

# **Hitachi Sustainability Report 2017**

**Fiscal 2016 Results** 





## Contents

Introduction	02	Activities	32	
How to Use This Report	02	Corporate Governance	33–44	Customers (Consumer Issue
Editorial Policy	02	Pursuing Management Efficiency and Transparency	35	Pursuing Customer Satisfacti
Hitachi Group Profile	04	Sharing the Hitachi Group Identity	39	Ensuring Accessibility to Prod
Hitachi and Society	05	Advancing Risk Management on Multiple Fronts	41	Ensuring Thorough Managen
Management Approach	09	Human Rights	45–50	Community Involvement and
		Respect for Human Rights Throughout the Value Chain	47	Promoting Sustainable Comr
Leadership	10–11	Respect for Workers' Rights	50	and Development
CEO's Message	10			
Executive Officer's Message: CSR and the Environment	11	Labor Practices	51–66	Environment
		Achieving a Fair and Equitable Work Environment	54	Promoting Environmental Ma
Recognition of Social Responsibility	12–26	Promoting Diversity and Inclusion	55	Enhancing Environmental Ma
Realizing Sustainable, Innovative Management	14	Promoting Occupational Health and Safety	61	an Ongoing Basis
Understanding Issues Through Dialogue and		A Strategy for Growing Together with		Responding to Environmenta
Taking Part in Initiatives	22	Our Global Human Capital	64	Achieving a Low-Carbon Soc
				Achieving a Resource Efficier
Review and Improvement of CSR Activities	27–31	Fair Operating Practices	67–75	Achieving a Harmonized Soc
Enhancing CSR Management	29	Promoting Work Practices in Line with		
		International Ethics Codes	69	Performance Data
		Engaging in Responsible Procurement	71	
				Key Indicators

Customers (Consumer Issues)	76–84
Pursuing Customer Satisfaction	78
Ensuring Accessibility to Products and Services	80
Ensuring Thorough Management of Quality and Safety	y 82
Community Involvement and Development	85–88
Promoting Sustainable Community Involvement	
and Development	87
Environment	89–121
Promoting Environmental Management	90
Enhancing Environmental Management on	
an Ongoing Basis	93
Responding to Environmental Risks and Opportunities	3 105
Achieving a Low-Carbon Society	107
Achieving a Resource Efficient Society	112
Achieving a Harmonized Society with Nature	117
Performance Data	122
Key Indicators	123–124
Overview of Financial Results, Board Members,	
and Employee Data	125–127
Main Assessments and Awards	128-129
Independent Assurance	130



## How to Use This Report

Use the category tabs, navigation icons, and link buttons to go directly to different sections of this report.

**Link Buttons Navigation Icons** Click to go back one page Category Tabs Click to go forward Contents Introduction Management Approach Activities Performance Data Go to the beginning of the one page corresponding section Contents Introduction Management Approach Activities Performance Data

## **Editorial Policy**

## Basic Concept

We are continuously improving our CSR activities and have identified nine key themes for our CSR management framework: (1) recognition of social responsibility, (2) corporate governance, (3) human rights, (4) labor practices, (5) environment, (6) fair operating practices, (7) customers (consumer issues), (8) community involvement and development, and (9) review and improvement of CSR activities.

With reference to these nine key themes, the *Hitachi Sustainability Report 2017* details the social and environmental issues that are vital to the sustainability of our operations and society, presenting our stance and the activities undertaken in fiscal 2016.

Inasmuch as the report is a tool with which we engage with our stakeholders through honest and transparent disclosures of information, it contains our basic policies, promotion systems, key performance indicators, and specific measures for our CSR initiatives in line with the disclosure requirements of the GRI Sustainability Reporting Standards (GRI Standards).

## What This Report Covers (Boundary of Reporting)

Period:	The main period covered is fiscal 2016 (April 1, 2016, to March 31, 2017)			
Companies:	1,253 companies, na and joint ventures)	amely, Hitachi, Ltd. and 1,252 consolidated subsidiaries (including 388 equity-method associates		
Boundary of Data:	Financial data:	1,253 companies, namely, Hitachi, Ltd. and 1,252 consolidated subsidiaries (including 388 equity-method associates and joint ventures)		
	Social data:	Boundary of data indicated under each indicator		
	Environmental data:	865 companies, namely, Hitachi, Ltd. and 864 consolidated subsidiaries. However, for environmental performance data associated with Hitachi's business operations, Hitachi, Ltd. and consolidated subsidiaries whose environmental load comprises 90% of the total (based on Hitachi calculations) are included.		
Reporting Cycle:	Published every year	r as an annual report		
Date Published:	September 2017			

#### Notes:

- The data for each fiscal year are the results according to the boundary of data in that fiscal year.
- The base fiscal year data has been revised to match the boundary of data for fiscal 2016.

#### 3

#### [Symbol Marks Used in This Report]

HITACHI

Inspire the Next

\* Technical terms, proper nouns, tables, diagrams, etc. requiring explanation

#### [Hitachi References in This Report]

Hitachi, Ltd.: Information on or initiatives of Hitachi, Ltd.

Hitachi and the Hitachi Group: Information on or initiatives of all

Group companies in and outside Japan

#### [Key Guidelines Referred to in Preparing This Report]

- GRI Standards, Global Reporting Initiative
- Environmental Reporting Guidelines (2012 version), Ministry of the Environment, Japan
- Environmental Reporting Guidelines 2001 With Focus on Stakeholders, Ministry of Economy, Trade, and Industry, Japan

# Disclosure of Financial and Non-Financial Information

Hitachi, following closely the deliberations of the European Union (EU) and the International Integrated Reporting Council (IIRC) about non-financial disclosure, presents information to match the needs of stakeholders reading this report.

Since the fiscal 2016 edition, the *Hitachi Integrated Report* has presented both financial and non-financial information showing how Hitachi is striving to create value. The *Hitachi Sustainability Report* continues to serve as a comprehensive tool providing detailed non-financial information.

#### Independent Assurance

To enhance the credibility of this report, we have engaged KPMG AZSA Sustainability Co., Ltd. to provide assurance on environmental and social performance indicators. This assurance was carried out in accordance with the International Standard on Assurance Engagement (ISAE) 3000 and 3410, as well as

• Financial and Non-Financial Information Reports on Hitachi's Value Creation



Hitachi Integrated Report 2017

the Practical Guidelines for the Assurance of Sustainability Information of the Japanese Association of Assurance Organizations for Sustainability Information.

Performance indicators for fiscal 2016 that have been assured are marked with  $\bigcirc$  in the report.

#### • Financial Information Reports



Web Investor Relations

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

Note: Information about Hitachi, Ltd. is also disclosed in the *Annual Securities Report* and the *Report on the 148th Business Term*.

#### Non-Financial Information Reports

The Hitachi Sustainability Report 2017 provides non-financial information to investors, auditors, and CSR experts in an easily searchable, interactive PDF format (A4, 132 pages).

The CSR website contains not only the contents of this report but also news releases to provide up-to-date information to our diverse stakeholders.



Hitachi Sustainability Report 2017



Web CSR (Corporate Social Responsibility)
http://www.hitachi.com/csr/



Web Environmental Activities
http://www.hitachi.com/environment/



Web Global Community Relations and Activities (Social Contribution Activities) http://www.hitachi.com/csr/sc/

Note: We also disclose information about Hitachi, Ltd. in the Corporate Governance Report.



## Hitachi Group Profile

#### Company Profile (as of March 31, 2017)

Corporate name	Hitachi, Ltd.
Incorporated	February 1, 1920 (founded in 1910)
Head office	1-6-6 Marunouchi, Chiyoda-ku,
	Tokyo 100-8280, Japan
Representative	Toshiaki Higashihara
	Representative Executive Officer,
	President, and CEO
Capital	458.79 billion yen
Number of employees	35,631 (unconsolidated basis)
	303,887 (consolidated basis)
Number of consolidated	864 (Japan: 208, outside of Japan: 656)
subsidiaries (including	
variable interest entities)	
Number of	388
equity-method associates	
and joint ventures	
·	·

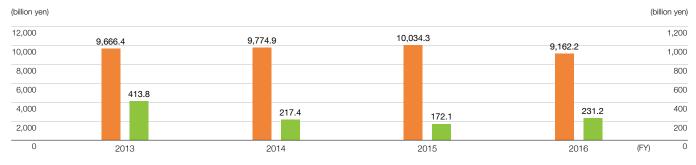
## Consolidated Financial Highlights for Fiscal 2016, Based on the International Financial Reporting Standards (IFRS)

Revenue	9,162.2 billion yen (down 9%,		
	year on year)		
EBIT*1	475.1 billion yen (down 11%)		
Income from continuing	469.0 billion yen (down 9%)		
operations, before income taxes			
Net income attributable to	231.2 billion yen (up 34%)		
Hitachi, Ltd. stockholders			
Capital expenditure*2	377.5 billion yen (down 29%)		
R&D expenditure	323.9 billion yen (unchanged)		
Total assets	9,663.9 billion yen		

- \*1 EBIT: Income from continuing operations before income tax, less interest income, plus interest charges.
- \*2 Since fiscal 2015, the amount of investment in leased assets that fall under the heading of finance and leases included in conventional capital expenditure are deducted from capital expenditure for disclosure.

Note: Hitachi's consolidated financial statement is prepared based on the International Financial Reporting Standards (IFRS).

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



■ Revenue (left scale) ■ Net income attributable to Hitachi, Ltd. stockholders (right scale)

Hitachi Sustainability Report 2017

5



## Hitachi and Society

Creating value to fulfill our Corporate Credo—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.

#### Key Business Segments for Social Contributions

The issues humanity faces—environmental problems like climate change and ecosystem degradation; energy, water, resource, and food shortages; urban population growth; and the graying of societies—are growing more serious around the world. As a global corporate citizen, Hitachi is globally engaged in providing social infrastructure and, in many other fields, creating both economic and social value to address these issues and contribute to a sustainable society.

## Information & Telecommunication Systems

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.

Locations of our business operations:

Over 100 countries and region

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

- Main Products and Services
   Systems integration, consulting, cloud services, servers, storage, software, telecommunications & networks. ATMs
- Principal Consolidated Subsidiaries (as of March 31, 2017)
   Hitachi Information & Telecommunication Engineering, Ltd., Hitachi-Omron
   Terminal Solutions, Corp., Hitachi Computer Products (America), Inc., Hitachi
   Financial Equipment System (Shenzhen) Co., Ltd., Hitachi Solutions, Ltd.,
   Hitachi Systems, Ltd., Hitachi Consulting Corporation, Hitachi Data Systems
   Corporation, Hitachi Payment Services Pvt. Ltd.



A Hitachi storage system.

1,982.8 billion yen	152.9 billion yen	76.4 billion yen	
Revenue	Adjusted operating income	EBIT	

#### Social Infrastructure & Industrial Systems

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.

Installation of water solutions:

1,800<sub>sites</sub>

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.

#### Main Products and Services

Industrial machinery and plants; elevators; escalators; railway systems; thermal, nuclear, and renewable energy power generation systems; transmission and distribution systems

Hitachi Sustainability Report 2017

 Principal Consolidated Subsidiaries (as of March 31, 2017) Hitachi-GE Nuclear Energy, Ltd., Hitachi Industrial Equipment Systems Co., Ltd., Hitachi Elevator (China) Co., Ltd., Hitachi Building Systems Co., Ltd., Hitachi Industry & Control Solutions, Ltd., Hitachi Plant Construction, Ltd., Hitachi Plant Services Co., Ltd., Hitachi Power Solutions Co., Ltd., Hitachi Rail Europe, Ltd., Horizon Nuclear Power, Ltd.



A seawater desalination system.

2,331.9 billion yen 77.0 billion yen -19.9 billion yen

#### Electronic Systems & Equipment

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.

Number of operating particle therapy facilities:

Inspire the Next

in the United States (as of June 30, 2017)

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.

- Main Products and Services
- Semiconductor manufacturing equipment, measurement and analysis equipment, advanced industrial products, medical equipment
- Principal Consolidated Subsidiaries (as of March 31, 2017) Hitachi High-Technologies Corporation, Hitachi Kokusai Electric Inc.



Hokkaido University Hospital's particle beam cancer therapy system.

1,170.3 billion yen 81.5 billion yen 66.7 billion yen

### Construction Machinery

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.

> Global share of hydraulic mining excavator market:

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

- Main Products and Services Hydraulic excavators, wheel loaders, mining machinery
- Principal Consolidated Subsidiaries (as of March 31, 2017) Hitachi Construction Machinery Co., Ltd.



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

753.9 billion yen 26.3 billion yen 22.7 billion yen

### **High Functional Materials & Components**

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.

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

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.

#### Main Products and Services

Semiconductor- and display-related materials, printed wiring board 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

Principal Consolidated Subsidiaries (as of March 31, 2017)
 Hitachi Chemical Company, Ltd., Hitachi Metals, Ltd.



Hitachi Chemical's molded plastic rear door module

1,464.6 billion yen 119.9 billion yen 123.3 billion yen

## **Automotive Systems**

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.

Global share of air flow sensor market:

Approximately 40% (as of March 31, 2016)

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.

- Main Products and Services
- Engine management systems, electric powertrain systems, drive control systems, car information systems
- Principal Consolidated Subsidiaries (as of March 31, 2017)
   Clarion Co., Ltd., Hitachi Automotive Systems, Ltd., Hitachi Automotive Systems Americas, Inc.



Hitachi Automotive Systems' air flow sensor.

Revenue Adjusted operating income EBIT

992.2 billion yen
56.3 billion yen
65.8 billion yen

## Smart Life & Ecofriendly Systems

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.

Home appliance

products: Sold in over

120 countries and re

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.

- Main Products and Services
- Refrigerators, washing machines, vacuum cleaners, room air conditioners, air-conditioning equipment
- Principal Consolidated Subsidiaries (as of March 31, 2017)
   Hitachi Appliances, Inc., Hitachi Consumer Products (Thailand), Ltd., Hitachi Consumer Marketing, Inc.



Hitachi Appliances' robot cleaner "minimaru."

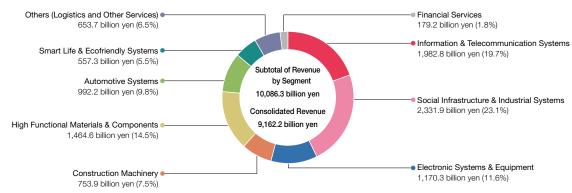
557.3 billion yen	22.4 billion yen	31.8 billion yen
Revenue	Adjusted operating income	FBIT

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.

#### HITACHI Inspire the Next

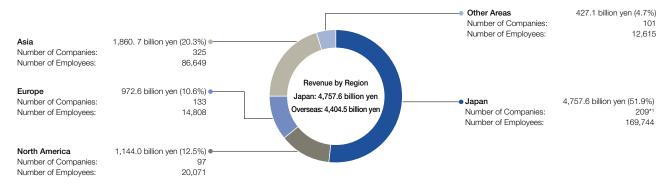
#### Revenue and Share by Segment

(Consolidated for fiscal 2016, based on IFRS)



#### Revenue and Share by Region

(Consolidated for fiscal 2016, based on IFRS)



<sup>\*1</sup> Including Hitachi, Ltd. and 208 consolidated subsidiaries, totaling 209 companies in Japan.

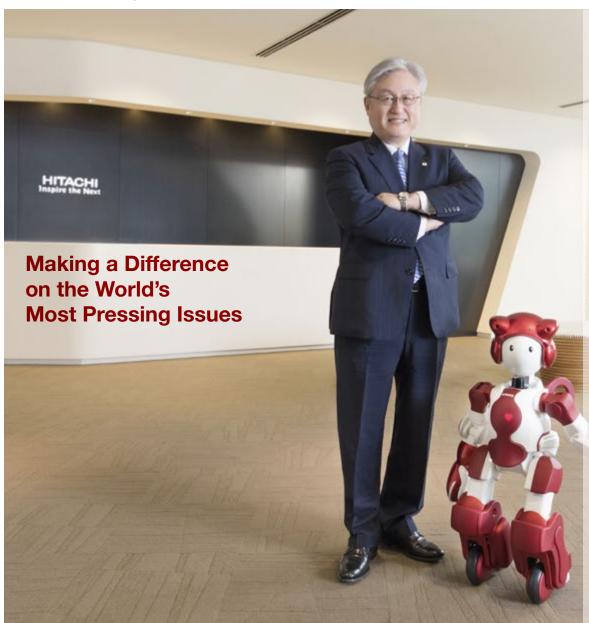
HITACHI Inspire the Next

Management Approach

Management Approach	09
Leadership	10–11
CEO's Message	10
Executive Officer's Message: CSR and the Environment	11
Recognition of Social Responsibility	12–26
Realizing Sustainable, Innovative Management	14
Understanding Issues Through Dialogue and	
Taking Part in Initiatives	22
Review and Improvement of CSR Activities	27-31
Enhancing CSR Management	29



# Leadership CEO's Message



Leadership

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 epoch-making Paris Agreement on long-term, drastic reductions in greenhouse gas emissions entered into force.

At Hitachi, we believe that by combining our long-cultivated expertise in infrastructure with our revolutionary IT offerings, we can contribute to these global goals. To this end, we are actively working to advance our Social Innovation Business, building on our longstanding efforts to improve quality of life for large numbers of people by providing a wide range of products and services. Of course, like other companies, in recent years we are increasingly called upon to consider how the value our products and services create is received by and impacts society.

To further deepen our integration of business and sustainability amid these changes in the business environment, in April 2017 we launched the Executive Sustainability Committee. Meeting members are tasked with examining sustainability-related measures based on an understanding of the trends and needs of international society. I myself chair the meeting, which includes top Hitachi executives, business unit CEOs, and related department heads, and I look forward to reporting on our progress from next year in the *Hitachi Sustainability Report* and *Hitachi Integrated Report*.

Through its diverse range of current and future business activities, Hitachi will contribute significantly to resolving social and environmental issues and establishing an inclusive, harmonious, and prosperous world. To achieve this, we will continue to promote innovative solutions and collaborative creation with our business partners and stakeholders. At the same time, through responsible corporate conduct, we will reduce and mitigate negative impacts on people and the global environment and actively contribute to achieving global targets like the Sustainable Development Goals.

This is what "sustainability" means to Hitachi.

Toshiaki Higashihara

J. Higaslihara

President & CEO Hitachi, Ltd.



## Executive Officer's Message: CSR and the Environment





## Hitachi's Efforts to Promote Sustainability

#### Toshiaki Kuzuoka, Hitachi, Ltd.

Representative Executive Officer
Senior Vice President and Executive Officer
General Counsel & Head of Corporate Communication
Head of Risk Management
General Manager of Legal and Communications Group
General Manager of Risk Management Group
General Manager of Corporate Hospital Group

Many governments and companies are now implementing measures to contribute to the attainment of the UN Sustainable Development Goals (SDGs).

At Hitachi, the first meeting of the Executive Sustainability Committee was held in April 2017 to advance a sustainability strategy that includes contributions to the attainment of the SDGs and other related measures. Each business unit has named an officer in charge of promoting Hitachi's sustainability strategy; the mission of these officers is to take responsibility for linking the operations of the business units with Hitachi's sustainability strategy and to incorporate the Hitachi Environmental Innovation 2050 targets into their business strategies for implementation from a long-term perspective.

Our major activities and achievements during fiscal 2016 include the following.

In the area of governance, we have expanded the Hitachi Global Compliance Program to ensure thoroughgoing compliance and are making ongoing efforts to reinforce our compliance efforts throughout the Group.

We are also bolstering our environmental initiatives with a view to attaining the targets of our Environmental Action Plan for 2018. One key performance indicator is CO<sub>2</sub> emissions of our products and services; we have established a target of 40% reductions in fiscal 2018 and are well on our way to achieving this target, as we were able to reduce emissions by 35% in fiscal 2016.

As part of Group-wide workstyle reforms aimed at bolstering creativity and achieving higher productivity and efficiency, we have launched a Work-Life Innovation Project for a Creative Future designed to encourage workstyle diversity. Suggestions by employees and best practices are shared over the intranet, and initiatives are promoted on a Group-wide basis in keeping with President and CEO Toshiaki Higashihara's message for employees to use the increase in their free time—secured through workstyle reforms—for their self-edification.

Hitachi Sustainability Report 2017 contains an overview of these and many other initiatives undertaken to fulfill our corporate social responsibilities.

We will further advance our sustainability strategy and do our best to disclose information in an appropriate manner in contributing to the resolution of social issues through our Social Innovation Business.



Recognition of Social Responsibility

## Hitachi's Aims: Achieve Management That Is Ever Responsive to the Expectations of Society



We are actively advancing our CSR activities to meet society's expectations based on an accurate perception of the impact of our operations on society and our social responsibilities. We are contributing to the resolution of social issues through our Social Innovation Business, which combines advanced IT with infrastructure technologies developed over many years, and are conducting dialogue with all our stakeholders to identify and contribute to the identification of social issues.

Of particular note in fiscal 2016 was the start of management-level deliberations on how we can contribute to society through our Social Innovation Business while paying heed to the United Nations Sustainable Development Goals (SDGs), which came into force in January 2016.

## Fiscal 2016 Overview of Activities



In fiscal 2016, we formulated our long-term environmental targets for 2050 and worked to promote understanding of the Sustainable Development Goals (SDGs) inside the company. We also made an effort to communicate interactively with our stakeholders, such as by actively conducting stakeholder dialogue in and outside of Japan.

## Main Plans and Results

#### Realizing Sustainable, Innovative Management

rodinizing oddiamasio, innovativo managomoni					
Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans	
Recognition of stakeholder expectations; identification of social responsibilities to fulfill in business activities and social issues to address through business	Formulate long-term environmental policies     Hold workshops to promote understanding     of the importance of sustainability	Announced long-term environmental targets     Held workshops on scaling up SDGs and business activities at the Water Business Unit	**	Launch Executive Sustainability Committee; have each business unit/Group company formulate and promote a sustainability strategy that includes SDGs	
Promotion of innovative R&D that contributes to resolving customers' or society's issues	Continue to actively communicate research activities and achievements     Continuously achieve recognition for world-leading innovative research	Issued 35 press releases (17 related to open innovation)     Received nine awards for world-leading innovative research, such as the Industrial Standardization Awards, Minister of Economy, Trade, and Industry Award, and Contemporary Master Craftsman award	***	Continue policy of disclosure and open innovation     Continuously achieve recognition for world-leading innovative research	



## Understanding Issues Through Dialogue and Taking Part in Initiatives

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Recognition of company's impact on society through interactive communication with stakeholders	Recognize issues and achieve improvements by building relationships and engaging in dialogue with NGOs	Held stakeholder dialogues around the world with NGOs and shared experiences, information	***	Continue building relationships and engaging in dialogue with NGOs
	· Pursue proactive PR activities	Examined social issues and solutions in designated areas in Japan and overseas with various business units and Group companies     Shared activity policies and case studies with PR officers of US Group companies	***	Promote PR activities of both social and business activities     (1) Create new Social Innovation Business activities by partnering with governmental and international institutions     (2) Formulate SDG-based assessment index of social businesses     Establish a global public relations structure that capitalizes on Hitachi's strengths as both a Japanese and international company
	· Hold stakeholder dialogues	Held stakeholder dialogues in India,     Europe, Australia, Singapore, and China;     started preparing for stakeholder dialogues     in North America; discussed issues on     disclosure in Europe     Discussed Integrated Report disclosure     issues at the dialogue in Europe	**	Continue with stakeholder dialogues in each country and reflect the conclusions in business activities     Hold stakeholder dialogue more than once a year on policies and important themes under review in North America, Australia, Europe, China, India, and Singapore
	Advertise in 19 countries, including     Japan, as part of a global integrated     brand campaign	Ran ads and TV commercials on two themes, respectively, in 19 countries, including Japan	***	Advertise in 16 countries, including     Japan, as part of a global integrated     brand campaign

★★★: Achieved ★★: Partially achieved ★: Not achieved



## Realizing Sustainable, Innovative Management

## Hitachi's Approach

#### **Executive Sustainability Committee Initiatives**

In April 2017, Hitachi, Ltd. launched the Executive Sustainability Committee to discuss and reach decisions on the Group's sustainability strategy. The committee comprises President and CEO Toshiaki Higashihara and other members of the Senior Executive Committee, along with the CEOs of various business units (BUs).

The inaugural meeting on April 25 addressed such issues as the measures to be adopted in helping achieve the UN Sustainable Development Goals (SDGs) and the setup needed to advance those measures.

Each BU will henceforth assign sustainability strategy promotion officers in an effort to strengthen the measures and organizations needed to help achieve the SDGs and promote sustainability.

#### Trends in Society and Hitachi Group Identity

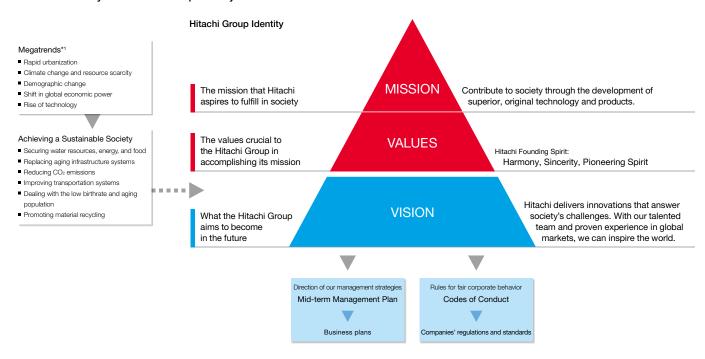
Society is today undergoing great changes and faces a range of challenges, from environmental issues and natural resource and energy constraints to poverty, inequality in education, diseases, and population concentration in cities. Hitachi's Corporate Credo is to contribute to society through the development of superior, original technology and products. We created our Group Vision in May 2013, at the start of the 2015 Mid-term Management Plan, with the aims of delivering innovations that help to answer society's challenges and of building a safe, secure, comfortable, and fair society.

The Group Vision indicates the path to the next stage of growth. We draw on the ethics and values that Hitachi has developed over the past 100 years—encapsulated in our Corporate Credo and Founding Spirit—while continuously considering the next generation. We look ahead to the longer term, while promoting corporate activities informed by sensitivity to the needs of a changing society. Our Mid-term Management Plan is the action plan we define to realize this vision; by integrating our management and CSR strategies, we seek to enhance the effectiveness of this approach.

The implementation of our plan is a way for us to fulfill our responsibilities as a good corporate citizen through robust, diverse governance; the pioneering spirit and strong ethical stance of our employees; and operations that help address environmental and other issues. We comply with the laws and regulations of all countries and regions in which we operate and pursue our activities in line with the Hitachi Group Codes of Conduct.



#### Trends in Society and Hitachi Group Identity



<sup>\*1</sup> As identified in "Five Megatrends and Possible Implications," published in 2014 by PwC.



Industry/

Use Lumada\*1 IoT platform to

and distribution

**Investment Focus** 

Optimized factory

Strengthening engineering

Predictive maintenance

optimize value chains for industry

Distribution/Water

#### Hitachi's Social Innovation Business

We work with stakeholders to recognize issues society and our customers face, including global environment problems, and are contributing to the resolution of social issues through our Social Innovation Business, which combines advanced IT with infrastructure technologies developed over many years.

In May 2016, we formulated our 2018 Mid-term Management Plan, which will culminate in fiscal 2018. Under the plan, we aim to become an Innovation Partner for the IoT Era centered on our Social Innovation Business, seeking to expand the sales ratio of frontline operations that develop and deploy services meeting the diverse needs of global society to 40% and to increase our overseas sales ratio as a whole to 55%. We will expand our frontline operations by evolving and enhancing our Social Innovation Business through digital technology and promoting it overseas in the focus business domains of "power and energy," "industry, distribution, and water," "urban," and "finance, public, and healthcare."

We will continue to provide optimum solutions to society's issues with advanced network technologies that are capable of connecting social infrastructure, products, and people.



Social Innovation Business

#### Focus Business Domains and Key Initiatives



#### Power/Energy

#### Transition to distributed power supply utilizing IT

- Microarid, regional energy management
- Renewable energy

#### **Investment Focus**

- Strengthening grid and engineering
- Predictive maintenance



## Finance/Public/ Healthcare

FinTech, My Number Healthcare service (platform)

#### **Investment Focus**

Strengthening healthcare informatics

#### Improvement of quality of life in communities

From rail as a service to outcome delivery

#### **Investment Focus**

- Development of urban solutions
- Expansion of the rail business area
- \*1 Hitachi's open and highly versatile IoT solution platform using software technology to obtain new information from integrating and analyzing data and running simulations.

## **Innovation Management**

#### Research and Development Direction

As an Innovation Partner for the IoT Era, Hitachi has identified "power and energy," "industry, distribution, and water," "urban," and "finance, public, and healthcare" as the four focus business domains in which to advance its Social Innovation Business by accelerating collaborative creation with customers.

The role of the Research & Development Group is to respond to the challenges faced by customers through collaborative creation and technology development to lead the Social Innovation Business.

R&D will be pursued in accordance with a directive to "create business innovation in an era of uncertainty."

Hitachi will contribute to resolving increasingly global and complex challenges in society through its Social Innovation Business.

## Customer-Driven R&D and Hitachi's Business Structure

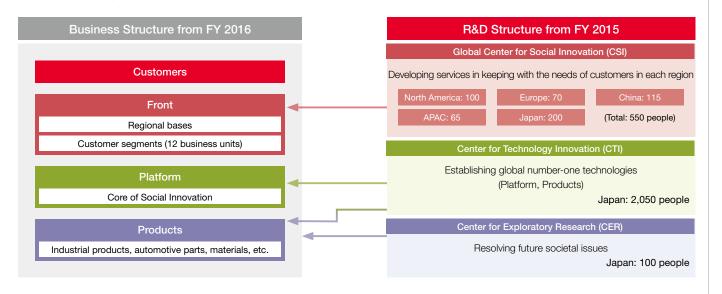
To accelerate collaborative creation with customers, the Research & Development Group was realigned into a more customer-driven research structure in April 2015. The three research laboratories in Japan—the former Central Research Laboratory, Hitachi Research Laboratory, and Yokohama Research Laboratory—were consolidated along with the Design Division and overseas research centers and regrouped into the Global Center for Social Innovation (CSI), the Center for Technology Innovation (CTI), and the Center for Exploratory Research (CER). This R&D structure supports the new market-driven business structure created in April 2016 along the lines of the "Front" (the customer interface), "Platform," and "Products."



Under this new structure, the CSI is working with the 12 Front business units (BUs) as well as regional centers around the world to develop services meeting the needs of customers in each region. The CTI is working with the Platform BUs that provide the backbone of Social Innovation, as well as the Product BUs that provide the highly competitive key components that support services, to generate digital solutions combining OT (operational technology) and IT, and provide new value to customers in various fields. In December 2016, the Open Laboratory was established within the Yokohama Research Laboratory to use Hitachi's latest technologies to develop

prototypes together with customers, thereby developing applications and platforms that contribute to the creation of visionary innovations. The CER is conducting cutting-edge research toward realizing a human-centric society that pursues the fundamental human goals of "experience and well-being," by working in collaboration with various research institutions to resolve future societal challenges.

#### Research & Development Group Structure



# Lumada's Evolution in Support of Hitachi's Social Innovation Business

Through collaborative creation, Hitachi creates new value by designing, verifiying, and simulating business models based on challenges and visions shared with the customer. To enable this, an open and secure platform that can connect the different systems of stakeholders is required. Thus in 2016, Hitachi launched the Lumada IoT platform and began offering related services. The Research & Development Group is using NEXPERIENCE, a systemized process facilitating collaborative creation with customers, to generate Lumada customer cases, as well as developing solution cores using innovative technology, such as AI and analytics, as the common platform.



# Accelerating Collaborative Creation with Customers Worldwide

The market for Hitachi's Social Innovation Business is expanding globally. To be able to respond to the increasing number of collaborative creation projects, CSI is located in five key regions—Japan, Asia-Pacific (APAC), North America, China, and Europe, with about 350 of the approximately 550 CSI personnel being assigned outside of Japan.

CSI-Tokyo is using methodologies developed through design and service research to pursue collaborative creation of solutions together with customers.

CSI-APAC is creating energy, transportation, and urban solutions in collaboration with customers using data science, machine learning, and software engineering. In addition to the existing centers in India and Singapore, R&D personnel have been assigned to a new center in Australia.

CSI-North America is building a big-data analytics platform to collaboratively create advanced solutions in such areas as energy, communications, finance, and healthcare. New laboratories launched in 2016 include the Financial Innovation Laboratory and the Digital Solution Platform Laboratory, which aims to strengthen IoT platform research.

CSI-China is developing such products as elevators and ATMs through collaborative creation with customers to realize solutions for "Made in China 2025," a policy being promoted by the Chinese government to advance the manufacturing sector, and other industrial policies, such as that for a low-carbon society. In 2016, a new center was opened in Guangzhou, a major manufacturing hub in southern China, complementing existing facilities in Beijing and Shanghai.

CSI-Europe is participating in the creation of new markets through European-led standardization activities, addressing challenges facing mature society by developing solutions with key institutions. In April 2017, a new office was opened in London to accelerate the development of digital solutions.

Also launched the same month was the Insights Laboratory, a global hub for collaborative creation between regional CSIs and customers. The laboratory will work closely with the Hitachi Insight Group, established in May 2016, to accelerate the global expansion of Lumada.

#### **Promoting Open Innovation**

To realize innovative technology development that cannot be achieved by one company alone, Hitachi has created an open R&D environment, working with research institutes, universities, and customers both within and outside of Japan. From fiscal 2015, the CER has become an open innovation hub to co-create the seeds for the Social Innovation Business of the future.

In Japan, joint research laboratories were established within the University of Tokyo, Kyoto University, and Hokkaido University in June 2016 to work toward the realization of a "Super Smart Society" (Society 5.0)\*1 proposed by the Japanese government. In April 2017, the Hitachi Kobe Laboratory was opened within the Kobe Biomedical Innnovation Cluster as a development facility to achieve practical applications for regenerative medicine. These centers will seek insights into future societal challenges and propose visions and innovations that can both resolve those challenges and contribute to economic development.

Further, as part of efforts toward realizing Society 5.0, Hitachi announced its Vision Design project to consider the future role of technology in people's daily lives. Focusing on the four main themes of "school education," "public safety," "aging support," and "meal experience," Vision Design proposes new ways in which technology can augment human initiatives in support of people requiring assistance.

Globally, in addition to working closely with Stanford University in the field of autonomous driving technology, in 2016 Hitachi became a board member of the Hyperledger Project for blockchain technology, an area of rising interest in FinTech and other fields. Additionally, Hitachi is one of 46 groups from North America, Europe, and Asia participating in the OpenFog Consortium and plays a key role in the Japan regional committee.

In fiscal 2016, research collaboration was conducted with 65 research institutes outside of Japan and 243 within Japan. Collaboration with researchers outside of Japan is being further strengthened through such programs as the Hitachi Research Visit Programs (HIVIPS), established in 1985 to invite researchers to work for a fixed term in labs in Japan.

\*1 Super Smart Society (Society 5.0): A term used in the 5th Science and Technology Basic Plan released by the Japanese government to refer to a new type of society that will be led by innovations in science and technology, following on from the hunter-gatherer, pastoral-agrarian, industrial, and information societies.



 Hitachi and Hokkaido University Receive Imperial Invention Prize for Real-Time Tumor-Tracking Particle Beam Cancer Therapy System

At the fiscal 2018 National Commendation for Invention, Hitachi and Hokkaido University were jointly awarded the Imperial Invention Prize for a real-time tumor-tracking particle beam cancer therapy system (Japanese patent no. 05896211). The award recognizes the most outstanding inventions of the year.

In particle beam cancer therapy, particles such as protons (hydrogen nuclei) and carbon ions are accelerated to create a particle beam that is focused on the tumor. Almost painless and causing relatively few side effects compared to other forms of radiotherapy, this cutting-edge technique is being introduced at an increasing number of medical institutions in Japan and worldwide. However, as tumors in the lung, liver, and other internal organs move frequently due to respiration and other factors, the need for a technology that can accurately determine the location of moving tumors has long been recognized. This new, jointly developed system combines Hitachi's spot-scanning irradiation technology with Hokkaido University's real-time tumor-tracking radiotherapy in a single, complete therapeutic device that can quickly and accurately irradiate moving tumors, reducing the burden on patients. The Hokkaido University Hospital has been treating patients using this technology since 2014.

The National Commendation for Invention was inaugurated in 1919 and is considered Japan's most prestigious award in the field of invention.

#### **R&D Ethics Reviews**

In September 2000, Hitachi established an ethical review committee to oversee the handling of information from human genome analysis. It was the first such committee to be established by a private company in Japan. The majority of the committee members are external experts, and the committee meets two or more times a year to review Hitachi's activities with reference to the in-house ethical guidelines that were prepared based on government documents, such as the "Ethical Guidelines for Human Genome/Gene Analysis Research" and the "Ethical Guidelines for Clinical Research."\*1

All Hitachi business divisions and Group companies whose activities require review are expected to show a high level of corporate social responsibility and to maintain high ethical standards among their researchers and staff.

## R&D Planning and Budget

R&D investment by the Hitachi Group is equivalent to about 4% of revenue, approximately one-fifth of which is used by the Research & Development Group. Research categories are divided into two categories: (1) Sponsored and Advanced Sponsored Research and (2) Frontier and Platform Research. The former is financed by business units and Group companies and is based mainly on business roadmaps from business unit initiatives. The latter is led by the Research & Development Group and is based on medium- to long-term technology plans. The aim of Sponsored and Advanced Sponsored Research is to expand and grow core businesses with a target

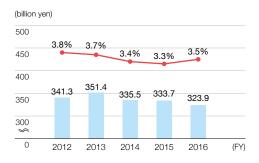
date for practical applications within three to five years. Frontier and Platform Research aims to strengthen customer collaborative creation and technical platforms and to create new businesses.

In fiscal 2017, investment in Frontier and Platform Research was concentrated on the four focus business domains identified in the 2018 Mid-term Management Plan—power and energy; industry, distribution, and water; urban; and finance, public, and healthcare—as well as digital solutions (Social Innovation Business using digital technology) that will contribute to the evolution of the Lumada IoT platform.

Hitachi will continue to pursue R&D aligned with its corporate strategy in order to contribute to the expansion and accelerated global deployment of its businesses.

#### **Key Indicators**

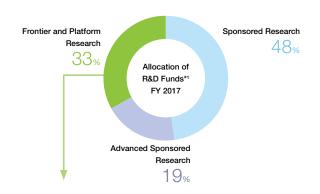
R&D Expenditure (Hitachi Group)



■ Research investment ◆ R&D expenditure as % of revenue

<sup>\*1</sup> The guidelines' in-house name was changed on October 1, 2015, by the Hitachi ethical review committee to "Ethical Guidelines for Medical and Health Research Involving Human Subjects."

#### Allocation of Research & Development Group Funds



Proportion of research related to four focus business domains

Proportion of research related to digital solutions



\*1 Roughly 20% of total Hitachi Group R&D expenditure.

#### Intellectual Property

#### ► Actions in the Intellectual Property Field

Intellectual property (IP) is a key element of Hitachi's business strategy. We protect the innovations emerging from our R&D, as well as the Hitachi brand, through patent, trademark, and other IP rights, along with strict management of trade secrets, while providing remuneration and incentive awards for inventors. Furthermore, as our Social Innovation Business expands and opportunities for collaborative creation with customers and partners increase, we handle IP acquired from other parties with care.

#### ▶ Building a Global Patent Portfolio

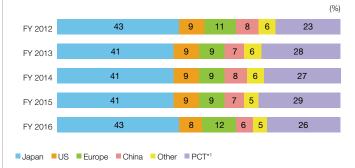
One of the IP activities supporting our global operations is the development of a global patent portfolio to ensure worldwide protection for innovations emerging from our R&D and prevent competitors from imitating the technological advantages that set us apart. The portfolio also enables us to demonstrate the advantages of those technologies to customers and provide patent licenses to other companies, spurring further collaborative creation. We increased our patent application ratio outside Japan from 47% in fiscal 2009 to 57% in fiscal 2016, and we will continue to efficiently build and maintain our global patent portfolio.

In tandem with efforts to globalize our R&D centers, we are also globalizing our IP hubs. We currently have IP offices in New York and Santa Clara, California, in the United States, Beijing and Shanghai in China, and London in the United Kingdom to protect the innovations generated through R&D activities outside Japan.

Another key issue is developing globally minded IP human resources. Since fiscal 1964, Hitachi's Intellectual Property Division has operated an international job training system, sending trainees to IP law firms and Group companies in Europe and the United States and to study abroad. In fiscal 2016, two trainees went to the United States, two to Germany, and one to Singapore, while one employee was sent to the United States to study.

#### **Key Indicators**

#### Patent Application Ratios by Country or Region



<sup>\*1</sup> International applications filed for Patent Cooperation Treaty coverage.



#### Respect for Intellectual Property

We respect the intellectual property rights (IPRs) of others, as we expect them to respect ours. We follow the Hitachi Group Codes of Conduct and conduct preliminary searches of others' patents when undertaking R&D on new products and technologies in order to avoid IPR infringements. For IPRs that belong to others, we obtain licenses from IPR holders before we use the IP. As our Social Innovation Business expands and opportunities for collaborative creation with customers and partners increase, we handle IP acquired from other parties with care. If any company is found to have infringed Hitachi's IPRs, we encourage the counterparty to acquire the necessary license and take legal action if necessary.



Hitachi Group Codes of Conduct, 5.3: Management and Preservation of Company Assets

#### Anti-Counterfeiting Activities

Protecting the Hitachi brand is crucial for supporting our global operations. We operate a rigorous regime against such infringements as making and selling counterfeit goods carrying the Hitachi brand and illegally applying for or registering trademarks similar to the Hitachi brand.

Until recently, the bulk of counterfeit goods were manufactured in China, but over the past several years manufacturing methods and sales routes have become more sophisticated and diverse, which has spurred us to take further action.

To stamp out counterfeit goods, it is also important to teach general consumers not to buy them. Hitachi conducts ongoing consumer awareness activities to eliminate counterfeit goods.

#### Reward System for Employee Inventions

We motivate employees in the R&D field with an ample reward system for new inventions. To make this reward system as fair and transparent as possible, we set standards to evaluate inventions and disclose these standards to employees. We also have a mechanism for receiving inquiries about the rewards, as well as opinions on the reward system.

We have established a special division within the Intellectual Property Division to plan and operate this system, while an internal Invention Management Committee made up of R&D, legal affairs, personnel management, and IP experts ensures that the system operates effectively across the whole Group. The system includes an invention information channel to promote communication between inventors and the business divisions implementing the resulting patents. Inventors can ask the business divisions for information about patent implementation and check the evaluation standards used to calculate the rewards for their inventions. To ensure transparency and inventor satisfaction, we also set up an Arbitration Committee for Invention Rewards, composed similarly to the Invention Management Committee. Inventors can appeal to this committee if they disagree with the amount they have been awarded.

From fiscal 2005, we have given President's Awards to the top 100 inventors. Since fiscal 2006, we have also given awards to the top 50 young inventors (under 35 years old) based on patent application rewards received within five years of their joining Hitachi.



## Understanding Issues Through Dialogue and Taking Part in Initiatives

## Hitachi's Approach

Hitachi promotes its Social Innovation Business with efforts to accurately perceive the social issues in each country or region, followed by collaborative creation with customers and other stakeholders to resolve them. In conducting this business, we place importance on two-way communication with stakeholders and active participation in various initiatives in coordination with various groups.

## Stakeholder Engagement

#### Communication with Stakeholders

The outcomes of communication with stakeholders are shared with respective divisions and actively utilized as valuable insights into our business. Public interest is growing in how corporations are taking in stakeholders' voices to improve their businesses, and we will continue to globally develop and promote ways of capitalizing on the opinions of the members of society with whom we engage in our business activities.

Stakeholders Main Roles		Main Divisions	Means of Communication	Pages		
Customers	Creation of better products and services, response to complaints,	Quality Assurance     Sales	Customer satisfaction activities     Marketing	Customer Satisfaction Quality Assurance Activities pp. 78–79 pp. 82–84		
	appropriate disclosure of information  • Website  on products and services  • Advertisement activities	<ul><li>Universal Design pp. 80</li><li>Rigorous Information Management</li></ul>				
				Adaption for Emerging p. 84 Markets p. 81		
Shareholders and Investors	Timely and proper information disclosure, fair assessment and support from capital markets, reflection of shareholder and investor viewpoints in corporate management	Public Relations and IR	Financial results briefings (quarterly)     General shareholders' meetings (annual)     IR events, one-on-one meetings (about 700 times/year)     IR tools: Integrated Report, business reports, etc.	Stakeholder Engagement pp. 22–26		
Suppliers	Building of fair and sound business relations, smooth information sharing toward better partnerships	Procurement	<ul><li>Procurement activities</li><li>Supplier meetings</li><li>CSR monitoring (316 companies/year)</li><li>CSR audits (20 companies/year)</li></ul>	Supply Chain Management pp. 71–75		
Employees	Active utilization, proper treatment, promotion of occupational health and safety of human capital	Public Relations     Human Capital	Intranet, in-house newsletters Training Town hall meetings between senior management and employees (16 times/year) Employee surveys (annual)	<ul> <li>Diversity and Inclusion pp. 55–57</li> <li>Developing Women's Careers p. 57</li> <li>Work-Life Management pp. 58–59</li> <li>Employing People with Disabilities p. 59</li> <li>Diverse Support Systems for Employees p. 60</li> <li>Occupational Health and Safety pp. 61–63</li> <li>Global Human Capital Development pp. 64–66</li> <li>Stakeholder Engagement pp. 22–26</li> </ul>		
National and Local Governments, Industrial Associations	Compliance with domestic and foreign laws and regulations, policy recommendations, participation in industry-government-academia collaborative projects	Government &     External Relations	Policy council participation Participation in business and industry associations	Stakeholder Engagement pp. 22–26		
Local Communities	Fulfillment of responsibilities as corporate citizen, involvement in local communities	<ul><li>Social Contribution</li><li>All Business</li><li>Divisions</li></ul>	Contribution to local communities through business     Participation in volunteer activities	Social Contribution Activities p. 87		
Academic Associations and Research Institutions	Promotion of technological innovations, participation in industry-government-academia collaborative projects	<ul> <li>Research and Development</li> </ul>	Open innovation (joint research)	● Innovation Management pp. 16–21		
NGOs and NPOs	Incorporation of diverse public opinions, promotion of stakeholder-focused management, social contribution through nonprofit activities	CSR Promotion	Stakeholder dialogues (4 times/year)     Dialogue through collaboration	Oscial Contribution Activities p. 87		
Global Environment	Realization of a low-carbon society, a resource efficient society, a harmonized society with nature	<ul><li>Environment</li><li>All Business</li><li>Divisions</li></ul>	Stakeholder dialogues (annual)	Environment pp. 89–121		



#### **Engagement with Customers**

#### ► Global Campaign Rollout

It is critical for Hitachi to gain stakeholders' understanding of its Social Innovation Business and corporate vision, which aspire to realize a sustainable society. We conducted a Global Brand Campaign in 19 countries under the slogan "THE FUTURE IS OPEN TO SUGGESTIONS," presenting examples of how Hitachi's Social Innovation Business is helping to address the many issues societies now face globally, such as energy issues, depletion of water resources, transportation issues linked to urbanization, healthcare issues associated with the graying of society, advancement of big data and other information technologies, food safety, and information security.

To globally enhance the Hitachi brand, we have held the Hitachi Social Innovation Forum in locations worldwide, including Brazil, Germany, India, Japan, Myanmar, the United Kingdom, and the United States, showcasing examples of the Social Innovation Business being conducted in each region. Through keynote speeches, panel discussions, and exhibits, we present a wide range of stakeholders—including customers and government officials—with solutions to social issues that countries and regions around the world face today.

## **Engagement with Employees**

▶ Enhancing Management-Employee Communication
Since fiscal 2012, we have held town hall meetings as forums
for direct dialogue between senior management and employees.
In fiscal 2016, President and CEO Toshiaki Higashihara attended
a total of 16 town hall meetings in Japan, the United States,
China, Singapore, Australia, and other countries.

Ordinary business meetings and conferences are limited in agenda, and company communications with employees via

our intranet and other channels tend to be one-way. Town hall meetings, however, are forums for direct dialogue where employees can gain a real sense of the senior management's way of thinking and what is needed for Hitachi to make the next leap forward, as well as occasions for reaching a shared understanding of the work in which everyone is involved. These interactions help drive mindset reform within Hitachi. For example, at one town hall meeting, a participant pointed out that existing structures and procedures made it difficult for junior-level staff to propose new business ideas. This ultimately led to the creation of an entirely new way for employees to make business proposals: an internal "New Ideas Contest" called "Make a Difference!"

In the town hall meetings, we believe that it is important for senior management to hear the thoughts of frontline employees and for both sides to share their awareness as they engage in dialogue on diverse topics, such as how we can grow our business.

### Promoting a Proactive IR Approach

Our investor relations (IR) activities broadly include business strategy meetings, tours of plants and R&D facilities for institutional investors and analysts, participation in brokerage-sponsored investor meetings, and one-on-one meetings with institutional investors and analysts.

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 an established, worthwhile 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 Lumada IoT platform, 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 and created a dedicated page outlining our new Mid-term Management Plan.



Investor Relations



Disclosure Policy

### Working with Governments and Public Policymakers

#### External Relations Initiatives

We believe that it is governments that are best positioned to both understand and work to resolve social issues, whether at the

national or regional level. As we develop our Social Innovation Business on a global scale, our activities in the social infrastructure field are particularly intertwined with the public interest. This makes government institutions and related organizations in Japan and other countries around the world important partners to Hitachi both as customers and as backers.

Today's global community urgently requires solutions for a range of social issues related to the environment, energy, aging societies, and urbanization. At the same time, innovation in the fields of internet of things (IoT) and artificial intelligence (AI) the so-called fourth industrial revolution—is advancing rapidly. Like the Japanese governement and its "Super Smart Society" (Society 5.0) proposal, governments around the world are expanding their support systems in response to these developments. For Hitachi, promoting our business according to legislative policies and making effective use of governmental advice and support systems is enormously helpful to us in advancing our Social Innovation Business. We also increasingly receive requests for proposals from the Japanese government as they seek to identify solutions for social issues and craft infrastructure support policies to resolve unique regional challenges. Assisting with these requests, whether directly or through participation in an economic organization or industrial body, is one way Hitachi contributes to a better society.

The senior management of Hitachi actively embrace their social responsibilities. For example, Chairman of the Board and Representative Executive Officer Hiroaki Nakanishi takes part in the Council on Investments for the Future, newly founded in September 2016 by the Japanese government, as one of the representative members of the business world, and also serves as vice chairman of Keidanren (Japan Business Federation), a major economic organization. President Higashihara's service

as chair of the Japan Electronics and Information Technology Industries Association (JEITA) between May 2016 and May 2017 was one way he has brought Japanese corporations closer together and contributed to establishing an appropriate relationship between business entities and society.

#### Promoting External Relations

Hitachi established the Government & External Relations
Division in our corporate headquarters in fiscal 2009 to guide
and accelerate the external relations of the entire Hitachi
Group, and we have since worked to strengthen our relationships
with government and industrial organizations. In fiscal 2016,
we reorganized the division to achieve our new goals of further
enhancing the global expansion of our Social Innovation
Business in terms of external relations.

The Government & External Relations Division is not only active in Japan but also works with the Hitachi Corporate Office in Washington DC, the Hitachi Corporate Office, Europe, and other business locations in the Americas, Europe, and Asia. By dealing with governments and organizations as a unified Group in seeking mutual benefit with the communities we participate in, we uncover new business opportunities for Hitachi in each community's unique social issues and policies. We contribute to better societies in Japan and around the world through business activities balanced against harmonious relationships with governments and economic organizations worldwide.

#### ► Policy Council Participation

As part of our dialogue with government officials, Hitachi executives and other representatives participate in a range of government-sponsored policy councils. We are particularly active in the discussion of how best to realize "Society 5.0,"

advocated by the Japanese government, exploring ways to simultaneously resolve social issues and achieve economic growth. Chairman Nakanishi has been a member of the New Industrial Structure Committee since its founding in 2015 under the Industrial Structure Council of the Ministry of Economy, Trade, and Industry, playing a key role in discussions for the formulation of a New Industrial Structure Vision to help Japan take the lead in the fourth industrial revolution of innovations based on IoT, big data, and Al. He has also been a member of the governmental Council on Investments for the Future since its first meeting in September 2016. The council is a new command post for the government's growth strategy, chaired by the prime minister of Japan. As a representative of a corporation contributing to the realization of "Society 5.0," Chairman Nakanishi makes proposals in areas including the use of data and open innovation.

Staff from the Hitachi headquarters and business departments have also participated in meetings and roundtable discussions that look into policy from the standpoint of expanding businesses, as well as cooperating in planning new policies for Japan, including specific recommendations for more effective policy planning and implementation.

#### Participating in Business and Industry Associations

Membership in business and industry associations is another critical aspect of our external relations. Hitachi is a member of Keidanren, where Chairman Nakanishi has served as vice chair since June 2014. He also chairs the Committee on South Asia and the Committee on Information and Telecommunication Policy (as of July 2017). Other executives and employees participate in the Industrial Policy, Labor Policy, Innovation Policy, Regional and Bilateral Relations, and other major



Keidanren committees. As the planning and coordination chair for the subcommittee on Europe, we also conduct activities with Japanese and European governments, while maintaining close economic relations with European governments and economic organizations.

In fiscal 2016, President Higashihara served as chair of JEITA, initiated new business models, and launched fresh concepts with an eye to the future. For example, he spearheaded an initiative to dramatically overhaul the major CEATEC JAPAN event, transforming it in a single year from a general fair for cutting edge IT and electronics to a "CPS/IoT Exhibition."\*

He has also worked to stimulate the IT and electronics industry for the coming fourth industrial revolution by promoting Japanese-German collaboration at CeBIT, a global event for digital business held in Germany in March 2017.

As a member of the Japan Electrical Manufacturers' Association (JEMA), Hitachi takes its commitment to sustainable development of the heavy electric machinery industry and the establishment of a low-carbon society very seriously. To that end, we are surveying the status of the development of the electric power infrastructure in other countries, including power generation and transmission facilities, to promote infrastructure system exports. We are also participating in public relations activities—primarily interactions with business operators in these countries—on how Japanese technologies and products can help to solve social issues there.

► United States: Hitachi Corporate Office in Washington DC The Hitachi Corporate Office in Washington DC examines the impact of US government policies and legislation on our business activities. To promote mutual understanding and improve business opportunities, we communicate to key stakeholders on how Hitachi can contribute to the growth of US society.

For example, we share information gathered by the Washington office with Group companies, exchanging reports on key laws and regulations that affect management and business, analyzing their impact, and responding appropriately. To increase the effectiveness of these activities, we engage with external business associations, think tanks, and academic groups, exchanging ideas and knowledge with specialists and researchers in efforts that will lead to better policy.

As part of the global expansion of our Social Innovation Business, we provide information to policymakers and government representatives on Hitachi's technological expertise to convey how Hitachi can contribute to the United States.

These kinds of activities allow us to foster a broader understanding of Hitachi's business and technological expertise and to expand our global network.

#### Europe: Hitachi Corporate Office, Europe

The Hitachi Corporate Office, Europe, located in Brussels, monitors policy and legislation trends in the European Union, such as the European Commission and European Parliament, and analyzes their impact on Hitachi's business activities. It demonstrates how business can contribute to European policy and to societal issues.

Specifically, the office actively gathers information in the fields of energy, trade, information and telecommunications, transportation, healthcare, research and development, environment, and CSR; communicates with relevant departments within the company and other Group companies; and

makes policy contributions to EU institutions through business and trade associations like BUSINESSEUROPE, DigitalEurope, and the Japan Business Council in Europe (JBCE). We also participate in the European Commission Product Environmental Footprint (PEF) pilot project as part of our environmental policy activities, exchanging opinions and supporting the development of new policies.

Regarding non-financial information disclosure and conflict minerals regulation, we maintain ongoing dialogues with representatives responsible for European policy, business associations, and others, mainly via the JBCE, in forums including the EU-Japan Working Group on Corporate Social Responsibility, organized by the European Commission and Japan's Ministry of Economy, Trade, and Industry, and the UN Asia Regional Forum on Business and Human Rights.

Since 1998, we have held the EU Hitachi Science & Technology Forum to deepen understanding of Hitachi's business. In fiscal 2014, the forum took place in Paris, addressing the theme of healthcare. Starting in fiscal 2016, we are focusing on the Social Innovation Business while continuing to hold these forums from the perspective of contributing to European society through business and technology. Through these activities Hitachi actively communicates with European stakeholders including policymakers.

#### Asia-Pacific Region: Hitachi Asia Ltd., APAC Office

The Asia-Pacific region is replete with challenges in areas including the environment, energy, transportation, and health-care that call for urgent solutions. At the same time, however, it offers a wealth of business opportunities. Hitachi Asia Ltd. opened its Asia-Pacific (APAC) office in April 2016 and continues working to reinforce its business activities in the region. A core

<sup>\*1</sup> CPS (Cyber Physical System): A system in which data collected in the physical world is analyzed and transformed into knowledge through large-scale data processing technologies in cyberspace to stimulate industry and seek solutions to social issues.



team made up of top-level managers from each national and regional office monitors legislative policies and legal regulations impacting businesses across the Asia-Pacific region and ensures that business activities remain suitable to each location's individual circumstances. On matters such as trade policies that have cross-border implications, solutions are sought through cross-border collaboration. In Singapore, for example, our active participation in the Committee on the Future Economy (CFE) gives us a voice in policymaking.

The Asia-Pacific region is known for its religious, political, and economic diversity. To expand our Social Innovation Business in this region and contribute to solving the social issues it faces, cooperation with national and local governments and involvement in policymaking throughout the region, including Japan, is crucial. For this reason, we sponsor regional events like the Hitachi Social Innovation Forum (HSIF) and Hitachi Young Leaders Initiative (HYLI) as part of our strategy to raise understanding and awareness of our values and vision for the future among those involved in formulating policy.

Until now, Hitachi has emphasized information exchange and communication between Group companies on a national basis. From fiscal 2017, we plan on strengthening collaborative ties between regional offices as well. As One Hitachi, we will continue to seek dialogue with policymakers across a variety of forums in order to resolve social challenges through business.

## Participation in Initiatives

#### Main Initiatives in Which Hitachi Is Involved

#### United Nations Global Compact

Hitachi, Ltd. became a full member of the United Nations Global Compact in February 2009. Our corporate foundation is the basis for continuing growth as a global company, and it also needs to meet internationally recognized global standards that go beyond national and regional laws and regulations. We believe that respecting and implementing the 10 principles of the UN Global Compact will build a stronger foundation for our business.



Global Compact Network Japan (GCNJ)

► World Business Council for Sustainable Development
The World Business Council for Sustainable Development
(WBCSD) is an organization led by CEOs of forward-looking
companies in more than 30 countries worldwide. Its aim is to
create a sustainable future for business, society, and the environment. Hitachi, Ltd. has participated in the WBCSD since 1995.



#### International Standardization Activities

To help create and expand markets as well as to accelerate our global business expansion, we are actively involved in developing international standards and are willing to commit employees to serve as chairpersons or international secretaries or in other key positions of international standards-developing organizations, such as the International Electrotechnical Commission (IEC) and the International Organization for Standardization (ISO).

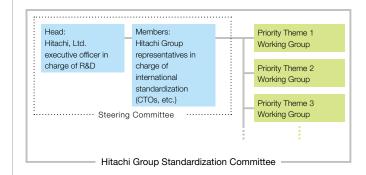
The Hitachi Group Standardization Committee was established to coordinate the efforts of all Hitachi Group companies toward international standardization. The Steering Committee\*1 of this body determines priority themes and promotes standardization activities by establishing working groups for each theme.

Hitachi's international standardization work is well regarded. In fiscal 2016, a Hitachi employee received the IEC Thomas Edison Award, and two of our employees received the Minister of Economy, Trade, and Industry Award. And we were also honored by such bodies as the Information Processing Society of Japan and the Railway Technology Standardization Investigation Committee.

Hitachi is committed to contributing to international standardization via standard-developing organizations like the IEC, ISO, and various consortia to facilitate innovation that resolves social issues, as well as to providing solutions consistent with international standards to support the development of sound global markets.

\*1 Steering Committee: Headed by the executive officer overseeing R&D, this entity includes chief technology officers of Hitachi business units and Group companies. The committee is responsible for decisions on cross-departmental and companywide standardization projects.

#### Hitachi Group Standardization Committee





Review and Improvement of CSR Activities

## Hitachi's Aims: Improving the Quality of Management Through Integration with CSR



Our society faces a wide range of problems, including global warming, poverty, and social discrimination, and demand is growing for corporations to address these problems.

To meet these expectations, Hitachi is integrating its management and CSR, incorporating CSR into routine business practices throughout the organization and improving the quality of management by implementing the PDCA cycle. By communicating with our stakeholders, we are affirming our relationship of trust with society, and by sharing values with stakeholders, we aim to achieve both the sustainable development of society and our economic growth as a global company. Senior management will play a leadership role in advancing measures to contribute to the resolution of global-scale societal issues through our business operations.

## Fiscal 2016 Overview of Activities



In fiscal 2016, we prepared to set up the Executive Sustainability Committee, and the new framework was launched in April 2017. We are continuing to hold global and regional CSR meetings to share our CSR activities on a worldwide basis.

#### Main Plans and Results

#### **Continuous Enhancement of CSR Management**

Continuous Emilianoonione or Continual agonione					
Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans	
Pursuit of management strategy incorporating CSR into organizational activities through structural and governance-related measures	Promote CSR activities throughout the corporate division	Shared each division's latest activities at CSR Promotion Team Meeting (brand communication strategy in achieving 2018 Mid-term Management Plan; 2016 R&D strategy; workstyle reforms; and revision of compliance regulations)	***	Formulate fiscal 2017 CSR Activity Plan and share results	
	Promote understanding of CSR among senior management	Deliberated and approval granted for long-term environmental targets by Senior Executive Committee and Board of Directors     Proposed launch of Executive Sustainability Committee from fiscal 2017 to the CEO, and received approval	***	Hold lectures on sustainability for senior management at Executive Sustainability Committee	



Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Development of CSR network on Group-wide, global basis	Hold Hitachi Group CSR meeting in each country and region	· Held regional CSR meetings in India, Europe, and Australia	***	Hold Hitachi Group CSR meetings at six locations
Improvement and enhancement of management quality through the PDCA cycle based on third-party assessments	Have DJSI World select Hitachi, Ltd. for its index     Bolster response to global assessment	Hitachi Ltd. selected by DJSI eight years in a row     Took measures in response to CDP criteria for climate change and water, as well as for supply chain     Responded to EIRIS, MSCI, and Sustainalytics     Implemented analysis of required disclosure levels and shared results with relevant parties	***	Continue with bolstered response to the global assessments by DJSI, CDP, EIRIS, and MSCI
Promotion of company-wide CSR awareness through education and volunteering	Promote Hitachi Volunteer Day     Advocate employee volunteer activities	Inspected activities implemented on Hitachi Volunteer Day, and collected and tallied data     Resumed distribution of e-mail newsletters to employees	***	Implement Hitachi Volunteer Day     Implement employee-participatory social contribution program, such as the "Buy and Help Society! Bazaar"
	Facilitate worldwide environmental e-learning (fiscal 2016 version) in Japanese, English, and Chinese	Implemented Hitachi University, Hitachi's e-learning system, with more than 140,000 enrolling	***	Continue to promote enrollment, as courses last for three years
	Facilitate worldwide CSR e-learning (revised version) in Japanese, English, and Chinese	· Implemented Hitachi University, Hitachi's e-learning system; more than 120,000 enrolled	***	Add CSR to items covered in training for employees at various levels
Communication with stakeholders through information disclosure	Publish integrated report, sustainability report, and company outline and structurally reinforce the project team for next year's publications     Obtain feedback from stakeholders	Published Hitachi Integrated Report 2016, identified key issues, and reviewed items for publication in 2017 edition     Published Hitachi Sustainability Report 2016 and revised website; considered items to be disclosed in light of GRI Standards and analysis of required disclosure levels for 2017 edition	***	Expand scope of information disclosed based on GRI Standards and analysis of required disclosure levels

★★★: Achieved ★★: Partially achieved ★: Not achieved



## **Enhancing CSR Management**

## Hitachi's Approach

We have been building our CSR policy on a framework based on ISO 26000 to promote the integration of our management and CSR. In 2017, we reorganized our Group-wide sustainability structure by launching the Executive Sustainability Committee, whose members are Hitachi's senior executives and the CEOs of various business units. The committee is playing a central role in advancing Hitachi's sustainability strategy. In addition, we are actively organizing global CSR meetings and undertaking initiatives at the national and regional levels, with the aim of further strengthening our global, Group-wide CSR network. We attach importance to information disclosure, on which communication with stakeholders is based. and are responding to stakeholder needs through the Hitachi Sustainability Report, meeting disclosure requirements of the GRI Standards.

## Hitachi's CSR Management Framework

To realize the Hitachi Group Vision, which draws on our Corporate Credo and Founding Spirit that form the core of our CSR, we have been sharing throughout the Group our CSR Policy, created in 2005, as the basis of our CSR activities. In keeping with a management strategy of actively advancing our Social Innovation Business, we have, since fiscal 2014, adopted

a framework of nine key themes based on ISO 26000 with the aim of further integrating management and CSR and continually improving our CSR activities by running the PDCA cycle.

#### **CSR Management Framework**



## Hitachi's Engagement with Material Issues

Hitachi's CSR activities are premised on an accurate perception of changing social issues and expectations. To strengthen the integration of management and CSR, from fiscal 2015 to the first quarter of fiscal 2016, Hitachi, Ltd. prioritized, from its own perspective, its CSR initiatives in accordance with the 2018 Mid-term Management Plan. As a result, three material issues were identified, namely, social innovation, collaborative creation, and the environment. Our aims for each item were formulated, and initiatives are being actively advanced using the CSR management framework as the foundation for the achievement of those aims.

#### Hitachi's Material Issues

Material issues	Aims for each issue
Social innovation	Utilize digital technology, which can connect all things, to offer optimum solutions to social issues
Collaborative creation	Share understanding of issues and ideals with various stakeholders, suggesting and implementing solutions with them, to create new social value and minimize adverse risks
Environment	Resolve environmental issues involving climate change, resources, and ecosystems throughout the value chain



#### Material Issues and Boundaries

In reporting the achievements of its CSR initiatives, Hitachi seeks to identify issues that are of interest to its stakeholders. To ascertain the ever-changing interests of stakeholders in the light of fluctuating economic and social conditions, we have endeavored since fiscal 2014 to give specific examples of our initiatives under a nine-item CSR management framework. We take note of stakeholders' own priorities, analysis conducted by outside consultants, and the opinions of experts in choosing initiatives that correspond to our nine framework items. These are further screened with reference to the ESG (environmental, social, and governance) investment indexes and SASB (Sustainability Accounting Standards Board) standards, reviewed by the executive officer in charge of CSR, and reflected—starting this year—in *Hitachi Sustainability Report 2016*.

We also aim to provide a more detailed account of the topics' social impact by clarifying the boundaries (importance to internal and external stakeholders) of each topic.

#### Material Issues and GRI Standards

Themes	Material issues	GRI Standards	Reporting	boundary External
Recognition of social responsibility	Realizing sustainable, innovative management	GRI 203: Indirect economic impacts		- Extorna
	Understanding issues through dialogue and taking part in initiatives	p	•	
2 Corporate governance	Pursuing management efficiency and transparency			
	Sharing the Hitachi Group Identity	GRI 205: Anti-corruption GRI 419: Socioeconomic compliance	•	•
	Advancing risk management on multiple fronts			•
Human rights	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	•	
4 Labor practices		GRI 401: Employment		
	Achieving a fair and equitable work environment	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		
6 Environment	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 305: 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		•
6 Fair operating practices	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	•	•
7 Customers (consumer issues)	Pursuing customer satisfaction	GRI 417: Marketing and labeling	•	•
	Ensuring accessibility to products and services  Ensuring thorough management of quality and safety	GRI 417: Marketing and labeling  GRI 416: Customer health and safety  GRI 418: Customer privacy  GRI 419: Socioeconomic compliance	•	•
Community involvement and development	Promoting sustainable community involvement and development	GRI 413: Local communities		
	- Colored Colo			

## Sustainability Management Structure

In October 2013, the CSR Division and the Environmental Strategy Office at Hitachi, Ltd. merged to form the CSR and Environmental Strategy Division. Soon afterward, we began sharing the Hitachi Group CSR Statement and Mission, created in fiscal 2014 to lay out the goals of the new organization, with business units and Group companies.

In April 2017, we created the Executive Sustainability Committee and reorganized the promotion structure it heads.

To promote sustainability policies and activities across the Group, the Sustainability Promotion Meetings were convened to work with sustainability strategy promotion officers from the various business units and Group companies using the CSR and Environmental Strategy Division as a secretariat. As well as holding regular meetings with CSR-related departments at

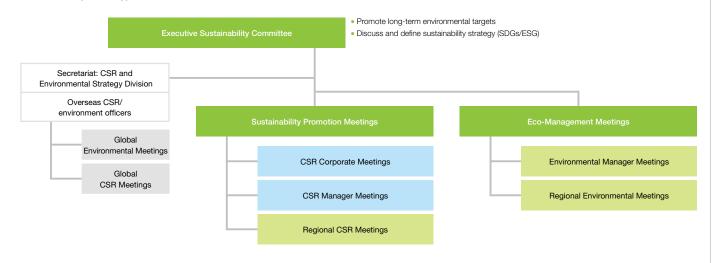
Hitachi, Ltd. and CSR Corporate Meetings, the Sustainability Promotion Meetings also organize CSR Manager Meetings with the CSR departments of business units and Group companies. In addition, the committee will hold regular Regional CSR Meetings for regional headquarters outside Japan to share a common direction and promote sustainability strategy.

To fulfill our social responsibilities, as well as to seek sustainable growth as a global company, we conduct stakeholder dialogue on a worldwide basis in cooperation with our regional headquarters and take a proactive approach to incorporating global social issues into our management strategy while continuously striving to improve the quality of our management.



Executive Sustainability Committee Initiatives

#### Sustainability Strategy Promotion Structure



#### Hitachi Group CSR Statement and Mission

We strive to realize a sustainable society by properly understanding global social and environmental expectations through communication with our various stakeholders and integrating those expectations into our management.

- CSR and environmental initiatives that contribute to solving social issues
- Governance that realizes sustainable management
- Communication that fosters mutual understanding with stakeholders



Activities

Activities	32		
Corporate Governance	33–44	Customers (Consumer Issues)	76–84
		· · · · · · · · · · · · · · · · · · ·	
Pursuing Management Efficiency and Transparency	35	Pursuing Customer Satisfaction	78
Sharing the Hitachi Group Identity	39	Ensuring Accessibility to Products and Services	80
Advancing Risk Management on Multiple Fronts	41	Ensuring Thorough Management of Quality and Safety	82
Human Rights	45–50	Community Involvement and Development	85–88
Respect for Human Rights Throughout the Value Chain	47	Promoting Sustainable Community Involvement	
Respect for Workers' Rights	50	and Development	87
Labor Practices	51–66	Environment	89–121
Achieving a Fair and Equitable Work Environment	54	Promoting Environmental Management	90
Promoting Diversity and Inclusion	55	Enhancing Environmental Management on	
Promoting Occupational Health and Safety	61	an Ongoing Basis	93
A Strategy for Growing Together with		Responding to Environmental Risks and Opportunities	105
Our Global Human Capital	64	Achieving a Low-Carbon Society	107
		Achieving a Resource Efficient Society	112
Fair Operating Practices	67–75	Achieving a Harmonized Society with Nature	117
Promoting Work Practices in Line with			
International Ethics Codes	69		
Engaging in Responsible Procurement	71		



## Corporate Governance

Corporate Governance

## Hitachi's Aims: Developing Efficient and Transparent Corporate Governance



"Sustainability management" is expected to play an array of roles in realizing a sustainable society, a key component of the Sustainable Development Goals (SDGs)—the centerpiece of the 2030 Agenda for Sustainable Development, adopted by the United Nations in 2015. We believe that meeting society's expectations requires a corporate culture that unfailingly contributes to the resolution of social issues through the creation of products and services and that ensures ethical and fair business activities.

We are cultivating a self-directed corporate culture where CSR perspectives are reflected in management decision making and a common identity is shared throughout the Hitachi Group. In addition to pursuing greater management efficiency and transparency, we have identified the main themes of this effort as sharing our Codes of Conduct and values throughout the Group and promoting multifaceted risk management. In these ways we are accelerating the development of corporate governance that incorporates CSR into our decision making and operations across our business activities.

## Fiscal 2016 Overview of Activities



In fiscal 2016, we made a Group-wide effort to enhance compliance, reorganizing our global compliance structure and expanding the Hitachi Global Compliance Program (HGCP). We are promoting further collaboration with our suppliers to strengthen our business continuity plans (BCPs) throughout the supply chain.

# Main Plans and Results Sharing the Hitachi Group Identity

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Establishment of corporate ethics, strict compliance with laws and regulations	· Enhance Group-wide compliance framework globally	Appointed global compliance officers     Held various compliance meetings and committee sessions and communicated CEO's message     Expanded HGCP for Group-wide implementation	***	Enhance Group-wide compliance framework globally through deepening of the Hitachi Group Codes of Conduct and HGCP     Fully launch global compliance structure     Ensure thorough pursuit of business in line with expanded HGCP     Further improvement of compliance reporting system



Corporate Governance

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Instilling of the Hitachi Group Identity in employees	Realize the Hitachi Group Vision by further instilling the Group Identity in employees, raise employee awareness to achieve the 2018 Mid-term Management Plan  (1) Provide training worldwide to promote understanding of the Hitachi Group Identity and Hitachi brand value  (2) Implement "Inspiration of the Year Global Award (IYGA) 2016"; foster and utilize brand ambassadors  (3) Hold brand-training sessions	Published the revised Hitachi Brand Book     Developed brand teaching materials in the     Americas and held webinars     Implemented IYGA 2016 (winners selected     from among 212 entries)     Issued Hitachi Brand News     Held brand training sessions	***	Make ongoing efforts to instill the Hitachi Group Identity (to enhance brand recognition and induce action) (1) Launch brand awards conferred by the president (2) Provide training worldwide to promote understanding of the Hitachi Group Identity and Hitachi brand value (3) Make use of the Hitachi Group Identity movie

★★★: Achieved ★★: Partially achieved ★: Not achieved



Corporate Governance

## Pursuing Management Efficiency and Transparency

## Hitachi's Approach

We not only strive to ensure the legality, soundness, and transparency of our business but also endeavor to respond rapidly to constantly changing economic and social conditions and efficiently conduct operations. At the same time we are bolstering management oversight and monitoring capabilities and clearly defining managerial responsibilities with a view to sustainably enhancing our corporate value by forging ever-stronger corporate governance.

Worldwide social and environmental megatrends, such as population growth and climate change, have reached a point in recent years where they are having a bigger impact on corporate management decisions. As a global company that contributes to society through our Social Innovation Business, we are working to ensure that environmental and social issues are at the heart of decision making at the highest levels of corporate governance.

We give great importance to management efficiency and transparency and appropriate organizational control and are firmly maintaining and reinforcing a management structure enabling us to strengthen our efforts to fulfill our social responsibilities on multiple fronts, such as through proper information disclosure and tripartite audits.

## Corporate Governance

#### Driving Hitachi's Governance

Hitachi, Ltd. has adopted the committee system, which has nominating, audit, and compensation committees.\*1 We aim to establish a framework for quick business operations and to realize highly transparent management by separating the responsibilities for management oversight from the execution of business operations. The majority of our Board of Directors are independent outside directors, including non-Japanese. Our goals are to reflect diverse and global viewpoints as well as to reinforce management supervisory functions. We have 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 independent outside directors, and the criteria for assessing the independence of these directors.

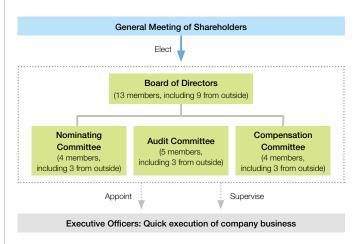
\*1 A corporate governance system under the Companies Act of Japan, where a board of directors makes basic policy decisions and oversees the execution of business by executive officers, while the executive officers, appointed by the board of directors, execute the company's business affairs via a set of statutory committees.



Corporate Governance Guidelines

#### ► Governance Structure of Hitachi, Ltd.

The Board of Directors comprises a majority of independent outside directors and includes five non-Japanese directors, two of whom are women. This represents an effort to reflect global, diverse viewpoints in company management, as well as to reinforce management supervisory functions.



# Strengthening Structures to Expand Our Social Innovation Business

In April 2016 we transitioned to a market-driven business structure with three levels—namely, "Front," "Platform," and "Products"—in order to accelerate collaborative creation with customers and develop value-creating innovations through services and products.



#### Strengthening Frontline Functions of Focus Business Domains

Our frontline function businesses include 12 Front business units (BUs) with strengthened capabilities in sales, engineering, and consulting. These BUs target our four focus business domains of "power and energy"; "industry, distribution, and water"; "urban"; and "finance, public, and healthcare." Each will provide innovation as a service to customers in their region, and we will create synergies in each focus domain in order to globally develop our digital-driven Social Innovation Business.

Our Services and Platforms Business Unit offers a shared platform aggregating and integrating technologies essential for advanced services, including artificial intelligence, analytics, and control technologies.

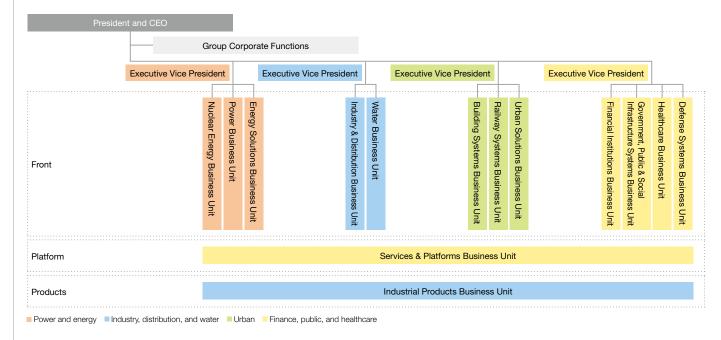
Our product-focused businesses include the companies within the Hitachi Group and our Industrial Products Business Unit. These provide customers and Front BUs with innovative, globally competitive products, parts, and materials, all while pursuing synergies as a Group.

Because BUs are under the direct control of the president, each unit's CEO has investment authority and responsibility for profit and earnings. They work in partnership with other BUs, comprehensively and organically leveraging the resources of the entire Hitachi Group and creating innovations quickly and flexibly in order to provide optimum products and services to customers.

Our business model aims to sustainably create value.

Through our Social Innovation Business, we contribute to improving people's quality of life by addressing on an ongoing basis the issues society and our customers face.

#### Fiscal 2017 New Business Structure





Hitachi to Make a Transition to a Market-Specific Business Structure with Strengthened Frontline Functions



#### Transition to a Global Management System

To accelerate growth in the global market, Hitachi in April 2015 appointed regional chief executives in the four global regions of the Americas, China, the Asia-Pacific, and EMEA/CIS.\*1 In March 2017 the functions of the regional chief executives for the Americas, Asia-Pacific, and EMEA/CIS were revised, and their responsibilities were assumed jointly by the Social Innovation Business Division and the chairman and president of each regionally integrated company.

In the Americas—a market that features world-leading IT innovations—big data analytics are providing new solutions in a variety of industries, including energy. In China, we have brought the direction of our Group operations in line with government initiatives for strengthening infrastructure networks and improving health presented in the Thirteenth Five-Year Plan, and we are also promoting our Social Innovation Business developed for emerging economies. Social-infrastructure-related demand is very strong in the Asia-Pacific, where the aim is to collaborate with local partners in the region in developing our Social Innovation Business to solve issues common in urban areas. In the EMEA/CIS region, where innovations in manufacturing drive markets, the focus will be on rolling out our Social Innovation Business aimed at increasing efficiency in production and supply chains. In all these regions, the chief executives will act as regional "control towers," developing and building solutions with Hitachi customers to resolve a variety of global issues that are becoming increasingly complex and borderless.

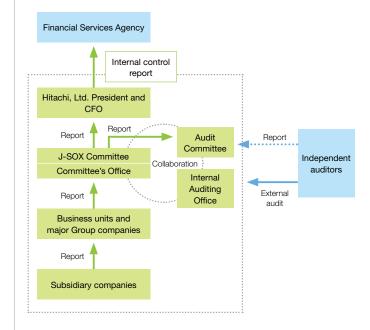
#### Internal Control over Financial Reporting

To ensure the reliability of consolidated financial reporting, every company develops and uses control documents ranging from company-level to business process controls based on the guidelines determined by our J-SOX Committee.\*1

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.

#### Corporate Governance

#### Hitachi Group Internal Control Assessment Framework



## Toward a Stronger "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 the 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.

<sup>\*1</sup> EMEA/CIS: Europe, the Middle East, Africa, and Commonwealth of Independent States.

<sup>\*1</sup> J-SOX: A system for the development of the internal control required under Japan's Financial Instruments and Exchange Act (FIEA) to ensure the reliability of financial reporting.



#### Improving Internal Control Through a "Tripartite Audit" Function



#### Compensation for Directors and Executive Officers

Compensation for each director and executive officer is determined by the Compensation Committee in accordance with the provisions of the Companies Act of Japan.

- (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 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

Corporate Governance

¥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.

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 payment of retirement allowances to directors and executive officers due to the abolition of the retirement allowance system will be in an amount determined by the Compensation Committee at the time of the retirement of a relevant director or executive officer. The amount of compensation for directors and executive officers for the fiscal year ended March 31, 2017, is as follows:

#### FY 2016 Compensation to Directors and Executive Officers

Category	Number of persons	Total amount (millions of yen)
Directors	14*1	383*2
(independent outside directors)	(10)	(308*3)
Executive officers	33	2,569
Total	47	2,953

- \*1 The number of directors indicated excludes two directors who concurrently serve as executive officers.
- \*2 The amount of compensation to directors (excluding independent outside directors) includes the basic remuneration for two directors who retired due to expiration of their terms of office at the close of the 147th Annual General Meeting of Shareholders held on June 22, 2016.
- \*3 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.



# Sharing the Hitachi Group Identity

# Hitachi's Approach

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.

In pursuing sustainable management, we give equal importance to value creation that contributes to the resolution of social issues. This is being advanced through the dissemination and sharing among all employees of the Hitachi Group Identity—an integrated set of principles spelling out our management vision, Codes of Conduct, and values.

As our operations expand across the globe, our supply chain, too, is globalizing at an accelerating pace. This demands that we fulfill our social responsibilities not only as a Group but also in working with business partners. We thus conduct compliance risk surveys in every region, in addition to implementing export-import controls and inspecting the content of transactions so as to ensure normative conduct—free of complicity in any illegal behavior—throughout the supply chain.

# Sharing Codes of Conduct and Compliance Approaches Throughout the Group

# Ensuring Awareness of the Hitachi Group Codes of Conduct

Hitachi, Ltd. formulated the Hitachi Group Codes of Conduct as a common conduct code for the Hitachi Group in fiscal 2010. We issued the *Hitachi Group Codes of Conduct Handbook* in fiscal 2011 as a guidebook for all employees; as of March 2017, more than 260,000 copies have been distributed to employees in Japan. We ask managers to submit a written pledge to comply with the Hitachi Group Codes of Conduct. To deepen awareness of the codes throughout our global operations, we have produced an e-learning tool in Japanese and nine other languages, such as English and Chinese, showing appropriate behavior and presenting specific examples for use in Hitachi Group companies within and outside Japan.



Hitachi Group Codes of Conduct

#### **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.

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 fight corruption and promote fair competition.

## 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, Ltd. 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.

#### Prevention of Antisocial Transactions

To cut off all relationships with organized crime groups and other antisocial forces, we observe the following three provisions laid out in the Hitachi Group Codes of Conduct, and we have established Regulations on Prevention of Antisocial Transactions covering the Group as a whole by adopting the basic policies stipulated in the Codes of Conduct:

- 1. We will have no relations whatsoever with antisocial forces such as organized crime groups, and we will never engage in antisocial transactions under any circumstances.
- 2. We will prevent antisocial transactions through self-inspection of our transactions.
- 3. We will oppose antisocial forces such as organized crime groups with firm resolve, and refuse any improper demands.

The entire Hitachi Group acts decisively to eliminate approaches from antisocial forces in partnership with, where necessary, external specialist institutions (the National Center for the Elimination of Boryokudan or the police). We include

antisocial force rejection clauses in contracts so that if it is determined that a business partner belongs to an antisocial group, we can promptly void the contract and break off the relationship.

#### **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



Preventing Violations of Fair Competition Laws

# Sharing Values Throughout the Group

#### Solidifying the Hitachi Group Identity

#### Instilling the Group Identity in Employees

To help us solve social issues through understanding and embodiment of the Hitachi Group Identity, our brand management must engage everyone in the Group. We use channels including our intranet to ensure that Group employees are clearly aware of what needs to be done to express the Group Identity. To promote understanding of the Hitachi Group Identity and the Hitachi brand, we launched the Inspiration of the Year Awards in fiscal 2003 to share activities within Hitachi that have demonstrated the Hitachi Group Identity and made an outstanding contribution to our brand value. In fiscal 2012, we began evaluating applications globally, renaming the program the Inspiration of the Year Global Awards. In fiscal 2016, the awards saw 212 applications from China, Europe/Africa, India, North America, Southeast Asia, and Japan. Outstanding activities from each region were highlighted on the intranet, and the president presented the awards at a ceremony held at our Tokyo headquarters.

To further instill the Hitachi Group Identity and promote understanding of the Hitachi brand among our employees globally, we held brand-training sessions utilizing the Hitachi Brand Book, a straightforward explanation of the Group Identity and Hitachi brand, and the Hitachi Vision Movie, a visual depiction of the Hitachi Group Vision. By raising employee awareness of the Hitachi Group Identity through these activities, we continue to strive to become a company that "delivers innovations that answer society's challenges."



Hitachi Group Identity



# Advancing Risk Management on Multiple Fronts

# Hitachi's Approach

Changes to our operating environment from such factors as the globalization of the economy and advances in and spread of information and communications technology (ICT) lead not only to the expansion of business opportunities but also to the diversification of risks to our operations.

We have built a diverse risk management system under which we carry out risk analysis to accurately gauge ongoing economic and social changes and use the insights gained to take preventive measures and ensure a rapid response to issues that may arise unexpectedly.

Particularly in recent years, as a company deeply involved in infrastructure projects in countries and regions around the world, we take note of the discussions at meetings like the World Economic Forum on such international risks as the unending series of terrorist attacks, the increasing severity of abnormal weather conditions, global-scale climate change, and the growing scale and sophistication of cyberattacks.

We are reinforcing business continuity plans (BCPs) and further tightening our information security to ensure the stable supply of our products and services and to prevent threats to our networks that could severely disrupt business operations. We will continue to reinforce our risk management on a Group-wide basis and make thoroughgoing efforts to minimize risks to society from our operations.

# 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.





Hitachi Group Guidelines for Developing Business Continuity Plans (for individual departments).



Earthquake simulation drill.

#### 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, Ltd. 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:

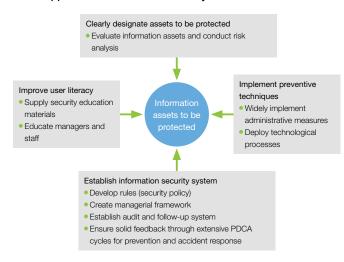
- (1) Precautionary measures and prompt security responses We classify assets to be secured and take safeguarding measures based on vulnerability and risk analyses. We also have an emergency manual for security breaches, based on the assumption that these are inevitable, and not just possible.
- (2) 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*.



#### 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.

Corporate Governance

We 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.



Damage Caused by Ransomware, and Status of Recovery



# 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.

#### 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 of Hitachi, Ltd. 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.



Human Rights

# Hitachi's Aims: Thoroughgoing Respect for Human Rights Across the Value Chain



As our value chain expands on a global scale, we find diverse working environments, business norms, and trade practices in countries and regions around the world, and this has highlighted the need to ensure respect for human rights in our operations. Society's awareness of human rights issues is also rising, and companies are expected to address human rights issues in accordance with such international standards as the UN Guiding Principles on Business and Human Rights. Companies are now being asked not only to respect human rights in their own activities but also to avoid becoming complicit in the human rights infringements of their suppliers and customers.

In carrying out our business, Hitachi recognizes human rights as a key management issue. On the basis of this awareness, we will respect the human rights of all stakeholders, including our own employees and across the supply chain, in every country and region where we operate. We are also engaged in raising awareness of human rights and promoting the use of grievance mechanisms to address employee concerns throughout the Hitachi Group. At the same time, we are strengthening human rights due diligence and expanding the scope of other human-rights-related activities.

# Fiscal 2016 Overview of Activities



In fiscal 2016, we took steps to further propagate the Hitachi Group Human Rights Policy. In addition to implementing human rights due diligence (HRDD), with a focus on human resources divisions, we held training sessions for Group and global employees to enhance respect for human rights.

# Main Plans and Results Respect for Human Rights Throughout the Value Chain

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Propagation of the Hitachi Group Human Rights Policy and implementation of HRDD based on guidelines	Implement HRDD within human resources divisions     Create guidelines for individual divisions     Create an overview edition of guidelines	Hosted three workshops on HRDD within human resources divisions     Issued summary of the guidelines (in Japanese and English)     Prioritized revision of <i>Hitachi Group CSR Procurement Guidelines</i> and HRDD guidelines for procurement divisions were not drafted	***	Have human resources divisions examine measures by taking HRDD results into account     Create guidelines for individual divisions     Continue to promote HRDD     Implement HRDD workshops in Europe



Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Propagation of the Hitachi Group Human Rights Policy and implementation of HRDD based on guidelines	Follow up on companies that have yet to formulate company regulations integrating the Hitachi Group Human Rights Policy, based on the findings of a survey on the number of companies that have established the policy as company regulation	· Ascertained number of companies with company regulations integrating the Hitachi Group Human Rights Policy and shared information with them; sent reminders to companies that have yet to integrate the policy in their regulations	***	
Promotion of employee understanding of the principles on Business and Human Rights and respect for human rights	Implement human rights training sessions for Hitachi, Ltd. executive officers     Hold human rights workshops in Europe     Plan and produce fiscal 2016 e-learning materials	Implemented human rights training session for Hitachi, Ltd. executive officers     Released human rights e-learning materials in three languages: Japanese, English, and Chinese     Implemented HRDD training sessions and workshops in Europe     Implemented human rights training sessions for Hitachi Group companies in China, ASEAN, and Australia     Distributed CEO's human rights message to approximately 156,000 executives and employees	***	Continue to hold training sessions in and outside Japan     Continue to implement human rights training sessions for Hitachi, Ltd. executive officers     Distribute CEO's human rights message

★★★: Achieved ★★: Partially achieved ★: Not achieved



# Respect for Human Rights Throughout the Value Chain

# Hitachi's Approach

The Hitachi Group Human Rights Policy has been formulated to create a value chain where the human rights of all stakeholders are respected. Under the leadership of top management, educational activities targeting all executives and employees are carried out on an ongoing basis to help foster an organization in which human rights infringements do not occur.

Under this policy, we are also building a framework to accurately assess and mitigate human rights risks in the workplace environments of Hitachi's suppliers and other stakeholders.

# Respect for Human Rights

#### **Human Rights Initiatives**

In May 2013, we adopted the Hitachi Group Human Rights Policy to supplement the Hitachi Group Codes of Conduct, drawn up in fiscal 2010. In this policy, we clarify our understanding of human rights as being, at a minimum, those outlined in the International Bill of Human Rights and the International Labour Organization's Declaration on Fundamental Principles and Rights at Work. This policy shapes Hitachi's approach to meeting the responsibility to respect human rights, including implementing human rights due diligence\*1 in line with the UN Guiding Principles on Business and Human Rights,\*2 providing appropriate education to employees, adhering to laws and regulations in all the regions and countries where we operate, and seeking ways to honor the principles of international human rights when faced with conflicts between internationally recognized human rights standards and national laws.

In fiscal 2014, Hitachi added the perspective of business and human rights to its existing structures and policies and developed guidelines on human rights due diligence that explain procedures for everyday business practices. Based on these guidelines, we initiated human rights due diligence in two divisions—procurement in fiscal 2015 and human resources in fiscal 2016—assessing, prioritizing, and considering measures to reduce the human rights risks with which Group employees are likely to be confronted.

- \*1 Human rights due diligence: An ongoing process to identify and assess potential and actual human rights impacts, integrate findings, and take appropriate action to prevent or mitigate potential impacts or to provide for or cooperate in the remediation of actual impacts. The processes also cover tracking the effectiveness of actions to address impacts and communicating externally.
- \*2 UN Guiding Principles on Business and Human Rights: Included in the March 2011 Report of the Special Representative of the Secretary-General on the issue of human rights and transnational corporations and other business enterprises, John Ruggie (A/HRC/17/31).



Hitachi Group Codes of Conduct



Hitachi Group Human Rights Policy

#### Framework for Human Rights

Hitachi, Ltd. established the Corporate Human Rights Promotion Committee in fiscal 1981 to gauge the impact of business activities on stakeholders' human rights and to deliberate on mechanisms and policies for preventing human rights violations. The executive officer in charge of CSR chairs this body, whose members include representatives from sales, procurement, human capital, CSR, and other corporate units. Hitachi is improving its Group-wide human rights awareness based on the guidelines discussed and written by the Corporate Human Rights Promotion Committee. Information from these deliberations is shared with all employees through business unit and business site committees, led by business unit presidents and division heads. Business units provide consultation services through which employees can seek consultation on issues such as sexual harassment and are working to ensure that those coming forward are treated with respect and dignity.

In a practice launched in fiscal 2014, we distribute a human rights message by Representative Executive Officer, President, and CEO Toshiaki Higashihara every year on December 10,



Human Rights Day. In fiscal 2016, approximately 156,000 executives and employees at Hitachi, Ltd. and Group companies in and outside Japan received an e-mail message regarding global trends in human rights, Hitachi's human rights policy and activities, and the importance of individual employees respecting human rights in their work.



Hitachi, Ltd. Framework for Promoting Respect for Human Rights



# Raising Human Rights Awareness Among Executives and Employees

Hitachi conducts regular group training and seminars and uses videos to educate employees in each business unit and Group company. The target is for each employee to attend these sessions at least once every three years (equivalent to a yearly participation rate of 33.3%). In fiscal 2016, the participation

rate came to 41.9% at Hitachi, Ltd. and 48.4% among Group companies. We launched an e-learning program on business and human rights in October 2016, in which approximately 186,000 Group executives and employees in Japan and elsewhere had participated by March 2017. Using educational materials developed in line with the Hitachi Group Human Rights Policy, adopted in May 2013, the program aims to ensure that employees understand Hitachi's human rights policy and act accordingly. In accordance with these goals, the training is provided to all employees once every three years on average and regularly revised based on human rights trends worldwide.

In July 2016, 30 executive officers from Hitachi, Ltd. participated in an officer training session on the theme of human rights challenges for global businesses led by Shigeyuki Kumisaka, president of the Buraku Liberation League, which is fighting for the rights of the descendants of former outcast communities. Touching on several cases, Kumisaka discussed the human rights situation in Japan and the challenges that must be overcome to solve the global immigration issue as Hitachi's business becomes increasingly globalized.



A scene from the officer training session.

#### **Human Rights Due Diligence Initiatives**

In our Hitachi Group Human Rights Policy, we pledged to develop mechanisms for and to continue the implementation of human rights due diligence. Toward that end, in fiscal 2013 some business units launched pilot programs for human rights due diligence to identify key issues that need to be clarified for Group-wide implementation while also analyzing and evaluating human rights risks in six ASEAN countries. Based on the results of these pilot programs, in fiscal 2014 we developed a document offering guidelines for implementing human rights due diligence in collaboration with the nonprofit organization Shift.

In fiscal 2015, we initiated human rights due diligence in the procurement divisions, whose activities are at risk of negatively impacting the human rights of workers in the supply chain and local communities. In fiscal 2016, we incorporated the results of human rights due diligence into the revision of our CSR procurement guidelines for suppliers and in other specific initiatives.

Fiscal 2016 also saw the launch of human rights due diligence for human resources divisions at Hitachi. The operations in those divisions touch on many issues connected to human rights for employees, including working hours, employee treatment, and health and safety. The human resources and CSR divisions at Hitachi, Ltd. also played a central role in a working group that was formed to assess and prioritize human rights risks for employees and explore mitigation strategies. The group included CSR representatives from two business units, three Group companies, and four regional headquarters outside Japan. It also investigated grievance mechanisms, analyzing existing procedures and exploring ideas for improvement. Starting from fiscal 2017, Hitachi will



begin implementing specific human resources initiatives based on the results of human rights due diligence in fiscal 2016.



Human Rights Due Diligence in Procurement

#### Addressing the Risks of Child and Forced Labor

The Hitachi Group Codes of Conduct clearly express Hitachi's firm stance against the use of child labor or forced labor either in Group companies or along our supply chain. The company president's human rights message for fiscal 2016 also addressed the issues of forced labor and human trafficking. Recognizing the growing risks of forced labor amid the ongoing globalization of business, Hitachi also developed an e-learning program for all Group executives and employees on the subject of human rights. The program draws on specific case studies to convey the importance of preventing forced labor and human trafficking problems before they occur.

Hitachi's CSR procurement guidelines for suppliers also clearly forbid the use of child labor or forced labor. As part of our efforts to raise awareness all along the supply chain, these guidelines are distributed to tier 1 suppliers of business units and Group companies. In fiscal 2016, a four-part webinar\*1 series was also held for employees responsible for procurement and human resources in Southeast Asia, where the risk of forced labor is expected to be higher. Speakers from nongovernmental organizations and businesses implementing advanced countermeasures were invited to lead the webinars, each of which was attended by an average of 45 people.

All of these initiatives designed to prevent any instance of the "modern slavery" of forced labor and human trafficking either within Group companies or along our supply chain are covered

in the statement published by Hitachi, Ltd. in accordance with the UK Modern Slavery Act 2015.

\*1 Webinar: A portmanteau word combining "web" and "seminar," used to refer to an interactive seminar held online.



Supply Chain Management



Statement in Accordance with the UK Modern Slavery Act 2015



# Respect for Workers' Rights

# Hitachi's Approach

Our employees are tasked with maintaining respect for human rights within the value chain, but at the same time, in their role as employed persons, they are also stakeholders whose human rights must be respected.

Hitachi's longstanding approach has been to give importance to building a mutually beneficial relationship with our employees as partners in a common effort. Given the globalization of our business, there is a growing need to respect workers' rights not only by complying with international ethics codes but also by taking into account the respective practices and cultures of each country.

Moving forward, we will continually strengthen our system of mutual cooperation to build an equitable worker-employer relationship and improve worker health and safety levels based on respect for workers' fundamental rights.

# Freedom of Association and Collective Bargaining

#### Respecting the Rights of Employees

The Hitachi Group Codes of Conduct were approved by the Senior Executive Committee to specify the standards of behavior applicable throughout the Hitachi Group. It calls for the upholding of the fundamental human rights of employees, in line with the principles of the United Nations Global Compact.

In Japan, where labor unions are recognized, for example, we espouse the three fundamental rights of labor unions (to organize, to bargain collectively, and to act collectively) as seen in the collective agreement between the CEO of Hitachi, Ltd. and the representative of the Hitachi Workers Union.

# Notification of Work-related Transfers and Reassignments

The collective agreement between Hitachi, Ltd. and the Hitachi Workers Union states that any transfer or reassignment of an employee for work-related reasons should adequately take into consideration the situation of the employee, as well as requiring the company to promptly inform the Hitachi Workers Union of the decision. More specifically, in cases of large-scale transfers or reassignments, the company will consult with the labor union regarding the basic issues involved.

#### Cooperating to Improve Health and Safety

Hitachi and the Hitachi Workers Union are dedicated to improving health and safety levels through employee-management cooperation. This includes signing a collective agreement on the promotion of, among other things, health and safety mechanisms, a health and safety committee, education and training programs, and health checks for employees.

The committee works to ensure a healthy and safe work environment through initiatives that include planning and tracking health and safety activities each year, reviewing measures to prevent industrial accidents, and sharing information on whether employees have received their annual health check-ups.



Labor Practices

# Hitachi's Aims: A Global Work Environment Rewarding Individuality and Diversity



Employees are valued partners who play a vital role in sustaining our business. The cornerstone of a sound and mutually beneficial relationship between employees and the company, and the motive force for sustainable growth, is to provide proper working conditions for employees and build a framework for the maximization of their potential. By complying with all work-related laws and regulations and creating a work environment that maintains and develops fair employment relations and makes full use of the abilities of its diverse human capital, Hitachi aims to be a company in which all employees can engage in safe and fulfilling work.

Hitachi strives to remain in dialogue with each individual employee about their basic rights and career development. Systems are in place for employees to discuss matters with human resources at the level of the business unit, and a variety of other contact points, such as a health and safety committee and labor unions, are available to employees as well. When necessary, we encourage employees to use the Compliance Reporting System, which is designed to ensure a careful and thorough response to all issues raised.

#### Fiscal 2016 Overview of Activities



In fiscal 2016, in addition to our continuing efforts to promote the career development of female employees, build a work environment that embraces diversity in our human capital, and employ people with disabilities, we conducted various training sessions that are aligned with employees' respective career paths. Furthermore, as part of our undertaking in the area of occupational health and safety, from fiscal 2017, we will launch a new initiative under the theme of "health and productivity management."

#### Main Plans and Results

#### **Promoting Diversity and Inclusion**

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Creation of a work environment that embraces diversity in human capital (promotion of work-life management)	Help employees     balance work with     child- and nursing care     Realize flexible     workstyle	Introduced an Allowance for Balancing Child Care and Work in October 2016     Launched workstyle reforms (Hitachi Work-Life Innovation) in December 2016	***	Continue to help employees balance work with child- and nursing care Promote workstyle reforms (Hitachi Work-Life Innovation) (1) Raise awareness (2) Promote flexible workstyles (3) Promote operational reforms (4) Realize health and productivity management



Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Support of female employees' career development	Support female employees' career development     Raise awareness of male employees and managers; transform workplace culture	Supported female employees' career development (1) 169 female employees participated in the Women Leaders' Meeting (2) 155 female employees participated in the career seminar for junior-level female employees (including Group companies) (3) 485 female employees took part in the pre-maternity leave and back-to-work support seminar  Efforts made to raise awareness of male employees and manage- ment and to transform workplace culture (1) Held diversity workshops at multiple business sites (2) 153 employees participated in management seminar for manag- ers with female subordinates (open seminar held at Hitachi, Ltd.); individual seminars were held at each business site	***	Continue with support of female employees' career development (1) Implement Hitachi Group Women's Career Success Survey (2) Promote participation of female employees in management trainings and selective training courses (3) Hold Women Leaders' Meeting (4) Hold career seminar geared for junior-level female employees (5) Hold pre-maternity leave and back-to-work support seminar Continue with efforts to raise awareness of male employees and managers (1) Hold diversity workshop (2) Hold management seminar for managers with female subordinates
Promotion of employment of people with disabilities within the Group	Achieve Japan's legally required employment rate at Hitachi, Ltd.     Ensure strict compliance with legal employment rate at all Hitachi Group companies in Japan	Group companies in Japan; seven companies still below the legal rate (as of June 2017)  Held a special hiring fair for people with disabilities  Held study sessions concerning employment of people with	***	Expand hiring through the founding of a special subsidiary     Encourage responsive measures from companies that have not met     Japan's newly stipulated legally required employment rate     Hold Hitachi Group job fair for people with disabilities

## **Promoting Occupational Health and Safety**

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Raising of health and safety man- agement levels across the Group through promotion of global health and safety management	Continue to implement and review minimum Group-wide health and safety standards     Implement preventive measures by utilizing best practices and accident cases     Introduce measures in response to new laws and regulations in Japan	Shared best practices and knowledge on the topic at Group-wide occupational health and safety conference     Put in place stress-check system stipulated by law	**	Continue to implement preventive measures by utilizing best practices and accident cases     Grasp the safety status by collecting Global Safety Figures     Promote office well-being by utilizing the findings from the collective analysis of the stress check     Introduce support system for employees returning to work from leave of absence



Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Health and		· Prepared and streamlined specific action policies for fiscal 2017	***	· Strengthen efforts for health and productivity management through
productivity		· Acquired 2017 Certified Health and Productivity Management		workstyle reforms as well as health promotion by collaborating with
management		Organization Recognition Program		Hitachi's Health Insurance Society

#### A Strategy for Growing Together with Our Global Human Capital

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Implementation of career training for employees, young and old, at various stages in their careers	Hold career training for 660 new employees     Hold Hitachi Career     Development     Workshop (H-CDW)     for 800 new assistant managers     Provide Life Plan     Training, including participation in     (1) e-learning program;     (2) seminars for     50-year-old employees on annual contracts;     and (3) Life Plan     Briefing for 500     employees at age 58		***	Hold career training for 650 new employees     Hold H-CDW for 700 assistant managers     Provide Life Plan Training, including participation in (1) e-learning program for 1,000 employees; (2) seminars for 700 50-year-old employees on annual contracts; and (3) Life Plan Briefing for 500 employees at age 58     Build workplace structures to promote self-directed career development

★★★: Achieved ★★: Partially achieved ★: Not achieved



# Achieving a Fair and Equitable Work Environment

# Hitachi's Approach

Ensuring that hiring and promotions, as well as worker assessment and compensation, are fair is not only a duty that companies must fulfill toward their employees but also an important means of building a healthy relationship with outstanding human capital. Hitachi has a human resource strategy that emphasizes the concept of "decent work" (that is, work that is humane and fulfilling). This concept has taken on increased importance globally as a standard for labor practices, with the International Labour Organization, for example, positioning the concept as an important objective of its activities. Companies are expected to ensure decent work through policies appropriate to their businesses.

Hitachi's policies toward realizing this ideal of decent work go beyond promotion of diversity and inclusion among our human capital around the world to include a variety of other initiatives reflecting the globalization of business, from worldwide implementation of fair employee evaluation systems and working conditions to ensuring that executive positions are open to employees from all regions. We will continue to promote the creation of open, fair work environments that provide greater job satisfaction, in accordance with the business conditions and economic environment of each individual country and region.

#### **Decent Work**

#### Hitachi's Thinking on Decent Work

Human resources are key to Hitachi's ability to adapt to rapid social and environmental change and continue providing new value to customers. Diversity and inclusion are crucial to our strategy, and throughout the Hitachi Group we promote HR management practices that maximize the strength we can draw from a diverse, highly engaged workforce transcending national and corporate boundaries. Our globally shared leadership development program fosters leaders who champion our Social Innovation Business around the world, while a range of other training programs help employees obtain the knowledge and skills they need to provide innovative solutions to our customers.

Hitachi also views it as crucial to create a work environment in which each employee can engage meaningfully in productive work. As part of our efforts in this area, we have unified performance review standards worldwide in a highly transparent and fair system for evaluating each employee's achievements. We have also enacted safety policies that apply across the entire Hitachi Group and continue striving globally to create workplaces that offer safety and peace of mind to those who work there. Other initiatives aim to make it easier to achieve work-life balance, reduce work hours, and promote healthy lifestyles among employees. Additionally, we conduct an annual survey of employee engagement levels across the Group, using the results as the basis for further improvement in management practices.

## **Ensuring Fair Evaluation and Compensation**

With the globalization of business, business frameworks with a global outlook have become increasingly important. Hitachi is working to establish management systems based on consistent

principles across all areas, including compensation, so that our diverse human capital around the world can engage at a high level.

We are developing Group-wide compensation systems that are fair and competitive in the context of each country or region's labor market. Individual performance is also assessed against evaluation criteria that are disclosed to all employees. Every year, the individual achievements of all employees are reviewed to set their compensation, and feedback on their evaluation results is provided to inspire them to develop and grow even further.

We ensure compliance with the laws and regulations of each country in which we operate when determining compensation. In Japan, starting pay for new graduates—representing about half of all new graduates recruited each year across the Group's global operations—was roughly 20% higher than the weighted average of Japan's regional minimum wages.



Advancing Global Human Capital

#### Recruiting Human Capital in Europe

The railway business is an important business field for which growth is expected in overseas markets, particularly Europe and Asia. To further solidify our position in this industry, 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 previously served as president of a Group company in the United Kingdom and has since become an executive officer at Hitachi, Ltd. as well. Our railway business is a crucial one, driving Hitachi's growth, and we have grown it steadily through M&A and other strategic activities.



# Promoting Diversity and Inclusion

# Hitachi's Approach

Hitachi believes that building a corporate culture that fully draws on the diversity of human capital, in terms of gender, age, and values, not only offers employees an opportunity to approach their work with enthusiasm but also contributes to enhancing competitiveness through the provision of solutions that incorporate diverse perspectives. In recent years, with the growing interest among stakeholders for personnel policies enabling flexible workstyles, we are taking a proactive stance toward implementing this approach.

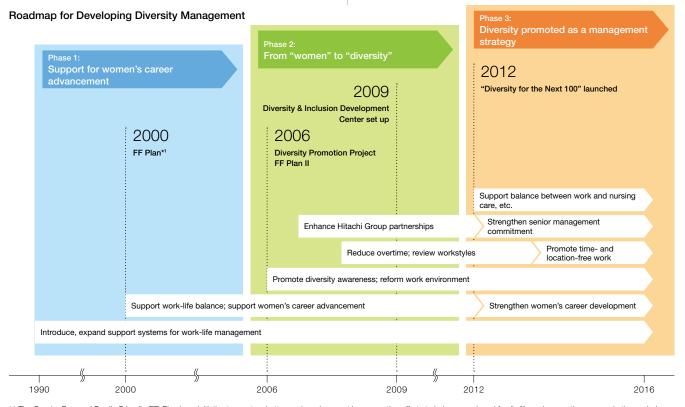
Hitachi has recognized the importance of diversity since the 1990s and has built its management systems accordingly, listening closely to employee feedback. As our Statement on Diversity and Inclusion explains, we view diversity as our growth engine. We pay particular attention to career development for women, not only through strict policies on equal pay but also by actively encouraging the promotion of female employees in accordance with trends both within Japan and worldwide and by establishing key performance indicators to track our success. Our other efforts to promote diversity include work-life management policies that enable employees at any life stage to find fulfillment in their work and initiatives to promote the hiring of people with disabilities. With the strong commitment of top management, we aim to make a significant contribution through the efforts of our diverse human capital to the building of a more sustainable society for all.

# Diversity and Inclusion

#### Statement on Diversity and Inclusion

Diversity is the wellspring of our 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. With strong teamwork and broad experience in the global market, we will meet our customers' needs.



<sup>\*1</sup> The Gender-Free and Family-Friendly (FF) Plan is an initiative to create a better work environment by supporting efforts to balance work and family life and supporting women in the workplace.

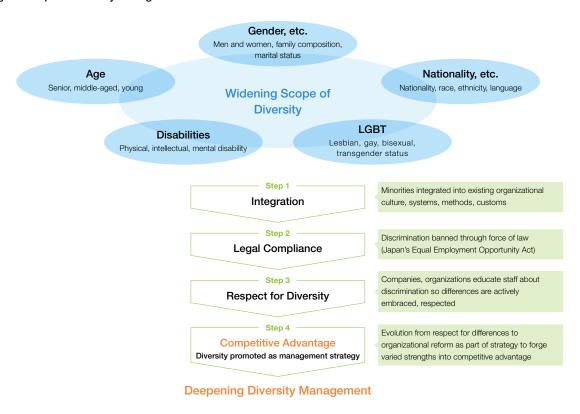


# Diversity Management Initiative: "Diversity for the Next 100"

Since the 1990s, we have been at the social forefront, 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 initiative slogan "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.

#### **Expanding the Scope of Diversity Management**



#### Labor Practices

#### **Development Structure of Diversity Management**

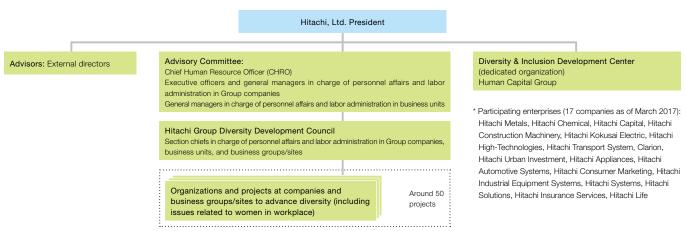
The Diversity Development Project, launched in fiscal 2006 under the president's direct control, was replaced in fiscal 2009 with the Diversity & Inclusion Development Center, which currently operates under the direct supervision of the Human Capital Group of Hitachi, Ltd.

Hitachi, Ltd. and 17 Group companies operate the Advisory Committee and the Diversity Development Council to accelerate awareness across Hitachi as a whole, including support for diverse human resources and work-life management. The Advisory Committee ensures follow-through on our diversity management policy, while the Diversity Development Council discusses specific activities and shares best practices. Both meet every six months.

Group companies and business groups/sites have also set up their own diversity-promotion organizations and projects, such as those to help develop women's careers, in order to enhance initiatives geared to the challenges faced by individual workplaces. We also hold regular meetings to exchange opinions on diversity with labor unions.



#### Hitachi Group Diversity Structure



# **Developing Women's Careers**

#### KPI of 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. These KPIs signal our commitment both internally and to the world to further advance women in the workplace and to improve our diversity management.

In addition to reinforcing existing programs, we will use the Hitachi Group Women's Career Success Survey to highlight progress with initiatives and outstanding issues in each business unit and to set numerical targets for each unit, strengthening our management commitment. We will also boost women's individual ambitions and morale through programs such as the Hitachi Group Women Leaders' Meeting, which targets female employees at the general manager level and above, and the

Roundtable Conference with Female Outside Directors. We intend to create an environment where as many women as possible are able to optimize their potential in management positions. Alongside these efforts, we are working to change the mindset of managers and male staff regarding gender parity and examining our working style as a whole with the aim of transforming our corporate culture.

Employee compensation is set according to each individual's roles and achievements, with no divisions or differences based on gender or age.

#### 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).

Labor Practices

#### **Key Indicators**

Number and Ratio of Female Managers



■ Female managers, Hitachi, Ltd. (left scale) ■ Female managers, Hitachi Group (right scale) 
◆ Percentage of total, Hitachi, Ltd. ◆ Percentage of total, Hitachi Group

Note: Figures include section chiefs and above who are full-time, regular employees.

#### Global Women's Summit

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. A presentation about Hitachi's efforts for the promotion of diversity and inclusion also helped attendees deepen their understanding of the topic. At a subsequent networking reception, the participants shared stories about their careers and the issues they faced at their workplace; 99% of respondents rated the summit either "Very Good" or "Good" in a follow-up questionnaire. We look forward to holding more events to promote diversity and inclusion globally.



# Work-Life Management

#### Hitachi's Work-Life Management Approach

Diversity and inclusion boost productivity and grow Hitachi's business. To ensure that all employees reach their full potential, enhancing our organizational capabilities and creating new synergies, we strive to maintain a work environment that embraces human resource diversity, encourages inclusion, and promotes workstyle flexibility.

Hitachi looks beyond work-life balance, promoting work-life management that enables our employees to take charge of improving the quality of both their work and their private lives. We believe that optimizing time spent in and outside the workplace through work-life management enhances our employees' professionalism and builds character, resulting in both individual and organizational growth over the long term.

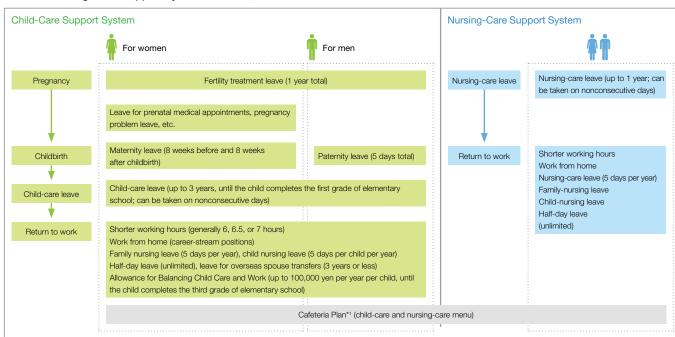
# Fulfill potential to contribute to business Enable diverse ways of working (employee-friendly workplaces) Employees

#### Enhancing Work-Life Management Support Systems

Since the 1990s, we have been introducing and improving an array of programs for employees to balance work with family, aiming to create a more employee-friendly work environment.

In October 2016, we introduced an Allowance for Balancing Child Care and Work to further promote work-life management.

#### Work-Life Management Support System at Hitachi, Ltd.



<sup>\*1</sup> Flextime and discretionary labor systems are also available. The Cafeteria Plan is a system in which employees can select the support that they need, when they need it, according to their "Cafeteria Points."



# Return and Retention Rates After Maternity and Child-Care Leave (Hitachi, Ltd.)

		FY 2016
Return rate (%)	Male	96.7
	Female	97.1
Retention rate (%)	Male	100.0
	Female	98.6

#### In-House Child-Care Centers

The Hitachi Group, in collaboration with its labor union, has set up in-house child-care facilities as a way to help employees balance work with child-raising.

"Genki Club" logo.

#### Genki Club

Established	April 2003
Location	292 Yoshida-cho, Totsuka-ku, Yokohama-shi, Kanagawa, Japan (Yokohama Office, Hitachi, Ltd.)
Capacity	Approximately 70 children
Ages eligible	Children aged several months up to 6 years old (who have not yet entered elementary school) of Hitachi Group employees who live near or commute to the Totsuka area in Yokohama.
Operating hours	7:30-20:00



Excursion (sweet potato digging).



Christmas party.

#### Sakura Hiroba (Hitachi Chemical Group)

Established	April 2008
Location	2-27-22 Higashi-cho, Hitachi-shi, Ibaraki, Japan (near Yamazaki Division, Hitachi Chemical)
Capacity	23 children
Ages eligible	Children aged several months up to 6 years old (who have not yet entered elementary school) of Hitachi Chemical Group employees.
Operating hours	7:20–20:20

# **Employing People with Disabilities**

## **Expanding Hiring of People with Disabilities**

Hitachi, Ltd. and Group companies in Japan have worked hard to employ people with disabilities, such as by holding a special hiring fair and study meetings for Group companies to share information. As a result, as of June 2017 the employment ratio of people with disabilities was 2.15% at Hitachi, Ltd. and 2.25% for the entire Group in Japan. Both of these figures exceed Japan's legally required employment rate of 2.0%. We will maintain our Group-wide drive to hire more people with disabilities.

#### Labor Practices

#### **Key Indicators**

Employment of People with Disabilities and Employment Ratio
 (Hitachi, Ltd.\*¹)



- Employment of people with disabilities (left scale)
- Employment ratio (right scale)
- \*1 Includes 11 special subsidiaries and related Group companies.
- \*2 The legally required employment rate was 1.8% up to fiscal 2012 and has been 2.0% since fiscal 2013.

#### Notes:

- Data compiled in June of each fiscal year.
- $\bullet$  The employment ratio is calculated according to methods prescribed in the relevant laws.



# **Diverse Support Systems for Employees**

#### Support Systems that Meet Diverse Employee Needs

To respond to the diverse lifestyles and needs of our employees, Hitachi, Ltd. has provided a wide range of support by introducing benefits\*1 that include housing support, such as dormitories, company housing, and a housing allowance system, as well as an asset-building savings program, an employee stock ownership program, group insurance, consolation payments, and a Cafeteria Plan program.

The cafeteria plan allows employees to select the benefits they receive. This allows them to tailor a plan to their individual lifestyles and living needs by choosing from a list of options, such as skills development, childcare, nursing care, health promotion, and donations. Employees use Cafeteria Points to select the type of support they need when they need it.

For our retirement and pension plans, defined contribution and defined benefit plans have been introduced across the Hitachi Group in response to the diversification of lifestyles among the elderly and the changes in forms of employment.

The defined contribution pension plan encourages employees to participate in their postretirement planning by providing asset management and investment education, as well as other support. We increased the choice of benefit options and timeframes for both the defined contribution pension plan and the defined benefit pension plan in order to better meet the varied needs of employees.

In October 2016, to actively support the efforts of employees with children to balance work and parenting responsibilities, Hitachi introduced a system of allowances to partially defray day-care and babysitting costs, further enhancing support for work-life management.

\*1 For full-time, regular employees.



Enhancing Work-Life Management Support Systems



# Promoting Occupational Health and Safety

# Hitachi's Approach

As a corporate group that engages in multinational business activities, building safe, healthy, and hygienic workplace environments at business sites around the world is a Group-wide management task for Hitachi. This means that we must be sure to take into careful consideration the social conditions and workplace environment of each country and region.

Hitachi has thoroughly implemented measures for occupational health and safety since its founding. Currently, we are advancing a global occupational health and safety system based on the concept of decent work while also drawing on the lessons and knowledge gained at workplaces in Japan. The measures we take go beyond simple adherence to international ethics codes and include a unique award program to publicize best practices, support for employee-run health promotion activities, and a range of other initiatives. By implementing these at business sites around the world, we seek to continue fulfilling our responsibilities as a global business by creating safe, healthy, and rewarding work environments across the entire Group.

## 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 Always 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:

- 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.
- Comply with the local laws and regulations in each company regarding health and safety.
- 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.
- Require an understanding of Hitachi's principle and the promotion of health and safety awareness from all business partners of the Hitachi Group.
- 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 that include preventing workplace accidents by setting and applying minimum safety standards to be observed by Group manufacturers around the globe as well as taking additional measures tailored to the specific conditions at each company. We respond quickly when an accident occurs, using incidents to make improvements and boost our levels of health and safety management. Furthermore, we foster understanding of work procedures and workplace hazards in newly hired employees and temporary workers by providing health and safety training in advance along with guidance in the workplace.

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.

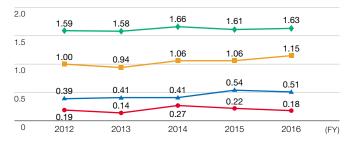
In fiscal 2011, we introduced the Hitachi Group Key Safety Management Designation System. This initiative tracks key safety management improvements at Hitachi Group companies and business sites in Japan that have experienced serious work accidents. Under the leadership of top executives, these



companies and business sites take on management-driven and bottom-up initiatives to formulate and promote specific improvement plans. We are also reshaping the Group's safety management framework and introducing targeted safety measures, including extensive investigations of the cause of serious accidents, reviews of risks to reduce potential accidents, and engagement of third parties with a high level of health and safety expertise to diagnose safety issues.

#### **Key Indicators**

#### Occupational Accident Rates



- → All industries → Manufacturing industries

Notes: Occupational accidents are defined as those involving fatality or work-time loss of more than one day. Hitachi Group figures for Japan, including Hitachi, Ltd., are for 175 Group companies in 2012; for 195 Group companies in 2013; for 251 Group companies in 2014; for 240 Group companies in 2015; and for 200 Group companies in 2016.

#### Hitachi Group's Global Safety Figures (Occurrence rate\*1)

	2014	2015	2016
Americas	2.25	4.35	6.41
Europe	3.34	2.02	5.07
China	2.38	2.10	1.26
Rest of Asia	1.65	0.80	1.72
Other	20.53	22.05	7.74
Japan	0.53	0.42	0.35
Global total	1.23	1.21	1.33

<sup>\*1</sup> Occurrence rate is the rate of workplace accidents per 1,000 directly contracted employees resulting in fatality or work-time loss of more than one day.

# Sharing Health and Safety Information in the Hitachi Group

We built the Hitachi Group Health and Safety Portal System in 2012 to ensure that every Hitachi Group company in Japan can track the health and safety performance of 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.

Labor Practices

Once a year we hold the Hitachi Group Health and Safety Research Presentation Meeting for Hitachi health and safety officers. The 60th gathering, held in November 2016, attracted around 160 participants, who shared newfound knowledge from case studies and heard special lectures from outside experts on ways to improve health and safety activities at companies. Around 80 occupational healthcare workers, including physicians and public health workers, participated in the 16th Hitachi Group Industrial Health Conference in March 2017. Participants presented research results, shared information on methods for improving occupational health programs at business sites, and discussed training approaches for relevant healthcare workers.

# The Hitachi Group Health and Safety Award Program

We have implemented the Hitachi Group Health and Safety Award Program to recognize Group companies in Japan that extend their accident-free records or that receive prizes for health and safety from external organizations.



#### Initiatives to Improve Employee Health

Health is the foundation for being able to work with energy and peace of mind. The fundamental principle of the Hitachi Group Health and Safety Policy is that "Health and Safety Always Comes First." Based on this principle, we are engaged in efforts to maintain and improve the health of employees.

In Japan, occupational healthcare workers, human resource departments, and the Hitachi Health Insurance Society work together to provide a range of health support and appropriate health management in accordance with Japan's Industrial Safety and Health Act.

In Ibaraki, Tokyo, and Kanagawa Prefectures, where many Hitachi Group business sites are concentrated, a system of health-management centers has been put in place, staffed with occupational doctors, nurses, and other occupational health-care personnel. The center supports the health maintenance of employees by providing them with health guidance based on periodic health checks and other examinations to prevent serious disease, while also offering medical interviews and advice to employees working long hours to head off mental and physical disorders. We are also taking steps to raise health awareness through consultations that can help relieve employees' health concerns and promote regular exercise.

In December 2015, revisions to Japan's Industrial Safety and Health Act took effect, requiring businesses of 50 or more employees to put in place a stress-check system. We are proactively implementing stress checks at all business sites in Japan—even those employing fewer than 50 employees, which are only required to make efforts toward compliance—to promote awareness of stress among all employees. Group analysis results from these stress checks will also be used by workplace health and safety committee members, occupational

healthcare workers, and human resource departments to improve workplace environments. In combination, these efforts are expected to help prevent mental health issues and revitalize workplaces. Recognizing that an understanding of basic mental health and stress coping skills is an effective preventive measure, we also conduct regular e-learning and other training sessions for our employees, including temporary workers.

Hitachi's efforts in this area were recognized under the 2017 Certified Health and Productivity Management Organization Recognition Program, in the large enterprise category (White 500).



Health committee members and healthcare workers discuss environmental improvement measures with HR staff.

#### Labor Practices





Hitachi was recognized under the 2017 Certified Health and Productivity Management Organization Recognition Program.



# A Strategy for Growing Together with Our Global Human Capital

# Hitachi's Approach

The globalization of the economy has led many companies to accelerate the shift toward multinational operations. Fostering global human capital has thus become indispensable to providing common global services while at the same time meeting the needs of each country and region. Impacting heavily on the employment and human resource strategies of companies over the medium- to long-term, though, are the falling birthrates and aging populations of industrial countries and the population explosion in developing nations.

The Hitachi Group, with a combined workforce of around 340,000 people engaged together in business activities in countries and regions around the world, is promoting a global human capital management strategy. Specifically, in order to attract, promote, and develop the right human capital, we are taking proactive steps like standardizing required employee skills and evaluation standards globally and rendering human capital visible throughout the Group. We are also working to promote employee development from a global perspective by drafting measures to share values and promote mutual understanding and formulating programs to develop human capital capable of meeting the needs of global operations. Through additional initiatives such as effective implementation of Hitachi's Global Performance Management (GPM) to improve employee engagement and analysis of feedback from our global employee survey, we will continue our efforts to perfect a human capital strategy that allows us to develop along with our employees.

## Global Human Capital Development

#### Advancing Global Human Capital

Our Group-wide global human capital management strategy optimizes both human resources and organizational performance in pursuit of our goal of becoming an Innovation Partner for the IoT Era.

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 and to assess macro management data, such as the allocation of human resources. 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.

In addition, we introduced a performance management system at Hitachi, Ltd. and at some Group companies worldwide to link the individual and operational business goals, with the aim of promoting mutual sustained improvement and the growth of both individuals and businesses. This system will be expanded to include more companies. With an eye to supporting the advancement of employees as our global operations expand, we are introducing common global hiring systems to secure talented personnel, boost efficiency, and reduce hiring costs.

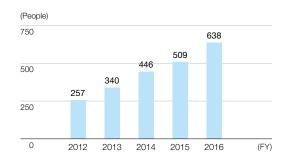
#### Global Recruiting and Globalizing Human Capital

As a means of developing markets worldwide, we have been accelerating the globalization of human capital in Japan through three initiatives: (1) recruiting "global business personnel" who can promote global operations, (2) providing younger Japanese employees with experience outside Japan, and (3) providing globally unified management training.

Given the globalization of our business, our hiring activities are designed to secure the right personnel. In principle, we categorize all employees graduating from universities and technical colleges as global business personnel who can contribute to driving our global operations. Our priority in employing such personnel is to attract those who are eager to build their foreign language skills and relish the challenge of working in different cultures, social settings, and work environments.

#### **Key Indicators**

• Non-Japanese Employees\*1 (Hitachi, Ltd.)



<sup>\*1</sup> Figures include contract-based technical intern trainees with fixed terms



▶ Providing Younger Employees with Overseas Experience Hitachi maintains broad programs to systematically cultivate and secure people who can succeed in global business. To develop the careers of people capable of understanding and adapting to local cultures and lifestyles, we have offered a program for younger employees to live outside Japan. We have sent around 8,300 Group employees over six years beginning in fiscal 2011, allowing them to take part in more than 80 programs designed to promote understanding of other cultures and to engage in language studies, local field studies, and internships, as well as to provide opportunities to work with local people to resolve social issues. In fiscal 2015, we shifted our focus to a practical, work-related model of overseas postings instead of the former emphasis on language learning and cross-cultural activities to accelerate the development of employees ready to take on global challenges. We will continue with these initiatives in fiscal 2017.

#### ► Globalizing Management Training

Along with the rollout of global human capital management, we are also globalizing our human capital development programs.

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. GAP-K helps participants to look at themselves objectively through three modules and to gain a deeper understanding of the Hitachi Group Identity and their own role in maintaining it. They commit themselves to vigorously and fully resolving business issues and challenges with a sense of mission, share values and goal-oriented thinking while inspiring others, and declare, in their own words, how they will put their skills into practice. Participants also discuss strategies for

global business expansion, with special reference to emerging markets, and explore how these strategies can be applied to Hitachi's existing businesses. In fiscal 2016, 23 people were selected to participate in GAP-K over a three-month period in Japan and India.

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 overseas subsidiaries. It is aimed at fostering a deeper understanding of the Hitachi Group's global growth and developing the leadership, thinking, and skills needed for such growth. In fiscal 2016, 24 leaders from around the world took part in the program.

Starting in fiscal 2014, we also initiated standard training courses for general managers and new managers. Around 7,200 people worldwide have taken part in these courses across our Group. We will continue to globalize our management development programs and cultivate leaders to guide us toward further growth in line with our global human capital management strategy.

#### Career Development Support

There are differences among individual employees with regard to what they find fulfilling in their lives and careers. Bearing this in mind, Hitachi has developed a broad range of career development support that focuses on employees' "internal careers," namely, their individual values and views on the significance and meaning of their work. In addition to ensuring that these individuals can fulfill their potential and maximize their creativity, our aim is also to link that individual growth to the positive outcomes and growth of the organization, thereby enhancing

our corporate value. Along with promoting self-understanding and fostering strong individuals with the independence and autonomy to think and act for themselves, we are also providing support to create a framework that will capitalize on the engagement and motivation of individual employees and to enhance mutual understanding as a way of fostering the teamwork needed to enhance organizational strength and performance.

#### **Future Initiatives for Career Development**

In pursuit of becoming a major global player, we are upgrading individual and organizational performance as one of our top priorities. We create value built on employees' individuality and personal aspirations by implementing Hitachi's Global Performance Management (GPM) grounded in diversity and the individual. We are also committed to supporting career development by fostering communication and mutual understanding between employees and their organizations based on programs encouraging individual employees to take greater control of developing their own careers. In these ways, we provide the resources and tools that enable a wide range of people to work together with enthusiasm.

## Conducting a Global Employee Survey

Since fiscal 2013, we have been conducting the annual global employee survey, Hitachi Insights, as a way of measuring employee engagement.\*1 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.

In accordance with the 2018 Mid-term Management Plan, the contents of the survey were partially revised in fiscal 2016



to measure internal awareness and understanding of the plan along with employee attitudes toward Hitachi's corporate culture. The results in all 14 categories, including those concerning targets in the plan, improved compared to the previous fiscal year's results.

Hitachi scored particularly well in "pride in your company" and "teamwork," suggesting that employees are proud to be part of a company that is aiming to grow globally as an Innovation Partner for the IoT Era. On the other hand, the low scores for "resources and support" that were observed in fiscal 2015 did not improve. 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.

Survey results are sent directly to immediate section and department heads so that they can confirm the survey results and communicate with team members. This can lead to concrete initiatives through the PDCA cycle, further enhancing the level of engagement within Hitachi as a whole.

\*1 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 in the Workplace

For Hitachi, the center of career development is the work that employees perform daily in the workplace. Based on 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.

Every fiscal year we also conduct "performance planning," in which individual employees work with supervisor guidance and support, consulting with their supervisors to reach a consensus regarding short-term objectives. These consultations include discussions about past work and evaluations of the content of the work performed to date and the degree to which employee goals were met, followed by the setting of goals for the next fiscal year. Repeating the GPM cycle improves individual performance and further increases motivation and creativity, spurring individual growth and improving organizational results. Along with GPM, employees also take part in career consultations with their superiors to discuss their medium- and long-term career plans regarding such matters as requests for transfers or overseas postings.

In addition, Hitachi administers the Career Counseling Center as part of career development support, in order to provide employees with professional counseling services to help them proactively address concerns related to such issues as their jobs, career plans, or personal relations.

#### **Promoting Career Development Workshops**

Along with our workplace career development, we also provide direct support for individual career development through our career development programs. Our key program is the Hitachi Career Development Workshop (H-CDW), launched in fiscal 2002 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 30s. Participants use self-analysis to deepen their self-understanding with an emphasis on their "internal careers," affirming their career direction, goals, and paths so that they

can direct the development of their own career and skills. H-CDW has gained recognition as a high-quality program for in-house career development that has built up research and improvements during a period of over 40 years.

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." Specific responses received include "I began to seriously examine my medium- and long-term life plan," "I gained a renewed awareness of the importance of my position and responsibilities," and "I started to think deeply about my career and became conscious of my actions." Of the responses from section chiefs, about 60% reported making use of their workshop experiences in managing subordinates. In addition to those programs, Hitachi also offers programs targeting specific age groups, such as career education for younger employees and training for middle-aged or older employees to help them prepare for the changes ahead in their careers. Regarding the training for employees aged 50 and over, a survey conducted between October 2015 and March 2016 found that 90% of participants felt that the training had been beneficial; one respondent noted, "Creating a financial plan and grasping my current situation in terms of specific numbers dispelled my anxiety," while another said, "It was a good opportunity to start thinking about my life plan from age 60 onward."



Fair Operating Practices

# Hitachi's Aims: Fostering a Corporate Culture of Fairness with Our Partners



There is a growing idea that companies should build their businesses with a view to promoting CSR throughout the supply chain, not just around the company's operations. This view informs such global initiatives as the Guidelines for Multinational Enterprises of the Organisation for Economic Co-operation and Development (OECD) and the United Nations' Global Compact and Guiding Principles on Business and Human Rights.

In seeking to be a company that continually fulfills its social responsibility throughout the value chain, Hitachi strictly adheres to laws and regulations and acts in a moral and fair manner with all its business partners. We thoroughly promote the compliance of our employees in all business activities, including procurement, manufacture, sales, export, and taxation. To fully carry out our responsibilities as a corporate citizen, we not only encourage business sites to implement their own investigation and reporting systems for any improprieties but also promote the utilization of a compliance reporting system to prevent or promptly address such indiscretions.

By enhancing activities to raise our suppliers' awareness, we are advancing the creation of a framework to carry out ethical actions and fulfill our social responsibility together with our business partners, thereby fostering a corporate culture of fairness throughout the supply chain.

#### Fiscal 2016 Overview of Activities



In fiscal 2016, we reflected the findings of the human rights due diligence (HRDD) working group from the previous fiscal year in our CSR procurement activities. At the same time, we fully revised our guidebook for suppliers into the *Hitachi Group CSR Procurement Guidelines* in an attempt to further propagate the concept among our suppliers. In addition, we conducted document-based and on-site audits to strengthen our supply chain from a global perspective.

#### Main Plans and Results

#### **Engaging in Responsible Procurement**

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Contribution to continuation of Hitachi's	· Regularly update information on parts and	· Verified information on parts and suppliers	**	· Continue to regularly update information on
operations by working with suppliers to	suppliers	and created non-workday contact list for		parts and suppliers
secure supplies		200 production sites outside Japan		



Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Reinforcement of supply chain from global perspective	Implement written survey for 200 companies and on-site audits for 20 companies as part of supplier monitoring     Host two seminars for Chinese suppliers	Revised questions on check sheet used in CSR monitoring (self-checks) Implemented on-site audits for 20 companies Hosted seminar for Chinese suppliers, attended by 45 employees from 32 companies	***	Continue supplier monitoring by reviewing number of companies and regions targeted for monitoring Implement survey based on revised check sheet by targeting primary suppliers in China, Malaysia, and Vietnam Implement CSR audit at supplier plants in China, Malaysia, and Vietnam Host seminars for suppliers in China Send Procurement Guidelines; analyzing certificates sent by suppliers and deliberating on next steps Formulate policies in response to European regulations on conflict minerals and examine ways to reflect the above in Conflict Minerals Procurement Policy
	Restructure CSR procurement activities based on fiscal 2015 findings of HRDD working group Revise <i>Procurement Guidelines</i> and distribute to suppliers Revise details of supplier monitoring	Distributed Hitachi Group CSR Procurement Guidelines, revised in January 2017, to all primary suppliers Introduced revisions to the Guidelines to procurement members of business units and Group companies at Hitachi Group CSR Green Procurement Committee	***	Revise contents of <i>Hitachi Group CSR</i> Procurement Guidelines when appropriate; run PDCA cycles and promote CSR procurement activities Revise Guidelines approximately every three years

★★★: Achieved ★★: Partially achieved ★: Not achieved



# Promoting Work Practices in Line with International Ethics Codes

# Hitachi's Approach

Given the globalization of the economy and the increasingly borderless nature of corporate activities, our business increasingly spans countries and regions with different governmental and economic frameworks, trade practices, and sets of values. Common worldwide principles in the form of initiatives and guidance are becoming increasingly important in order to thoroughly implement fair business practices around the globe and to avoid any risks that could impede business activities.

Hitachi has formulated in-house regulations in line with widely accepted international standards to govern important business practices, such as bribery prevention, ensuring of fair competition, and tax compliance, and these regulations are made known to and thoroughly implemented across the Hitachi Group. There is ongoing global debate concerning each of these issues, and demands regarding corporate behavior and the interpretation of relevant rules and regulations are constantly evolving. We thus regularly review and update our in-house regulations as appropriate in responding to society's demands. We will continue to act in a thoroughly responsible manner as members of both the global and local community.

# **Preventing Bribery and Corrupt Practices**

#### 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*\*1 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.

We have also established the proper procedures to follow for handling donations such as contributions to political funds in compliance with related laws. Decisions to go ahead with donations or similar gifts are made based on amount-specific approval criteria to prevent donations with improper aims.

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

\*1 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

#### Preventing Violations of Fair Competition Laws

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.



# Tax Compliance

#### 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.



# **Engaging in Responsible Procurement**

# Hitachi's Approach

International initiatives like the UN Global Compact have prompted companies worldwide to give greater thought to CSR and green procurement under which they take social and environmental concerns into consideration when selecting suppliers, thereby strengthening CSR activities throughout the supply chain.

As a company that procures products and services from suppliers in regions and countries around the world, Hitachi was quick to introduce CSR and green procurement policies, which are being meticulously implemented by all Group companies. High expectations have been placed on the Electronic Industry Citizenship Coalition's Code of Conduct in recent years as an international CSR standard for the industry. We are further evolving our procurement activities in line with this code, not only reviewing our own CSR standards but also auditing and cooperating with the CSR initiatives of our suppliers.

Moreover, Hitachi has taken the lead in responding to the issue of conflict minerals, which has been the focus of public concern in recent years, 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.

# Supply Chain Management

#### Creating and Sharing Procurement Policies

We base our procurement activities on the *Hitachi Guidelines* for *Procurement Activities*, while sharing global supply chain issues within the Group. All Group companies follow these guidelines. The guidelines were created in line with the United Nations Global Compact and include 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 *Hitachi Guidelines for Procurement Activities*.

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. To ensure that the guidelines' provisions are strictly followed, 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. Tier 1 suppliers are further asked to confirm that tier 2 suppliers also follow the provisions in the guidelines.

We plan to revise these guidelines regularly in the future to ensure that they always reflect the demands of global society regarding corporate supply chain management.



#### **Guidelines for Procurement Activities**

These guidelines define business transaction standards which shall be applied to all HITACHI executives and employees in connection with their activities purchasing necessary materials, products, services, and information from outside sources.

- Overall procurement activities of Hitachi shall adhere to the "HITACHI Company Conduct Standards."
- HITACHI shall maintain proper partnerships, mutual understanding, and reliable relationships with suppliers with a view to the long term results, giving due consideration to the following:
- (1) HITACHI shall treat all suppliers impartially and be prohibited from favoritism such as giving unfair priority to any specific suppliers.
- (2) HITACHI respects fair business dealings with suppliers and will avoid any improper act which might cause a loss to a supplier apart from normal and customary business transactions.
- (3) HITACHI shall keep suppliers' trade secrets strictly confidential and prevent them from being revealed or improperly used.
- 3. HITACHI develops suppliers to maintain competitiveness from a worldwide point of view, with particular attention to the following points:
- (1) HITACHI responds to all suppliers' offers sincerely, and is always willing to offer the information necessary for suppliers to compete on an even playing field.
- (2) HITACHI shall periodically check and review suppliers' performance and will consider offering more advantageous business opportunities when comparison with other resources allows.
- 4. Through a designated selection process, and in compliance with the standards given below, suppliers shall be evaluated by product quality, reliability, delivery, price, suppliers' business stability, technical development ability, fair and transparent information release, compliance with societies' rules, regulatory compliance, respect for human rights, elimination of discrimination in respect of employment and occupation, elimination of all forms of child and forced labor, environmental preservation activities, social contributions, good working environment, and recognition of social responsibilities with business partners.
- (1) HITACHI shall not request quotations from suppliers with whom there is no intention to enter into a future business relationship.
- (2) In accordance with specified internal procedures, the authority and responsibility for specifications, terms and conditions, and product acceptance and inspection belong to each Requester, Procurement Department, and Inspection Department.
- (3) Procurement Departments shall represent HITACHI when contracting with suppliers.
- HITACHI members are prohibited from receiving any personal gifts or offers from suppliers.

Revised in 2009

Guidelines for Procurement Activities

Procurement Policy



**CSR/Green Procurement** 

# **CSR Supply Chain Management Framework**

Given the global reach of Hitachi's business, there is a growing likelihood of supply chain risks creating management problems, and we are working hard to identify and mitigate these risks beforehand as much as possible.

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 after this discussion are shared throughout the Group through the Hitachi Group CSR Green Procurement Committee, which includes members from business units and key Group companies.

In order to share the philosophy of Hitachi among our suppliers, in fiscal 2015 we also introduced a new initiative to provide suppliers directly with information in a face-to-face format, in addition to the information shared on the Hitachi website as well as our CSR monitoring (self-checks), CSR audits, and other measures. The most recent of these face-to-face events was held in January 2017 at a CSR and green procurement seminar held in Shenzhen for Hitachi Group partners in China. The event was attended by 45 people from 32 companies. At the seminar, Hitachi explained topics including its fundamental CSR philosophy, the CSR audit situation, regulatory trends under Chinese environmental laws, and Hitachi's related policies. Feedback from participants included a comment from one person who was "impressed by the emphasis the company places not only on monozukuri craftsmanship but also on fulfilling its social responsibility in a range of areas." Another participant "gained a sense that profitability is not the sole aim and that it is important to adhere to environmental laws." As reflected in the comments, the

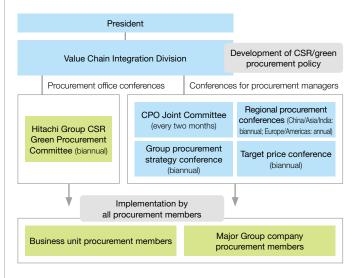
Fair Operating Practices

seminar served to deepen the understanding of Hitachi initiatives related to CSR and green procurement.



Approx. 30,000 companies (66 countries)

#### Supply Chain Management Organizational Structure





## Green Procurement

To procure parts and materials manufactured with reduced environmental impact, so that suppliers help to protect the environment, it is crucial that we share our commitment to environmentally conscious monozukuri craftsmanship throughout our entire supply chain. In fiscal 1998, we led the industry in developing Green Procurement Guidelines to define our basic position on procuring parts and products that do not have a negative impact on the global environment, as well as our requirements of suppliers, so that we can work together to promote green procurement. The guidelines set out supplier requirements for environmental conservation, including building an environmental management system and acquiring certifications. There are also requirements for reducing the environmental impact of products supplied to Hitachi, such as conserving resources and energy in production, recycling, managing chemical substances, and fully disclosing related information.

There is a global trend toward tighter regulations on chemical substances. In fiscal 2013, we reviewed our categories for controlled chemical substances in our *Green Procurement Guidelines* to comply with the stipulations on restricted substances, authorized substances, and substances of very high concern (SVHCs) in Europe's Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) regulation for managing chemical substances within the European Union. Specific changes include: (1) moving some chemicals to the prohibited substances list, (2) further breaking down the controlled substances list, and (3) adopting the industry association list. The previous guidelines were revised to version 8.4 and distributed through Group companies and business units to suppliers to ensure that they are fully informed. We have built A Gree'Net, an Internet-based green procurement system,

to collect information about chemical substances contained in products and other environment-related data from suppliers as soon as it becomes available. The goal is to manage chemicals carefully. Under this system, we encourage suppliers to use the MSDSPlus\*1/AIS\*2 reporting templates published by the Joint Article Management Promotion Consortium\*3 to achieve smoother and more efficient transmission of information.

- \*1 MSDSPlus: A format for reporting chemical substances contained in products created by upstream companies (chemical manufacturers) for midstream companies (molded product manufacturers, etc.).
- \*2 AIS: A format for reporting chemical substances contained in products created by midstream companies (molded product manufacturers, etc.) for downstream companies (assembly manufacturers, etc.).
- \*3 Joint Article Management Promotion Consortium (JAMP): Established in September 2006 as a cross-industry promotion association of 17 companies endorsing the idea that "it is essential for the enhancement of industrial competitiveness to ensure proper management of information on chemical substances contained in articles (parts and final products), and to establish and popularize a concrete mechanism for smooth disclosure and transmission of such information in supply chains."



Hitachi Group Green Procurement Guidelines



Joint Article Management Promotion Consortium

# Response to the Conflict Minerals Issue

Hitachi released a Conflict Minerals Procurement Policy in September 2013. Our *Request to Our Suppliers*, based on this policy, is published on our website as a clear statement of our position.

In fiscal 2016, we revised this policy to ensure that procurement of components incorporating conflict minerals does not benefit armed groups in the Democratic Republic of the Congo (DRC) or adjoining countries. The policy now explicitly lays out the measures to be implemented, including inquiries based on international guidelines, to ensure responsible procurement.

#### Fair Operating Practices

#### Hitachi Group Conflict Minerals Procurement Policy Conflict Minerals

There are numerous types of mineral resources buried within the lands of the Democratic Republic of the Congo, located in central Africa, and its neighbouring countries. Ores containing minerals such as tin which is used in solders to secure electronic parts to printed circuit boards, tantalum which is used in capacitors, tungsten which is used in superhard materials, and gold which is used in lead frames can be found in this region. The locals extract these ores, which traders and brokers export to other countries in order to earn valuable foreign currencies, but part of those foreign currencies are forcibly collected and used as funds to purchase weapons by armed groups that repeatedly engage in conflict and violate human rights in the same region, which has become a major problem. As such, the minerals listed above are called "conflict minerals".

#### **Procurement Policy**

The policy for procurement departments in all Hitachi Group companies have always been and will continue to be to ensure that procurement activities do not result or aid in conflicts within the same region and that the armed groups described above do not benefit from those activities, while continuing responsible procurement activities of minerals that are not related to the conflicts in the region based on local laws. Additionally, we will continue to support the practice of due diligence based on the "OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas" among companies. With these in mind, Hitachi Group would like to request all our suppliers to utilise the Conflict Minerals Reporting Template developed by EICC/GeSI to continue checking the country of origin and supply chain of minerals, and also to procure from the CFS (Conflict Free Smelter)\*1 listed within.

\*1 CFS (Conflict Free Smelter): A list of smelters who have been identified as "not being involved in the conflict within the same region" by the Conflict-Free Sourcing Initiative (CFSI), an organisation that was founded by the EICC/GeSI, which is a group that aims to solve the conflict minerals problem.



Hitachi Group Conflict Minerals Procurement Policy

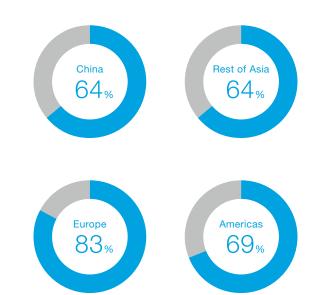


#### Strengthening Global Partnerships

A key element of the Hitachi Group Vision is to improve the competitiveness of our value chain based on partnerships with our suppliers. Given our business aim to expand internationally, we need to extend our procurement globally, looking toward increasing local production for local consumption. In fiscal 2011, we appointed procurement officers to oversee local procurement in China, the rest of Asia, Europe, and the Americas.

A global supplier database built in fiscal 2013 was followed in fiscal 2014 by a new global procurement scheme using the professional service functions available in the Group at the time (Hitachi High-Technologies, Hitachi Capital, and Hitachi Transport System). 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.

#### Rate of Local Procurement of Materials for Main Regions



# 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. After collecting and 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 issues related to the suppliers. Since fiscal 2011, we have expanded the scope to include suppliers in China and the rest of Asia, and in fiscal 2016 we asked 316 suppliers inside and outside Japan to conduct CSR Monitoring.

#### Fair Operating Practices

Additionally, 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 🗸

continuing (continuing)						
FY	Suppliers in Japan	Suppliers outside Japan	Total			
2012	57	41	98			
2013	55	45	100			
2014	0	200	200			
2015	0	218	218			
2016	198	118	316			
Total*1	310	724	1,034			

<sup>\*1</sup> Total also includes self-check results from fiscal 2011.

# Implementation of CSR Audits

Since July 2012, Hitachi, Ltd. has been auditing the manufacturing bases of its and Group companies' suppliers in China and the rest of Asia. In fiscal 2016, we conducted CSR audits of 20 suppliers.

For these audits, we engaged the experienced CSR auditing company Intertek Certification.\*1 Our audits are based on the international SA8000 certification standard developed by Social Accountability International (SAI), an American CSR evaluation institution. These audits investigate our workplace practices, and an EICC-recognized auditor checks suppliers' CSR initiatives from the perspectives of labor and human rights, health and safety, the environment, and ethics.

No major infringements were found at the 20 suppliers audited in fiscal 2016, but some small areas needing improvement were noted, such as overtime work exceeding stipulated

Fair Operating Practices

rules (19 suppliers), failure to conduct periodic inspections of machinery and equipment (6), and insufficient management of hazardous waste (9). The relevant suppliers were requested to submit improvement action plans, and Hitachi, Ltd., together with Group companies, will work with and advise the suppliers until they complete the planned improvements.

\*1 Intertek Certification: With a presence in over 100 countries across the globe, the Intertek Group provides a wide array of certification services in every industrial field.

#### Increasing Green Purchasing of Office Supplies

We are improving our green procurement rate—the ratio of environmentally conscious products purchased to total office supplies—by using a Group-wide online procurement system: the E-sourcing Mall. This system has a range of environmentally conscious products and promotes procurement by clearly labeling these products. In fiscal 2016, our green purchasing rate reached 88%.

# 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 assistance of the consulting services 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, 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 fully revised Hitachi Group CSR Procurement Guidelines based on results obtained from human rights due diligence activities in fiscal 2015 as well as input from a range of sources and perspectives, including Hitachi Europe, Hitachi (China), and outside experts.

Starting from fiscal 2017, Hitachi will incorporate input from various perspectives into a revision of its checklists, which will then be used to prevent supply chain risks. As well as strengthening and improving existing initiatives in this way, we will use the results obtained from the checklists to deepen our communication with suppliers. Additionally, in cooperation with outside experts, we will enhance suppliers' understanding of the expectations of Hitachi Group procurement departments and, at the same time, promote capacity building at suppliers and take other necessary measures.



Respect for Human Rights



Customers (Consumer Issues)

# Hitachi's Aims: Building a Sustainable Society Through Our Products and Services



Under the Hitachi Group Codes of Conduct, we have worked to provide high quality and safe products and services and to prioritize the customer's perspective. The Hitachi Group provides a broad range of products and services extending from household electronics to social infrastructure, and we strive to expand our lineup to address the needs of our clients and issues facing society. We feel it is important to contribute to building societies where everyone can enjoy a lifestyle of convenience and comfort, and toward this goal we are working to respond to the diverse needs of customers regardless of factors such as age, physical and mental abilities, economic circumstances, and cultural background.

We develop products and services with which customers will be satisfied and which can be used with confidence while also striving to improve their accessibility. We also respect the rights of customers and are working to provide accurate information about our products and services while strictly managing customer information. In accordance with this philosophy, we provide a broad range of channels through which customers can make an inquiry or voice their opinions about our products and services. In addition to communicating with the sales floor staff, customers can contact our comprehensive customer support through the websites of Hitachi, Ltd. and all Group companies.

# Fiscal 2016 Overview of Activities



Hitachi is working to create mechanisms to ensure respect for the rights of customers. In fiscal 2016, we continued to achieve improvements in our business activities by acting on feedback from our customers. We also worked to improve the accessibility of our corporate website used in communicating with our customers. We are working to increase customer satisfaction through improvements in the quality of our products.

# Main Plans and Results Pursuing Customer Satisfaction

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Creation of Group-wide mechanisms to keep track of customer satisfaction and feedback from customers	Come up with and implement on a trial basis mechanisms to identify business units that have yet to conduct customer satisfaction surveys and to ascertain the loyalty of key customers	Reviewed state of implementation of customer satisfaction surveys and conducted hearings on state of implementation of Net Promoter Score at the Railway Systems Business Unit  Conducted customer satisfaction survey at information divisions (collection rate of 88%)	*	Continue to conduct customer satisfaction surveys at each business unit to improve operations



# **Ensuring Accessibility to Products and Services**

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Improvement of corporate website accessibility in keeping with 2010 revisions of Japan Industrial Standards	Annually conduct an online training session on website accessibility in Japan     Annually update information and distribute materials for online conferences at various locations outside Japan	Conducted two online training sessions on website accessibility     Distributed materials for online conferences at various locations outside Japan	***	Revise the Website Accessibility Guidelines     Provide the Website Accessibility Guidelines     in Japanese, English, and Chinese     Annually conduct an online training session     on website accessibility in Japan     Annually update information and distribute     materials for online conferences at various     locations outside Japan

# **Ensuring Thorough Management of Quality and Safety**

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Eradication of serious accidents	· Report zero serious accidents (fire/non-fire)	Reported six A-class accidents out of 13 serious accidents due to initial failure Reported one serious non-fire accident related to product safety Had zero compliance incidents	*	· Report zero serious accidents (fire/non-fire)

★★★: Achieved ★★: Partially achieved ★: Not achieved



# **Pursuing Customer Satisfaction**

# Hitachi's Approach

As a company that offers a broad range of products and services, we believe it is important to engage in corporate activities with the general public in mind, not just the corporate and individual consumers with whom we deal directly.

To improve customer satisfaction (CS), we have created the Customer Satisfaction Management Guidelines. We share customers' thoughts obtained through direct dialogue, customer service counters, and other means within the relevant divisions and reflect these in our management, products and services, and solution strategies.

The opinions and requests we receive from our corporate clients, as well as the more than 2.3 million comments submitted each year by a broad spectrum of individual customers, are shared with all Hitachi divisions engaged in manufacturing. Drawing on our strengths as a provider of solutions for consumer issues, we apply this feedback in implementing improvements in a full range of products, from industrial equipment to consumer appliances.

We also look to communicate information through our advertising and public relations activities in a truthful and appropriate manner that does not mislead customers or in other ways that may adversely affect society, such as by reinforcing human rights infringements. These guidelines and activities are shared with a continually larger number of Group companies outside Japan, enabling Hitachi to enhance customer satisfaction from a global perspective.

# **Customer Satisfaction**

#### **CS** Improvement Activities

Using the Customer Satisfaction Management Guidelines, one of the pillars of the company's business management, Hitachi continues to improve CS with the goal of creating innovation through collaboration with customers.

#### **Customer Satisfaction Management Guidelines**

- Listen to our customers, who determine the value of products and services
- 2. Review information from our customers is another source of improvement
- 3. Offer prices and quality that are competitive
- 4. Respond rapidly to keep our promises to our customers
- 5. Adopt systems that prevent accidents and minimize their impact

Formulated in 1994

# Reflecting Customers' Voices

Our sales and marketing division uses customer input in developing management, product, and solution strategies. We identify key customers who will help grow our business, then assign an account manager (AM) to each one. The AMs serve as customers' "portals" into Hitachi Group companies in Japan, and the whole Group works with them to build closer relations with customers and to boost customer satisfaction.

Our Hokkaido, Tohoku, Chubu, and Shikoku area operations hold executive seminars for local customers. In the Kansai area, Hitachi, Ltd. works with Group companies to stage Hitachi Group exhibitions. Through direct dialogue with customers participating in these seminars and lectures, we

incorporate their expectations for Hitachi and their opinions into product strategies.

To accelerate collaborative creation with customers in Hitachi's evolving Social Innovation Business, we also hold the Hitachi Social Innovation Forum in North America, Europe, Asia, and other regions, providing lectures, exhibits, and more. Our sales teams invite our customers to these events to deepen their understanding of Hitachi's business. We also collect feedback from these events to improve our future operations.

Our R&D Technology Community program provides opportunities for collaborative creation with customers. Project leaders invite customers to their research labs to see exhibits of products and systems currently being developed.

# Applying Advertisement Guidelines

Based on its Customer Satisfaction Management Guidelines, Hitachi, Ltd. applies advertisement guidelines to ensure that its advertising activities comply with laws and regulations showing proper consideration for society as a whole. We will continue to create advertisements that reflect ongoing changes in society, that provide customers with clear and concise messages, and that are appropriate for a company committed to contributing to society.

As issues that arise from advertisement activities can have broad impact on the company, we have established in each business unit a framework for evaluating the expressions in advertisements that stands independent of the ad production process. Following this institutional check, we also evaluate advertisements to ensure that they are socially appropriate.



We designed our advertisement guidelines to be flexibly adjusted and applied to the entire Hitachi Group's diverse operations. At our business locations outside Japan in particular, we strive to ensure appropriate advertising activities by confirming all items on the checklist included in the guidelines.

## **Providing Customer Support Online**

Hitachi offers comprehensive customer support on its website. This enables us to process customer inquiries, opinions, requests, and complaints—in collaboration with the customer support offices of Hitachi Group companies in Japan—to improve our business operations, as well as our products and services. We also conduct training courses to provide better handling of these inquiries.

As one initiative, we have been holding the Web Inquiry Responsiveness Improvement Course since fiscal 2009. In fiscal 2016, 49 Hitachi Group company employees took the course (bringing the cumulative total to 750 participants), which features case studies on responses to inquiries. Going forward, we will strengthen coordination among Group companies to respond more quickly and effectively to customer inquiries, using the website as an important contact tool.

# Improving Customer Satisfaction in Electric Home Appliances

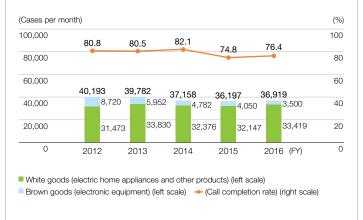
The Electric Home Appliances Customer Satisfaction Division has enabled the expansion of Hitachi's business from electronic and electric equipment to the environment business by drawing up a vision for environmental value creation, actively promoting various service areas.

Our call center and website handle about 2.36 million customer inquiries, repair requests, and complaints about washing machines, LCD TVs, and other appliances per year.\*1 We have undertaken a number of initiatives to better respond to inquiries and to reflect customer feedback in our *monozukuri* craftsmanship, including improving the contact success rate by using outsourcing; creating a database of customer feedback, including consultations, inquiries, and complaints; and enhancing our website's FAQ section.

We also conduct semiannual customer service evaluation surveys at approximately 90 service centers in Japan. Based on the answers, we improve services through CS training courses and other programs.

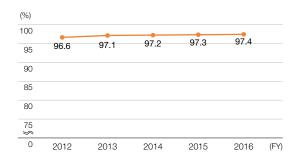
With the expansion of Hitachi's markets outside Japan, sales offices have been opened in nine countries in Asia and the Middle and Near East. We are also working on unifying management of operations outside Japan.

- \*1 Since fiscal 2013, technical inquiries from suppliers and parts orders have been excluded from these statistics.
- Customer Contact Cases, Call Completion Rate (12-Month Average)



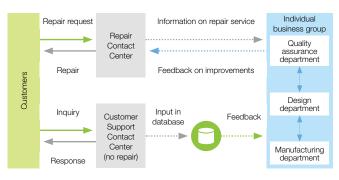
#### Customers (Consumer Issues)

 Results of Evaluation Survey for Customer Repair Services (Customer Satisfaction)



Note: Evaluation survey for fiscal 2016 carried out in June–July 2016 (35,400 respondents; 38.0% response rate) and December 2016–February 2017 (28,800 respondents; 36.1% response rate).

#### Flow of Customer Service



→ Response activity ···· Flow of information ··· Information sharing



# Ensuring Accessibility to Products and Services

# Hitachi's Approach

ISO 26000 provides guidelines for corporate social responsibility. It identifies such core consumer issues as "fair marketing, factual and unbiased information" and "access to essential services" and calls on corporations to actively take measures addressing these. It is the base of our CSR management framework, and in applying it we are working to improve our products and services to make them broadly accessible to society through such activities as the appropriate disclosure of product information and the promotion of universal design.

As symbolized by the adoption of the UN Sustainable Development Goals, worldwide interest is growing in achieving a more sustainable society, such as by supporting the economic growth and higher living standards of emerging economies. We, too, are enhancing our business structure to contribute to the development of these economies. We are developing products and services to meet new social needs and engaging in active marketing activities carrying out our Social Innovation Business.

# **Universal Design**

We promote universal design (UD) with a focus on three aspects of our products: their quality of use, their accessibility, and their entire life cycle. Quality of use means focusing on the traits that make people feel that the product is easy and enjoyable to make a part of their lives. Accessibility refers to the range of people who can use a product or service. And life cycle covers all the customer-relevant stages of the value chain, from product purchase through to disposal.

We conduct basic research on users' behavioral and cognitive characteristics to formulate UD guidelines and reflect these in product development, incorporating input from users and experts at every stage. The information obtained during product development goes into a database shared by our businesses in Japan. We also distribute some of this information externally to promote open-source standardization and education.

We incorporate UD considerations as a fundamental component of home and digital appliance product design. During the development of the front loading washer-dryer machines released by Hitachi Appliances in 2016, we incorporated universal design to improve the product's performance, including increased capacity and extended range of functions. Through usability testing of the control panel, we explored alternative button layouts for more intuitive operation and angles for superior visibility, successfully combining multifunctionality with usability. We also made the detergent dispenser more cleanable by changing its shape, allowing spilled detergent

to be easily wiped up, and improved maintainability by moving the circuit board unit to a location that did not interfere with repairs and servicing.



A front loading washer-dryer machine that incorporates UD-conscious performance improvements.

# **Product Safety Information Disclosure**

# Information Disclosure for Safety

Hitachi's Product Safety Assurance Guidelines state that our highest priority is the safety of our customers, and, based on these guidelines, we promote activities to ensure safety across the Group.

As changes in social norms and the environment bring about the need for higher standards of safety, we are crafting even higher safety standards through the work of our risk assessment team, who share the latest practical cases within



the Group and evaluate the safety activities related to each product as part of their activities to increase trust in Hitachi.

We are also proactively working to disclose safety information on the use of our products and establish the Guide for Preparing User Instruction Manuals in order to improve risk communication with our customers.

# Adaptation for Emerging Markets

# Product and Service Adaptation for Emerging Markets

As a consequence of their rapid economic development, emerging markets face issues including food shortages, poverty, and environmental and energy concerns, which are attributed to urbanization and population growth. In an effort to seek solutions to these social issues, we are expanding our Social Innovation Business globally.

Economic growth and rising incomes in India have made bolstering the nation's financial infrastructure a top-priority issue, and the Indian government is promoting measures to expand access to financial services throughout the country, including in rural communities. Hitachi entered India's payment services market by acquiring a major domestic firm (now called Hitachi Payment Services with 1,300 employees as of February 2017) with a proven record in automated teller machine (ATM) services, including monitoring, maintenance, and support in optimizing installation for better location selection and further efficiency.\*1 This has enabled us to increase our payment services nationwide, and, as of February 2017, we manage over 50,000 ATMs and over 320,000 point of sale (POS) service devices.

Additionally, in response to India's strong demand for ATMs and a governmental "Make in India" initiative designed to promote the manufacturing sector, in October 2015 Hitachi established Hitachi Terminal Solutions India (24 employees as of February 2017) as an ATM manufacturing base. Producing highly reliable banknote recycling ATMs using the latest sensing and mechatronics technology developed by Hitachi-Omron Terminal Solutions, the company is aiming at a manufacturing target of 1,500 units per month.

Like developed countries, where cashless settlement and other FinTech\*2 services are widely available, India, too, is achieving government-led advances in digital payment. Hitachi stands at the forefront of these developments, strengthening its support for cashless settlement services in addition to its existing cash settlement solutions and continuing to contribute to the improvement of India's financial and settlement infrastructure.

Moving forward, we also plan to expand our financial services business in Southeast Asia and other emerging countries.

<sup>\*1</sup> ATMs include cash dispensers (CDs).

<sup>\*2</sup> FinTech: A portmanteau of financial technology, describing convenient and innovative financial services using IT created from the point of view of customer needs.



# **Ensuring Thorough Management of Quality and Safety**

# Hitachi's Approach

Meeting the quality standards our customers expect and providing products and services they can use with confidence are the management themes cited at the beginning of the Hitachi Group Codes of Conduct that each employee is expected to fulfill as a promise to society. We are establishing thorough quality assurance measures from the design and production stages through after-sales service, as well as working to ensure a quick response and proper information disclosure in the event a problem emerges. In addition, as production and other operations increasingly take place outside of Japan, we are giving importance to quality assurance in our global human resource development activities, and we are working to expand our current programs.

These efforts are important in enabling Hitachi to grow together with society. They must also be actively and comprehensively pursued in the light of the impact of our products and services on society in case of an emergency. Hitachi not only complies with laws and regulations and adheres to accepted standards but also formulates and abides by stringent Group-wide criteria in response to economic, social, and technological demands.

# **Quality Assurance Activities**

#### **About Our Activities**

Based on the Corporate Credo of contributing to society through the development of superior, original technology and products. Hitachi is engaged in the *monozukuri* craftsmanship with quality and reliability as top priority. An integral aspect of this is ochibo hiroi, Hitachi's traditional approach meaning "gleaning" in English, through which we learn from failure and further develop our technologies. In practice, when an accident occurs, we not only investigate the technical cause of the accident but also have an executive officer in charge and relevant staff members thoroughly discuss the process, framework, and psychological factors of the incident in order to improve our product reliability and customer satisfaction. To ensure that quality and reliability are maintained, we enhance our quality assurance activities from the perspectives of organization and management, technology, and human resources in every process—from planning and development to design, manufacturing, delivery, and maintenance.

From fiscal 2010 to 2015 we promoted Group-wide measures to ensure product safety, compliance with laws and regulations, human resource development, and quality improvements. To realize our fiscal 2018 Mid-term Management Plan, from fiscal 2016 onward we are steadily working to improve the quality of services and the reliability of our products for quality, as well as to promote the reduction of loss costs with better quality management.

#### Intensive Risk Assessment

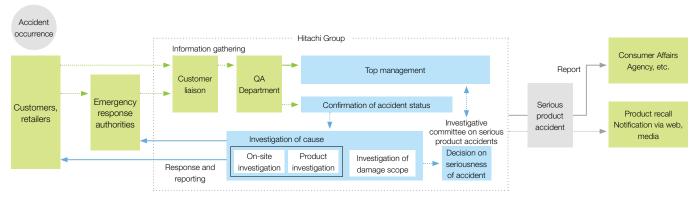
Hitachi is committed to the delivery of safe products and services by combining expertise and technologies in such varied areas as planning, research, design, manufacturing, quality assurance, and maintenance. The safety of our customers' life, health, and property is the top priority in product development. Therefore, we verify safety at every step, from development and production to sales and maintenance, and conduct risk assessments from a wide perspective in collaboration with related business units and research laboratories. In responding to these risks, we apply the safety principles of ISO/IEC Guide 51 in accordance with the product safety handbook for business operators published by Japan's Ministry of Economy, Trade, and Industry, ensuring safety by means of the mitigation measures of risk reduction through design (fundamental safety design), risk reduction through protective measures (safeguards), and risk reduction through usage information (product manuals), in order of priority.

#### Complying with Technical Laws

To supply our customers with products that they can use with confidence, we comply with all product safety and technical laws, including those covering environmental consciousness and safety labels. We distribute information on product regulations worldwide, along with amendment trends and enforcement dates, among Hitachi Group companies. We have also created guidelines for assessment of technical laws and quality assurance systems, sharing them throughout the Group. The guidelines focus on clarifying product-specific laws



#### Response Flow in the Event of Product Accident



---- Flow of information --- Report ---- Information sharing

(the product-specific laws map); on regulatory compliance activities and continuous improvement of processes, based on our compliance management system; and on compliance education, as well as raising compliance awareness.

# **Handling Product Accidents**

When a product accident occurs, the division responsible acts swiftly to resolve the problem from the customer's perspective. For an especially severe accident, we report to government agencies in line with legal requirements and publish the incident information on our website and through other channels. At the same time, we promptly submit a status report to top management, ensuring fast and appropriate action at all companies across the Group.

# Quality and Reliability Education

We conduct technical lectures for engineers engaged in *monozukuri* craftsmanship at a range of levels from beginner

to expert. Hitachi's distinct approach to *monozukuri*, including our Founding Spirit and lessons learned from past accidents, is a core part of our identity, and as part of our efforts to ensure that it is practiced throughout the Group, in November 2014 we initiated training on reliability improvement to foster instructors. To date, we have trained over 200 instructors who are passing on Hitachi's *monozukuri* to the next generation of engineers.

Each business unit also conducts specialized technical courses regarding manufacturing, quality assurance, and maintenance at their quality assurance training centers.

# **Ensuring Home Appliance Safety**

We are reducing consumer appliance accidents to near zero levels in line with Hitachi's Customer Satisfaction Management Guidelines, which set avoidance of all accidents as the baseline. To this end, we conduct product safety risk assessment as well as testing worst-case scenarios—for example, deliberately setting a fire inside a product to confirm that the fire will

Customers (Consumer Issues)

not spread outside it. Furthermore, along with each product's full manual, we include a quick start guide summarizing key features and operations, and make step-by-step how-to videos available on our corporate website as well.

Additionally, to improve sharing of on-site investigative procedures and ensure the safety of the customers who use our products, we are enhancing our efforts to communicate on risk factors with the relevant emergency response authorities. From July 2011 to the end of fiscal 2016, we held 17 briefings at fire departments around the country, sharing information on investigative procedures for fire sites and explaining the measures taken to ensure the safety of new products. These endeavors saw Hitachi Appliances awarded a letter of recognition by the Fukuoka City Fire Department for the contribution our staff have made toward increased fire safety awareness and our advocacy work on public fire prevention policies.

We will continue to make all our consumer appliances even safer, using our own voluntary action plan for product safety, so that customers can use our products with confidence.

# Training Global QA Personnel in Asia

As local production has been growing in Asia, we are carrying out training to ensure that products from the region meet Hitachi's global quality standards. For example, we host conferences for QA managers in China and Thailand, where we have a large number of manufacturing sites, to raise quality awareness with regard to Hitachi's *monozukuri* craftsmanship and to share information and best practices.

Additionally, to help employees in quality assurance become global players and improve their level of quality management, we provide three levels of training courses in Beijing, Shanghai, and Guangzhou in China and in Bangkok, Thailand: the Basic



Reliability Course,\*1 Intermediate Reliability Course,\*2 and Advanced Reliability Course. In the Advanced Reliability Course, managers and senior managers hold group discussions on past product accidents to investigate the causes, including process-related, organizational, and psychological factors, and these discussions help them enhance their ability to identify issues and craft solutions.

- \*1 Basic Reliability Course: Deepens understanding of Hitachi's monozukuri craftsmanship, quality management, and labor safety.
- \*2 Intermediate Reliability Course: Improves understanding of more practical issues, including Hitachi's monozukuri craftsmanship, ISO 9001 certification, defect elimination, design for reliability, and purchase management.

# **Rigorous Information Management**

# Communicating with Customers on the Web and Social Media

Hitachi places great importance on digital tools, including our corporate website and social media, for promoting our activities and deepening customer understanding as part of developing our Social Innovation Business globally. Effective risk management is required when using these digital tools on online platforms to protect our brand and avoid violating the rights of others, including human rights. To this end, we have established the Hitachi Disclosure Policy, the Global Information Security Administration Rules, and the Social Media Communication Guidelines as guidance instruments, sharing them with Group companies worldwide.

Also, Hi-CRM, Hitachi's customer relations management system, has been applied to 189 Group companies to collect and accurately manage customer information Group-wide, in addition to serving as a marketing tool. Hi-CRM covers more

than 80% of the orders received across the whole Group, with the database enabling us to formulate more effective sales strategies and offer collaborative solutions by multiple businesses. We are currently considering rolling out the system more aggressively across the Group.

## **Protecting Personal Information**

We established a personal information protection management system based on our Personal Information Protection Policy. Through the rollout of this system, as well as the safe handling of personal information, e-learning programs for all employees, and periodic audits, we are ensuring protection of personal information throughout the company.

We are also establishing a management system and defining internal regulations in line with legal requirements to appropriately manage information related to Japan's My Number taxpayer identification system, which the government introduced in January 2016.

During fiscal 2016, no grievances concerning breach of customer privacy or loss of data were recorded in the system that aggregates all such reports from Group companies.

#### Privacy Mark\*1 Certification

Hitachi, Ltd. first received Privacy Mark certification in March 2007. We have maintained the high level of privacy protection needed to renew this certification five subsequent times, most recently in March 2017.

The entire Hitachi Group is committed to personal information protection, with 47 Hitachi Group companies *⊙* in Japan having received the Privacy Mark as of May 2017. In July 2009, the Corporate Hospital Group in Japan also gained Privacy Mark certification. This group is working hard to protect and carefully

Customers (Consumer Issues)

handle the personal information of its patients and others.

Hitachi also strives to safeguard personal information globally at Group companies outside Japan based on the Personal Information Protection Policy and by complying with all applicable laws and regulations as well as the expectations of society at large.

Hitachi experienced two known leaks of personal information during fiscal 2016.

\*1 Privacy Mark: A third-party certification established in April 1998 that is granted by the assessment body Japan Information Processing Development Corporation to businesses that have taken appropriate security management and protection measures related to personal information.



Personal Information Protection Policy





Community Involvement and Development

# Hitachi's Aims: Building a Better Future Through Collaborative Creation



Corporations interact with a diverse community of stakeholders through their on-site operations. In working toward a sustainable society, modern corporations are expected to recognize the value of community interaction and utilize their operational strengths in actively supporting the local community through projects that bolster involvement and development at the local level.

As a good corporate citizen, Hitachi is collaborating with various stakeholders in carrying out a diverse range of community activities with the aim of achieving coexistence with society, such as through youth development, creation of cultural diversity, assistance for local community development, and environmental preservation.

# Fiscal 2016 Overview of Activities



In fiscal 2016, we implemented a survey on community engagement using the LBG guidelines and moved forward with community investment. We continued to support community engagement by our employees and to implement human resources development measures in developing countries, as well as cultivating STEM human resources.

# Main Plans and Results Promoting Sustainable Community Involvement and Development

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Examination and implementation of measures to establish longer-term relationship with communities in which Hitachi operates	Organize approaches to implementing strategic community engagement	Appointed CSR promotion officers at Group companies to reinforce North American CSR network     Globally shared information on community investment ratios and major case studies     Systematized surveys of community engagement, conducted assessments of such activities, and considered establishment of KPIs	***	Conduct hearings on and determine guidelines for Hitachi's community engagement     Establish assessment methods and KPIs



Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Implementation of community support activities	Conduct programs by or for Group employees     Conduct independent programs in collaboration with Group companies     Have each Group company and business unit conduct independent community support programs	Organized volunteer festival (though postponed until next fiscal year due to circumstances of a cosponsor)     Surveyed other companies' employee donation (matching gift) systems and considered own approaches     Implemented approximately 120 activities on Hitachi Volunteer Day	***	· Continue with and expand Hitachi Volunteer Day activities
Implementation of policies to cultivate STEM human resources (Japan) Implementation of new businesses of value to the local community (global)	Develop and implement program to cultivate STEM human resources (Japan)     Plan and design new businesses of value to the local community (global)	Implemented a pilot class as part of Science and Technology Human Resource Development Support Program (Hitachi Future Innovator Program)     Conducted dialogue with experts and interview with director general of Gender Equality Bureau, Cabinet Office, as part of the Female Engineer Encouragement Project     Launched Female Engineer Encouragement website     Implemented Hitachi Science Seminar     Published Mirai ("Future") web magazine     Hosted symposium on socially disadvantaged groups and implemented workshop on new businesses of value to the local community	***	Launch Science and Technology Human Resource Development Support Program on a Group-wide basis     Host a mini workshop for female high school students as part of the Female Engineer Encouragement Project     Continue with Hitachi Science Seminar     Publish second issue of web magazine and host symposium on socially disadvantaged groups (Japan)     Build hypothesis on and conduct analysis of new businesses of value to the local community (global)
Implementation of human resources development measures in developing countries	Hold 14th Hitachi Young Leaders Initiative (HYLI)	· Prepared to host 14th HYLI	***	Host 14th HYLI and implement Reporting Meeting in each country     Come up with KPIs for each program     Determine areas requiring Hitachi's community engagement through the perspectives of SDGs

★★★: Achieved ★★: Partially achieved ★: Not achieved



# Promoting Sustainable Community Involvement and Development

# Hitachi's Approach

Our diverse operations span the globe and involve a wide range of communities. In order to participate in a community, establish a long-term relationship with it, and contribute to its development, we feel it is important to strategically pursue social contribution activities and to establish sustainable goals. We have formulated a policy on social contribution activities and are carrying out a wide variety of activities across the Group.

The results of these activities are monitored using internationally recognized methods for measuring effectiveness, and improvements are made as needed. The Hitachi Global Foundation will further accelerate these initiatives by examining optimum approaches to Hitachi's community engagement.

## Social Contribution Activities

#### Policy on Social Contribution Activities

Hitachi's Group-wide policy on social contribution activities guides our promotion of a range of socially responsible initiatives. The engine of our various businesses including social innovation is driven not only by Hitachi's efforts to build a relationship with communities as a corporate citizen but also by our employees' flexible mindset and motivation brought about by volunteer activities. We believe that these initiatives enable us to contribute to the development of sustainability in both our business and society as a whole.

As one of Hitachi's global efforts, we introduced the Hitachi Volunteer Day in 2012. To mark the International Volunteer Day on December 5 each year, we set every November and December as a period during which we further encourage our employees to organize and take part in a broad range of volunteer activities to contribute to their communities. In fiscal 2016, approximately 7,540 employees and family members participated in 115 separate activities rooted in local communities, from environmental initiatives carried out together with local residents and students to support for welfare and educational facilities.

These activities are promoted by our CSR and Environmental Strategy Division in conjunction with the CSR and social contribution departments of business units and major Group companies, planning and carrying out initiatives as appropriate to the nature of their business and the needs and challenges of the regions they operate in.

In fiscal 2016, Hitachi and the Hitachi Global Foundation

provided 1,953 million yen in funding toward social contribution activities worldwide.

#### Policy on Social Contribution Activities and Statement

#### Policy on Social Contribution Activities

The Hitachi Group promotes interactive communication with local society through social contribution activities related to business activities, employee volunteers, and charitable activities in the key fields of human development, the environment, and community support.

#### Statement

#### "Nurturing People, Connecting to the Future"

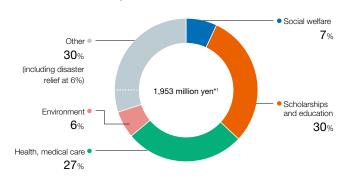
The statement was set down to succinctly express and convey the meaning of the policy to as many people as possible.



Social Contribution Activities

#### **Key Indicators**

Breakdown of Funding for Social Contribution Activities



\*1 Japan: Hitachi, Ltd., 134 Group companies, and the Hitachi Global Foundation. Outside Japan: 159 Group companies.



#### Classification According to LBG Guidelines

We conduct surveys of social contribution activities across all eight businesses by applying three categories of motivation based on the LBG\*1 measurement framework, namely, charitable gifts, community investment, and commercial initiatives in the community.

Hitachi continues to focus on ways to strategically align its social contribution activities with business operations, with efforts toward this end including continued charitable activities and increased community investment across the Hitachi Group.

In June 2016, Hitachi, Ltd., the city of Kamaishi, and the Japan Emerging Business Development Association (JEBDA) agreed to work together to revitalize the community and promote industry in Kamaishi, Iwate Prefecture. As our contribution to addressing the needs and issues of this regional community, we applied our specialist skills in the field of IT to pro bono activities that have included building websites and upgrading business systems for a local fishing cooperative and seafood processing company.

We also seek ways to use the knowledge and technical skills we have cultivated through our business to develop the human capital that society will need in the next generation. To this end, we work with local governments and educational institutions to implement and expand activities for young people, taking advantage of each Group company's individual characteristics. To date, these activities have included science classes, IT school visits, and hands-on programs using Hitachi products.

# Ratio of Social Contribution Activities Based on LBG Guidelines (monetary basis)

	FY 2014	FY 2015	FY 2016
Charitable gifts	80%	80%	75%
Community investment	18%	16%	20%
Commercial initiatives in the community	2%	4%	5%

\*1 LBG (London Benchmarking Group): An internationally recognized, global network of 114 companies that provides a framework for measuring corporate community investment. Over 300 companies worldwide use the LBG model.



#### The Hitachi Global Foundation

In April 2015, five Japanese Hitachi foundations merged into the Hitachi Global Foundation. The newly formed Foundation began work on activities centered on three key areas: promotion of academic research, science, and technology; human development; and support for local communities. In fiscal 2016, to accelerate our work contributing to resolving the issues faced by society and responding to societal needs, we began several new initiatives.

Promotion of Academic Research, Science, and Technology: The Foundation awards Kurata Grants to support research taking place in Japan. The establishment of the Kurata Grants system was originally proposed in 1967 by Chikara Kurata, former chairman of Hitachi, Ltd., who hoped to encourage the development of science and technology in Japan. The formation of the Hitachi Global Foundation was taken as an opportunity to revise the Kurata Grants system in response to the changing times, and in fiscal 2016 the Foundation awarded 30 grants to research seeking solutions to social challenges in the three areas of energy/environment, urban development/transportation, and health/medical care.

Human Development: In fiscal 2016, as well as systematizing our Science and Technology Human Resource Development Support Program, the Foundation also launched two new programs. The Hitachi Future Innovator Program is an independently developed, four-month quest-style educational program aimed at fifth-grade elementary school students, cultivating scientific and technical thinking through training in issue-resolution skills. We intend to expand it in fiscal 2017 into a Group-wide social contribution program run with the assistance of employee volunteers. The Female Engineer Encouragement Project is an educational initiative that aims to spark interest in science and engineering among middle and high school girls and encourage them to pursue a career in the field. We also held a symposium and panel discussion on the topic of "Girls in STEM: Embracing the Future."

Support for Local Communities: The Foundation published the inaugural issue of the web magazine *Mirai* ("Future"). Written to reach a broad audience, *Mirai* addresses the problems of vulnerable members of society and other challenges from a variety of perspectives to explore solutions, alternative views, and support measures. As a further consciousness-raising activity, we also held a symposium on socially disadvantaged groups and other relevant social issues.

Moving forward, the Hitachi Global Foundation will continue to consider the needs of the times; launch new initiatives aimed at contributing to the problems faced by society; encourage dialogue, workshops, and exchange of opinion among experts; and search for ways to contribute to regional communities.



The Hitachi Global Foundation



Environment

# Hitachi's Aims: Achieving a Low-Carbon Society, a Resource Efficient Society, and a Harmonized Society with Nature



The world's population, which was 7.6 billion in 2017, is projected to grow to 9.8 billion by 2050 and to 11.2 billion by 2100.\*1 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.

# Fiscal 2016 Overview of Activities



In fiscal 2016, we announced our Environmental Vision and long-term environmental targets called Hitachi Environmental Innovation 2050. Likewise, we worked hard to achieve the following targets that were set forth in the Environmental Action Plan for 2018: Raising the level of environmental activities; improving the environmental performance of our products and services; and reducing energy use in our factories and offices. With the exception of one item, we were able to attain all targets. With an eye to the plan's final year of fiscal 2018, we are committed to improving the results of various activities on an ongoing basis to achieve our targets.

# Main Plans and Results (excerpt from the Environmental Action Plan for 2018)

Enhancing Environmental Management on an Ongoing Basis

Policies	FY 2016 goals/plans	Results in FY 2016	Achievement level	FY 2017 goals/plans
Higher level of environmental activities	240 green points (GPs) under the GREEN21-2018 environmental activity index	265 GPs	***	360 GPs

#### Achieving a Low-Carbon Society

Improvement in the environmental performance of products and services	Reduce CO <sub>2</sub> emissions from use of products and services by 30% (base: FY 2010)	35%	***	35%
Reduction in energy use in factories and offices	Reduce energy use per unit by 15% (base: FY 2005)	12%	**	16%

★★★: Achieved ★★: Partially achieved ★: Not achieved

<sup>\*1</sup> According to World Population Prospects: The 2017 Revision, published by the United Nations.



# **Promoting Environmental Management**

# Hitachi's Approach

Hitachi faces a broad range of challenges regarding its products and services, such as reducing carbon emissions and improving resource efficiency across the value chain. At the same time, given the expectations of society, achieving innovations that help resolve environmental issues presents major business opportunities.

Guided by our Environmental Vision, we announced in September 2016 a set of long-term environmental targets called Hitachi Environmental Innovation 2050 to guide our environmental initiatives from a broader and longer-term perspective. Aligning this with our Mid-term Management Plan, we have also formulated an Environmental Action Plan for 2018 that lays out specific activity areas and improvement targets over a three-year period through fiscal 2018 in promoting our environmental activities.

We will promote Group-wide efforts to achieve the targets set forth in the Environmental Action Plan for 2018 in order to conduct environmental management in a manner that meets the expectations of society.

# The Environmental Vision and Hitachi Environmental Innovation 2050

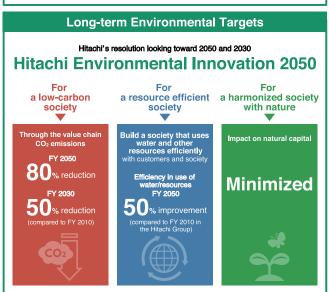
As global warming, resource depletion, ecosystem destruction, and other environmental issues grow more serious, companies

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.





#### **Environmental Action Plan**

Set environmental action items and targets every 3 years in order to achieve the long-term targets





#### ► 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.



For a Low-Carbon Society

#### ► 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.



For a Resource Efficient Society

#### ► 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.



For a Harmonized Society with Nature

# The Hitachi Action Guidelines for Environmental Conservation

The Action Guidelines for Environmental Conservation were drawn up to show the direction of our business management initiatives for environmental protection as we set out to realize our Environmental Vision.



The Hitachi Action Guidelines for Environmental Conservation

#### Environmental Action Plan for 2018

Hitachi is pressing forward with activities in accordance with its Action Guidelines for Environmental Conservation in order to achieve its Environmental Vision and the Hitachi Environmental Innovation 2050 long-term environmental targets. Toward this end, the Environmental Action Plan is drawn up every three years. The Environmental Action Plan for 2018—formulated in fiscal 2016—stipulates detailed activities and targets to tackle by fiscal 2018.

# Environmental Action Plan for 2018: Results and Targets

For our performance under the Environmental Action Plan for 2018, marking fiscal 2016 as its first year, we missed a target in one of the item areas, but for every other category, we were able to reach our goals. We will continue to make improvements in each activity aimed for fiscal 2018—our final year—and achieve our targets.

The indicators used in the Environmental Action Plan for 2018 are the main ones in Hitachi's environmental activities overall, and our endeavors in these areas are introduced in the following pages.



## Management

Items	Indicators	Fiscal 2016 targets	Fiscal 2016 results	Achievement level	Final fiscal year (2018) targets
Strengthen global environmental management	Voluntary implementation of environmental monitoring by business units and Group companies at overseas business sites (implementing sites/ total targeted)	20%	59%	***	80% or higher (cumulative total)
Raise the level of environmental activities	Green points (GPs) under the GREEN21-2018 environmental activity index	240 GPs	265 GPs	***	480 GPs

#### **Products and Services**

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Improve environmental performance	Rate of reduction in CO <sub>2</sub> emissions from use of products and services (base: FY 2010)	30%	35%	***	40%

#### Factories and Offices: Prevent Global Warming

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Reduce energy use	Reduction in energy use per unit (base: FY 2005)	15%	12%	**	17%

## Factories and Offices: Enhance Efficiency of Water Usage

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Enhance efficiency of water usage	Reduction in water use per unit (base: FY 2005)	23%	27%	***	27%

# Factories and Offices: Use Resources Efficiently

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Reduce waste generation	Reduction in waste and valuables generation per unit (base: FY 2005)	12%	13%	***	14%

## Factories and Offices: Manage Chemical Substances

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Reduce emissions of chemical substances	Reduction in atmospheric emissions of chemical substances per unit (base: FY 2006)	34%	34%	***	36%

## **Ecosystem Preservation**

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Contribute to ecosystem preservation	New ecosystem preservation activities implemented	30	144	***	600

#### Partnership with Stakeholders

Item	Indicator	Fiscal 2016 target	Fiscal 2016 result	Achievement level	Final fiscal year (2018) target
Make social contributions through environmental activities	Activities implemented in such areas as environmental education, information exchange, ecosystem preservation through afforestation, etc., community contribution through cleanup projects, etc., campaigns to turn off lighting, and community energy-saving activities	800	965	•••	2,400 (cumulative total)

◆◆◆: Achieved ◆◆: Partially achieved

Environment



# Enhancing Environmental Management on an Ongoing Basis

# Hitachi's Approach

To lay the groundwork for the promotion of environmental management on an ongoing basis and thereby achieve its Environmental Vision, the Hitachi Group needs to establish and continuously improve systems to reduce the environmental burden of its business operations.

Based on a number of certifications and guidelines, including ISO 14001, we have developed Group-wide environmental management systems that allow us to gauge the environmental burden of our business activities and steadily implement a PDCA cycle to reduce that burden. In order to reduce the environmental burden throughout the value chain, we apply Environmentally Conscious Design Assessments during the design and development stages of the products and solutions we offer. We also have in place a global environmental management framework, under which we evaluate our environmental activities and keep close track of our environmental performance.

# **Environmental Management**

# Environmental Management Framework

Our global environmental management system supports environmental decision making and implementation at Hitachi, Ltd. and 864 consolidated subsidiaries (a total of 865 companies).

The CSR and Environmental Strategy Division is responsible for developing Group-wide environmental policies. Important items related to environmental initiatives are deliberated by the Executive Sustainability Committee, established in 2017; it is chaired by the president of Hitachi, Ltd., and its members include top Hitachi executives. The environmental strategy officers from business units and major Group companies ensure that the Hitachi Group Environmental Action Plan approved by the executive officer in charge of environmental concerns is implemented throughout the Group. Eco-Management Meetings, reorganized in 2017, promote long-term targets, set goals for the Environmental Action Plan, develop ways to achieve them, and endorse initiatives to be carried out by the Group as a whole. Outside Japan, we assign regional specialists to report on the progress of the Environmental Action Plan and share information on the latest environmental regulations while exchanging views on local environmental issues during meetings held once or twice a year in each region.

## ▶ Building Environmental Management Systems

We have established environmental management criteria to ensure efficient management of each business site's environmental load. There are approximately 200 business sites that meet these criteria, and these, together with the CSR and Environmental Strategy Division, have developed and implemented the Hitachi Group Environmental Promotion Organization EMS (environmental management system) to promote the consistent implementation of environmental policies. At the same time, every business site meeting the

aforementioned criteria for environmental management continues to maintain ISO 14001 certification. Certification is also being pursued at business sites that do not yet meet the criteria. In conjunction with the issuance of ISO 14001: 2015, business sites that acquired certification prior to this version have been working to align their environmental management systems with the 2015 update. As of March 2017, approximately 25% of business sites have completed this task. The transition will be steadily promoted with an eye to meeting the September 2018 deadline.

#### Status of ISO 14001 Certifications (as of March 31, 2017)

	Total
Number of Certified Sites*1	250

<sup>\*1</sup> Including companies with more than one certified business site.







#### ▶ Monitoring Environmental Performance Data

For effective environmental management, we collect data on the environmental performance of business operations using the Environmental Data Aggregation System.

The system was upgraded in fiscal 2016, and it now supports multiple languages and is able to directly register environmental load data from some 1,200 Hitachi business sites worldwide on items such as energy use, CO<sub>2</sub> emissions, and waste generation, as well as whether it falls under relevant environmental laws and regulations. The collected data will be aggregated and analyzed at the CSR and Environmental Strategy Division where we will identify environmental management issues, share instructive examples within the Group, and improve environmental practices.

At the approximately 200 business sites that meet Hitachi's environmental management criteria, we collect and analyze data on such key items as energy, waste materials, and water on a monthly and quarterly basis so that the environmental management levels can be further increased.

#### ► Environmental Activity Evaluation System

We use our own evaluation system, GREEN 21, to improve the level and quality of our environmental activities. It divides the targets of the Environmental Action Plan into six categories and evaluates achievements. A perfect score for any category is 100 green points (GPs), and each item is assessed on a scale from 1 to 5.

Starting in fiscal 2016, activities reflecting an eagerness to stimulate environmental action have been taken into consideration as an additional scoring criterion. Our fiscal 2016 comprehensive evaluation was 265 GPs against the target of 240 GPs. For fiscal 2017, we will continue to promote environmental activities to achieve the target of 360 GPs.

#### **Key Indicators**

Green Point (GP) Average: FY 2016 Targets and Results



# **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\*1 criteria for environmentally conscious design, in addition to implementing these assessments, we are advancing environmentally conscious design and development

Environment

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 (LCAs) 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 LCAs are disclosed to our stakeholders and utilized in improving the design of next-generation products.

\*1 The standard developed by the International Electrotechnical Commission concerning environmentally conscious design for electrical and electronic products.

# Creating Eco-Factories & Offices Select

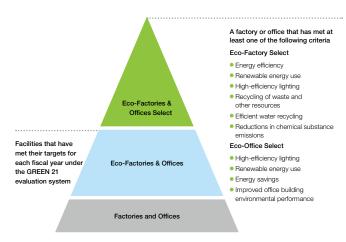
To reduce the environmental burden of our business activities, since fiscal 2011 the CSR and Environmental Strategy Division has implemented an Eco-Factories & Offices Select certification program for business sites that promote activities demonstrating a high level of environmental consciousness and produce notable results in that area. This helps raise the environmental awareness of employees and promote environmentally conscious business activities.

Based on certification criteria that were developed for our manufacturing (factory) and nonmanufacturing (office) divisions globally, we certify existing factories that actively engage in improvements to achieve efficient production and new offices that have been environmentally designed from the start. Superior policies from certified factories and offices are shared with the entire Group, with other locations encouraged to implement them as well. To maintain and raise the level of environmental awareness through Eco-Factories & Offices Select, certified factories and offices are re-evaluated every fiscal year to confirm



that their performance continues to meet requirements. In fiscal 2016, 9 facilities were newly certified and 67 facilities had their certifications renewed. The total number of certified factories and offices was 76.

#### **Eco-Factories & Offices Select Certification Criteria**





# Energy Savings in Eco-Factories & Offices

► Energy Savings with an Efficient Manufacturing Line Using JCM\*1 (Hitachi Chemical Co., Ltd.)

The Hitachi Chemical Group's Hitachi Chemical Energy Technology (Vietnam) manufactures lead-acid batteries in Vietnam, and has constructed a new, efficient manufacturing line to reduce energy consumption. In conventional manufacturing lines, electric power consumption is particularly high during the formation and charging processes. By integrating these processes to reduce the amount of electric power consumed and by eliminating the LPG used in washing and drying processes, CO<sub>2</sub> originating from fossil fuels was reduced about 60% on the new line. In this way CO<sub>2</sub> emissions from the plant were reduced by 2,880 t-CO<sub>2</sub> compared to fiscal 2015. The washing process could also be eliminated from the new line, cutting down on the amount of water used. Construction of the new line was done using the Joint Crediting Mechanism (JCM).

\*1 Joint Crediting Mechanism (JCM): A system of cooperating with developing nations in efforts to reduce greenhouse gases, after which the benefits of the reduction are shared between the two countries.



The newly constructed manufacturing line.

Environment

▶ Energy-Saving Activities Using IoT with a Shop Floor
Perspective (Hitachi Construction Machinery Co., Ltd.)
Hitachi Construction Machinery 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.



Hitachi Construction Machinery Co., Ltd.



Lumada IoT Platform



Energy and Equipment Management Service

#### **Environmental Education Initiatives**

#### **Promoting Environmental Education**

Promoting greater environmental awareness and understanding among our employees is essential to Hitachi's effort to energize its environmental activities. Toward that end, we are advancing our environmental education. Hitachi Group training is being implemented for all Group employees, from newly hired workers to working-level employees. They are provided with basic environmental education, as well as courses on environmental risks and compliance with environment-related laws and regulations.

#### **Actions and Achievements**

At Hitachi, we provide basic environmental management courses for employees working in air, water, and waste management, as well as training in recent amendments to laws and operational procedures. We are also strengthening similar courses designed for working-level employees who work outside of Japan. Accordingly, in fiscal 2016, 21 people from 9 companies took part in a training program that was hosted in Ayutthaya, Thailand, in February 2017, and a program in Amoy, China, in March 2017 attracted 57 people from 37 companies.

In order to complete our response to ISO 14001: 2015 within the three-year transition period, explanatory meetings for the internal auditors of the Hitachi Group were held to deepen understanding of the revisions. In fiscal 2016, the explanatory meetings held in Japan (in June and August) were attended by 99 internal auditors from 43 Group companies, while 74 internal auditors from 49 Group companies attended the meeting in Nanjing, China (in September). Furthermore, 16 internal auditors from 15 Group companies attended the US meeting in Dallas (in June) to deepen their understanding of the revision. In addition

to Hitachi Group training, individual companies and units provide

education tailored to their own business area. For general education, we offer Internet-based e-learning courses in Japanese, English, and Chinese to familiarize all employees with our Environmental Vision and long-term environmental targets called Hitachi Environmental Innovation 2050. To date,

142,012 employees worldwide have taken this course.

#### **Environmental Education and Training System**

**Environment** 

	Target	Introductory	Beginning	Intermediate	Advanced
		Introductory training	for new employees		
General education	Online e-learning: E (General topics: Glr issues, environn		obal environmental		
Genera	, ,		(Hitachi Group top	Eco-Mind education pics: Environmental tal Action Plan, etc.)	
	Working-	Basic environmental for working-lev (management of was hazardous materia operation of manage	vel employees ite; air/water quality; ls; development &		
ation	level employees		Education for	Eco-Factories	
educ			Eco-Product dev	elopment training	
alized			Risk commun	icator training	
Specialized education	Internal			Brush-up trainin	g on ISO 14001
	environmental auditors			ISO 14001 auditor certification training	ISO 14001 senior auditor certification training



## **Next Steps**

From fiscal 2017, we will continue with environmental education training across our global operations to enhance the knowledge and skills of staff in charge of factory management. Since the general e-learning course is a three-year program, we will encourage more employees to take the course with the aim of familiarizing them with our Environmental Vision and Hitachi Environmental Innovation 2050.

# **Environmental Compliance**

# **Environmental Compliance Response**

Hitachi considers the environmental burden of all business activities and sets voluntary management criteria that are more stringent than regulatory requirements. We regularly monitor water quality, noise levels, and other conditions at each business site and work to minimize environmental risks. In addition, we take every possible step to prevent problems or their recurrence and to strengthen controls by sharing information on environmental laws and regulations, as well as examples of infringements, throughout the Group.

#### **Actions and Achievements**

In fiscal 2016, we received a worldwide total of 12 notices concerning water quality, air quality, or waste matter and complaints about noise or odors. Of these, 6 were complaints from nearby residents regarding noise, foul odor, or construction dust from our business sites. This is slightly higher than the 4 complaints we received in fiscal 2015, but they were all promptly addressed.

Hitachi continues to implement enhanced environmental management in order to prevent repeated or new contamination occurrences.

#### Global Notices and Complaints

	Water quality	Air quality	Waste matter	Complaints	Other (petition, notification, etc.)
Fiscal 2016 cases	1	2	1	6	2

As part of our measures to address the pollution of soil and groundwater, we are examining the soil and water for any contamination at business sites where hazardous chemical substances have been used. In case contamination is found, we conduct cleaning and monitoring activities until decontamination has been completed.



# **Environmental Load**

# Data on Environmental Load from Operations (FY 2016)

The data below shows the resource inputs and the environmental load for Hitachi Group operations in fiscal 2016.



<sup>\*1</sup> CO2e: CO2 equivalent.



# Detailed Data on Resource Input and Environmental Load Output

# ► Total Input of Resources

Total resources input from Hitachi Group operations.



#### **Total Energy Input**

#### Energy consumption: (crude oil equivalent) 1.95 GL

			FY 2015	FY 2016
Renewable energy	Electricity		3.9 GWh (39 TJ)	2.9 GWh (29 TJ)
Non-renewable energy	Electricity		5,111 GWh (49.7 PJ)	5,897 GWh (57.3 PJ)
	Gas	Natural gas	0.11 Gm <sup>3</sup> (4.9 PJ)	0.16 Gm³ (7.1 PJ)
		LPG, LNG, etc.	56 kt (2.9 PJ)	61 kt (3.2 PJ)
	Fuel oil (heavy oil, kerosene, etc.)		85 ML (3.1 PJ)	78 ML (2.9 PJ)



#### Raw Materials Input

#### Materials: 3,193 kt

			FY 2015	FY 2016
Materials	Metals		1,638 kt	2,710 kt
		New materials	_	1,497 kt
		Recycled materials, etc.	_	1,213 kt
	Plastics		149 kt	169 kt
		New materials	_	167 kt
		Recycled materials, etc.	_	2 kt
	Other materials		347 kt	314 kt
		New materials	_	308 t
		Recycled materials, etc.	_	6 kt
Chemicals	PRTR substances*1 handled		177 kt	189 kt
	Ozone-depleting substances handled	·	11 t	208 t
	Greenhouse gas substances handled		3,791 t	3,425 t

<sup>\*1</sup> PRTR substances: The 462 chemicals designated in Japan's Pollutant Release and Transfer Register (PRTR) Law.

Note: "-" in the FY 2015 column indicates items for which data collection began in fiscal 2016.



## **Total Water Input**

#### Water use: 41.34 million m<sup>3</sup>

		FY 2015	FY 2016
Water provided by municipality or other sources	Tap water	5.65 million m <sup>3</sup>	7.77 million m³
	Industrial water, river water	20.13 million m <sup>3</sup>	18.41 million m³
Groundwater		18.13 million m <sup>3</sup>	14.92 million m <sup>3</sup>
Rain water		_	0.03 million m <sup>3</sup>
Recycled water (recycled from the wastewater of other organizations)		_	0.21 million m <sup>3</sup>

Note: "-" in the FY 2015 column indicates items for which data collection began in fiscal 2016.



## ► Total Output of Environmental Load

Environmental load output from Hitachi Group operations.



#### Greenhouse Gas Emissions

Greenhouse gases: 3,922 kt-CO₂e

		FY 2015	FY 2016
CO <sub>2</sub> emissions		3,085 kt-CO <sub>2</sub>	3,845 kt-CO <sub>2</sub>
Other GHGs	SF <sub>6</sub> (sulfur hexafluoride)	56 kt-CO2e	56 kt-CO₂e
	PFCs (perfluorocarbons)	4 kt-CO <sub>2</sub> e	4 kt-CO₂e
	HFCs (hydrofluorocarbons)	16 kt-CO <sub>2</sub> e	16 kt-CO₂e
	N <sub>2</sub> O, NF <sub>3</sub> , CH <sub>4</sub>	1 kt-CO <sub>2</sub> e	1 kt-CO <sub>2</sub> e

#### Notes:

- The CO2 electrical power conversion factor uses the 2005 emission coefficients for individual countries published by the International Energy Agency (IEA) in the 2010 edition of CO2 Emissions from Fuel Combustion.
- The gas and fuel oil conversion factor is based on the list of emissions and calculation methods published by Japan's Ministry of the Environment.



#### Total Volume of Waste and Valuables

Waste and valuables generation: 1,336 kt Nonhazardous: 1,309 kt (hazardous: 27 kt)\*1

		FY 2015	FY 2016
Waste reduction		53 kt	68 kt (0.4)
Recycling	Reuse	3 kt	1 kt (0.4)
	Materials recycled	506 kt	1,001 kt (21.5)
	Thermal recovery	13 kt	12 kt (2.4)
Landfill		43 kt	254 kt (2.0)
Chemicals	PRTR substances discharged or transferred	4.4 kt	4.7 kt
	SOx (sulfur oxides)	50 kNm³	101 kNm³*²
	NOx (nitrogen oxides)	350 kNm³	488 kNm³
	Ozone-depleting substances emitted (CFC-11, etc.)	1 t (0 t-ODP)*3	1 t (0 t-ODP)*3

<sup>\*1</sup> Waste materials that pose a threat to human health or the living environment. We dispose of all such materials in accordance with the laws and regulations of each country and region.

<sup>\*3</sup> ODP (ozone depletion potential): A coefficient indicating the extent to which a chemical compound may cause ozone depletion relative to the depletion for CFC-11 (trichlorofluoromethane, ODP = 1.0). The emissions factor uses the ODP and global warming potential of Japan's Ministry of the Environment.



# Total Volume of Water Effluents Discharged

Water effluents discharged: 38.77 million m<sup>3</sup>

		FY 2015	FY 2016
Public water		27.36 million m <sup>3</sup>	26.16 million m <sup>3</sup>
Sewerage		9.37 million m <sup>3</sup>	8.93 million m <sup>3</sup>
Underground infiltration, evaporation	n, etc.	6.58 million m <sup>3</sup>	3.68 million m <sup>3</sup>
Water quality	BOD (biochemical oxygen demand)	433 t	446 t
	COD (chemical oxygen demand)	732 t	731 t

<sup>\*2</sup> Includes SOx generated by a materials company that became a consolidated member of the Hitachi Group in fiscal 2016.

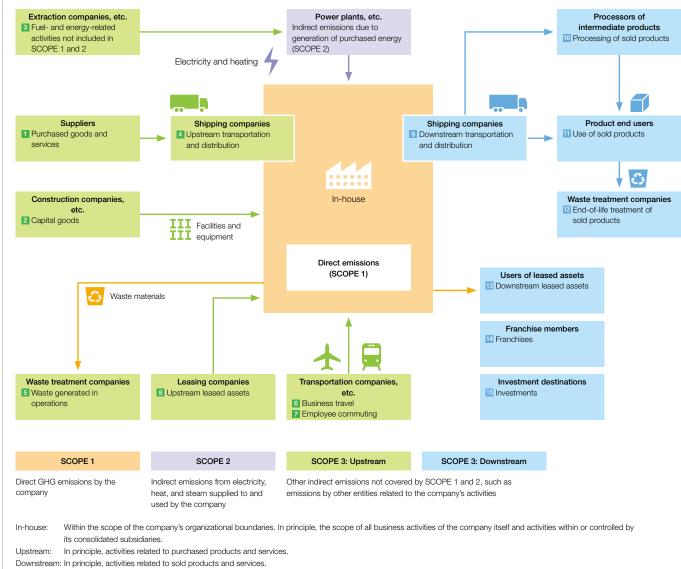


# Environmental Load Through the Value Chain

# Calculation of GHG Emissions Throughout the Value Chain

We calculate greenhouse gas (GHG) emissions throughout the entire value chain to more effectively reduce these emissions. As a substantial amount of emissions comes from use of the products we sell, we make an ongoing effort to reduce emissions by enhancing the efficiency and energy-saving features of our products and services during their use.

# Categories of GHG Emissions in the Value Chain





## GHG Emissions Throughout the Hitachi Value Chain

Category	Description	Calculation Results (Mt-CO2e)
SCOPE 1*1		
Direct emissions	Direct emissions from in-house fuel use and industrial processes	1.36 (1.1%)
SCOPE 2*2		
Energy-related indirect emissions	Indirect emissions from production of electricity and heat purchased by the company	2.55 (2.1%)
SCOPE 3: Upstream (other indirect emissions)		
1 Purchased goods and services	Emissions from the resource extraction stage to the manufacturing stage, including raw materials, parts, supplied products, and sales	6.92 (5.5%)
2 Capital goods	Emissions generated in the construction, manufacture, and shipping of the company's own capital goods, such as equipment, devices, buildings, facilities, and vehicles	1.09 (0.9%)
3 Fuel- and energy-related activities not included in SCOPE 1 and 2	Emissions from procuring fuel necessary for electricity and other energy production, including resource extraction, production, and shipping	0.23 (0.2%)
Upstream transportation and distribution	Emissions from distribution of raw materials, parts, supplied products, and sales prior to delivery of materials to the company, as well as other distribution activities of products for which the company bears the expense	0.10 (0.1%)
5 Waste generated in operations	Emissions from transportation, disposal, and treatment of waste generated in the company's operations	0.11 (0.1%)
6 Business travel	Emissions generated from fuel and electric power used by employees for business travel	0.07 (0.1%)
7 Employee commuting	Emissions generated from fuel and electric power used in employee commuting	0.06 (0.0%)
8 Upstream leased assets	Emissions from the operation of assets leased by the company, excluding those counted in SCOPE 1 and 2	Included in SCOPE 1 and 2
SCOPE 3: Downstream (other indirect emissions)		
Downstream transportation and distribution	Emissions from transportation, storage, loading and unloading, and retail sales of products	0.01 (0.0%)
10 Processing of sold products	Emissions by downstream companies during processing of intermediate products	N/A*3
111 Use of sold products*4	Emissions from use of products by end users, such as consumers and businesses	110.94 (89.5%)
12 End-of-life treatment of sold products*4	Emissions from transportation, waste disposal, and treatment of products by end users, such as consumers and businesses	0.31 (0.3%)
13 Downstream leased assets	Emissions from operating assets owned by the reporting company as lessor and leased to other entities	0.03 (0.0%)
14 Franchises	Emissions by franchises under SCOPE 1 and 2	N/A
15 Investments	Emissions related to management of investments	0.10 (0.1%)
Total		123.88 (100%)

Note: Figures in parentheses are percentages of GHGs emitted throughout the value chain.

<sup>\*1</sup> Includes SFe, PFC, HFC, N2O, NF3, and CH4. The gas and fuel conversion factor is based on the list of emissions and calculation methods published by Japan's Ministry of the Environment.

<sup>\*2</sup> The CO<sub>2</sub> electrical power conversion factor used to calculate emissions 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.

 $<sup>\</sup>ensuremath{^{\star}}\xspace$  Cannot be determined due to insufficient information on processing.

<sup>\*4</sup> CO2 emissions per unit is based on the Inventory Database for Environmental Analysis (IDEA), developed by the National Institute of Advanced Industrial Science and Technology (AIST) and the Japan Environmental Management Association for Industry (JEMAI).



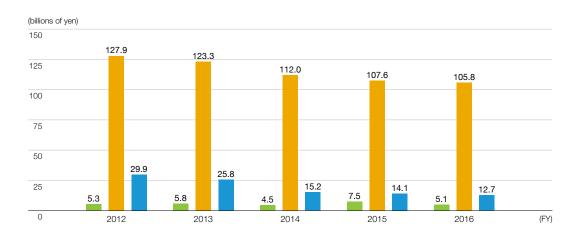
# **Environmental Accounting**

# Overview of Environmental Accounting

Hitachi has adopted and made public a set of environmental accounting procedures conforming to the Japanese Ministry of the Environment's Environmental Accounting Guidelines 2005. We have used the results of these procedures to raise the efficiency of our environmental investments and activities, more effectively allocating management resources to our ongoing environmental efforts.

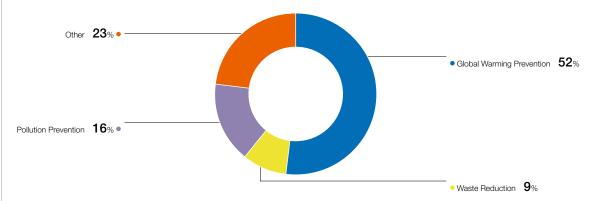
## **Achievements**

#### Environmental Investments, Environmental Protection Costs, and Economic Effects



■ Environmental Investments ■ Environmental Protection Costs ■ Environmental Protection Effects (Economic Effects)

#### Fiscal 2016 Environmental Investments by Countermeasure





#### **Environmental Investments**

						(billions of yen)
	Description	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Total investment	Investment in energy-saving equipment and equipment that directly reduces environmental load	5.28	5.81	4.46	7.50	5.12

#### **Environmental Protection Costs**

(billions of yen)

Item	Description	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Expenses						
Business area	Maintenance costs for equipment with low environmental load, depreciation, etc.*1	31.84	38.63	26.90	24.22	19.19
Upstream/downstream	Green procurement expenses, recovery and recycling of products and packaging, recycling expenses	1.38	1.27	1.09	0.97	0.63
Administration	Labor costs for environmental management, implementation and maintenance of environmental management system	7.67	6.77	6.47	5.97	5.12
Research and development	R&D to reduce environmental burden caused by products and production processes, product design expenses	84.71	75.62	76.12	75.71	79.64
Social activities	Planting, beautification, and other environmental improvement expenses	0.41	0.51	0.36	0.45	1.21
Environmental remediation	Environmental mitigation costs, contributions, and charges	1.90	0.53	1.03	0.27	0.22
Total		127.91	123.33	111.97	107.59	105.84

<sup>\*1</sup> Equipment depreciation costs are calculated using the straight-line method over five years.

#### **Environmental Protection Effects**

#### Economic Effects\*1

(billions of yen)

Item	Major FY 2016 Activities	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Net income effects	Recovering value from waste by sorting and recycling	17.85	15.98	7.54	7.27	4.96
Reduced expenses effects	Installing high-efficiency equipment (lighting, power supply)	12.07	9.82	7.65	6.78	7.77
Total		29.92	25.80	15.19	14.05	12.72

<sup>\*1</sup> Economic effects include:

- Net income effects: Benefits with real incomes, including incomes from the sale of resalable materials and incomes from environmental technology patents.
- Reduced expenses effects: Reduction in electricity, waste treatment, and other expenses through environmental load reduction activities.

#### Physical Effects\*1

(million kWh)

Item	Major FY 2016 Activities	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Reduction in energy used during production	Installing LED lighting, upgrading air-conditioning equipment, etc.	107	70	68	59	51

<sup>\*1</sup> Equipment depreciation costs are calculated using the straight-line method over five years.

# **Environmental Liability**

We have appropriated 10.05 billion yen in expenses for the disposal of PCB-containing waste and 1.57 billion yen to clean up contaminated soil as the amounts that we can reasonably project as of March 2017 as future environmental liabilities.



# Responding to Environmental Risks and Opportunities

# Hitachi's Approach

From abnormal weather conditions around the world associated with global warming to resource depletion and loss of biodiversity, environmental risks that could seriously affect the future of humanity and our planet are on the rise. International calls are being made for measures to mitigate these risks, as exemplified by the Paris Agreement adopted in 2015 at the 21st Conference of the Parties (COP21) to the United Nations Framework Convention on Climate Change and the Sustainable Development Goals (SDGs)—the centerpiece of the 2030 Agenda for Sustainable Development, adopted by the United Nations. Businesses, too, must accurately ascertain the risks they face and the opportunities that arise for the utilization of management resources.

Hitachi focuses on two particular environmental risks and opportunities—climate change and water resources—and promotes initiatives to address them in a steadfast manner. Indeed, among the top five global risks in terms of impact cited by the World Economic Forum in its *Global Risks Report 2017* are "water crises," "extreme weather events," and the "failure of climate-change mitigation and adaption." Hitachi will strengthen its response from a global perspective to risks that threaten both corporate finances and society as a whole, such as the growing seriousness of abnormal weather, changing rainfall patterns, and the impact of droughts and floods on economic activity.

# Climate Change: Risks and Opportunities

# Engaging with the Risks and Opportunities of Climate Change

Hitachi sees climate change risks and opportunities as important management issues. We are therefore setting long-term environmental targets through 2050 and clearly outlining our policy of contributing to the achievement of a low-carbon society. In addition, given the global regulatory and policy trends in climate change, we will launch business strategies to minimize risks and maximize opportunities. To that end, the Executive Sustainability Committee was created in 2017, with the Hitachi president serving as chairman and members including other top executives. Group-wide measures on climate change are advanced by establishing KPIs in our Environmental Action Plan.

#### ► Regulatory Risks and Opportunities

Carbon taxes, energy consumption taxes, and emissions trading systems may be newly introduced or further strengthened, representing risks impacting directly on management costs on top of those incurred in complying with the environmental regulations and policies of countries and regions around the world. To mitigate such risks, we have been reducing or minimizing cost burdens by enhancing production efficiency and introducing energy-saving measures. Our energy-saving investments in fiscal 2016 totaled approximately 9.1 billion yen.

We also regard the energy-efficiency standards and regulations for products as opportunities for business expansion. If our products did not meet such standards, we would risk losing sales opportunities, but Hitachi not only clears the required norms, we also develop energy-saving products and services that go beyond the prescribed standards. We can thus increase the likelihood of our energy-saving products and services being selected by our customers and gaining fuller market penetration, thereby expanding our business.

# ▶ Risks and Opportunities Presented by Physical Factors Hitachi has a worldwide business presence and believes that disasters due to the impact of global warming—like powerful typhoons and heavy rainfall—represent serious business continuity risks. In choosing sites for new plants, for example, we take potential flood damage into consideration, and we have established the Hitachi Group Guidelines for Developing

Business Continuity Plans that outline measures to be taken in times of disaster.

At the same time, we perceive the increase in demand for natural-disaster countermeasures in various countries and regions as business opportunities for our disaster-prevention solutions. Hitachi uses the latest IT tools to analyze and evaluate

regions as business opportunities for our disaster-prevention solutions. Hitachi uses the latest IT tools to analyze and evaluate data pertaining to people's daily lives, meteorological and other natural trends, and the operation of social infrastructure, providing solutions that lead to a proper climate change response and creating new business opportunities.

## Other Risks and Opportunities

A company's approach to climate change issues influences stakeholders' evaluations and affects customers' choice of products and services. It can become either a risk to business



continuity or an opportunity for sales expansion. Hitachi upholds long-term environmental targets of reducing the CO<sub>2</sub> emissions throughout our value chain by 50% in fiscal 2030 and 80% in fiscal 2050. Toward this goal, in fiscal 2016, we achieved 35% reductions in CO<sub>2</sub> emissions from the use of products and services through the promotion of environmentally conscious design during the development stage, as well as through the increased sales of products and services with high energy-saving performance. Furthermore, we have improved energy use per unit by 12% through energy-saving investments in high-efficiency facilities and equipment and by moving forward in production efficiency by utilizing IoT. In the future, we will switch to a low-carbon business structure; develop innovative devices and materials that contribute to the reduction of the environmental burden; develop and popularize ultra-efficient products and low-carbon energy; and offer energy-conserving social system solutions through the wide-ranging and integrated harmonization of disparate systems.

# Water-Related Risks and Opportunities

# Activities for Water-Related Risks and Opportunities

Hitachi is responding to both water-related risks and opportunities with our customers and society through our business operations by establishing a long-term environmental target of building a water- and resource-efficient society by 2050.

#### Regulatory Risks and Opportunities

We are subject to regulations stipulated by different countries and regions concerning water use, such as a tightening of quality standards for both water supply and drainage and a jump in prices. These regulations pose a risk for our business activities, but they can also be an opportunity for our water-related business.

Hitachi places the water-related business as a core undertaking, having established the Water Business Unit to provide machinery, electrical facilities, and services for water infrastructure. To date, we have installed approximately 700 water purification plants and 900 sewage treatment plants in Japan, as well as over 200 plants in some 40 countries and regions around the world. By providing a range of water-treatment technologies, from water generation to sewage, we seek to realize efficient water circulation for our customers and to lessen the impact of water-related regulations.

At approximately 200 Hitachi business sites around the world, we are promoting appropriate water usage for each locale by investigating and analyzing water risks and usage status to be prepared for any regulatory risks that may arise in the future.

▶ Risks and Opportunities Presented by Physical Factors
Just as there are countries and regions around the world that
are endowed with rich water resources, there are also many
places where people do not have enough water for their
everyday lives and for agriculture. For Hitachi, such shortages
represent both a risk and an opportunity.

For example, we provide the long-distance water pumps at the core of water distribution facilities in large-scale projects to provide water to areas with a shortage. In Egypt, we built pumping facilities to send water from the Nile River to desert areas for the country's greening project, and in China we are drawing water from the Yangtze River to the Yellow River, which suffers from a serious water shortage. Meanwhile, our desalination system provides water for Male, the capital of the

Environment

Maldives—an island country without rivers that depends on rain or groundwater for its drinking water. Through our participation in these large-scale, global projects, we will continue to help find solutions for water-related problems around the world.

We are also focusing on physical water risks at our own plants. A water shortage is usually regarded as the main physical risk for ordinary plants. However, since Hitachi's business sites are concentrated in areas near rivers or with a rich source of underground water, we consider this physical risk to be minimal. Even so, we have taken appropriate and necessary measures to secure dedicated waterways in case there are water-access concerns. We also deem flood damage as a physical risk. At times of new plant constructions, therefore, we keep the potential damage in mind when choosing sites. When we judge countermeasures to be required, we install bulkhead partitions or place essential amenities on the second floor—including at existing plants. We check upstream water levels every month and set up flood task forces when levels reach a dangerous level, sharing such information with our suppliers. We also diversify risks by procuring components from multiple suppliers.

We will continue to promote necessary measures to minimize water-related physical risks.



# Achieving a Low-Carbon Society

# Hitachi's Approach

Achieving a low-carbon society is an urgent challenge shared widely around the world. Among the Sustainable Development Goals (SDGs) adopted by the United Nations are "Goal 13: Take urgent action to combat climate change and its impacts" and "Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all."

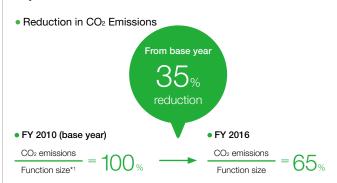
Hitachi helps to achieve a low-carbon society in a great number of ways, both through its own operations and also by developing energy-saving products and services. We manufacture a diverse range of products, from power generation systems to railway carriages and industrial equipment. We also advance technological innovations in building infrastructure worldwide by combining our operational technology (OT) and IT. In order to achieve our long-term targets contained in Hitachi Environmental Innovation 2050 and the Environmental Action Plan for 2018, we will promote medium- to long-term efforts to reduce greenhouse gas emissions from our factories and offices, as well as from our products and services.

# Global Warming Prevention from Products and Services

# 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.

## **Key Indicators**



\*1 Major functions of products correlated to CO2 emissions.



# Improvements in Environmental Performance

▶ RS90 Series of Information and Control Servers (Hitachi, Ltd.) The RS90 series of information and control servers are real-time, high-reliability information and control system platforms that play an integral role in maintaining smooth operations of society's basic infrastructure. These servers are used in such fields as power generation, water and sewer services, and rail transport. The use of high-performance processors has increased the MIPS\*¹ value—a computer performance indicator—to twice that of our product launched in fiscal 2010. The servers also save energy due to their smaller size, fewer components, and low-power-consuming parts, reducing annual energy consumption by 10,404 kWh. As a result, CO₂ emissions per control server MIPS value have declined by 72.9%.

\*1 Million instructions per second: A value showing how many million instructions can be made in one second.



A rack-mountable RS90 series of information and control server.

# 3100 Clinical Analyzer (Hitachi High-Technologies Corporation)

The 3100 clinical analyzer is an automated chemical analyzer for the healthcare field used by hospitals to test patient specimens. With a footprint of just 0.59 m², it requires very little space and is suitable either as a main analyzer in clinics and small hospitals or a backup analyzer in large hospitals. The

demand for fast test results has been increasing in recent years, and the 3100 was developed with the aim of achieving 400 tests per hour, twice the throughput of a model we launched in 1995.

The performance of our earlier products was examined, and a thoroughgoing review of the operating program of each mechanism was conducted. At the same time, the motor and other parts were optimized to ensure high performance even under short operating times. As a result, we achieved both the targeted throughput of 400 tests per hour and high analytical performance. Power consumption associated with higher speeds and an increase in the number of component parts was reduced both during operation and while in standby by lowering the isolation transformer load through a rethinking of the AC power supply configuration and by switching to a DC power source with good conversion efficiency. As a result, annual energy consumption was reduced by 169 kWh compared to the previous model. With these improvements, the automatic analyzer achieved a CO<sub>2</sub> emissions reduction rate of 54.4% per hour of processing capacity.



3100 clinical analyzer.

#### Environment

#### ▶ Disc Brake Pad (Hitachi Chemical Co., Ltd.)

Disc brake pads are built into the brakes of automobiles and motorcycles and bring vehicles to a stop by sandwiching the discs that rotate with the wheels from both sides. Generally speaking, disc brake pads contain copper to increase abrasion resistance and maintain the level of performance over long periods. Copper-containing dust powder is produced when braking, however, which is thought to cause water pollution as the powder runs off the pavement into nearby streams and rivers. To prevent this, a law to limit the copper content in disc brake pads will be implemented in the United States from 2021.

By augmenting copper's performance with various materials, Hitachi Chemical has developed an environmentally responsive disc brake pad\*1 that maintains abrasion resistance while minimizing copper content. Consequently, we have been able to achieve both low environmental impact and high performance, reducing the average copper usage volume per disc brake pad by 75.9% compared to fiscal 2010.

\*1 Environmentally responsive disc brake pads are either copper-free or copper-less.



Disc brake pads



# Addressing Our Carbon Footprint

The carbon footprint of products (CFP) is the CO<sub>2</sub> equivalent of the total amount of greenhouse gases (GHGs) emitted over the entire life cycle of a product or service—from procurement of materials through to disposal and recycling. Making the GHG emission amount visible in this way encourages efforts to reduce the amount of carbon emitted by products over their whole life cycle. A number of countries around the world use the CFP approach.

Hitachi launched CFP assessment in 2009. We participate in the Carbon Footprint Communication Program of the Japan Environmental Management Association for Industry (JEMAI) and are working to expand the number of Approved CFP Products.\*1 In fiscal 2016, our midrange storage system, Hitachi Virtual Storage Platform G800, was verified and approved by the JEMAI CFP Program. In addition to visualizing CO<sub>2</sub> emissions, we quantified the rate of CO<sub>2</sub> emission reductions per function\*2 from previous models, publishing the quantitative effect of their energy efficiency in our catalogs and on both in-house and external websites. We are also working with JEMAI to raise the recognition of the CFP label and to promote Approved CFP Products.

- \*1 Approved CFP Product: A product subjected to testing according to the CFP quantification rules of the Carbon Footprint Communication Program, is verified as conforming to those rules, and for which an application is made for registration and public announcement.
- \*2 Specifically, the "life cycle GHG emissions per unit function size," calculated by dividing the "life cycle GHG emissions per sales unit" by "function size of applicable product" as specified by performance (or performance characteristic) and/or use period.

#### Products authorized to display the CFP label in fiscal 2016

Product	Midrange Storage				
Model	Hitachi Virtual Storage Platform G800				
Product appearance					
[Previous model]	Hitachi Unified Storage VM				
Rate of reduction in CO <sub>2</sub> emissions (compared to previous model)	-55%				

# Working with European Environmental Footprint Initiatives

Europe's Environmental Footprint initiatives develop methodologies for measuring the entire life cycle environmental burden of products and organizations in up to 16 areas. Pilot studies were launched in November 2013 to establish assessment methods in multiple product and organization fields.

Hitachi, drawing on experience with Japan's Carbon Footprint Communication Program and the knowledge gained from calculating and visualizing CO<sub>2</sub> emissions in the IT product life cycle, is participating in a European Environmental Footprint pilot study in the IT equipment field, for which it serves as the technical secretariat.

In fiscal 2016, we evaluated the environmental burden of IT products in accordance with the methods approved by the European Commission, using the Hitachi storage platform actually sold on the European market. We also disclosed and communicated the evaluation results to our customers. In conjunction, we held a consultation forum to hear the opinions of stakeholders on evaluation and communication methodologies. These were, in turn, subsequently reflected in actual methods.

Next Steps in Products and Services

**Environment** 

Hitachi will ensure the environmental consciousness of its products and services by conducting Environmentally Conscious Design Assessments and implementing life cycle assessments (LCAs). In addition, by linking environmental values to the creation and expansion of business opportunities, we will continue to develop products and services with high environmental performance that will prove to be an added value to our customers.

# Global Warming Countermeasures at Factories and Offices

## Promoting Global Warming Countermeasures

We are promoting ways to use energy more efficiently and reduce GHG emissions during production and transportation, in both the manufacturing and nonmanufacturing divisions, to contribute to the prevention of global warming.

#### **Actions and Achievements**

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.

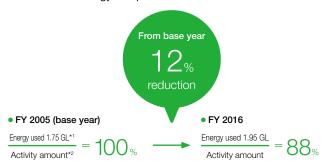


The increase in the total volume of CO<sub>2</sub> emissions was due to the fact that a materials company in the Americas newly became a member of the consolidated Hitachi Group in fiscal 2016. There was a general decline in regions other than the Americas.

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.

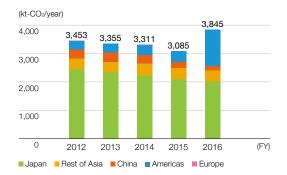
#### **Key Indicators**

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).

## CO₂ Emissions



# Breakdown by Region (kt-CO<sub>2</sub>/year)

3 2014		
2014	2015	2016
1 8	7	11
358	375	1,273*1
2 305	211	166
5 423	402	384
3 2,217	2,090	2,011
3,311	3,085	3,845
	1 358 2 305 5 423 3 2,217	1 358 375 2 305 211 5 423 402 3 2,217 2,090

\*1 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).

#### Environment

# 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) 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.



Green Power logo for the Green Power Certification scheme.



## Reducing Transportation Energy Consumption

Hitachi is working toward the reduction of energy output during transportation as well as at business sites, and we have established targets for the reduction of energy use per unit for each business unit and Group company. Business sites are promoting a modal shift to highly efficient transportation methods, improving truck loading ratios and taking other measures to reduce transportation energy consumption, and switching to the use of eco-cars. CO<sub>2</sub> emissions from transportation inside Japan for the Hitachi Group in fiscal 2016 were 106 kt-CO<sub>2</sub>. In addition, the Healthcare Business Unit has promoted a modal shift in manufacturing precision medical equipment, enabling our CT systems and X-ray diagnostic tools to earn the Ministry of Land, Infrastructure, Transport, and Tourism's Eco Rail Mark.\*1

 $^{*}$ 1 A mark conferred on products and businesses when a designated share of freight shipments are made by rail transport, which has low CO $_2$  emissions.





# Next Steps for Factories and Offices

In the Environmental Action Plan for 2018, we are pushing ahead to incorporate efficient energy use during the production stage. We will continue to run the PDCA cycle to achieve improvements.

In the future, to realize the low-carbon society called for in the Hitachi Environmental Innovation 2050 long-term environmental targets, we will strive to reduce energy-derived  $CO_2$  and other GHG emissions by making full use of high efficiency products and low-carbon energies. Our energy usage efficiency has improved by 7% since fiscal 2010. To achieve our long-term targets, we will continue to improve the efficiency of energy usage and reduce GHG emissions during the production stage.

# Reducing Transportation Energy Consumption

▶ A Modal Shift in the Transport of Precision Medical Equipment (Healthcare Business Unit, Hitachi, Ltd.)

The Healthcare Business Unit is implementing a modal shift by using railways to transport CT systems and X-ray diagnostic systems of a size that fit in 12-foot railway containers. These systems are one of the types of diagnostic imaging equipment made at the Medical System Operations Group, Kashiwa.

Because these are precision machines used in providing healthcare services, the quality of the transport was doubly verified in advance. Great care is also needed in the handling of these products, which are very heavy and have mass eccentricity, and efficient transport has been achieved while ensuring transport quality by sharing handling know-how and modifying the pallets used with these products for container use. These efforts have resulted in the acquisition of Eco Rail Mark product certification for these CT systems and X-ray

Environment

diagnostic systems, and  $CO_2$  emissions were reduced 18.6 t- $CO_2$  in fiscal 2016 (5.2% down from the previous year) with this modal shift.



Loading a CT system onto a railway container.



Environment

# Achieving a Resource Efficient Society

# Hitachi's Approach

Creating higher economic value with fewer resources, embracing production and consumption activities that reduce the environmental burden, and achieving a resource efficient society and economy—these aims, as the United Nations' Sustainable Development Goals (SDGs) cite in "Goal 12: Ensure sustainable consumption and production patterns," are directed at achieving a resource efficient society, an increasingly important and shared concern of humankind. As a corporate group with manufacturing and sales operations in locations around the world, Hitachi positions the achievement of a resource efficient society as an integral part of its Environmental Vision and is advancing efforts to make efficient use of the Earth's finite resources.

In keeping with our long-term Environmental Innovation 2050, we recognize water resources to be a key environmental risk and seek to build a society that uses water and other resources efficiently. We are implementing a variety of initiatives, such as reducing the volume of water used, making effective use of raw materials, and making sure to promote the "three Rs" of reduce, reuse, and recycle. We are making active use of the technologies and expertise held by various Group companies in advancing thoroughgoing waste management, water and resource conservation during production, and utilization of used and recycled components in IT equipment. The Hitachi Group as a whole will continue to promote manufacturing approaches that contribute to the achievement of a resource efficient society.

# **Enhancing Efficiency of Water Usage**

#### 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.

#### **Actions and Achievements**

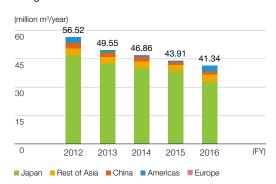
In fiscal 2016, we set a target of a 23% reduction (over the base year of fiscal 2005) for water usage per unit at our 204 global sites and achieved a 27% reduction.

#### **Key Indicators**

• Reduction in Water Usage per Unit



#### Water Usage



#### Breakdown by Region (million m³/year)

					(⊢Y)
	2012	2013	2014	2015	2016
Europe	0.03	0.02	0.02	0.01	0.02
Americas	3.15	1.20	0.98	0.89	3.09*1
China	2.85	2.50	2.32	1.22	1.51
Rest of Asia	3.85	3.65	3.85	3.56	4.00
Japan	46.64	42.18	39.69	38.23	32.72
Total	56.52	49.55	46.86	43.91	41.34

<sup>\*1</sup> Includes 2.12 million m³/year used by a materials company that became a consolidated member of the Hitachi Group in fiscal 2016.

# Next Steps to Improve Water Usage Efficiency

Hitachi has set a target of enhancing water usage efficiency in fiscal 2050 by 50% compared to fiscal 2010. We will aim to realize a resource efficient society by maintaining appropriate management of our business-related water usage and taking measures to solve each region's water-related issues, such as by reducing water intake quantity and promoting the circulative use of water through the purification and reuse of wastewater.

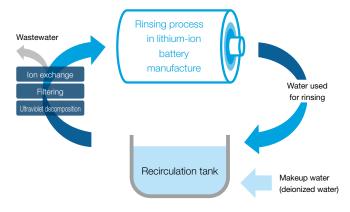


# Reducing Water Use Through Improved Efficiency

► Reducing Water Use in the Manufacture of Hybrid Vehicle Batteries (Hitachi Vehicle Energy, Ltd.)

Hitachi Vehicle Energy has reduced the amount of water used in manufacturing lithium-ion batteries for hybrid vehicles by circulating and reusing the pure water\*1 utilized in rinsing. Deionized water that has been used in the rinsing process is mixed with makeup water (deionized water) in a recirculation tank, and then subjected to ultraviolet decomposition, filtering, and ion exchange. Through this cycle, it can be repeatedly used as rinse water. As a result, industrial wastewater and water usage have been slashed by more than 99%, compared with the amount used before the system was introduced.

\*1 Deionized water: Water from which the impurities have been removed using an ion exchange resin, reverse osmosis membrane, distiller or other means.



Recirculation System Flowchart for Pure Water Used in Rinsing

► Fixing Leaks to Reduce Water Usage at a Washing Machine Manufacturing Site (Shanghai Hitachi Household Appliances Co., Ltd.)

Shanghai Hitachi Household Appliances produces about 1 million automatic washing machines each year and uses large amounts of water in quality checks during acceptance tests. To reduce the amount of water used, the company spent six months conducting repeated surveys, checks, improvements, and verifications and located the places where water was leaking through the monitoring of underground pipes and the installation of more meters. It implemented water-saving activities, replacing leaking underground pipes and repairing and updating air conditioning equipment. As a result, the company now uses only half the water it did in the past. To prevent the recurrence of water leaks, the pipe routing was changed so that pipes are now above ground with fewer joints.



An automatic washing machine acceptance test.

#### Environment

# Improving Efficiency in the Use of Resources

# Promoting Product Collection and Recycling

In response to the 2001 Home Appliance Recycling Law, Hitachi is taking part in a cooperative effort among five companies\*1 in the same industry to recycle air conditioners, television sets, refrigerators, and washing machines at 19 recycling plants nationwide. In fiscal 2016, we recycled around 59,000 metric tons of the roughly 66,000 tons of end-of-life home appliances we collected.

Hitachi has built its own recycling network of 11 locations in Japan providing services near our customers to collect and recycle such end-of-life products as supercomputers, mainframes, and other computing machines; communication equipment like network devices and telephone switchboards; and information equipment like ATMs.

In the United States, when a customer replaces a large-capacity storage unit with a new model, part of the end-of-use device is cleaned and inspected and resold as a certified Hitachi product.

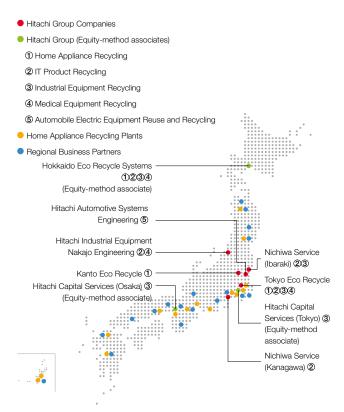
We collect automobile electric components from dealers and repair shops, disassembling, checking, cleaning and restoring, reassembling, and inspecting them so they can be reused as equipment featuring the same performance as new products.

We are also promoting collection and recycling through recycling networks for medical equipment and such industrial equipment as pumps, motors, distribution boards, transformers, refrigeration equipment, and air conditioners.

<sup>\*1</sup> Hitachi Appliances, Inc.; Sharp Corp.; Sony Corp.; Fujitsu General Ltd.; and Mitsubishi Electric Corp.



#### **Product Recycling Network**



# Using IT to Manage Waste

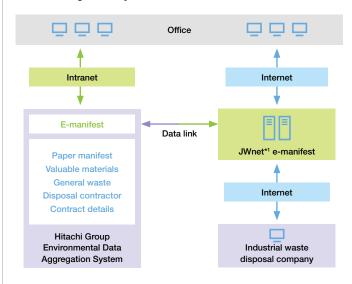
Hitachi has developed a waste management system aimed at more efficient processes and reduced compliance risk. In Japan, we visualize the generation and disposal of waste produced at our factories, offices, and contract operations and manage data on waste contractors so that we can keep accurate track of our progress in waste recycling. In fiscal 2016, entries were made to the system regarding waste generated at approximately 2,800 locations in Japan. This information is being put to use in measures to reduce waste volume, improve recycling rates, and enhance the management of waste contractors to counteract

the cross-border movement of hazardous waste materials.

We have established a target of raising the e-manifest\*1 system registration rate to at least 90% by fiscal 2015. This was achieved in fiscal 2014, and we continued with our efforts in fiscal 2016.

\*1 The e-manifest is a document that waste generators must issue when commissioning a disposal company to handle waste disposal.

#### Waste Management System



\*1 JWnet: The Japan Waste Network is an electronic manifest system operated by the Japan Industrial Waste Information Center under the auspices of Japan's Ministry of the Environment

# Environment

#### 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 on-site 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\*1 as of fiscal 2016.

\*1 Defined as a final disposal rate (landfill disposal/waste and valuables) of less than 0.5% in any given fiscal year.



Zero Emission Sites

#### **Key Indicators**

Reduction in Waste and Valuables Generated per Unit





## • Waste and Valuables Generated



#### Breakdown by Region (kt/year)

					(FY)
	2012	2013	2014	2015	2016
Europe	1	1	2	1	2
Americas	58	56	67	63	744*1
China	38	62	54	36	48
Rest of Asia	80	93	106	98	107
Japan	478	465	463	420	435
Total	655	677	692	618	1,336

<sup>\*1</sup> Includes 675 kt/year of a materials company that became a consolidated member of the Hitachi Group in fiscal 2016.

# Next Steps in Improving Resource Efficiency

Hitachi upholds the goal of improving resource efficiency by 50% between fiscal 2010 and 2050. We aim to realize a resource efficient society through the implementation of such conservation measures as using recycled materials in the manufacturing process, reducing or recycling waste, and collecting end-of-use products for recycling.

# Efficient Use of Resources

 Reusing and Recycling IT Products (Hitachi Computer Products [America], Inc. and Hitachi Data Systems International Distribution Center)

Hitachi Computer Products (America) and Hitachi Data Systems International Distribution Center manufacture and market mass storage systems for use in enterprise computer systems. When customers exchange these systems for newer models, some of the IT equipment is cleaned, retested, and then reused as products with a company warranty. Other, waste-bound products are recycled for their resources. In fiscal 2016 the product recycling volume was 412 metric tons.

These reuse and recycling efforts, together with the company's environmental efforts overall, have been recognized with a Greenovation Award every year since 2011 from the Norman Chamber of Commerce in the company's home city of Norman, Oklahoma.

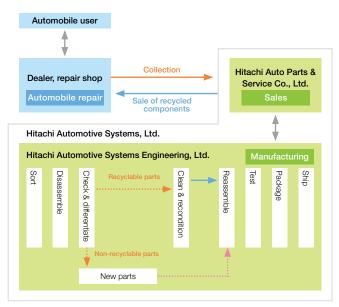


Hitachi Virtual Storage Platform G Series.

#### Environment

► Reusing Automotive Electrical Components (Hitachi Automotive Systems Engineering, Ltd.)

Since 1994, Hitachi Automotive Systems Engineering has applied the knowledge and understanding gained as a manufacturer of automotive equipment to recycle automotive electrical component collected from dealers and repair shops. A technical system to sort, disassemble, check and differentiate, clean and recondition, reassemble, and test is used to recycle about 60% of the electrical components collected. These components are then sold as products that perform as well as new products. In fiscal 2016 the company received the Award of the Director-General of the Japanese Ministry of Economy, Trade, and Industry's Industrial Science and Technology Policy and Environment Bureau (for Resources Recirculation Technologies and Systems) in recognition of these efforts over many years.





# Recycling Rare Earths in Sludge Generated During Magnet Manufacturing (Hitachi Metals, Ltd.)

Hitachi Metals' Magnetic Materials Company manufactures the rare earth magnets used in motors for automobiles, industrial products, electrical machinery, electronic devices, and other products that demand high efficiency and light weight. When recycling the rare-earth-containing sludge\*1 generated during magnet production, the conventional process is to bury and treat it as industrial waste without using the iron contained in residue. There was also the problem of large amounts of acid and alkali required to treat the sludge for recycling.

Hitachi Metals developed a carbothermal reduction method\*² in which sludge is taken as iron ore and enables reuse not only of magnetic rare earth elements but also of iron as pig iron.\*³ It also established a resource recycling process that minimizes the use of acid and alkali. In recognition of these efforts, Hitachi Metals received the Rare Metal Recycling Award as part of the fiscal 2016 Awards for Resources Recirculation Technologies and Systems.



Flow of Recycling with the Carbothermal Reduction Method

#### Environment

# ► Turning Plastic and Paper Waste into High Calorie Fuel (Nichiwa Service, Ltd.)

Nichiwa Service has developed shared services that consolidate and standardize waste management for the Hitachi Group, using certain plastic, paper, and wood materials that are unsuitable for recycling as the raw material in manufacturing refuse paper and plastic fuel (RPF), a high calorie solid fuel. As an alternative to fossil fuels, RPF contributes to the prevention of global warming with the reduction of CO<sub>2</sub> while also promising such effects as extending the life of final disposal sites. In fiscal 2016, about 1,700 metric tons of waste material generated at Hitachi Group business sites were made into RPF.



An RPF manufacturing facility.

<sup>\*1</sup> Sludge: A mud-like material that is a mix of water (grinding fluid) and processing waste when magnets are processed.

<sup>\*2</sup> Carbothermal reduction method: A method of recovering rare earth elements as slag (a material that rises to the surface of sludge) by heating sludge as if it were iron ore together with carbon.

<sup>\*3</sup> Pig iron: Iron removed from a blast furnace or electric furnace by reducing iron ore.



Environment

# Achieving a Harmonized Society with Nature

# Hitachi's Approach

The ecosystem furnishes humankind with a range of benefits, not only supplying the natural resources required for people's food, clothing, and shelter and for economic activity but also reducing damage from natural disasters and absorbing greenhouse gases. Human economic activity, though, is resulting in the consumption of natural resources at a faster pace than can be restored through nature's recuperative powers, and this is having a serious impact on ecosystem services.

Hitachi not only promotes ecosystem preservation but also undertakes thoroughgoing management of chemical substances that may affect the ecosystem and seeks to achieve a harmonized society with nature that minimizes impact on natural capital. We have created an Ecosystem Preservation Activities Menu covering the entire value chain to guide our preservation initiatives and are promoting design and production activities that reduce the burden on the ecosystem throughout the product life cycle, in addition to carrying out environmental conservation activities as needed. In managing chemical substances, we adhere to laws and regulations in all countries and regions where we do business, as well as establishing our own in-house criteria to enable stringent and high-level management. These efforts are aimed at minimizing the burden our activities place on natural capital.

## Chemical Substances

## Managing Chemical Substances

In fiscal 2005, Hitachi formulated the Regulations for Environmental CSR-Compliant Monozukuri to manage the chemical substances contained in its products at all stages—from development and design, procurement, and production to quality assurance and sales. With regard to chemical substances used in our business operations, we manage risk by assigning three ranks to the use of such substances: prohibition, reduction, and control. We also reduce risk by educating chemical substance handlers and managers on laws and regulations and on proper risk assessment.

# Managing Chemical Substances in Our Products

To ensure compliance with Europe's REACH\*1 and other regulations, we continuously revise the list of chemical substances in our products that are to be managed. In October 2015, we modified the list of Voluntarily Controlled Chemical Substances so that 18 prohibited substances (Level 1) and 27 controlled substances (Level 2) are now listed.

Hitachi reviewed its Green Procurement Guidelines to reflect our new Environmental Vision, and in October 2016 we issued a revised edition. Furthermore, as a result of the amendment of China's RoHS\*2 in July 2016, we conducted an explanatory meeting in China, and 37 employees from 10 business units and Group companies participated in the event.

- \*1 REACH: The European Union regulation on Registration, Evaluation, Authorization, and Restriction of Chemicals.
- \*2 China's RoHS: The Administrative Measures for the Restriction of the Use of Hazardous Substances in Electrical and Electronic Products, which is similar to Europe's RoHS directive, is China's regulation to restrict the use of these substances in electrical and electronic products.



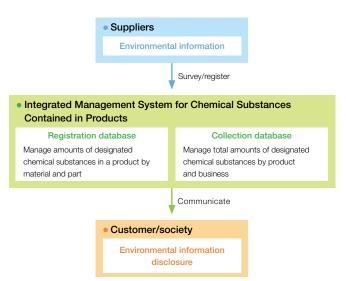
Hitachi Group's Voluntarily Controlled Chemical Substances



# Working with the Supply Chain to Manage 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



# Managing Chemical Substances in Our Business Operations

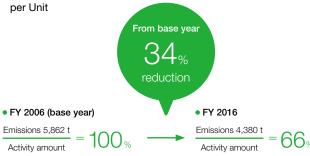
We have been cutting emissions of chemical substances from our factories and other sites through stricter management, such as by expanding the number and scope of controlled chemical substances. Initiatives in fiscal 2016 to reduce emissions of volatile organic compounds (VOCs) included switching from VOC-containing paints to water-soluble and powder paints as well as expanding their use, changing to material components that require no coating, and altering washing processes. These efforts enabled us to successfully achieve our targets. Information on our efforts has been translated into English and Chinese and shared globally with Hitachi Group members. We also monitor and manage emissions of sulfur oxides (SOx) and nitrogen oxides (NOx),\*1 which are required to be measured under the laws and regulations applicable at our business locations.

We comply with Japan's Pollutant Release and Transfer Register (PRTR) Law\*2 through Group-wide monitoring of chemical substances released into the atmosphere or into public waters, removed outside our plants as waste, or discharged into sewage systems, reporting the results to local governments for each office or plant. Although some substances are exempt from reporting due to their small quantities, our policy is to keep data on the handling, emission, and transfer of all PRTR substances totaling 10 kilograms or more per year, recognizing the need to control these substances as well.

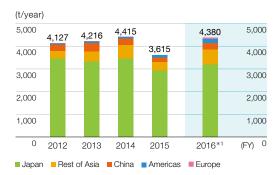
#### Environment

#### **Key Indicators**

Reduction in Atmospheric Emissions of Chemical Substances



• Reducing Atmospheric Emissions of Chemical Substances



#### Breakdown by Region (t/year)

					(FY)
	2012	2013	2014	2015	2016*1
Europe	6	8	12	9	57
Americas	53	76	66	113	187
China	273	372	281	199	291
Rest of Asia	346	447	604	373	662
Japan	3,449	3,313	3,452	2,921	3,183
Total	4,127	4,216	4,415	3,615	4,380

<sup>\*1</sup> In fiscal 2016, the scope of controlled chemical substances was expanded from 41 to 50 substances.

<sup>\*1</sup> Emissions of SOx and NOx: Calculated by multiplying their concentration and exhaust volume.

<sup>\*2</sup> PRTR Law: Act on Confirmation, etc. of Release Amounts of Specific Chemical Substances in the Environment and Promotion of Improvements to the Management Thereof.

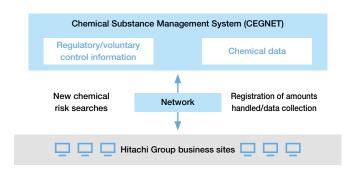
Note: Atmospheric emissions of VOCs and other chemical substances are calculated from the content rate included in the ingredients.



# The CEGNET Chemical Substance Management System

To ensure the proper management of chemical substances used in its business operations, Hitachi has operated a database for chemical substance management called CEGNET since 1998 to keep track of the latest laws and regulations and the company's own voluntary regulations.

CEGNET also collects and aggregates data on the amount of chemical substances handled, emitted, and transferred in our operations, helping to reduce the volume of chemicals that we handle.



# Managing Storage of Equipment Containing PCBs

Equipment that uses polychlorinated biphenyls (PCBs) and PCB waste materials are systematically disposed of within the time limit established by the national government of Japan. The storage and disposal of PCBs within the Group are monitored every year to promote efficient disposal. In fiscal 2016, disposal was completed for PCB waste materials stored at 55 business sites.

# **Next Steps**

In connection with Europe's REACH regulation, we will continue our checks and preparations in the lead-up to the next round of notification deadlines. As in fiscal 2016, we will continue our initiatives to reduce the release of regulated chemical substances.

# Reducing Chemical Substances in Our Business Activities

 Promoting Paintless Parts by Switching to New Materials (Hitachi Appliances, Inc.)

Hitachi Appliances' Taga Works manufactures washing machines, vacuum cleaners, microwave ovens, rice cookers, and other home appliances; IH cooking heaters and other all-electric appliances; and products in new environmental fields, such as LED lighting and residential photovoltaic power generation systems.

The Taga Works is currently promoting paintless parts for design accents, such as by switching to high gloss polypropylene (PP) for the design elements on its front load washing machines. This has reduced the amount of paint used in painting by 15.3% (9.6 t/year) compared with fiscal 2015, contributing to a reduction in the release of chemical substances.

#### Environment



Paintless Parts for the Design Elements of Front Load Washing Machines

\*1 Acrylonitrile butadiene styrene.

# Preserving Ecosystems

# Corporate Relationship with Ecosystems

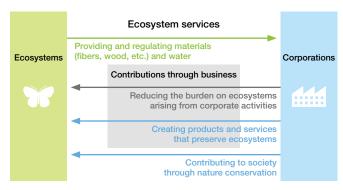
Corporations depend on "ecosystem services," including the natural supply of materials like fibers and wood, and the ability of ecosystems to maintain the quality and quantity of air, water, and soil. Contributing to ecosystem preservation through both business and social activities enables companies to continue receiving these benefits and to restore ecosystems.

Through its business activities, Hitachi is promoting designs and production methods that reduce the impact on ecosystems throughout the product life cycle. We are also increasing the number of products and services that directly help preserve



ecosystems, such as water purification measures. We view chemical substance management as part of ecosystem preservation and continually ensure that it is carried out correctly. To contribute to society, we encourage employee volunteer programs, such as tree planting and ecological surveys of rare plants and animals, as well as other programs that preserve ecosystems.

#### Corporations and Ecosystems



- Production dependent on ecosystems
- Minimizing negative impacts (reducing burden on ecosystems)
- Expanding positive impacts (contributing to ecosystem preservation)

# Initiatives to Preserve Ecosystems

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 fiscal 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\*1 and the Japan Business Initiative for Biodiversity (JBIB).

<sup>\*1</sup> 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).



The Biodiversity Working Group

#### Environment

#### **Ecosystem Preservation Activities Menu**

Category		Activities Taken	Number of Items
	Production	Reducing use of resources that cannot be reused	4
	Transportation	Using packaging that takes ecosystem into consideration	7
Business	Collection, disposal, and recycling	Reducing hazardous materials in products	2
Sites	Product planning, development, and design	During R&D, estimating impact on biodiversity during a product's life cycle and implementing, if needed, mitigation measures	3
	Site management	Using native species, setting up biotopes	17
	Water use	Using rainwater	1
	Investment and acquisition	Confirming impact on biodiversity when investing in or acquiring a business, and implementing measures to minimize such impact	1
	Market entry and expansion	Including biodiversity as an investment criterion	1
Value	Business development	Developing products and services to purify water, air, and soil and expanding such businesses	1
chain	Procurement	Preferentially procuring paper and other office supplies that take biodiversity into consideration	17
	Transportation	Implementing ballast water measures during marine transportation	2
	Sales	Implementing sales expansion of products that take biodiversity into consideration	9
	Collection, disposal, and recycling	Reusing and recycling components	7
	Entire value chain	Promoting the use of renewable energy	1
Cammunity	Engagement	Promoting employee activities outside the company	3
chain -	Social contribution	Implementing desert greening and afforestation activities	12
Water use that takes	Water intake	Observing and collecting biota information (impact on ecosystem depending on intake volume)	14
watershed ecosystem into consideration	Water discharge	Setting up biota management indicators and making observations (species and numbers of inhabiting organisms)	14



# **Next Steps**

For fiscal 2017, we have set a target of implementing 150 new initiatives in accordance with the Ecosystem Preservation Activities Menu and will continue to further promote ecosystem preservation activities throughout the Group.

# **Ecosystem Preservation Activities**

# 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.

## ▶ Yuyu Forest (Hitachi Power Solutions Co., Ltd.)

Hitachi Power Solutions has been conducting tree-planting activities since 2007 in the Yuyu Forest in the city of Takahagi in northern Ibaraki Prefecture. Each year employees and their families gather to plant trees, clear underbrush, prune, and perform other forest maintenance activities under the guidance of the Ibaraki District Forest Office and Takahagi's forestry cooperative. These events also include environmental education, handicraft classes using pruned materials, and other activities that employees' families can enjoy together as they create healthy forests.

• Tree-planting area: 10 ha

Number of trees planted: 31,510Total number of participants: 2,016



▶ Yasato Forest (Hitachi High-Technologies Corporation)
Hitachi High-Technologies embarked on a 60-year plan in
2005 to cultivate trees in the Hitachi High-Tech Yasato Forest
in the city of Ishioka in southern Ibaraki Prefecture. Employees
and their families participate in the work of pruning and thinning
to grow a healthy forest.

Tree-planting area: 2.32 ha
Number of trees planted: 5,600
Total number of participants: 1,387



#### Environment

# Mangrove Seed Collection and Tree-Planting (Hitachi Terminals Mechatronics Philippines Corporation)

In June 2016 Hitachi Terminals Mechatronics Philippines (HTMP) planted 883 seedlings grown from mangrove seeds collected in advance to protect and grow the mangroves remaining in the Subic Bay special economic zone where its factory is located.

Mangrove forests are a valuable part of the natural ecosystem in the Philippines, but at the same time the mangrove ecosystem is fragile and requires protection. HTMP has conducted tree-planting activities for some time, but in fiscal 2016 it expanded its activities to collecting seeds from mangrove plants and raising seedlings. HTMP will continue to be actively involved in ecosystem preservation.



Collecting seeds from mangrove plants.



Performance Data

Performance Data	122
Key Indicators	123–124
Overview of Financial Results, Board Members,	
and Employee Data	125–127
Main Assessments and Awards	128–129
Independent Assurance	130

Key Indicators



# **Key Indicators**

The Key Indicators of Hitachi's CSR activities are listed below. Comparative tables with the GRI Standards Content Index, as well as our Policy, Vision, and Guidelines, are only available on our website.



Comparative Tables with GRI Standards Content Index



Policy, Vision, and Guidelines

# Recognition of Social Responsibility

,	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Realizing Sustainable, Innovative Management					
Ratio of R&D expenditure to revenue (%)	3.8	3.7	3.4	3.3	3.5
Patent application ratio outside Japan (%)	57	59	59	59	57

## Scope of Data

Hitachi, Ltd. and consolidated subsidiaries (including variable interest entities).

Number of companies: FY 2012: 964; FY 2013: 948; FY 2014: 996; FY 2015: 1,057; FY 2016: 865.

## **Labor Practices**

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Promoting Diversity and Inclusion					
Ratio of male and female employees*1 (%)	84:16	83:17	84:16	84:16	83:17
Global number and ratio of female managers ♥	_	3,415	3,670	3,727	3,365
		5.6%	6.0%	6.4%	6.3%
Employment ratio of people with disabilities*¹ (%) ♥	2.02	2.02	2.03	2.08	2.15
Promoting Occupational Health and Safety*2					
Occupational accident rate*¹ €	0.14	0.10	0.09	0.07	0.18
Occupational accident rate*³ �	0.19	0.14	0.27	0.22	0.18
A Strategy for Growing Together with Our Global Human Capital					
Number of non-Japanese employees*⁴ 🔗	257	340	446	509	638
Number of young employees participating in training outside Japan*5	1,202	747	720	674	382

## Scope of Data

<sup>\*1</sup> Hitachi, Ltd.

<sup>\*2</sup> January to December each year.

<sup>\*3 175</sup> Hitachi Group companies in Japan including Hitachi, Ltd. for 2012; 195 Hitachi Group companies in Japan including Hitachi, Ltd. for 2013; 251 Hitachi Group companies in Japan including Hitachi, Ltd. for 2014; 240 Hitachi Group companies in Japan including Hitachi, Ltd. for 2015; 200 Hitachi Group companies in Japan including Hitachi, Ltd. for 2016.

<sup>\*4</sup> Full-time, regular employees at Hitachi, Ltd. as of the end of each fiscal year.

<sup>\*5</sup> Hitachi, Ltd. and Group companies in Japan.



Key Indicators

				ne	

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Reducing the Environmental Burden of Our Business Operations					
Rate of reduction in CO <sub>2</sub> emissions from use of products and services (base: FY 2010)*1 (%)	_		_		35
CO <sub>2</sub> emissions from factories and offices (kt-CO <sub>2</sub> )	3,453	3,355	3,311	3,085	3,845*2
Waste and valuables generation (kt)	655	677	692	618	1,336*2
Water use (million m³)	56.52	49.55	46.86	43.91	41.34*2
Atmospheric emissions of chemical substances (t)	4,127	4,216	4,415	3,615	4,380*2 *3

## Scope of Data

Hitachi, Ltd. and consolidated subsidiaries.

Number of companies: FY 2012: 964; FY 2013: 948; FY 2014: 996; FY 2015: 1,057; FY 2016: 865.

Environmental performance data associated with Hitachi's business operations: Hitachi Group companies whose environmental load comprises 90% of the total (based on Hitachi calculations); data for each fiscal year indicates performance within the given scope for the fiscal year.

# Fair Operating Practices *⊙*

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Engaging in Responsible Procurement					
Number of CSR monitoring (self-checks)	98	100	200	218	316
Number of audits by external auditing organizations	12	16	20	20	20

# Community Involvement and Development *⊙*

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Promoting Sustainable Community Involvement and Development					
Funding for social contribution activities (million yen)*1	_	1,806	1,218	889	527
Funding for social contribution activities (million yen)*2	3,284	3,076	2,327	2,057	1,953

## Scope of Data

<sup>\*1</sup> New indicator established in fiscal 2016.

<sup>\*2</sup> Fiscal 2016 figure includes a materials company that became a consolidated member of the Hitachi Group that year.

<sup>\*3</sup> In fiscal 2016, the scope of controlled chemical substances was expanded from 41 to 50 substances.

<sup>\*1</sup> Hitachi, Ltd. and the Hitachi Global Foundation in Japan.

<sup>\*2</sup> Through to fiscal 2014: Hitachi, Ltd. and 136 Group companies (including equity-method associates and joint ventures) and five foundations in Japan, 199 companies outside Japan; for fiscal 2015: Hitachi, Ltd. and 136 Group companies (including equity-method associates and joint ventures) and the Hitachi Global Foundation in Japan, 244 companies outside Japan; for fiscal 2016: Hitachi, Ltd. and 134 Group companies and the Hitachi Global Foundation in Japan, 159 companies outside Japan.



# Overview of Financial Results, Board Members, and Employee Data

Overview of Financial Results, Board Members, and Employee Data

An overview of the consolidated financial results, board members, and employee data is listed below. Most data are Hitachi, Ltd. figures.

# Financial Results (Consolidated IFRS)

	(Dillor) ye			
	FY 2014	FY 2015	FY 2016	
Revenue	9,774.9	10,034.3	9,162.2	
Adjusted operating income	641.3	634.8	587.3	
EBIT*1	534.0	531.0	475.1	
Income from continuing operations, before income taxes	518.9	517.0	469.0	
Net income attributable to Hitachi, Ltd. stockholders	217.4	172.1	231.2	
Capital investment (completion basis)	374.3	528.5	377.5	
R&D expenditure	335.5	333.7	323.9	

<sup>\*1</sup> EBIT: Income from continuing operations before income tax, less interest income, plus interest charges

# **Board Members**

		Gender		Nationality	
	Total	Male	Female	Japan	Outside Japan
Directors*1	13* <sup>2</sup>	11	2	8	5
Executive officers*1	35	35	0	33	2

<sup>\*1</sup> As of June 2017.

<sup>\*2</sup> Including nine independent outside directors (four from Japan and five from outside Japan).



Overview of Financial Results, Board Members, and Employee Data

Composition of Employees

Composition of Employees	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Number of employees*1	33,665	33,500	31,375	37,353	35,631
Male	28,437	28,273	26,428	31,536	29,921
Female	5,228	5,227	4,947	5,817	5,710
Ratio of female employees (%)	16.0	16.6	16.3	16.5	16.8
Average age (years)	40.2	40.7	41.0	41.2	41.4
Male	40.8	41.3	41.6	41.7	42.0
Female	37.1	37.6	38.0	38.4	38.6
Average service (years)	18.0	18.3	18.4	18.4	18.6
Male	18.7	19.0	19.0	19.0	19.2
Female	14.5	15.0	15.4	15.6	15.7
Number and ratio of female managers*2	401	418	434	474	509
	3.5%	3.8%	3.7%	4.0%	4.1%
General manager or above	68	77	87	104	113
	2.3%	2.7%	2.8%	3.2%	3.3%
Section chief	333	341	347	370	396
	4.0%	4.3%	4.1%	4.3%	4.4%
Employment ratio of people with disabilities (%)*3 🗸	2.02	2.02	2.03	2.08	2.11

<sup>\*1</sup> Includes nonregular employees.

Hiring Ratios

······································	April 2013	April 2014	April 2015	April 2016	July 2017
Ratio of new female graduates hired*1 (%)	18.0	19.4	21.7	22.8	26.3
Technical	11.6	14.7	18.3	17.3	20.8
Administrative	43.4	43.4	41.0	45.5	42.1

<sup>\*1</sup> Graduates from universities or colleges (including postgraduate schools and technical colleges).

<sup>\*2</sup> Full-time, regular employees only. See Key Indicators for Group global figures.

<sup>\*3</sup> Data compiled in June of each fiscal year.



Overview of Financial Results, Board Members, and Employee Data

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Number of employees taking maternity/paternity leave					
Female	525	539	508	524	664
Male	245	238	236	307	352
Number of employees using shorter working hours for child care					
Female	617	683	663	668	813
Male	8	5	4	3	2
Number of employees taking nursing-care leave					
Female	 10	8	8	8	7
Male	7	12	9	9	8
Number of employees using shorter working hours for nursing care					
Female	7	4	7	9	9
Male	3	2	3	3	3

# **Working Conditions**

-	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Paid leave					
Average number of days	15.3	15.5	15.4	15.6	16.3
Ratio (%)	64.0	64.7	64.3	65.3	68.1
Average overtime hours/month	14.1	13.5	12.2	11.9	12.8
Occupational health and safety					
Number of fatal accidents	3	1	1	2	1

# Social Contribution Activities

	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016
Social contribution activities					
Number of voluntary social contribution programs	34	43	39	38	793*1
Participants in voluntary social contribution programs	2,479	2,744	2,344	2,166	32,419*2

<sup>\*1</sup> The scope of these programs was changed in fiscal 2016 to include all activities reported in the survey of social contribution activities across the Hitachi Group. In addition to self-organized programs, this figure includes monetary donations, participation and dispatch of employees to take part in activities, and the opening of Hitachi facilities for use in relevant activities, each of which was counted one time for inclusion.

<sup>\*2</sup> The number of participants in activities specified in note \*1 above.

Main Assessments and Awards

# Main Assessments and Awards

Hitachi actively pursues a range of CSR activities aimed at developing a more sustainable society. These activities have earned the Hitachi Group high marks from numerous external organizations.

# Actively Responding to ESG Assessments

The Hitachi Group welcomes external assessments as a target for ESG\*1 and sustainability-oriented investment. For eight years in a row since fiscal 2009, the Dow Jones Sustainability World Index (DJSI World),\*2 a leading global sustainability investment index, has listed Hitachi, Ltd. as a component stock. RobecoSAM, which handles survey and analysis for the DJSI listings, gave its Bronze Class designation to Hitachi, Ltd. in its 2015, 2016, and 2017 CSR rankings.

Three Group companies (Hitachi Chemical, Hitachi Construction Machinery, and Hitachi High-Technologies) were selected for the FTSE4Good Index Series.\*3 Hitachi Chemical, Hitachi Construction Machinery, Hitachi Metals, and Hitachi High-Technologies were chosen for the Morningstar SRI Index,\*4 with the Group performing well overall in these external assessments. Hitachi Chemical was also selected for the MSCI Global Sustainability Indexes.\*5

- \*1 ESG stands for "environment," "social," and "governance"—key factors in promoting socially responsible investment.
- \*2 DJSI: A family of ESG indexes developed by Dow Jones & Company (USA) and RobecoSAM (Switzerland) that includes global and regional indexes with specific compositions. DJSI World, for example, selects on a global basis, while the DJSI Asia Pacific Index covers Japan, Asia, and Australia.
- \*3 FTSE4Good Index Series: One of the indexes calculated by the London Stock Exchange—owned FTSE Group that selects component stocks based on their ESG performance, specifically, environmental management, climate change mitigation, human rights and workers' rights, supply chain labor standards, and bribery and corruption prevention.
- \*4 Morningstar SRI Index: An ESG index for Japanese stocks developed by Morningstar Japan K.K. with the Center for Public Resources Development.
- \*5 MSCI Global Sustainability Indexes: A family of indexes developed by US-based Morgan Stanley Capital International comprising companies with high ESG ratings relative to sector peers.

#### Results of ESG Analysis in Fiscal 2016

Institution	Index	Companies selected
RobecoSAM	Dow Jones Sustainability World Index	Hitachi, Ltd.
	Dow Jones Sustainability Asia Pacific Index	Hitachi, Ltd., Hitachi Chemical Co., Ltd.
FTSE Group	FTSE4Good Index Series	Hitachi Chemical Co., Ltd., Hitachi Construction Machinery Co., Ltd., Hitachi High-Technologies Corporation
	FTSE Blossom Japan Index	Hitachi Metals, Ltd., Hitachi High-Technologies Corporation, Hitachi Chemical Co., Ltd., Hitachi Construction Machinery Co., Ltd.
Morningstar	SRI Index	Hitachi Chemical Co., Ltd., Hitachi Construction Machinery Co., Ltd., Hitachi Metals, Ltd., Hitachi High-Technologies Corporation
MSCI	MSCI Global Sustainability Indexes	Hitachi Chemical Co., Ltd.
	MSCI Japan ESG Select Leaders Index	Hitachi, Ltd., Hitachi Chemical Co., Ltd., Hitachi Metals, Ltd., Hitachi High-Technologies Corporation
	MSCI Japan Empowering Women Index (WIN)	Hitachi, Ltd., Hitachi Chemical Co., Ltd., Hitachi Metals, Ltd., Hitachi High-Technologies Corporation

# Dow Jones Sustainability Indices In Collaboration with RobecoSAM ROBECOSAM Sustainability Award Bronze Class 2017

MEMBER OF

# Nadeshiko Brand Designation

On March 23, 2017, Hitachi, Ltd. was selected as a 2017 Nadeshiko Brand—the fourth year in a row the company received the honor. Hitachi was recognized for its management strategy promoting diversity and for promoting innovation by drawing on its diverse human capital.

Since fiscal 2012, the Ministry of Economy, Trade, and Industry (METI) and the Tokyo Stock Exchange (TSE) have jointly selected, on an industry basis, enterprises that are considered to encourage women to play active roles in the workplace from among the approximately 3,500 companies listed on the first section of the TSE, the TSE second section, the Mothers index, and JASDAQ. Companies are assessed on two factors: providing career support for women and supporting women in balancing work and life. Of the top scoring companies, those also meeting return on equity requirements receive the Nadeshiko Brand designation. Hitachi, Ltd. was one of 47 enterprises in this round of selections.





Main Assessments and Awards

# **Diversity Management Selection 100**

On March 22, 2013, Japan's Ministry of Economy, Trade, and Industry (METI) held a ceremony to celebrate Diversity Management Selection 100. Hitachi, Ltd. was one of 43 companies receiving awards in Japan. The Diversity Management Selection 100 system chooses and recognizes companies that achieve high results in such areas as improving innovation and productivity by using the talents of diverse employees, including women, different nationalities, older employees, and people with disabilities. Hitachi was lauded for going beyond simply introducing diversity programs to promote diversity management Group-wide as a corporate strategy backed by strong management commitment.

On March 18, 2015, Hitachi Group companies Hitachi Transport System and Hitachi Solutions were chosen for the METI Diversity Management Selection 100.



# **Kurumin Certification**

Kurumin certification is granted under Japan's 2005 Act on Advancement of Measures to Support Raising Next-Generation Children to companies that create action plans for child-care support in line with this legislation and that meet performance requirements.

In February 2011, Hitachi, Ltd. acquired this certification\*1 in recognition of its achievements in developing and implementing action plans supporting child care so that employees can work with the peace of mind that comes from a good work-life balance.

\*1 Hitachi Group companies receiving Kurumin certification are: Hitachi Construction Machinery Co., Ltd., Hitachi Kokusai Electric Inc., Hitachi High-Technologies Corporation, Clarion Co., Ltd., Hitachi Urban Investment, Ltd., Hitachi Systems Ltd., Hitachi Solutions, Ltd., Hitachi Solutions, Ltd., Hitachi Solutions East Japan, Ltd., Hitachi INS Software, Ltd., Hitachi Government & Public Sector Systems, Ltd., Hitachi Architects & Engineers Co., Ltd., Hitachi Mito Engineering Co., Ltd., Mito Engineering Service Co., Ltd., and Okinawa Hitachi Network Systems, Ltd.



# **Eruboshi Certification**

The Eruboshi mark is conferred on companies that have submitted action plans under the Act on Promotion of Women's Participation and Advancement in the Workplace (which came into effect on April 1, 2016) and are implementing exceptional measures.

On February 28, 2017, Hitachi, Ltd. was awarded Eruboshi certification for promoting diversity as an important component of its management strategy and for creating work environments enabling its diverse human capital to play an active role. Companies are assessed in five categories\*1 and are grouped

into three classes according to the number of standards they clear; Hitachi, Ltd. was awarded class 2.\*2

- \*1 The five assessment categories are (1) recruitment, (2) years of continuous employment, (3) workstyles, including working hours, (4) percentage in management positions, and (5) diversity of career choices.
- \*2 Other Hitachi Group companies earning Eruboshi certification are: Clarion Co., Ltd. (class 3); Hitachi Systems Ltd. (class 3); Hitachi Solutions, Ltd. (class 3); Hitachi Chemical Co., Ltd. (class 2); Hitachi High-Technologies Corporation (class 2); and Hitachi Solutions East Japan, Ltd. (class 2).



# Independent Assurance

To enhance the reliability of the data disclosed in the *Hitachi Sustainability Report* 2017, we have received independent assurance of key environmental and social performance indicators by KPMG AZSA Sustainability Co., Ltd. The indicators that were assured are marked with a  $\bigcirc$ .

The standards, guidelines, and calculation methods used in collecting environmental data are posted on our website.



Calculation Methods for Environmental Load Data

Independent Assurance

#### Third-Party Assurance Report



#### Independent Assurance Report

To the President of Hitachi, Ltd.

We were engaged by Hitachi, Ltd. (the "Company") to undertake a limited assurance engagement of the environmental and social performance indicators marked with ⊚ for the period from April 1, 2016 to March 31, 2017 (the "ladicators") included in its Hitachi Sustainability Report 2017 (the "Report") for the fiscal year ended March 31, 2017, except for the "Employment of people with disabilities", whose figures as of June 2016 and June 2017 are the subject of this assurance engagement.

#### The Company's Responsibility

The Company is responsible for the preparation of the Indicators in accordance with its own reporting criteria (the "Company's reporting criteria"), as described in the Report, which are derived, among others, from the GRI Standards of the Global Reporting Initiative and Environmental Reporting Guidelines of Japan's Ministry of the Environment.

#### Our Responsibility

Our responsibility is to express a limited assurance conclusion on the Indicators based on the procedures we have performed. We conducted our engagement in accordance with 'International Standard on Assurance Engagements (ISAE) 3000, Assurance Engagements other than Audits or Reviews of Historical Financial Information,' ISAE 2410, Assurance Engagements on Greenhouse Gas Statements', issued by the International Auditing and Assurance Standards Board, and the 'Practical Guidelines for the Assurance of Sustainability Information' of the Japanese Association of Assurance Organizations for Sustainability Information. The limited assurance engagement consisted of making inquiries, primarily of persons responsible for the preparation of information presented in the Report, and applying analytical and other procedures, and the procedures performed vary in nature from, and are less in extent than for, a reasonable assurance engagement. The level of assurance provided is thus not as high as that provided by a reasonable assurance engagement.

- Interviewing with the Company's responsible personnel to obtain an understanding of its policy for the preparation of the Report and reviewing the Company's reporting criteria.
- Inquiring about the design of the systems and methods used to collect and process the Indicators.
- Performing analytical reviews of the Indicators.
- Examining, on a test basis, evidence supporting the generation, aggregation and reporting of the Indicators in conformity with the Company's reporting criteria, and also recalculating the Indicators.
- Visiting to the Company's Kokubu Factory selected on the basis of a risk analysis.
- Evaluating the overall statement in which the Indicators are expressed.

#### Conclusio

Based on the procedures performed, as described above, nothing has come to our attention that causes us to believe that the ladicators in the Report are not prepared, in all material respects, in accordance with the Company's reporting criteria as described in the Report.

#### Our Independence and Quality Control

We have complied with the Code of Ethics for Professional Accountants issued by the International Ethics Standards Board for Accountants, which includes independence and other requirements founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior. In accordance with International Standard on Quality Control 1, we maintain a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and resolution; requirements.

KPMG AZEA Sustamblery co. Ltd.

KPMG AZSA Sustainability Co., Ltd. Tokyo, Japan September 22, 2017



# CSR and Environmental Strategy Division

1-6-6 Marunouchi, Chiyoda-ku, Tokyo 100-8280, Japan Tel: +81-3-4235-5800 Fax: +81-3-4235-5835 www.hitachi.com/csr/