Hitachi, Ltd. stockholders	(58,125)	(787,337)	(106,961)	238,869	347,179	175,326	264,975
Cash flows from operating activities	791,837	558,947	798,299	841,554	447,155	583,508	439,406
Cash flows from investing activities	(637,618)	(550,008)	(530,595)	(260,346)	(195,584)	(553,457)	(491,363)
Free cash flows	154,219	8,939	267,704	581,208	251,571	30,051	(51,957)
Cash flows from financing activities	(185,556)	284,388	(502,344)	(584,176)	(167,838)	(180,445)	32,968
Cash dividends declared	19,947	9,971	-	36,133	36,727	47,690	50,711
Capital expenditures (Property, plant and equipment)	969,087	788,466	546,326	556,873	649,234	742,537	849,877
Depreciation (Property, plant and equipment)	541,470	478,759	441,697	382,732	360,358	300,664	329,833
R&D expenditures	428,171	416,517	372,470	395,180	412,514	341,310	351,426
At year-end:							
Total assets	10,530,847	9,403,709	8,964,464	9,185,629	9,418,526	9,809,230	11,016,899
Property, plant and equipment	2,653,918	2,393,946	2,219,804	2,111,270	2,025,538	2,279,964	2,342,091
Total Hitachi, Ltd. stockholders' equity	2,170,612	1,049,951	1,284,658	1,439,865	1,771,782	2,082,560	2,651,241
Interest-bearing debt	2,531,506	2,820,109	2,367,143	2,521,551	2,396,454	2,370,079	2,823,049
Number of employees	347,810	361,796	359,746	361,745	323,540	326,240	320,725
Per share data:							
Net income (loss) attributable to Hitachi, Ltd. stockholders:							
Basic	¥(17.48)	¥(236.86)	¥(29.20)	¥52.89	¥76.81	¥37.28	¥54.86
Diluted	(17.77)	(236.87)	(29.20)	49.38	71.86	36.29	54.85
Cash dividends declared	6.0	3.0	-	8.0	8.0	10.0	10.5
Total Hitachi, Ltd. stockholders' equity	652.95	315.86	287.13	318.73	382.26	431.13	549.02
Financial ratios:							
Operating income ratio	3.1	1.3	2.3	4.8	4.3	4.7	5.6
EBIT ratio	3.0	-2.8	0.9	4.8	5.9	4.0	6.1
Return on revenues	-0.5	-7.9	-1.2	2.6	3.6	1.9	2.8
Return on equity (ROE)	-2.5	-48.9	-9.2	17.5	21.6	9.1	11.2
Return on assets (ROA)	0.5	-8.0	-0.9	3.3	4.4	2.5	3.5
D/E ratio (Including non-controlling interests) (times)	0.76	1.29	1.04	1.03	0.86	0.75	0.73
Total Hitachi, Ltd. stockholders' equity ratio	20.6	11.2	14.3	15.7	18.8	21.2	24.1

- Notes: 1 In order to be consistent with financial reporting principles and practices generally accepted in Japan, operating income is presented as total revenues less cost of sales and selling, general and administrative expenses. The Company believes that this is useful to investors in comparing the Company's financial results with those of other Japanese companies. Under accounting principles generally accepted in the United States of America, restructuring charges, net gain or loss on sales and disposal of rental assets and other property and impairment losses for long-lived assets are included as part of operating income.
- 2 The restructuring charges mainly represent special termination benefits incurred with the reorganization of our business structures and as the result of the Company and its subsidiaries reviewing and reshaping the business portfolio.
- 3 EBIT is presented as income before income taxes less interest income plus interest charges.
- 4 The Company has changed the number of employees to exclude temporary employees starting from the year ended March 31, 2010. The figures for the prior years have been restated to reflect the current year's presentation.
- 5 Effective from fiscal 2014, a part of the thermal power generation systems business is classified as a discontinued operation in accordance with the provision of ASC 205-20, "Presentation of Financial Statements - Discontinued Operations," which was not transferred to MITSUBISHI HITACHI POWER SYSTEMS, LTD. for the business integration in the thermal power generation systems with Mitsubishi Heavy Industries, Ltd. The results of the discontinued operation are reported separately from continuing operations. In line with this classification, "Revenues" and "Operating income" for fiscal 2013 are reclassified.
- 6 ROA (Return on Assets) = Net income / Total Assets (Average between the end of current fiscal year and the end of previous fiscal year) x 100

Millions of yen	IFRS				Millions of yen
FY 2014	For the year:	FY 2013	FY 2014	FY 2015	FY 2016
¥9,761,970	Revenues	¥9,666,446	¥9,774,930	¥10,034,305	<b>¥9,162,264</b>
600,479	Adjusted operating income	604,798	641,325	634,869	<b>587,309</b>
551,018	EBIT	691,230	534,059	531,003	<b>475,182</b>
241,301	Net income attributable to Hitachi, Ltd. stockholders	413,877	217,482	172,155	<b>231,261</b>
447,348	Net cash provided by operating activities	306,777	451,825	812,226	<b>629,582</b>
(610,255)	Net cash used in investing activities	(550,179)	(612,545)	(730,799)	<b>(337,955)</b>
(162,907)	Free cash flows	(243,402)	(160,720)	81,427	<b>291,627</b>
250,335	Net cash provided by (used in) financing activities	228,840	233,206	(26,467)	<b>(209,536)</b>
57,944	Cash dividends declared	50,711	57,944	57,939	<b>62,764</b>
848,716	Capital expenditures (Property, plant and equipment)	491,170	431,201	528,551	<b>377,545</b>
349,614	Depreciation (Property, plant and equipment)	331,228	350,783	366,547	<b>302,757</b>
335,515	R&D expenditures	354,487	334,814	333,730	<b>323,963</b>
12,395,379	At year-end:	11,098,191	12,433,727	12,551,005	<b>9,663,917</b>
2,564,105	Total assets	2,258,933	2,472,497	2,500,226	<b>1,998,411</b>
2,930,309	Property, plant and equipment	2,668,657	2,942,281	2,735,078	<b>2,967,085</b>
3,354,616	Total Hitachi, Ltd. stockholders' equity	3,033,985	3,557,356	3,604,455	<b>1,176,603</b>
333,150	Interest-bearing debt	323,919	336,670	335,244	<b>303,887</b>
Yen					Yen
	Per share data:				
¥49.97	Earnings per share attributable to Hitachi, Ltd. stockholders:	¥85.69	¥45.04	¥35.65	<b>¥47.90</b>
49.93	Basic	85.66	45.00	35.62	<b>47.88</b>
12.0	Diluted	10.5	12.0	12.0	<b>13.0</b>
606.87	Cash dividends declared	552.62	609.35	566.48	<b>614.56</b>
	Total Hitachi, Ltd. stockholders' equity				
%					%
	Financial ratios:				
6.2	Adjusted operating income ratio	6.3	6.6	6.3	<b>6.4</b>
5.6	EBIT ratio	7.2	5.5	5.3	<b>5.2</b>
2.5	Return on revenues	4.3	2.2	1.7	<b>2.5</b>
8.6	Return on equity (ROE)	17.5	7.8	6.1	<b>8.1</b>
3.1	Return on assets (ROA)	5.0	2.9	2.4	<b>3.0</b>
0.78	D/E ratio	0.78	0.83	0.87	<b>0.29</b>
23.6	(Including non-controlling interests) (times)	24.0	23.7	21.8	<b>30.7</b>
	Total Hitachi, Ltd. stockholders' equity ratio				
	Notes:				
	1 In order to be consistent with financial reporting principles and practices generally accepted in Japan, adjusted operating income is presented as total revenues less cost of sales and selling, general administrative expenses. The Company believes that this is useful to investors in comparing the Company's financial results with those of other Japanese companies.				
	2 A part of the thermal power generation systems business is classified as a discontinued operation in accordance with the provision of IFRS 5, "Non-current Assets Held for Sale and Discontinued Operations," which was not transferred to MITSUBISHI HITACHI POWER SYSTEMS, LTD. for the business integration in the thermal power generation systems with Mitsubishi Heavy Industries, Ltd. The results of the discontinued operation are reported separately from continuing operations.				
	3 From fiscal 2013, capital investment is stated exclusive of investment in lease assets classified as finance leases.				
	4 ROA (Return on Assets) = Net income / Total Assets (Average between the end of current fiscal year and the end of previous fiscal year) x 100				

# Operating and Financial Review

## Operating Results

Effective from April 1, 2016, the Company changed the name of the “Others (Logistics and Other services)” segment to the “Others” segment.

### Summary

Years ended March 31:	Billions of yen		Percent change
	2016	2017	
Revenues	¥10,034.3	<b>¥9,162.2</b>	-9%
EBIT	531.0	<b>475.1</b>	-11%
Income from continuing operations, before income taxes	517.0	<b>469.0</b>	-9%
Net income attributable to Hitachi, Ltd. stockholders	172.1	<b>231.2</b>	34%

### Analysis of Statement of Operations

Revenues decreased 9% to ¥9,162.2 billion, as compared with the year ended March 31, 2016. This was due mainly to lower revenues in the Information & Telecommunication Systems, High Functional Materials & Components, Smart Life & Ecofriendly Systems, Others and Financial Services segments. This decrease was partially offset by higher revenues in the Electronic Systems & Equipment segment.

Cost of sales decreased 9% to ¥6,782.6 billion, as compared with the year ended March 31, 2016, and the ratio of cost of sales to revenues was 74%, which was the same level as the year ended March 31, 2016. Gross profit decreased 8% to ¥2,379.5 billion, as compared with the year ended March 31, 2016.

Selling, general and administrative expenses decreased ¥148.0 billion to ¥1,792.2 billion, as compared with the year ended March 31, 2016, and the ratio of selling, general and administrative expenses to revenues was 20%, as compared with 19% for the year ended March 31, 2016.

Other income increased ¥43.2 billion to ¥100.7 billion and other expenses increased ¥4.6 billion to ¥146.5 billion, as compared with the year ended March 31, 2016. The details are as follows.

Net gain on sales and disposal of fixed assets improved by ¥19.5 billion, as compared with the year ended March 31, 2016, to a gain of ¥15.0 billion.

Impairment losses increased ¥23.8 billion to ¥68.5 billion, as compared with the year ended March 31, 2016. This mainly reflected impairment losses on software for sale and other intangible assets in the Information & Telecommunication Systems segment.

Net gain on business reorganization and others increased ¥26.1 billion to ¥81.3 billion, as compared with the year ended March 31, 2016, reflecting the partial sale of the shares of Hitachi Transport System, Ltd. in the Others segment and the sale of Hitachi Koki Co., Ltd. shares in the Electronic Systems & Equipment segment.

Special termination benefits decreased ¥20.8 billion to ¥24.6 billion, as compared with the year ended March 31, 2016.

Expenses related to competition law and others decreased ¥15.5 billion to ¥6.7 billion, as compared with the year ended March 31, 2016.

Financial income (excluding interest income) decreased ¥3.5 billion to ¥7.0 billion and financial expenses (excluding interest charges) decreased ¥4.0 billion to ¥26.2 billion, as compared with the year ended March 31, 2016.

Share of loss of investments accounted for using the equity method was ¥47.1 billion, a deterioration of ¥47.3 billion as compared with the year ended March 31, 2016, mainly reflecting the posting of an impairment loss in connection with the uranium enrichment business at an U.S. equity-method associate in the Social Infrastructure & Industrial Systems segment.

EBIT decreased ¥55.8 billion to ¥475.1 billion, as compared with the year ended March 31, 2016.



Interest income increased ¥0.8 billion to ¥12.9 billion and interest charges decreased ¥6.9 billion to ¥19.0 billion, as compared with the year ended March 31, 2016.

Income from continuing operations, before income taxes decreased ¥47.9 billion to ¥469.0 billion, as compared with the year ended March 31, 2016.

Income taxes decreased ¥40.0 billion to ¥125.1 billion, as compared with the year ended March 31, 2016, due mainly to recording tax expenses in the year ended March 31, 2016 in connection with the partial transfer of shares of Hitachi Transport System, Ltd. and Hitachi Capital Corporation.

Loss from discontinued operations decreased ¥51.1 billion to ¥5.9 billion, as compared with the year ended March 31, 2016.

Net income increased ¥43.2 billion to ¥338.0 billion, as compared with the year ended March 31, 2016.

Net income attributable to non-controlling interests decreased ¥15.8 billion to ¥106.7 billion, as compared with the year ended March 31, 2016.

As a result of the foregoing, net income attributable to Hitachi, Ltd. stockholders increased ¥59.1 billion to ¥231.2 billion, as compared with the year ended March 31, 2016.

## Operations by Segment

The following is an overview of results of operations by segment. Revenues for each segment include intersegment transactions. Segment profit is measured by EBIT.

### (Information & Telecommunication Systems)

Revenues decreased 6% to ¥1,982.8 billion, as compared with the year ended March 31, 2016, due mainly to the negative impact of foreign currency translation causing lower sales from overseas subsidiaries and to lower sales from ATMs for overseas markets.

Segment profit decreased ¥32.6 billion to ¥76.4 billion, as compared with the year ended March 31, 2016, due mainly to the posting of business structural reform expenses, despite the effect of business structural reform centered on the telecommunications & network business, improvement in profitability of the social infrastructure-related information systems, among other positives.

### (Social Infrastructure & Industrial Systems)

Revenues were ¥2,331.9 billion, which was the same level as the year ended March 31, 2016. This mainly reflected decreases in revenues in the elevators and escalators business due to the negative impact of foreign currency translation, and in the power and energy business because of the absence of a large project posted for the year ended March 31, 2016, despite substantial revenue growth in the railway systems business due to the acquisition of the businesses of AnsaldoBreda S.p.A. (excluding a part of its operations), the acquisition of Ansaldo STS S.p.A. (both of which are in Italy), and an increase in revenues for the U.K.

Segment loss was ¥19.9 billion, a deterioration of ¥49.1 billion from the year ended March 31, 2016, due mainly to the posting of an impairment loss regarding the uranium enrichment business of an equity-method associate in the U.S. and lower earnings in the elevators and escalators business because of the negative impact of foreign currency translation.

### **(Electronic Systems & Equipment)**

Revenues increased 4% to ¥1,170.3 billion, as compared with the year ended March 31, 2016, due mainly to increased revenues at Hitachi Koki Co., Ltd. because of the acquisition of Germany-based metabo Aktiengesellschaft, despite a decrease in revenues at Hitachi Kokusai Electric Inc. mainly owing to lower sales of telecommunication equipment and video surveillance systems in Japan.

Segment profit increased ¥2.4 billion to ¥66.7 billion, as compared with the year ended March 31, 2016, due mainly to higher earnings at Hitachi High-Technologies Corporation due to firm sales of semiconductor production equipment and higher earnings at Hitachi Koki Co., Ltd. because of the increased revenues, despite a decrease in earnings at Hitachi Kokusai Electric Inc. mainly because of a decline in revenues and the posting of business structural reform expenses.

### **(Construction Machinery)**

Revenues decreased 1% to ¥753.9 billion, as compared with the year ended March 31, 2016, due mainly to the negative impact of foreign currency translation caused by appreciation of the yen, despite the recovery of demand for hydraulic excavators in China and India.

Segment profit decreased ¥3.1 billion to ¥22.7 billion, as compared with the year ended March 31, 2016, due mainly to the absence of a gain on business reorganization and others related to the sale of shares of UniCarriers Holdings Corporation recorded for the year ended March 31, 2016, despite the effect of business structural reforms, decreases in business structural reform expenses and an improvement in exchange gain or loss.

### **(High Functional Materials & Components)**

Revenues decreased 6% to ¥1,464.6 billion, as compared with the year ended March 31, 2016, due mainly to a fall in revenues at Hitachi Metals, Ltd. due to the negative impact of foreign currency translation causing a fall in sales from overseas subsidiaries and a decline in demand associated with the slower economies in China and emerging countries in Asia.

Segment profit decreased ¥30.2 billion to ¥123.3 billion, as compared with the year ended March 31, 2016, due mainly to the decrease in revenues and the absence of gains on business reorganization and others related to the sales of equity interest in Hitachi Tool Engineering, Ltd. by Hitachi Metals, Ltd. in the year ended March 31, 2016.

### **(Automotive Systems)**

Revenues decreased 1% to ¥992.2 billion, as compared with the year ended March 31, 2016, due mainly to negative impact of foreign currency translation, despite sales growth particularly in North America and China, where demand for automobiles was firm.

Segment profit increased ¥11.8 billion to ¥65.8 billion, as compared with the year ended March 31, 2016, due mainly to posting of gain on sales and disposals of fixed assets despite the decline in revenues.

### **(Smart Life & Ecofriendly Systems)**

Revenues decreased 18% to ¥557.3 billion, as compared with the year ended March 31, 2016, due mainly to the effect of reorganization of the air-conditioning systems business with an equity-method associate that is a joint venture with Johnson Controls Inc.

Segment profit decreased ¥10.1 billion to ¥31.8 billion, as compared with the year ended March 31, 2016, due mainly to the effect of a decline in revenues from the reorganization of the air-conditioning systems business and the absence of a gain on business reorganization and others in association with the reorganization of the air-conditioning systems business recorded in the year ended March 31, 2016.

### **(Others)**

Revenues decreased 48% to ¥653.7 billion, and segment profit decreased ¥19.9 billion to ¥20.6 billion, as compared with the year ended March 31, 2016, respectively. This was due mainly to the conversion of Hitachi Transport System, Ltd. to an equity-method associate.

### **(Financial Services)**

As Hitachi Capital Corporation was converted to an equity-method associate as of October 2016, there is no company which belongs to the Financial Services segment. Accordingly, only the results for the period in which said company was a consolidated subsidiary are recorded. As a result, revenues decreased 51% to ¥179.2 billion, and segment profit decreased ¥23.8 billion to ¥22.8 billion, as compared with the year ended March 31, 2016, respectively.

## Revenues by Geographic Area

The following is an overview of revenues attributed to geographic areas based on customer location.

Years ended March 31:	Billions of yen		Percent change
	2016	2017	
Japan	¥ 5,231.5	<b>¥4,757.6</b>	-9%
Overseas Revenues Subtotal	4,802.7	<b>4,404.5</b>	-8%
Asia	2,112.3	<b>1,860.7</b>	-12%
North America	1,280.3	<b>1,144.0</b>	-11%
Europe	951.1	<b>972.6</b>	2%
Other Areas	459.0	<b>427.1</b>	-7%
Total Revenues	¥10,034.3	<b>¥9,162.2</b>	-9%

### Japan

Revenues in Japan decreased 9% to ¥4,757.6 billion, as compared with the year ended March 31, 2016. This was due to lower revenues across all segments, particularly in the Others segment, reflecting the conversion of Hitachi Transport System, Ltd. to an equity-method associate and in the Financial Services segment in which Hitachi Capital Corporation was converted to an equity-method associate.

### Overseas

Overseas revenues decreased 8% to ¥4,404.5 billion, as compared with the year ended March 31, 2016, and the ratio to total revenues was 48%, which was the same level as the year ended March 31, 2016.

### (Asia)

Revenues in Asia decreased 12% to ¥1,860.7 billion, as compared with the year ended March 31, 2016. This was due mainly to lower revenues in the Social Infrastructure & Industrial Systems segment, reflecting reduced revenues in the elevators and escalators business, particularly in China, the Others segment in which Hitachi Transport System, Ltd. was converted to an equity-method associate, and the Smart Life & Ecofriendly Systems segment due to the reorganization of the air-conditioning systems business, despite higher revenues in the Electronic Systems & Equipment and the Construction Machinery segments.

### (North America)

Revenues in North America decreased 11% to ¥1,144.0 billion, as compared with the year ended March 31, 2016. This was due mainly to lower revenues in the Information & Telecommunication Systems, High Functional Materials & Components and Others segments, despite higher revenues in the Social Infrastructure & Industrial Systems segment.

### (Europe)

Revenues in Europe increased 2% to ¥972.6 billion, as compared with the year ended March 31, 2016. This was due mainly to higher revenues in the Social Infrastructure & Industrial Systems segment, reflecting substantial growth in the railway systems business, and the Electronic Systems & Equipment segment, in which Hitachi Koki Co., Ltd. recorded increased revenues due to the acquisition of metabo Aktiengesellschaft, despite lower revenues in the Others and the Financial Services segments, etc.

### (Other Areas)

Revenues in other areas decreased 7% to ¥427.1 billion, as compared with the year ended March 31, 2016. This was due mainly to lower revenues in the Smart Life & Ecofriendly Systems and the Others segments, despite higher revenues in the Social Infrastructure & Industrial Systems segment, reflecting increased revenues in the railway systems business, and the Electronic Systems & Equipment segment, reflecting increased revenues by Hitachi High-Technologies Corporation.

## Summary of Financial Condition, etc.

### Liquidity and Capital Resources

Our management considers maintaining an appropriate level of liquidity and securing adequate funds for current and future business operations to be important financial objectives. Through efficient management of working capital and selective investment in new plants and equipment, we are working to optimize the efficiency of capital utilization throughout our business operations. We endeavor to improve our group cash management by centralizing such management among us and our overseas financial subsidiaries. Our internal sources of funds include cash flows generated by operating activities and cash on hand. Our management also considers short-term investments to be an immediately available source of funds. In addition, we raise funds both in the capital markets and from Japanese and international commercial banks in response to our capital requirements. Our management's policy is to finance capital expenditures primarily by internally generated funds and to a lesser extent by funds raised through the issuance of debt and equity securities in domestic and foreign capital markets. In order to flexibly access funding, we maintain our shelf registration with the maximum outstanding balance of ¥300.0 billion.

We maintain commitment line agreements with a number of domestic banks under which we may borrow in order to ensure efficient access to necessary funds. These commitment line agreements generally provide for a one-year term, renewable upon mutual agreement between us and each of the lending banks, as well as another commitment line agreement with a contract term of three years ending on July 29, 2019. As of March 31, 2017, our unused commitment lines totaled ¥599.0 billion, including these of ¥400.0 billion which the Company maintained.

We receive debt ratings from Moody's Japan K.K. (Moody's), Standard & Poor's Rating Japan (S&P), as well as Rating and Investment Information, Inc. (R&I). Our debt ratings as of March 31, 2017 were as follows.

Rating Company	Long-term	Short-term
Moody's	A3	P-2
S&P	A-	A-2
R&I	A+	a-1

With our current ratings, we believe that our access to the global capital markets will remain sufficient for our financing needs. We seek to improve our credit ratings in order to ensure financial flexibility for liquidity and capital management, and to continue to maintain access to sufficient funding resources through the capital markets.

### Cash Flows

Years ended March 31:	Billions of yen	
	2016	2017
Net cash provided by operating activities	¥ 812.2	¥ 629.5
Net cash used in investing activities	(730.7)	(337.9)
Net cash used in financing activities	(26.4)	(209.5)
Effect of exchange rate changes on cash and cash equivalents	(57.3)	(16.1)
Change in cash and cash equivalents	(2.3)	65.9
Cash and cash equivalents at beginning of year	701.7	699.3
Cash and cash equivalents at end of year	¥ 699.3	¥ 765.2

#### (Cash Flows from Operating Activities)

Net income in the year ended March 31, 2017 increased by ¥43.2 billion, as compared with the year ended March 31, 2016. Trade payables increased by ¥111.5 billion in the year ended March 31, 2017, as compared with the decrease of ¥1.6 billion in the year ended March 31, 2016. However, change in trade receivables and change in inventories decreased net cash flow by ¥143.7 billion and ¥67.0 billion, respectively. As a result of the foregoing, net cash provided by operating activities was ¥629.5 billion in the year ended March 31, 2017, a decrease of ¥182.6 billion compared with the year ended March 31, 2016.



### (Cash Flows from Investing Activities)

Net amount of investments related to property, plant and equipment\*<sup>1</sup> was ¥462.6 billion, a decrease of ¥189.7 billion as compared with the year ended March 31, 2016.

Proceeds from sale of investments in securities and other financial assets (including investments in subsidiaries and investments accounted for using the equity method) increased by ¥111.1 billion compared with the year ended March 31, 2016, reflecting partial sales of the shares of Hitachi Transport System, Ltd. and Hitachi Capital Corporation, and the sale of all shares of Hitachi Koki Co., Ltd. Purchase of investments in securities and other financial assets (including investments in subsidiaries and investments accounted for using the equity method) was ¥177.3 billion, a decrease of ¥19.3 billion compared with the year ended March 31, 2016, in which the acquisition of the businesses of AnsaldoBreda S.p.A. (excluding a part of its operations), the acquisition of Ansaldo STS S.p.A., and the acquisition of Pentaho Corporation were conducted. As a result of the foregoing, net cash used in investing activities was ¥337.9 billion in the year ended March 31, 2017, a decrease of ¥392.8 billion compared with the year ended March 31, 2016.

\*1 The sum of the purchase of property, plant and equipment, the purchase of intangible assets and the purchase of leased assets, less the proceeds from sale of property, plant, equipment and intangible assets, the proceeds from sale of leased assets and the collection of lease receivables

### (Cash Flows from Financing Activities)

The net cash outflow from a change in short-term debt increased by ¥164.0 billion compared with the year ended March 31, 2016. Proceeds related to long-term debt\*<sup>2</sup> were ¥115.5 billion, a decrease of ¥65.1 billion compared with the year ended March 31, 2016. As a result of the foregoing, net cash used in financing activities was ¥209.5 billion in the year ended March 31, 2017, an increase in net cash outflow of ¥183.0 billion compared with the year ended March 31, 2016.

\*2 The proceeds from long-term debt, less the payments on long-term debt

As a result of the above items, as of March 31, 2017, cash and cash equivalents amounted to ¥765.2 billion, net increase of ¥65.9 billion from March 31, 2016. Free cash flows, the sum of cash flows from operating and investing activities, represented an inflow of ¥291.6 billion in the year ended March 31, 2017, an increase in net cash inflow of ¥210.2 billion from the year ended March 31, 2016.

### Assets, Liabilities and Equity

As of March 31, 2017, total assets amounted to ¥9,663.9 billion, a decrease of ¥2,887.0 billion from March 31, 2016. This was due mainly to the conversion of Hitachi Capital Corporation and Hitachi Transport System, Ltd. into equity-method associates and the sale of Hitachi Koki Co., Ltd. Cash and cash equivalents as of March 31, 2017 amounted to ¥765.2 billion, an increase of ¥65.9 billion from the amount as of March 31, 2016.

As of March 31, 2017, total interest-bearing debt, the sum of short-term debt and long-term debt, amounted to ¥1,176.6 billion, a decrease of ¥2,427.8 billion from March 31, 2016. As of March 31, 2017, short-term debt, consisting mainly of borrowings from banks and commercial paper, amounted to ¥196.3 billion, a decrease of ¥675.0 billion from March 31, 2016. As of March 31, 2017, current portion of long-term debt amounted to ¥190.2 billion, a decrease of ¥461.2 billion from March 31, 2016. As of March 31, 2017, long-term debt (excluding current portion), consisting mainly of debentures, and loans principally from banks and insurance companies, amounted to ¥790.0 billion, a decrease of ¥1,291.5 billion from March 31, 2016.

As of March 31, 2017, total Hitachi, Ltd. stockholders' equity amounted to ¥2,967.0 billion, an increase of ¥232.0 billion from March 31, 2016. This is due mainly to the posting of net income attributable to Hitachi, Ltd. stockholders, despite the impact of converting Hitachi Capital Corporation into an equity-method associate. As a result, the ratio of total Hitachi, Ltd. stockholders' equity to total assets as of March 31, 2017 was 30.7%, compared with 21.8% as of March 31, 2016.

Non-controlling interests as of March 31, 2017 was ¥1,129.9 billion, a decrease of ¥260.5 billion from March 31, 2016.

Total equity as of March 31, 2017 was ¥4,096.9 billion, a decrease of ¥28.5 billion from March 31, 2016. The ratio of interest-bearing debt to total equity was 0.29, compared with 0.87 as of March 31, 2016.

# Consolidated Statement of Financial Position

March 31, 2017 and 2016

Assets	Millions of yen	
	2016	2017
<b>Current assets</b>		
Cash and cash equivalents	¥ 699,315	¥ 765,242
Trade receivables	2,992,770	2,433,149
Lease receivables	338,758	42,365
Inventories	1,299,855	1,225,907
Other current assets	541,857	535,943
<b>Total current assets</b>	<b>5,872,555</b>	<b>5,002,606</b>
<b>Non-current assets</b>		
Investments accounted for using the equity method	676,960	691,251
Investments in securities and other financial assets	1,329,974	719,704
Lease receivables	727,485	38,646
Property, plant and equipment	2,500,226	1,998,411
Intangible assets	1,070,403	919,201
Other non-current assets	373,402	294,098
<b>Total non-current assets</b>	<b>6,678,450</b>	<b>4,661,311</b>
<b>Total Assets</b>	<b>¥12,551,005</b>	<b>¥9,663,917</b>

<b>Liabilities</b>	Millions of yen	
	2016	2017
Current liabilities		
Short-term debt	¥ 871,417	¥ 196,357
Current portion of long-term debt	651,518	190,233
Other financial liabilities	280,048	274,270
Trade payables	1,451,918	1,402,233
Other current liabilities	1,739,315	1,657,766
Total current liabilities	4,994,216	3,720,859
Non-current liabilities		
Long-term debt	2,081,520	790,013
Other financial liabilities	115,155	53,422
Retirement and severance benefits	783,670	635,684
Other non-current liabilities	450,874	366,944
Total non-current liabilities	3,431,219	1,846,063
Total Liabilities	8,425,435	5,566,922
<b>Equity</b>		
Hitachi, Ltd. stockholders' equity		
Common stock	458,790	458,790
Capital surplus	586,790	577,573
Retained earnings	1,609,761	1,793,570
Accumulated other comprehensive income	83,543	141,068
Treasury stock, at cost	(3,806)	(3,916)
Total Hitachi, Ltd. stockholders' equity	2,735,078	2,967,085
Non-controlling interests	1,390,492	1,129,910
Total Equity	4,125,570	4,096,995
Total Liabilities and Equity	¥12,551,005	¥9,663,917

# Consolidated Statement of Profit or Loss

Years ended March 31, 2017 and 2016

	Millions of yen	
	2016	2017
Revenues	¥10,034,305	¥ 9,162,264
Cost of sales	(7,459,073)	(6,782,677)
Gross profit	2,575,232	2,379,587
Selling, general and administrative expenses	(1,940,363)	(1,792,278)
Adjusted operating income	634,869	587,309
Other income	57,539	100,742
Other expenses	(141,881)	(146,568)
Financial income	10,615	7,091
Financial expenses	(30,295)	(26,206)
Share of profits (losses) of investments accounted for using the equity method	156	(47,186)
EBIT (Earnings before interest and taxes)	531,003	475,182
Interest income	12,028	12,923
Interest charges	(25,991)	(19,014)
Income from continuing operations, before income taxes	517,040	469,091
Income taxes	(165,206)	(125,112)
Income from continuing operations	351,834	343,979
Loss from discontinued operations	(57,081)	(5,950)
Net income	¥ 294,753	¥ 338,029
Net income attributable to:		
Hitachi, Ltd. stockholders	172,155	231,261
Non-controlling interests	122,598	106,768

# Consolidated Statement of Comprehensive Income

Years ended March 31, 2017 and 2016

	Millions of yen	
	2016	2017
Net income	¥ 294,753	<b>¥338,029</b>
Other comprehensive income (OCI)		
Items not to be reclassified into net income		
Net changes in financial assets measured at fair value through OCI	(50,323)	<b>59,934</b>
Remeasurements of defined benefit plans	(140,844)	<b>46,086</b>
Share of OCI of investments accounted for using the equity method	(4,275)	<b>(1,887)</b>
Total items not to be reclassified into net income	(195,442)	<b>104,133</b>
Items that can be reclassified into net income		
Foreign currency translation adjustments	(190,099)	<b>(64,761)</b>
Net changes in cash flow hedges	32,785	<b>21,303</b>
Share of OCI of investments accounted for using the equity method	(26,239)	<b>1,166</b>
Total items that can be reclassified into net income	(183,553)	<b>(42,292)</b>
Other comprehensive income (OCI)	(378,995)	<b>61,841</b>
Comprehensive income (loss)	¥ (84,242)	<b>¥399,870</b>
Comprehensive income (loss) attributable to:		
Hitachi, Ltd. stockholders	(127,557)	<b>299,397</b>
Non-controlling interests	43,315	<b>100,473</b>



# Consolidated Statement of Changes in Equity

Years ended March 31, 2017 and 2016

Millions of yen

2016

	Common stock	Capital surplus	Retained earnings	Accumulated other comprehensive income	Treasury stock, at cost	Total Hitachi, Ltd. stockholders' equity	Non-controlling interests	Total equity
As of March 31, 2015	¥458,790	¥608,416	¥1,477,517	¥ 401,100	¥(3,542)	¥2,942,281	¥1,354,061	¥4,296,342
Reclassified into retained earnings	-	-	18,030	(18,030)	-	-	-	-
Net income	-	-	172,155	-	-	172,155	122,598	294,753
Other comprehensive loss	-	-	-	(299,712)	-	(299,712)	(79,283)	(378,995)
Cash dividends	-	-	(57,941)	-	-	(57,941)	(39,502)	(97,443)
Changes in treasury stock	-	(4)	-	-	(264)	(268)	-	(268)
Equity transactions and other	-	(21,622)	-	185	-	(21,437)	32,618	11,181
Total changes in equity	-	(21,626)	132,244	(317,557)	(264)	(207,203)	36,431	(170,772)
As of March 31, 2016	¥458,790	¥586,790	¥1,609,761	¥ 83,543	¥(3,806)	¥2,735,078	¥1,390,492	¥4,125,570

Millions of yen

2017

	Common stock	Capital surplus	Retained earnings	Accumulated other comprehensive income	Treasury stock, at cost	Total Hitachi, Ltd. stockholders' equity	Non-controlling interests	Total equity
As of March 31, 2016	¥458,790	¥586,790	¥1,609,761	¥ 83,543	¥(3,806)	¥2,735,078	¥1,390,492	¥4,125,570
Reclassified into retained earnings	-	-	10,486	(10,486)	-	-	-	-
Net income	-	-	231,261	-	-	231,261	106,768	338,029
Other comprehensive income (loss)	-	-	-	68,136	-	68,136	(6,295)	61,841
Cash dividends	-	-	(57,938)	-	-	(57,938)	(38,283)	(96,221)
Changes in treasury stock	-	(15)	-	-	(110)	(125)	-	(125)
Equity transactions and other	-	(9,202)	-	(125)	-	(9,327)	(322,772)	(332,099)
Total changes in equity	-	(9,217)	183,809	57,525	(110)	232,007	(260,582)	(28,575)
As of March 31, 2017	¥458,790	¥577,573	¥1,793,570	¥141,068	¥(3,916)	¥2,967,085	¥1,129,910	¥4,096,995

# Consolidated Statement of Cash Flows

Years ended March 31, 2017 and 2016

	Millions of yen	
	2016	2017
<b>Cash flows from operating activities</b>		
Net income	¥ 294,753	¥ 338,029
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization	507,790	415,183
Change in trade receivables	(53,092)	(196,824)
Change in inventories	44,342	(22,731)
Change in trade payables	(1,602)	111,589
Other	20,035	(15,664)
Net cash provided by (used in) operating activities	812,226	629,582
<b>Cash flows from investing activities</b>		
Purchase of property, plant and equipment	(369,494)	(316,116)
Purchase of intangible assets	(116,438)	(101,034)
Purchase of leased assets	(539,420)	(292,943)
Proceeds from sale of property, plant and equipment, and intangible assets	22,632	52,208
Proceeds from sale of leased assets	23,834	14,539
Collection of lease receivables	326,497	180,726
Proceeds from sale (purchase) of investments in securities and other financial assets (including investments in subsidiaries and investments accounted for using the equity method), net	(58,756)	71,653
Other	(19,654)	53,012
Net cash provided by (used in) investing activities	(730,799)	(337,955)
Free cash flows	81,427	291,627
<b>Cash flows from financing activities</b>		
Change in interest-bearing debt	110,821	(118,314)
Dividends paid to stockholders	(57,907)	(57,935)
Dividends paid to non-controlling interests	(41,671)	(36,508)
Other	(37,710)	3,221
Net cash provided by (used in) financing activities	(26,467)	(209,536)
Effect of exchange rate changes on cash and cash equivalents	(57,348)	(16,164)
Change in cash and cash equivalents	(2,388)	65,927
Cash and cash equivalents at beginning of year	701,703	699,315
Cash and cash equivalents at end of year	¥ 699,315	¥ 765,242

# Summarized Consolidated Statement of Financial Position by Manufacturing, Services and Others and Financial Services

Years ended March 31, 2017 and 2016

Billions of yen

	2016			2017		
	Manufacturing, Services and Others	Financial Services	Total	Manufacturing, Services and Others	Financial Services	Total
<b>Assets</b>						
Current assets	¥4,995.6	¥1,256.8	¥ 5,872.5	<b>¥5,002.6</b>	-	<b>¥5,002.6</b>
Cash and cash equivalents	660.9	157.0	699.3	<b>765.2</b>	-	<b>765.2</b>
Trade receivables	2,472.0	710.7	2,992.7	<b>2,433.1</b>	-	<b>2,433.1</b>
Lease receivables	45.6	311.9	338.7	<b>42.3</b>	-	<b>42.3</b>
Inventories	1,291.5	3.7	1,299.8	<b>1,225.9</b>	-	<b>1,225.9</b>
Other current assets	525.3	73.3	541.8	<b>535.9</b>	-	<b>535.9</b>
Non-current assets	4,922.3	1,834.6	6,678.4	<b>4,661.3</b>	-	<b>4,661.3</b>
Investments accounted for using the equity method	676.3	20.4	676.9	<b>691.2</b>	-	<b>691.2</b>
Investments in securities and other financial assets	681.6	675.9	1,329.9	<b>719.7</b>	-	<b>719.7</b>
Lease receivables	38.2	729.8	727.4	<b>38.6</b>	-	<b>38.6</b>
Property, plant and equipment	2,193.6	307.5	2,500.2	<b>1,998.4</b>	-	<b>1,998.4</b>
Intangible assets	1,007.7	62.6	1,070.4	<b>919.2</b>	-	<b>919.2</b>
Other non-current assets	324.6	38.1	373.4	<b>294.0</b>	-	<b>294.0</b>
<b>Total Assets</b>	<b>¥9,917.9</b>	<b>¥3,091.4</b>	<b>¥12,551.0</b>	<b>¥9,663.9</b>	-	<b>¥9,663.9</b>
<b>Liabilities and Equity</b>						
Current liabilities	¥4,095.5	¥1,323.2	¥ 4,994.2	<b>¥3,720.8</b>	-	<b>¥3,720.8</b>
Short-term debt	529.8	497.6	871.4	<b>196.3</b>	-	<b>196.3</b>
Current portion of long-term debt	234.9	485.6	651.5	<b>190.2</b>	-	<b>190.2</b>
Other financial liabilities	265.5	40.1	280.0	<b>274.2</b>	-	<b>274.2</b>
Trade payables	1,379.0	228.9	1,451.9	<b>1,402.2</b>	-	<b>1,402.2</b>
Other current liabilities	1,686.1	70.8	1,739.3	<b>1,657.7</b>	-	<b>1,657.7</b>
Non-current liabilities	2,038.0	1,421.1	3,431.2	<b>1,846.0</b>	-	<b>1,846.0</b>
Long-term debt	750.3	1,356.2	2,081.5	<b>790.0</b>	-	<b>790.0</b>
Other financial liabilities	85.0	28.7	115.1	<b>53.4</b>	-	<b>53.4</b>
Retirement and severance benefits	774.1	9.5	783.6	<b>635.6</b>	-	<b>635.6</b>
Other non-current liabilities	428.5	26.6	450.8	<b>366.9</b>	-	<b>366.9</b>
<b>Total Liabilities</b>	<b>6,133.5</b>	<b>2,744.4</b>	<b>8,425.4</b>	<b>5,566.9</b>	-	<b>5,566.9</b>
Hitachi, Ltd. stockholders' equity	2,540.8	201.3	2,735.0	<b>2,967.0</b>	-	<b>2,967.0</b>
Non-controlling interests	1,243.5	145.7	1,390.4	<b>1,129.9</b>	-	<b>1,129.9</b>
<b>Total Equity</b>	<b>3,784.3</b>	<b>347.0</b>	<b>4,125.5</b>	<b>4,096.9</b>	-	<b>4,096.9</b>
<b>Total Liabilities and Equity</b>	<b>¥9,917.9</b>	<b>¥3,091.4</b>	<b>¥12,551.0</b>	<b>¥9,663.9</b>	-	<b>¥9,663.9</b>
Interest-bearing debt	¥1,515.0	¥2,339.5	¥3,604.4	<b>¥1,176.6</b>	-	<b>¥1,176.6</b>
Total Hitachi, Ltd. stockholders' equity ratio	25.6%	6.5%	21.8%	<b>30.7%</b>	-	<b>30.7%</b>
D/E ratio (including non-controlling interests) (times)	0.40	6.74	0.87	<b>0.29</b>	-	<b>0.29</b>

## Summarized Consolidated Statement of Profit or Loss by Manufacturing, Services and Others and Financial Services

March 31, 2017 and 2016

	Billions of yen					
	2016			2017		
	Manufacturing, Services and Others	Financial Services	Total	Manufacturing, Services and Others	Financial Services	Total
Revenues	¥9,833.9	¥365.3	¥10,034.3	<b>¥9,053.3</b>	<b>¥179.2</b>	<b>¥9,162.2</b>
Adjusted operating income	586.8	45.2	634.8	<b>566.8</b>	<b>21.3</b>	<b>587.3</b>
EBIT	490.2	46.6	531.0	<b>458.1</b>	<b>22.8</b>	<b>475.1</b>
Income from continuing operations, before income taxes	476.9	46.6	517.0	<b>452.4</b>	<b>22.8</b>	<b>469.0</b>
Net income attributable to Hitachi, Ltd. stockholders	152.1	19.7	172.1	<b>227.8</b>	<b>9.7</b>	<b>231.2</b>

## Summarized Consolidated Statement of Cash Flows by Manufacturing, Services and Others and Financial Services

March 31, 2017 and 2016

	Billions of yen					
	2016			2017		
	Manufacturing, Services and Others	Financial Services	Total	Manufacturing, Services and Others	Financial Services	Total
Cash flows from operating activities	¥ 843.1	¥ (7.4)	¥ 812.2	<b>¥ 638.7</b>	<b>¥ 2.2</b>	<b>¥ 629.5</b>
Cash flows from investing activities	(518.7)	(218.8)	(730.7)	<b>(153.2)</b>	<b>(274.6)</b>	<b>(337.9)</b>
Free cash flows	324.4	(226.2)	81.4	<b>485.5</b>	<b>(272.4)</b>	<b>291.6</b>
Cash flows from financing activities	(262.7)	265.4	(26.4)	<b>(367.1)</b>	<b>117.5</b>	<b>(209.5)</b>
Effect of exchange rate changes on cash and cash equivalents	(55.5)	(1.8)	(57.3)	<b>(14.0)</b>	<b>(2.1)</b>	<b>(16.1)</b>
Change in cash and cash equivalents	6.1	37.3	(2.3)	<b>104.3</b>	<b>(157.0)</b>	<b>65.9</b>
Cash and cash equivalents at beginning of year	654.7	119.7	701.7	<b>660.9</b>	<b>157.0</b>	<b>699.3</b>
Cash and cash equivalents at end of year	¥ 660.9	¥ 157.0	¥ 699.3	<b>¥ 765.2</b>	-	<b>¥ 765.2</b>
Core free cash flows	363.5	(264.8)	113.3	<b>213.8</b>	<b>(109.2)</b>	<b>100.2</b>

Notes: 1 The consolidated financial statements by Manufacturing, Services and Others and Financial Services represent unaudited financial information prepared by the Company for the purpose of this supplementary information.

2 Total figures exclude inter-segment transactions.

3 As Hitachi Capital was converted into an equity-method associate as of October 3, 2016, there is no company that belongs to Financial Services. Accordingly, there is no balance of total assets, total liabilities and total equity in the summarized consolidated statement of financial position for Financial Services as of March 31, 2017. In addition, only the results for the first half of fiscal 2016 were recorded in the summarized consolidated statement of profit or loss for Financial Services and only the cash flows for the first half of fiscal 2016 and the decrease in cash and cash equivalents owned by Hitachi Capital as of the date were recorded in the summarized consolidated statement of cash flows for Financial Services.

4. Core free cash flows are operating cash flows plus collection of investments in leases less cash outflows for the purchase of property, plant and equipment, intangible assets, software, and assets to be leased.

# Environmental Performance

The world's population, which was 7.3 billion in 2015, is projected to grow to 9.7 billion by 2050 and to 11.2 billion by 2100.\* Global GDP is also continuing to expand, aggravating a host of environmental problems, including global warming caused by higher CO<sub>2</sub> emissions from fossil fuel consumption, the depletion of resources due to increased demand, and ecosystem destruction. Global-scale efforts are being made to develop approaches that lighten the burden on the environment so that a prosperous planet can be passed on to future generations.

Hitachi strives to achieve a more sustainable society by addressing environmental problems, which pose a major challenge for society, based on its corporate mission of contributing to society through the development of superior, original technology and products.

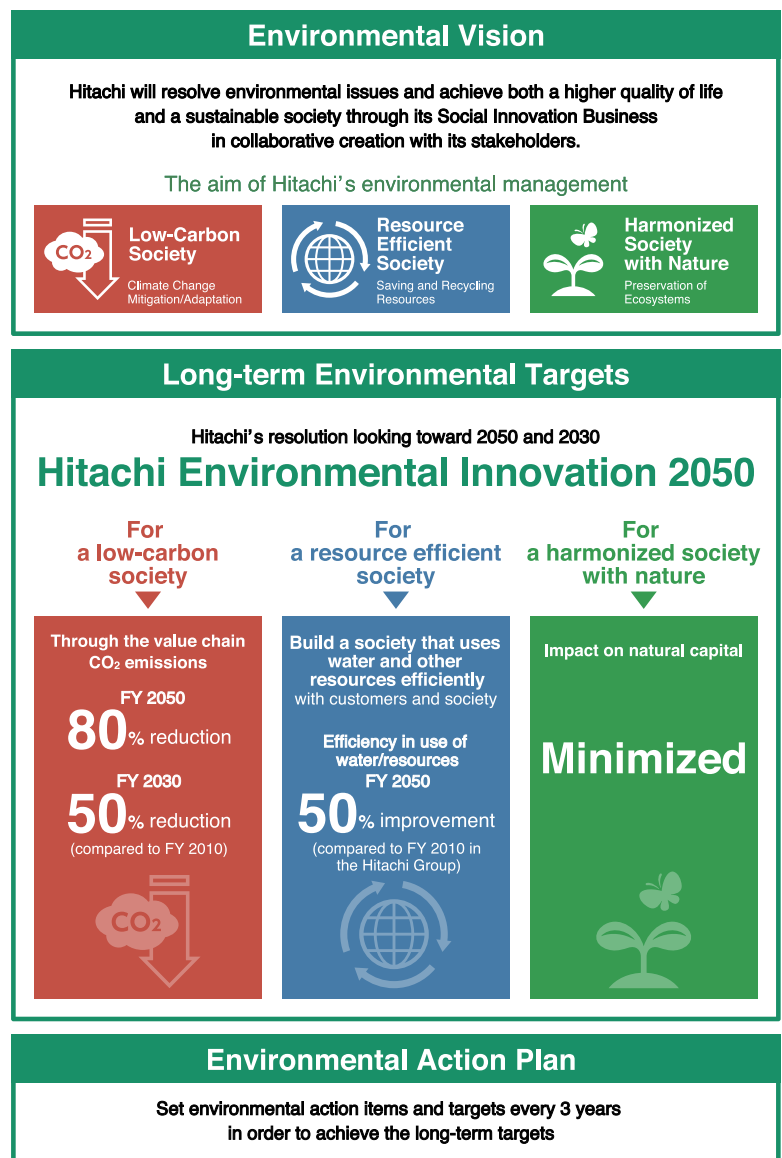
\* According to *World Population Prospects: The 2015 Revision*, published by the United Nations.

## The Environmental Vision and Hitachi Environmental Innovation 2050

As global warming, resource depletion, ecosystem destruction, and other environmental issues grow more serious, companies face increasing demands and expectations to reduce the environmental burden of their business activities.

The Intergovernmental Panel on Climate Change (IPCC) concluded that limiting global warming “below 2°C relative to pre-industrial levels” would require “40 to 70% global anthropogenic GHG emissions reductions by 2050 compared to 2010.” The Paris Agreement adopted in December 2015 at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change—and which came into force in November 2016—set ambitious targets, including a global long-term target of keeping global warming to below 2°C and efforts to limit the increase to 1.5°C. Environmental targets have also been set in the Sustainable Development Goals (SDGs)—the centerpiece of the 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015—whose Goal 13 reads: “Take urgent action to combat climate change and its impacts.”

In the light of these global trends and our own management policy, we created an Environmental Vision to better define the kind of society that Hitachi envisions from a long-term perspective. Our Environmental Vision envisions a low-carbon society; a resource efficient society; a harmonized society with nature. To achieve such a sustainable society, we established a set of long-term environmental targets called Hitachi Environmental Innovation 2050.



Hitachi Environmental Innovation 2050  
<http://www.hitachi.com/environment/vision/innovation2050.html>



# Toward a Low-Carbon Society

We seek to reduce CO<sub>2</sub> emissions by 80% compared to fiscal 2010 levels by fiscal 2050 to realize the drop in global anthropogenic GHG emissions that was deemed necessary in the IPCC's *Fifth Assessment Report*. We will attain this target throughout our value chain. First, this will be achieved by decreasing emissions during the *usage* stage of our products and solutions, which account for a substantial share of emissions in the value chain. We will contribute to our customers and to society by developing innovative technologies and solutions, as well as enhancing the efficiency of our products and supplying low-carbon energy. At the same time, we will also work to cut down on emissions at the *production* stage of our business activities.

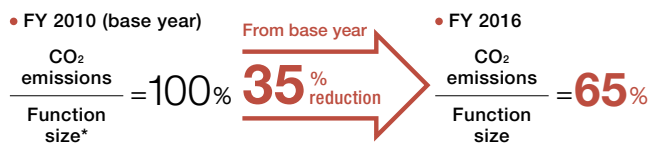
## Reduction of CO<sub>2</sub> Emissions During Use

### Improved Environmental Performance in Products and Services

Hitachi is improving the environmental performance of its products and services with the hope of contributing to the resolution of environmental challenges through the development and popularization of products and services with high environmental value. We strike a balance between improving functionality and reducing the environmental burden by using, as our index, the reduction rate per product and service function of CO<sub>2</sub> emissions during usage and of the volume of resources used during the life cycle. The group of products that demonstrate a high level of potential in solving environmental issues are the targets of a plan to achieve a 40% reduction in CO<sub>2</sub> emissions by fiscal 2018 (compared to fiscal 2010 products). In fiscal 2016, we attained a

35% CO<sub>2</sub> emissions reduction rate by promoting environmentally conscious designs and expanding sales of products and services with high energy-saving functions.

### Reduction in CO<sub>2</sub> Emissions



\* Major functions of products correlated to CO<sub>2</sub> emissions.

### Environmentally Conscious Design Assessments

We conduct Environmentally Conscious Design Assessments for all products and services involving a design process to ensure environmentally conscious design and development. Thirty environment-related areas are assessed for their impact on climate change, resource depletion, and environmental pollution (ecosystem degradation) at each stage of the product life cycle with a view to reducing the environmental burden. To meet the IEC 62430\* criteria for environmentally conscious design, in addition to implementing these assessments, we are advancing environmentally conscious design and development by integrating this process into our existing management system, such as by

keeping abreast of environmental regulations and ascertaining the environment-related needs of our stakeholders. We conduct life cycle assessments focusing on our main, priority products to quantitatively evaluate their burden on the global environment in such areas as the consumption of mineral resources, fossil fuels, and water resources, as well as their impact on global warming and air pollution. The results of such life cycle assessments are disclosed to our stakeholders and utilized in improving the design of next-generation products.

\* The standard developed by the International Electrotechnical Commission concerning environmentally conscious design for electrical and electronic products.

## Products and Solutions that Help Create a Low-Carbon Society

### Reducing CO<sub>2</sub> Emissions Through Energy Savings Amorphous Transformers

Transformers convert the high-voltage electricity produced at power plants into low-voltage electricity that can be used more safely. Since voltage is applied to the coil where electricity is flowing so that electricity can be used at any time, the occurrence of no-load loss (standby power) in which power is lost even when electricity is not being used cannot be avoided. Decreasing the no-load loss of transformers that operate 24 hours a day, 365 days a year, over a mean lifespan of about 25 years could lead to huge energy savings.

Hitachi Industrial Equipment Systems Co., Ltd. uses an amorphous alloy with outstanding magnetic properties in the iron cores around which coils are wound. This has resulted in an annual reduction of about one-fifth in no-load loss compared with previous silicon steel transformers\* and an annual reduction of 26 MWh in total loss, including load loss, during use.



An oil-immersed transformer (left) and molded transformer.



\* Comparison of loss between Hitachi's silicon steel transformer and amorphous transformer (3,000 kVA capacity, 22 kV/6.6 kV, 50 Hz models at 40% load factor).

## Reducing CO<sub>2</sub> Emissions with Renewable Energy Down-wind Turbine System

Hitachi has installed 162 wind turbines in Japan (as of February 28, 2017) and is actively developing this business to contribute to the growth of the renewable energy sector. In Hitachi's original down-wind system, the rotor is on the downwind side of the tower. The system's weather vane effect enables turbines to switch to the free-yaw operation mode in blackout conditions, such as during storms, preventing the dangers posed by cross wind. The characteristic makes the down-wind system very safe. Down-wind turbines also generate energy efficiently by capturing upward blowing winds in mountainous and hilly areas.

At a new wind power plant of the Aoyama-Kogen Wind Farm Corporation, located on the Aoyama plateau in Mie Prefecture, Hitachi supplied 40 down-wind turbines. The output is 80 MW, the largest in Japan.\*1 Hitachi is also taking part in research for the Fukushima Floating Offshore Wind Farm Demonstration Project of the Agency for Natural Resources and Energy, Ministry of Economy, Trade, and Industry.



A 5 MW floating wind turbine  
(courtesy of the Fukushima Offshore Wind Consortium).

CO<sub>2</sub> emissions  
reduction amount

**330** kt-CO<sub>2</sub>/year\*2  
(amount for the 162 wind power  
turbines installed by Hitachi)

- \*1 According to a list of wind power generation facilities installed in Japan (as of March 31, 2016), compiled by the New Energy and Industrial Technology Development Organization (NEDO).
- \*2 Comparison with LNG thermal power generation. Calculated from the life cycle CO<sub>2</sub> emissions for each type of power generation listed in the Evaluation of Life Cycle CO<sub>2</sub> Emissions of Power Generation Technologies, published by the Central Research Institute of Electric Power Industry (July 2010).

## Reducing CO<sub>2</sub> Emissions During Transport Railway Systems

Among the various modes of transportation, railways have among the lowest CO<sub>2</sub> emissions. As a comprehensive railway systems integrator, Hitachi is a global provider of railcar and transport systems, including signaling and train management systems, and will continue to deliver total railway systems for greater efficiency and environmental consciousness.

Hitachi's aluminum A-train rolling stock is lighter than stainless steel rolling stock, for example, enabling trains to run at high speeds with less energy. Outside of Japan, A-train production has also begun in a UK plant and additional orders have been received for 63 AT-300 cars for a railway in southwest England. Together with an order received in July 2015, the total is for 236 cars (36 trains).

The use of silicon carbide (SiC) in carriage inverters reduces energy loss during operation and cuts mass and volume by 40%. Energy savings are achieved through both lower electrical energy use and the contribution of these inverters to lighter rolling stock.



An AT-300 train for a UK railway company.

CO<sub>2</sub> emissions per  
transport unit  
(passenger)

Railway  
emissions  
are about  $\frac{1}{7}$  those of  
automobiles\*

- \* From Ministry of Land, Infrastructure, Transport, and Tourism data on CO<sub>2</sub> emissions in the transportation sector.

## Reducing CO<sub>2</sub> Emissions by Improving Automobile Fuel Efficiency Lithium-Ion Battery Packs

Automobile CO<sub>2</sub> emissions are a major environmental issue, and fuel efficiency is being improved through various technologies.

Hitachi Automotive Systems, Ltd. has developed a 48V lithium-ion battery pack for mild hybrid vehicles. An output density 1.5 times existing levels has been achieved by improving the material composition of the positive and negative electrodes and increasing the amount of lithium that can be stored per unit of weight. This not only enhances the motor's torque performance for assisting acceleration but also enables the recovery of substantial regenerative energy when decelerating and reduces energy loss.

Hitachi contributes to reduced CO<sub>2</sub> emissions through improved automobile fuel efficiency by providing storage batteries and other energy-saving automobile parts.



A 48V lithium-ion battery pack for mild hybrid vehicles.

48V lithium-ion battery pack  
energy density

**1.5** times previous  
product

## Reducing CO<sub>2</sub> Emissions Through Greater Efficiency with IoT Building Eco-Factories with Lumada

Hitachi Construction Machinery Co., Ltd. uses a network of Japanese and international affiliates centered on four main plants in Japan to produce construction machinery and its principal components. Together with energy reductions during use as these products switch to electric or hybrid power, efforts throughout the network are also being made to reduce energy consumption in the manufacturing stage.

The entire Hitachi Construction Machinery Group continues to implement energy-saving measures and promote greater efficiency in plant and office lighting and air-conditioning. Several locations have also introduced IoT technology to further reduce energy consumption and raise productivity. Specifically, by adopting the Energy and Equipment Management Service, a key solution concept under Hitachi's Lumada IoT platform to comprehensively control energy data and equipment across multiple business facilities, they are able to efficiently analyze and manage electric power data gathered from equipment at each plant. Energy usage by the machine tools, robots, and other production equipment used in plants is finely controlled, reducing standby power and increasing energy efficiency.

With these efforts the energy use per unit has been decreased 32% compared with fiscal 2010 at the company's main plants in Ibaraki Prefecture, contributing to a significant reduction in electric power costs.



Tsuchiura Works East Building and the Hitachi UH03 hydraulic excavator, which is included in the list of Japan's Mechanical Engineering Heritage.

Energy use per unit → **32% reduction compared with fiscal 2010**

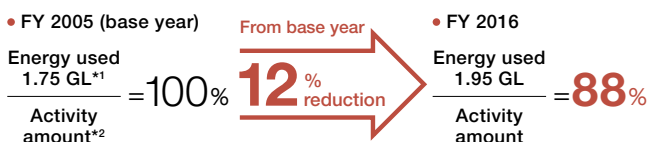
## Reduction of CO<sub>2</sub> Emissions During the Production Stage

We are working to reduce energy use per unit—an indicator of energy efficiency—by systematically improving efficiency, such as by installing high-efficiency equipment and devices, from LED lighting to inverter air conditioners, at each facility. In fiscal 2016, we achieved an improvement of 12% (from a base year of fiscal 2005), against a target of 15%. Part of the reason for not hitting the target was because of a decline in sales in energy intensive business divisions, which contracted the denominator in calculating energy use per unit.

The increase in the total volume of CO<sub>2</sub> emissions was due to the fact that a materials company in the Americas newly became a member of the consolidated Hitachi Group in fiscal 2016. There was a general decline in regions other than the Americas.

We will continue to harness our expertise in control and IT technologies to actively pursue energy conservation measures at our factories and offices and promote the efficient use of energy.

### Reduction in Energy Use per Unit



\*1 Energy volume used both in and outside the organization (SCOPE 1 and 2).

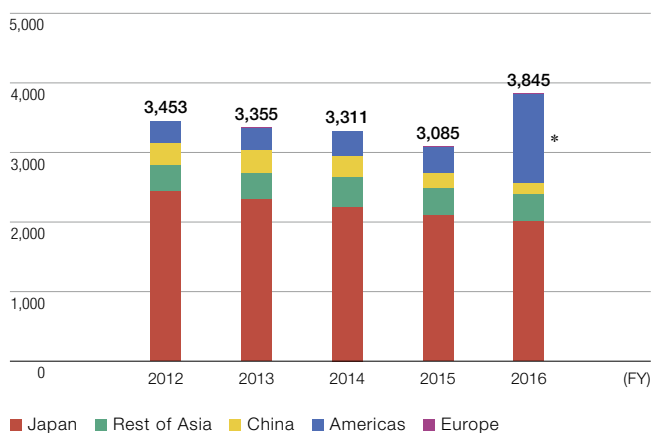
\*2 A value closely related to the emission factor numerators (environmental burden) of energy use from business activities (for example, production quantity, output, building floor space, and number of employees).

### Introducing Renewable Energy

We are promoting the use of solar, wind, and other forms of renewable energy. During the 2016 fiscal year, Hitachi produced 2,925 MWh of renewable energy for its own use. Hitachi Computer Products (America), Inc. proactively uses renewable energy to power its factory, purchasing 8,769 MWh during fiscal 2016. In Japan, we contracted for 1,000 MWh/year of Green Power through Japan Natural Energy Co., Ltd. to provide power for offices, showrooms, and exhibitions.

### CO<sub>2</sub> Emissions

(kt-CO<sub>2</sub>/year)



\* Includes 958 kt-CO<sub>2</sub>/year emitted by a materials company that became a consolidated member of the Hitachi Group in fiscal 2016.

#### Notes:

- The CO<sub>2</sub> electrical power conversion factor uses the 2005 emission coefficients for individual countries published by the International Energy Agency (IEA) in the 2010 edition of *CO<sub>2</sub> Emissions from Fuel Combustion*.
- Energy-related CO<sub>2</sub> emissions were 1,296 kt-CO<sub>2</sub> (SCOPE 1) and 2,549 kt-CO<sub>2</sub> (SCOPE 2).

# Realization of a Resource Efficient Society

Together with our customers and society, Hitachi will do its utmost through its business operations to help build a society that uses water and other resources efficiently. We will expand circulative uses of water by further advancing the entire range of water treatment technologies involved in water use from seawater desalination and other forms of fresh water generation to sewage treatment.

We also aim to improve our usage efficiency of water and other resources by 50% compared to fiscal 2010 levels by fiscal 2050. To achieve this target, we will create products that last longer and use less resources, make thoroughgoing efforts to collect and recycle used products, reduce the volume of water used in the production process such as through purification and reuse, and engage in other efforts.

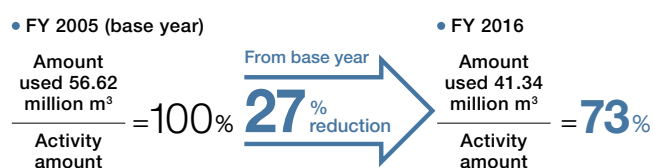
## Improving Usage Efficiency of Water and Other Resources

### Water Conservation

Hitachi uses water in such production processes as cleaning, cooling, and painting. To reduce water usage through greater efficiency, we are enhancing our level of water management by installing flow meters at more locations, introducing wastewater treatment devices to increase the use of recycled water, and upgrading water supply facilities at our business sites.

Different countries and regions are affected by water-related issues in different ways, so we devise appropriate countermeasures for each region. Our business sites in China, India, and the Philippines, for example, are striving to reduce the volume of water used by strengthening measures against water leakage.

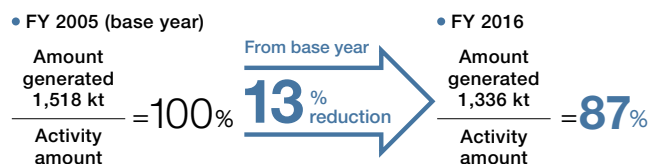
### Reduction in Water Usage per Unit



### Reducing Waste Volume

For fiscal 2016, we set a target of a 12% reduction (from a base year of fiscal 2005) for waste and valuables generated per unit, bettering this by achieving a 13% reduction. Every business site is reducing waste through onsite recycling of byproducts and scrap from the production process and efforts to curb use of packing materials during transport. Under the Zero Emission initiative, which seeks to minimize landfill disposal, 98 business sites achieved their zero emission goal\* as of fiscal 2016.

### Reduction in Waste and Valuables Generated per Unit



\* Defined as a final disposal rate (landfill disposal/waste and valuables) of less than 0.5% in any given fiscal year.

Zero Emission Sites

<http://www.hitachi.com/environment/activities/data/zeroemission.html>

## Creating a Resource Efficient Society Through Business

### Water Solutions to Protect Global Water Resources

Water covers 70% of the earth's surface, but only 0.01% of it is potable. Demand for water, however, is on the rise globally, with more than 40% of the world's population expected to face severe water shortages by 2050.

Hitachi has acquired an extensive record in the water business as it strives to become a comprehensive water service provider. We have supplied equipment to around 700 water purification plants and 900 sewage treatment plants in Japan, and over 200 sites in some 40 countries and regions around the world. We continue building on this experience to provide a variety of water infrastructure globally.

We are currently moving forward on IoT-based, optimized, and highly efficient water business solution offerings, including water supply and sewage systems and seawater desalination plants. For example, our energy-

efficient seawater desalination plant dilutes seawater with treated sewage to lower the salt concentration, reducing the pump pressure required for the desalination process and cutting energy consumption by approximately 30%.





# Harmonized Society with Nature

We strive to minimize Hitachi's impact on natural capital, which bestows the benefits of nature on humankind by assessing ecosystem impact and advancing measures to minimize the burden at each stage of Hitachi's value chain. Moreover, we are preserving the ecosystem through our products and services, such as our air and water purification systems and environmental monitoring systems. We also endeavor to minimize the environmental burden of our factories and offices.

## Ecosystem Assessments and Their Implementation

In fiscal 2016 Hitachi created an Ecosystem Preservation Activities Menu citing the specific activities to be undertaken to promote the preservation of the ecosystem. We are encouraging each business site to advance their own initiatives. This menu was created by adding the pioneering activities of other corporations and organizations to the list of items that had already been subject to assessment since 2010. It consists of 116 items covering all aspects of our business operations, including the value chain. Each business site selects those activities it plans to launch from the menu, and the total number of initiatives becomes Hitachi's target for ecosystem preservation. In fiscal 2016, 144 new initiatives were launched, far in excess of our initial goal of 30.

In the long term, we seek to minimize the impact on natural capital and realize a harmonized society with nature by minimizing

the burden (negative impact) on the ecosystem caused by business activities and maximizing the positive impact, such as by undertaking social contribution activities to protect nature and providing products and services that preserve the ecosystem.

Regarding impact and other ecosystem preservation assessments, we are deliberating the matter not only within the Group but also through our participation in activities outside the company, such as the biodiversity working group of four Japanese electrical and electronic industry associations\* and the Japan Business Initiative for Biodiversity (JBIB).

\* The Japan Electrical Manufacturers' Association (JEMA), Japan Electronics and Information Technology Industries Association (JEITA), Communications and Information Network Association of Japan (CIAJ), and Japan Business Machine and Information System Industries Association (JBMIA).

## Efforts Toward Building a Harmonized Society with Nature

### Hitachi Group Forestation Activities

Working together with employees and their families, the Hitachi Group participates in the Japanese Forestry Agency's Corporate Forest Program to preserve forests in several locations.

The Group has been conducting tree-planting activities since 2007 in the Yuyu Forest in Ibaraki Prefecture. Each year employees and their families gather to plant trees, clear underbrush, prune, and perform other forest maintenance activities. They also take part in activities including environmental education and handicraft classes using pruned materials.

The Hitachi High-Tech Yasato Forest embarked on a 60-year plan in 2005 to cultivate trees. Employees and their families participate in the work of pruning and thinning to grow a healthy forest.



Hitachi Power Solutions Co., Ltd. employees at the Yuyu Forest.

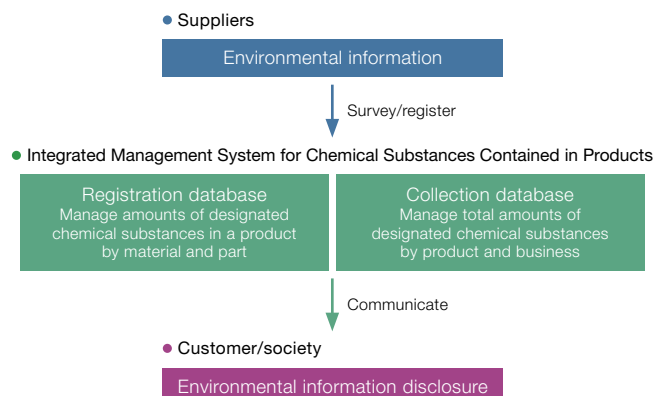


Hitachi High-Technologies Corporation employees at the Yasato Forest.

## Appropriate Management of Chemical Substances

Working closely with suppliers and customers, we gather and make available information on chemical substances across the supply chain via the Integrated Management System for Chemical Substances Contained in Products, which has been in operation since fiscal 2005. As of March 31, 2017, chemical substance information for more than 1.31 million parts and products was registered under this integrated management system. In fiscal 2016, we upgraded our system to respond to the shared information transmission scheme (chemSHERPA) on chemical substances contained in products.

### Integrated Management System for Chemical Substances Contained in Products





# Societal Performance

Companies are increasingly being called upon to create a business framework to advance CSR initiatives covering not only their own in-house activities but also their value chain.

Hitachi aims to continue fulfilling its social responsibilities throughout the value chain. We thus take meticulous care in ensuring the compliance, ethical conduct, and fairness of our own activities and those of our business partners. We also seek to offer safe and rewarding workplaces for all employees based on the belief that enabling them to fully realize their potential is the source of our sustainable growth.

## Supply Chain Management

As a company that procures products and services from suppliers in regions and countries around the world, we are reviewing our own CSR standards, and auditing and cooperating with the CSR initiatives of our suppliers. Hitachi is also taking the lead in responding to the issue of conflict minerals by scrutinizing the countries where raw materials are mined in order to prevent infringements on human rights by countries engaged in conflict. Keeping abreast of global trends, we will continue to share and strengthen on a Group-wide basis our commitment to fulfilling our social responsibilities throughout the supply chain.

### Creating and Sharing Procurement Policies

Our basic procurement policy is contained in the Hitachi Guidelines for Procurement Activities, drafted in line with the United Nations Global Compact and which call for the elimination of discrimination in employment and occupation, the rejection of all forms of child and forced labor, and environmental protection activities. Suppliers are selected strictly in accordance with the guidelines.

In fiscal 2016, we released the *Hitachi Group CSR Procurement Guidelines*, a full revision of the 2009 *Hitachi*

*Group Supply Chain CSR Deployment Guidebook*. This revision incorporates the provisions of the Hitachi Group Codes of Conduct and also makes references to version 5.1 of the Electronic Industry Citizenship Coalition (EICC) Code of Conduct, promulgated in January 2016. We distribute the *Guidelines* to the approximately 30,000 suppliers of Hitachi business units and Group companies, from whom we request acknowledgment of suppliers' understanding in writing.

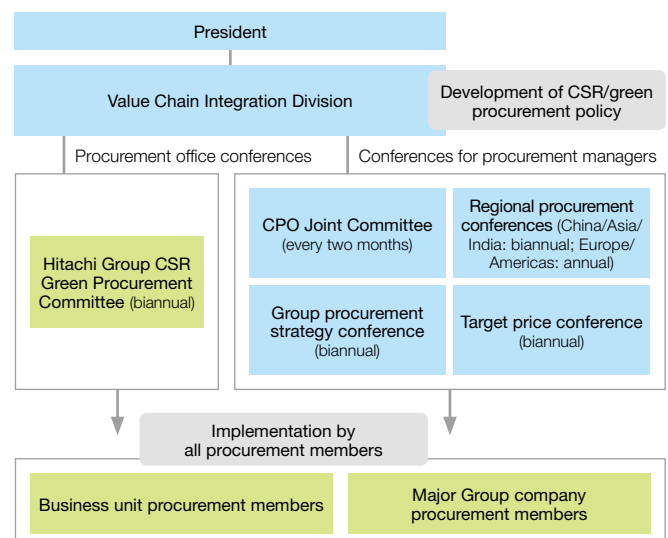
### CSR Supply Chain Management Framework

CSR supply chain management and green procurement policies and initiatives are discussed within Hitachi's Value Chain Integration Division, which is headed by the chief procurement officer (CPO) and reports directly to the president of Hitachi, Ltd. Policies and initiatives adopted by the division are shared throughout the Group via the Hitachi Group CSR Green Procurement Committee, which includes members from business units and key Group companies.

In fiscal 2011, we appointed procurement officers to oversee local procurement in China, the rest of Asia, Europe, and the Americas. We are expanding our suppliers in emerging nations while also strengthening our response to CSR-related risks expected to arise from the global expansion of our supply chain.

In fiscal 2015, we introduced a new initiative to provide information directly to suppliers in a face-to-face format. The January 2017 CSR and green procurement seminar held in Shenzhen for Hitachi Group partners in China was attended by 45 people from 32 companies.

#### Supply Chain Management Organizational Structure



## Implementation of CSR Monitoring (Self-Checks)

To monitor how well Hitachi's CSR supply chain management philosophy has been adopted by our suppliers, since fiscal 2007 we have asked key suppliers to conduct CSR Monitoring (self-checks) using the *JEITA Supply Chain CSR Deployment Guidebook* and detailed checklists, and in fiscal 2016 we collected checklists from 316 suppliers inside and outside Japan.

After analyzing the results, we provide feedback for the business operations related to the suppliers, and then work with those involved in the operations to resolve supplier-related issues.

Alongside the revisions made to the *Hitachi Group CSR Procurement Guidelines*, the checklists have also been fully updated to allow us to obtain a more detailed

understanding of the challenges our suppliers face. Starting in fiscal 2017, we will be asking our suppliers to conduct CSR Monitoring using the updated checklists.

### CSR Monitoring (Self-Check) Results

FY	Suppliers in Japan	Suppliers outside Japan	Checklists collected
2012	57	41	98
2013	55	45	100
2014	0	200	200
2015	0	218	218
2016	198	118	316
<b>Total*</b>	<b>310</b>	<b>724</b>	<b>1,034</b>

\* Total also includes self-check results from fiscal 2011.

## Implementation of CSR Audits

Since July 2012, the Hitachi Group Procurement Division has been auditing the manufacturing bases of suppliers in China and the rest of Asia. Our audits are based on the international SA8000 certification standard developed by Social Accountability International (SAI), an American CSR evaluation institution, and are conducted by an EICC-recognized auditor, who checks suppliers' CSR initiatives from such perspectives as labor and human rights, health and safety, the environment, and ethics.

No major infringements were found at the 20 Asian suppliers audited in fiscal 2016, but some small areas needing improvement were noted, such as overtime work exceeding stipulated rules (19 suppliers), failure to conduct periodic inspections of machinery and equipment (6), and insufficient management of hazardous waste (9). We have mandated that suppliers affected by these issues submit improvement action plans and will be working with and advising them until they complete the planned improvements.

## Human Rights Due Diligence in Procurement

Starting in fiscal 2015, the Hitachi Group Procurement Division began implementing human rights due diligence based on the Hitachi Group Human Rights Policy. With the consulting assistance of the nonprofit organization Shift, we have created a working group centered on the procurement and CSR divisions at Hitachi, Ltd.—which serve as the corporate divisions overseeing activities throughout the Group—and also including the procurement and CSR divisions of two in-house and four Group

companies and the CSR division of Hitachi Asia. The working group has evaluated human rights risks within the supply chain, set priorities, and considered measures for reducing risks.

In fiscal 2016, we published the revised *Hitachi Group CSR Procurement Guidelines* based on results obtained from activities in fiscal 2015 as well as input from a range of sources and perspectives, including Hitachi Europe Ltd., Hitachi (China), Ltd., and outside experts.

## Response to the Conflict Minerals Issue

Each Hitachi Group company is investigating and responding to the issue of conflict minerals in line with our customers' requests based on Hitachi's conflict mineral policy.

# Labor Practices

Hitachi has a human resource strategy that emphasizes the concept of “decent work” (that is, work that is humane and fulfilling). We make a thoroughgoing and meticulous effort to realize this ideal, actively pursuing dialogue with all employees on their basic rights and career development and setting up a variety of consultation opportunities as well as mechanisms—just in case—to report compliance abuses. We also implement a variety of initiatives reflecting the globalization of our business, from promoting diversity and inclusion in our human capital to globally implementing fair employee evaluation systems and working conditions.

## Global Human Capital Development

### Advancing Global Human Capital

Our global human capital management strategy optimizes both human and organizational performance. One example of our initiatives is the Global Human Capital Database covering all Hitachi Group employees, excluding factory workers outside Japan. This database enables us to fully ascertain the status of worldwide Group human capital. We have also built a global grading system that applies to all managers in the Hitachi Group worldwide, using it as a common platform for job evaluations throughout the Group and as a common standard for assessing the value of management duties.

We began to thoroughly revise our training of management candidates in fiscal 2015, implementing the Global Advanced Program for Key Positions (GAP-K) to

accelerate their development. In fiscal 2016, 23 people were selected to participate in GAP-K over a three-month period. Additionally, Hitachi has held the Global Advanced Program for Leadership Development (GAP-L) in Singapore every year since fiscal 2012. The program mainly targets local human resources with potential for leadership at the respective subsidiaries outside Japan. In fiscal 2016, 24 leaders from around the world took part in the program.

Starting in fiscal 2014, we also initiated a globally standardized training course for general managers and new managers. To date, around 7,200 people worldwide have taken part in this course across our Group.

### Conducting a Global Employee Survey

Since fiscal 2013, we have been conducting an annual global employee survey called Hitachi Insights as a way of measuring employee engagement.\* In September 2016, the survey was administered for the fourth time. Around 210,000 employees worldwide were sent the survey in one of 14 different languages, and roughly 180,000 responses were received.

The results for internal awareness and understanding of the 2018 Mid-term Management Plan and employee attitudes toward Hitachi’s corporate culture improved in all 14 categories, including those concerning the plan’s targets, compared to the findings of the previous fiscal year’s survey.

Scores were particularly high for “pride in your company” and “teamwork,” but those for “resources and support” remained low from fiscal 2015. Employees may have expected Hitachi to do better on the level of staffing as well as information and resource tools—a situation we will continue to address by reforming working patterns, introducing new tools, and deepening communication with employees.

\* Hitachi uses the term “engagement” to refer to employees’ understanding of the company’s strategies and policies, as well as their job satisfaction and desire to take actions on their own initiative to bring about results.

### Career Development Initiatives

Hitachi believes that the starting point of career development is the work that employees perform on a daily basis. Based on Hitachi’s Global Performance Management (GPM), we implement a cycle aimed at the growth of each employee through a process in which goals for daily tasks are set and then pursued, followed by the evaluation of the results to formulate the next objectives.

Along with our workplace-centered initiatives, we also provide direct support for individual employees through our career development programs. In fiscal 2002 we launched the Hitachi Career Development Workshop (H-CDW) as a

Group-wide initiative in Japan. Around 9,700 people have participated in the program so far (as of March 31, 2017), with a focus on technicians, managers, and researchers in their thirties. According to the January 2016 survey conducted of the most recent participants, about 80% of the 422 answers received from group managers and about 70% of the 277 answers from section chiefs agreed that “H-CDW has been helpful to my career development and work.” Of the responses from section chiefs, about 60% reported making use of their workshop experiences in managing subordinates.

## Diversity and Inclusion

### Promoting Diversity and Inclusion

Diversity is the wellspring of innovation and our growth engine. Hitachi regards personal differences—gender, nationality, work history, age, sexual orientation, and philosophy—as facets of people’s individuality. By respecting our employees’ individualities and positioning them as an advantage, Hitachi frames its diversity and inclusion as conducive to both the individual’s and the company’s sustainable growth.

Since the 1990s, we have been at the social forefront in supporting women and other members of our multifaceted workforce. This includes setting up systems to help balance work with child and nursing care. Entering Phase 3 of our diversity management roadmap, we are embracing diversity as a management strategy under the slogan of “Diversity for the Next 100.” This means creating

an environment where women and other members of our varied workforce can use their skills in leadership and business management. In October 2016, we introduced an Allowance for Balancing Child Care and Work to further promote balance between work and child care.

The Diversity Development Project, launched in fiscal 2006 under the president’s direct leadership, was replaced in fiscal 2009 with the Diversity & Inclusion Development Center, which currently operates under the direct supervision of the Human Capital Group.

Additionally, Hitachi and 17 Group companies jointly operate the Advisory Committee and the Diversity Development Council to accelerate awareness across Hitachi as a whole, including support for diverse human capital and work-life management.

### Developing Women’s Careers

Hitachi, Ltd. has created two key performance indicators (KPIs), announced in fiscal 2013, to enable as many female employees as possible to take up leadership positions and to participate in management decision making. We organize a variety of seminars to boost women’s motivation and also take steps to enhance awareness and create a women-friendly corporate culture in workplaces as a whole—including managers and male employees. Employee compensation is set according to each individual’s roles and achievements, with no divisions or differences based on gender or age.

In November 2016, we hosted the first Global Women’s Summit for female employees of the Hitachi Group. Held in the United Kingdom, the event was attended by more than 120 staff members from 25 Group companies around the world and featured a keynote speech from an external speaker and workshops on topics ranging from unconscious bias to individual career development. The participants also shared stories about their careers and the issues they faced at their workplace.

#### Goals for Hitachi, Ltd. (KPIs)

- Appoint female executives by fiscal 2015 by promoting from within (including the CSR and Environmental Strategy Division chief as a corporate officer in April 2015).
- Increase the number of female managers in Japan to 1,000 by fiscal 2020 (2.5 times more than at the end of fiscal 2012).

### Recruiting Human Capital in Europe

The railway business, which is an important business field for Hitachi, is promoting the recruitment of local human capital. We shifted the primary site of our railway business to London in 2014 and built a global operations framework managed by Hitachi, Ltd. and several other Group

companies, with 40% of senior management positions held by European personnel. The CEO of global operations is a London local who has since become an executive officer at Hitachi, Ltd.

## Occupational Health and Safety

### Fundamental Idea for Occupational Health and Safety

Ensuring the health and safety of all employees is the basic principle underlining the Hitachi Group Health and Safety Policy. This policy is shared by all Hitachi Group companies around the world. Employees work together to create safe, secure work environments that aim to be accident free.

#### Hitachi Group Health and Safety Policy

**Principle** ► “Health and Safety Comes First.”

**Policies** ► In accordance with our mission, “Contribute to society through the development of superior, original technology and products,” the Hitachi Group will endeavor to ensure safe and healthy workplaces under the principle of “Health and Safety Always Comes First.”

To accomplish this, we will:

1. Continually be involved in health and safety activities in order to prevent work-related injuries and sickness by designating the health and safety of employees as management’s top priority.
2. Comply with the local laws and regulations in each company regarding health and safety.
3. Develop a safe and comfortable work environment by encouraging employees to maintain their own health and taking a proactive stance on health and safety activities in the workplace.
4. Require an understanding of Hitachi’s principle and the promotion of health and safety awareness from all business partners of the Hitachi Group.
5. Contribute to the creation of a safe and pleasant society by emphasizing activities that make health and safety a top priority in all of Hitachi’s business activities.

Revised November 2013

### Framework for Promoting Health and Safety

Hitachi views occupational health and safety as vital preconditions for advancing our business. Manufacturing and maintenance are particularly accident-prone lines of work, and we have around 36,000 employees performing work of this type in Japan. We promote a range of Group-wide occupational health and safety activities globally that include preventing workplace accidents by setting and applying minimum safety standards to be observed by Group manufacturers as well as taking additional measures tailored to the specific conditions at each company. We respond quickly when an accident occurs and use lessons from the incident to make improvements and boost our levels of health and safety management.

In accordance with Japanese law, a health and safety commission—composed of company representatives, labor-union officials, and employees—is convened every month to discuss and share information related to such issues as workplace accident causes and

countermeasures, the situation regarding employees who have taken sick leave, and other points of concern. In 2016, we recorded one fatal workplace accident in Japan and two in the rest of Asia.

We built the Hitachi Group Health and Safety Portal System in 2012 to ensure that the health and safety performance of every Hitachi Group company in Japan is shared by the entire Hitachi Group. Group-wide information on work accidents is registered in the system so that companies can track causes and see what preventive measures have been initiated. To help prevent recurrences, statistics are kept on types of accidents. Since 2014, we have carried out initiatives to share information on workplace accidents globally, including one that tracks and provides feedback on accidents occurring at Group companies outside of Japan.



# Communicating CSR Initiatives and Material Issues

Building positive ties with our various business stakeholders is an important management issue that contributes to achieving not only a sustainable society but also to Hitachi's sustainable growth.

Hitachi views CSR as being centered on stakeholder engagement and continually implements initiatives in accordance with a nine-item framework for CSR management. We communicate our achievements through channels including the *Hitachi Sustainability Report* and also engage in stakeholder dialogue to build an even better relationship with society.

## Items Covered in the *Hitachi Sustainability Report*

Themes	Material issues	GRI Standards
<b>1 Recognition of social responsibility</b>	Realizing sustainable, innovative management	GRI 203: Indirect economic impacts
	Understanding issues through dialogue and taking part in initiatives	
<b>2 Corporate governance</b>	Pursuing management transparency and efficiency	
	Sharing the Hitachi Group Identity	GRI 205: Anti-corruption GRI 419: Socioeconomic compliance
	Advancing risk management on multiple fronts	
<b>3 Human rights</b>	Respect for human rights throughout the value chain	GRI 412: Human rights assessment GRI 408: Child labor GRI 409: Forced or compulsory labor GRI 410: Security practices GRI 411: Rights of indigenous peoples GRI 414: Supplier social assessment
	Respect for workers' rights	GRI 402: Labor/management relations GRI 406: Non-discrimination GRI 407: Freedom of association and collective bargaining
<b>4 Labor practices</b>	Achieving a fair and equitable work environment	GRI 401: Employment GRI 402: Labor/management relations GRI 202: Market presence
	Promoting diversity and inclusion	GRI 405: Diversity and equal opportunity
	Promoting occupational health and safety	GRI 403: Occupational health and safety
	A strategy for growing together with our global human capital	GRI 404: Training and education
<b>5 Environment</b>	Promoting environmental management	GRI 201: Economic performance
	Enhancing environmental management on an ongoing basis	GRI 302: Energy GRI 305: Emissions GRI 306: Effluents and waste GRI 307: Environmental compliance GRI 308: Supplier environmental assessment GRI 404: Training and education
	Responding to environmental risks and opportunities	GRI 201: Economic performance
	Achieving a low-carbon society	GRI 301: Materials GRI 302: Energy GRI 305: Emissions
	Achieving a resource efficient society	GRI 303: Water GRI 306: Effluents and waste
	Achieving a harmonized society with nature	GRI 304: Biodiversity
<b>6 Fair operating practices</b>	Promoting work practices in line with international ethics codes	GRI 419: Socioeconomic compliance GRI 205: Anti-corruption GRI 206: Anti-competitive behavior GRI 415: Public policy
	Engaging in responsible procurement	GRI 204: Procurement practices GRI 414: Supplier social assessment GRI 308: Supplier environmental assessment
<b>7 Customers (consumer issues)</b>	Pursuing customer satisfaction	GRI 417: Marketing and labeling
	Ensuring accessibility to products and services	GRI 417: Marketing and labeling
	Ensuring thorough management of quality and safety	GRI 416: Customer health and safety GRI 418: Customer privacy GRI 419: Socioeconomic compliance
<b>8 Community involvement and development</b>	Promoting sustainable community involvement and development	GRI 413: Local communities
<b>9 Review and improvement of CSR activities</b>	Enhancing CSR management	

# Corporate Data / Stock Information

As of March 31, 2017

## Corporate Name

Hitachi, Ltd. (Kabushiki Kaisha  
Hitachi Seisakusho)

## Number of Employees

303,887

## Accounting Auditor

Ernst & Young ShinNihon LLC

## URL

http://www.hitachi.com/

## Number of Shares Issued Common Stock

(including treasury stock)  
4,833,463,387 shares

## Investor Relations Contacts

### JAPAN

Hitachi, Ltd.  
6-6, Marunouchi 1-chome, Chiyoda-ku,  
Tokyo 100-8280  
TEL: +81-3-3258-1111  
E-mail: ir.info.hq@hitachi.com

## Principal Office

6-6, Marunouchi 1-chome,  
Chiyoda-ku, Tokyo 100-8280, Japan

## Number of Shareholders

381,374

### U.S.A.

Hitachi America, Ltd.  
50 Prospect Avenue,  
Tarrytown, NY 10591  
TEL: +1-914-333-2987  
E-mail: investor.info@hal.hitachi.com

## Founded

1910 (Incorporated in 1920)

## Administrator of Shareholders' Register

Tokyo Securities Transfer Agent  
Co., Ltd.  
6th Floor, NMF Takebashi Building,  
3-11, Kanda Nishiki-cho,  
Chiyoda-ku, Tokyo 101-0054, Japan

### U.K.

Hitachi Europe Ltd.  
Whitebrook Park,  
Lower Cookham Road,  
Maidenhead, Berkshire SL6 8YA  
TEL: +44-1628-585384

## Capital Stock

458,790 million yen

## Stock Exchange Listings

Tokyo, Nagoya

## 10 Largest Shareholders

Name	Number of Shares (shares)	Percentage of Total (%)
The Master Trust Bank of Japan, Ltd. (Trust Account)	284,898,000	5.89
Japan Trustee Services Bank, Ltd. (Trust Account)	252,038,415	5.21
Hitachi Employees' Shareholding Association	105,779,384	2.19
Nippon Life Insurance Company	93,264,995	1.93
Japan Trustee Services Bank, Ltd. (Trust Account 5)	88,220,000	1.83
Japan Trustee Services Bank, Ltd. (Trust Account 9)	84,599,000	1.75
State Street Bank and Trust Company 505225	75,789,192	1.57
State Street Bank West Client-Treaty 505234	75,205,327	1.56
The Dai-ichi Life Insurance Company, Limited*1	71,361,222	1.48
Japan Trustee Services Bank, Ltd. (Trust Account 7)	67,992,000	1.41

\*1 The number of shares held by The Dai-ichi Life Insurance Company, Limited includes its contribution of 6,560,000 shares to the retirement allowance trust (the holder of said shares, as listed in the Shareholders' Register, is "Dai-ichi Life Insurance Account, Retirement Allowance Trust, Mizuho Trust & Banking Co., Ltd.").

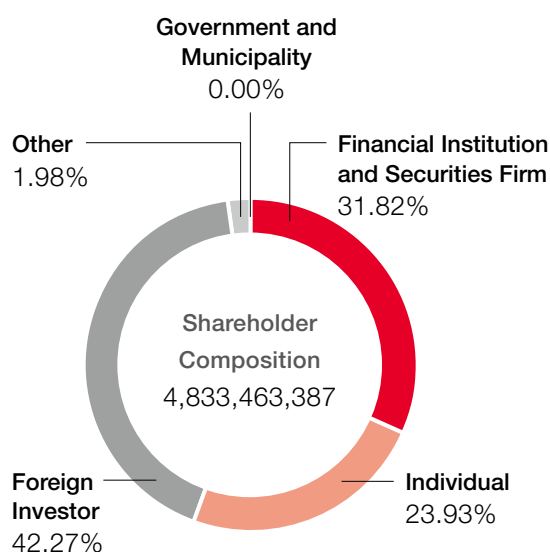
## Ratings

Rating Company	Long-term	Short-term
Moody's Japan K.K. (Moody's)	A3	P-2
Standard & Poor's Ratings Japan (S&P)	A-	A-2
Rating and Investment Information, Inc. (R&I)	A+	a-1

## Shareholder Composition

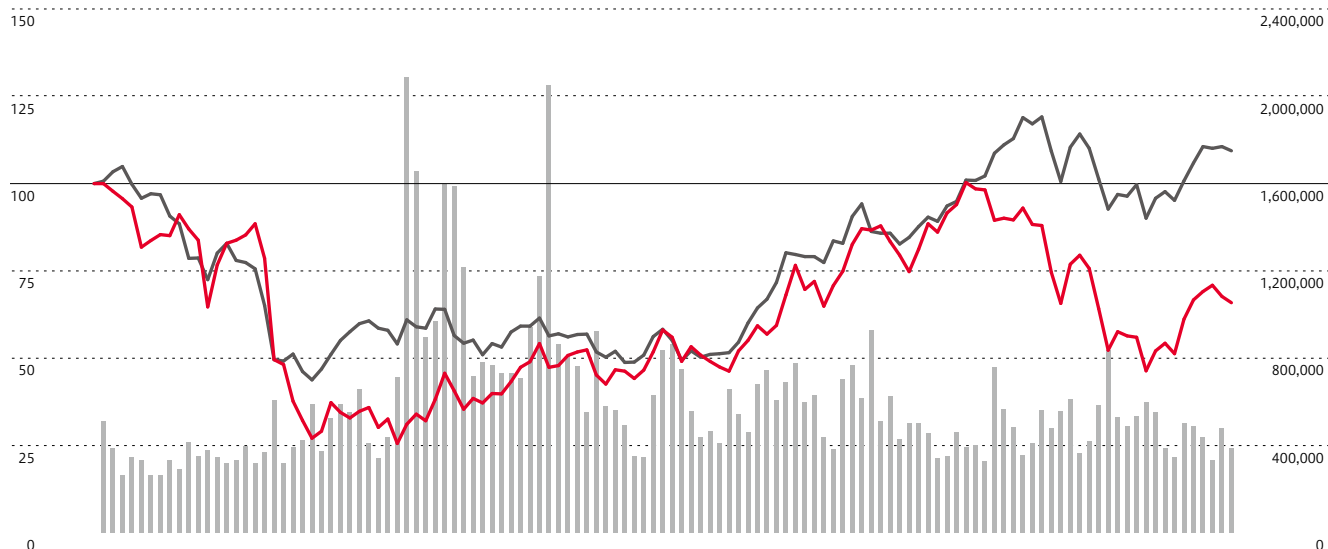
Class of Shareholders	Number of Shareholders	Share Ownership (shares)
● Financial Institution and Securities Firm	363	1,538,194,797
● Individual	376,172	1,156,524,302
● Foreign Investor	1,357	2,042,857,017
● Other	3,478	95,840,703
● Government and Municipality	4	46,568
<b>Total</b>	<b>381,374</b>	<b>4,833,463,387</b>

\* Treasury stock is included in "Other."



## Stock Price and Trading Volume

— Hitachi Stock Price — Nikkei Stock Average (225) ■ Trading Volume (1,000 shares)



	Year ended March 31, 2008	Year ended March 31, 2009	Year ended March 31, 2010	Year ended March 31, 2011	Year ended March 31, 2012	Year ended March 31, 2013	Year ended March 31, 2014	Year ended March 31, 2015	Year ended March 31, 2016	Year ended March 31, 2017
High (Yen)	947	843	404	523	547	578	877	939.9	858	679.5
Low (Yen)	569	230	227	313	360	401	508	660	431	400
Price at end of March	591	266	349	433	531	543	762	823.2	526.6	602.5

\* The closing price on March 31, 2007 equals 100.

## Website Information

Detailed information is available on the Company's website.

### About Hitachi Group

[http://www.hitachi.co.jp/about/corporate/index.html#hitachi\\_corporate](http://www.hitachi.co.jp/about/corporate/index.html#hitachi_corporate)  
(Japanese)

<http://www.hitachi.com/corporate/about/index.html>  
(English)

### Investor Relations

[http://www.hitachi.co.jp/IR/index.html#hitachi\\_ir](http://www.hitachi.co.jp/IR/index.html#hitachi_ir)  
(Japanese)

<http://www.hitachi.com/IR-e/index.html>  
(English)

### CSR (Corporate Social Responsibility)

[http://www.hitachi.co.jp/csr/index.html#hitachi\\_csr](http://www.hitachi.co.jp/csr/index.html#hitachi_csr)  
(Japanese)

<http://www.hitachi.com/csr/>  
(English)



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